REPORT 2021

Preamble Economic and financial developments Prudential regulation and supervision







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Table of contents

	•	ort presented by the Governor ehalf of the Council of Regency	11
l.	Ed	conomic and financial developments	41
	1.	International economy	43
		1.1 The global economy bounced back strongly in 2021, but the recovery is uneven and incomplete1.2 Inflation has accelerated considerably in most countries	45
		owing to both supply and demand factors 1.3 Macroeconomic policies supported the global economy,	54
		but the first signs of divergence between countries became apparent	58
		Box 1 — Public debt is reaching historic highs: is the sky the limit?	62
		1.4 The financial markets continued to recover but expected regional divergences concerning further policy support	
		began to play a role	64
	2.	Monetary policy in the euro area	69
		2.1 Favourable financing conditions supported the recovery in the first half of the year	71
		2.2 The Governing Council completed the review of its monetary policy strategy in July	75
		2.3 The new monetary policy strategy guided policy decisions	70
		in the second half of the year 2.4 Monetary policy is facing major challenges	79 84
	3.	Economic activity and the labour market in Belgium	87
		3.1 Belgian economy stages robust recovery despite ongoing COVID-19 pandemic	89
		3.2 Ongoing employment growth in a labour market	
		under pressure 3.3 After its exceptional fall in 2020, domestic demand became	96
		the main driver of economic recovery in 2021 Box 2 – Did the 2020 recession create supply shortages	101
		that could leave an indelible mark on economic activity?	110

4.	Prices and labour costs in Belgium	119
	4.1 Higher energy prices fuel inflation	121
	4.2 Core inflation rose in the second half of the year	125
	4.3 Health index also sharply up	128
	4.4 Inflation movements show up in wages after time lag	130
	4.5 Wage gap is an area for concern	133
	Box 3 — Business competitiveness and wage indexation	133
5.	Financial developments	139
	5.1 So far, businesses have managed to overcome the shock of the COVID-19 crisis	141
	Box 4 — The impact of the COVID-19 crisis on the financial health of firms: an initial assessment	143
	5.2 The situation of households is mixed, with some facing greater insecurity while others	
	have to decide between financial investment or investment in property Box 5 – Macroprudential measures	148 157
	5.3 In 2021, the COVID-19 crisis had a more limited impact on the banking sector	
	than initially expected	158
	5.4 The insurance sector is in a sound and robust starting position to cope with the impact	
	of the floods that the country suffered in July	164
6.	Fiscal policy and public finances	169
	6.1 Public finances in the euro area remained under the coronavirus spell in 2021	171
	6.2 Belgium's public finances propped up health care and the economy	175
	6.3 Crisis-related support measures gradually wound down	178
	6.4 Other factors also determined how primary expenditure and revenue developed Box 6 – The National Recovery and Resilience Plan	181 184
	6.5 Public debt and interest charges	188
7.	Towards a sustainable and resilient economy	195
	7.1 Major challenges remain beyond the coronavirus crisis	197
	Box 7 – Sustainable development indicators	205
	7.2 Getting and keeping more people in the labour market	210
	7.3 The climate challenge and the energy transition	219
	Box 8 – The case for carbon pricing	223
	7.4 Ensuring the sustainability of public debt	229
D		
Ы	rudential regulation and supervision	239
A.	Introduction	241
В.	Regulatory and legal framework	243
	1. Banks	243
	1.1 Aspects relating to management of the COVID-19 crisis	243
	1.2 Activities of the Basel Committee on Banking Supervision	245
	1.3 Integration of the definitive Basel III standards into European legislation	245
	1.4 Amendment of the Banking Law	247
	1.5 Transposition of the Covered Bonds Directive into Belgian law	248
	1.6 Reporting	249
	1.7 EBA guidelines and Bank Circular on loan origination and monitoring1.8 Recording of interest rate risk hedging operations under Belgian bank	250
	accounting law	251

П.

	2.	Insurance undertakings	252
		2.1 Aspects relating to management of the COVID-19 crisis	252
		2.2 July 2021 floods	253
		2.3 Changes to the regulatory framework	254
	3.	Cross-sectoral aspects	256
		3.1 Prevention of money-laundering and terrorist financing	256
		3.2 Developments in regulatory and prudential policy concerning risks relating to	
		climate change	260
C.	Ор	erational supervision	265
	1.	Banks	265
		1.1 Mapping of the bank and investment firm sector	265
		1.2 Supervision priorities	266
		Box 9 – 2021 stress tests by the EBA and the Bank	267
		Box 10 – Impact of the prolonged low interest rate environment and other factors on the business model of Belgian banks	269
	2.	Insurance undertakings	270
		2.1 Mapping of the sector	270
		2.2 Supervision priorities	271
		Box 11 – 2021 stress tests by EIOPA and the Bank	274
	3.	Financial market infrastructures and payment services	275
		3.1 Mapping of the sector	276
		3.2 Supervision priorities	277
D.	Dig	gitalisation	281
	1.	FinTech	281
		1.1 Open banking: access to payment account systems under PSD 2	281
		1.2 The digital euro	282
		1.3 Prudential treatment of crypto-asset exposures and draft European Regulation	282
		1.4 Regulation and prudential expectations concerning the use of artificial intelligence	283
		1.5 FinTech survey and analysis for credit institutions	283
		1.6 InsurTech survey and analysis for insurance undertakings	284
	2.	Digital operational resilience	285
		2.1 Cyber risks and IT risks	285
		2.2 Legislative guidelines and developments	286
		2.3 Operational activities	286
		Box 12 — Principal observations on the cyber risk questionnaire for the insurance sector	287
Ε.	Res	solution	289
	1.	Legislative and regulatory framework	289
		1.1 Transposition of BRRD2 and miscellaneous provisions	289
		1.2 Revision of the bank crisis management and deposit insurance framework	291
		1.3 Proposal for a Directive establishing a framework for the recovery and resolution of	
		insurance and reinsurance undertakings	292
	2.	Resolvability of credit institutions and investment firms	293
		2.1 Institutions under the remit of the SRB	293
		2.2 Institutions under the Bank's direct remit	294
	3	Set-up of resolution financing arrangements	294

Annexes	297
Statistical annex	299
Methodological note	315
Conventional signs	317
Abbreviations	319



Report presented by the Governor on behalf of the Council of Regency*

For the past two years, the COVID-19 pandemic has dictated the pace of Belgian, European and global economic life. This unprecedented situation has turned our lives upside down, blurred our points of reference and changed our attitude towards the future. The analysis of the Belgian economic situation is presented in this specific context, where breaks in the trend make the conventional economic indicators more difficult to read and reduce the relevance of historical benchmarks. The analysis of the past year therefore cannot rely to the same extent as previously on the established empirical regularities or the usual theoretical arguments, and the forecasts are based more on scenarios deemed plausible rather than projections firmly anchored in the continuation of past trends. This exceptional uncertainty calls for caution and restraint regarding the potential implications for economic policy.

In this Report published on behalf of the Council of Regency, the Governor refers to the extremely atypical economic recovery seen in 2021 and the accompanying uncertainties. Chapter 1 gives a brief narrative and offers some key messages. Chapter 2 presents the global dimension of current developments, including the factors determining the spike in inflation and the resulting challenges for monetary and fiscal policy. Most of the world's economies face the same challenges and their governments are confronted by very similar choices. Chapter 3 details developments and issues specific to the Belgian economy, which has staged a particularly strong recovery in view of the various periods of public health restrictions. Belgium's growth revival was not only stronger than expected, but it also surpassed that in neighbouring countries. This chapter also deals with the necessary response to long-term challenges. Finally, chapters 4 and 5 focus on recent developments in the financial sector and in prudential policy.

^{*} Two Regents were not able to endorse paragraphs 42 to 45 of the Report.

1. The Belgian economy in 2021: reinforcing the recovery in a period of great uncertainty

1. Following the unparalleled economic crisis in the spring of 2020, the year 2021 brought an equally unprecedented recovery which was stronger than expected but also uneven. Despite the

Stronger-than-expected but uneven economic recovery in Belgium

disruption of social contact and movement imposed by the episodic restrictions, Belgian GDP has displayed a V-shaped pattern since the start of the crisis. By the end of the third quarter, the strong growth of economic activity (6.1% in volume over the year) had wiped out the contraction suffered a year previously. Nevertheless, it must be said that this overall

performance masks wide variations in individual and sectoral situations.

2. This economic revival naturally reflects the scale of the initial decline, but also the effectiveness of the safety net, namely the crisis management measures and the operation of automatic stabilisers. In regard to health, wide-scale vaccination and the resilience of the health system were decisive for lifting the restrictions on movement and activity in certain sectors. On the macroeconomic front, public finances performed their shock-absorbing role

Monetary and fiscal policies provide exceptional support for demand

to the full, at the cost of a substantial budget deficit (–6.3 % of GDP). Monetary policy aided the government budget's nimble response by ensuring historically favourable financing conditions. Though exceptional, the large-scale, simultaneous deployment of fiscal and monetary instruments was in proportion to the challenge posed by the closure of entire swathes

of the economy. It can now be concluded that the effective protection of household incomes, labour relations, as well as wide support for businesses, have laid the foundations for the recovery of both production and employment. That said, the overall success should not detract from the wide variations in individual situations. The V-shaped recovery masked the widening inequalities caused by the pandemic which the support measures were unable to mitigate, while at the same time insufficiently targeted emergency measures generated some windfall effects.

3. The recovery in 2021 also featured the rapid emergence of supply constraints, which fuelled a strong surge in inflation (averaging 3.2 % over the year in Belgium), and the concomitant

Supply constraints and price rises soon emerged

challenge for monetary policy. This can be ascribed to multiple factors, including the dramatic increase in energy prices, the rising cost of certain essential inputs (such as semiconductors) and the substantial rise in transport costs. While the collapse in 2020 primarily reflected sudden constraints on

demand and the corresponding risk of a downward price spiral, the current recovery soon highlighted supply constraints which were synonymous with surprisingly strong and persistent price rises.

4. The current inflationary pressures should gradually ebb away in the coming months, although there is still considerable uncertainty about that, as some of the factors driving up prices

Inflationary pressures should gradually fade away

actually reflect a need for global value chain adjustments via investment which will take time to materialise. The risk of production costs fuelling inflation also requires extreme vigilance, especially in view of the dynamic labour market and, in Belgium, automatic wage indexation and the rapid

reppearance of labour shortages. Central banks need to balance the risk of spiralling prices against the danger of premature monetary tightening which could strangle the recovery.

5. In the euro area, the September 2021 reform of the monetary policy framework gives the Eurosystem the flexibility it needs to navigate in these uncertain waters. It will have to be both patient and vigilant in the face of an inflationary episode featuring uncertain dynamics

while standing ready to change course if there are definite signs of significant deviation from the new symmetrical target of 2% inflation in the medium term. The expectation that inflation will normalise in the medium term in the region of its target should make it possible to proceed with a gradual tightening while maintaining an accommodative monetary policy without side effects, particularly for financial stability.

The ECB will be patient but vigilant and ready to respond to shocks and the risk of inflationary drift

That is the essence of the December decision by the ECB Governing Council. To sum up, the watchwords for the coming months will be patience, agility and close attention to the relevant indicators.

6. The strong recovery, proliferating supply constraints and rising prices imply that the massive support for domestic spending will soon come to an end, in Belgium and everywhere else.

A gradual, smooth exit from the crisis policies is vital for the timely regeneration of the leeway essential for attenuating future shocks. However, the continuing public health uncertainties make it difficult to decide the right pace of normalisation. On the one hand, we must not

Massive support for demand is no longer justified

impede the recovery, but on the other hand, it is important to limit the risk of an erratic response by the financial markets to the fragility of public finances or the speed of monetary tightening.

7. Switching from macroeconomic stabilisation via demand to the mitigation of supply constraints is no easy transition: designing and implementing structural reforms to address the major changes taking place (in terms of demographics, technology and climate) and to stimulate potential growth affects everyone but in different, and sometimes opposing, ways.

More investment needs to go into the green transition, to facilitate the reallocation of resources to sectors with strong growth potential, encourage innovation and the adoption of new technologies and, finally, galvanise the labour market by reducing skill shortages while boosting the labour market participation rate. Public expenditure also needs to focus more on investment in order to rectify the continuing

Exit from the crisis policies marks the return of tough choices while the risks remain significant

infrastructure deficiencies, particularly in regard to transport, energy security, education, health care and digital technology. Assisting this difficult shift in economic policies is the aim of the recovery plans supported by the European Union's new financial instruments. For Belgium, that support is nevertheless modest given the challenges inherent in implementing long-delayed structural reforms and the need to guarantee the viability of the public debt in all the country's entities.

8. One last salient point about the recent experience in comparison with other acute crises was the Belgian financial sector's remarkable resilience which enabled it to play a leading role in absorbing the shocks and resolving the crisis. Following the 2008 global financial crisis, the regulatory framework was radically reformed and strengthened to remedy the evident shortcomings and enhance the future resilience of financial institutions. In one sense, the pandemic represented the first – albeit partial – test of that reformed framework. For the first time, the Bank made use of the macroprudential countercyclical capital buffer in the banking sector, built up in a period of favourable economic conditions and released in the event of a crisis. That buffer has yet to be reactivated. However, the high asset prices on the financial markets and the booming Belgian housing market point to a strong upward trend in the financial cycle. The Bank will continue to look closely at the need and the conditions for possibly activating this buffer in 2022. The macroprudential measures for the housing market

should also be maintained in order to safeguard the stability of the Belgian financial sector. Substantial capital buffers and sound bank balance sheets create scope for countercyclical adjustments to the macroprudential tools without any significant impact on lending conditions and hence on the financing of the recovery.

9. The current uncertainties presage considerable risks for the short- and medium-term outlook. While the baseline scenario remains favourable, the sharp slowdown in the final quarter of 2021 and the exponential spread of the new Omicron variant illustrate the threats to growth. Control over the dynamics of the epidemic with vaccines and treatments is still far from perfect and hard to foresee. The monetary policy choices could also be more difficult than expected if it takes a while for supply constraints to clear and for energy and commodity prices to return to normal. The same applies to the cumulative delays in resolving long-standing structural problems, including the sustainability of public finances.

2. Belgium keeping pace with the global recovery with a spike in inflation

A strong but patchy expansion of activity

10. Following an unprecedented contraction of almost 3 % in 2020, global economic activity recorded almost 6 % growth in 2021. International trade flows naturally reflected this trend, increasing in volume by 9.3 %, whereas they had shrunk by more than 8 % in the previous year. The rapid, widespread rollout of effective vaccines in the United States, Europe and China not

A V-shaped recovery at global level ...

only made it possible to lift the most severe health restrictions but also made it easier for the economies to withstand new waves of infection. Thanks to the unprecedented support of macroeconomic policies, the level of activity at the end of 2021 thus exceeded the pre-crisis level in most regions of the

world including many euro area countries, of which Belgium was one. China stood out with growth of 8.1%, even without a recession in 2020 (+2.3%). Elsewhere, some emerging and developing economies did better than others, partly on account of the uneven availability and distribution of vaccines, and partly because of the relative importance of sectors highly vulnerable to health restrictions, such as tourism.

11. A specific feature of the 2021 recovery was the speed with which the dramatic slump in demand in the spring of 2020 gave way to supply constraints. In many countries, highly accommodative monetary and fiscal policies meant that consumer purchasing power

... where demand is bouncing back faster than supply stood up well overall. Thus, once the main health restrictions were lifted, demand was able to respond immediately. In contrast, it inevitably took longer to get production up and running again, especially where the underlying value chains were complex, globalised and designed to operate "just in time". That is why the constraints on international trade were

extremely damaging and revealed the fragility of globally fragmented production processes. In particular, the closure of certain ports vital to maritime traffic combined with other logistical disruptions was enough to throttle many value chains upstream. Shortages of essential inputs (such as semi-conductors) or means of transport (containers, road haulage) impeded the recovery of industrial production in many countries, including Belgium.

- 12. The past year has therefore illustrated the degree to which the global dimension of the health shock determined both its direct economic impact and the uncertainty surrounding the
 - medium-term outlook. The successive waves of COVID-19 infections and the emergence of new variants over the past year have shown that the pandemic's economic consequences could spread as rapidly as the virus itself, by disrupting global value chains and transport networks. The risk of perpetuation of the pandemic via new variants potentially resistant to available vaccines and treatments will continue to threaten the global

International coordination remains important to contain the economic and health risks

economic recovery so long as high-infection areas persist. Good international coordination (from the sharing of medical data to the wider distribution of vaccines and treatments) remains important to contain this risk.

- 13. At the very end of the year, the extremely rapid spread of the new Omicron variant put a damper on the global economic prospects which had hitherto been encouraging, despite the marked slowdown in the final quarter. Where vaccination rates were already high, the new health measures were initially less restrictive than a year previously, suggesting that this wave of infections would only interrupt the recovery temporarily. Although the speedy delivery of booster doses offers extra reassurance in that regard, Omicron's infectiousness put a strain on even the most efficient health systems. Many governments had to restrict contact again by closing down certain sectors and maximising recourse to working from home. This situation also tested some countries' zero-COVID policy. While that approach may have offered epidemiological advantages within borders, it impedes the global recovery by perpetuating logistical bottlenecks (blocking of transport infrastructures) and disrupting value chains (closure of production units in lockdown areas). In the short term, the Omicron variant is bound to heighten the economic cost of the pandemic.
- 14. The vigorous, synchronised revival of global economic activity together with geopolitical factors triggered soaring energy and commodity prices in the second half of the year. Two main factors explain this development. First, widely fluctuating prices typify markets where supply is rigid in the short term, as reopening or closing a mining site is not just a matter of turning a tap or machinery on or off. Next, in the case of energy and more especially gas geopolitical uncertainties have been added to an intense debate over the increasing role of this energy source in electricity generation in Europe, just at a time when several countries are turning away from nuclear power or coal. That debate is influencing the expectations of market operators, which may have affected price movements.

The return of inflation

15. While the collapse of demand at the beginning of 2020 rapidly led to a drop in certain prices, the recovery has had the opposite effect, prompting a surge in inflation at global level. That is what happens when supply and demand are temporarily out of sync.

On the one hand, prices are adjusted, contributing to inflationary or *Inflation is back*

deflationary pressure depending on the direction of the demand shock.

On the other hand, shortages or excess stocks become apparent.

This inflation upsurge was surprisingly strong and persistent, reflecting the soaring cost of commodities (especially energy) and the impact of bottlenecks on input prices throughout the value chains.

16. Central banks worldwide are finding it difficult to foresee how long this inflation surge will last. Some are already brandishing the spectre of "stagflation", that persistent combination of high unemployment and inflation which followed the 1979 oil shock and the dramatic

... but stagflation is not looming

tightening of American monetary policy. A repetition of that scenario is highly improbable as economic agents remain confident that, in the medium term, inflation rates will normalise around their official targets (2 % per annum for the euro area). That confidence is based on the firm belief that

central banks are supposed to pursue their objectives unhindered. In 1979, that credibility was in jeopardy, since the monetary authorities were viewed as dependent on considerations unconnected with their main mandate.

17. Broadly speaking, the expert debate on inflation comes down to two different positions. Some experts believe that the inflationary surge could persist if monetary policy fails to respond fast enough. In their view, the demand pressures are such that many firms are no longer afraid to up their prices, in contrast to their previous approach of maintaining their

Opposing views of global inflation: temporary or persistent

competitiveness, market shares and profit margins by keeping costs down. In addition, fiscal policies reflecting the desire of many governments to step up investment in infrastructure will continue to fuel demand. These synchronised budgetary pressures could exacerbate the existing strain on some supply chains and be reflected in prices. Finally, a global context of tight labour

markets is conducive to wage rises, increasing the likelihood of further price hikes. Others take the view that the current inflationary pressures are fundamentally temporary, because mismatches between supply and demand never last. In particular, the surge in energy and commodity prices will dissipate once supplies on those markets pick up as expected. And the logistical bottlenecks which have driven transport costs sky high are also unlikely to persist. For those who take this view, if the accommodative monetary policies are ended too soon, that would crush a recovery which is still vulnerable to the epidemiological risk.

18. Such contrasting analyses reflect a reality which is hard to read and a highly uncertain outlook. On the one hand, even if the bottlenecks and other logistical disruptions were to cause a permanent rise in the level of some prices, the effect on inflation (which measures the growth rate of average prices) would still be transitory. The same logic applies to commodity prices, even if they were to stabilise at a higher level than before the crisis. On the other hand, some inflationary pressures could prove more persistent. First, permanent changes in the structure of expenditure could prolong the constraints on supplies of intermediate inputs or commodities. Be it a question of new private consumption behaviour, accelerated digitalisation or a global increase in green investments, some supply constraints will only be resolved by substantial adjustments to value chains, and that takes time. Second, the pandemic has shown up the fragility of globalised production methods. More fundamental changes designed to enhance their resilience (such as shortening of value chains by the relocation of production) therefore cannot be ruled out, especially if the pandemic persists. That said, any such relocation need not damage production efficiency if accompanied by increased automation. Third, the ongoing reallocations on the labour market are sometimes still difficult to interpret. In any case, the global context is more favourable to wage increases than before the pandemic, and the risk of spiralling cost inflation cannot be ignored.

A pivotal moment for macroeconomic policies

19. While inflation is expected to fall this year, the reforms of the monetary policy framework adopted in the United States and in the euro area in 2021 have given central banks greater flexibility to deal with this specific, highly uncertain environment. More than ever before,

monetary policy cannot be reduced to an automatic link between an inflation forecast and what is considered to be the optimum monetary policy stance. The exercise being conducted by credible central banks worldwide concerns risk management. Patience in the face of inflationary blips remains essential so long as a premature tightening of financial conditions would be at the cost of a stalled economic recovery.

Expected to decline this year, inflation will remain subject to close vigilance on the part of central banks

However, the credibility of patient central banks requires them to signal their willingness to act if inflation expectations clearly deviate from their official target. Striking the right balance between patience and swift response involves continuous, rigorous and transparent analysis of all the relevant data.

20. This three-pronged approach involving patience, swift response and analysis explains the decisions taken in December 2021 by the Federal Reserve and the European Central Bank (ECB), for instance. In varying degrees, reflecting different economic situations and outlooks,

the world's two leading monetary authorities signalled their willingness to make monetary policy less accommodative. By cutting back their asset purchases on the secondary markets, the monetary authorities are reducing their influence on longer-term interest rates, including the level

A global change of course is under way

of risk premiums. Elsewhere in the world, a number of central banks (in Latin America, Canada, the United Kingdom, Russia, the Czech Republic and Poland) have also initiated a cycle of monetary tightening. Unless the health risks return in force, those decisions mark the end of an exceptional period of support for demand.

21. The quantitative tightening (tapering) is notably speedier in the United States than in the euro area. Moreover, the American (overnight) policy interest rates are expected to go up several times during 2022. This more vigorous response by the Federal Reserve is due partly to signs

of acute stress on the labour market (notably in the form of escalating vacancy rates and unemployment heading towards an all-time low of 3.5%) and a fiscal policy which is potentially highly expansionary in view of the Biden Administration's plans. These factors are reflected in the American inflation forecasts, which exceed the 2% target until 2024.

The Federal Reserve is taking faster and more vigorous action

Faced with a more fragmented and generally less tight labour market, with budget deficits more under control in some Member States, the ECB predicts that inflation will converge on a level just under 2 % (but within the margin of error) in 2023 and 2024. In principle, it can therefore be more patient than its American counterpart and maintain an accommodative monetary stance for longer.

22. Leaving aside the debate on inflation, more neutral macroeconomic policies are necessary to restore room for manoeuvre in order to cope with future crises. The legacy of massive

fiscal support for the economy takes the form of historically high public debt ratios (averaging over 120% of GDP in the world's advanced countries), constricting future room for manoeuvre. In the central scenario of robust economic growth in 2022, and without prejudice to any targeted crisis measures remaining essential, the window of opportunity for initiating fiscal consolidation is now open. First, an early

Normalisation of macroeconomic policies is necessary to restore room for manoeuvre

start offers considerable freedom to choose the rate at which structural deficits are eliminated. The scenario of austerity dictated by the pressure of risk premiums is unlikely so

long as monetary policy remains highly accommodative. But it is much less improbable if monetary policy is obliged to change course. Second, the persistence of real interest rates well below the growth rate makes it possible to stagger the consolidation measures while maximising the reduction in the debt ratio. These conditions favour the chances of success, and hence the credibility, of the debt reduction strategy. Third, the phasing out of fiscal support for demand facilitates a gradual normalisation of monetary policy. At the same time, the credibility of moderate but sustained fiscal efforts reduces the risk of accidents on the sovereign bond markets and, in the euro area, the associated risk of fragmented financing conditions in the Monetary Union. Fiscal consolidation will entail a gradual shift in the financing of priority expenditure away from borrowings (or EU transfers) in favour of resources freed up by the rescheduling of less urgent programmes and reforms designed to contain the structural pressures on certain current expenditure, notably that related to population ageing.

- 23. The legacy of monetary support for the economy is seen in excessive debt levels for many economic agents and substantial increases in the prices of certain assets, headed by residential property. Low interest rates not only boost the borrowing capacity of households and firms, but they also encourage agents with surplus funds to acquire riskier assets in the hope of positive returns. Thus, in less than two years of crisis, residential property has recorded significant price increases in Belgium (almost 15% since the end of 2019), but also in Canada (over 20%), the United States (20%), the Netherlands (20%) and even in Germany (15%), though such a rise is uncommon there. This property price boom is another highly unusual development in the light of other recessions over the past 30 years. As explained in chapter 4 of this Report, the deployment of prudential measures can help to counteract these side effects of monetary policy. However, these measures are not neutral in terms of distribution, and there are limits to their effectiveness.
- 24. The end of the exceptional macroeconomic stabilisation efforts also marks the shift away from a strategy based on stimulating expenditure to an approach aimed at easing supply constraints.

Macroeconomic stabilisation via demand gives way to the alleviation of supply constraints and support for medium-term transitions At the same time, support is needed for unavoidable demographic, technological and climate transitions. In the United States, following an initial package of emergency measures adopted in March 2021 and totalling \$ 1 900 billion, the recovery has taken the form of a \$ 1 200 billion public expenditure plan (over ten years, half of it for new initiatives). This plan gives priority to infrastructure for transport, water and electricity supplies and broadband internet. In Europe, under the Recovery and Resilience Facility,

governments have devised medium-term plans (2021-2026) geared to investment and structural reforms, aimed at financing the digital and green transitions. This temporary Community instrument financed by European Union debt offers Member States more than \in 720 billion, including just under \in 340 billion in the form of grants. Although these grants will not be added to the national public debt, they nevertheless constitute a financial obligation on European taxpayers.

The policy mix in the euro area: the start of normalisation and new institutional frameworks

25. In the euro area, the combined support for demand offered by national fiscal policies and monetary policy remained at its maximum in 2021. Mass purchases of government securities

Coordination of monetary and fiscal policies ...

by the ECB under the Pandemic Emergency Purchase Programme (PEPP) ensured ease of financing for public deficits, which still stand at around 6 % of GDP on average in the euro area. Rising inflation during the year even

further reduced the real cost of debt. National governments were thus able to maintain an extensive (albeit more targeted) arsenal of economic support measures to accompany the successive waves of tightening and easing of the public health measures. In that respect, the monetary and fiscal measures complemented each other harmoniously.

- 26. Some observers saw this harmony as a sign that the central bank was subject to public deficit financing requirements. This "fiscal dominance" argument nevertheless presupposes a fundamental redefinition of a central bank's missions. In reality, monetary policy continued to perform its usual role of steering demand in order to stabilise the economy and prices. Under the particular conditions created by the pandemic, ... with due regard for public budgets proved to be the most effective way of safeguarding the economic fabric during its enforced shutdown before proceeding to support the recovery despite persistent uncertainties. The PEPP and, at budgetary level, activation of the general escape clause concerning the European budgetary limits for the 2020-2022 period enabled this vital complementarity between monetary and fiscal policies. The Eurosystem's response was therefore proportionate to the scale of the challenge and in line with the institutional framework defined by the Treaties.
- 27. Signs of a gradual normalisation of the policy mix with effect from this year emerged in the second half of 2021. On the monetary front, the conclusion of the strategic review of the ECB's monetary policy framework in June 2021 resulted mainly in a symmetrical interpretation of the 2 % inflation target, explicit recognition of the role of financial stability in price stability, and greater importance attached to the assessment of the proportionality of decisions and their potential side effects. The December 2021 decision forms part of this new strategy. The ECB announced the termination of public debt purchases under the PEPP (at the end of March 2022) and a slower pace of net asset purchases (APP) during 2022. The ECB also decided to terminate, at the end of June 2022, the exceptionally

also decided to terminate, at the end of June 2022, the exceptionally favourable conditions of access for commercial banks to the longer-term refinancing programme (TLTRO III). At the same time, the ECB reaffirmed its preference for a very gradual normalisation of monetary policy, maintained its forward guidance on the key interest rates set in

Normalisation of the policy mix and reforms of the institutional framework

June 2021 (no increase until the inflation projections are deemed compatible with the target of 2% in the medium term) and affirmed its vigilance concerning the risk of fragmentation of the transmission of monetary policy. To that end, it will watch over the stability of the sovereign debt markets and commercial banks' access to liquidity. This very cautious exit from the crisis policies minimises the risk of a hasty tightening which could strangle growth. However, it is vital not to ignore the opposite risk of unjustified maintenance of extremely accommodative financial conditions despite the ECB's inflation forecasts already very close to the target. Disregarding that risk could fuel concerns over the possibility of a disruptive reversal of monetary policy once inflation regains or even exceeds its target level.

28. On the budgetary front, the European Commission proposed deactivating the general escape clause under the Stability and Growth Pact by 2023. National budgets would then once again be subject to the pact's quantitative limits on deficits (3 % of GDP) and public debt (60 % of GDP). The pact's preventive guidelines, namely a sufficiently rapid reduction in the debt, control over the growth of expenditure (unless covered by new revenues) and an adequate reduction in structural deficits), would also offer specific indications of the way to go. However, the stability and growth pact had already demonstrated its limits before the crisis, and radical reform of the European Union's fiscal governance was envisaged. Having been interrupted by the health crisis, this review of the fiscal rules was restarted in the autumn. The European Commission launched a broad public consultation on the improvements to be made to these rules in order to simplify them and reinforce their implementation.

The path of medium-term macroeconomic policies remains uncertain

29. In the absence of a runaway wage-price spiral, attention focuses on two prospective scenarios. In the first, inflation converges sustainably on the 2 % target and monetary policy can be gradually normalised, as envisaged in December. The gradual approach and predictability suit the financial operators, limiting the risk of undesirable side effects on asset prices. In the

Two prospective scenarios for monetary policy

second scenario, the economy reverts to the pre-crisis situation, namely sluggish growth and inflation obstinately below the official target. In that case, difficult choices might need to be made in the next 18 months. If inflation is too low, it will be necessary to pursue an extremely accommodative

monetary policy with no real prospect of normalisation, even though that policy has not succeeded in getting inflation on target despite the sharp rise in 2021-2022. Conversely, financial stability could become so fragile as to endanger the proportionality of monetary policy, because the repercussions of that policy on the balance sheets of individuals and firms, or even the State, would persist (excess debt) while potentially soaring asset prices could imply the risk of sudden reversal (bursting of a potential financial bubble).

30. As regards public finances, the future path of the budget deficit and the national debt remains unclear despite the expected application of EU rules from 2023 onwards. The consequences

Lack of clarity about fiscal consolidation strategies

of this lack of clarity are minimal so long as monetary policy can pursue its very gradual tightening of financial conditions. Otherwise, there is a possibility of greater risk premium differentiation according to the state of public finances. There would be certain advantages in a return to fiscal strategies

based on clear rules geared to the medium term. In other words, while the complementarity of fiscal and monetary policies operated to the full during the crisis, it also applies in the policy mix normalisation phase. Ensuring the clarity of the medium-term fiscal paths would significantly reduce the risk of deviation from the stated course of monetary policy.

3. Close-up of the Belgian economy: a strong but uneven recovery in the face of persistent uncertainty and difficult transitions

Profile of an unprecedented but fragile recovery

31. The pandemic has continued to set the pace of the Belgian economy. Although the cyclical indicators were unusually volatile, real GDP achieved a historic rebound of 6.1 % during 2021, surpassing that recorded in neighbouring countries. This V-shaped recovery was in striking contrast to the slow revival which followed the 2008-2009 financial crisis. This performance

A V-shaped recovery in an economy more resilient to the onslaught of the virus ...

bears witness to the economy's growing resilience in the face of successive waves of coronavirus infections and the consequent public health restrictions. While many sectors were able to adapt to the health protocols, enabling them to continue operating, the restrictions themselves also became less stringent thanks to the speedy development of effective vaccines and treatments for

the virus. After a hesitant start, the Belgian vaccination campaign resulted in very high levels of vaccination, particularly in the population categories most vulnerable to serious forms of the disease. That success made it possible to switch from strict constraints on movement (lockdown of the population, sectoral closures) to social distancing and targeted access rules (hospitality, performances, events, schools, etc.) via rules on numbers, the Covid pass (Covid Safe Ticket), the promotion of remote working and rules on the ventilation of enclosed spaces.

- 32. However, the epidemiological risk has certainly not gone away. A marked slowdown in activity was confirmed in the final quarter of 2021, which brought a new wave of infections and strain on hospitals plus the predictable increase in health restrictions. Belgium likewise suffered the exponential spread of the new Omicron variant, despite the population's wide access to the booster vaccination. These recurrent unpleasant surprises could affect confidence in the existence of a permanent medical solution to ... but still vulnerable to the pandemic and in the economy's ability to making a lasting recovery unpleasant surprises ... from the consequences of the health restrictions. Any loss of confidence would then cast doubt on the outlook for the growth of private consumption and investment, the two main drivers of the recovery. In the face of these risks, key measures for protecting
 - would then cast doubt on the outlook for the growth of private consumption and investment, the two main drivers of the recovery. In the face of these risks, key measures for protecting incomes and preserving employment relationships, such as furlough for employees and the bridging allowance for self-employed workers, were extended until the end of March 2022. Although their use declined steeply during the year, it began to edge upwards in November as the system remains attractive for firms forced to lock down or experiencing supply problems and wishing to retain their skilled labour force.
- 33. Like the initial health shock, the benefits of the recovery have varied from one branch of activity to another. The V-shape described above is in fact more like a K, symbolising divergences between sectors within the economy. Compared to services, industry in general enjoyed a strong revival as soon as the economy and international trade were opened up. That said, there are wide variations between the ... with wide variations industrial sectors themselves. While pharmaceutical and construction between sectors companies logically benefited from very strong demand, firms in metallurgy suffered from the disruption of supply chains and staff shortages. The services sector, being more sensitive to the successive public health measures, generally recorded more modest growth over the year, though there was an uptick in the second half of the year. Certain sub-sectors also suffered much more than others as their business activities were subject to tougher restrictions.
- 34. Employment (+1.8 %) and unemployment (down by almost 30 000 units) reflect the robustness of production. In parallel with the mass recall of furloughed workers and the increase in hours worked, 88 000 additional jobs were created in 2021. Overall, the crisis had no significant effect on the rate of labour market participation (just under 70 %). Similarly, the shortages that existed before the crisis soon reappeared. As in the case of production, substantial differences became apparent between sectors, with losses confirmed in hospitality and other branches vulnerable to the health measures. This sectoral heterogeneity shows that the crisis heightened income inequality and widened geographical disparities.

While many workers survived the economic upheavals unscathed, others such as young people, casual student workers and the low-skilled, who are often in a more precarious financial position and are overrepresented in the hard-hit sectors, were more exposed to the hazards

The employment market proved to be very strong overall

of the economic situation. Thus, the numbers claiming the subsistence allowance increased considerably in 2020 (+8% over one year in December). Nonetheless, the numbers began falling slowly at the beginning of 2021 to reach a slightly worse situation at the end of the year than before the crisis. The decline was more marked in Flanders than in Wallonia, whereas in Brussels, which has a higher concentration of vulnerable sectors, the figures merely stabilised at a high level. These divergences are connected with the stronger labour market recovery in Flanders than in the other two Regions of the country.

35. The disparate effects of the crisis on the labour market also took the form of significant differences between men and women. Being over-represented in service activities, women were relatively more affected by the health crisis, and in very contrasting ways. Women employed in the health sector and in essential services came under stress while those in hospitality or contact professions were forced to stop work. In addition, the persistent imbalance in the sharing of household duties put particular pressure on women who were able to or had to continue working from home. This may explain why corona parental leave was used mainly by women, affecting their income and in some cases their career prospects. In 2021, the upturn in employment benefited both women and men. However, a higher proportion of these new female workers seem to have been previously inactive rather than unemployed. If that is the case, the rise in the female participation rate is a positive development.

As elsewhere, vigorous demand rapidly encountered supply constraints

36. Unusually, domestic demand was the factor driving the recovery. Private consumption (the main component of domestic expenditure) thus regained 6.4% in volume, indicating normalisation of the household savings ratio while the growth of purchasing power was

A recovery driven by domestic demand ...

temporarily eroded by resurgent inflation in the second half of the year. Apart from a specific effect in the pharmaceuticals sector, the remarkable vigour of business investment was a sign of greater digitalisation efforts. Rising sales and expanding gross margins were thus welcome support for this

momentum. The highly accommodative fiscal policy which continued in 2021 also enabled public investment and consumption to make a significant contribution to growth. Foreign trade had only a meagre positive impact following the simultaneous jump in imports and exports, the latter being inflated by pharmaceuticals products, including vaccines.

37. According to a recent survey by the Bank, Belgian firms suffered seriously from supply constraints, once again with fairly significant sectoral and regional disparities. These constraints are defined as difficulties concerning supplies and recruitment, or substantial increases in input

... and soon curbed by supply constraints

prices. They are due partly to a contagion effect via global value chains, and partly to shortages of skills and available applicants specific to the Belgian labour market. The hardest-hit branches of activity include agriculture, transport and logistics, industry and the hospitality sector. In this last case,

as in the travel agency sector, we can see the effect of reallocations away from the branches most affected by the closures in favour of jobs viewed as more secure. In view of the dynamism of the labour market, it is no surprise that labour availability problems occurred primarily in the Flemish Region.

38. In the light of these supply-side developments, it is legitimate to ask whether the crisis will leave deep scars on the Belgian economic fabric. Should we fear a permanent decline in the

However, there are no tangible signs of permanent damage to Belgium's production potential

economy's potential production level (or its growth rate)? At a time when the pandemic is still regularly producing unwelcome surprises, it is too soon to give a definite answer. While it already seems certain that some branches of activity will suffer irreparable losses, preliminary indications point towards fairly limited permanent damage overall. In addition, the escalating investment in digitalisation should actually foster productivity growth. Moreover,

the current labour market shortages (which do not necessarily affect highly-skilled jobs) are creating a real opportunity to step up the reforms intended to boost the participation rate via

- a balanced array of incentives, support and training. Nonetheless, the medium-term outlook for supply conditions is particularly unclear, notably in regard to global value chains which have proved extremely fragile. However, it is still too soon to assess the probability of production relocations aimed at promoting the resilience of value chains rather than their efficiency.
- 39. At a more microeconomic level, the expected tsunami of bankruptcies has not materialised. On the contrary, the monthly average of less than 600 bankruptcies since March 2020 is well below the figure of more than 800 recorded over the 2010-2019 decade. Apart from effects related to the periods of moratorium, the government support measures seem to have been generally successful in safeguarding the financial situation of firms. Their cash flow benefited from temporary unemployment (transferring payment of the wage bill to Social Security), the tax measures and various regional flat-rate payments. Nor does the crisis appear to have had any significant impact on corporate profitability or solvency, although these indicators are less relevant than in normal times, not least given the impact of all the government interventions on company accounts. Finally, government support for the strengthening of the capital base (for instance, via public investment companies and tax incentives) was a useful addition to the arsenal of measures promoting firms' financial viability. Here, too, the aggregate indicators conceal widely disparate sectoral and individual situations, making it inappropriate to draw definite conclusions. In particular, the scale of the government support could imply the risk of artificially prolonging the activities of non-viable businesses (zombies). However, there have been no signs as yet of any large-scale zombification, which may be due to the relatively targeted nature of the measures taken. Business start-ups have remained at a high level and many entrepreneurs have recapitalised their company and revitalised their business model, while the process of reallocating resources from less efficient producers to other more productive firms does not appear to have stalled during the crisis.

Sharp rise in inflation

- 40. Belgium has not escaped the global inflation surge. In January 2022, the inflation rate reached 8.5% compared with January 2021, a record high since the harmonised index of consumer prices was launched for the euro area in 1997. The average rate for 2021 came to 3.2%, or 0.4 percentage point higher than in the three main neighbouring countries. The influence of "base effects" whereby abnormally low inflation at one point automatically gives way to higher inflation twelve months later is not the sole reason. The main
 - culprit is energy inflation, which reached an historical peak of 22.4 % on average over the year, or twice the average for the three main neighbouring countries. That contrast is due to the specifics of energy

Inflation has been propelled by rocketing energy prices ...

pricing in Belgium. These essentially concern the low weight of excise duty on heating oil (which soared in price by an average of 36.4% over the year), reinforcing the link between the ultimate price and the cost of the commodity, and the variable price contracts for gas (39.6%) and electricity (16.2%) which are applied more widely than in the other countries. The health index, the benchmark for wage indexation and all allowances and social benefits, therefore also recorded a very strong rise.

41. Apart from energy and other products with notoriously volatile prices (food, alcohol and tobacco), core inflation also exhibited a marked rise during the year. That should be seen as the effect on demand of the reopening of the economy combined with

the effect on supply of the value chain bottlenecks. The steep rise in production costs therefore began to filter through to prices of consumer goods (particularly domestic electrical appliances, furniture and

... and by the rise in the costs of production, transport and imported inputs

furnishings, and second-hand vehicles). To give an idea of the scale here, production and

import prices in manufacturing industry jumped by 25 % at the end of the year, an increase unheard of since the 1980s. On the basis of a survey by the Bank at the end of November, firms state that they expect to have to continue raising their prices over the next six months. This suggests that inflation could be around for a bit longer, bringing with it a higher risk of a price-wage spiral. Conversely, the individual VAT cuts applied to some sectors have not affected prices and are therefore fully reflected – as intended – in gross margins.

Wage setting and competitiveness

42. In this specific context, automatic indexation of wages and social benefits as applied in Belgium protects households against the erosion of purchasing power caused by inflation. The health index which forms the basis includes essential domestic energy (gas, electricity and heating oil). Nonetheless, that protection is subject to a slight time lag, depending on technical factors which may vary from one sector to another. In the public sector, the threshold index system involves the threshold being exceeded on two successive occasions at intervals

Wage indexation protects purchasing power against inflation ...

of two months (in December 2021 and February 2022), the actual indexation being applied one month after each overrun in the case of social benefits and two months after it for wages. In the private sector, the indexation mechanism varies from one joint committee to another; it may either refer to a threshold index or take the form of annual or periodic index-linking. For low-income

households, this protection is only partial, given that energy expenses take up a relatively larger share of their family budget. According to available estimates, one in every five households is now thought to be living in energy poverty. Apart from indexation, there is a whole array of more specific measures (which are, incidentally, accepted by the European Commission) to reduce energy bills. The Belgian government has therefore taken a number of decisions on the coverage of the social tariff, VAT rates and ad-hoc transfers to cushion the shock for household budgets.

43. Since automatic wage indexation is unusual elsewhere in Europe and the rest of the world, it inevitably affects the Belgian economy's cost competitiveness in the short term. There is

... but temporarily affects the economy's competitiveness

therefore a need to strike a balance between the purchasing power protection offered by indexation and its potentially detrimental impact on the economy's competitiveness. That is why wage setting in Belgium is governed by the Law on the Promotion of Employment and the Safeguarding of Competitiveness.

This Law is built on the concept of a wage cost gap in relation to the three main neighbouring countries. It gives the social partners a clear and binding framework setting out a maximum wage margin available within which wage-bargaining negotiations must be conducted to preserve the economy's competitiveness.

44. This combination of automatic index-linking and safeguard legislation, specific to Belgium, involves different considerations. The first concerns the business cycle. As empirical analysis suggests that lasting real wage cuts are fairly uncommon in Europe, it will be necessary to see how quickly wages also rise in neighbouring countries to offset the loss of purchasing power. If that *de facto* indexation does take place quite promptly and if energy prices return to normal as expected, there should be no major, lasting deviation in the wage gap. But the uncertainty surrounding this remains high and the Belgian economy's competitive position could deteriorate more sharply than expected. The second consideration concerns the inevitable tension between the macroeconomic steering of wages and microeconomic efficiency which requires flexibility between branches, or even between firms. Taking account of automatic index-linking, which protects real wages from falling, relative changes can only take place via higher wage costs within labour market segments where labour is in short

supply or in branches (firms) achieving significant productivity gains. In that case, the effective reallocation of labour entails a bigger average increase which may soon be constrained by the margin for wage increases, currently set at 0.4%. That tension between the macroand microeconomic dimensions of the Law is inherent in the current system. In actual fact, given the sharp rise in inflation, it will be the macroeconomic dimension of the economy's competitiveness that has to be given particular attention in the coming months.

45. In the short term, it should be noted that the usual labour cost statistics, and hence the interpretation of the wage cost gap concept at the heart of the safeguard law, are harder to read. While gross hourly pay was up by 4.8 % in 2020, it was practically unchanged during the year under review (+0.1 %). At first sight, these movements are counter-intuitive, but they are due largely to technical effects concerning the nature of the temporary lay-off system in Belgium, with claimants under this system being excluded from the wage bill. Since these claimants are often in the lower-income groups, the application of temporary lay-offs leads to an increase in the labour cost indicators, while the opposite occurs when the same individuals are reinstated in their jobs. The crisis also accelerated the planned pay rise in the health care sector and triggered the payment of various bonuses.

Lasting impact on public finances: towards gradual consolidation to restore room for manoeuvre and ensure debt viability

46. As stated above, the time has come for gradual normalisation of the exceptionally accommodative fiscal policy stance. Owing to their very nature, the emergency measures are set to disappear or become increasingly targeted while fiscal revenues keep pace with the

recovery. The correction of the deficits is therefore largely automatic. Thus, the net funding gap declined from 9.1 % of GDP in 2020 to 6.3 % in 2021. Although there are no specific commitments for the medium term, current forecasts predict stabilisation at around 4 % of GDP, which is above the limits set by the European framework and higher than the figure required to set the government debt ratio firmly on a downward path, especially if the recovery continues as expected.

The public deficits are still high and their automatic normalisation will not be enough to ensure the viability of public finances

Since the crisis, the regional and Community governments have for the first time made a substantial contribution (around 2 percentage points of GDP in 2020 and in 2021) to the State's financial imbalance and the increase in the national debt. More than ever before, fiscal consolidation will require good coordination of the efforts between the various entities.

47. Reactivation of the European fiscal framework will provide useful benchmarks for the Belgian government. Despite reforms which have been announced but remain very vague, it seems that the budget deficit limit of 3 % of GDP will again take effect in 2023. To be credible, any fiscal plan will have to strike a balance between the necessary gradual approach to

improving budget balances and the sufficiently rapid restoration of room for manoeuvre by cutting the debt ratio. The focus of fiscal policies also needs to switch to medium-term challenges by better prioritisation of expenditure. Before the crisis, Belgium's public finances were fragile

Gradual consolidation is required

owing to an excessive public debt and poorly controlled budget deficits reflecting the pressure of current expenditure. It is true that borrowing conditions have remained highly favourable, enabling the State to raise funds cheaply. But the first signs of financial conditions returning to normal at the end of the year indicate that we can no longer expect any significant fall in the annual debt burden. The earliest possible commitment to medium-term objectives anchored in definite measures would avert a rise in risk premiums and restore the room for manoeuvre essential for coping with the next crisis.

48. The sustainability of regional and Community public finances must also come under closer surveillance, particularly in view of their dominant role in the protection of citizens and the economy against exogenous shocks (pandemics, natural disasters) and in the public investment

We must take care to ensure the viability of the federated entities' finances policy. Even without the cost of the summer floods in 2021, the viability of Wallonia's regional debt was pinpointed in an independent report published in September. According to that report, in a favourable financial environment, a sustained effort could alter the debt path without necessarily jeopardising the federated entities' essential contribution to the execution of the recovery

plan supported by the European Union and modernisation of the infrastructures (transport, education, health care). Although this EU support is modest for Belgium (just over 1 % of GDP over five years), the amount passed on to the Regions is significant in view of the importance in the recovery plans of investment projects relating to the green transition and digitalisation.

Ensuring that the recovery leads to a resilient, sustainable economy

49. When a crisis comes to an end, that invariably fosters the hope that the impetus generated by the recovery can set the economy on the road to more favourable growth, i.e. growth that is more inclusive and more environmentally sustainable. To achieve that, it is necessary to make maximum use of the economy's structural strengths and tackle its weaknesses by means

Building a resilient, sustainable economy requires ambitious reforms of ambitious reforms. Belgium's strengths include its capacity for innovation, its strong position in global value chains and its high productivity. Its main weaknesses include productivity growth, inadequate labour market participation, low labour mobility, relatively substantial greenhouse gas emissions and shortcomings in its infrastructure. None of that is new and, in

the past, the Bank has made specific recommendations about the nature and direction of the necessary reforms. The current recovery and its litany of supply constraints represent an environment conducive to the speedier manifestation of the benefits expected from these reforms, as buoyant demand helps to mitigate the undesirable redistribution effects caused by certain structural measures.

50. A key objective of the structural reforms is to improve market efficiency. Contrary to some received ideas, that is not synonymous with a general laissez-faire approach. On the contrary, it is necessary to fine-tune government intervention in proportion to the nature and extent of each market's imperfections. In most cases, that intervention involves a combination of fiscal measures, regulations and efficient infrastructure. In Belgium, three priorities for reform are worth highlighting: relaxation of certain regulations favouring businesses already established on a market over and above new competitors, resolution of the tensions on the labour market, and a fiscal policy which better reflects the priorities of the green transition and infrastructure modernisation. The first priority aims to avoid zombification of the production base by revitalising business demographics, the key objectives being more innovation and stronger productivity growth. The second aims to reduce the labour shortages on certain market segments (lack of applicants for vacancies), to bring the supply of certain skills more into line with demand, and to boost the participation rate. Better use could be made of the many instruments available, including the provision of training geared to shortage occupations, active assistance for job-seekers, notably in the case of workers on long-term leave, an adequate financial gain in the event of transition from inactivity or unemployment into work, and finally, the provision of lifelong education and training. The measures designed to encourage people into work will be all the more effective if the quality of the jobs available or created is guaranteed and specific arrangements, such as part-time working, can cater for the constraints affecting certain categories of inactive persons. Obviously, some of these measures will take time to produce their full effect and are not neutral in terms of distribution. However, they are relevant instruments for achieving the official target of an 80 % employment rate.

51. The third priority, the green transition, has a global dimension which, as well as substantial public and private investment, also requires reforms capable of achieving a permanent change in consumption behaviour and production choices. Thus, under the Green Deal, the European Union has set ambitious targets for reducing greenhouse gas emissions, increasing the share of renewable energy in consumption, and improving energy efficiency: all these targets are

to be achieved by 2030. Here, too, public intervention is based on a combination of regulation, taxation, subsidies and investment. The effectiveness of these various instruments in terms of reducing carbon dioxide emissions at the lowest possible cost involves their influence on the implicit price of carbon. In Belgium, that price is still

Encouraging the green transition entails raising the carbon price ...

relatively low, delaying the decisions needed to make progress in the energy transition, and ultimately increasing the cost of the transition. In principle, a specific tax on carbon would be the best way of encouraging the transition, but political constraints and distributional considerations favour a balanced package of less direct measures. While some instruments, such as the European Union's emissions trading system, are not within the remit of the Belgian authorities, others are directly under their control and merit particular attention. Apart from legislation, this concerns fiscal policy instruments (taxes, subsidies and green investment).

52. While the greening of the State budget aims to increase the implicit price of carbon, the measures to be taken must be predictable and must fit into a transparent framework.

More predictable energy costs will make it easier for the economic agents to plan the investments needed to switch to the use of clean or transitional forms of energy. Conversely, sporadic policy decisions would be liable to encourage price volatility and hamper the planning and implementation of these investments. Excessive price volatility would also undermine political support for the energy transition. In that regard,

... in a transparent framework permitting a gradual, predictable rise in fossil fuel prices

it cannot be emphasised enough that the sharp price rises observed recently in no way fit the desirable profile of a gradual, predictable rise in fossil fuel prices and the levels expected at the end of the transition bear no comparison with the current peaks.

53. The question of a greener fiscal policy is not confined to knowing how much carbon will cost at the end of the transition but also entails deciding who will pay. As we know, a consumption

tax is often regressive because it affects people on low incomes who spend most of that income on consumption and cannot afford the expenditure necessary for switching to lower-carbon consumption baskets. Any successful greening of the State budget will have to take account of these considerations in order to determine a range of taxes,

But the greening of fiscal policy must take account of redistribution effects

subsidies, compensatory transfers and green investment compatible with a transition which is ecologically effective, economically efficient and socially fair. That will require the most detailed possible impact assessments.

4. A resilient financial sector accelerates the economic recovery

- 54. In a crisis, policy-makers and economic agents must be able to count on a resilient financial sector which helps them to absorb the shocks and lay the foundations for the subsequent recovery. The Bank fosters that resilience by preserving financial stability so that, even in times of crisis, the financial sector can perform its essential functions.
- 55. During the past two years the Belgian banking and insurance sector has had to contend with the consequences of a public health crisis and extreme flooding. Many customers of banks and insurance institutions took a major financial hit simultaneously, owing to either a sharp fall in their income (due to the pandemic) or serious damage (caused by natural disasters). However, given their sound financial position, financial institutions were able to absorb these shocks and contribute to the design and implementation of support measures for the businesses and households concerned. In the future, too, the financial sector must once again form an integral part of the solution, together with the authorities, in these moments of crisis.
- 56. The financial institutions' supervisory and regulatory authorities play a key role in that respect. In fact, they have to ensure that financial institutions correctly assess, measure and control the risks that they face so that the vulnerabilities and losses in the event of a severe shock remain manageable. Moreover, the minimum requirements must guarantee that, in a crisis,

The capital buffers ensure the resilience of the financial sector in the event of a crisis financial institutions hold sufficient capital reserves both to cover their own losses and to enable them to continue performing their key functions for the other economic sectors. That is why, following the global financial crisis in 2008, the regulatory framework was radically revised and strengthened to remedy the shortcomings identified and to enhance the resilience of

financial institutions in the future. In some ways, the pandemic has been the first – albeit partial – test for the financial sector of that reformed framework which, in particular, ensured that the Belgian banking sector's capital buffers were considerably larger at the start of the pandemic than at the outbreak of the global financial crisis: in fact, in March 2020, the ratio between the capital and the balance sheet total (6.5 %) was more than double the August 2007 figure (3.2 %).

57. At the beginning of the coronavirus crisis, a number of measures were taken to enable the financial sector to assist in managing the crisis. For instance, the micro- and macroprudential authorities promptly relaxed some of the capital and liquidity requirements. They thus enabled the banks to use the capital buffers previously created to cover the losses and continue to finance lending or other forms of support for severely affected customers. Working with the government, the financial sector devised arrangements permitting both the postponement of loan repayments and insurance premiums, and the grant of bank loans and commercial credit insurance backed by the State. Without these general support measures, there was the threat of a wave of payment defaults and disruption in lending to hard-hit households and businesses. The ensuing credit constraints would in turn have damaged the economic recovery.

The economic recovery has reduced the short-term risks for financial stability

58. The economy's strong and swift recovery and the currently very low default rates on loans to Belgian households and firms bear witness to the effectiveness of these exceptional temporary measures. However, it must be borne in mind that the repayment capability of the hardest-hit households and firms is still largely underpinned by the various income support measures adopted by the federal government or the Regions. That said, the combination of all these

initiatives has helped to avoid a spate of defaults and, to a great extent, safeguarded the economic fabric. The short-term risk for the financial system's stability emanating from a sharp rise in non-performing loans has therefore clearly been reduced. The lower than originally expected scale of these loan losses is the main reason why, during the first nine months of 2021, the net profit of the banking sector was maintained at a level well above the figure for the corresponding period in 2020 (€ 5.3 and € 2.7 billion respectively). Nevertheless, the banking sector's business model and medium-term profitability remain key points for the Bank's attention. The challenges stem from the protracted period of very low and even negative interest rates, the rapid and extensive digitalisation of financial services, and the need for further improvements in cost efficiency. That is particularly true for medium-sized and small banks whose business model is geared to retail banking. Compared to large universal banks, they often apply a less diversified revenue model, centred on activities which are most sensitive to the impact of the low interest rate environment. In addition, they benefit less from economies of scale which, for example, would enable them to spread the cost of their necessary IT investment in digitalisation over a broader asset base.

Some of the support measures ended without any cliff effect

- 59. The economic recovery has made it possible to phase out some of the support measures which had initially been extended and, if necessary adjusted without triggering any significant cliff effect in the form of an increase in defaults. The recommendation calling on financial institutions to limit the payment of dividends and other benefits was therefore not extended beyond its expiry date of 30 September 2021, in accordance with the decisions of the ECB and the European Systemic Risk Board (ESRB).
- 60. The general scheme for postponing payment, set up for existing business and household loans, expired at the end of June 2021. This support measure had peaked at 6% of outstanding mortgage loans and 13% of business loans in September 2020. After that, its use declined steadily, falling to a very low volume by the time the scheme ended. Most households and firms resumed their normal schedule of loan repayments. In addition,
 - Belgian banks offered solutions for firms and households which still needed to defer payments or reschedule their debt. Thus, the percentage of restructured business loans increased from around 1% before the pandemic to 4% in 2021. Adopting permanent solutions for viable businesses with excess debts, namely debt restructuring or partial cancellation, reduces the number of businesses going bankrupt or

Banks must continue to assess non-performing loans properly and make adequate provision for them

defaulting. Ultimately, these bankruptcies and defaults would damage the financial sector itself and weaken the economic recovery. However, the supervisory authorities must continue to make sure that the banks assess non-performing loans properly and make adequate provision for them so as to speed up their resolution. Previous financial crises have demonstrated the importance of recognising losses immediately and swiftly eliminating them from the system in order to shorten the crisis and support the economic recovery.

61. After the first scheme expired at the end of 2020, the second scheme for new State-backed business loans was also terminated at the end of 2021. Use of this second federal government guarantee scheme was optional and reserved for loans to SMEs with terms of one to five years. At the end of 2020, the outstanding amount of State-backed bank loans under the two schemes peaked at around € 2 billion. In December 2021, that figure had dropped below € 750 million. Use of these two schemes was rather limited overall, notably because demand for new investment loans remained low during this period and the banks were willing to continue lending to businesses during the pandemic without this support measure.

62. During 2021, lending to Belgian non-financial corporations caught up to some extent following a period of weak growth in the second half of 2020 and the first half of 2021. At the end of November, the annual growth of lending to non-financial corporations stood at 3.1 %. However, that growth was still well below its pre-crisis level, when it had reached 5 % or more.

Mortgage loans and house prices grew at a steady pace

63. Conversely, driven by mortgage loans, household borrowing was again highly dynamic with annual growth in excess of 5 % in the second half of 2021. This was accompanied by a significant acceleration in house price growth, which reached almost 10 % in the third quarter. Housing became more expensive despite further expansion of the stock of real estate,

Demand factors fuelled the rapid growth of house prices and mortgage loans which reached its highest level in at least thirty years in terms of the ratio of houses to households in Belgium. In recent times, the boom in housing prices and mortgage loans was therefore fuelled mainly by demand factors. However, this surge in prices is not attributable solely to the steady increase in the average size or energy efficiency of the houses sold, the trend in

household disposable income, mortgage interest rates and demographics, or changes to property taxes. If these rising prices were to prove unsustainable in a changed economic context, a sharp fall in house prices could pose a threat to financial stability, especially since the debt ratio of Belgian households continues to climb rapidly owing to the strong growth of lending. It currently stands at 63 % of GDP, which is well above the level prevailing ten years ago (55 %) and exceeds – albeit to a lesser degree – the corresponding average in the euro area countries (61 %).

The macroprudential measures for the housing market remain relevant

- 64. Meanwhile, mortgage lending has made the Belgian banking sector and some insurance institutions very exposed to the housing market. However, that risk is mitigated by two macroprudential measures adopted by the Bank, measures which have dual aims: to prevent the continuing accumulation of risks in the financial sector and to ensure that banks operating with an internal risk model hold sufficient capital to absorb losses and shocks in an orderly way.
- 65. At the beginning of 2020, to avert a continuing increase in risks, the Bank issued prudential

Young people's share of new mortgage loans is unchanged at 35 % expectations for Belgian mortgage loans, applicable to all types of lenders. Consequently, in 2020 and in the first half of 2021, high ratio loans were far less common than in previous years. As the recommendations for loans to first-time buyers were the least strict, the proportion of young borrowers remained unchanged at around 35 % of new loans. The reduction in loan-

to-value ratios protects new borrowers against excess debt and ensures that the risks on financial institutions' loan portfolios do not increase any further.

66. However, in recent new business, the borrowing criteria have not improved to such an extent, that adjustment of the second macroprudential measure is justified. That measure involves an additional capital buffer to cover systemic risks in the portfolios of banks using an internal risk model to calculate the minimum capital requirements. That calculation generally results in very low risk weightings, as Belgium has never experienced a property crisis. It therefore underestimates the potential losses in the event of a severe market shock. The buffer was introduced in 2013 and extended by one year in 2021. Any adjustments required in the light

of recent improvements in loan criteria will not be considered until after the next extension. But in the event of a property market crisis, that buffer can be released immediately to enable the banks to use the capital to cover losses. The capital thus freed up will also need to be used to finance solutions for customers encountering repayment difficulties, while taking account of the risks, so that any potential crisis is not exacerbated by a spate of payment defaults, evictions and forced sales of housing.

Activation of the countercyclical capital buffer could prove necessary in the near future

- 67. Use of the countercyclical capital buffer built up during a period of favourable economic conditions for release in a crisis was applied by the Bank for the first time at the start of the pandemic. At that time, the 0.5 % countercyclical capital buffer had been released in the sum of around € 1 billion. That buffer has not yet been reactivated. However, the high asset prices on the financial markets and the strong momentum on the Belgian housing market indicate a sharp upturn in the financial cycle. The Bank will continue to keep a close eye on the need to activate this buffer and the arrangements for doing so during 2022.
- 68. Macroprudential measures are in fact the first line of defence for cushioning any repercussions on financial stability of a highly expansionary monetary and fiscal policy. Their activation extends the necessary scope for pursuing these expansionary policies. However, it should be noted that macroprudential policy cannot contain all the risks. Moreover, capital buffers, such as the countercyclical buffer, are not in themselves able to restrain the financial cycle. They merely oblige the banks to build up a reserve to cover any losses in the event of a crisis.

Macroprudential policy is the first line of defence for cushioning the impact on financial stability of a highly expansionary monetary and fiscal policy

The Bank calls for transposition in accordance with Basel III for European banks

69. Since regulatory authorities need to learn useful lessons from times of crisis, the 2008 global financial crisis led to radical redesign of the regulation and supervision of the financial system. The Basel Committee on Banking Supervision completed its reforms of banking legislation at the end of 2017 with the publication of measures limiting and - via the output floor supplementing the use of internal models for the determination of the risk-weighted assets (i.e. the denominator of the risk-weighted capital ratio). This last requirement specifies that the total risk-weighted assets as calculated by internal models must not be less than 72.5 % of the same total risk-weighted assets as calculated by the standard, more conservative model. The Bank regrets that, in its proposal at the end of October 2021, the European Commission does not transpose these Basel III rules fully into European legislation. The transitional period for adoption of the output floor is longer and the transitional measures go much farther than the Basel Committee's provisions. Moreover, the proposal maintains the existing exemptions from the Basel rules in force in European legislation, which reduce the requirements for European banks. In addition, it is proposed that the output floor should only be imposed at consolidated level for international banking groups, whereas the banking rules have hitherto always applied to their various local subsidiaries as well.

70. Together with more than 25 other central banks and European supervisory authorities, the Bank – which is in favour of full and timely implementation of the Basel III standards – addressed a letter to that effect to the European Commissioner for Financial Services. In the

Local subsidiaries of foreign banking groups must hold sufficient capital to ensure the financial stability of the domestic banking sector long term, it is in the interests of the economy that banks should be adequately capitalised, since they are a major – and probably the most important – factor for the resilience of the financial system. Furthermore, the proposal for applying the output floor only at consolidated level creates a regrettable precedent for Member States such as Belgium, which host banks from other European Member States, since the Banking Union has not yet been completed. Financial stability can only be ensured if the subsidiaries

of foreign banking groups which play a prominent role in the domestic banking sector also hold sufficient capital to absorb any substantial, unexpected shocks.

The regulatory framework for non-bank financial intermediation needs to be strengthened

71. While Belgian investment funds stood up well to the COVID-19 shock, the Bank also gives high priority to strengthening the regulatory framework governing non-bank financial intermediation. The coronavirus crisis and the ensuing dash for cash in March 2020 showed that vulnerabilities persist in certain sub-segments of the money market, the bond market and the real estate funds market. In addition, as emerged in the light of the Greensill and Archegos cases in the first quarter of 2021, developments in the non-bank financial sector can have a great impact on the banking sector. We need to draw the right lessons from these experiences and strengthen the regulatory framework where necessary. The Bank fully supports the ongoing work on this subject at international and European level. The supervisory and regulatory authorities must likewise continue to keep a close watch on the risks concerning the interlinks between banks and non-banks. They must also examine the possible need to supplement the existing regulations, notably in regard to systemic exposures, e.g. to central counterparties for derivatives.

Digitalisation and climate change are the top priorities

72. While digitalisation of the financial world offers opportunities for financial institutions, it also implies various risks. In September 2021 the European Commission therefore proposed a strategy for promoting this digital innovation and creating a single digital market for financial services. However, the set of measures proposed for digital finance also aims at better control over the risks associated with digital innovation. It includes proposals concerning the markets in crypto-assets (MiCA), digital operational resilience (DORA) and distributed ledger technology

The emergence of cryptocurrencies and crypto-assets requires the creation of a sound framework so as to maintain control over the risks for financial stability (DLT). The proposals also aim to remedy a gap in the existing European legislation in order to prevent the current legal framework from impeding the use of new digital financial instruments while ensuring that these new technologies and products conform to the regulations and the management of corporate operational risks in the European Union. The aim of these initiatives is to encourage innovation and new financial technologies while ensuring adequate protection for consumers and investors. It is in fact increasingly crucial to guarantee cyber security and the continuity of the

underlying IT systems in order to ensure the availability and operation of essential financial services providers. We must continue to make sure that the financial players' administrative bodies have the necessary expertise and information to monitor these risks properly and to take the necessary steps to control them. The emergence of cryptocurrencies and crypto assets

requires the creation of a sound framework to maintain control over the risks to financial stability. Finally, all financial institutions must adapt their business model in line with the changing preferences of financial services customers, without however forgetting access to banking services for customers less familiar with the use of digital tools. The supply of financial services tends to favour digital channels and is able to exploit the latest technological innovations. In that regard, financial institutions increasingly need to compete with non-bank service providers as well. On this subject, the Bank's FinTech survey shows that, while most Belgian banks have actually established a strategic vision for FinTech and digitalisation, there are significant divergences between institutions in terms of digital performance and the development of innovative or digital applications. There is a risk that the business model of some banks may come under pressure, and not only because of competition from new players such as the BigTechs. It is also possible that the banks which are farthest advanced in terms of digitalisation and the integration of FinTech solutions might set the bar higher for all players in the sector by responding better and/or more efficiently to customers' needs.

- 73. In publishing its report on the digital euro at the end of 2020, the ECB initiated an in-depth review of the need for its own digital currency and the arrangements for issuing it. If a digital euro were to be issued, it would aim to support the digitalisation of the European economy and ensure sovereignty over foreign digital currencies or private means of payment. Since the use of cash is tending to decline, at least in some Member States, this project could offer citizens an alternative for securing their access to central bank currency. However, there is no question of discouraging or phasing out the use of cash, nor of competing with the private sector. On the other hand, the aim is to improve cooperation between banks, payment entities and other financial institutions. The Bank is cooperating with the other euro area central banks on this project in the High-Level Task Force, which is examining the main aspects of the design and characteristics of the digital euro.
- 74. Climate change and the transition to a more sustainable, low-carbon economy may also have a significant effect on the economy and on the financial system's stability. The prudential authorities are examining how to incorporate climate risks in the prudential legislation, while the supervisory authorities are ensuring that financial institutions analyse, monitor and manage these risks. The Network for Greening the Financial System (NGFS) remains a major source of inspiration for the regulatory and supervisory authorities. This is a global partnership of central banks and supervisory authorities aiming to exchange knowledge and experience in regard to climate and environmental risks and sustainable finance. The Bank plays an active part in this European and international work on climate risks in order to devise a risk-based approach to regulation and supervision. For the banking sector, for example, the Basel Committee on Banking Supervision examines how these risks could be incorporated in the

assessment of company-specific risks (second pillar) and in the minimum capital requirements (first pillar) of the Basel framework. However, these capital requirements must continue to be risk-based. There can therefore be no question of relaxing the capital requirements unless it can be shown that the exposures concerned are less risky; it is also necessary to impose more stringent capital requirements in the case of

The Bank is actively involved in devising a risk-based approach to climate risks in regulation and supervision

exposures highly sensitive to climate risks. In the meantime, progress has been achieved in the definition of the rules for measuring (taxonomy) and reporting climate risk-sensitive exposures, and work has continued on the introduction of climate risk reporting in order to ensure that financial institutions worldwide take account of these risks in the same way. The creation of the International Sustainability Standards Board by the IFRS Foundation should permit internationally comparable and consistent reporting of these risks. Pending the availability of more data and adjustments to the prudential regulations, the Bank recommends that Belgian financial institutions identify these climate risks and control them as best as they can. To that

end, the Bank published a Circular at the end of 2020 setting out its expectations concerning the collection – and incorporation in risk management – of data on the energy efficiency of real estate exposures. Those data must also be notified to the Bank in the case of new mortgage loans. The climate-related stress test to be carried out by the SSM in 2022 is an interesting exercise which will, in particular, reveal how much progress Belgian banks have made in the analysis of their climate risks.

A new European authority to strengthen the fight against money-laundering and terrorist financing

- 75. In July, the European Commission presented an ambitious set of legislative proposals for strengthening the EU rules aimed at combating money-laundering and terrorist financing. This legislative package also contains a proposal for the creation of a new EU authority for combating money-laundering. It forms part of the Commission's commitment to protect EU citizens and the EU financial system against money-laundering and terrorist financing. Its aim is to improve the detection of suspicious transactions and activities and to remove any loopholes that criminals exploit in order to launder the proceeds from illegal activities or to finance terrorist activities via the financial system. The measures considerably strengthen the existing EU framework by taking account of the emergence of new challenges relating to technological innovation. Those challenges include virtual currencies, the increased integration of financial flows in the Single Market, and the international character of terrorist organisations. The Bank supports these proposals as they will permit the creation of a much more harmonised framework, making it easier for operators subject to the rules on money-laundering and terrorist financing to abide by those rules, particularly if they engage in cross-border activities.
- 76. During the course of the period under review, the question of "de-risking" has become increasingly problematic. De-risking is a complex phenomenon that mainly consists of financial institutions inadequately applying anti-money-laundering legislation and ceasing to supply financial services to entire sectors or entire categories of clients. This obviously has major social and economic consequences. Following an Opinion on this published by the European Banking Authority (EBA) at the beginning of 2022, the Bank set out its expectations for the sector through a Circular. For the Bank, this is also a key element of its supervisory actions over the coming period. The Bank realises that a balanced approach is necessary, one that can meet commitments in terms of the fight against money-laundering, while ensuring certain specific social responsibilities. The Bank hopes that the policy framework provided for this will contribute.

Major changes in the legal framework governing resolution of (potentially) defaulting institutions

77. The Bank also exercises a mandate as the national resolution authority, within the Banking Union, alongside the SRB and other national resolution authorities of the participating

Transposition of the BRRD2
Directive into Belgian
law is one of the key
resolution developments

Member States. Major changes were made to the legal framework governing resolution by the BRRD2 Directive, transposed into Belgian law in 2021. For example, the BRRD2 Directive introduces the concepts of a "resolution entity" and a "resolution group". From now on, group resolution plans must identify, within a banking group, the entities to which the resolution authority intends to apply the resolution instruments in the event of failure, and the

ones which will continue to operate without going into resolution. That distinction permits differentation between Single Point of Entry (SPE) resolution strategies in which only the parent

company goes into resolution, and Multiple Point of Entry (MPE) resolution strategies. In the latter case, the resolution instruments are applied to both the parent company and some of its subsidiaries, leading to dismantling of the group. In addition, the regulatory framework relating to the Minimum Requirement for Own Funds and Eligible Liabilities (MREL) was radically revised and the rules on the subordination of the MREL instruments were tightened up. However, other adjustments are desirable for further strengthening of the second pillar of the Banking Union. In particular, they aim to extend the public interest test, permitting use of the resolution instruments for a wider range of banks, or harmonisation of deposit rankings in order to prevent a resolution from including deposits in a bail-in. Similarly, the treatment of banking groups in resolution – and particularly the single point of entry model – needs to be strengthened because at present this model only establishes a presumption which does not guarantee group solidarity in the event of resolution. This also implies the question of burdensharing, in the event of a crisis, between the home state and the host state, which requires an answer commensurate with the challenges.

Pierre Wunsch Governor

Brussels, 2 February 2022



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Economic and financial developments



1. International economy

1.1	The global economy bounced back strongly	
1.2	in 2021, but the recovery is uneven and incomplete	45 54
1.3		58
1.4	The financial markets continued to recover but expected regional divergences concerning further policy support began to play a role	64

1.1 The global economy bounced back strongly in 2021, but the recovery is uneven and incomplete

The strengthening of the global economy that began in mid-2020 continued throughout the year under review, and even exceeded the expectations prevalent in January 2021. Quite obviously, it was more difficult than previously to predict how the recovery would proceed, and the growth forecasts underwent multiple significant revisions. It was in fact the first time in modern history that a pandemic had caused a severe global economic crisis, and the erratic course of this tenacious virus continued to affect the economy in 2021. However, the link between the epidemic and the crisis has weakened as the proportion of

vaccinated citizens in the population has risen continuously, and people and businesses have adapted their behaviour and learned to live with the virus. Moreover, at the beginning of the year, there was still great uncertainty over the pace at which the vaccination campaigns could be rolled out around the world and the degree to which the success of that vaccination would permit the speedier reopening of the economy. In short, economists and policy-makers are advancing into unknown territory: forecasts are even harder than usual to make and they have to be constantly revised as our understanding of events evolves.



Table 1.1

GDP of the main economies
(percentage changes in volume compared to the previous year)

		January 2022 projections		p.m. January 2021 projections	p.m. Level compared to pre-COVID¹
	2019	2020	2021	2021	2021 Q4
Advanced economies	1.7	-4.5	5.0	4.3	101.6
of which:					
United States	2.3	-3.4	5.6	5.1	102.9
Japan	0.0	-4.5	1.6	3.1	99.6
Euro area	1.5	-6.5	5.1	3.9	99.9
United Kingdom	1.4	-9.4	7.2	4.5	98.7
Emerging economies	3.5	-2.2	6.8	6.4	106.0
of which:					
China	6.0	2.3	8.1	8.1	110.3
India	4.0	-7.3	9.0	11.5	105.9
Russia	2.0	-2.7	4.5	3.0	102.9
Brazil	1.4	-3.9	4.7	3.6	99.6
Low-income countries	5.3	0.1	3.1	5.1	n.
World	2.8	-3.1	5.9	5.5	103.9
p.m. World trade	0.9	-8.2	9.3	8.1	n.

Sources: ECB, IMF. 1 Index, 2019 Q4 = 100.

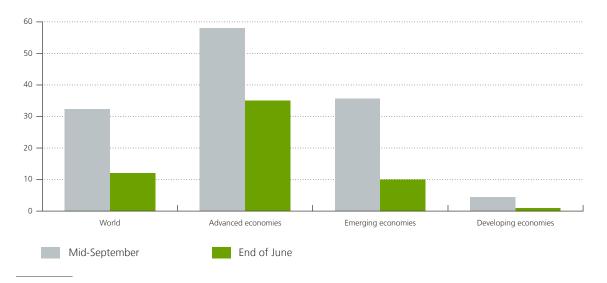
A global recovery marked by geographical faultlines

On average, the year 2021 was much better than expected for the advanced economies. But lowincome countries achieved very disappointing economic growth, so that - for the first time in several years – they collectively recorded a slower expansion than the advanced economies. In addition, taking account of their faster population growth, the income gap widened considerably in 2021. Unequal access to the coronavirus vaccines is a major factor here. In September, while 60 % of the population of the advanced economies was fully vaccinated, the vaccination campaigns had yet to be launched in the poorest countries. The more fragile institutional framework in developing countries and the more informal character of their economies make them very vulnerable to any resurgence of the virus, while their governments do not have the financial resources to grant substantial aid.

The emerging economies as a whole recovered in line with expectations, but wide variations emerged between countries. Many, with the exception of China, initially struggled to restart their economic activity, owing to new waves of the more contagious Delta variant of the coronavirus in the spring (in India and Latin America) and in the summer (in South-East Asia). The vaccination campaign also started later there than in the advanced economies or was greeted with great scepticism by the population (in Russia, Eastern Europe and the Balkans), so that those countries remained more susceptible to the virus. However, once the restrictions were lifted, the economic rebound generally exceeded expectations, as is evident from the robust growth of the Indian economy in the third quarter.

Chart 1.1

The vaccination campaigns are progressing much more slowly in the poorest countries (fully vaccinated individuals, in % of the population)



Source: IMF.

The Chinese economy was the first to recover from the pandemic in the second half of 2020. There, a zero-tolerance policy and restrictions on international travel were the main measures taken against the virus. The economy also benefited from the vigour of global demand for certain goods (face masks, electronics) which China produces in large quantities. As international trade continued to pick up following the full reopening of the Western economies in the first half of 2021, Chinese exports recorded further sustained growth. However, production struggled to keep up with this strong demand for exports, as the economy faced acute shortages of electricity plus new waves of coronavirus leading to the temporary closure of factories and ports. In the autumn, the Chinese economy also had to contend with headwinds coming from the real estate sector, which is estimated to represent, directly and indirectly, almost 30% of activity. The measures taken by the authorities in 2020 to contain the financial risks in that sector had in fact caused problems for some heavily indebted Chinese developers, such as Evergrande. In addition, small regional banks and shadow banks that are very exposed to property companies saw a rise in their non-performing loans. All these factors caused the property market to run out of steam, curbing the growth of the Chinese economy.



In the advanced countries, full reopening of the economy and society was only possible after a successful vaccination campaign. The United Kingdom and the United States kicked off first at the turn of the year, and the rest of Europe soon followed. These advanced economies bounced back with unprecedented vigour. In comparison with previous crises, the economy was in fact in a unique position at the start of the revival. Unlike the global financial crisis, this one did not require the correction of underlying macroeconomic im-

balances. On average, the current crisis has caused hardly any deterioration in the financial situation of households, thanks to the savings built up during the

successive lockdowns (scope for consumption was limited and governments made up for the loss of income) and the new rise in the value of housing and financial assets. Consequently, the reopening led to a spending spree with a strong focus on consumer durables, which created a mismatch between demand and supply resulting in price increases and extended delivery times. As the year progressed, firms also encountered ever more problems in obtaining the raw materials, intermediate inputs or staff they needed and were forced to scale down their activities or even suspend them temporarily. Global value chains came under pressure when production units remained closed in countries where the virus was raging. These supply-side constraints, which are examined in detail below, and the accompanying spike in inflation, alongside the resurgence of this tenacious virus, put the brakes on the recovery at the end of the year.

In Japan, on the other hand, the recovery fell short of expectations throughout the year, as the country lagged behind with vaccination and even had to reimpose temporary restrictions at the time of the Olympic Games.

The economic profile outlined above was particularly pronounced in the United States, largely on account of the country's unprecedented policy response involving three support plans for the American econ-

> omy, adopted successively between March 2020 and March 2021 and together representing 20 % of GDP. On each occasion, the emphasis was on assistance

for households, except the most wealthy ones, with the aim to boost the purchasing power of people with a high propensity to consume and thus to give a strong impetus to the US economy once it was fully reopened. That rebound actually occurred in the first half of the year. Conversely, the termination of certain temporary support measures at the end of the summer produced a negative fiscal impulse in the third and fourth quarters.

In the United Kingdom, economic activity in 2020 was particularly affected by the pandemic, especially during the winter, with what was initially termed the British variant, and by the risk of an abrupt exit from the European Single Market and Customs Union in the absence of any agreement. Thanks to the Trade and Cooperation Agreement concluded on 24 December 2020, the impact on



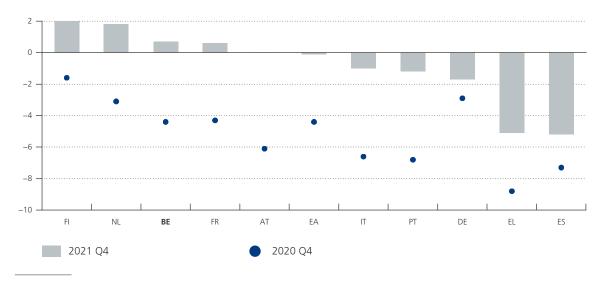
A mismatch has emerged between

demand and supply, resulting in price

rises and extended delivery times

Chart 1.2

In many euro area countries, GDP has already regained or even surpassed its pre-crisis level (change compared to GDP in 2019 Q4, percentage points)



Sources: ECB, NBB.

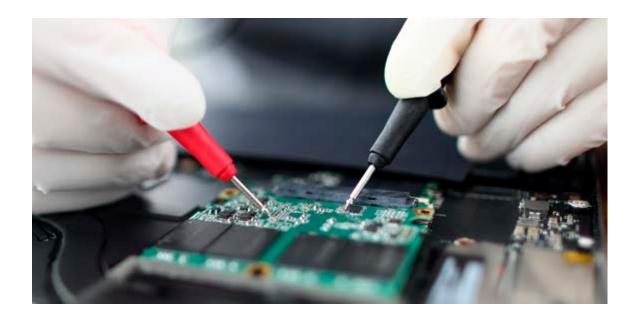
trade relations between the EU and Great Britain – Northern Ireland remaining in the European Single Market and Customs Union – was limited, especially as the introduction of certain barriers was postponed until 1 January 2022. In addition, thanks to prompt vaccination, the United Kingdom was able to ease the public health restrictions more quickly, resulting in a remarkable rebound in 2021.

In the advanced countries, the recovery following the coronavirus crisis was thus significantly faster than after the global financial crisis: at the end of the year, many of them had regained or even surpassed the level of production prevailing just before the pandemic. That was true of many euro area countries, with the main exception of the Southern Member States where the recovery remained incomplete. They were in fact the most severely affected by the epidemic. Their heavy dependence on tourism is certainly a factor. Nonetheless, Germany's economic recovery also failed to live up to expectations, with production in manufacturing industry suffering from bottlenecks in the supply of certain components. In particular, the motor vehicle industry which is very important in Germany saw output slump on account of the shortage of semiconductors and other supply chain disruptions. Finally, the Member States with a lower vaccination rate were more vulnerable to the resurgence of the more contagious Delta variant during the autumn. Overall, income inequality between the euro area Member States widened less than initially feared. The solidarity mechanisms provided by the European policy response were a contributory factor here.

Bottlenecks hamper the rapid expansion of supply

During the lockdown, the accelerating digitalisation of society following the outbreak of the pandemic and the temporary closure of services involving close contact led to a shift in demand from services to goods, and a shift between various categories of goods, particularly in favour of consumer electronics. Even after the full reopening of the advanced economies, the shadow of the epidemic continued to hover over consumption behaviour. In particular, demand for consumer durables thus reached an extreme peak and came up against the shortage of supply. The rapid increase in production was impeded by bottlenecks affecting the various links in the production process, particularly commodities, intermediate goods such as semiconductors and plastics, and logistical services.

The transport sector, and more specifically maritime container transport, had trouble coping with the



exceptional peak in the trade of goods. Port infrastructure cannot be expanded quickly, and a number of container ship operators that had gradually scaled back their capacity owing to the lack of demand following the outbreak of the pandemic were only able to build it back up gradually. In addition, when industrial activity took off again in China, the containers were apparently located in the wrong place so they first had to return empty. New outbreaks of the virus also led to a shortage of port workers and further temporary closures of major container ports in China. This resulted in long waiting times in the ports. A container ship which ran aground in the Suez Canal in March further exacerbated the delays.

Semiconductors are a key component in a number of products such as smartphones, computers, consumer electronics, ICT infrastructure, motor vehicles and industrial machinery. The sudden surge in demand for remote working equipment and consumer electronics combined with an unexpectedly rapid revival in demand for motor vehicles at the time of reopening led to serious bottlenecks in the supply of semiconductors. The shortages were made even worse by temporary interruptions in the case of some major producers and by the build-up of strategic stocks of semiconductors by Chinese firms affected by the American export restrictions.

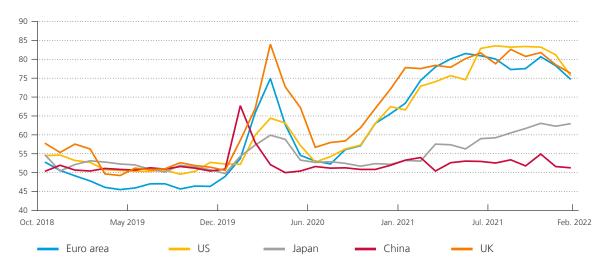
The organisation of production processes in the form of complex global value chains, a particular feature of the semiconductor industry and the motor vehicle industry among others, makes such sectors vulnerable to disruption in one link or another. Apart from the need to restart machinery, the principal requirement for the production chain's recovery is good coordination between entities and locations. Production processes based on maximum efficiency and minimum stocks are therefore vulnerable to unexpected demand and supply shocks. Thus, many vehicle manufacturers reduced their stocks of semiconductors significantly when demand for motor vehicles collapsed following the outbreak of the pandemic, which left them unprepared for the ensuing vigorous upsurge in demand.

Whereas the lack of demand previously eroded business leaders' confidence, supply problems have now become the main source of concern for business leaders in manufacturing industry. The bottlenecks are causing a (marked) extension of delivery times and historically low stocks of finished products. The problem is particularly acute in the United States, the United Kingdom and the euro area, economies which are driven by strong domestic demand, in contrast to Japan and China where consumption remained sluggish, especially in the second half of the year. Nonetheless, export-oriented Chinese and Japanese firms also faced longer delivery times.

There is great uncertainty over how long it will take to eliminate all the shortages. If the disruptions are due to temporary closures of production facilities following natural disasters or epidemiological emergencies,

Chart 1.3

Delivery times lengthened considerably in the United States, the United Kingdom and the euro area (PMI indices¹ for delivery times in manufacturing industry)

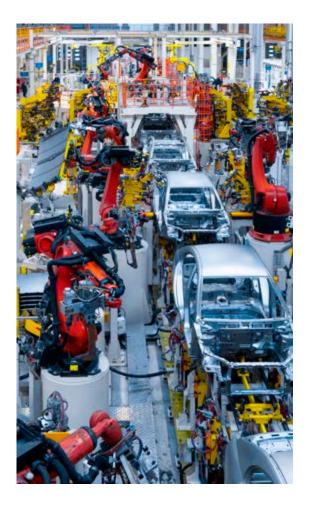


Source: Refinitiv (an LSEG company).

1 Indices defined as 100 less the proportion of firms polled responding that delivery times are shorter or the same as in the preceding month.

the shortages can generally be corrected in a few months. That is the baseline scenario that many economists had initially anticipated. But experience also tells us that structural shifts in demand or supply have a much longer-lasting impact on the economy. Thus, some of the changes relating to the coronavirus will probably become permanent. In the absence of any notable improvement, there is a growing conviction that the supply disruptions will last longer than expected.

The shift in demand towards consumer durables was also behind the rapid recovery of international trade in goods, following its collapse in the second quarter of 2020. That vigorous expansion persisted at first in 2021 but subsided later in the year owing to the bottlenecks described above. International trade in motor vehicles and spare parts was particularly affected, and that was also reflected in the downturn in sales of new cars in all the large economies (euro area, United States and China). Conversely, trade in services remained below its end-2019 level, as tourism only partly returned to normal.





There are signs of a growing shortage on the labour markets

The labour markets also staged a swift and vigorous recovery once the restrictions were lifted. But their revival remained incomplete in that employment (in persons and in hours worked) has not yet returned to its end-2019 level. In the euro area, the United Kingdom and Japan, the shock was essentially absorbed by reductions in working time via the use of furlough schemes, which maintained the link between employers and workers. However, American firms had to make their workers redundant because there is no temporary lay-off scheme in that country. Employment there recovered faster in terms of hours worked than in numbers of persons.

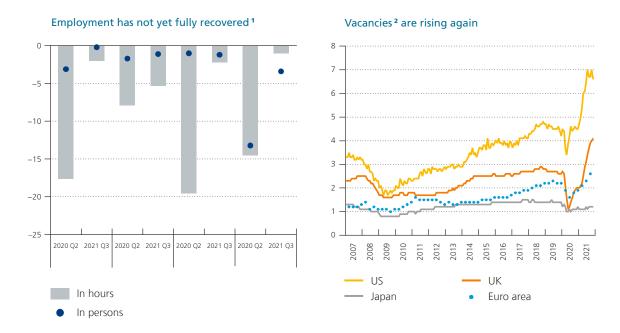
The number of vacant posts also increased sharply, notably in the United States and the United Kingdom, where historically high figures were recorded at the end of the year. In the euro area and Japan, too, the number of vacancies regained its pre-pandemic level in the third guarter.

A high number of vacancies sends various signals about the labour market. On the one hand, it may be a sign of a healthy recovery with ample new jobs. On the other hand, it may also suggest a slump in the supply of labour and/or mismatches between demand and supply. These last factors certainly apply in the United Kingdom and the United States. In the latter country, where many workers lost their job after the outbreak of the pandemic, firms are having difficulty attracting them back again now that the economy is picking up. The number of workers in the United States is still more than 3 % below the

pre-crisis figure, possibly implying that the labour supply is still suffering from the crisis. The temporary increase in replacement incomes may have contributed to a more wait-and-see attitude, while fear of infection has made a number of sectors less attractive. That is particularly true in hospitality. As well as that, many workers are opting to guit voluntarily, in the hope of benefiting from the current tightness on the labour market and finding a job offering better working conditions. In the United Kingdom, employers are also increasingly reporting recruitment problems; they attribute them not only to the strength of demand but also to a smaller supply of workers from the EU (owing to Brexit) and skills mismatches. Structural mismatches on the labour market are not yet as pronounced in the euro area as a whole, but they are growing in certain sectors and in some Member States, such as Belgium and the Netherlands.

Chart 1.4

The labour market's recovery is still incomplete, but there are also signs of tightness (in %)



Sources: Bureau of Labour Statistics (US), Bureau of Statistics (Japan), ECB, Eurostat, Federal Reserve Bank of St Louis, Office for National Statistics (UK).

¹ Deviation from the corresponding average value in the last quarter of 2019.

² Defined as the ratio between the number of vacancies and the total number of posts filled and not filled.

1.2 Inflation has accelerated considerably in most countries owing to both supply and demand factors

The combination of supply shortages and vigorous demand has driven up many input prices

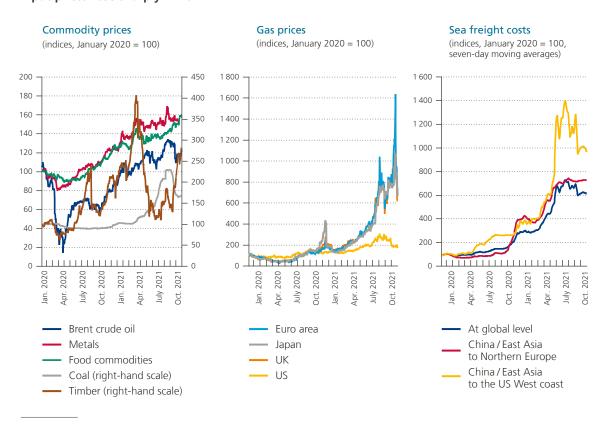
The strong recovery of demand after the sharp decline in 2020 also drove up prices, mainly energy and commodity prices but also the cost of intermediate goods and transport (particularly sea freight). As previously mentioned, various factors contributed to the situation where supply fell short of demand and global value chains were seriously disrupted. For example, the price of container shipping from China and East Asia to the West coast of the United States increased tenfold between January 2020 and the end of December 2021.

In the case of oil and gas, investment in production capacity during the years preceding the coronavirus crisis had been clearly insufficient owing to the low market prices prevailing at that time. Moreover, the slump in oil prices in 2020 bankrupted several independent shale oil producers in the United States, while others underwent mergers or acquisitions. When global demand for oil picked up following the particularly weak year 2020, OPEC+ only slightly raised its output targets. In some parts of Asia and Europe, high gas prices have also led to the substitution of oil for gas in electricity generation, putting additional pressure on oil prices. However, discovery of the Omicron variant of the coronavirus did trigger a fall in oil prices at the end of November, just after a number of countries (including the United States, the United Kingdom and China, in particular) had announced plans to use strategic oil reserves in order to curb the rising cost of energy. In regard to gas, the scheduled scaling down of extraction in Groningen, in the Netherlands, continued as planned (activities closing down in 2022) so that the supply of gas diminished further. In addition, various idiosyncratic factors were at work, such as a long, cold winter in 2020-2021 in the United States and North-East Asia, so that stocks were largely exhausted and frozen wells impeded production; periods of drought that limited hydroelectric production in Brazil, Turkey and California; below-average wind-generated electricity in Europe; Hurricane Ida in the United States; insufficient extra gas supplies from Russia to make up for the shortfall in supplies from other regions; the closure of various Chinese ports owing to coronavirus restrictions, etc.

Owing to the COVID-19 crisis, maintenance work also had to be postponed from 2020 to 2021 at gas and coal extraction sites (especially gas production sites in the United Kingdom and Norway), further reducing the supply of these energy commodities just at a



Chart 1.5
Input prices rose sharply in 2021



Sources: EIA, Freightos, Refinitiv (an LSEG company).

time when demand was expanding strongly. The unplanned shutdown of some LNG plants, supply problems upstream of the production chains, unexpected repairs and cumulative delays on certain investment projects are all additional factors which reduced global gas supplies. In China, the economic recovery caused the coal price to jump, as coal production was unable to keep up with demand. China is a global price setter for coal, in view of its massive demand for it. Disruptions in coal production in other major exporting countries (Indonesia, Australia and South Africa) also drove up coal prices. Pressure on prices only eased to some extent when China stepped up its coal production considerably in the final guarter. High gas prices also prompted a shift in global demand, as a number of electricity producers on major American, European and Asian markets switched back from gas to coal.

Gas and coal prices therefore reached record levels, taking electricity prices in their wake. In China,

the soaring coal prices were not reflected proportionately in electricity prices since they are subject to strict government regulation there. As a result, several electricity producers refused to produce at a loss, leaving electricity supplies diminished and large swathes of China had to contend with power cuts. Consequently, a number of highly energy-intensive industries (such as steel, aluminium and cement) suspended their activities entirely or in part, and that in turn had repercussions on the availability and prices of certain materials and goods at global level. In October, in a bid to prevent a prolonged energy crisis, the Chinese government therefore decided to authorise larger electricity price fluctuations. In Europe, electricity prices reached unprecedented levels, mainly owing to the transmission of high gas prices (for various reasons, gas power stations currently dictate the prices on European electricity markets), but also as a result of the marked rise in the price of emission rights under the European Emissions Trading System in 2021.

The prices of various other commodities also increased or fluctuated widely owing to supply problems and the strong surge in demand linked to the pandemic. For example, the price of timber for construction displayed substantial variations in 2021, rising steeply in the spring and at the end of the year. Food commodity prices climbed throughout the entire year, except for a brief decline during the summer months. In particular, prices of vegetable oils and cereals went up because of poor harvests in Canada, the United States and Russia, while strengthening demand and the shortage of seasonal workers in Malaysia exerted upward pressure on palm oil prices.

Apart from commodity prices, intermediate goods also became more expensive. Semiconductor prices are an obvious example. The reason lies in the situation described above in which rising demand – due mainly to the expansion of remote working and growing demand for motor vehicles – is confronted by disrupted supplies.

In various countries, consumer prices increased much more steeply than in recent years

The higher prices of commodities and inputs were then transmitted to consumer prices, so that core inflation also exhibited a

marked – albeit less steep – upward trend. Consumer prices were also affected by the increase in prices of services. The reopening of economies caused booming demand for services, while the rise in input prices, and above all the shortage of labour in some services involving close contact, likewise had an adverse effect on the supply of services. Finally, inflation rates were also propelled by base effects compared to 2020, including certain government measures relating to the coronavirus crisis (such as the temporary cut in VAT in Germany in the second half of 2020).

From the second half of the year, consumer prices therefore rose much more sharply than in recent years in almost all the major economic blocs, with the notable exceptions of Japan and China. While input prices did go up in Japan as elsewhere, that rise was passed on to a much smaller extent in consumer prices. In China, low inflation is due partly to the large weight of food prices in the consumption basket (around 30%),

and in particular the price of pork, which has fallen in the course of the year. In the United Kingdom, consumer prices rose faster than in the euro area because the labour market was already tighter there, partly on account of Brexit. In addition, temporary government measures related to the COVID-19 crisis (such as the cut in VAT rates in the hospitality sector) generated base effects. The United States recorded the highest inflation rates owing to the marked rise in transport costs, the growing tightness on the labour market – which affected services prices – and an escalating demand for goods (essentially durables).

The pandemic makes it hard to interpret wage indicators, which are biased, for instance, by the use of different temporary unemployment schemes in several countries and by the sharp fall in the number of hours worked. Nevertheless, excluding certain sectors in some countries, the labour market situation and the upswing in inflation did not trigger exceptional wage increases in 2021. That could be a sign that the inflationary spike was believed to be temporary. However, wages usually do take a while to respond to fluctuations in inflation. Thus, higher inflation could prove to be more permanent if significant wage increases were to occur in 2022 and be reflected in turn in consumer prices (second-round effects). In particular, in

countries where the labour market is already tight and where fuel prices and rents are already rising rapidly (cost increases which are

much more apparent to consumers), workers could become more demanding in wage negotiations, and that could spark an escalating wage-price spiral.

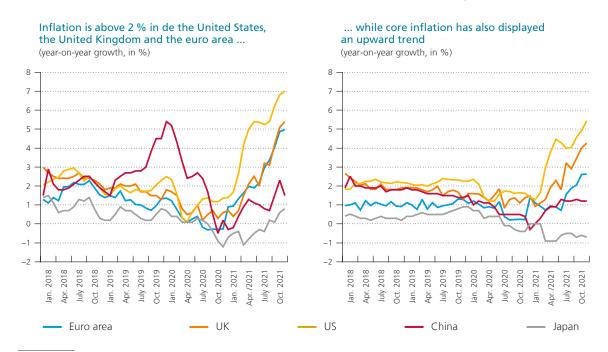
Rents often go up in the wake of house price rises, which occurred almost everywhere last year. In much of Europe, Canada and the United States, growth rates were actually in double figures. House prices in the United States shot up, and in November 2021 were already 60 % higher than their previous peak in April 2007. This boom in property prices is attributable to the large volume of savings that households built up during the coronavirus crisis, the low interest rate environment and perhaps also to changes in preferences. The transmission of such a steep rise in house prices to consumer price inflation depends on the way in which the costs associated with owner occupied housing are taken into account and the weight of that component in the total consumer

Inflation rose sharply in most of the major economic blocs

price index.

Chart 1.6

Headline inflation and core inflation of consumer prices 1 took off almost everywhere in 2021



Sources: ECB, BLS, BIS, CEIC, NSO, Refinitiv (an LSEG company), Federal Reserve.

¹ Core inflation: CPI excluding food and energy in the United States and Japan; excluding food, energy, alcoholic beverages and tobacco in the United Kingdom and in the euro area.

1.3 Macroeconomic policies supported the global economy, but the first signs of divergence between countries became apparent

Monetary policy generally remained expansionary, ...

In response to the pandemic shock, monetary policy was deployed in order to support economic activity, stabilise the financial markets and maintain bank lending to businesses and households. For instance, central banks had cut their key interest rates in the spring of 2020 while also stepping up their asset purchases and, in some cases, widening the range of corporate debt they would agree to buy.

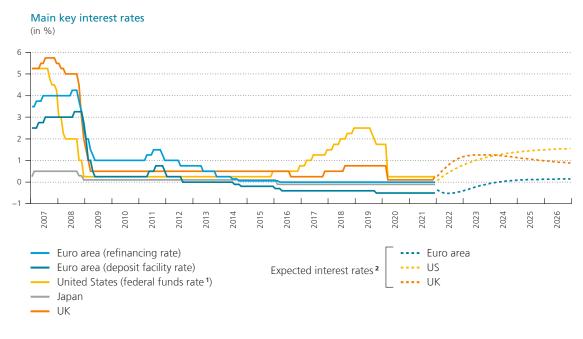
During most of 2021, the main advanced economies did not adjust their key interest rates and where asset purchase policies applied the practice continued, driving up the weight of central bank assets in GDP to new heights.

Conversely, a number of emerging countries – notably in Latin America (Brazil, Mexico, etc.) and Eastern Europe (Russia, Poland, etc.) – had to tighten their monetary policy in order to curb inflationary pressures. In Turkey, however, the monetary authorities which had raised the key interest rates sharply between September 2020 and March 2021 cut the rates by several percentage points in 2021, despite galloping inflation. In most of the large emerging economies (with the exception of Indonesia), asset purchase policies were discontinued. In China, borrowing costs were driven down by the use of monetary policy instruments other than the key interest rates (such as easing of the banks' reserve requirements).

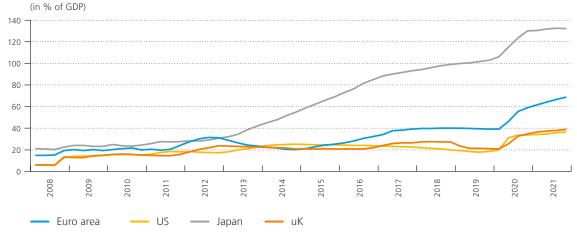


Chart 1.7

The central banks of the main economies kept their key interest rates low and continued to expand the size of their balance sheet



Central bank balance sheet total



Sources: Bank of England, BIS, Eurostat, OECD, ONS, Refinitiv (an LSEG company).

- 1 Upper limit of the target range.
- 2 Interest rate expectations at the end of December.

... but normalisation has begun

In March, in view of the vigorous economic rebound and the ensuing rise in inflation, the financial markets were already expecting interest rates to go up and central banks took the first steps towards normalisation. The Bank of Korea was the first central bank among the G20 advanced countries to raise its interest rates since the start of the pandemic, while

Australia's central bank and the Bank of Canada began to taper their asset purchases. From October, the Bank of Canada only purchased securities to replace bonds reaching maturity.

In the United Kingdom, the Bank of England's Monetary Policy Committee decided to raise its key interest rate from 0.1% to 0.25% at its meeting on 15 December, owing to the tight labour market

and signs of more persistent pressure on prices and domestic costs. For the time being, it maintained its stock of sovereign bonds and bonds issued by high-grade non-financial corporations. It also considered that, at this stage, a modest tightening of monetary policy would probably be necessary over the coming three years to bring inflation down sustainably to the target of 2 %.

In the United States and in the euro area, the response by the central banks was guided by the new strategies 1, redefined in August 2020 and July 2021 respectively. Although they differ, these strategies both imply tolerance in the event of the inflation target being temporarily exceeded, notably after a long period in which inflation has remained (well) below that target. Nonetheless, as inflation has risen, central banks have launched a process of normalisation on both sides of the Atlantic, albeit each at their own pace.

In the United States, the Federal Reserve announced in November that it would cut its net purchases of Treasury securities from \$ 80 to \$ 70 billion and its purchases of agency mortgage-backed securities from \$ 40 to \$ 35 billion. At its December meeting, it decided to double the rate of tapering, bringing the additional monthly reduction to \$ 20 and \$ 10 billion respectively over the following three months, so that net purchases of securities will cease by the end of March 2022. The Federal Reserve also plans to raise its key interest rates with effect from March 2022.

In the euro area, the ECB kicked off in December with a gradual reduction in its monetary easing. The rate of normalisation there will be slower and more flexible and will probably start with a lower rate of balance sheet expansion rather than a tightening of the key interest rates (see chapter 2).

Fiscal policy had to remain expansionary in most of the G20 countries

Fiscal policy, which had been radically eased in 2020, remained expansionary overall. With each successive wave of the coronavirus epidemic, governments in the

1 See box 2 of the Report 2020 for the revision of the American monetary strategy and chapter 2 of this Report for the ECB's new monetary policy strategy.

advanced countries had to make regular adjustments to the main measures supporting their economies and they allowed the automatic stabilisers to do their work. Nonetheless, as the economy picked up, the support measures became fewer and more finely targeted, while recovery and investment measures – usually phased over future years – proliferated on both sides of the Atlantic: the European recovery plan focusing mainly on green and digital investment in the EU Member States, and various plans by President Biden in the United States. Congress approved some elements of the Biden plans: innovation and competition, and infrastructure.

In most emerging countries, fiscal policy likewise supported economic activity in 2021, albeit to a lesser degree than in 2020. Nonetheless, some countries ran out of fiscal leeway and were forced to tighten the purse strings.

Overall, and taking account of relatively robust economic growth, the budget deficits declined to a greater or lesser degree from one country to another. Oilexporting countries, such as Russia and Saudi Arabia, or other commodity-exporting countries like Brazil, Argentina and South Africa, took advantage of soaring prices to reduce their deficits substantially, against the backdrop of high debt levels and limited budgetary scope. On the other hand, these escalating prices placed a burden on the public finances of countries which import these commodities, including India and Turkey. In the euro area, looking at just the large economies, the deficit remained more or less stable, as the deterioration of the deficit recorded in Germany in an election year offset the improvement in the French, Italian and Spanish deficits.

In some countries, the deficits remained substantial, driving public debt to new record levels in 2021 (see box 1 for a historical overview of the public debt). In other countries, despite the deficits, the debt diminished because the (partly mechanical) growth revival enabled growth to exceed the (implicit) interest rate on the debt, and hence to achieve an endogenous reduction in the government debt ratio.

Chart 1.8

Public deficits which had deteriorated sharply in 2020 were reduced in 2021,

but in varying proportions between countries 1

(in % of GDP)



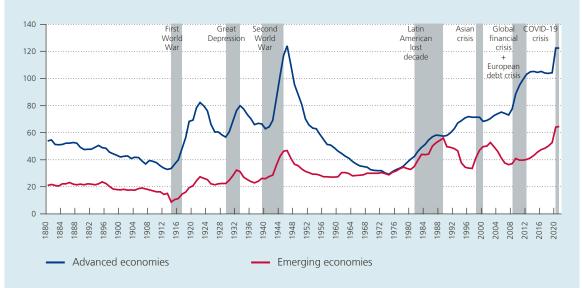
Sources: ECB for the euro area, EC for Russia and Turkey, OECD for the other advanced economies and IMF for the other emerging economies.

1 The G20 countries are divided into advanced and emerging economies. In each of these two categories, the countries are ranked in descending order of their public deficit in 2021.

Public debt is reaching historic highs: is the sky the limit?*

Public debt¹

(in % of GDP)



Source: IMF.

1 The aggregates for the advanced and emerging economies are based on samples of 25 and 27 countries respectively and are weighted by GDP in purchasing power parity terms.

On average, the current public debt-to-GDP ratio of advanced economies is very close to the level observed at the end of the Second World War. The sharp reduction in the public debt ratio in the postwar years was due to an exceptional combination of factors which persisted until the late 1970s: very strong economic growth fuelled by the reconstruction, persistently high inflation, and extensive financial repression (in other words, policies aimed at keeping nominal interest rates on public debt below the free market rate by means of regulatory restrictions and other government interventions). Other major jumps in the public debt ratio of advanced economies coincide with the First World War, the Great Depression of the 1930s, the global financial crisis and the ensuing European sovereign debt crisis, and finally, the COVID crisis. In contrast to what happened after the Second World War, more recent shocks and crises were followed by much more modest debt reductions (if any), so that the overall public debt has been on an upward trajectory since the mid-1970s. The public debt ratio of emerging economies tends to follow a less steep path but is equally characterised by waves of debt accumulation and crisis-related jumps.

While the exact debt dynamics vary between countries, no or hardly any fiscal buffers were rebuilt between the global financial crisis of 2008-2009 and the eruption of the COVID-19 pandemic. True, negative interest-growth differentials (the famous "r-g") often had a beneficial impact on the debt ratio,

* See Buysse K., F. De Sloover and D. Essers (2021), "Indebtedness around the world: Is the sky the limit?" NBB, Economic Review, June.



but the effect was not always sufficiently large to offset the primary fiscal deficits. In the emerging economies, the increasing primary deficits seen in recent years, sometimes combined with other factors (such as exchange rate depreciation) drove up the public debt ratio despite GDP growth which traditionally outpaces that in the advanced economies. As regards the impact of the COVID-19 crisis, public debt ratios jumped in response to the massive budgetary support (particularly in advanced economies), temporarily reinforced by severe drops in economic activity during lockdowns (in both advanced and emerging economies).

High debt levels hamper the government in conducting countercyclical policies and in responding to future shocks. The public debt ratio tends to be negatively correlated with economic growth, but the relationship is likely non-linear and it remains difficult to establish clear causality. Moreover, there is no "magic" universal threshold beyond which public debt has an unambiguously negative impact on growth. The growth effects of public debt also depend on the motives underlying governments' borrowing, such as temporary countercyclical fiscal support, the funding of major investment projects designed to boost production, or politically motivated expenditures (e.g. for electoral purposes).

At the end of the day, public debt has to remain "sustainable", which means that the primary fiscal balances necessary to at least stabilise debt under realistic scenarios should be economically and politically feasible, while keeping refinancing risks manageable and preserving sufficient potential growth. In practice, assessing public debt sustainability is a complex and intrinsically forward-looking exercise which involves a good dose of judgment.

It is sometimes suggested that debt-friendly interest-growth differentials (resulting largely from low interest rates) should make us worry less about high public debts and open up possibilities for more aggressive fiscal stabilisation policies and public investment. While it is true that a negative r-g provides some extra budgetary leeway, it should not be used as a free pass to waive all fiscal discipline. In fact, when primary deficits are large they may outweigh the favourable effects of a negative r-g. Additional fiscal expansion and debt accumulation could themselves lead to a rise in interest rates and/or slower growth. Research has also shown that, while a negative r-g is historically fairly common in both advanced and emerging economies, it is certainly not guaranteed over the longer term since sudden inversions of r-g moving into positive territory may occur if investors lose confidence in public debt sustainability. Furthermore, not all public debts and debtors are created equal. The creditor structure, the currency in which the debt is denominated, together with the macroeconomic fundamentals and the perceived institutional quality of a country are all key factors for public borrowing costs and debt sustainability.

1.4 The financial markets continued to recover but expected regional divergences concerning further policy support began to play a role

Generally speaking, stock markets had a strong year, particularly in the euro area and still more so in the United States, where markets remained on the upsloping path on which they had embarked in the final months of 2020. This upward trend was fuelled mainly by the rollout of the vaccination campaigns and the ensuing further reopening and revival of the economy, enabling firms to post good profits which often exceeded expectations. The continued support of fiscal and monetary policies also boosted market

confidence. However, uncertainty over the upswing in inflation and signals implying that the Federal Reserve would consequently tighten its accommodative monetary policy more rapidly than expected triggered a series of temporary drops on American and other stock markets, most notably in September. Uncertainty surrounding the Omicron variant of the coronavirus was another source of volatility towards the end of 2021. While almost all corporate sectors recorded positive results on the American and European stock markets

Chart 1.9

American and European stock markets had a strong 2021
(indices, January 2020 = 100)



Source: Refinitiv (an LSEG company).

over the year as a whole, the shares of technology companies and financial institutions gained the most from the economic rebound. The latter were able to reduce their provisions for default since the expected wave of corporate bankruptcies did not materialise. In addition, American shares in the energy and real estate sectors, like shares in the European car industry, performed better than the stock market average, despite supply chain problems. The strong rise in American stock market indices such as the S&P 500 and Nasdaq was driven to a considerable degree by a small number of positive outliers – including by shares of some large technology companies – and was accompanied by intensive derivative trading.

In the United Kingdom, the stock market revival was considerably more gradual than in the United States and Europe, given the persisting concerns over post-Brexit relations with the EU. At the end of 2021, the British FTSE 100 index had still not regained its prepandemic level. The Japanese stock market climbed rapidly in the first quarter but then moved rather sideways.

After an exceptionally strong year in 2020, stock markets in continental China underwent a substantial correction. The steepest drops occurred in February-March, when the perception of a potential overvaluation of equity and an expected normalisation of Chinese monetary policy spooked investors, and in July, when the Chinese authorities announced stricter regulation of firms operating digital platforms and in related sectors. Concerns over the Chinese real estate sector, exacerbated by the payment problems of property giant Evergrande, had apparently very little

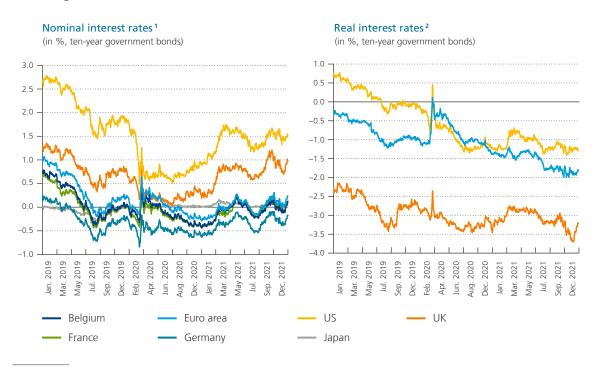
impact on the stock markets. In most of the other emerging Asian and Latin American countries, stocks also performed less well than in the advanced economies. That is due not only to the limited progress of the vaccination campaigns and other domestic vulnerabilities, but also to the expected growth slow-down in trading partner China and the prospect of a general normalisation of monetary policy in the main advanced economies, making riskier investment less attractive.

Nominal yields on advanced countries' sovereign bonds remained historically low, partly owing to the effect of the still highly accommodative monetary policy. However, nominal interest rates ended the year 2021 at a higher level than the year before. In the United States, Treasury yields rose sharply in the first guarter. Thanks to the favourable economic news combined with the strong fiscal stimulus announced by President Biden, investors expected faster growth and accelerating inflation, and consequently a quicker phasing out of the Federal Reserve's monetary policy support. In the second quarter and at the start of the third, the rapid spread of the Delta variant of the coronavirus and disappointing economic data again triggered a slight fall in the nominal yield on US Treasuries. From August onwards, more persistent inflation rates and the Federal Reserve's announcement of the tapering of its purchase programme nevertheless drove interest rates higher again. In the euro area and the United Kingdom, the evolution of nominal yields on sovereign bonds mirrored the pattern in the United States but the upward trend in interest rates was generally less marked – especially in the euro area where the markets expected a more



Chart 1.10

Nominal sovereign bond yields increased but remained historically low, while real interest rates reached new troughs



Sources: Eurostat, Refinitiv (an LSEG company).

- 1 The euro area aggregate is a GDP-weighted average.
- 2 Nominal ten-year interest rates minus expected inflation derived from swap contracts covering the inflation risk over a ten-year period.

gradual tightening of monetary policy. In emerging economies, except those in Asia, nominal yields on local currency sovereign bonds picked up significantly in 2021. But the rise in yields on dollar-denominated bonds was considerably more muted, demonstrating the growing importance of currency risk in the pricing of those economies' sovereign bonds.

Since inflation expectations outpaced the rise in nominal interest rates, *ex-ante* real yields on government bonds continued to fall. Real interest rates, which had already been negative for some time in the United States, the euro area and the United Kingdom, actually dropped to historically low levels towards the end of 2021.

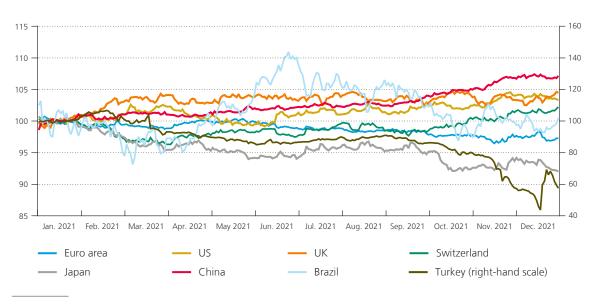
The exchange rates of the main advanced economies were relatively stable in 2021. Nonetheless, the prospect of monetary policy tightening in the United States, particularly in the second half of the year, caused the dollar to appreciate against

the currencies of America's main trading partners, including the euro. Also more generally, the euro depreciated over the course of the year. The Japanese yen weakened considerably, in accordance with predictions that the accommodative monetary policy stance would be maintained longer in Japan than elsewhere. Conversely, the British pound strengthened considerably against the euro because the markets expect the Bank of England to scale down its monetary policy stimulus more quickly than the ECB. The Chinese renminbi also appreciated strongly thanks to China's continuing (albeit decelerating) economic recovery and partly as a result of an attractive carry trade marked by relatively low exchange rate volatility and high yields on renminbidenominated financial instruments. The currencies of other emerging economies, notably Brazil and Turkey, exhibited high volatility in 2021. Runaway inflation combined with successive reductions in the policy interest rate caused the Turkish lira to sink to new lows.

Chart 1.11

The US dollar appreciated while the euro depreciated against the currencies of the respective main trading partners

(effective nominal exchange rate, indices, January 2021 = 100)



Sources: BIS, Refinitiv (an LSEG company).



2. Monetary policy in the euro area

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2.1	the recovery in the first half of the year	71
2.2	The Governing Council completed the review of its monetary policy strategy in July	75
2.3	The new monetary policy strategy guided policy decisions in the second half of the year	79
2.4	Monetary policy is facing major challenges	84

2.1 Favourable financing conditions supported the recovery in the first half of the year

When the coronavirus spread across continental Europe in early 2020, it soon became clear that major measures would be needed to cushion the economic repercussions of the health crisis. In this context, monetary policy backed up the measures adopted by governments and prudential authorities by stabilising the financial markets, supporting bank lending and, more generally, by maintaining favourable financing conditions. To this end, the ECB Governing Council initially adapted its existing policy instruments. The operational modalities of the third series of targeted longer-term refinancing operations (TLTRO III) were thus loosened, while the amount of debt securities purchased under the Asset Purchase Programme (APP) was stepped up by € 120 billion in 2020. However, as it soon turned

out that the severity of the crisis would require a much bigger policy reaction, a new temporary crisis asset purchase programme – the Pandemic Emergency Purchase Programme (PEPP) – was launched. The PEPP envelope was revised upwards several times, to reach € 1 850 billion, with asset purchases planned to continue at least until the end of March 2022, or in any case until the crisis phase of the pandemic is over.

Despite the sheer scope of the pandemic, the Eurosystem has managed to soften the repercussions for the euro area economy. The financial markets recovered quite quickly and bank lending remained intact. However, the euro area was still in a highly precarious situation at the beginning of 2021, with some sectors



of the economy having been shut down while vaccination campaigns still needed to be rolled out. Consequently, in the first half of 2021, monetary policy continued to focus on maintaining favourable financing conditions, through the instruments put in place in 2020, so as not to jeopardise the dynamic – although nascent and uncertain – economic revival.

The December 2020 Governing Council decision to use three additional TLTRO III operations implied that one such transaction took place in each quarter of 2021. These operations above all guaranteed that banks were able to continue to get funding at the highly attractive TLTRO III conditions. In 2021, the need for Eurosystem liquidity nevertheless turned out to be well below the previous year's level. While the banks still borrowed around € 1 700 billion through TLTRO III in 2020, some € 450 billion, net of repayments, were added in 2021. The amounts lent under the pandemic emergency LTROs (PELTRO), which provide banks with shorter-term liquidity, have remained quite limited, at around € 3 billion in 2021, as in the previous year (roughly € 25 billion).

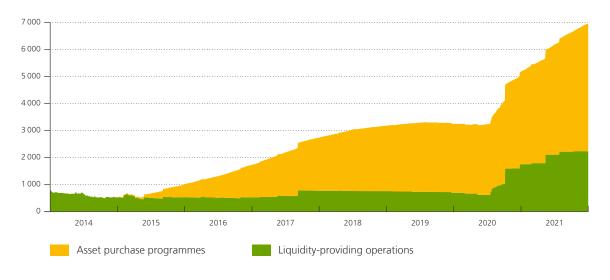
Bank lending rose considerably in 2020, on the back of strong demand for business loans over the first few months of the COVID-19 crisis. In 2021, this growth

abated sharply. While firms saw their revenue start rising again as a result of the economy reopening, they were also able to resort to the liquidity buffers built up the year before. Loans to households in the euro area followed a net upward trend over the last year, bolstered by demand for mortgage loans. This, in turn, needs to be seen against a backdrop of rising house prices and with interest rates still extremely low. Thanks to the continued accommodative monetary policy, bank lending rates to firms and households remained at historically low levels in 2021. Against that background, the Governing Council decided in December to schedule no further new TLTRO operations after 2021. It is nevertheless continuing to closely monitor the banks' funding conditions so as to make sure that discontinuing these operations does not hinder the smooth transmission of monetary policy.

Once the additional envelope of €120 billion had been spent in 2020, purchases made under the Eurosystem's APP dropped back to a pace of €20 billion a month in 2021. As far as asset purchases under the PEPP were concerned, the Governing Council had decided in December 2020 that they would be carried out to maintain favourable financing conditions and tackle the downward impact of the pandemic on the projected path

Chart 2.1

The Eurosystem balance sheet total has continued to rise (€ billion)

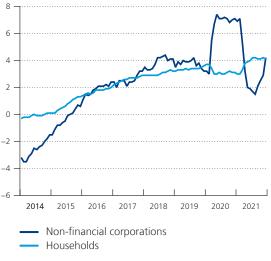


Source: ECB.

Chart 2.2

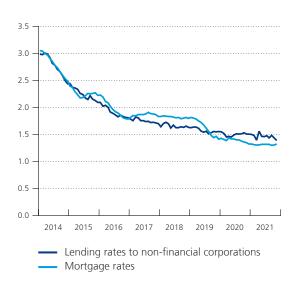
Accommodative monetary policy has supported bank lending in the euro area

Bank lending to households and firms (annual percentage change)



Source: ECB.

Bank rates on loans to households and firms



of inflation. Guaranteeing advantageous financing conditions implies that neither the overall level of interest rates, nor market fragmentation tensions should rise too much. As government bond yields and the risk-free interest rate serve as a reference for borrowing conditions applied to households and firms, they are closely monitored by the Governing Council.

At the beginning of the COVID-19 crisis, government bond rates had risen more in some countries

The acute tensions observed

on the financial markets were

no longer evident in 2021

 that had higher initial debt levels and had been hit harder by the crisis – than in others. The PEPP has managed to stem

these fragmentation tensions, that were no longer evident in 2021: government bond rates in the different euro area countries moved in very similar ways last year. The EU itself also became a big bond issuer, with similar rates to Belgian and French government bonds.

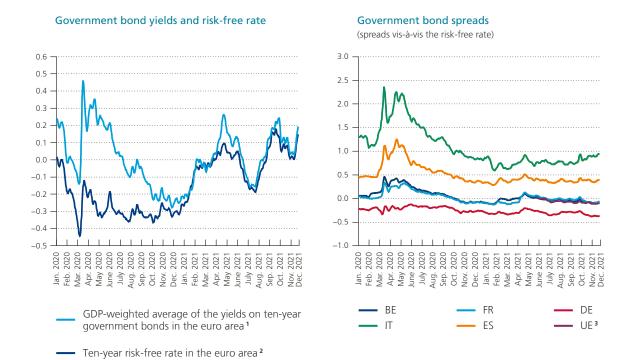
In a bid to stimulate the economic recovery, it was also important for the general level of borrowing costs not to increase excessively. In this context, the Governing Council decided in March to significantly step up the pace of asset purchases under the PEPP. At the start of the year, the nominal risk-free interest rate had in fact started gradually rising and government bond yields in the various euro area countries followed this movement. That can be largely explained by spillover effects associated with the situation observed at the time in the United States, where Treasury rates had started to rise earlier, fuelled by favourable prospects for the economic recovery. The roll-out of vaccination campaigns and the recovery plan that President Biden

approved in March generated a wave of optimism across the economy. To tackle rising interest rates, the Governing Council de-

cided in March to considerably step up the pace of asset purchases made under the PEPP in the second quarter of 2021 compared with the first few months of the year. In this way, it intended to prevent any increase in government bond yields and the risk-free interest rate from being passed onto house-holds' and firms' financing conditions, which was deemed undesirable given the still extremely fragile economic situation in the euro area. Even though the recovery had gained further momentum in June,

Chart 2.3

The PEPP has played a key role in preserving easy financing conditions in the euro area (in %, five-day moving averages)



Source: Refinitiv (an LSEG company).

the Governing Council felt that the faster pace of purchases under the PEPP should also be kept up in the third quarter so as not to jeopardise the nascent recovery and the upward pressure on inflation.

Thanks to the increased rate of asset purchases via the PEPP, the Governing Council managed to halt any further rise in government bond rates in the euro area. After this initial rise at the beginning of the year, their GDP-weighted average has remained stable, at around 0 %. It was not until early summer that these rates started to drop, after the Governing Council announced, on 8 July, the results of its monetary policy strategy review.

¹ Based on data from eleven euro area countries, namely Germany, France, Italy, Spain, the Netherlands, Belgium, Austria, Portugal, Finland, Ireland and Greece.

² Ten-year Eonia swap rates.

³ Yields on EU bonds issued under the NGEU.

2.2 The Governing Council completed the review of its monetary policy strategy in July

The ECB Governing Council started the review of its monetary policy strategy back in January 2020. Although the whole process had been due to be finalised by the end of 2020, it was postponed until the summer of 2021 because of the COVID-19 crisis. As the previous strategy assessment was as far back as 2003, a very wide-ranging review was deliberately chosen this time. However, the ECB's mandate per se, and the price stability objective in particular, were not being called into question, as that would have required an amendment of the Treaty on the Functioning of the EU. Instead, the assessment sought to examine how to best fulfill the ECB's mandate

within the limits of the EU Treaty, but in a very different environment. The context in which the ECB and other central banks carry out their activities has in fact radically changed over the last few decades. The fall in the equilibrium interest rate, combined with a long period of sluggish growth and low inflation in the aftermath of the global financial crisis, has led to wider use of non-standard monetary policy instruments. The COVID-19 crisis has further reinforced this trend. Moreover, a series of structural developments – such as globalisation, digitalisation, climate change and the transformation of the financial landscape – also throw up major challenges for monetary policy.



Chart 2.4

The ECB's monetary policy strategy review was wide-ranging and covered various aspects of the policy framework

Inflation target

- "annual inflation of 2% in the medium term"
- the effective lower bound of the nominal interest rate has an impact on maintaining the symmetry of the inflation target close to the lower bound and, in the event of an unfavourable shock, the ECB will intervene with forceful or persistent policy measures and an inflation rate moderately above target may be tolerated temporarily

ECB monetary policy strategy review

Monetary policy instruments

- the policy rate remains the ECB's main instrument
- in a low interest rate environment, the other instruments will be used if necessary

Monetary policy analysis

- better integration of economic, monetary and financial analysis
- systematic assessment of proportionality of monetary policy measures; recognition that financial stability is a precondition for price stability

Measuring inflation

- the harmonised index of consumer prices remains the ECB's inflation measure
- staged plan to integrate owneroccupied housing costs into the measure

Communication

- more accessible communication, more regular interaction with the public
- new, more "narrative" explanation of monetary policy decisions (monetary policy statement)
- regular review of monetary policy framework, next review scheduled for 2025

Climate change

 detailed action plan to integrate climate change into the monetary policy framework

Source: ECB.

The new strategy was announced on 8 July and the changes cover six different aspects. First of all, it was felt that aiming for an inflation rate of "2% in the medium term" rather than inflation "below, but close to, 2 % in the medium term" was the best way to safeguard price stability. This new definition is symmetric, with deviations, both positive and negative, from the target being regarded as equally undesirable. Through this simplified inflation target, the Governing Council wants to provide a clear nom-

inal anchor for inflation expectations. In order to preserve the symmetry of the inflation objective, the ECB acknowledges that it is crucial to consider

the consequences of the effective lower bound. More precisely, when interest rates are close to their lower bound, monetary policy measures that are especially forceful or persistent are necessary to avoid deeply rooted negative deviations from the objective. This can also imply a transitory period with inflation slightly above target.

Secondly, monetary policy remains focused on the medium term. This makes it possible to take into account not only delays in monetary policy transmission, but also uncertainties or other considerations. On this last point, for example, the medium-term orientation provides the necessary flexibility to assess the nature of the shock – is inflation changing because of demand factors or supply factors? - and enables any temporary rise in inflation to be discounted. Such a policy horizon also guarantees the necessary margin to assess the proportionality of monetary policy decisions in a systematic and wellthought-out way, balancing the benefits of the policy against any possible side effects. Such side effects may for example take the form of risks for financial stability, which, in the new strategy, is explicitly recognised as a condition for price stability. The new analytical framework, that underlies monetary policy decisions and involves a more integrated study of economic, monetary and financial developments, must be considered in this context too.

Thirdly, while the harmonised index of consumer prices (HIPC) will continue to be the ECB's inflation measure, a decision has been taken to include owner-occupied housing costs in it. The fact that these costs are not included in the inflation figures used by the ECB was considered to be an aberration

by the general public, as revealed in the various "listening" consultations held as part of the strategy review. Therefore, over the next few years, an inflation measure that takes these costs on board will be sought. Until such an index is available, estimates will be used to start taking owner-occupied housing costs into account in the ECB's analyses 1.

A fourth aspect concerns the ECB's various monetary policy instruments. Although it was decided that the

target, the Governing Council

for inflation expectations

policy rate would remain the ECB's main instrument, the European Central Bank acknowledges that, in a low interest rate environment, other instruments

With the new symmetric inflation wants to provide a clear anchor

> will also have to be implemented in order to reach the inflation target. Asset purchases, longer-term refinancing operations and indications given in the Governing Council's communication on monetary policy (the so-called forward guidance) will therefore continue to be an integral part of the ECB's range of monetary policy instruments.

> The way in which the ECB can take into account the effects of climate change was also on the agenda for the strategy review. Climate change actually has an impact on the economy and the financial system and, for this reason, involves risks in terms of price stability and financial stability. Climate transition risks can also influence the valuation of assets on the Eurosystem balance sheet. In this context, a detailed multiannual action plan has been drawn up with a view to integrating climate change into the ECB's monetary policy framework. There are initiatives that seek to improve the understanding of the consequences and risks of climate change and eventually integrate them into analyses and models underpinning the ECB's macroeconomic projections and policy. Specific measures will also be adopted for monetary policy operations, for example as regards risk assessment, the collateral accepted for such operations or corporate bond purchases under the ECB asset purchase programmes.

> The central banks have changed the way in which they communicate on monetary policy matters. What's more, communication itself has become a

¹ See also La BCE va davantage tenir compte du coût du logement propre (ECB to take greater account of the cost of owner-occupied housing), NBB blog, 15 November 2021: https://www.nbb.be/fr/blog/la-bce-va-davantage-tenir-compte-ducout-du-logement-propre.



monetary policy instrument, with forward guidance being a prominent example. Clear communication on monetary policy decisions actually makes them more effective: the better markets and the general public understand these decisions, the easier the policy transmission to the economy. This is why monetary policy communication will be adapted and made more accessible. That means, for example, that the monetary policy statement from now on takes a more "narrative" tone: monetary policy decisions are motivated by information drawn from economic, monetary and financial analysis. In addition, interaction with the public will be organised more systematically.

The experience of the "listening" events, held in 2020 and 2021 by the ECB and the different national central banks of the euro area 1, will serve as a starting point here. Lastly, the ECB has undertaken to review its monetary policy strategy more regularly, with the next review already scheduled for 2025.

¹ In Belgium, this listening event was held on 22 January 2021. To back up this event with viewpoints of Belgian citizens, an online portal "The NBB Listens" was also set up; its main conclusions are summarised in the article by Wauters J. (2021) entitled "Summary Report on the NBB Listens Portal", NBB, *Economic Review*, December.

2.3 The new monetary policy strategy guided policy decisions in the second half of the year

The revamped strategy has an impact on the way in which the different policy instruments are used. While some effects will mainly emerge in the longer term – including owner-occupied housing costs in the inflation measure and the implementation of the climate action plan being just two examples -, other aspects of the revised strategy have a more immediate impact. For instance, the ECB's forward guidance, which throws some light on future movements of policy rates, was adjusted during the Governing Council's 22 July meeting in order to align it on the new strategy. Two changes made to the monetary policy strategy in particular have required an adjustment of forward guidance: the new symmetrical inflation target and the statement that "especially forceful or persistent monetary policy measures" are required to safeguard this symmetry when the economy is close to the lower bound. With a low interest rate and medium-term inflation expectations below target, that implies keeping the accommodative monetary policy stance over a longer period.

More specifically, the conditions that need to be met – simultaneously – before the Governing Council starts raising policy rates have been tightened up. The first condition stipulates that inflation should reach its 2 % target well before the end of the ECB's projection horizon, which is two to three years. This condition provides reassurance that convergence of inflation towards the target is sufficiently advanced when interest rates are raised. By stating that inflation must reach 2 % well before the end of the projection horizon, the Governing Council is also seeking to prevent monetary policy decisions from being taken on the basis of projections that would need to be adjusted later on, as is more often the case for longer-term forecasts. The second condition is for the inflation target to be attained durably for the rest of

the projection horizon. In other words, inflation cannot fall back below the 2% mark in this timescale. That should prevent monetary policy from reacting to a brief surge in inflation. The third condition is that underlying inflation should also have increased sufficiently to be compatible with a stabilisation of inflation at 2% in the medium term. This condition is based on published inflation rates and offers extra protection against monetary policy tightening in the event of shocks likely to trigger a temporary surge in inflation but destined to dissipate rapidly. Underlying inflation is a wide-ranging concept referring to the persistent component of inflation which rectifies short-term volatility and thus brings more clarity to the real direction in which inflation seems to be moving in the medium term. Lastly, the revised forward guidance explicitly acknowledges that inflation can remain moderately above target during a transitory period, which is in line with the new strategy.

The announcement of the revised strategy and forward guidance has not been without consequences for the financial markets. The prospect of seeing the Governing Council showing more patience in future before raising its policy rate has prompted the markets to expect a later interest rate rise. Moreover, the revised strategy and forward guidance have also influenced inflation expectations. Both market expectations – which are derived from prices of swap contracts covering inflation risks in the euro area – and expectations drawn from surveys of professional forecasters were revised upwards in the summer.

Expectations that the Governing Council would stick to a highly accommodative monetary policy over a longer period has also exerted some pressure on longterm risk-free interest rates and on government bond yields. This has resulted in an easing of borrowing conditions in the euro area, which prompted the Governing Council to decide in September to moderately slow down the pace of purchases under the PEPP in the last quarter of the year in comparison to the two previous quarters.

While the *nominal* interest rate, – such as sovereign bond yields – is directly observable, the *real* interest rate – that is, after deducting expected inflation – reflects the real cost of borrowing for economic agents. Prices of swap contracts covering inflation risk in the euro area give some measure of expected inflation, which enables the real interest rate level to be estimated. The combination of a falling nominal rate and rising inflation expectations therefore led to a drop in the real interest rate in the euro area over the summer, bringing down the real cost of financing in its wake.

From the end of August onwards, the rise in inflation expectations intensified even further, against the background of higher-than-expected inflation in the euro area. At the end of October, the ten-year inflation expectations inferred from inflation swaps for the euro area were again above 2 %, something that had not been seen for seven years. Initially,

this trend was accompanied by a rise in the tenyear nominal interest rate, as the markets had once again revised upwards their anticipations of a possible tightening of monetary policy in the context of the higher-than-expected surge in inflation. However, when the nominal rate stopped rising from October on, the real interest rate also continued to fall back. At the end of the year, the ten-year real interest rate posted an all-time low of -2 %.

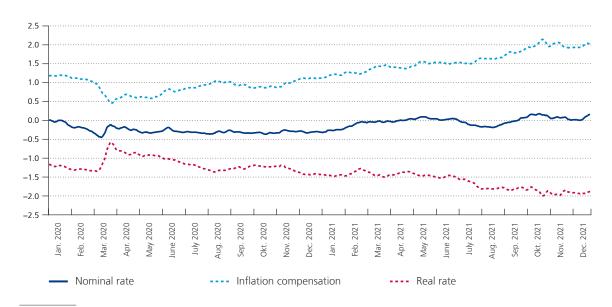
Inflation swaps contain risk premiums, which makes it harder to interpret them as an indication of inflation expectations, especially for longer maturities. Inflation expectations drawn from surveys of professional forecasters do not have this complication. They certainly have risen but have always remained below the target for longer horizons, unlike the compensation for inflation risk demanded on the market.

This pick-up in inflation and inflation expectations must be considered against the background of the strong recovery of the global and euro area economy. This upturn has been accompanied by a sharp rise in energy prices. On the one hand, this trend constitutes a base effect, given that prices had fallen back sharply over the previous year. On the other

Chart 2.5

The real interest rate in the euro area continued to fall in 2021

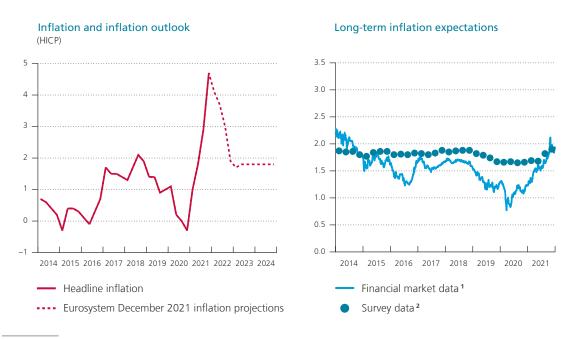
(breakdown of the ten-year risk-free nominal interest rate 1 in the euro area, percentages, 5-day moving averages)



Source: Refinitiv (an LSEG company).

¹ Ten-year Eonia swap rate.

Chart 2.6 Inflation and inflation expectations rose sharply in 2021 $\mbox{\tiny (in \%)}$



Sources: ECB, Refinitiv (an LSEG company).

- 1 Five-year-on-five-year inflation expectations, based on prices recorded by swap contracts, which hedge euro area inflation risk over a period of five years, starting five years after the contract is concluded.
- 2 Five-year inflation expectations based on the ECB's quarterly survey of professional forecasters (average of the aggregate probability distribution for this projection horizon).

hand, the rise in energy prices was much stronger than expected, owing to supply-related problems (chapter 1 deals with this aspect in more detail). Furthermore, base effects not only played a role in the case of energy inflation. Certain government decisions, such as the VAT reduction in Germany, also pushed prices downwards in 2020, to then exert a positive (base) effect on inflation in 2021, after the measure expired at the end of 2020. Supply chain disruptions constituted a second major factor explaining the rise in inflation. What is more, prices in services sectors, that had been particularly hard-hit by the crisis and were only able to open again after a long period of closure, also rose sharply. This combination of factors brought particularly strong upward pressure to bear on inflation in the euro area, which took off from the summer onwards, rising from 2.2 % in July to a peak of around 5 % in December.

According to the Eurosystem's December projections, inflation is nevertheless expected to slow

down again in 2022, precisely because the factors fuelling it stem mainly from the reopening and recovery of the economy, so that their effects should gradually fade out. Beyond 2021, the base effects will also disappear from inflation rates and will cease to exert any upward force. However, so-called second-round effects could induce more persistent upward pressure on prices, if their increase starts to feed through to wages. Although there are indications of a slight increase in wage growth in the short to medium term, wage pressure is not likely to be strong enough, according to the Eurosystem projections, to push up inflation on a lasting basis. The fact that a fraction of the population has left the labour market in the last two years effectively explains in part why unemployment in the euro area is almost back to its pre-coronavirus level. In a continued economic recovery scenario, a strong return to employment is expected, thus helping to curb the upward pressure on wages. Consequently, the Eurosystem expects, in its December projections, that inflation will drop again, falling back to 1.8%



in 2023 and 2024, after having reached 3.2% in 2022. These inflation projections were significantly revised upwards from the September projections. This just goes to show the huge uncertainty clouding the forecasts, being highly dependent on future movements in energy prices and wages.

In view of the upward revision of inflation forecasts and the ongoing economic recovery, the Governing Council decided in December that a gradual exit from the crisis measures was possible. Nevertheless, in view of the considerable uncertainty surrounding the projections, it wanted to keep sufficient monetary support and a certain degree of flexibility in the conduct of monetary policy.

Against this background, the Governing Council decided, in December, to slow the pace of net asset purchases under the PEPP over the first three months of 2022 in comparison to the previous quarter, before suspending them altogether at the end of March 2022. In addition, the Governing Council postponed for a year, i.e. until at least the

end of 2024, the horizon for full reinvestment of the principal payments from maturing securities purchased under the PEPP. To deal with any new pandemic-related risks of fragmentation, some latitude will also be given to the way in which this principal may be reinvested. During the pandemic, it has emerged that the flexibility allowed with the asset purchases has contributed to preserve the transmission of monetary policy in crisis situations. If necessary, the Governing Council will retain this flexibility by spreading out the reinvestments under the PEPP over time, between the different asset classes and between the euro area countries. As far as the latter are concerned, Greek government bonds, which are not eligible for the APP because they do not meet the quality requirements, will be able to be bought up over and above rollovers of redemptions. Finally, net purchases made under the PEPP themselves could be relaunched if the pandemic were again to trigger negative shocks.

Lastly, in order to be able to gradually reduce asset purchases while ensuring that inflation continues to converge towards the target, the pace of purchases made under the APP has also been changed. While they had been carried out at a rhythm of \leqslant 20 billion per month, they will rise to, respectively, \leqslant 40 and 30 billion per month in the second and third quarters of 2022. The ending of net purchases under the

PEPP will therefore not cause any sudden nosedive in purchases of securities by the Eurosystem. As of October 2022, the total monthly amount of asset purchases will be brought down to its pre-crisis level of \in 20 billion. Purchases under the APP are expected to end shortly before the first rise in policy rates.

2.4 Monetary policy is facing major challenges

The combination of fiscal, monetary and prudential policies has made it possible to react forcefully to the COVID-19 crisis, and the synergies between these different areas of action have led to a collec-

tive policy response going well beyond the cumulative individual results of these three policies. While

The current low interest rates are not set in stone

monetary policy has largely produced its effects via fiscal policy, there has nevertheless not been any explicit coordination between the two. Nor should this exceptional situation imply that monetary policy is dictated by the degree of sustainability of public finances. Monetary policy has remained faithful to its mandate, which is to ensure price stability by steering total demand in the economy according to supply. It is therefore important to reconstitute buffers to be able to deal with unforeseen economic difficulties, all the more as inflation is accelerating. Inflationary pressures also show that a policy based solely on supporting demand has its limits. The supply side of the economy needs to be reinforced; Belgium's priorities in this regard are set out in chapter 7 of this Report.

As regards monetary policy more specifically, the revised strategy and forward guidance suggest that the Governing Council will be more patient before going ahead with the first rise in interest rates – and likewise, before ending asset purchases under the APP. The conditions governing any policy tightening have effectively been reinforced. At the same time, the strategy mentions explicitly that financial stability is important for price stability. Moreover, the assessment of proportionality of the Governing Council's decisions and their potential side effects are expected to figure prominently in future.

Different scenarios may of course play out in the future. In the base scenario, inflation converges sustainably towards the 2% target and the monetary support can be gradually relaxed. If inflation remains high

> and the inflation forecasts are no longer compatible with the ECB's objective, the monetary policy stance

will have to be tightened more quickly. Any such sudden and unexpected rise in interest rates may uncover hidden vulnerabilities, for example for financial stability or sustainability of public finances. A soft landing will thus depend heavily on the various economic stakeholders' resilience and their ability to adapt.

Inflation may also drop and remain below target for an extended period of time. In this case, the accommodative policy should in principle be maintained indefinitely. In the face of such a situation, it is increasingly likely that the assessment of proportionality, which weighs up the costs and benefits of the policy, becomes binding.

This scenario effectively raises questions about the advantages or effectiveness of the policy followed to stimulate inflation: the sensitivity of economic activity to interest rates may, for instance, weaken when rates are very low for a long time. At the same time, the costs of the policy followed may rise themselves. A prolonged period of low interest rates can disrupt the sound functioning of the financial sector, affect savers or help keep otherwise unviable companies in business. Apart from these undesirable side effects, the persistence of the low interest rate policy also has its risks that are mainly evident in the financial sector and on the fiscal policy front. Existing vulnerabilities are thus likely to get worse.

While low interest rates have opened up wide budgetary margins for the national public authorities in the euro area, not all countries have used them to build up reserves. The current low interest rates are nevertheless not set in stone. If inflation expectations eventually rise, interest rates will follow. The risk premium paid by governments on their debt may also go up: the Eurosystem stands ready to alleviate governments' liquidity problems, but it is powerless if the debt is basically unsustainable. The central bank therefore must have the assurance that governments are able to cope with a heavier debt burden, without which it risks not being able to fulfill its price stability mandate. Chapter 7 of this Report describes the challenges facing the sustainability of the Belgian public debt in a European context.

The persistently low interest rates may also encourage excessive risk-taking, building up bubbles in certain market segments, such as stocks or real estate. These developments fall largely under prudential policy, which has targeted instruments to tackle specific financial vulnerabilities. It must, however, be borne in mind that there are limits to what this policy can accomplish, something which justifies close monitoring by the Governing Council.

In this context, the Governing Council will systematically weigh up the costs and benefits of its policy. If the cost of a policy choice starts to outweigh its benefits, the Governing Council will adjust it, drawing for example on the flexibility that the medium-term orientation of its policy offers.





3.1	Belgian economy stages robust recovery despite ongoing COVID-19 pandemic	89
3.2	Ongoing employment growth in a labour market under pressure	96
3.3	After its exceptional fall in 2020, domestic demand became the main driver of economic recovery in 2021 Box 2 – Did the 2020 recession create supply shortages that could leave an indelible mark on economic activity?	101

3.1 Belgian economy stages robust recovery despite ongoing COVID-19 pandemic

In 2021, the COVID-19 pandemic continued to weigh down the Belgian economy, if less so than in 2020. When public health conditions took a turn for the worse in the autumn of 2020, fresh measures were implemented to contain the number of new cases. Most of these measures remained in place in the first six months of 2021, following which a number were gradually phased out as public health conditions little by little returned to normal, thanks in the main to vaccination campaign progress. However, in the

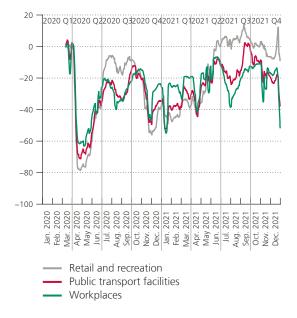
autumn, COVID-19 case numbers surged back up and public health measures were tightened once again to combat the pandemic. But this time, measures did not entail a lockdown for the population or the closure of large parts of the economy as in the previous year, whereas other regions of the world facing a pandemic flare-up did have to implement these. Tighter measures in Belgium were rather more about stricter observance of social distancing and needing a Covid Safe Ticket to access certain

Chart 3.1
Impact of COVID-19 pandemic particularly noticeable in first and final quarters of 2021

Hospital admissions caused by COVID-19

Google mobility data

(trend in visits to various places and length of time spent compared with a reference value ¹, averages for the previous seven days)



Sources: Google, Sciensano.

Seven-day average

¹ Median value for a given day calculated over the period between 3 January and 6 February 2020.

places. However, the mere announcement of worsening public health conditions caused the country's consumers to scale down their mobility voluntarily even before these measures were laid out. This put economic activity under pressure.

After its record downturn in 2020, GDP barrelled past pre-crisis levels in 2021

In the first few months of 2021, measures to combat the COVID-19 pandemic were tightened or relaxed as the situation required. At the end of March, for instance, high-contact professions were compelled to stop their business activities altogether. Non-essential shops had to cease part of their activities. This lasted about a month. Compared with the year-earlier period, however, the economy was less curtailed by restrictions, as industry and construction were relatively unscathed. What is more, previous experience made many companies - in all sectors - better prepared to handle these fresh restrictions. Vaccination campaign progress and the reduced population spread of COVID-19 soon allowed for relaxation of the public health measures. In May 2021, the night-time curfew was lifted and the hospitality industry in particular was able to resume business after six months of closures. Despite the restrictions, overall GDP was up by 1.2 % and 1.7 % in the first and second quarters of 2021 respectively, compared with the previous quarters.

The gradually improving epidemic situation over the summer, combined with high vaccination rates to bring a medical solution to the crisis closer, enabled the government to further lift public health measures. Most private and public events once again got the green light, subject to certain conditions. Pacing ahead at 2 % in the third quarter – i.e. a third consecutive step-up in growth – GDP first touched the pre-pandemic level and then exceeded it by 0.5 %.

Towards the end of 2021, coronavirus was once again spreading rapidly and fresh restrictions were being imposed. High country-wide vaccination rates, which cushioned some of the impact for the health sector, helped to prevent another lockdown for the population and closures of large sections of the economy as in the previous year. The new measures mainly involved stricter observance of some basic rules, such as wearing a face mask and social distancing, as well as the obligation – from November – to produce a Covid Safe Ticket when entering selected venues.



That said, catering establishments were ordered to close earlier, while supply constraints – in terms of a shortage or workers, materials and stocks as well as higher input costs – had a heavy impact on economic

activity from the summer onwards, which slowed steeply or was hampered across many businesses.

As a result, GDP growth ran out of steam in the fourth quarter, but still stayed in positive territory with a 0.5 % rise on the previous quarter.

In 2021, real GDP grew a total 6.1% on the previous year – one of the highest average annual rises in Belgium since the Second World War. Admittedly, this followed hot on the heels of the biggest negative shock recorded in the same period, but it was still a remarkable recovery, not just compared with expectations but also with the biggest previous economic recession in recent history, i.e. the 2008-2009 global financial crisis. The initial shock caused by COVID-19 may have been four times as big, but GDP was back to its pre-pandemic levels in as little as seven quarters,

whereas this had taken nine quarters post-financial crisis. The nature of these two recessions explains the difference, of course: the 2008-2009 global financial crisis was triggered by financial imbalances, including

a burst real estate bubble in the United States, causing a massive drop in foreign demand and an

overall crisis of confidence in Belgium, whereas the COVID-19 pandemic is a fully exogenous shock. The 2021 recovery was fast and furious on the back of massive government support to safeguard the incomes of numerous households, companies and self-employed people. This protection made it easy for economic activity to bounce back as soon as circumstances improved.

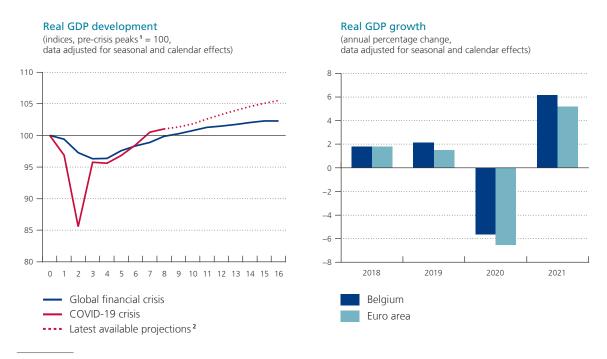
In 2021, GDP growth in Belgium was 0.9 of a percentage point higher than in the euro area, where it advanced by 5.2 %. The difference is mostly down to a more resilient Belgian economy in the face of the public health measures taken from the autumn of 2020. As already noted, GDP in Belgium rose by

Chart 3.2

Rising sharply, economic activity exceeded its pre-pandemic levels from the third quarter of 2021

GDP staged exceptional growth

of over 6% in 2021



Sources: ECB, NAI, NBB.

¹ The pre-crisis peaks (t = 0) reflect the second quarter of 2008 and the fourth quarter of 2019 respectively.

² December 2021 economic projections by the Bank.

1.2% in the first quarter in the teeth of stricter restrictions, whereas GDP for the euro area as a whole continued to decline, by 0.3%.

Industry and construction were gradually bogged down by supply constraints, while services became the main growth driver

The coronavirus crisis affected different sectors in different ways. Although its impact was negative across the board, service activities were hit the hardest by measures taken to combat the spread of COVID-19, particularly where these involved close contact between people. Being a key contributor to total value added generated in Belgium, services were also a significant factor in the hit to GDP.

The repercussions of the COVID-19 pandemic had an unequal effect on the various branches of activity in 2021 as well.

Typically more sensitive to cyclical fluctuations, industry fully benefited from the economic recovery from the third quarter of 2020 and proved pretty resilient to worsening public health conditions towards the end of that year. It continued its recovery into 2021 – albeit at a slightly less pronounced pace – and its value added was up by 11.2 % in the course of the first three quarters when compared with the corresponding period of the previous year. Compared with the early stages of the pandemic in 2020, the sector was less directly affected by public health measures and not compelled to suspend its activities, even temporarily. But its recovery also drew on previous experience and the implementation of

Chart 3.3

Market services activities a major factor underpinning growth from second quarter



Source: NAI.

¹ Notably "agriculture, forestry and fisheries" and taxes on production, excluding subsidies.

² Percentage change compared with the corresponding period of the previous year.



protocols that helped to organise business activity more efficiently in these circumstances. Yet, value added growth, which had still been robust at the start of 2021 (at 2.3 % in the first quarter) slowed, halving in the second quarter (1.1 %) before turning slightly negative in the third (–0.4 %), as industrial activity was hobbled by supply constraints. And these started to really bite as the year drew on. A survey by the Bank in October revealed that nearly 65 % of the respondent industrial companies were struggling with staff shortages and over 80 % with

supply issues. Companies estimated the negative impact on production of these two sets of prob-

lems at 4% and 6% respectively. In a separate development, many industrial companies reported clear increases in input costs, to which the sector is very sensitive.

Not all branches of industry benefited from the economic recovery to the same degree after the initial shock. Of the most important industrial sectors in the Belgian economy, pharmaceuticals – which accounts for around 20% of manufacturing industry – notched up very remarkable results in the first three quarters of the year. Thanks to its specialisation, this branch of industry benefited from high demand for vaccines by exporting its production massively, making for a GDP growth contribution totalling around 0.15 percentage point in the first nine months of the year.

The metals industry, by contrast, which accounts for nearly 10% of Belgian manufacturing, was really struggling with the supply constraints already mentioned and saw its value added slide in the first nine months of the year.

Construction also saw its value added surge in the first three quarters of 2021: up 9.1% compared with the corresponding period of the previous year. Construction and renovation/refurbishment activities continued to benefit from the ongoing

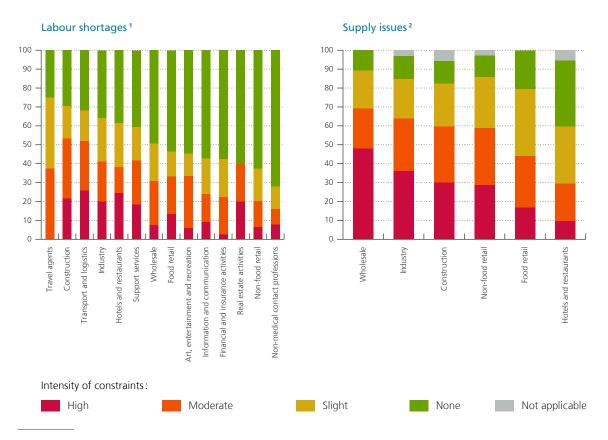
low interest rate environment and, compared with 2020, the branch of activity was less affected

by the public health situation and the measures taken. To a degree, this also reflected previous experience and the implementation of protocols that helped to organise activity more efficiently. Just as in industry, three-month value added growth gradually declined in construction, from 1.4 % in the first quarter to a negative 0.9% in the third. And here, too, supply shortages were increasingly beginning to bite. Around 70% of construction companies surveyed by the Bank faced labour shortages and a little over 80 % reported supply issues. Companies estimated the negative impact on production of these two sets of problems at 9% and 7% respectively. Incidentally, construction was one of the key industries reporting a significant increase in input costs.

Services activities have been the main driver of growth

Chart 3.4
Many companies facing supply constraints

(in % of respondent companies facing supply constraints, by intensity of the constraints, October 2021)



Source: La reprise a été vigoureuse mais elle est de plus en plus entravée par les contraintes d'offre, NBB, 8 November 2021.

- 1 Self-employed workers excepted.
- 2 Other than price rises.

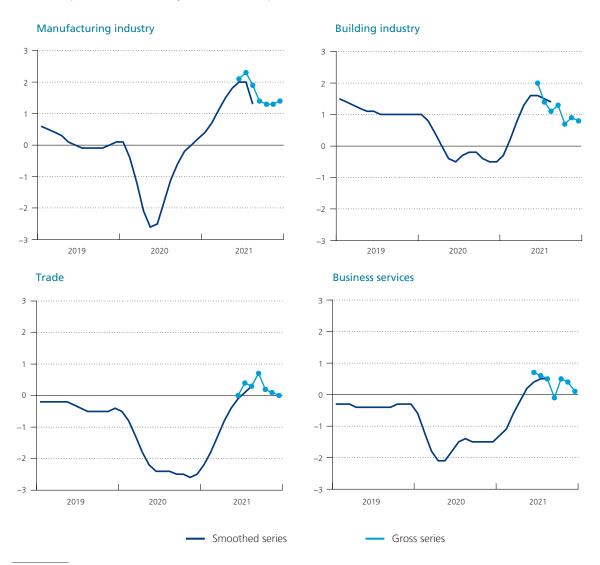
And lastly, whereas the value added generated by market and non-market services activities traipsed the steep advances enjoyed by these two large branches of activity - i.e. up 6.3 % and 2.7 % respectively - in the first three quarters compared with the corresponding period in 2020, it did accelerate sharply as the year progressed and ended up becoming the leading driver for growth. The sector's growth was supported by the gradual lifting of public health measures and in particular the reopening of contact professions at the end of the first guarter, gradual normalisation by the hospitality industry from April, and the go-ahead for public events from the third quarter. As a result, value added in the hospitality industry and in art, entertainment and recreation rose significantly from the second quarter. What is more, service activities were relatively less prone to labour shortages and supply issues, with the exception of the wholesale sector, where supply problems were crippling.

In the fourth quarter, the Bank's business surveys generally pointed to a loss of business confidence across Belgium compared with the previous quarter. The deterioration in the business climate doubtless reflects concerns about rising energy prices and a continuation of this trend in the short term, while the turn for the worse in public health conditions and successive tightening of restrictive measures towards the end of the year may have played into it as well. After all, it has become less likely that vaccinations will prove a complete solution to the COVID-19 pandemic, and this is making companies unsure about their business returning to normal in the immediate future.

Chart 3.5

Business confidence deteriorated in second half

(balance of responses to the Bank's survey¹ for the 1995-2021 period)



Source: NBB.

¹ All observations are reduced by the empirical average of the data and divided by their standard deviation. As a result, the long-term average (1995-2021) for all data series is nil.

3.2 Ongoing employment growth in a labour market under pressure

Following the shock of the health crisis in 2020, the economic activity rebound came with sharply higher numbers of hires and hours worked. A hefty 88 000 new jobs were created in 2021 (+1.8%), which is comparable to pre-crisis numbers and contrasts with virtually stalling employment in 2020. Meanwhile, every employee also increased their average working hours by 4.8%, a recovery from 2020 – mostly the result of furlough schemes – even if the number of hours worked per person is still 4.1% below the figure for 2019. The Belgian economy's volume of labour rose by a total 6.7% in 2021 but stuck at 2.4% below pre-crisis levels.

The furlough and bridging allowances continued to provide protection, as restrictions were gradually lifted. In the first eleven months of 2021, an average 267 000 employees were on the furlough scheme every month, while 69 000 self-employed workers needed the bridging allowance. Although a downward trend had been visible from May 2021, the figures edged back up towards the end of year in the wake of the fresh restrictions imposed in November.

Employment dynamics were driven both by employees (+68 000) and the self-employed (+19 000).

Chart 3.6

Recovery accompanied by dynamic net employment creation
(seasonally adjusted data, changes in thousands of people compared with previous quarter)



Sources: NAI, NBB.



For self-employed workers, this was partly down to the preservation of the coronavirus bridging allowance and the various support measures at federal, regional and local level during the health crisis. Between them, these factors dampened an already subtle relationship between self-employment trends and cyclical fluctuations. This group typically comprises highly-educated people in the liberal professions or management jobs.

The net increase in the number of self-employed was due more to the fact that – compared with previous years – fewer of them ceased trading in 2020 and not so much because there were more start-ups. Statistics on start-ups from the National Institute for Health and Disability Insurance (NIHDI-INAMI-RIZIV) even show a drop in the number of people who set up as self-employed. The number of recorded bankruptcies, by contrast, was exceptionally low at around 1 800 in 2020, compared with 2 200 in 2019. Bankruptcy

numbers gradually normalised as 2021 drew on, to a little over 2 100. There is currently no sign of any

catch-up in bankruptcies that failed to materialise in 2020, making for positive net job creation – and this despite the moratorium on bankruptcies being lifted at the start of the year, the double bridging allowance being scrapped and access requirements for a single bridging allowance being tightened up from October (a turnover drop of 65 % compared with 40 % previously). The labour force survey suggests that the number of self-employed workers in 2021 predominantly grew in the information and communication, human health and social work, and transport sectors.

After significant losses in 2020, salaried workers enjoyed net employment creation, mostly in sectors sensitive to the business cycle (+45 000 compared with a net loss of 29 000 in the previous year). Employment in public administration and education, as well as in other services also outpaced 2020, with net job creation at 12 000 and 11 000 respectively.

A breakdown of the data at more detailed sector level for private sector employees - available for the first three quarters of the year - shows a continued loss of jobs in the hospitality industry (-5.6% compared with the average for the first three quarters of 2020, i.e. 6 600 jobs), although the third quarter recorded a recovery to pre-health crisis levels. Job losses were likewise recorded in other services activities 1 (-1%, or 700 jobs), and to a limited degree in manufacturing (-0.1 %, or 500 jobs) and in mining (-2.5 %, a mere 60 jobs given the industry's small size in Belgium). Financial and insurance activities

saw job numbers reduced

Job-rich recovery for both further, although this reemployees and the self-employed flects a long-term trend that had been visible before. Having suffered massive declines in job numbers

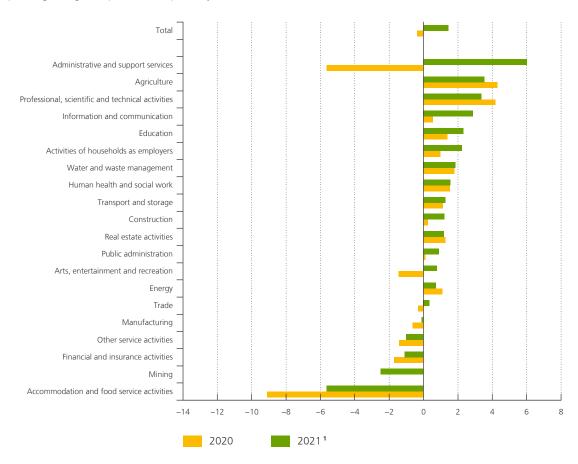
during the health crisis, administrative and support services recorded the biggest gains in 2021 (+6%, or 24 400 jobs). The sectors enjoying the biggest net employment creation included education (+2.3 %, i.e. 9 400 jobs), human health and social work (+1.6 %, i.e. 8 900 jobs), the professional, scientific and

¹ This includes associations' activities, repair of computers, personal and household goods, and other personal services to individuals, such as hairdressers

Chart 3.7

Some sectors are still seeing job losses

(percentage changes compared with the previous year)



Source: NAI.

1 Average for the first three quarters.

technical activities (+3.4 %, i.e. 6 300 jobs), information and communication (+2.9 %, i.e. 3 300 jobs) and to a lesser degree also agriculture (+3.5 %, or nearly 1 000 jobs).

The health crisis had a relatively limited impact on labour market participation: the activity rate of the 15-64 age group fell between 2019 and 2020 to 68.6% from 69%. In the past year, by contrast, the previous upward trend was resumed and the activity rate ended up at 69.5% (average for the first three quarters of 2021).

This pronounced rise in employment – although coupled with a greater number of active persons in the labour market – coincided with a significant drop in joblessness numbers. Few of the workers

on furlough slid into classic unemployment and most returned to the labour market. Based on figures from the Crossroads Bank for Social Security Datawarehouse, not quite 4.3% of the people temporarily laid off in the first quarter of 2020 were job-seekers in the subsequent two quarters. In 2021, Belgium had an average 29 600 fewer unemployed job-seekers than in 2020. At a total 464 100 people, the number of unemployed job-seekers was 12 100 below the figure for 2019, i.e. before the health crisis. That said, the unemployment breakdown is different this time. In the years prior to the health crisis, the fall in the number of unemployed job-seekers was recorded in all categories of job-seekers, including the long-term unemployed. The crisis years have broken the trend, with the number of people out of work for longer than a year up by nearly 8 000 in 2020 and again in 2021, by 8 400 additional people. Whereas previously the numbers of both short-term and long-term unemployed were falling, this is now only the case for people who have been jobless for under a year (–38 000).

Coupled with fierce company demand for workers, these trends in the number of job-seekers and their composition are causing major tensions in the labour market. In the third quarter of 2021, the job vacancy rate, (i.e. the ratio between the number of vacancies and the total number of available jobs, given by the sum of jobs taken and vacant) reached levels never seen before since these statistics first became available in 2012, at 4.7 % or 196 000 of vacant jobs. Although these tensions are a structural phenomenon in most sectors 1, the hospitality industry is the odd one out. Paradoxically, while numerous jobs were scrapped when restrictions were imposed to combat the COVID-19 pandemic, a large number of positions remain unfilled: around 13 500 jobs, which boils down to an 11.4% vacancy rate. Whereas employment in this sector had been steadily rising by around 1% per annum

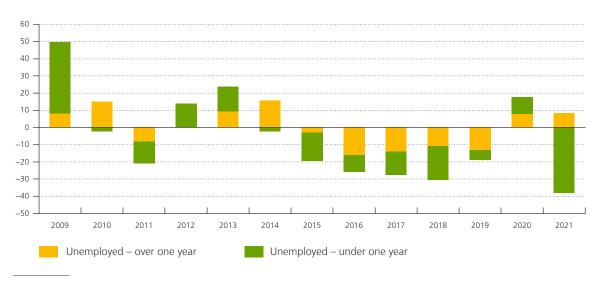
1 See also Chapter 7 of this report.

between 2014 and 2019, countless people lost their jobs during the pandemic and would appear to have left the industry since it began – as suggested by an analysis of transitions between sectors based on the labour force survey. In 2020, people in work may have had less inclination than usual to leave their sectors on average (2.3% compared with 2.9% in 2019), but the hospitality industry saw a larger proportion leave: 6.4% (compared with 4.3% in 2019), with most of them switching to trade. What is more, in 2019 4.2% of hospitality workers had transitioned from other sectors, but in 2020 this applied to only 3.4%.

Because of its asymmetrical sector impact, COVID-19 hit some sections of the population harder in terms of employment and loss of income. Some were barely affected as they were able to work from home or were essential workers, while others faced furlough, lost their jobs altogether, saw their hours cut or their employment opportunities reduced, causing some households to tip into financial difficulties. The young (aged 15 to 24), low- and medium-skilled workers and people of non-European descent work temporary or atypical contracts comparatively often and are over-represented in the sectors that were hit hardest. As a result, the repercussions of the health crisis for the labour market affected them the most. At the

Chart 3.8

Significant drop in unemployed job-seeker numbers masks higher long-term unemployment (changes in thousands of people)



Source: NEO.

same time, there were fewer employment opportunities for them than is usually the case, making it harder to swap joblessness or inactivity for a job.

Although the employment rate was nearly back at its pre-crisis levels in 2021 - an average 70.3% of the 20 to 64 age group in the course of the first

Not everyone benefited equally

from employment growth

three guarters of 2021 the people hit hardest by the pandemic were not necessarily those benefiting from the recovery, as

the employment rates of the vulnerable groups listed above still languish below 2019 levels. Conversely, higher or similar employment rates were recorded for the 55 to 64 age group, for people of EU descent and for the highly-educated. Those with higher education diplomas were able – most often and more frequently than before - to trade in joblessness or inactivity for jobs. Nearly six out of ten highly-educated workers who had been out of work in 2020 were able to find jobs in 2021. In 2018, the number had been four out of ten. In 2021, 22% of the highly-educated went from inactivity to work, compared with 13% in 2019.

The recession caused by the health crisis is internationally known as a "she-cession" because of the significant impact it has had on women. And Belgium is no exception: women more often work in the hardest-hit sectors, such as the hospitality industry, trade or contact professions, and are at a higher risk of losing their jobs – more than in previous economic crises. Also, the health crisis has only exacerbated the imbalance in the division of labour in the home, particularly in terms of childcare. School closures, whether during lockdown or as a result of high numbers of COVID-19 cases, and longer school holidays have forced numerous parents to take on the care of their children much more than usual. More widespread adoption of working from home or taking coronavirus-related parental leave made it easier to strike a work/life balance. However, it was mostly women who availed themselves of these options, potentially to the detriment of their careers going forward. The 2021 recovery in employment benefited women and men alike. One difference, though, was that a

> larger proportion of these had been in the "inactive"

new female employees rather than "jobless" categories. The upward trend

in women's labour market participation rate - temporarily interrupted during the health crisis – continued in 2021. It touched an all-time high of 70.6% in 2021 and thus further closed the gap with the male participation rate, which has remained relatively stable in the past few years.

Although the health crisis caused a drop in the transition from joblessness to work in the country's three Regions (by 4.9 percentage points in Brussels, 3.3 percentage points in Flanders and 2.5 percentage points in Wallonia), regional recovery was not evenly balanced. In the Flemish Region, over half of those jobless in 2020 were able to get back into the workforce in 2021, adding up to an employment rate 12 percentage points up on 2019. Fewer were able to make the transition in the Brussels-Capital Region – around 31%. This still exceeds the pre-crisis figure by 5.5 percentage points. In Wallonia, by contrast, the transition from unemployment to work did not rise (24%) and stayed below the level recorded in 2019 (25%). These differences in the transition from unemployment to work were recorded against a backdrop of unemployment rates that varied markedly between the Regions. In Flanders, unemployment stood at 4.1%, in Wallonia at 9% and in the Brussels-Capital Region at 12.9% (averages for the first three quarters of 2021).

3.3 After its exceptional fall in 2020, domestic demand became the main driver of economic recovery in 2021

The outbreak of the COVID-19 pandemic in 2020 triggered a historic fall in domestic demand. In 2021, by contrast, all domestic demand components staged a clear rise and between them (with the exception of inventories) made an amply positive contribution to growth of around 6.5 percentage points. Private consumption, which accounts for around half of GDP in Belgium, rose by 6.3% and did not exceed the pre-crisis level until the third quarter, which was later than the other domestic demand components. Private investment, which accounts for some 20% of GDP, recorded a spectacular increase and surged ahead of

pre-crisis levels from the first quarter. Households invested 10.4% more, while companies upped their capital spending by 9.2%. Meanwhile, the government also contributed to growth: public consumption and investment were up by 4.5% and 10.9% respectively.

Net exports made a slightly positive contribution to GDP growth (of 0.5 percentage point) on the back of a marginally more pronounced climb in exports (9%) compared with imports (8.5%). By contrast, the change in inventories was a negative contributor to GDP (–0.9 percentage point).



Table 3.1

GDP and main expenditure categories

(calendar adjusted volume data; percentage changes compared to the previous year, unless otherwise stated)

	2017	2018	2019	2020	2021 e
Private consumption	1.9	1.9	1.8	-8.2	6.3
Public consumption	0.2	1.3	1.7	0.2	4.5
Gross fixed capital formation	1.4	3.0	4.5	-6.2	9.6
Housing	1.0	1.5	5.1	-6.8	10.4
Enterprises	1.6	2.4	4.8	-7.0	9.2
General government	1.1	10.2	1.7	0.6	10.9
p.m. Final domestic expenditure 1,2	1.3	2.0	2.4	-5.7	6.5
Change in inventories ²	0.0	0.4	-0.5	-0.3	-0.9
Net exports of goods and services ²	0.3	-0.6	0.3	0.4	0.5
Exports of goods and services	5.5	0.6	2.0	-5.5	9.0
Imports of goods and services	5.2	1.4	1.6	-5.9	8.5
GDP	1.6	1.8	2.1	-5.7	6.1

Sources: NAI, NBB.

Private consumption recovery ultra-sensitive to coronavirus measures

The public health situation and its repercussions continued to influence households' consumption behaviour, particularly at the start of the year. As noted above, compared with the public health measures imposed at the early stages of the pandemic, those taken in the autumn of 2020 and still in place in the first few months of 2021 were not equally restrictive for consumers. That said, some types

of spending were still impossible at the start of the year. Personal services activities were suspended on several occasions and

Selected consumer spending repeatedly hobbled by pandemic

the hospitality industry did not reopen until the beginning of May – and then only partially. As a result, private consumption gradually grew more robust as the quarters progressed – as did consumer confidence – and recorded an advance from 1.3 % to 6.1 % between the first and third quarters, beating pre-crisis levels. When the epidemic situation rapidly deteriorated towards the end of the year, fresh public health restrictions were implemented. Unlike previously, access to trade was unhindered,

but some venues – particularly cultural institutions and the hospitality industry – could only be visited with a Covid Safe Ticket. Consequently, private consumption growth in the fourth quarter remained positive, but the Bank's projections suggest it had significantly slowed.

Consumer spending was also depressed by the impact on disposable income and the concern caused by rising energy prices at the end of 2021, particularly for households on the lowest incomes. Consumption was also affected by growing supply restrictions, which

influenced the degree to which consumer demand could be met.

Altogether, private con-

sumption in Belgium rose by 6.3 % in 2021, following a drop of 8.2 % in the previous year. Although not the most cyclically sensitive component of demand, private consumption does typically reflect the first signs of recovery, as it did after the 2008-2009 financial crisis. The shock for private consumption did not last very long and proved relatively marginal as it did not trigger a decline for the whole year of 2009 but rather just a slowdown to 0.6 %. Recovery was faster after the financial crisis,

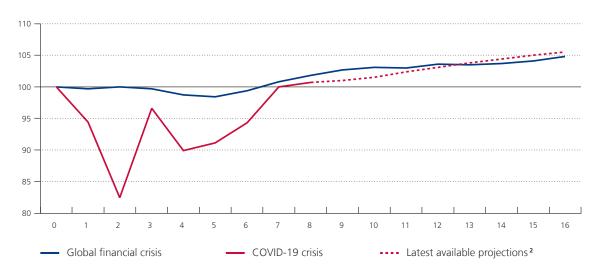
¹ Excluding the change in inventories.

² Contributions to the change in GDP compared to the previous year, in percentage points.

Chart 3.9

Private consumption recovery was uneven and moved up and down in tandem with the waves of tightened and eased coronavirus measures

(indices, pre-crisis peaks 1 = 100, data adjusted for seasonal and calendar effects)



Sources: NAI, Statbel, NBB.

- 1 Pre-crisis peaks (t = 0) are the second quarter of 2008 and the fourth quarter of 2019 respectively.
- 2 December 2021 economic projections by the Bank.

too, with private consumption back to its pre-crisis levels in under a year, whereas it took seven quarters during the COVID-19 pandemic. The difference between these two most recent and devastating recessions matches their individual features: while the financial crisis sparked great uncertainty and hence a sharp rise in precautionary savings, the COVID-19 pandemic mostly forced people to save as they were unable to spend on particular goods or services multiple times.

The measures to combat the COVID-19 pandemic have also brought about a change in the breakdown of consumer spending by households, bringing a shift from services to goods, and particularly non-durable goods. Similarly, in 2021, internet-search-based indicators reveal a continuation of this trend, with search volumes for certain types of services categories having plummeted due to stricter public health measures, much more so than searches for durable and non-durable consumer goods.

Inflation squeezed households' purchasing power and some saw their financial vulnerability increase

Because of general price trends – which were pushed up by their energy component in particular – purchasing power rose by only 1.1% in 2021, a relatively minor contribution to higher private consumption. After all, purchasing power captures households' real disposable income. Admittedly, incomes in Belgium are index-linked to keep up with inflation, but only after a selected period of time and only partly.

In nominal terms, household disposable income was up by 3.2 %. One of the key components was the rise in wages – of both employees and self-employed workers – because of higher numbers of hours worked, particularly in sectors that had been hit by COVID-19 pandemic in 2020. Despite a persistent low interest rate environment, net capital income was also up, supported by a recovery in dividends paid by companies.

The transfers paid by households to other sectors – mainly involving taxation – grew faster than their incomes. Transfers received from the public sector,

by contrast, moved a lot more slowly, as a lot less use was made of furlough schemes for employees and bridging allowances for the self-employed than in the year before.

Real disposable incomes grew less than consumer spending did, reducing the savings rate. This fell by 4.1 percentage points between 2020 and 2021, from 20.2% to 16.1%, even though this was still higher than the 12.4% recorded in 2019. It once again shows how impossible it was to make certain expenditure during part of the year, causing a savings surplus to arise.

Such an accrual of savings would appear to have happened in households that are financially better off, though. And more investment in less liquid assets also seems to suggest an asymmetrical distribution of savings.

Higher gross disposable income at a macroeconomic level hides the financial vulnerability of a proportion of households. Despite measures being extended – such as higher replacement rates for temporary lay-offs, double bridging allowances and the freezing

of the degressive nature of unemployment benefits -2021 once again saw some households face significant income losses in the wake of the COVID-19 crisis. In 2021 (data only available for the first ten months), an average 13 % of NBB consumer survey respondents still reported a crisis-related loss of income in excess of 10 %. That is a significant proportion of respondents, although lower than the 21% reported in 2020, which incidentally did come down over the course of 2021 as more and more sectors were able to operate on fewer or even no restrictions. Broken down by position in the labour market, it is worth noting that, in 2021 as well, loss of income continued to be much more pronounced for self-employed workers. Compared with employees, an average 3.5 times more self-employed workers reported facing a serious loss of income in 2021 (> 30 %). As explained in chapter 5, households hit by significant loss of income also saw their opportunities to save vanish and their often meagre savings buffer gradually eroded.

For households such as these, on low incomes and with little in the way of savings, even a slight loss of income can soon turn into a big problem. And it

Table 3.2

Determinants of the gross disposable income of individuals, at current prices (percentage changes compared to the previous year, unless otherwise stated)

						p.m. In € billion
	2017	2018	2019	2020	2021 e	2021 e
Gross primary income ¹	3.9	3.3	3.3	-3.5	5.6	274.1
Gross wages ¹	3.7	3.8	3.7	-2.1	5.5	187.0
Gross operating surplus and gross mixed income	3.8	2.9	3.0	-3.1	4.1	60.8
Capital income ²	5.1	0.9	0.7	-13.1	10.1	26.4
Current transfers received	3.6	3.1	3.2	13.5	0.8	119.5
Current transfers paid 1	3.4	3.3	0.8	0.4	6.7	103.3
Gross disposable income	3.9	3.2	4.1	1.6	3.2	290.3
p.m. In real terms³	2.0	1.2	2.7	0.9	1.1	-
Savings rate⁴	12.2	11.6	12.4	20.2	16.1	-

Sources: NAI, NBB.

¹ Wages received or current transfers paid, excluding social contributions payable by employers.

² These are net amounts, i.e. the difference between incomes received from other sectors and those paid to other sectors.

³ Data deflated by the household final consumption expenditure deflator.

⁴ In % of disposable income in the broad sense, i.e. including changes in households' supplementary pension entitlements accruing as a result of an occupational activity.

was precisely these households that most often faced coronavirus-related temporary lay-offs, termination of contracts – temporary or otherwise – or reduced chances of finding new work, and that therefore suffered a loss of income ¹. Also, not everyone is able to ben-

efit from the social security system, e.g. those in some types of jobs or on

some types of contract (student jobs, for instance), with insufficient time on the payroll, or with incomes earned in the informal economy.

In fact, quite a few people had nowhere to turn for support except for public social welfare centres or charities. According to a Federal Public Service for Social Integration (FPS SI) survey, the number of people in receipt of integration incomes reached a peak of over 160 000 early in 2021, following a steady increase in 2020. As more and more sectors in the economy were able to operate freely and loss of income became more limited, integration income recipients also became fewer in number over the summer of 2021 and ended the year at a level slightly higher than before the pandemic. It is too early to draw any conclusions, though, as the number of people entitled to such income is also influenced by seasonal

1 See Coppens B., Minne G, Piton C. and Warisse Ch (2021), "The Belgian economy in the wake of the COVID-19 shock", NBB, Economic Review, September. changes, and their number traditionally falls during the summer months.

Unlike integration income, the demand for other types of social assistance provided by the country's

public social welfare centres stayed significantly higher in 2021 than before the crisis. Most no-

table, however, is the change the crisis has caused in the type of assistance being sought. In 2020, such assistance was mostly in response to acute issues, such as emergency food supplies, which systematically peaked around or after lockdowns, and financial assistance (for instance, rent rebates or advances on benefit payments). Demand for these types of assistance clearly dropped off with the reopening of the economy in the spring of 2021. Since the start of 2021, however, people have increasingly been seeking debt mediation services and these numbers look set to keep rising. This may suggest that the persistent COVID-19 crisis is turning into such a major financial problem for some households that they increasingly feel compelled to ask for help to manage their finances and debts. In addition, the number of people that have appealed to Belgium's public social welfare centres for non-urgent medical help was much higher in 2021 than before the pandemic. This may also reflect the fact that various non-COVID-related medical treatments were initially postponed and that 2021 saw some catching up.

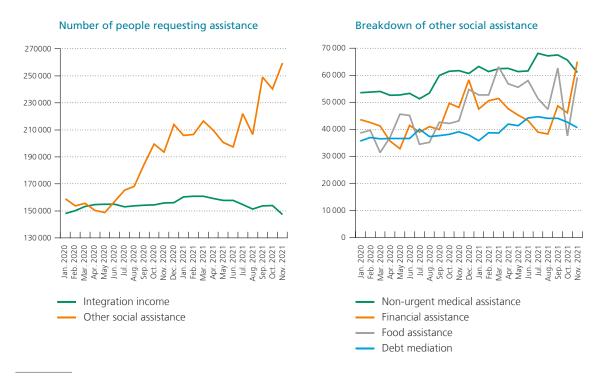


Some households remain financially

vulnerable, despite the recovery

Chart 3.10

Pandemic causes social assistance demand on public social welfare centres to change shape (number of recipients)



Sources: Survey on Social Impact of COVID-19, FPS Social Integration & Working Group on Social Impact COVID-19 (last update 17/01/2022).

Despite the steep rise in requests for social assistance, initial projections suggest that, in global terms, Belgium's COVID-19 crisis did not have a significant impact on poverty risk in 2020¹. However, some households were deeply affected. In addition to the immediate impact of the crisis, the country's financially most vulnerable households have also been up against rising energy prices since the autumn of 2021. This has hit these households proportionally harder (as explained in chapter 4) and puts their already precarious finances under even greater pressure.

Residential property investment benefited from growing real estate activity

While investment in housing had plunged by 6.8 % in 2020, this reversed to a 10.4 % uptick in 2021 and

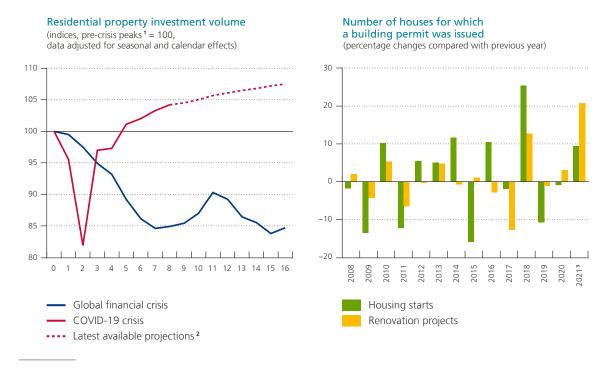
pre-crisis levels were exceeded from the first quarter of the year. In fact, by the final quarter, residential property investment was an estimated nearly 4% higher than before the pandemic. This was a remarkable recovery, especially when compared with the aftermath of the 2008-2009 financial crisis, when such investment was broadly down for a period of well over five years. It is worth noting that residential property investment was the sharpest rising component of demand in 2021, increasing by over €3 billion in total compared with the previous year.

In 2021, the persistent low interest rate environment continued to support the real estate market, as borrowing conditions remained favourable and weighted average mortgage rates fell to 1.45% in the first eleven months of 2021, i.e. 0.11 of a percentage point below the level for the entire previous year. Once again, investment in housing was considered an attractive investment opportunity.

The construction of new housing and the renovation of existing buildings, which together account for the

¹ Eurostat (2021), "Early estimates of income and poverty in 2020", Eurostat News, July 2021.

Chart 3.11
Investment in housing staged an exceptionally strong rise and was back at pre-crisis levels from early 2021



Sources: NAI, Statbel, NBB.

- 1 Pre-crisis peaks (t = 0) are the fourth quarter of 2007 and the fourth quarter of 2019 respectively.
- 2 December 2021 economic projections by the Bank.
- 3 First nine months of the year.

core of investment in housing, benefited from construction coming back on stream, a branch of activity that had been deeply affected by the COVID-19 pandemic and its consequences. There was a surge in the issue of building permits in the first nine months of 2021, particularly for renovation projects. The latter type of activity rose by 21% compared with the corresponding period of the previous year, the steepest rise in 25 years. New builds also contributed to the revival of housing investment, as evidenced by a rise of over 9% in the number of building permits issued.

Registration duties on property transactions serve to complete the housing investment picture – and also showed growth. Real estate activity in 2021 clearly accelerated when compared with the previous year. In 2020, by contrast, it had been hit hard by both the COVID-19 pandemic and the end to the mortgage relief scheme for new loans in the Flemish Region (see chapter 5).

Business investment was clearly up, in keeping with higher demand and income

Business investment for the year 2021 as a whole advanced by 9.2%, after recording a historic fall of 7 % in the previous year, as restrictions and the virtually complete standstill of all industrial and building activity triggered sharp declines in the second quarter of 2020. Remarkably, after this companies continued to invest up to and including the first six months of 2021, with investment coming down a little in the second half of the year. The second-half drop reflected a temporary deterioration in the business climate from the summer, the Bank's business barometer surveys suggest, particularly in manufacturing - a major player in investment in Belgium. The sector's production capacity utilisation rate - an indicator of the degree of investment needed to keep expanding production – grew sharply early in the year and then also

Chart 3.12

Business investment – the composition of which has changed – was exceedingly resilient

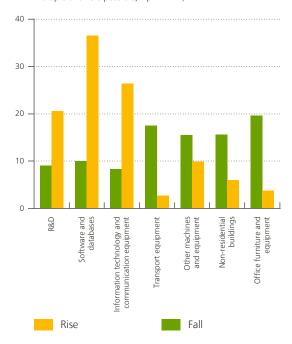


(indices, pre-crisis peaks ¹ = 100, data adjusted for seasonal and calendar effects)



Changes in the breakdown of investment due to the COVID-19 crisis

(in % of companies surveyed employing more than 50, multiple answers possible, April 2021)



Sources: ERMG, NAI, NBB.

- 1 Pre-crisis peaks (t = 0) are the second quarter of 2008 and the fourth quarter of 2019 respectively.
- 2 December 2021 economic projections by the Bank.

came down in the second half. The fact is that companies were up against supply issues from the summer, hampering production, and also faced an increase in the number of COVID-19 cases, prompting uncertainty.

The resilience of business investment during the COVID-19 pandemic is all the more notable for its

contrast with earlier recessions. The 2008-2009 financial crisis, for instance, resulted in a downward

trend in business investment for ten quarters before this gradually went back up, and it did not return to its pre-crisis level until 2014. The shock caused by the COVID-19 pandemic may have triggered a significant drop in business investment, but really only for two quarters, after which it recovered rapidly and was back to its pre-crisis levels from

the first quarter of 2021, i.e. five quarters after the pandemic first struck.

Surveys run by the Economic Risk Management Group (ERMG) – a group of leading experts established by the Belgian government in 2020 to closely monitor the impact of the crisis on the economy – and the European Investment Bank have suggested a change

in the composition of business investment, driven by the pandemic. In response to certain changes directly

related to the restrictions, particularly wider use of e-commerce, investment partly shifted to information technologies and digitalisation. Conversely, companies surveyed reported that they have cut down on investment in commercial property, particularly in office property, whose use may become less necessary as people increasingly work from home.

Table 3.3

Determinants of companies' gross operating surplus 1, at current prices

(percentage changes compared to the previous year, unless otherwise stated)

	2017	2018	2019	2020	2021 e
Gross operating surplus per unit sold ²	-0.3	2.0	3.5	1.5	12.3
Unit selling price	2.5	2.4	0.9	-0.6	6.4
On the domestic market	2.0	2.0	1.5	0.9	2.4
Exports	2.7	2.6	0.9	-1.6	7.7
Unit sales costs	3.0	2.4	0.4	-1.0	5.3
Imported goods and services	3.3	3.4	0.1	-2.1	8.2
Costs of domestic origin per unit of output ^{2,3}	1.8	1.1	0.6	-0.5	-0.1
of which:					
Unit labour costs 4	1.8	1.2	0.9	3.3	-2.1
Unit net indirect taxes	2.2	1.5	-0.4	-14.1	12.1
Final sales at constant prices	3.5	1.7	2.0	-6.6	8.0
Companies' gross operating surplus	3.2	3.7	5.6	-5.2	21.2

Sources: NAI, NBB.

- 1 Private and public companies.
- 2 Including the change in inventories.
- 3 In addition to wages, this category includes indirect taxes less subsidies, and gross mixed income of self-employed people.
- 4 Unit labour costs are expressed in units of value added of the business sector and are not calendar adjusted.

Incidentally, a proportion of the rise in business spending in 2021 was driven by the pharmaceuticals sector, which makes up around 20% of Belgian manufacturing industry and accounted for a little over 4% of gross fixed capital formation. This particular industry had, of course, recorded a significant rise in business investment in 2020, by some 23% compared with the preceding year. The exceptional circumstances of the health crisis undoubtedly also worked to the advantage of the pharmaceuticals sector in 2021 and required major capital layouts, particularly to achieve vaccination targets to combat the pandemic.

Companies' gross operating surplus, i.e. the revenues they generate with their business activities, surged by 21%, the steepest rise ever recorded in the national accounts and about twice the size of the recovery that took place after the 2008-2009 economic and financial crisis. This clear upward trend after the 5.2% plunge in 2020 was driven by a higher volume of sales – in both the domestic and export markets – and most of all by a clear widening in gross margins. These margins, in turn, were underpinned by a rise in unit selling prices, especially in exports, which exceeded that of unit sales costs. The costs of imported goods

and services were up, mostly fuelled by much higher energy prices at the end of the year, whereas the costs of goods and services of domestic origin stabilised on the back of falling labour costs. It is worth noting that the strong rise in net unit indirect taxes is primarily due to the phasing out of subsidies paid by the government to the health sector to offset income losses resulting from postponing non-urgent treatments at the height of the pandemic.

Public consumption and investment rose significantly

Higher public consumption expenditure in 2021 (up by around 4.5%) was mostly attributable to the impact of the COVID-19 pandemic. In addition to the costs of the vaccination campaign, this item includes health spending for surgery and medical consultations unrelated to COVID-19 that had been postponed in 2020 to ensure sufficient capacity in intensive care units. In addition, public employment went up temporarily in the first half of 2021 in the wake of the exceptional increase in the number of teachers on sick leave.

Government investment rose by 10.9% in 2021. Although construction started feeling the pain of capacity constraints as the year progressed, government investment was boosted by the implementation of

recovery plans – as well as by the delivery of several military transport aircraft. It should be observed that this transaction was import-based and did not therefore influence GDP.

BOX 2

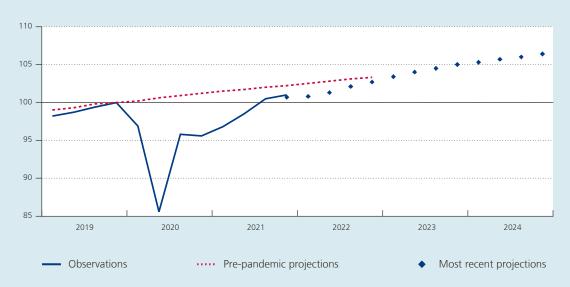
Did the 2020 recession create supply shortages that could leave an indelible mark on economic activity?

The COVID-19 pandemic set off an historic slump in Belgian GDP, but recovery was swift on its heels – from the third quarter of 2020 – and very robust too. In fact, economic activity had not grown at this clip since the end of the Second World War. But although GDP has already touched and exceeded pre-crisis levels, it remains below the levels that had been expected before the pandemic hit. Economic growth appears to be hobbled by supply constraints, including commodity shortages (timber, metals, natural gas and oil, etc.), semi-manufactures (plastics, semiconductors, etc.) and logistics services (sea freight, etc.). What is more, many companies are reporting people shortages.

Economic research – and particularly research carried out after the 2008-2009 financial crisis – suggests that cyclical fluctuations can affect supply and may cause lingering or scarring effects on

Despite the robust recovery, GDP in 2021 stuck below the level expected before the pandemic

(real GDP adjusted for seasonal and calendar effects, indices 2019 Q4 = 100)



Sources: NAI, NBB.

Note: The pre-pandemic projections for GDP growth are those that the Bank released in December 2019. The most recent projections are from December 2021.



GDP. It is a distinct possibility that the deep recession of 2020 has changed the growth path of economic activity. In Belgium, many businesses across all sectors reported facing supply constraints in 2021. A Bank survey conducted in October revealed that over 80 % of companies in wholesale, retail (both food and non-food), industry and construction grappled with supply issues, primarily shortages at their suppliers and transport problems. Coupled with steeply higher energy prices, inputs became a lot more expensive, and even more so in sectors highly dependent on them.

The causes of these supply constraints are many and not specific to Belgium, as PMI indicators for delivery terms and input prices suggest. Both have got significantly worse across the world, and particularly in the euro area (see chapter 1 of this Report). The global economy bounced back with a vengeance, especially compared with previous periods of recession. As a result, it has been a strongly goods-intensive period, much more than services. Consumption of services, by contrast, remained a prisoner of concerns over the public health situation and the restrictions, but also reflected changing preferences. As a result, demand rose for industrial goods – whose manufacture typically ties into global value chains – and led to a sharp increase in demand for commodities and sea freight. The literature uses the term "bottleneck" to refer to the scarcity arising when demand for a factor of production suddenly and significantly exceeds the maximum that can be produced or delivered.

The COVID-19 pandemic was also a key factor in the sense that many relationships between suppliers and producers were disrupted or hampered by public health measures and were not always easily and swiftly restored – as aspect made even worse by the lack of synchronicity in restrictions across the world.

To make matters worse, some sectors – transport and distribution, but mining as well – had been facing a lack of investment even prior to the pandemic, eroding their ability to cope with a sudden increase in demand.

All that said, supply constraints and their impact on economic activity are expected to ease steadily, with the nature of the constraints determining the speed at which this will happen. Where these are mainly attributable to the sheer strength of the recovery, the impact of which may be further fuelled by stock-building in supply chains, the so-called bullwhip effect, these constraints should be quick to disappear. If, by contrast, they reflect major changes in the composition of demand, such as increased digitalisation of the economy, they will require investment that will take time. Most Belgian companies that responded to the above-cited survey, including those in supply-sensitive lines of business, emphasised the temporary nature of the supply constraints, and reckoned these should ease and then disappear in the second half of 2022. And this is exactly the scenario that informed the Bank's macroeconomic projections in the autumn: these assumed that growth would accelerate from the spring of 2022, taking GDP close to the levels that had been expected before the outbreak of the pandemic and then certainly beyond.

As for the labour markets, the crisis has served to intensify specific trends that had featured previously, such as the challenge of recruiting employees with varying profiles. Specialists in information and communication technology had been hard to find for quite a few years and now there is also a shortage of people in construction, the hospitality industry, and transport and logistics, to mention but a few sectors.





The way people work within companies has likewise undergone a major transformation, particularly because of the much wider recourse to working from home, which has led to a willingness on the part of companies to offer hybrid arrangements. Against this particular backdrop, it is becoming increasingly important for workers to develop and nurture digital skills in both their initial and lifelong training.

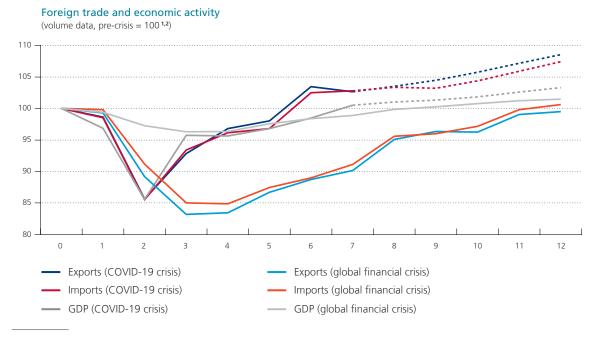
It is reasonable to assume that employment – which already surged by a net 88 000 new jobs – would have staged exceptional growth in 2021 if it had not been for these recruitment issues. This job creation came at a time of swelling labour supply, as new people entered the labour market, while unemployment fell significantly at the same time. In 2021, Belgium had 29 600 fewer unemployed job-seekers than in 2020. That said, the data does show a rise in structural unemployment, as 8 400 more people have now been out of work for a year or longer. This poses a major challenge, as we are dealing with a group of people who find it harder to find work again. In fact, the transition from unemployment to work has always been relatively tough in Belgium compared with partner countries, whose labour markets have proved less rigid. Recent developments are pointing to some improvement, however, and suggest that more favourable outcomes are possible. Provided that appropriate policy measures are taken and that the supply chain bottlenecks do indeed prove temporary, the shock caused by the COVID-19 pandemic will probably not cause any lasting damage to supply.

Belgium's trade flows recovered quickly

In terms of foreign trade, Belgium was unable to sidestep a deteriorating global economy and the drop in international trade in 2020. Still, after the slump in the second guarter of 2020, trade in Belgian goods and services with the rest of the world recovered sharply from the third quarter of that year, in line with the trend in GDP. In fact, foreign goods and services trade reached higher levels than before the crisis from the second quarter of 2021, slightly more quickly than the broader economy. One reason for this can be explained by the massive impact of a range of pandemic-related public health measures on services activities, which have not yet returned to their pre-crisis levels and whose weight in Belgian GDP is higher than that of foreign trade. Just as with all the other components of demand - with the exception of private consumption – the recovery in trade flows was swift when compared with the 2008-2009 crisis: pre-crisis levels were scaled as early as six quarters after the initial shock, as against twelve after the global financial crisis.

At annualised increases of 9.0% and 8.5% respectively compared with 2020, outgoing and incoming trade flows, as expressed in constant prices, recorded pretty similar trends and made, as they did last year, a slightly positive net contribution to economic activity growth in 2021. Meanwhile, sharply higher energy and production costs pushed down Belgium's terms of trade (i.e. the relationship between the export price index and the import price index) in 2021 when compared with the previous year (-0.5%). The 2021 energy price surge, for gas and oil in particular, was all the more significant because those same prices had been at exceedingly low levels in 2020. Although oil prices were high in 2021 (averaging around €71.8 per barrel in the year), prices per barrel are close to those recorded in 2018 (€71.0 on average) and remain firmly below those seen in the years after the 2008-2009 crisis (€ 102 on average in the 2010-2014 period). Gas prices, by contrast, were historically high in full-year 2021 and higher still in the second half. Coupled with higher demand for these mostly imported products, these prices widened the Belgian trade deficit for energy products with the rest of the world. This deficit stood at around € 9.8 billion in the first nine months of 2021, i.e. € 3.5 billion more than in

Chart 3.13
Imports and exports of goods and services rapidly recovered



Sources: NAI, NBB.

¹ The dotted lines reflect the Bank's economic projections dated December 2021.

² The pre-crisis peaks (t = 0) reflect the second quarter of 2008 and the fourth quarter of 2019 respectively.



the corresponding period of 2020, but less than in the first nine months of 2018 and less than the average in the corresponding period of 2010-2014, when the

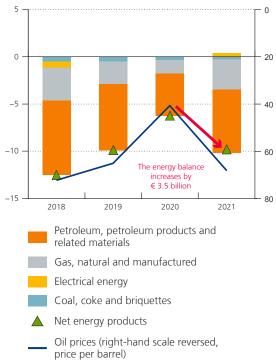
Terms of trade and oil prices

deficit worked out at € 12.5 billion and € 12.6 billion, respectively. The surge in energy prices also had a significant impact on a broad range of domestic

Chart 3.14
Rising energy prices adversely affected the terms of trade and Belgium's net energy bill

101.5 10 101.0 20 100 5 30 40 100.0 50 99.5 60 70 99.0 80 90 2020 Q2 5 2021 Q3 e 2020 Q1 Q4 e 2020 2020 2021 2021 2021 Terms of trade (left-hand scale, index 2019 Q1 = 100) Oil prices (right-hand scale reversed, price per barrel in €)

Energy balance relative to the rest of the world (balance in € billion, first three quarters of the year, unless otherwise stated)



Sources: ECB, NAI, NBB.

sectors of the Belgian economy in 2021. For one thing, households saw their consumer spending grow at the expense of their savings, while companies faced higher production costs. For the government, these higher energy prices led to temporarily higher income in 2021, due to higher VAT revenues from these products. Overall, surging energy prices somewhat reduced the Belgian economy's financing capacity for the year.

Beyond the larger deficit in energy product trade, the

decline and subsequent recovery of trade in goods were uneven, much as was global trade. From the end of 2020 and par-

Manufacture of COVID-19 vaccines supported Belgian exports

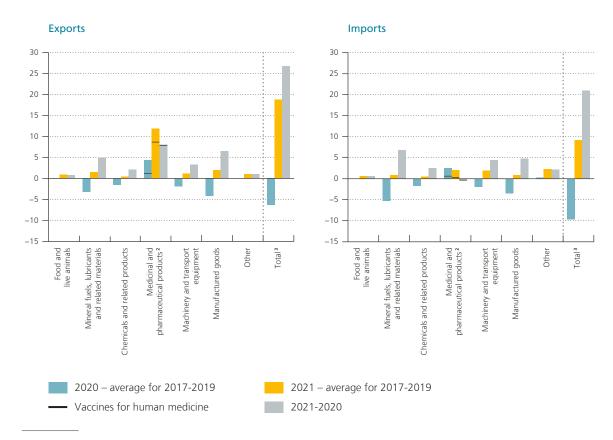
ticularly in 2021, Belgium benefited from the size of the pharmaceuticals sector on its territory in terms of the massive exports of medical material, particularly COVID-19 vaccines. This category of products was one of the few positive contributors to Belgian export growth in 2020, and to a lesser extent to imports, and in 2021 – the year in which the adoption of vaccines accelerated across the globe – the contribution of this type of goods to Belgian trade sharply increased. Vaccines against SARS-related coronaviruses, in particular, accounted for around € 15.4 billion in exports in the first nine months of 2021 (69% of total

exports of vaccines for human medicine), compared with a mere € 0.9 billion in imports (18% of total imports of vaccines for human

medicine) – a net result of around € 14.5 billion for the Belgian economy. However, inputs useful for

Chart 3.15 Pharmaceuticals sector drove Belgian goods exports

(contributions to growth; first three quarters of the year; in percentage points, unless otherwise stated 1)



Source: NAI.

¹ Data according to the foreign trade statistics, national concept.

² The black line reflects the contributions of vaccines for human medicine – which include vaccines against SARS-related coronaviruses (SARS-CoV species) – to growth of trade flows in goods.

³ Percentage changes compared with the corresponding period of the previous year.

the manufacture of these vaccines are also imported, but are classed as other categories of goods, resulting in an artificially high net figure for this specific category of products. In the first nine months of 2021, the other goods categories – with the exception of manufactured and energy products – only made a limited or even negative contribution to exports and imports growth.

In trade in services, both exports and imports rose in the first three quarters of 2021, making for a net surplus below that for 2020 but still larger than the average recorded in the 2017-2019 period. This state of affairs was mostly down to services categories transport and travel, the net figure for which turned more strongly negative in 2021, as there were fewer lockdowns or other restrictions on economic activity and travel than had been the case in 2020. The year was also marked by a significant rise

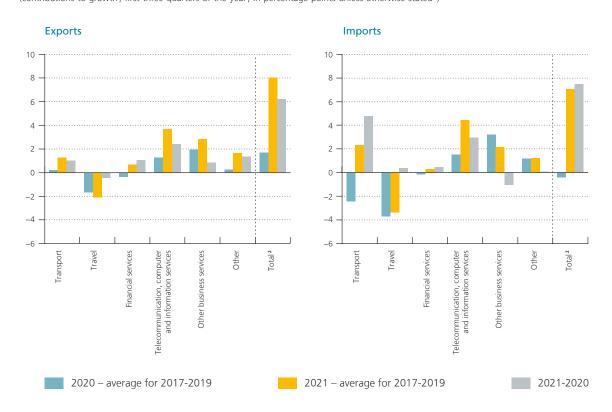
in exports and imports of communication, information technology and information services, mainly explained by the business activity of a company in this sector related to a new IT software development.

Belgium's trade flows in goods and services with the rest of the world were also influenced by the United Kingdom's departure from the European Union at the beginning of 2021. Whereas 2020 trade flows in goods to and from the United Kingdom developed pretty much in line with that recorded with the rest of the world – with the exception of the last quarter of the year when a "stock" effect was noted – trade with the UK became less dynamic at the beginning of 2021, particularly in terms of imports. Over the second and third quarters of 2021, goods imports declined further, whereas the exports of many categories of goods, particularly pharmaceuticals products, shot up. As for trade in services, both exports to and imports from the UK fell in the first

Chart 3.16

Trade in services recovered

(contributions to growth; first three quarters of the year; in percentage points unless otherwise stated ¹)



Source: NBB.

¹ Data according to the balance of payments statistics.

² Percentage change compared with the corresponding period of the previous year.

six months of 2021, dragged down particularly by transport services, travel, financial services and other business services, four key sectors of trade with the UK. Unlike imports, the export of services to the UK revived in the course of the third quarter. Overall and despite major fluctuations – which would probably have been even bigger if there had not been a Trade and Cooperation Agreement between the EU and the UK – the balance of trade between Belgium and the United Kingdom shows a surplus for the first nine months of 2021, to a stronger degree than the average of the three preceding years, as a result of the fall in goods imports.

Slightly higher financing capacity for the Belgian economy

All things considered and taking account of the fact that there has been only a minor change in net primary income (which includes earned and investment paid to and received from the rest of the world) and net secondary income (mainly transfers

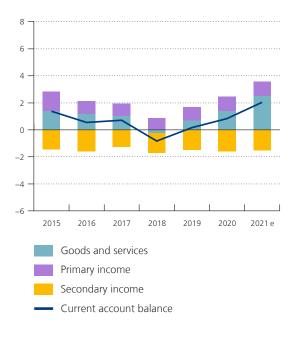
from households and government) to or from the rest of the world as a percentage of GDP, Belgium's current account surplus grew from around 0.8 % of GDP in 2020 to 2 % in 2021. This overall trend is also visible in the Belgian economy's slightly higher financing capacity vis-à-vis the rest of the world, as the country's general government borrowing requirement has come down from its all-time high in 2020, although in a historical perspective it remains considerable (6.2 % of GDP). Companies' increased financing capacity has also provided a positive impetus to this position relative to the rest of the world, as their disposable income grew in 2021 on the back of a higher gross operating surplus offsetting higher investment. Taken together, this lower foreign financing requirement of companies and general government has made it possible to offset the lower borrowing capacity of households, whose savings have contracted – even if their savings rate remains substantial - and whose investment in housing has started to rise again after having fallen in 2020.

Chart 3.17

Borrowing and current account surpluses both up

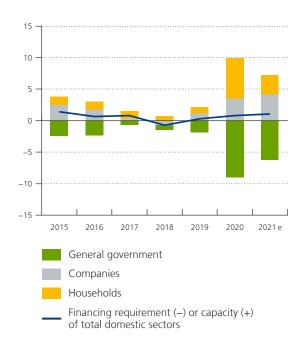
(in % of GDP, unless otherwise stated)

Current account balance



Sources: NAI, NBB.

Financing balance of all domestic sectors





4. Prices and labour costs in Belgium



4. 1	Higher energy prices tuel inflation	121
4.2	Core inflation rose in the second half of the year	125
4.3	Health index also sharply up	128
4.4	Inflation movements show up in wages after time lag	130
4.5	Wage gap is an area for concern Box 3 – Business competitiveness and wage indexation	133

4.1 Higher energy prices fuel inflation

In 2021, inflation rose to highs unprecedented since the harmonised index of consumer prices (HICP) began in 1997, working out at 7.1 % in November and at 6.6 % by the end of the year. The second half of the year, in particular, saw inflation climb, largely driven by energy prices. Average inflation jumped from 0.4 % in 2020 to 3.2 % in 2021. Inflation excluding energy contracted overall in 2021 but accelerated as the year progressed and economic activity recovered.

On average over the year, price growth in Belgium exceeded the average of its three main neighbouring

countries (Germany, France, Netherlands), where it amounted to 2.8 %. In fact, by the end of the year, Belgian inflation was even 1.7 percentage points higher. On the whole, energy inflation in Belgium exceeded the numbers in its neighbouring countries, whereas core inflation was lower. The latter was highest in Germany, powering ahead in January 2021 when the basic VAT rate returned from 16 % to 19 %.

In 2021, prices for all energy products rose in Belgium, compared with generally negative inflation rates in 2020: 15.2 % for fuels, 36.4 % for heating oil, 39.6 % for gas and 16.2 % for electricity.

Table 4.1

Harmonised index of consumer prices (HICP)
(percentage changes compared to the previous year)

					Average for three neighboring countries
	2018	2019	2020	2021	2021
Total	2.3	1.2	0.4	3.2	2.8
Energy products	8.9	-0.8	-11.0	22.4	11.0
Motor fuels	10.7	0.0	-8.5	15.2	18.3
Heating oil	19.4	-1.6	-28.2	36.4	17.9
Gas	9.6	-5.8	-13.9	39.6	11.4
Electricity	2.2	1.6	-6.4	16.2	4.1
Unprocessed food	1.8	-0.4	4.7	-2.2	2.3
Processed food	2.9	1.7	2.1	1.7	2.1
Core inflation	1.3	1.5	1.4	1.3	1.8
Services	1.6	1.8	1.8	1.6	1.8
Non-energy industrial goods	0.8	1.0	0.7	0.8	1.9
p.m. National index	2.1	1.4	0.7	2.4	-

Sources: Eurostat, Statbel.

On the one hand, this reflects base effects. After oil prices collapsed in the spring of 2020 triggered by the pandemic and first lockdowns, prices for heating oil and fuels fell sharply, causing nearly as big a drop in energy inflation as during the financial crisis in 2009. This massive fall has had major base effects on monthly inflation figures (year-on-year) since the spring of 2021, as annual comparisons are based on exceptionally low energy prices in 2020.

On the other hand, the combination of a range of supply and demand factors has rapidly pushed up prices for oil and other commodities, as well as sparking an upsurge in wholesale gas prices and to a lesser extent also electricity. Further background to these factors is provided in chapter 1.

Belgium's neighbouring countries are facing similar pressures in their wholesale markets, but the impact of these on households differs between countries.

Overall, energy inflation in Belgium (22.4%) was twice as high as in its neighbouring countries in 2021.

The same phenomenon had been visible in 2020, if in the reverse direction: energy inflation fell twice

Energy inflation rose faster in Belgium than in neighbouring countries

as hard in Belgium ($-11\,\%$, compared with $-5.6\,\%$). Several factors inform these differences, including the

composition of energy in the consumption basket, taxation and the types of energy contracts on offer or selected by households.

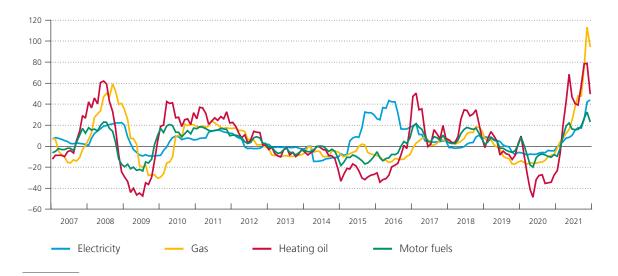
Energy product prices turn out to be more sensitive to global oil price fluctuations in Belgium, mainly because of very low excise duties on heating oil. With flat-rate taxes accounting for only a small proportion of prices (€ 19 per 1 000 litres compared with € 156 in France and € 61 in Germany), these taxes also constitute less of a cushion than is the case in neighbouring countries when crude oil price fluctuations percolate through to consumer prices. Besides, heating oil accounts for a higher proportion of energy use in Belgium (13 % of energy products, compared with an average 8 % in its neighbouring countries). By contrast, profiles and inflation levels for motor fuels were comparable between Belgium and its three main neighbouring countries.

In addition, changes in wholesale prices are typically passed on faster to Belgian electricity and gas bills, because of the higher number of variable energy

contracts and more rapid adjustment to market prices, whereas consumers in Belgium's neighbours tend

to opt for fixed-rate contracts more often. Consumer energy prices break down into an energy component,

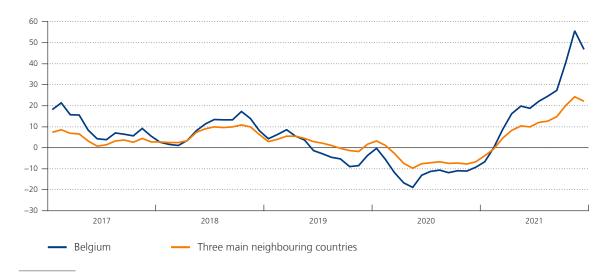
Chart 4.1
Inflation rates accelerated for all energy products
(HICP: percentage changes compared with the previous year)



Source: Eurostat.

Chart 4.2

2021 energy inflation was higher in Belgium than in neighbouring countries (HICP: percentage changes compared with the previous year)



Source: Eurostat.

grid rates, taxes and surcharges, plus VAT. It is the energy component cost that explains the swift advance in electricity and gas prices in Belgium since the summer of 2021.

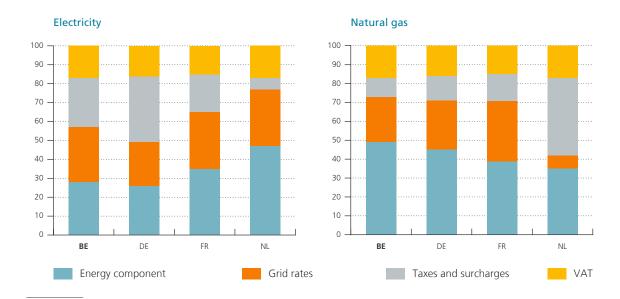
Inflation figures for gas were at all-time highs. In November, for instance, gas prices surged by a year-on-year 113%, a percentage that had not been recorded since the harmonised price index was first

launched. The share of the energy component in overall gas prices in Belgium was higher than the average for its neighbouring countries, making consumer prices more sensitive to changes in wholesale prices. Although the relative weight of gas in Belgium is lower than in its neighbouring countries (18% compared with 23%), contract prices have risen so much that this component has put Belgium at a disadvantage, widening the energy inflation gap. As for



Chart 4.3

Breakdown of electricity and natural gas prices ¹
(in % of total prices, averages for 2019-2021)



Source: CREG.

electricity, if the return to 21% VAT levied on electricity in September 2015 is disregarded, inflation on this energy product also touched its highest level since HICP records began, reaching 42% in November. In Germany, the fact that recent price rises in the electricity market are barely making a dent in the energy component of consumer bills is explained by early purchases tied in by suppliers, among other factors. In France, the relative inertia of prices charged to households is underpinned by a high degree of price regulation and nuclear power generation, which have protected consumers from a number of elements that have caused prices to spike (including higher prices for carbon allowances). Electricity accounts for a larger share of Belgium's energy consumption than in its neighbouring countries (37 % compared with 30 % in neighbouring countries), making for a bigger impact on total energy inflation.



¹ Electricity: average consumption of 3 500 kWh a year using a standard meter. Natural gas: average consumption of 23 260 kWh a year.

4.2 Core inflation rose in the second half of the year

Economies reopened at a rapid pace as restrictions were phased out, such as those on travelling and going out to restaurants. Some purchases of goods and services had been put

off to 2021, boosted by **Production costs drive up core inflation** of price increases for serforced savings during the

lockdowns, and after reopening, companies found it easier to raise their prices without losing customers.

Yet core inflation inched down on average between 2020 and 2021, to 1.3 % from 1.4 %, for two reasons: a base effect and the fact that various activities did not restart at the beginning of the year, keeping the inflation percentage low at that point.

In the absence of price data for a number of services that were suspended during the lockdowns, statistics offices were compelled to extend some rates in 2020

> and early in 2021. The pace vices slowed in 2021 (to

1.6%). Tax deductions for the purchase of service vouchers in Flanders were cut in January 2020, pushing up inflation (households are now paying more for these services). This effect disappeared after 12 months. Following the reopening of cafés and restaurants, inflation in the hospitality industry picked up to 4% by the end of the year, and the temporary VAT cut to 6% for selected restaurant and catering

Chart 4.4 Inflation in services and industrial goods rose as the year progressed (HICP: percentage changes compared with the previous year)

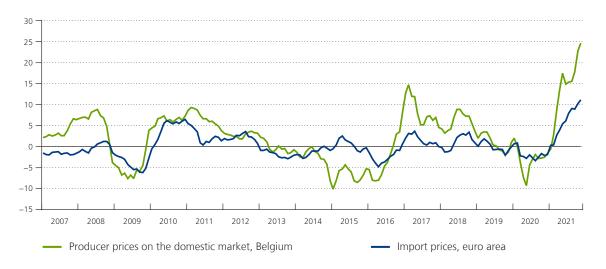


Source: Eurostat.

Chart 4.5

Producer and import prices in the manufacturing industry jumped 1

(percentage changes compared with the previous year for the price indices)



Source: Eurostat.

1 Excluding the energy and construction sectors.

services between 8 May and 30 September 2021 has had no visible impact on consumer prices. This had anyway not been the aim of the cut, as it was primarily meant to support the industry's recovery. Cultural and recreational services and high-contact professions such as hairdressers recorded steeply higher rates than in the previous year, although the weight of these services in the consumption basket remains limited. These price increases probably reflect certain costs for reopening business (virus protection measures) as well as an attempt to make up for losses incurred during lockdown. After months of declines, prices for package holidays were on the rise again in July 2021 and contributed to accelerated services inflation in the second half of the year.

At the same time, many businesses found it hard to meet rapidly rising demand, as they needed to shore up their supply chains, which had been hit hard by the pandemic. Shortages emerged in the manufacture of selected goods, for which essential parts – such as semiconductors – rapidly ran out. Shipment of goods became harder and more expensive as a result of problems in the transport sector.

These cost pressures are visible in the index of manufacturing import prices in the euro area, which rose steadily from the start of the year, with growth

touching an all-time high of 11% in November. The same was true for producer prices in the Belgian domestic market's manufacturing industry: a record 25% jump, an increase on a scale not seen since the early 1980s. More expensive inputs have pushed up consumer prices, while selected imported end-products also became more expensive.

For non-energy industrial goods, the other component of core inflation, price changes in 2020 and 2021 were very volatile, as sales periods were delayed and extended. In 2020, the country's summer sales were moved from July to August, but those in 2021 were back to their usual July schedule. The year-on-year inflation figure for non-energy industrial goods dropped, as a period of lower prices was now being compared with a time of 'normal' prices (July 2020). The following month, the figure was back up - normal prices in August 2021 being compared with reduced prices in August 2020. In February 2021, winter sales were exceptionally – extended, and inflation figures once again plumbed lows. This movement was not observed in the national consumer price index – which the health index draws on - as seasonal sales are smoothed across the year.

Ignoring these atypical movements, we note that industrial goods inflation was climbing in the second



half of the year and particularly towards the end, when inflation for these products stood at 2.1 %. Supply and delivery issues combined with steeper commodity prices to drive up prices for a whole host of goods, including household equipment, furniture and furnishings, and second-hand cars. Delays in the delivery and manufacture of new vehicles galvanised demand in the used car market and prices kept rising (buyers had been taking refuge in this category of vehicles as early as 2020), staging 15 % growth in December.

And lastly, food inflation declined from 2.6% to 0.9% between 2020 and 2021, predominantly because of negative inflation for unprocessed food. Base effects are at play here, as – unrelated to the pandemic – food markets had faced a range of supply issues in 2020 that were responsible for driving up prices (e.g. weather conditions causing harvests to fail, African swine fever in Asia resulting in higher demand for meat from Europe) or were related to them, e.g. labour shortages in some sectors causing supply issues, a temporary ban on special offers at the start of the pandemic.

Inflationary pressures have not become wide-ranging and mainly reflect significant movements in some sectors. Ignoring typically highly volatile product categories (and particularly in 2021), such as energy products and fruit and vegetables, the share of products (defined at four-digit COICOP level ¹) with an inflation percentage in excess of long-term inflation (1.8 % in the 2011-2021 period), stood at 27 % in 2021, compared with 38 % in 2020. This confirms that core inflation – in the wider sense – remained moderate in 2021.

¹ The Classification of Individual Consumption by Purpose (COICOP) captures household consumption. Its four-digit level refers, for instance, to "bread and grains" or "clothing".

4.3 Health index also sharply up

Automatic indexation in Belgium of wages and social benefits helps to prevent purchasing power from being eroded by inflation. But any worsening in the terms of trade – due to higher oil prices, for instance – makes the entire economy poorer and hence has to be absorbed by all economic actors. This is why indexation has been calculated on the basis of an adjusted index figure instead of total index figures since 1994. The health index reflects the national consumer price index excluding motor fuels, alcohol and tobacco, with these exclusions ensuring that the effects of oil price shocks and indirect taxes on health-damaging products do not get fully passed on to wages, containing the risk of a wage-price spiral (see box 3).

Non-motor-fuel energy products, i.e. electricity, gas and heating oil, do feature in the health index basket.

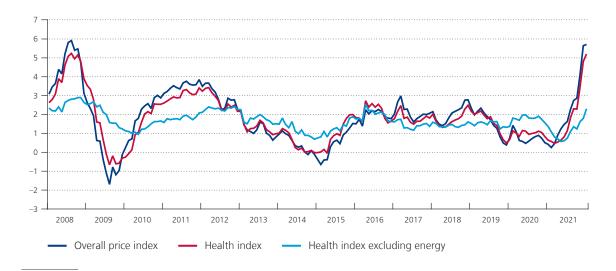
Although these account for only 6% of the index, their high volatility levels may speed up or slow down the pace of indexation. In 2021, energy inflation shot up so fast that the public sector's trigger index was breached twice: in August for the first time and once more in December. The Bank's June projections, by contrast, had posited a single such breach in 2021, in October.

While the growth of the total national price index reached 2.4% in 2021¹, growth of the health index was on average 2.0%. In other words, the health index undershot inflation by 0.4 of a percentage point. If all energy products were stripped out of

1 Methodologies differ between the national price index and the harmonised index, which are mainly related to the origins of the index weightings.

Chart 4.6

Energy prices pushed up health index as well
(percentage changes compared with the previous year for the price indices)



Sources: Statbel, own calculations.

the health index, it would have gone up by 1.2% in 2021 - 0.8 of a percentage point less than recorded by the index as actually constituted.

This is not the first time that energy has had such a major impact on the way the health index develops. In 2008, for instance, total inflation stood at 4.5%, while energy prices rose by 19.9%. The rise in the health index, then at 4.2%, undershot inflation by 0.3 of a percentage point. Stripping out all energy products, the health index would have gone up by 2.6%, a clear reflection of the impact of energy on the wage indexation mechanism.

The consumer price index is based on an average Belgian household's consumption basket. However, what is in the basket differs depending on income, and price developments in goods and services do not impact all sections of the population equally. The country's household budget survey revealed that gas, electricity and heating oil account for double the share of income for the lowest-income households (interdecile difference 1). It is possible to calculate an

inflation rate for a type of household on the basis of the relative weight of consumption per income quartile. According to these calculations, the least well-off households face an overall inflation rate above the average (2.5%) and 0.3 of a percentage point higher than households on the largest incomes, with the gap even wider by the end of the year. However, these calculations ignore any measures taken to ease the energy bills for certain sections of the population. To provide immediate relief to households struggling in energy poverty (more than one in five households in 2019, according to the King Baudouin Foundation), the government expanded subsidised rates (the so-called "social tariff") in February 2021, with a million householders seeing their energy bills reduced. In October 2021, the government decided to extend this measure until the end of March 2022. In addition, people on such rates should receive an additional one-off payment of around € 80 in 2022.

1 The interdecile difference can only be calculated on the basis of the 2010 household budget survey, as only income quartiles have been published since then.



4.4 Inflation movements show up in wages after time lag

Inflation trends typically percolate through to wages with some time lag, partly because any adjustments reflect the health index's four-month moving average (the smoothed health index), but also because changes are implemented by way of different indexation mechanisms – with adjustments spread over time as a result. Indexation formulae differ between public and private sectors and, within the private sector, between joint committees. In the medium term, however, any increases in the smoothed health index are fully reflected in wages.

This wide range of indexation methods breaks down into two broad categories. The first sees indexation happen after the health index's four-month moving average has exceeded a trigger index figure, typically in increments of 2 %. This is the general rule for wage

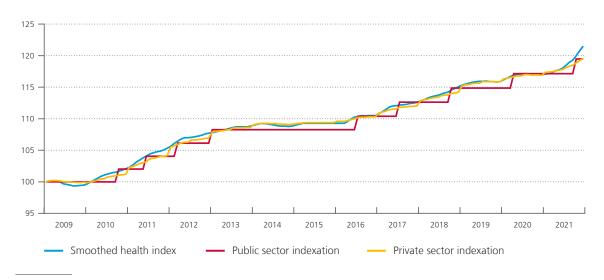
indexation applied in the public sector. In the second category, wages are indexed at set intervals, e.g. every month, two, three, four or six months, or every year. Annual adjustment is the most common mechanism for this category.

In 2021, wages of over 48% of private sector employees were indexed when a trigger index was passed – 38% of them through annual indexation and around 9% once every three months. Other setups are less frequent.

Much as in the public sector, indexation was the biggest contributor to gross hourly wage developments in the private sector, which amounted to 1.1%, a slight increase on 2020. The traditional time lag in the adjustment of wages to the cost of living – caused

Chart 4.7

Wage indexation in public and private sectors follows health index developments (indices, January 2009 = 100)



Sources: FPS ELSD, NBB.

Table 4.2 Labour costs (percentage changes compared with the previous year, unless otherwise stated; data adjusted for seasonal and calendar effects)

	2018	2019	2020	2021 e
Hourly wage costs in the private sector	1.5	2.2	5.3	-0.6
Gross hourly wages	2.1	2.3	4.8	-0.2
Collectively agreed wages ¹	2.1	2.5	1.7	1.4
Real agreed adjustments	0.4	0.7	0.6	0.4
Indexation	1.7	1.8	1.0	1.1
Wage drift ²	0.0	-0.2	3.1	-1.7
Employers' social contributions ³	-0.6	-0.1	0.5	-0.3
p.m. Hourly wage costs in the private sector according to the economic concept ⁴	1.4	2.1	4.3	-0.9
Hourly wage costs in the public sector	1.8	2.2	3.1	0.7
of which: Indexation	1.5	1.5	1.5	1.0
Hourly wage costs in the economy as a whole	1.5	2.2	5.0	-0.4

Sources: FPS ELSD, NAI, NSSO, NBB.

The return to work by the temporarily

by the various indexation mechanisms – explains why wage indexation is bound to be particularly steep in 2022. Based on its December projections, the Bank now forecasts indexation in excess of 4 % in 2022. An

increase of this nature has an immediate impact on social partner dialogues, laid-off squeezed wage growth in 2021 under the 19 March 2017

Law amending the 1996 Law on the Promotion of Employment and the Preventive Safeguarding of Competitiveness, whose purpose is to prevent wage indexation from eroding companies' competitiveness (see box 3).

Trends in gross hourly wages were strongly influenced by the public health situation in 2021, as in 2020. That year's steep wage growth of 4.8 % was largely explained by the extent to which companies drew on the furlough scheme. The scheme's beneficiaries typically worked in sectors and jobs on low or medium pay. As they were no longer paid by their employers, but from the public purse, their wages disappeared from the total wage bill, automatically pushing up

average gross wages and precipitating a strong increase in the net wage drift (3.1%). The reverse happened in 2021 on the back of a generally favourable development in the public health situation, as em-

> ployers were now able to offer jobs to the majority of their furloughed staff. Statistically,

dampened aggregate hourly wages, contributing to a lower wage drift, to -1.7 %. As a result, gross hourly wages barely grew in 2021.

People working in essential sectors, particularly in health care, received extra pay for their performance in challenging pandemic conditions. Such payments took the shape of bonuses, overtime payments or consumption vouchers and contributed to the wage drift dynamics in 2020. Fundamental upgrading of wages and working conditions in health care had been on the cards anyway, but the health crisis facilitated swifter social agreements, which came

into force in 2021. The structural wage rises imple-

mented under these agreements were factored into

131

¹ Wage rises set by joint committees.

² Increases and bonuses granted by companies over and above those under interprofessional and sectoral collective agreements; wage drift resulting from changes in the structure of employment, and errors and omissions; contribution to the change in labour costs,

³ Contribution to the change in labour costs resulting from changes in implicit social security contribution rates, in percentage points.

⁴ Hourly wage costs according to the economic concept take account of the reduction in employers' contributions for target groups, the reduction in payroll tax, and other wage subsidies (particularly the COVID-19 measures). This concept gives a more accurate idea of the real labour costs for firms.

collectively agreed wages. With these rises wholly financed by government through wage subsidies, they should be budget-neutral for the employers involved.

The social partners were unable to agree on the maximum margin for hourly wage costs in the 2021-2022 period and the federal government turned to the law to set them at 0.4% by Royal Decree, matching the maximum margin as determined by the January 2021 technical report issued by the Central Economic Council (CEC). Also, the law was amended to include in the list of elements not used to calculate margins selected COVID-19-related measures, including consumption vouchers in the health care sector. June 2021 saw the social partners reach an interprofessional agreement after all, which included an increase in guaranteed average minimum monthly income with effect from April 2022.

Although the interprofessional level is a key part of wage-setting, consultations in the sectoral joint committees remain essential. Within these committees, sectoral realities shape not just the outcomes of interprofessional talks on wage margins but also inform negotiations on other key elements, such as

hours worked, training and the indexation mechanism. Sector-based minimum wages are also set at this level – an important springboard for wage differentiation between joint committees.

In 2021, sectors or companies also discussed the option of companies that are doing well granting an additional COVID-19 payment of up to € 500 per employee on top of the 0.4% margin. Sectoral collective agreements were concluded in food trade, large retailers, department stores, transport and logistics, cleaning, funeral services, as well as in food, chemicals, metals, construction, banking services and other sectors covered by the supplementary joint committee for white collar workers — which alone represents around 500 000 employees. The payment amount agreed varied between € 125 and € 500 per employee.

By the end of the summer, not all sector-based negotiations had been completed and the bulk of the increase in real negotiated wages was not yet included in the data in terms of the wage margin. These sector agreements stood to bring negotiated increases in the fourth quarter of 2021, and even more in 2022.

4.5 Wage gap is an area for concern

The Central Economic Council is tasked with estimating the gap in hourly wage costs that has been created in Belgium's private sector since 1996 relative to its three most important partner countries. The 2020 wage gap was difficult to gauge because of the health crisis's statistical effects on labour costs. Even though all four countries used furlough schemes to address the issue, the statistical consequences

were not identical because of the specific characteristics of the scheme in each country. Labour costs in 2021 were also influenced by pandemic-related composition effects. In the absence of data from which the purely statistical effects of the crisis could be stripped out, the CEC opted to adopt projection smoothing on the assumption that upward and downward effects would cancel each other out.

BOX 3

Business competitiveness and wage indexation

Belgium is a small, open economy integrated into international trade. With the advent of the single currency, it lost its exchange rate as a tool to ensure the competitiveness of its businesses. This dimension then had to be incorporated into the social dialogue and more generally by better taking into account the trade-off between wages and jobs.

Belgium remains one of the few euro area economies where cost of living expenses are automatically reflected in wages. Indexation is deeply embedded in the way its economy operates, but this mechanism inevitably also contributes to the rigidity of real wages. To ensure that indexation does not erode the country's relative competitiveness, a scheme was devised to embed the effects of indexation on wage-setting. The Law on the Promotion of Employment and the Preventive Safeguarding of Competitiveness was enacted in 1996, with the aim of aligning hourly labour cost developments in Belgium with expected trends at its three main trading partners, i.e. Germany, France and the Netherlands. In practice, however, the Law was unable to prevent labour costs from going off the rails, with the wage gap having widened since 2006 and peaking at 6.1% in 2009. It took until 2017 before the gap was fully closed after a range of wage moderation measures, an index jump and additional cuts in social security contributions.

The enactment of the March 2017 Law amending the 1996 Law brought in a series of relevant adjustments, without prejudice to the basic principles of the 1996 Law. For one thing, expected growth in nominal wages in the three main neighbouring countries continued to serve as the benchmark for



Belgium's labour cost gap 1



Source: CEC.

1 Compared with the three main neighbouring countries, weighted average by relative size of GDP.

determining the maximum margin for wage growth: the social partners still negotiate the (real) wage cap and the automatic indexation mechanism is in principle guaranteed.

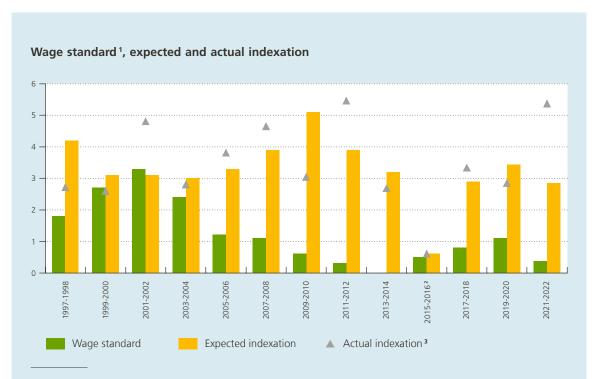
The big change introduced by the 2017 Law is the way in which the maximum available margin for real wage costs growth is calculated once every two years. The Central Economic Council is now required to allow for an adjustment factor and a safety margin in addition to expected nominal labour cost developments in Belgium's neighbouring countries and projected indexation in Belgium. As its name suggests, the adjustment factor is meant to factor in the past in order to adjust for any gap, e.g. when cumulative hourly wage costs in Belgium have been rising faster since 1996 than those in its neighbouring countries. The safety margin was put into the mix to allow for any projection errors relating to the expected trend in nominal labour costs in the neighbouring countries and indexation in Belgium. This margin is a minimum 0.5 percentage point for these two years, serves a preventative purpose only, and adds to the next available maximum margin if wholly or partly unused.

Ever since the Law came into force in 1996, upward and downward projection errors on indexation have been major in some years, because of the volatile components underpinning them.

The Law also specifies that, if the labour cost gap grows so wide as not to allow for its elimination within two years based on the prevailing outlook at the time, the government can take measures to safeguard competitiveness after seeking the advice of the social partners.

Since the 2017 amendment of the Law, the CEC has also been calculating other indicators for the competitiveness of Belgian companies, such as the absolute wage costs gap, both including and excluding productivity. The amended Law also stipulates that any calculation of the maximum available margin must also factor in an historical wage gap by way of the adjustment factor, i.e. the gap remaining after





Sources: CEC, NBB.

1 Up until 2016: indicative wage standard for gross wage increases, excluding indexation. From 2017: binding maximum margin.

2 2015-2016: 0.5 % gross + 0.3 % of net compensation.

3 For 2021-2022, NBB projection dated December 2021.

addressing the one built up since 1996. To date, no agreement has been reached on the methodology to be used for calculating the historical wage gap. Although the social partners are unable to ignore these other gaps in their negotiations, the difference in hourly wage cost growth since 1996 continues to serve as the key reference.

Once agreed by the social partners, the maximum available margin for wage growth will be turned into the standard in a collective labour agreement by the National Labour Board before sector negotiations commence. If no agreement is reached, the federal government may set this margin by Royal Decree, and in both cases this maximum margin has legal force, and any breaches will incur a fine under the amended Law.

Inflation trends sparked a significant adjustment in the indexation figures for Belgium compared with the data available on the release of the CEC's technical report

negotiations nearly complete, the review meant that

labour costs for the period may have been underestimated. Based on an identical source for all four

countries, i.e. the Eurosystem's macroeconomic pro-

jections, which draw on a joint framework and were

all completed on 1 December 2021, cumulative wage

cost growth between the start of the pandemic and

the end of 2021 was less pronounced in Belgium than in the other countries. That said, Belgium's indexation

in January 2021, which had served as the basis for negotiation. With the wage margin already set for 2021-2022 and sector

Cost of living trends quicker in neighbouring countries

to be reflected in wages than

mechanisms ensure that inflation rises are passed on more quickly than in its neighbouring countries, where nominal wage trends are the subject of negotiations

> between social partners. As this might affect the competitiveness of Belgian companies in 2022, it is up to the CEC to assess any such loss

of competitiveness and to calculate expected nominal wage developments in the three neighbouring countries under the Law on the Promotion of Employment and the Preventive Safeguarding of Competitiveness, in order to establish whether any such a gap may be eliminated within the space of two years. If this is found to be impossible, the Law provides for appropriate measures to repair competitiveness (see box 1) in consultation with the social partners.

136





5.1	So far, businesses have managed to overcome the shock of the COVID-19 crisis Box 4 – The impact of the COVID-19 crisis on the financial health of firms: an initial assessment	141
5.2	The situation of households is mixed, with some facing greater insecurity while others have to decide between financial investment or investment in property Box 5 – Macroprudential measures	148
5.3	In 2021, the COVID-19 crisis had a more limited impact on the banking sector than initially expected	158
5.4	The insurance sector is in a sound and robust starting position to cope with the impact of the floods that the country suffered in July	164

5.1 So far, businesses have managed to overcome the shock of the COVID-19 crisis

Imposed in March 2020 to contain the spread of coronavirus, the first business closures had triggered fears of a wave of bankruptcies and numerous job losses in the hardest-hit sectors. The main concern was not so much the resulting loss of turnover but rather the cash reserves that firms held at that point, which might be insufficient to cope with a prolonged absence of income streams. In fact, many firms still had to cover a range of expenses such as paying rent and suppliers' invoices, employees' remuneration, insurance premiums or the servicing of loans previously obtained from banks.

In a study already mentioned in its Report on the year 2020¹, the Bank estimated that around one in four Belgian firms could face a cash shortage at some point during the first wave of the pandemic, albeit to varying degrees. In practice, this means that those firms had to either obtain additional funds or negotiate payment deferrals with their suppliers or other creditors, in order to avoid a cash deficit which would have prevented them from meeting their short-term commitments.

More than a year after the coronavirus appeared in Belgium, and after the year 2021 had begun with a number of sectors of activity still closed down, the extensive government measures have thus far substantially limited firms' losses and cash flow problems, so that bankruptcies recorded in 2020 and 2021 actually dropped to historically low levels. Although corporate debt levels have not risen significantly overall, a number of firms – particularly those operating in the sectors most affected by the lockdowns – have seen their financial health deteriorate since the start of the

COVID-19 crisis. The federal and regional authorities therefore set up various schemes to strengthen their balance sheets.

The support measures continued to play a key role in 2021

Public authorities were very quick to realise the problems that the lack of cash could cause, and hence the threat facing a broad swathe of the economy. They therefore speedily introduced various support measures to enable firms to stay afloat.

As well as facilitating furlough arrangements for staff, some of these measures consisted in the grant of flatrate allowances for firms suffering a substantial reduction in their turnover as a result of the lockdowns. Paid by the regional authorities, these allowances were granted tax exemption by the federal government. Other federal and regional aid, similarly in the form of allowances or tax exemptions, was targeted more at the sectors most affected by the lockdowns. For example, restaurateurs were granted a temporarily reduced rate of 6% VAT on their purchases of food supplies, exemption from social security contributions, and corporation tax reductions. In addition, a number of general tax exemptions were introduced at federal level, such as the deduction of anticipated losses for 2020 from corporation tax, the investment deduction (to remain active until 2022), and tax concessions for landlords waiving their rent.

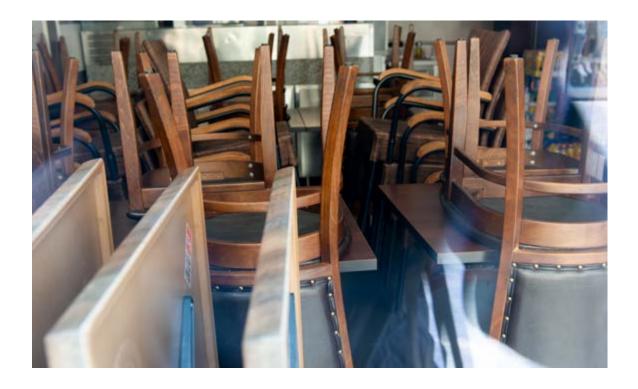
The financial sector also helped to attenuate the risks of cessation of payment due to the closure of some economic activities. In particular, it put in place a moratorium on the repayment of loans granted for an initial term of six months, which was extended several times before finally coming to an end on

¹ See Tielens J., Ch. Piette and O. De Jonghe (2021), "Belgian corporate sector liquidity and solvency in the COVID-19 crisis: a post-first-wave assessment", NBB, *Economic Review*, June.

30 June 2021. Apart from this moratorium, which was widely used by firms, the banks also provided businesses with liquidity simply by fulfilling their traditional role, either via credit facilities that already existed before the start of the pandemic or by granting new loans. Some of the latter were covered by two guarantee schemes set up by the federal government. The first automatically covered loans with a maximum term of twelve months, granted to viable businesses between March and December 2020. The second, activated in July 2020 and remaining in operation until 31 December 2021, concerned loans for a term of between 12 and 36 months (and up to five years with effect from January 2021). Under the second scheme, in contrast to the first, it was for the banks to decide whether to back the loan with a State guarantee. However, little use was made of these two guarantee schemes, probably because the cash flow problems of firms likely to use them had already been resolved in other ways. The banks also demonstrated some flexibility in relation to their debtors by allowing the rescheduling of repayment dates for a number of credit agreements.

While the repayment moratoria and State guarantees were conditional upon certain viability criteria, that was not the case for all the support measures. As already stated, the lump-sum allowances were essentially allocated to firms on the basis of the reduction

in their turnover and/or the fact that they belonged to a branch of activity particularly badly affected by the lockdowns. Various reasons justify this government strategy, such as the prevention of escalating defaults on bank loans and excessive numbers of job losses, with the latter's potential implications for demand. However, it does have two drawbacks. First, it may create windfall effects, in that public funds may have been allocated to firms that did not need them to survive a temporary halt in their activities. That is the case, for example, if they could easily adjust their costs in line with the fall in sales, or if their business model enabled them to continue their business activity during the lockdowns. Also, it could hamper the "creative destruction" process by facilitating the survival of failing businesses. In the study mentioned above, it had been considered that, at the end of the first wave of the pandemic, 2% of non-financial corporations were not viable before the pandemic erupted but had managed to make a profit at the end of the first wave thanks to the support measures (at least those for which the impact could be quantified). The annual accounts for 2020 which are now available seem to bear this out, because - as shown in box 1 - the impact of the COVID-19 crisis on firms' results and balance sheets was ultimately limited in that year. But the impact was greater on some businesses, notably those operating in the sectors most affected by the lockdowns.

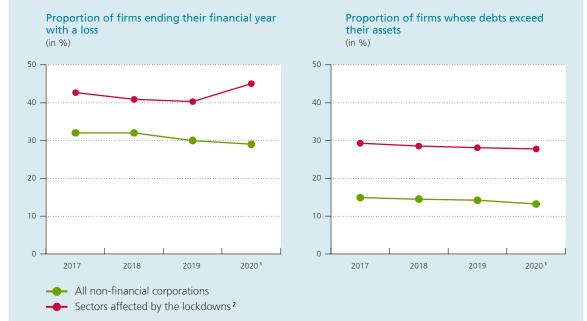


The impact of the COVID-19 crisis on the financial health of firms: an initial assessment

While the COVID-19 pandemic had a substantial impact on the turnover and gross operating surplus of many firms, its effect on the balance sheets of non-financial corporations still seems to be relatively modest overall. That is one of the lessons to be derived from an analysis of the corporate accounts drawn up for the year 2020.

Although many firms saw their profits shrink as a result of the interruption in their activities during the lockdowns, or in some cases owing to supply problems, the percentage that actually ended the year 2020 with a loss was not noticeably different from the figure for previous years. Estimated at 29 %, that proportion was actually slightly lower than in 2019. Moreover, as more firms were able to carry forward gains in their equity, that also had the effect of boosting their solvency. The proportion of firms whose debts exceed the value of their assets therefore also declined from 14 % in 2019 to 13 % in 2020.

The COVID-19 crisis did not cause any serious damage to firms' profitability and solvency



Source: NBB.



¹ Provisional figures based on around 374 000 sets of annual accounts filed by non-financial corporations. For 2019, the population covered totals 431 000 companies.

² Hospitality, personal services, transport, travel agencies, miscellaneous creative, cultural and sporting activities.

This situation, which may appear paradoxical in a crisis context, is probably due in part to the allowances and tax exemptions that businesses received in 2020, since the compensation paid in respect of the loss of turnover was recorded as operating revenue. Yet, it conceals wide disparities, particularly between branches of activity. Taken separately, the results of firms operating in the sectors hit hardest by the lockdowns definitely deteriorated in 2020: 45 % of them ended the year with a loss, compared to 40 % in 2019. However, the proportion of firms facing a solvency problem remained stable.

As shown by Dhyne and Duprez (2021)1, the impact of the COVID-19 crisis on firms' results not only varied from one sector to another but was also, and above all, heterogeneous between firms, even within a given branch of activity. While some firms saw their turnover fall dramatically in 2020, others recorded a much more moderate decline. There are also firms which saw their revenue increase, probably because their business model – e.g. specialising in online sales or in a specific category of products – enabled them to prosper. Another factor explaining the disparate impact of the crisis is that, despite easier recourse to furlough, the firms suffering a loss of turnover were not all able to reduce their consumption of intermediate goods and services proportionately.

1 See Dhyne E. and C. Duprez (2021), "Belgian firms and the COVID-19 crisis", NBB, Economic Review, September.

The combined impact of the various support measures on firms' cash flow and profitability was therefore also reflected in the number of bankruptcies recorded in Belgium. Compared to the average figures over the past ten years, there have been very few bankruptcies since the start of the COVID-19 crisis. Apart from the level of support – most of which continued to be granted during the third wave of the pandemic, i.e. in the first half of 2021 - that

is also due largely to the cies which was first introduced in April 2020 for

a period up to 17 June in that year, and was then reinstated in November 2020 until January 2021. After that date, the tax authorities and the NSSO applied de facto moratoria on the payment of taxes and social contributions due. The NSSO waited until the autumn before again starting insolvency proceedings in the case of firms which failed to meet their obligations in that regard.

Although the various forms of government intervention undeniably enabled many businesses to survive the successive lockdowns, the amounts of the various allowances and tax exemptions were not always sufficient to cover the cash deficits in the case of some firms. They therefore needed to be able to rely on recapitalisation or medium- or long-term loans, to give them time to restore normal profitability and generate sufficient financial revenues to pay off their borrowings, while still having the resources needed to continue growing their business. To meet these needs, the government took steps to increase

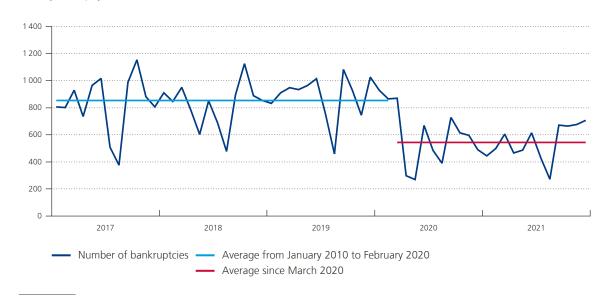
> the supply of long-term gional investment companies set up subordinated

loan systems within the limits authorised by the temporary framework adopted by the EU. One of the latter's requirements is that certain viability criteria must be taken into account when granting funds to businesses affected by the crisis. Subordinated loans will also be granted by the Belgian Recovery Fund, the establishment of which was announced by the federal government in September 2021. That fund is co-financed by the Federal Holding and Investment Company and by institutional investors. The federal government also introduced tax incentives to encourage strengthening of the

moratorium on bankrupt- There have been very few bankruptcies finance. In 2020, the resince the start of the COVID-19 crisis

Chart 5.1

The number of bankruptcies is still below the pre-pandemic levels (monthly bankruptcy declarations 1)



Source: Statbel.

1 The data cover declarations of bankruptcy for individuals pursuing an occupation on a self-employed basis, legal persons, and organisations without legal personality.

Long-term loans are not

accessible to all businesses

capital of firms hit by the crisis. These include a tax exemption equivalent to the losses incurred in 2020 on revenues generated between 2021 and 2023 if they are allocated to the reserve. In addition, a "tax shelter" type of personal income tax reduction was granted for investment in share capital in firms suffering a loss of at least 30% of their turnover between mid-March and the end of April 2020. In view of the persistence of the pandemic, the federal government decided to extend this last measure adopted in April 2020, widening its scope to include firms whose turnover contracted by 30% or more between mid-March 2020 and the end of August 2021.

Nevertheless, whether granted by the financial sector or by public investment companies, long-term loans are not accessible to all businesses. That is the case,

for example, if firms do not meet certain viability criteria, as that could cast doubt on their ability to

service a new loan. It is also possible that such a loan might push their debt to a level detrimental to their solvency, for example if they do not have sufficient assets to pledge as security for potential lenders. In such cases, financing needs have to be resolved via funds contributed in the form of current account advances by the directors, partners or shareholders of the undertakings concerned.

The growth of bank lending picked up at the end of the year

Lending to businesses continued to decline during the initial months of 2021, maintaining the trend which had emerged at the beginning of the summer in 2020. According to the results of the bank lending survey (BLS) covering the four largest banks active in Belgium, that trend was due partly to the decline in investment and, to a lesser extent, to a reduction in working capital requirements. The lat-

> ter also meant that loans of up to one year made a negative contribution to the total growth of bank

lending. Another factor which may have affected lending to businesses concerns loan criteria, which have become progressively stricter since the start

Chart 5.2

The growth of business loans picked up in the second half of 2021

(growth of loans by resident banks to non-financial corporations, annual percentage change and contributions)



Sources: ECB, NBB.

1 Including loans securitised or otherwise transferred.

of the COVID-19 crisis, owing to the increase in credit risks and lower credit risk¹. In addition, credit growth fell to a low point between March and April 2021, owing to a base effect. This concerns the distorting effect of the peak which had occurred in the corresponding period of 2020, as credit growth rates are usually expressed in year-on-year terms. That growth peak was due to the temporary use of credit lines by a small number of large companies which were trying to boost their liquidity position at that time.

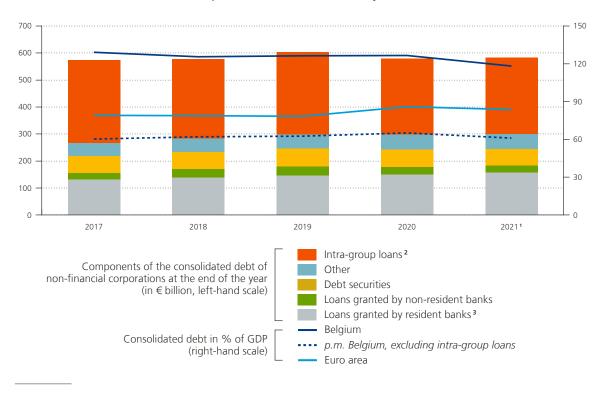
The growth of lending to businesses became positive again from June 2021. In November, it came to 3.1% year-on-year. This can be viewed in the context of the revival in activity during the year which, according to the BLS findings, gave rise to additional demand for loans to finance new investment, stocks and working capital needs. Nonetheless, the credit growth recorded at the end of 2021 falls short of what was seen in the two years preceding the outbreak of the COVID-19 pandemic.

Overall, according to the financial accounts data, the debt of Belgian non-financial corporations to resident banks increased by € 6.7 billion in the first nine months of 2021, to reach € 157.9 billion at the end of September (including securitised loans). The outstanding amount of loans obtained from non-resident banks expanded by € 160 million over the same period. This year, the amount of debt securities repaid at maturity far exceeded the level of new issues, so that the outstanding amount was down by € 4 billion. Intra-group financing obtained from non-resident entities or non-institutional lenders expanded by €744 million. If loans by other financial intermediaries and the government are included, the total consolidated debt of Belgian non-financial corporations came to € 582.1 billion at the end of the third quarter of 2021, or 118.2 % of GDP, compared to €578.5 billion (126,6% of GDP) at the end of 2020. Taking account of the level of intra-group financing in Belgium, that is still well above the figure for the euro area as a whole. If that component is excluded, the consolidated debt came to 61.1 % of GDP at the end of September 2021.

¹ The tightening of conditions for accessing bank lending since the beginning of 2020 is also confirmed by the Bank's quarterly survey of firms' assessment of credit conditions.

Chart 5.3

The total debt of non-financial corporations remained relatively stable



Sources: ECB, NBB.

¹ Data relating to the situation on 30 September 2021.

² Intra-group loans are defined as loans granted by captive money lenders and by the foreign non-financial sector. The debts of resident non-financial corporations to other resident non-financial corporations are disregarded.

³ Including loans recorded as assets on the balance sheet of securitisation vehicles.

5.2 The situation of households is mixed, with some facing greater insecurity while others have to decide between financial investment or investment in property

While the crisis took a heavy toll on some groups of households (which suffered loss of income combined with the erosion of their savings), others – having less opportunities for consumption – were able to build up their assets and invest in the financial markets and property. Staging a strong recovery, the Belgian property market, like that in other European countries, experienced a boom in prices which made housing less affordable. At the same time, household debt – though still rising – seems to be under control (improvement in loan quality and low default rates).

The vulnerability of some groups has increased ...

The public health crisis has varied in its repercussions from one household category to another. Not all households have emerged in a stronger financial position after the months of lockdown or restrictions. The aggregate data obtained from the financial accounts mask that reality. The use of data from surveys, such as the Bank's monthly consumer survey, which was supplemented by questions designed to measure the impact of the COVID-19 crisis on households' financial situation, can therefore shed light on questions concerning the differing real-life situations 1.

While a large proportion of households experienced little (less than 10%) or no loss of income as a result

of the crisis, a certain section of the population did suffer in that way, though the number has fallen as the months go by (for more details, see chapter 3). In particular, the survey data (variables available only since the start of the crisis) reveal that, for those households, opportunities for saving steadily disappeared and their savings buffer collapsed. Thus, since April 2021, a stable proportion of one in twenty households (compared to one in ten at the start of the pandemic) stated that they still had to contend with a loss of income in excess of 10 % and only had enough savings to cover current expenses for a maximum of three months. The gradual exhaustion of their savings has therefore made these households particularly vulnerable and increased their risk of hardship.

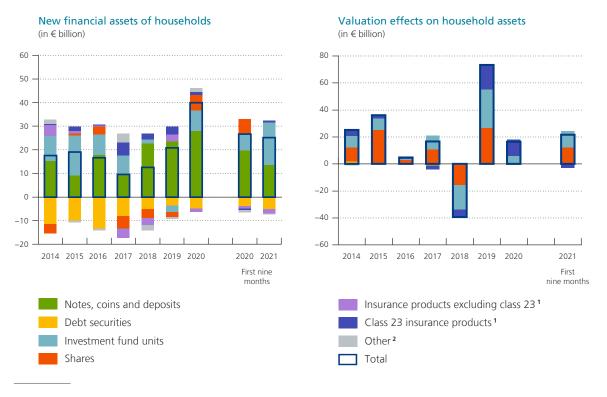
... although the financial position is better overall

However, in overall terms, after the health crisis had been going on some for months, the financial position of Belgians was better than before. The lack of opportunities for spending during the lockdowns or in periods of travel restrictions due to the COVID-19 pandemic led to a substantial rise in financial assets in 2020. That trend continued during the first nine months of 2021, with new financial investment during that period practically matching the volume increase recorded in the first three quarters of 2020.

¹ For more details, see Statistical Focus (2021), "Impact of the COVID-19 crisis on household incomes and savings: results after one year in the light of the consumer survey", NBB, April.

Chart 5.4

Households continued to display an interest in medium-risk investments, which also went up in value in 2021



Source: NBB

- 1 This item includes the net claims of households on technical insurance reserves, pension funds and standard guarantee reserves.
- 2 In the left-hand section of the chart, this item comprises, in so far as they have been recorded, trade credit as well as miscellaneous assets of general government and financial institutions. In the right-hand section of the chart, this item also covers notes, coins and deposits and insurance products not ranked under class 23.

Households also put part of their savings into riskier financial assets, to a greater extent than in the previous year: while money was still placed in accounts

and deposits, Belgians also favoured investment funds in 2021, in contrast to debt securities

Some household savings went into riskier financial products

and insurance products without a capital guarantee (class 23). The continuing deep-seated preference for liquid assets may also reflect a propensity for precautionary savings in the context of escalating prices of consumer goods, particularly energy.

Apart from new investment, existing financial assets benefited from positive valuation effects in the first nine months of 2021 as a result of rising prices on the financial markets. Households owning equities and investment funds thus made an extra € 22 billion approximately.

Taking account of transactions and valuations, the financial assets (excluding debts) of households in Belgium therefore rose by almost € 46 billion be-

tween January and September 2021, climbing to \in 1 507 billion (+3.1 %), which is more or less sta-

ble in real terms. Apart from the financial component, household wealth also includes property assets which, according to the available data, reached almost € 1 800 billion at the end of the third quarter of 2021. Over the first three quarters of 2021, that represents a rise of 8.5% compared to the corresponding period of the previous year. The escalating value of property assets is due to both the new investment made by individuals and the rapid rise in house prices.

House prices rose steeply

In 2021, the housing market saw a strong revival in activity after the number of transactions had fallen sharply at the beginning of 2020 owing to the COVID-19 pandemic, but also the abolition of the housing bonus in the Flemish Region on 1 January in that year. The growth of real estate activity which began in the second quarter of 2020 continued overall during the first three quarters of 2021, with a bounce of 36.2 % compared to the corresponding period of the previous year. In addition, in the third quarter of 2021, the number of transactions was 8.6 % higher than the level of activity recorded two years previously, i.e. before the COVID-19 pandemic and the impact of the aforesaid tax reform.

Price growth accelerated again in 2021, reaching 8.5% over the first three quarters compared to the corresponding period of the previous year. The price rise therefore exceeds that seen in 2020 (5.8%) but is also above the average for the three previous years (3.7%). This is in fact the strongest rise since 2007. Taking account of inflation, the real rise in house prices is still significant, with a year-on-year increase of 7.1% over the first three quarters of 2021.

This rise in house prices was general, in that it was evident in all three Regions of the country on a similar scale: over the first three quarters of 2021, the year-on-year increase came to 8.6% in the Flemish Region, 8.7% in the Walloon Region and 6.6% in the Brussels-Capital Region. It also concerned all types of housing, with prices of ordinary homes rising by 8.9% over the same period, while villas and apartments went up by 9.1% and 7.4% respectively.

Except in a few countries, particularly Spain and Italy, property prices also displayed a marked rise in the euro area. On average, they increased by 6.3 % during the first three quarters of 2021, exceeding the rise in previous years. Although prices in Belgium went up by more than the euro area average, the rise was still smaller than that recorded in many European countries over the same period, such as Germany (9.9 %), Austria (10.8 %), the Netherlands (12.2 %) and Luxembourg (15.3 %).

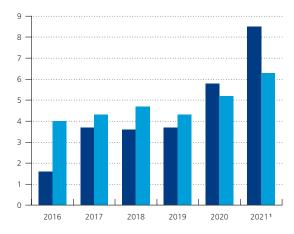
Apart from the fall in mortgage interest rates which, all other things being equal, boosts demand for housing, the persistence of the general low yield environment and the associated search for yield also bolstered the property market in 2021

Chart 5.5
In 2021, the growth of real estate activity and house prices continued

Number of transactions on the secondary market



Sources: Statbel, NBB 1 First three guarters.



Euro area

Residential property prices (percentage annual change)

Belgium

and contributed to the rise in property prices, especially as the tax rules on securities accounts were amended in Belgium, reducing the attractiveness of that type of investment. More specifically in the case of the primary market, the price of new builds was propelled higher by the rising cost of building materials, with the ABEX index up by 4.6 % in 2021, the biggest rise in 13 years and more than one percentage point higher than the average for the three preceding years.

However, the 2021 rise in property prices cannot be explained entirely by the main market determinants,

namely average household disposable income, mortgage interest rates, demographics and chang-

es in property taxes. In 2021, the degree to which market prices deviated from their reference value – i.e. the value determined by the said factors – rose to an average of 20.8% during the first three

quarters. It is also worth noting that the house price boom is not attributable to a change in the composition of the transactions since the COVID-19 pandemic, as the share represented by detached houses and the average size of gardens, the average habitable area and the average energy efficiency of the buildings have expanded very little since the revival of real estate activity in the third quarter of 2020, and that is in line with a pre-existing trend.

On the supply side, all the statistics point to a further expansion of the housing stock in 2021, as residential investment and value added in the cons-

truction industry recorded a marked rise. In fact, conditions have generally been favourable to in-

vestment in property and the construction of new housing: mortgage interest rates have remained at historically low levels, keeping down the cost of financing such investment, and – as property prices



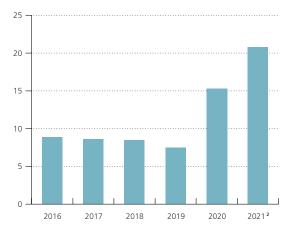
Growth of property prices

accelerated again in 2021

Chart 5.6

The rise in property prices cannot be attributed entirely to the main market determinants





Housing stock and property prices (indices 1991 = 100)



Sources: Statbel, NBB and own calculations.

- 1 See Warisse Ch. (2017), "Analysis of the developments in residential property prices: is the Belgian market overvalued?", NBB, Economic Review, June, 61-77.
- 2 Average of the first three quarters.
- 3 Deflated by the private consumption deflator.

have outpaced the rise in construction costs – the apparent profitability of investing in new housing has again improved.

While the expansion of the housing stock is a factor that may moderate the rise in property prices, particularly if it outstrips the increase in the number

of households as was the case at the beginning of this century, the recent increase in supply has in-

stead been accompanied by a marked rise in house prices, suggesting that it is mainly demand factors that are driving the property price boom.

The affordability of property has diminished somewhat

The surge in property prices has also made property somewhat less affordable. The estimated share of households' net disposable income that has to be spent on repaying a new mortgage loan – with a loan-to-value ratio of 80 % and a term of 20 years – amounted on average to 24.9 % during the first three quarters of 2021. Although that is higher than

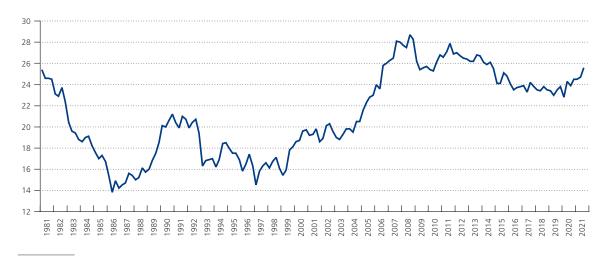
the peak reached in 2020 (23.9%), it is still below the peak of 28.7% recorded in the third quar-

ter of 2008, just before the eruption of the global financial crisis. The recent increase in house prices has therefore had a greater impact on households' ability to repay a mortgage loan than the rise in incomes and the maintenance of low interest rates.

Chart 5.7

The rise in house prices has reduced affordability to some extent

(share of households' net disposable income spent on repaying a new mortgage loan 1, in %)



Source: NBB.

Debt levels have increased but remain under control

The growth rate of household lending has continued to rise, and that trend has been accentuated as the months go by, propelled by home loans. These developments were facilitated by the accumulation of capital during the health crisis, which also permitted investment expenditure financed by borrowing. In addition, reflecting the surge in property prices, the average amount borrowed for the purchase of a home increased significantly, and at a faster pace than in previous years, rising from € 135 100 at the end of 2020 to € 144 300 in November 2021. Overall, taking new investment and price rises together, the annual rate of change in home loans, which came to 4.4% at the end of 2020, peaked at 6.4% in September 2021, before subsiding slightly to 6.1% in November. Between January and November, new loans had been issued for a net total of € 12.5 billion.

The historically low interest rates – rates on ten-year mortgage loans remained below 1.40 % throughout the year – undoubtedly

helped to stimulate demand, as stated by the banks in the BLS, while considering that other factors probably also played a role, such as the outlook for the property market and consumer confidence.

At the same time, defaults on both mortgage loans and consumer loans have remained low. Default rates on home loans which benefited from the moratorium introduced by the banks on account of the COVID-19 pandemic up to the end of June 2021 continued falling until then before stabilising at 0.7 % in the ensuing months. Default rates were similarly restrained in the case of other types of loans to households.

The rise in amounts borrowed by households coinciding with the decline in default rates may reflect preventive behaviour on the part of banks, more willing to lend to households with better collateral and borrowing capacity. That trend had already been apparent in 2020.

On the credit supply side, at the beginning of the year, the banks polled in the BLS reported a slight easing of their mortgage loan conditions, owing to

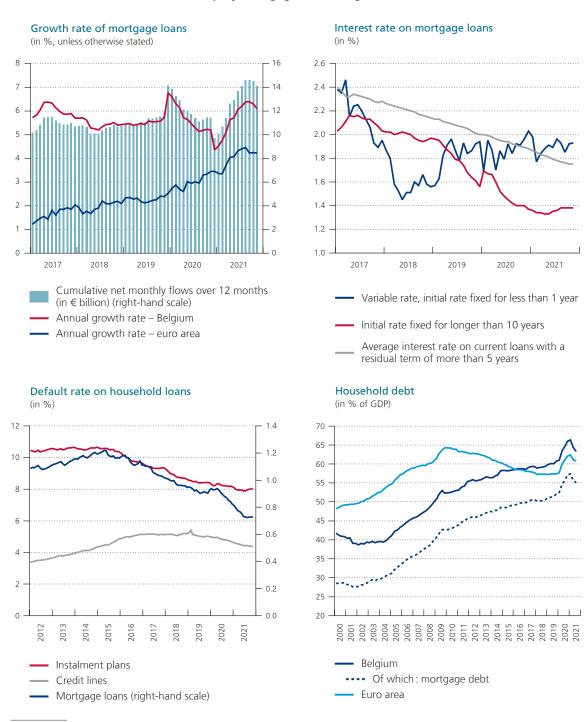
a downward revision of the risk perception. That essentially took the form of a reduction in the margins

Credit conditions remaining relatively strict contributed to the improvement in the overall quality of mortgage loans

¹ This indicator is based on the assumptions that a mortgage loan has an average term of 20 years and that it is granted to finance 80% of the value of the property purchased. Repayment is assumed to take the form of annual instalments and takes no account of any tax deductibility of the loan.

Chart 5.8

Household debt increased, driven up by mortgage borrowing



on standard loans while the other credit conditions (maturity, collateral, loan volume and charges other than interest) remained unchanged. After that, lending conditions remained unchanged during the following three quarters. Over the year as a whole, they were therefore still relatively strict, taking account of the repeated tightening in 2019 and 2020. In practical terms, the result was an improvement in the loan-to-value (LTV) ratio which relates the amount borrowed to the value of the property purchased.

The banks' tightening of credit conditions relating to the LTV ratio of new mortgage loans is due to the prudential expectations announced by the Bank at the end of 2019 (see also box 5). In comparison with previous years, far fewer loans with a high LTV ratio were therefore concluded in 2020 and in the first half of 2021. In introducing these measures, the Bank aims to protect new borrowers from excessive debt and to ensure that the risks in the mortgage loan portfolios of financial institutions do not continue to rise.

The Bank's recommendations distinguish between loans granted for the purchase of an owner-occupied property and those for the purchase of a buy-to-let property. In the latter – riskiest – category, only 12 % of

new loans concluded in the first half of 2021 still had an LTV ratio of more than 80% (the reference value applied by the Bank for this type of loan). In 2018, that proportion had still amounted to 35 %. In the case of new owner-occupied loans (except to first-time buyers), only 9% still had an LTV ratio of more than 90% (reference value), compared to 33 % in 2018. In the case of first-time buyers, the proportion of loans with an LTV ratio of more than 90% dropped from 46% in 2018 to 25% in the first half of 2021. According to the Bank's recommendations, which are less strict for firsttime buyers, 35 % of these loans can exceed the LTV limit of 90%. The fact that institutions did not make full use of the available tolerance margins for granting loans with a high LTV ratio also indicates that demand for such loans has fallen since the measures were introduced. Also, the Central Individual Credit Register figures show that the proportion of young borrowers (under the age of 35 years) has been stable at around 35 % in recent years. These findings together with the loan dynamics therefore show that the Bank's prudential expectations are sufficiently flexible for the mortgage market to remain accessible to first-time buyers.

While household debt does not show any particular signs of fragility overall, it peaked at € 326.6 billion

Chart 5.9

Fewer loans with a high LTV ratio in 2020 and in the first half of 2021 than in previous years (breakdown of new mortgage loans according to the LTV ratio, in % of the total)



Source: NBB.

in September 2021, representing a 3.5% increase against the end of 2020. Mortgage debt made up the bulk of lending to individuals (86.9%). Although debt levels declined in relative terms as a result of the recovery of GDP in the first two quarters of 2021, they nevertheless remained above the euro area average.

Thus, household debt in Belgium fell from 66.0% of GDP at the end of 2020 to 63.3% at the end of September 2021, while in the euro area it averaged 60.8% of GDP at that time. In Belgium, debt also remained at a level well above the plateau reached in 2018 and 2019 (average of 59.7% of GDP).



Macroprudential measures

In March 2020, in its capacity as macroprudential authority, the Bank decided to release the countercyclical capital buffer. That buffer is built up in times of dynamic lending to give banks sufficient room for manoeuvre when economic conditions deteriorate. The macroprudential policy stance thus switched from a phase of preventive build-up of capital buffers to crisis mode in which some buffers were released. Since the outbreak of the COVID-19 crisis, it has been important for the supervisory authorities to safeguard the resilience of the banking sector and to ensure that the banks can continue to perform their role of lending to businesses and households. In addition, to make sure that the available bank buffers are used primarily to support the economy, the importance of a prudent dividend distribution policy was emphasised from the macroprudential perspective, in addition to the microprudential recommendations on that subject.

Although the economic conditions improved during the year under review, the Bank has not yet decided to rebuild the countercyclical capital buffer. Furthermore, it has stated that it has no plans to do so before the second quarter of 2022, so long as there are no major deviations from the current expectations concerning loan losses and credit growth, in particular. The Bank is keeping a close watch on these developments.

The Bank also closely monitors developments on the housing market. For some years now, it has required the Belgian banking sector to maintain a specific macroprudential capital buffer for real estate risks, owing to the banks' substantial exposure to that market in the form of mortgage loans. In May 2021, that measure was extended for a further year. In the event of problems on the property market, banks can use the buffer – amounting to around \in 2 billion for the sector as a whole – to absorb losses due to default and to be proactive in proposing sustainable solutions for borrowers facing payment difficulties. That reduces the risk of a housing market crisis erupting in the wake of a substantial rise in the number of defaults and evictions. So long as the vulnerabilities on the market persist and there is no sign of the risks materialising, e.g. via increasing payment difficulties, the Bank will maintain this buffer for real estate risks.

At the beginning of 2020, alongside this capital buffer, the Bank issued prudential expectations for institutions granting mortgage loans. Those recommendations were also maintained following the outbreak of the COVID-19 crisis. They aim to improve the average credit quality of new mortgage loans because, in recent years, the proportion of risky loans has risen significantly, and that may lead to substantial loan losses in the event of a negative shock. In 2021, for the first time, institutions had to report to the Bank on their compliance with the recommendations for any new mortgage loans granted in 2020. The sharp fall in the percentage of loans with a high LTV ratio (see chart 5.9) indicates that the recommendations were indeed complied with overall. At the same time, the persistent dynamism of mortgage lending and the fact that the available tolerance margins for granting loans with a high LTV ratio has not been fully used, show that these recommendations leave sufficient room for manoeuvre so that the mortgage market remains accessible to solvent borrowers, including young purchasers and first-time buyers (for whom the recommendations are the most flexible).

5.3 In 2021, the COVID-19 crisis had a more limited impact on the banking sector than initially expected

So far, the Belgian banking sector has stood up well to the challenges which it has faced following the eruption of the COVID-19 pandemic. At the start of the crisis, it was expected that the sector would have to contend with a wave of defaults, but up to now those fears have not been borne out. The reason lies mainly in the effectiveness of the various support measures and the improvement in economic conditions. In addition, the banking sector's robust financial situation has enabled it to provide support to the economy by lending to businesses and households and by granting payment deferrals or other forms of loan restructuring for borrowers encountering financial problems. The sector thus helped to absorb the shock and was not itself the source of the problems, as it had been at the time of the 2008-2009 financial crisis. However, the risks have not entirely gone away. New waves of the pandemic are creating uncertainty over the speed and strength of the economic recovery, so that credit risk remains a point of attention. Moreover, the banking sector still faces some pre-existing challenges, such as the low interest rate environment, business model sustainability, and digitalisation.

The Belgian banking sector was able to support the economy

During the first nine months of 2021, the outstanding volume of loans in the Belgian banking sector increased by € 7 billion in the case of businesses and € 15 billion for households 1. Most of these are loans to Belgian counterparties, but they also include loans to borrowers on banks' main foreign markets.

At the end of September 2021, the sector therefore recorded an outstanding total of \leqslant 333 billion in loans to households and \leqslant 265 billion in loans to businesses, representing 50% of the total assets on its balance sheet.

This new credit growth in uncertain economic circumstances was possible thanks to the ample amount of buffers available in the Belgian banking sector. Those buffers, which were already high at the start of the COVID-19 crisis, have expanded further as a result of the measures introduced since then. The prudential measures, such as the restrictions on dividend distribution or the release of accumulated buffers, boosted the available capital buffers while the monetary policy measures - particularly the easing and expansion of the TLTRO programme - led to an increase in the banking sector's funding resources and liquidity buffers. In September 2021, the average core capital ratio (CET 1 ratio) in the banking sector came to 17.7 % and the liquidity coverage ratio (LCR) stood at 180 %, compared to 15.6 % and 141 % respectively at the end of 2019. The size of these buffers offers the banks greater room for manoeuvre, enabling them among other things to absorb loan losses and be proactive in proposing debt restructuring without having to make drastic cuts in their lending.

The banking sector was not only able to continue granting new loans but could also grant payment deferrals in the case of existing loans to borrowers facing (temporary) financial difficulties. Some of these deferrals came under the agreement concluded by the sector with the federal government which, after having been extended several times, came to an end in June 2021. The banks also offered specific payment deferrals on an individual basis and other types of debt restructuring. This largely avoided defaults

¹ Excluding some one-off movements occurring in certain banks, such as those due to a change in one bank's prudential consolidation scope, and those resulting from the sale of a loan portfolio by another bank.

resulting from a temporary loss of income for businesses and households.

So far there have been fewer defaults than feared ...

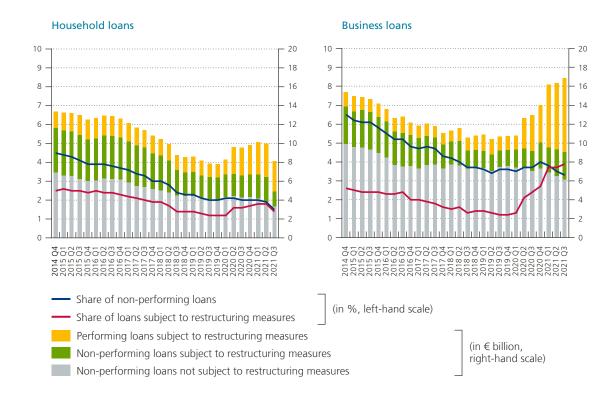
At the start of the crisis, the expectation was that banks would face a wave of defaults on their outstanding loans as a result of an increase in the number of bankruptcies and the unemployment rate. So far, those fears have not materialised. In the last quarter of 2020, it must be said that business loans presenting existing or expected payment arrears (known as non-performing loans) had risen to \in 10.1 billion, or 4% of total business loans. Nevertheless, that rise did not continue in the first nine months of the

year under review, as non-performing loans subsided to \leq 9.1 billion (or 3.4%) in September 2021. Households' non-performing loans remained relatively stable at around \leq 6.7 billion, or 2% of all loans to households. Their sudden fall in September 2021 – to \leq 4.9 billion, or 1.5% – is due to the sale of a (foreign) portfolio of non-performing loans by a Belgian bank.

Conversely, since the start of the COVID-19 crisis, the number of loans granted a specific repayment deferral on an individual basis or an extension of the term on account of the borrower's financial difficulties has risen sharply. These restructuring measures can be applied to (non-) performing loans if that is likely to help enable borrowers to honour their payment obligations (again). In September 2021, such measures were applicable to €4.8 billion of

Chart 5.10

Fewer non-performing loans ¹, but more loans subject to restructuring measures ²
(in % of total outstanding loans on the left-hand scale; in € billion on the right-hand scale)



Source: NBB.

¹ Non-performing loans are loans which will probably not be repaid owing to the borrower's financial problems, or loans which are already in arrears of payment.

² Loans subject to restructuring measures are loans for which the banks have granted concessions (e.g. in the form of repayment deferral or an extended term to maturity) to debtors facing financial difficulties. According to the EBA guidelines on payment moratoria, a general postponement of payment (moratorium) which meets the criteria is not regarded as a renegotiation or restructuring measure (EBA/GL/2020/02, amended by EBA/GL/2020/08 and EBA/GL/2020/15).

household loans (1.4% of the total) and \in 10.7 billion of business loans (4%). Before the crisis broke out, they only applied, respectively, to \in 3.7 billion (1.2%) and \in 3.1 billion (1.2%) of these loans (at the end of 2019). The increase in restructured loans mainly concerned borrowings on which there were as yet no (long-term) arrears of payment. This shows that the banks were proactive in offering this type of solution to borrowers facing (temporary) financial problems in order to limit the losses and avoid defaults. Combined with the general deferral of payment (moratorium), these measures have so far helped to curb the expected steep rise in non-performing loans, so that loan losses should be lower than initially expected.

... but the possibility of credit risks materialising is still not ruled out

Nonetheless, some borrowers and sub-segments of outstanding loans still display vulnerabilities. Firms and workers in the sectors hardest hit by the measures to contain the pandemic or currently confronted by structural changes, such as accelerating e-commerce or the spread of remote working, present a greater risk of default. Moreover, new waves of the pandemic are causing some uncertainty over the speed and vigour of the economic recovery, so that the possibility of a future materialisation of credit risk for vulnerable borrowers cannot be ruled out.

The picture for each branch of activity shows that the hospitality sector and the events sector are

The banks only recorded minor

additional provisions and have even

already begun to reverse part of

the previously booked provisions

where non-performing loans have risen the most. In hospitality, in particular, the proportion of loans with existing or expected arrears of pay-

ments remained high in September 2021 (8.9%), after having risen more or less continuously since the end of 2019 (5.9%). In the events sector, too, non-performing loans have increased from 4.1% at the end of 2019 to 5.1% in March 2021. Nevertheless, they have since subsided, dropping to 4.5% in September 2021. In the Belgian banking sector, the outstanding total of loans to these two branches is admittedly fairly small. In September 2021, it stood at € 6.3 billion, or barely 2% of all business loans.

The banking sector still has a substantial and growing exposure to the Belgian residential and commercial real estate markets. In September 2021, the banks' balance sheets showed € 243 billion in Belgian mortgage loans and € 48 billion in loans to Belgian businesses operating in the construction and real estate sectors, together representing no less than 25% of their total assets. A shock to this market caused, for example, by a rise in unemployment or a fall in house prices or commercial property prices, could trigger substantial loan losses for the banks. That is why the Bank keeps a close eye on the property market situation (see also box 5).

Profitability restored ...

Over the first nine months of the year, the Belgian banking sector made a net profit of \leq 5.3 billion, representing a return on equity of 9.2%. In the previous year, profitability in the corresponding period had been considerably lower (a net profit of \leq 2.7 billion and a return on equity of 5.0%), mainly because of the additional provisions that the banks had built up to cover the expected increase in loan losses in the aftermath of the COVID-19 crisis.

However, as payment defaults have so far been fewer than feared, the banks only recorded minor additional provisions over the first nine months of 2021. Some of them have actually already reversed part of their previously booked provisions, and that has had a favourable impact on the profit and loss account. The net volume of impairments and provisions therefore came to just ≤ 0.2 billion, compared to ≤ 2.5 billion

in the corresponding period of the previous year. Consequently, the loan loss rate – which corresponds to the ratio between new loan loss pro-

visions and the total volume of loans – fell sharply, dropping to 2.3 basis points. In 2020, this rate still came to 35 basis points.

The gross operating result before impairments and provisions remained stable compared to 2020, at \in 6.3 billion. However, there were several differences in its composition. The net result on fees and commissions came to \in 4.8 billion, up sharply against the corresponding period of the previous year (\in 4.1 billion), thanks

to the higher fees received by banks for their asset

Table 5.1
Income statement of Belgian credit institutions

(consolidated data, in € billion)

			First nine months ³			
	2017	2018	2019	2020	2020	2021
Net interest income	14.1	14.4	14.6	14.2	10.7	10.8
Non-interest income	8.9	8.3	8.5	7.9	6.0	5.7
Net fee and commission income ¹	5.6	5.6	5.6	5.6	4.1	4.8
Net realised gains and losses on financial instruments	0.9	1.2	0.5	0.0	-0.2	0.5
Other non-interest income	2.5	1.5	2.4	2.3	2.1	0.4
Operating income	23.0	22.7	23.1	22.1	16.7	16.5
Operating expenses	-13.4	-13.9	-13.7	-13.5	-10.5	-10.1
Gross operating result (before impairments and provisions)	9.6	8.8	9.4	8.6	6.2	6.3
Impairments and provisions	-0.7	-0.8	-1.3	-3.1	-2.5	-0.2
Other components of the income statement ²	-3.0	-2.3	-2.0	-1.2	-1.0	-0.9
Net profit or loss	5.9	5.6	6.1	4.3	2.7	5.3

Source: NBB.

management activities and payment services. In addition, the results on financial instruments made a positive contribution (\in 0.5 billion over the first nine months of 2021) owing to the improved conditions prevailing on the financial markets. In the previous year, that item still showed a loss (of \in 0.2 billion). Various other movements such as the fall in other non-interest income, but also the decline in operating expenses, are attributable in part to a change in the prudential consolidation scope of one Belgian bank. Net interest income came to \in 10.8 billion, comparable to the figure for the corresponding period of the previous year.

... but still under pressure in the longer term

As net interest income is their biggest source of revenue, the low interest rate environment remains one of the main challenges facing Belgian banks. The difference between the average interest that banks receive on loans and bonds and the interest that they

have to pay on sight accounts and savings accounts (i.e. the net interest margin) has clearly narrowed in recent years. Nevertheless, net interest income has stood up relatively well, as banks have managed to offset the narrower margins by boosting the volume of lending. Interest income has also benefited slightly from the fall in (net) interest charges on derivatives, which could perhaps point to changes in the banks' hedging policies. In 2020 and during the first nine months of 2021, net interest income was also underpinned by, on the one hand, the generous conditions applied to substantial amounts of financing made available by the central bank, which the banks made use of under the TLTRO programme, and on the other hand by the application of a zero rate instead of a negative interest rate on part of the reserves that they hold at the central bank.

The banks are also increasingly trying to pass on, to the liabilities side of their balance sheet, the low or even negative interest rates recorded on the assets side. For instance, they have therefore begun

¹ Including commission paid to bank agents.

² This item includes taxes, extraordinary results, negative goodwill recognised in profit or loss, and the share in the profit or loss of investment in subsidiaries and joint ventures.

³ For the data for the first nine months of 2020 and 2021, an adjustment in the reporting was taken into account, as a result of which there was a shift of certain costs between parts of the income statement at some banks. The figures for the full year 2020 have been adjusted to make them comparable with the years before.

to convert regulated savings accounts into non-regulated savings accounts (which are not subject to the statutory minimum interest rate of 11 basis points) and to apply negative interest rates on (large) deposits of other financial institutions, firms and non-profit organisations. The overall effect of these initiatives on the net interest income has been rather meagre so far, notably because the majority of (savings) deposits are held by households to which negative interest rates are not applied (except in certain cases concerning wealthy customers).

Some banks are also trying to further diversify their income sources, e.g. by increasing the fees on traditional banking activities (such as bank accounts and investment and insurance products) or by activating some of the savings deposits via asset management. They are also striving to increase cross-selling and customer loyalty, e.g. by offering non-financial services on their banking applications. The cost reduction programmes implemented in recent years should support profitability by reducing the banking sector's traditionally heavy costs, but despite everything the cost/income ratio remained high at 62 % during the first nine months of 2021. That can be ascribed in part to the IT investment necessary for pursuing the digitalisation of services and internal processes. Even if this investment should ultimately lead to better cost efficiency, digitalisation also implies additional risks, e.g. in regard to data security and vulnerability to cyber attacks.

The challenges relating to low interest rates, cost efficiency and the digital transformation are more acute for small and medium-sized banks whose business model is geared to retail activities. In comparison with the large universal banks, their income model is often less diversified, being centred on activities particularly affected by the impact of the low interest rate environment, and they cannot take advantage of economies of scale, for instance, by spreading over a broader asset base the cost of IT investment made in the course of their digital transition. Also, according to a recent analysis conducted by the Bank on FinTech and digitalisation (see the section on Prudential regulation and supervision in this Report, section D.1.5), it is evident that these small and medium-sized banks are often the least advanced in developing digital applications, implying the risk of their business model coming under pressure, because the bigger banks can often respond more appropriately to customers' wishes, setting the bar higher for all players in the sector.

Finally, some major challenges related to climate risk are in store for the banking sector in the near future, as climate change and the climate transition could accentuate a number of traditional risks in the banking sector. For instance, banks could experience an increased credit risk owing to their exposure to certain sectors, regions or markets which feel the direct impact of climate change or which are affected by the measures taken to bring about the transition to a more sustainable economy.



5.4 The insurance sector is in a sound and robust starting position to cope with the impact of the floods that the country suffered in July

Claims resulting from climate events

have increased in recent years

During 2020, the insurance sector's solvency level remained relatively high, despite dipping slightly in the second quarter as a result of the double hit caused by the impact of the COVID-19 crisis on the financial markets. That shock had affected the value of both the assets and the liabilities on insurance companies' balance sheets (on that subject, see the Annual Report 2020).

At the end of December 2020, the solvency capital requirement (SCR) coverage rate had reverted to

its pre-crisis level and stood at 202 %, or about double the level required by the regulations. The

year 2021 therefore began with a strong solvency position. In the first quarter of 2021, the solvency level climbed higher, supported by the rise in risk-free rates which drove down the discounted market value of commitments to policy-holders and by the upturn on the financial markets, boosted by the predictions of economic recovery and the anti-coronavirus vaccination campaigns. The sector's solvency level then declined slightly in the second and third quarters of 2021, reaching 205% at the end of September 2021.

As far as profitability is concerned, the insurance sector posted a net profit of € 2.6 billion at the end of 2020. Despite the pandemic-induced crisis, that surpassed the figure recorded at the end of 2019, which was in the region of € 2.3 billion. Two factors account for this: first, the net result of the non-life insurance segment improved as a result of the lockdowns, which in general led to a decline in claims, whereas the level of premium income

remained stable. Second, the non-technical result, a volatile component of the net result, exceeded the 2019 figure.

Although the information on the sector's profitability in 2021 is not yet available, a negative impact will certainly be apparent as a result of the floods that the country suffered last July. The claims burden due to those floods is borne by various public and private players, including insurance companies. On the basis of the latest data collected, the

> material damage caused by those floods comes to around €2.1 billion. However, those estimates

could change as the claims for compensation are

processed.

However, the effect of the flooding is already apparent in the higher level of claims recorded in the third quarter of 2021. The combined ratio of the non-life segment, which expresses the relationship between outgoing and incoming payments, began rising in September 2021, reaching 96 %.

But, according to simulations conducted by the Bank, the negative impact of the flood-related claims on the sector's solvency should remain relatively limited.

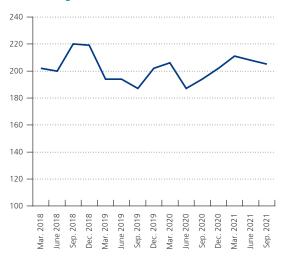
In general, it must be borne in mind that claims caused by climate events have increased in recent years and that they could become even more frequent and serious in the future. That is likely to put pressure on pricing in some branches of the non-life insurance segment.

Chart 5.11

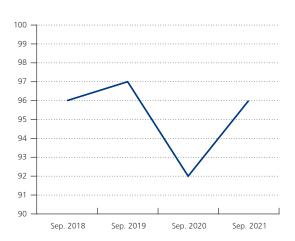
The sector's solvency remained relatively good in 2021 while the impact of the flooding drove up the combined ratio of the non-life segment

(in %)





Combined ratio of the non-life sector



Source: NBB.

Investment portfolio: the search for yield continued in 2021 in the context of low interest rates

The low interest rate environment is a particular problem for life insurers offering cover at guaranteed rates (class 21). They have to make sufficient margins to honour contracts concluded in the past which sometimes guaranteed high yields which have become difficult to sustain in the low interest rate context which has prevailed for a number of years.

Nonetheless, these insurance companies continue to demonstrate their ability to adapt: on the one hand, they are continuing to reduce the average guaranteed rate on their stock of existing contracts (notably by steering customers towards class 23 with no guaranteed rates) while they are also securing returns by redirecting their investments towards more lucrative – but riskier and less liquid – assets.

Between 2019 and 2020, the returns on assets held to cover class 21 contracts remained relatively stable at around 3.12%, while the average guaranteed rate on the stock of life contracts dropped from 2.16% to 2.00%.

Up to now, the return generated by these assets therefore seems to have suffered little from the impact of the health crisis. That is probably due to two factors. First, the support measures for the economy and households performed their role as stabilisers, and in particular averted a spate of immediate bankruptcies. Also, insurance companies' investment proved to have little exposure to the sectors most affected by the impact of the health crisis.

With the low interest rate environment persisting in 2021, the search for yield continued, as can be seen from the expanding investment in funds (particularly equity and real estate funds) and in the residential and commercial real estate sector. In that regard, the insurance sector's direct and indirect exposures to the residential and commercial real estate sector respectively represented 6% and 10.9% of the investment portfolio at the end of September 2021 (or \leq 16.5 and \leq 31.6 billion).

This shift in investment is at the expense of assets offering lower returns in the low interest rate environment, such as government and corporate bonds. Although these still account for a considerable share of the investment portfolio of the sector taken as a

whole, exposures to these financial securities have maintained their downward trend, dropping from 72.9% in September 2016 to 64.8% in the corresponding period of 2021 (or € 188.5 billion).

Climate risk remains significant, while the pandemic has highlighted the growing cyber risk

The financial risks resulting from both physical climate change and the climate transition are considerable for insurance companies. While the level of claims due to damage caused by climate change is rising, the insurance companies' investment portfolio is itself exposed to climate risk via its constituent assets.

According to the recent mapping carried out by the Bank, around 48 % of the corporate bond portfolio, 54 % of the equities portfolio and 36 % of the commercial loans portfolio held by the insurance sector are exposed to industries likely to suffer from the risks associated with the transition to a low-carbon economy. Some of the sectors that issue securities are in fact more sensitive to a sudden, unexpected transition to a greener, more sustainable economy. At individual level, climate risk exposures vary widely and may sometimes be at a high level in some insurance companies.

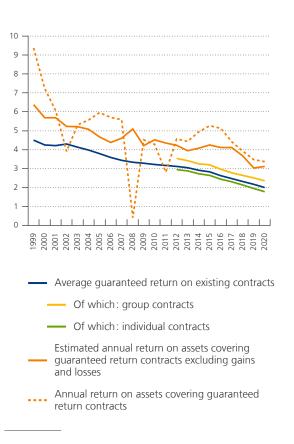
The COVID-19 crisis also highlighted the growing cyber risk. With the widespread recourse to remote working and the increasing digitalisation

Chart 5.12

Returns on assets held to cover class 21 contracts still exceed the average guaranteed rate, thanks in particular to the reallocation of the investment portfolio

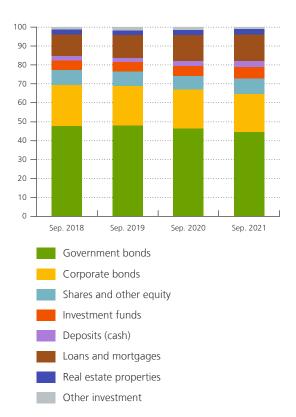
(in %)

Average guaranteed returns on class 21 contracts and returns on assets held to cover them



Source: NBB.

The sector's investment portfolio (excluding class 23), by asset type



accompanying online consumption habits, the frequency and scale of cyber attacks have escalated, particularly in the financial sector.

In regard to the insurance sector, the Bank took a number of measures on this subject, aiming in particular to encourage companies to take better account of cyber risk, not only from an operational angle but also in their insurance policies (silent cyber risk). The Prudential regulation and supervision section of this Report gives a detailed overview of those measures.





	6.1	Public finances in the euro area remained under the coronavirus spell in 2021	171
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	6.2	Belgium's public finances propped up health care and the economy	175
	6.3	Crisis-related support measures gradually wound down	178
	6.4	Other factors also determined how primary expenditure and revenue developed Box 6 – The National Recovery and Resilience Plan	181
	6.5	Public debt and interest charges	188
The state of the s			

6.1 Public finances in the euro area remained under the coronavirus spell in 2021

Fiscal policy in euro area remained

strongly accommodative in 2021

Fiscal policy continued to play a key role in supporting the economy and health care

Just as in 2020, governments across the euro area drew heavily on fiscal policies to curb the economic and social impact of the pandemic. This was both a

necessary and appropriate response, given that the health crisis was still raging and economic recovery far from complete. For one

thing, the automatic stabilisers - i.e. lower tax receipts and higher employment benefits in the event of an economic downturn - had a further stabilising effect on the economy. In addition, and particularly in the first six months of 2021, discretionary measures remained in place, or new ones were introduced, to provide temporary and targeted support to health care and households and companies. These were increasingly combined with recovery measures, which bolstered total demand and should enhance the full potential of the economy.

Fiscal policies across the euro area remained highly accommodative, if slightly less so than in 2020. The euro area's nominal overall balance showed a deficit of 5.9% of GDP in 2021. Although better than for 2020, this remains much worse than levels recorded in 2019. The budget deficit was still particularly high in countries whose balances had been less favourable even

> before the COVID-19 crisis. In 2021, developments varied between Member

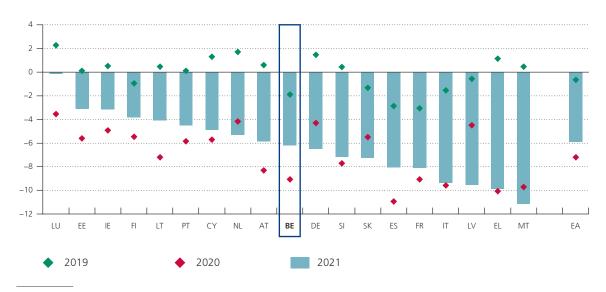
States, with balances deteriorating further in some.

The Netherlands and Germany are cases in point, although both have more fiscal scope than most. By contrast, most Member States, including Belgium, saw their balances improve on the back of economic recovery and the partial wind-down of support and recovery measures. In fact, Belgium was among the countries that recorded a major improvement, as did Spain and Austria. In most euro area countries, support and recovery measures were as significant in 2021 as they had been in 2020. France and Italy, for instance, implemented sizeable recovery measures.



Chart 6.1 Public deficit stayed high in the euro area

(budget balances, in % of GDP)



Sources: EC, ESCB, NBB.

Application of general escape clause extended in Europe

Early in March, the European Commission released an important Communication with general guidance for EU Member States on fiscal policy. Its focus was mostly on the further application of the general escape clause and the impact of the EU Recovery Plan.

The general escape clause, activated in March 2020, remained in force throughout 2021 and was a key influence on the fiscal policies of the Member States, as the clause enabled them to temporarily deviate from their medium-term budgetary objectives or

from the paths towards that goal, with the proviso that this should not jeopardise the sustainability of public finances in the

medium term. With the activation of the clause, EU Member States were able to initiate broad-based fiscal stimulus. Early in June, the Commission indicated that the clause would remain in force in 2022 and would be deactivated from 2023. This conclusion resulted from a general assessment of the economic situation based on quantitative criteria. More specifically, the Commission proposed to deactivate

the general escape clause the year after economic activity is back to pre-crisis levels in the EU or euro area. Spring projections in 2021 suggested this will happen in 2023. This conclusion was confirmed in November with the release of the European Semester's autumn package.

The activation of the general escape clause has eased the application of European fiscal rules, but Stability and Growth Pact procedures remained in place, and the annual cycle of budgetary surveillance proceeded as normal. When reviewing stability programmes in June, the Commission felt unable to make any decisions about initiating excessive deficit procedures in view of continued uncertainty

over the COVID-19 crisis. Additionally, country-specific recommendations remained relatively qualitative. In contrast to

its 2020 recommendations, the Commission called for more differentiated fiscal policies. It drew a distinction between countries with high debt ratios (Belgium, France, Italy, Greece, Portugal and Spain) and the others. The first group of countries was advised to channel resources from the Recovery and Resilience Facility (RRF) featuring in the European Recovery Plan towards additional investment to

The general escape clause remained in place and is not set to be deactivated until 2023

bolster the recovery, while at the same time pursuing a cautious fiscal policy. This same group of countries was also advised to restrict any nationally financed growth in current spending. In keeping with these recommendations, the Commission's autumn assessment of the draft budgets noted that it is important for highly indebted countries to continue to pursue cautious fiscal policies when devising accommodative fiscal measures, given major sustainability issues in the longer term even before the outbreak of the COVID-19 pandemic.

The European Recovery Plan got underway

In 2021, the Next Generation EU Recovery Plan (NGEU), for which € 750 billion had been earmarked (at 2018 prices), became operational. Accounting for some 90 % of this amount, the main element of the plan, the Recovery and Resilience Facility (RRF), will support investment and reforms. Countries must at least spend 37 % of their allocated RRF funds towards the green transition and 20 % towards the digital transition. The facility is a mix of loans and grants, with the latter providing key support to the EU's least developed countries and so contributing to economic convergence in the European Union. In addition, the RFF grants will provide support to

a few more developed countries that have been particularly hard hit by the coronavirus crisis, such as Spain and Italy. On initial calculations, Belgium's share of this support works out at € 5.9 billion¹, i.e. 1.2 % of GDP spread over the 2021-2026 period.

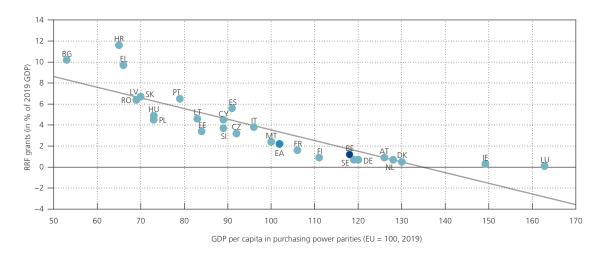
To tap into the facility, countries have to draw up and submit a Recovery and Resilience Plan (RRP), specifying the investments and reforms they are seeking to carry out. By the end of the year, all EU countries except the Netherlands had submitted their plans and 22 of them had seen these plans approved. Box 6 describes Belgium's plan. RRF resources are released when the plans' milestones and objectives have been achieved.

Government measures funded by RRF grants are booked as fiscally neutral at the level of the individual Member State. In keeping with the ESA methodology used in the national accounts, RRF grants are booked at the same time as the expenditure – or tax cuts – they finance, irrespective of when the country receives the actual cash. If such a cash receipt and the relevant expense or tax cut do not coincide or match, a temporary impact on the debt

1 This preliminary amount will be reviewed in June 2022 as soon as the first official GDP numbers for 2021 have been published. The most recent estimates suggest that the amount for Belgium will be revised downwards.

Chart 6.2

RRF grants should foster economic convergence in the EU 1.2



Sources: EC, NBB

¹ RRF grants only, no loans. The amounts will be spread over the 2021-2026 period.

² For IE and LU: gross national income (GNI) per capita in purchasing power parities.

position will apply. As a matter of fact, in the year under review, pre-financing to the tune of 13 % of maximum grants was paid to those countries whose RRPs had been given the go-ahead. For Belgium, this involved a sum of €770 million, which exceeded the spending it had made until that date and so temporarily reduced public debt for the difference. While RRF-financed policies are budget-neutral for Member States, these grants are making the fiscal stance of the EU as a whole more expansive. Lastly, any loans granted to Member States under the RRF are considered as national debt.

To fund the NGEU plan, the Commission launched a programme in June 2021 to borrow money in the financial markets on behalf of the EU, the first time it had tapped the markets for such a large amount (around € 800 billion at current prices). The money borrowed in this way will be paid back between 2028 and 2058. The proportion of the RRF paid in grants will be repaid from fresh new EU resources and, where necessary, from contributions by Member States calculated on the basis of their gross

national income. RRF loans will be paid back to the EU by the Member States.

Lastly and for the sake of completeness, it should be noted that most other measures taken in 2020 at the European level in terms of fiscal policy to combat the crisis remained in place or were extended. Examples include flexibility with state aid rules and safety nets in the shape of loans against favourable interest rates ¹.

1 For a more detailed discussion, see box 3, "European institutions' budgetary and financial response to the COVID-19 crisis", in the 2020 NBB Annual Report.



6.2 Belgium's public finances propped up health care and the economy

Belgian budget deficit shrank but remained historically high

Belgium saw its budget deficit fall in 2021, although it stayed historically high at 6.2 % of GDP. Fiscal policy remained highly supportive in a society still very much held captive by the coronavirus crisis. The deficit improvement by 2.9 percentage points compared with 2020 was attributable to the robust economic recovery and some winding down of support measures. Both factors contributed to the sizeable fall in primary expenditure - i.e. expenditure excluding interest charges - relative to GDP, by around 3.2 percentage points. Interest charges themselves also helped to reduce the deficit by 0.3 percentage points of GDP. Meanwhile, revenue as a percentage of GDP recorded a temporary decline. Despite a still hefty budget deficit, the debt ratio slid to 108.6% of GDP, on the back of a strong rise in nominal GDP.

The budget balance breaks down into various components. There is the denominator effect of primary expenditure, of course, which captures the difference between primary expenditure as a percentage of GDP and as a percentage of potential GDP. For one thing, the denominator effect highlights the impact of the business cycle on the spending ratio. If GDP languishes below its potential, the primary spending ratio goes up and the balance deteriorates. And then there is the impact on the budget balance of temporary discretionary coronavirus measures. For the sake of simplicity, these also include the exceptional expense of furlough schemes and the bridging allowance, even though these are cyclical in nature. And lastly, there are the other factors that influence the balance.

By way of primary expenditure's denominator effect, the economic revival of 2021 improved the budget balance by around 2.5 percentage points

Table 6.1

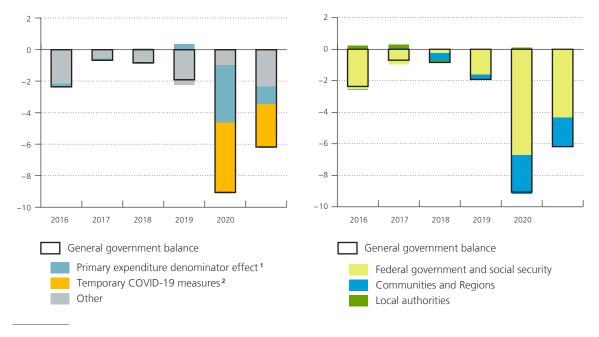
General government overall balance and debt
(in % of GDP)

	2016	2017	2018	2019	2020	2021 e
Revenue	50.8	51.3	51.4	49.9	50.1	49.4
of which: Fiscal and parafiscal revenue	43.6	44.2	44.2	42.9	43.1	42.6
Primary expenditure	50.4	49.7	50.1	49.9	57.2	54.0
Primary balance	0.3	1.7	1.3	0.1	-7.1	-4.6
Interest charges	2.7	2.4	2.1	2.0	1.9	1.6
Overall balance	-2.4	-0.7	-0.8	-1.9	-9.1	-6.2
Public debt	105.0	102.0	99.9	97.7	112.8	108.6

Sources: NAI, NBB

Chart 6.3

Budget deficit remained high despite economic revival – and highest at the federal level (general government budget balance, in % of GDP)



Sources: NAI, NBB.

Improved balance mainly

fuelled by economic revival

of GDP – as economic activity bounced back in 2021, having slumped well below its potential in 2020.

The reduced deficit also came on the back of the phasing out of temporary COVID-19 support measures, with the budgetary cost of these measures down by 1.7 percentage points of GDP in 2021, even if they remained substantial at 2.7 % of GDP. For one thing, employees and self-employed workers

were still able to sign up to the furlough scheme and bridging allowance, while companies were still

being propped up by a range of support measures, including regional allowances, and spending to address the health crisis remained high.

Broadly speaking, the other elements constituted more of a drag on the general government balance in 2021 than in 2020. The flooding in the summer of 2021 prompted the various authorities – and particularly in Wallonia – to engage in exceptional

temporary spending. What is more, the regional authorities devised wide-ranging recovery plans to kick-start the economic recovery after COVID-19. Meanwhile, a number of structural measures came into effect, which will steadily push up expenditure in the future, such as higher wage subsidies in health care and minimum social benefits as decided by the federal government.

Lastly, interest charges were under no pressure

from the financial markets. Additional and rollover debt was still funded free of charge and

thus a lot cheaper than in the past. Continued asset purchasing by the Eurosystem helped to keep interest rates down.

The continuation of expansive fiscal policies in 2021 was imperative to absorb the ongoing repercussions of the pandemic. As economic activity reverts to its potential level, however, support measures will have to be wound down at an appropriate

¹ The denominator effect of primary expenditure is calculated as the difference between primary expenditure as a percentage of GDP and primary expenditure as a percentage of potential GDP.

² Temporary COVID-19 measures also include spending on temporary lay-offs and the bridging allowance.

pace and Belgian public finances will need to be structurally consolidated (see section 7.4).

Improved balance mostly at federal level

The federal government's, social security's and Communities' and Regions' deficits declined but remained high. At 4.3 % of GDP, the federal deficit was significantly higher than in the Communities and Regions, which were 1.9 % of GDP in the red.

That said, the federal government and social security did notch up a major improvement of 2.4 percentage points, as it is at this policy level that the bulk of the automatic stabilisers kick in, and so it was the federal government that benefited more from the economic revival. At the regional, level the deficit improvement was stymied by expenditure on the economic recovery and arising from the floods. And lastly, local government balanced its budget, as additional spending related to the coronavirus crisis and the floods was to a large degree offset by transfers from the Regions and the federal government.



6.3 Crisis-related support measures gradually wound down

In 2021, government authorities again implemented or extended temporary support measures to mitigate the impact of the health crisis. Though still significant, the overall amount was less sizeable than it had been in 2020: estimated at \in 13.9 billion in 2021, compared with around \in 20.4 billion in 2020.

A large number of measures was either extended or implemented in the first half of 2021, while subsequent months saw these gradually wound down as the public health situation improved and the green shoots of recovery spread across all sectors of the economy. Some sectors of activity that had faced more exacting restrictions than others received more support and for longer. As the public health situation took a turn for the worse towards the end of the year, a number of support measures were reactivated.

The federal government (and that includes social security) still assumed the bulk of the spending to

Table 6.2

Temporary measures ¹ to mitigate the impact of the crisis have eased compared with 2020, but remained significant

(impact on general government budget balance; in € billion, unless otherwise stated)

	Federal government and social security		Communities and Regions		Total ¹		p.m. In % of GDP	
	2021	2020	2021	2020	2021	2020	2021	2020
Health crisis management	3.1	3.9	0.8	1.1	3.9	4.9	0.8	1.1
Income support to households	5.2	8.4	0.0	0.4	5.2	8.7	1.0	1.9
Furlough scheme benefits	1.9	3.9	0.0	0.0	1.9	3.9	0.4	0.8
Bridging allowance for self-employed	2.1	3.3	0.0	0.0	2.1	3.3	0.4	0.7
Other social benefits and premiums	1.3	1.1	0.0	0.4	1.3	1.5	0.3	0.3
Support to companies	2.4	2.6	2.4	4.2	4.8	6.8	0.9	1.5
Premiums for forced closures or massive revenue falls	0.3	0.7	1.9	2.7	2.3	3.4	0.5	0.7
Solvency-boosting tax measures	0.4	0.7	0.0	0.0	0.4	0.7	0.1	0.1
Support to specific sectors and other	1.7	1.3	0.4	1.5	2.1	2.8	0.4	0.6
Total	10.7	14.8	3.2	5.7	13.9	20.4	2.7	4.5
p.m. In % of GDP	2.1	3.2	0.6	1.2	2.7	4.5		

Sources: FPS Policy and Support, FPS Finance, FPS ELSD, FPB, Communities and Regions, NBB.

¹ Excluding structural measures to provide additional funding for health care and the plan for the overall recovery.

² Excluding measures taken by local government. Some municipalities decided to abolish, reduce or suspend local taxes on businesses (on outdoor seating, tourist overnight stays, etc.) and/or handed out vouchers and other bonus payments.

mitigate the health crisis, not ignoring the key role the Communities and Regions were playing in contact tracing, testing, and establishing and running vaccination centres.

The federal government (and that includes social security) also propped up household purchasing power: throughout 2021, employees were still able to access furlough schemes, and self-employed workers could still benefit from the bridging allowance. The budgetary costs of both sharply declined

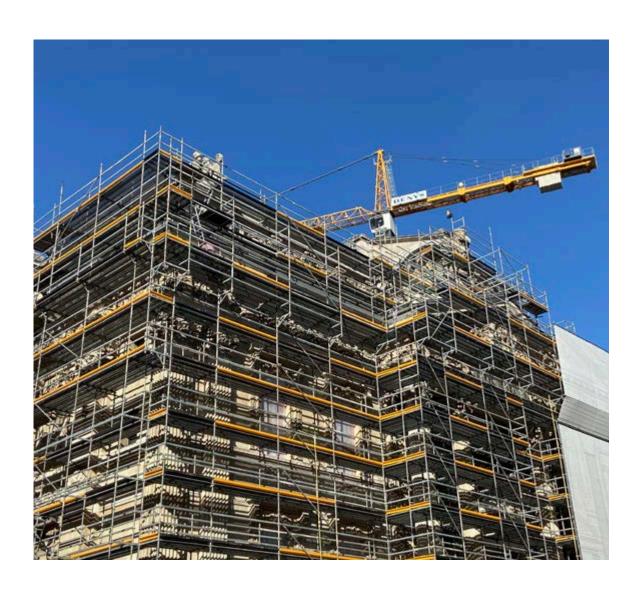
in 2021, albeit less so for the bridging allowance, as at the end of 2020 self-employed workers had been offered a dou-

ble bridging allowance if forced to stop trading. More specific assistance was also provided to vulnerable households in 2021, to the same degree as it had been in 2020. This served to freeze the tapering of unemployment benefits, while some social benefits – monthly payments to beneficiaries of integration incomes, old people's guaranteed income and disability benefits – were, in fact, adjusted upwards. At the end of 2020, the government also decided to extend its social energy rate, which came into force in 2021.

In 2021, companies received help from both the federal government and the Regions. Support by

the Communities and Regions to companies and self-employed workers nearly halved compared with 2020, whereas that

extended by the federal government stayed closed to the levels estimated for 2020. Together, these discretionary support measures totalled \leq 4.8 billion in 2021.



Temporary and focused support still

necessary to get hard-hit companies

and households through the crisis

Compared with the measures taken in 2020, the three Regions again granted allowances to companies that were still turning over significantly less than they had done before the health crisis and to those forced to close during part of the year. Most of these regional allowances were discontinued in the summer or in early autumn. Some payments had been lump sums and not systematically linked to actual losses incurred because of COVID-19 or consistent with companies' fixed costs. Meanwhile, any such regional allowances and assistance provided in the wake of the pandemic remained exempt from tax by the federal government, while a range of tax measures agreed in 2020 did not show up in the budget until after some time lag. Examples include tax carry-backs for company losses incurred in 2020, the reconstruction reserve and the investment allowance.

Lastly, certain sectors received targeted assistance if they were particularly hard hit by the public health measures, e.g. tourism, culture and events, as well as the hospitality businesses. As in 2020, when a similar measure was introduced, VAT rates were temporarily cut on restaurant services and the sale of alcoholic beverages. In a broader sense, the federal government waived employers' contributions towards annual holiday for employers who had put in place the furlough scheme. It also agreed reductions in social security contributions to encourage employers to stop using furlough and to put their staff back to work as soon as possible. To encourage entrepreneurs in construction, VAT rates on demolishing buildings and rebuilding residential property were lowered to 6 % until the end of 2022. And the country's national rail company SNCB received support to offset losses due to reduced train use.

Such support measures will gradually have to be replaced by structural policy measures to encourage transition to viable economic activity. Support measures are at their most effective when temporary, time-limited and targeted on households and companies that actually need them – and must be discontinued as soon as the economy is showing signs of sufficient recovery.

6.4 Other factors also determined how primary expenditure and revenue developed

Revenue and primary expenditure were driven by a number of factors other than temporary coronavirus measures. Disregarding the latter, primary expenditure recorded growth that – if taken together for the past two years – may be considered in line with potential nominal GDP. Revenue (in which coronavirus measures had a minor part to play) staged a robust recovery when compared with 2020, as did economic activity, although it is still lagging far behind the potential nominal GDP trend.

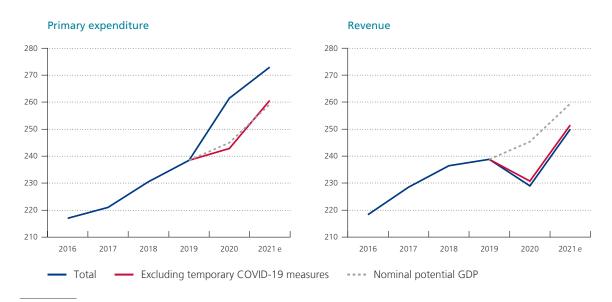
Consequently, factors other than temporary coronavirus measures and the economic recovery contributed to a deteriorating budget balance.

Primary expenditure driven by recovery plans and floods among other factors

To obtain a true picture of the impact of other factors on primary expenditure developments

Chart 6.4

Disregarding temporary coronavirus measures, primary expenditure grew about as rapidly as nominal potential GDP, while revenue recovery was strong but not complete (in € billion)



¹ Sources: NAI, NBB.

Table 6.3
Key primary expenditure categories ¹

(in % of potential GDP)

	2016	2017	2018	2019	2020	2021 e
Compensation of employees	12.4	12.4	12.4	12.3	12.4	12.4
Purchases of goods and services		4.0	4.1	4.1	4.1	4.1
Social benefits	24.6	24.5	24.6	24.6	26.3	26.4
Pensions	10.1	10.2	10.3	10.4	10.5	10.7
Health care	6.6	6.6	6.7	6.7	6.6	7.0
Sickness and disability	1.8	1.8	1.9	2.0	2.1	2.2
Unemployment ²	1.3	1.2	1.1	1.0	2.6	1.9
Other	4.7	4.6	4.6	4.6	4.6	4.6
Subsidies to companies	3.7	3.6	3.7	3.8	4.6	4.3
Current transfers	2.2	1.8	2.0	2.0	2.8	2.7
Gross fixed capital formation	2.4	2.4	2.6	2.6	2.6	2.8
Other capital expenditure	0.9	0.8	0.8	0.8	0.8	1.2
Total	50.2	49.5	50.2	50.2	53.6	53.9
p.m. Total excluding temporary COVID-19 measures	50.2	49.5	50.2	50.2	49.7	51.5

Sources: NAI, NBB.

in 2021, it is useful to strip out the temporary coronavirus measures and express the outcome as a percentage of potential GDP. It is also useful to adjust nominal primary expenditure that is automatically index-linked (such as the wages of public sector employees and social benefits) to take account of the difference between the GDP deflator and indexation based on the health index. In 2021, after all, indexation was way behind inflation as measured by the GDP deflator, temporarily keeping down the spending ratio. Following these adjustments, primary expenditure rose from 49.7% of potential GDP in 2020 to 51.5% of potential GDP in 2021, on the back of a range of temporary and structural factors.

The pandemic sparked various structural social agreements in the health care sector at federal, Community and regional level. These came into force in the course of the year under review and aim to raise wages and improve labour standards for people working in hospitals, nursing homes and other care facilities. In the government accounts,

these pay rises are included under subsidies from the federal government and the various federated entities to the organisations under their respective authority. Adding in refinancing of mental health care, fully effective since this year, all these measures will total \leq 1.5 billion when fully operational.

Wage costs in the public sector likewise reflect the impact of the health crisis. In 2021, education saw an unprecedented rise in employment, partly to replace people on sick leave or in self-isolation, but also because of recruitment to offer educational and psychosocial support to students.

2021 was the first implementation year for a series of structural measures from the federal government agreement, one example being the gradual increase until 2024 of many social minimums, including old age pension, disability, unemployment and social assistance. This structural measure has no bearing on temporary monthly allowances for groups of people on benefits under COVID-19 support schemes.

¹ In 2021 primary expenditure is adjusted for the exceptional difference between GDP deflator developments and those of the automatic indexation of public sector pay and social benefits.

² Including furlough schemes and bridging allowance.

The floods that hit Belgium in July had a varying impact on the public finances of the public administration sub-sectors. The federal government provided emergency assistance through civil protection and defence, while freeing up resources to help the public social welfare centres and the Red Cross. The bulk of the budgetary hit will be shouldered by the Walloon Region, as it is the Regions that are res-

ponsible for natural disasters and Wallonia faced the brunt of the disaster. In view of the caps on

insurance pay-outs, the Walloon authorities soon announced they would pay for what remained of the estimated damage and so fully reimburse insured flood victims. There is also a significant, if partial, government compensation scheme in place for uninsured victims. Both schemes, totalling around € 1.5 billion for 2021 alone, are in the shape of capital transfers to households and companies. The proportion pre-funded by insurers but ultimately payable by the Region – estimated at € 1.1 billion – will be recognised as public spending in keeping with European accounting rules. Apart from these compensation payments, spending will mostly be on public infrastructure and may well be spread across multiple years.

In 2021, Belgium also drew up its National Recovery and Resilience Plan, pulling together a great many recovery projects that are to be implemented in the short and medium term and that require government investment and other capital spending on the part of the federal government and the federated entities (see box 6). With this spending funded by European grants, there should be no direct

implications for national budgets. That said, this spending will contribute to the government invest-

ment ratio, which the federal government is looking to raise to 3.5% of GDP in 2024 and to 4% of GDP by 2030.

In 2021, investment by all of Belgium's government authorities accounted for 2.8% of potential GDP. Investment is driven by the implementation of a range of recovery plans, at the federal level as much as at the level of the Communities and Regions, and its overall scale exceeds the national plan submitted to the European authorities. The total budget for all these plans, known variously as the Federal Recovery and Investment Plan, Vlaamse veerkracht and Plan de relance de la Wallonie, adds up to around € 16 billion, of which € 5.9 billion is funded



Rebuilding infrastructure destroyed

by the floods will take years

by Europe and the rest by the entities concerned. The net effect of these plans on public finances has

yet to be established, as they may include projects that were already on the drawing board and might have been implemented in normal times.

Success of recovery plans will be measured by the quality of the investment and reforms

people and materials currently besetting the industry. The amounts actually spent in 2021, incidentally, were

lower than those originally planned. Whatever the case may be, the success of these programmes will not be measured by the

number of projects selected, nor by the resources committed. Whether or not these recovery plans succeed will in fact depend on the relevance of the projects that make the grade (selectivity and coherence between plans, coordination between federated entities, etc.), the efficacy of their implementation, their ability to promote corporate investment, etc.

The biggest chunk of recovery spending is supposed to be made by 2024, i.e. before the current governments' terms in office end. This schedule looks highly ambitious in view of the usual delays in construction – a problem made worse by the shortages of

BOX 6

The National Recovery and Resilience Plan¹

On 30 April 2021, Belgium submitted its National Recovery and Resilience Plan, drawing on the assumption that the country stands to receive € 5.9 billion (1.2 % of GDP) in grants between 2021 and 2026. Belgium has not applied for any RRF loans.

Belgium's Recovery and Resilience Plan provides a list of planned investments and reforms towards which it wishes to put the grants it will receive. The breakdown between the various authorities is the outcome of a political agreement by the Consultative Committee, which settled on the largest portion going to the Flemish Community (38%), followed by the Walloon Region (25%) and then the Federal State (21%).

The plan aims to accelerate Belgium's transition to a more sustainable, structurally stronger and more inclusive economy while at the same time to keep strengthening its social, economic and climate-related ambitions. It also supports boosting public investment and is structured around six axes of key challenges facing Belgium today. Together, the three biggest axes — Climate, sustainability and innovation, Mobility, and Economy of the future and productivity — account for over 80 % of total planned spending.

Most of the planned investment will go to renovating government buildings, improving cycling infrastructure, digital transformation of government bodies and education, and on enhancing research and development. To be eligible for the EU funds, EU Member States are required to pursue a number of ambitious reforms, including reforming pensions and end-of-career set-ups, promoting

1 For more details, see Bisciari P., W. Gelade and W. Melyn (2021), "Investment and reform in Germany, France, Italy, Spain and Belgium's National Recovery and Resilience Plans", NBB, Economic Review, December.



emissions-free transport, and spending reviews. To date, not much flesh has been put on the bones of these reforms. The plan clearly focuses on the first four years in which over 80 % of the total available grants are to be spent.

On 23 June 2021, the European Commission approved Belgium's Recovery and Resilience Plan, as formalised in a Decision adopted by the Ecofin Council on 13 July.

Belgian Recovery and Resilience Plan structured around six strategic axes

(in € billion)

Strategic axes		Planned spending			
	Total	Federal	Communities and Regions		
1. Climate, sustainability and innovation	2.0	0.3	1.8		
2. Digital transformation	0.8	0.4	0.4		
3. Mobility	1.3	0.4	0.9		
4. Social and living together	0.8	0.0	0.8		
5. Economy of the future and productivity	1.0	0.1	0.9		
6. Public finances	0.0	0.0	0.0		
Total	5.9	1.2	4.7		

Sources: Recovery and Resilience Plan, NBB.

Government revenues gradually returning to pre-crisis levels

After steep falls in 2020 – and the key role they had played as the economy's automatic shock absorber – government revenues bounced back in keeping with economic activity in 2021. The recovery was not quite complete, though, and neither was the recovery of economic activity, which still remained below its potential.

Also, revenue shrank by 0.7 of a percentage point relative to economic activity in 2021, a temporary disconnect fully attributable to relatively subdued growth of taxes on earned income and replacement incomes. First of all, the rise in income from employment

smoothed in 2020 and 2021, as the drop in income from employment had been less pronounced than that in GDP in 2020 - which also happened to be the year when the tax base swelled through the massive uptake of the furlough schemes for employees and the bridging allowance for the self-employed. The flipside was that the total wage bill and replacement incomes lagged behind GDP growth in 2021. And the disconnect intensified even further in 2021, as wage indexation fell behind the growth in the price component of GDP - a temporary gap that is expected to close in the years ahead. Personal income tax being progressive, the overall tax take was still slightly ahead of the 2019 reference year. Social security contributions, by contrast, shrank by 0.2 percentage point of GDP compared with pre-pandemic levels.

Table 6.4

General government revenue¹
(in % of GDP)

	2016	2017	2018	2019	2020	2021 e
Fiscal and parafiscal revenue	43.6	44.2	44.2	42.9	43.1	42.6
Levies applicable mainly to earned incomes	24.7	24.7	24.5	23.9	24.9	23.9
Personal income tax ²	10.9	11.0	10.9	10.4	11.0	10.6
Social security contributions ³	13.8	13.7	13.6	13.5	13.9	13.2
Corporate income taxs ⁴	3.4	4.1	4.3	3.7	3.3	3.5
Levies on other incomes and on assets ⁵	4.1	4.0	4.0	3.9	3.8	4.0
Taxes on goods and services	11.5	11.4	11.5	11.4	11.1	11.3
of which:						
VAT	6.7	6.7	6.8	6.6	6.4	6.6
Excise duties	2.7	2.7	2.7	2.6	2.5	2.5
Non-fiscal and non-parafiscal revenue ⁶	7.1	7.2	7.1	7.0	7.1	6.8
Total revenue	50.8	51.3	51.4	49.9	50.1	49.4

Sources: NAI, NBB.

- 1 In accordance with the ESA 2010, general government revenues do not include the tax revenues transferred to the EU, nor revenues collected directly by the EU.
- 2 Mainly withholding tax on earned income, advance payments, assessments and proceeds of additional percentages on income tax.
- 3 Including the special social security contribution and the contributions of people not in work.
- 4 Mainly advance payments, assessments and the withholding tax on income from movable property payable by companies.
- 5 Mainly the withholding tax on income from movable property payable by households, the withholding tax on income from immovable property (including proceeds of additional percentages), inheritance taxes and registration fees.
- 6 Property incomes, imputed social security contributions, current and capital transfers from other sectors, and sales of produced goods and services, including revenues on guarantees granted by the State on interbank loans.

While wages displayed relative stability, corporate earnings have been more volatile than GDP in the past two years. 2021's robust demand for products and services triggered a comparatively sharp revival of corporate earnings, prompting corporation tax revenues to advance by 0.2 of a percentage point of GDP and thus normalising these as a percentage of GDP. The same applied to VAT takings, which also benefited from higher demand. Excise duties were virtually unchanged as a percentage of GDP, pushed up by higher tobacco duties but at the same time recording clearly lower tax-based growth relative to nominal GDP growth. Excise duties happen to be correlated with consumer volume movements, whereas nominal GDP in 2021 was pushed up higher by the price component as well.

Levies on other income and taxes on property grew by 0.1 of a percentage point on the introduction of a "solidarity contribution" on securities accounts to replace the previous Securities Account Tax that had been rendered void by the Constitutional Court. More specifically, the contribution amounts to a levy of 0.15 % on securities accounts with average values of over € 1 million during a reference period.

Lastly, non-fiscal and parafiscal revenue was down by 0.2 of a percentage point of GDP, mainly caused by the denominator effect. As noted, the GDP deflator increased by a lot more in 2021 than did consumer prices, which tend to co-determine the way sales develop. In addition, any resources left in the pension funds acquired since the early 2000s - of which Belgacom was by far the biggest - had been steadily depleted. These had been funding the retirement pensions of the relevant employees, paid out by the government and making for a neutral budget balance. Budget neutrality will end, though, as these pensions will continue to be paid. Grants received towards NGEU spending in 2021 exerted a positive effect on non-fiscal revenue to the tune of around 0.1% of GDP.



6.5 Public debt and interest charges

The fall in the debt ratio is only a temporary phenomenon on the back of reviving economic growth

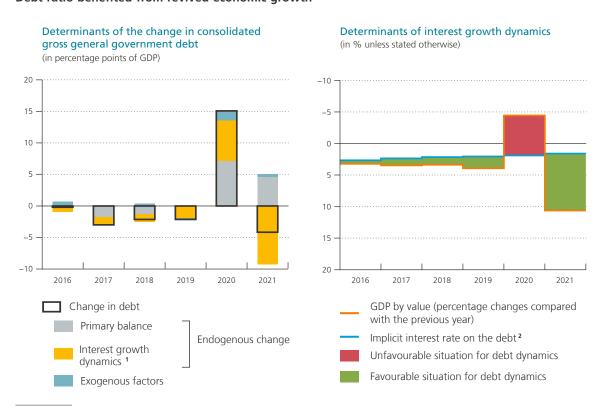
By the end of 2021, the Belgian government's debt ratio stood at 108.6% of GDP. As a result, public debt shrank by 4.2 percentage points compared with the previous year, when the pandemic had fuelled an exceptional surge. Actual levels remain high, though:

10.9 percentage points up on the end of 2019 and nearly 12 percentage points higher than the euro area average (see chapter 7).

The 2021 drop is largely down to steep growth in nominal GDP on the back of a return to normal economic activity. This temporary effect strongly benefited the debt ratio denominator and was a major factor in growth exceeding the implicit

Chart 6.5

Debt ratio benefited from revived economic growth



Sources: NAI, NBB.

¹ The difference between the implicit interest rate on the debt and nominal GDP growth, multiplied by the ratio between the debt at the end of the previous year and GDP in the period considered.

² Ratio between interest charges in the current year and debt at the end of the previous year.

interest rate on public debt. The difference, which is further enhanced by historically low interest rates, currently constitutes the endogenous determinant causing a downward effect on debt ratio dynamics. Conversely, the primary balance – which is recording a significant deficit – is responsible for an upward effect on public debt.

Exogenous factors, which influence debt but do not affect the overall balance, pushed up debt by 0.5 of a percentage point. Some economic support measures taken because of the COVID-19 crisis, for instance, exerted an upward effect on the debt ratio, more specifically government loans and stakes in private companies and the discontinuation of the so-called December advance on payroll withholding tax. Under the ESA methodology used in the national accounts, such payment deferral does not affect the year's budget balance, as revenue postponed in this way will be recognised in the economic activity year in which it arises. However, this does mean that the government has to borrow more at the end of the year and that its debt is therefore temporarily higher.

Loans granted by the Flemish Region under its social housing policies also pushed up debt.

Other exogenous factors partly offset the upward effects described above: pre-funding of European grants for Belgium under the NGEU and the Brexit Adjustment Reserve (BAR) pushed down debt, for instance. The proportion of pre-funding received but not spent on projects in 2021 is not recognised in the balance, but does reduce the debt to be financed. This impact is only temporary, however, and will be neutralised in the years ahead as financed projects progress.

Another exogenous factor that helped push down government debt temporarily relates to the damages disbursed to flood victims, which are being paid by the Walloon Region. Although only a proportion of these payments had actually been made to these beneficiaries, the total estimated amount was already recognised in the 2021 budget balance. The difference between these two sums temporarily reduced government debt, as the government did not have to borrow this amount.



The exogenous factor that contributed most to the debt reduction was the accounting adjustment for debt instruments' issue premiums. The Belgian Debt Agency has issued multiple securities at issue values in excess of their nominal values. At maturity, investors will therefore be repaid a lower amount than they laid out in the first place. In the first year of issue, such premiums have a favourable effect on government debt, but this is offset by an upward effect on the debt ratio in subsequent years, until the debt instruments mature.

Interest charges continue their downward trend

Interest charges kept moving down in 2021, narrowing by 0.3 percentage point of GDP compared with their 2020 levels. Financing conditions remained very favourable, with the reference rate on tenyear bonds at nil across the year, even if it edged up compared with 2020 (–0.1%). By the end of December, long-term yields were found to be rising. In terms of short-term debt, 2021 yields on Treasury Certificates came down slightly from 2020, meaning

that the federal government was again rewarded for short-dated issues as well as for various longer-dated issues in 2021. Three-month Treasury Certificates to the tune of around €1 billion, for instance, were being financed at record negative rates of -0.93% by December 2021.

The fall in interest rates in the past few years and their stabilisation at low levels has made it possible for the government to refinance its debt using issues at lower interest rates than those on maturing instruments, steadily reducing the public debt's implicit interest rate.

At a given level of debt, interest charges fall when market rates on new issues are below yields on instruments that are maturing. At the federal level, the OLOs that matured in 2021 and that will need to be rolled over in 2022 had still been issued at average interest rates of between 3.5% and 4%. Unless 2022 sees interest rates really take off, interest charges will continue to contract in 2022. However, if debt is not wound down, refinancing gains will start to fall, as instruments due for refinancing will be commanding lower rates from 2023.

Chart 6.6

Low interest rates continue to push down implicit interest rate



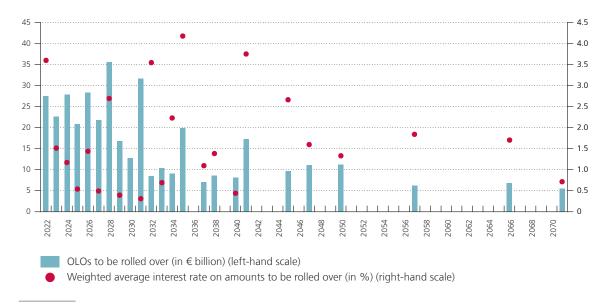
Sources: NAI, NBB

¹ Ratio between interest charges in the current year and general government debt at the end of the previous year.

Chart 6.7

Margins to reduce interest charges should narrow beyond 2022

(maturity of federal government's long-term debt (OLOs), end-2021)



Sources: Belgian Debt Agency, NBB.



Chart 6.8

Proportion of NBB-held public debt on the rise

(breakdown of general government's consolidated gross debt by holder 1)



Source: NBB.

1 For 2021: estimate for situation as at 30 September.

Public debt maturity still rising

Debt issued by the Belgian Debt Agency in 2021 commanded an annual interest rate of 0.14% and an initial maturity of 18 years, the longest ever. Once again, a range of very long-dated loans were issued, a number of which will mature in 2071. As a result, the remaining term to maturity of total federal debt increased further in 2021. The remaining term to maturity of government debt, which had stood at around six years by the end of 2010, had gone up to ten years and one month by the end of 2021, its highest level on record.

For a number of years now, those who manage government debt have viewed lower interest rates as an

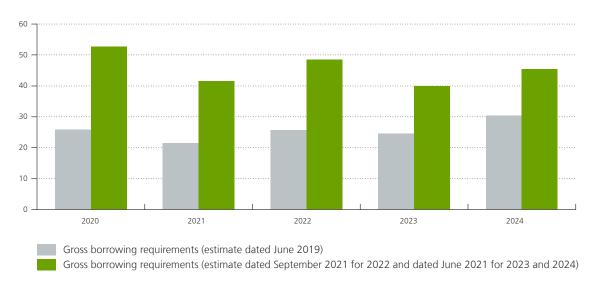
opportunity to reduce the refinancing risk at lower cost, a policy that was gradually deepened as market rates continued to fall. By staggering the maturity dates of long-dated debt, refinancing volumes falling due can be limited – and these volumes can be substantial in highly indebted countries such as Belgium.

In the secondary markets, the proportion of debt held by the Bank has been steadily growing since 2015 under the Eurosystem's asset purchasing programmes, taking up over 19% in 2021 compared with less than 2% of outstanding debt in 2014. The proportion of debt held by other Belgian residents – and particularly financial institutions – has fallen to the same degree. Over half of Belgian public debt is held by non-residents.

Chart 6.9

Gross borrowing requirement on the rise since the start of the pandemic





Source: Belgian Debt Agency.

Gross borrowing requirements raised since start of pandemic

Gross borrowing requirements include both fund-

ing of the current year's deficit and refinancing of maturing debt. These requirements are largely covered by OLO issues, which account for over

Increased borrowing requirements are making Belgium more vulnerable to liquidity crisis

85 % of outstanding federal public debt.

The COVID-19 crisis has had significant repercussions for the government budget since 2020, mostly because of the numerous support measures taken. In future, deficits are likely to stay higher than they were before the pandemic – and these deficits will also have to be financed in the markets.

Although extended debt maturity has enabled the Belgian government to better spread annual

refinancing volumes, a large deficit does imply an upward revision of the gross borrowing requirements, making Belgium more vulnerable to a liquidity crisis event and potential interest rate ris-

es. It is precisely for that reason that it started increasing the average maturity of government debt in 2010.

Asset purchases by the Eurosystem have had a downward effect on yields, but it would be unwise to base fiscal policy and debt management on the assumption that these favourable financing conditions will continue in the medium to longer term. Belgium's public finances should be consolidated and the country needs a sufficiently high primary balance to reduce future liquidity risks to public debt.

¹ The federal government's gross borrowing requirement covers, on the one hand, the current year's deficit and, on the other, early debt repayments and refinancing of debt reaching maturity.



ALC: NO.		ards a sustainable resilient econom	
1			
	7.1	Major challenges remain beyond the coronavirus crisis Box 7 – Sustainable development indicators	197
	7.2	Getting and keeping more people in the labour market	210
100	7.3	The climate challenge and the energy transition Box 8 – The case for carbon pricing	219
	7.4	Ensuring the sustainability of public debt	229

7.1 Major challenges remain beyond the coronavirus crisis

The COVID-19 pandemic hit Belgium's economy hard. In 2021, however, it recovered strongly on the back of massive government support bolstering the demand side of the economy across the world. This steep revival has ushered in rising inflation, suggesting that policy

priorities must now shift from supporting demand to a greater focus on the supply side of the economy. Belgium is no stranger to supply-side issues: even before the pandemic, the country was in need of structural reform to secure sustainable and resilient growth.

Chart 7.1

The Belgian economy has strengths and weaknesses



Source: Eurostat.



Recovery should not be about a mere return to pre-coronavirus conditions. For one thing, the COVID-19 crisis has set in motion a range of fundamental changes and the Belgian economy is bound to look different post-crisis. Examples include wider digitalisation both at the consumer level (online shopping) and in corporate Belgium (working from home, for instance), and digital technology will undoubtedly be used more than before the crisis. And it is against this backdrop that economic actors will have to find new ways to conduct their business.

Belgium's economy had been facing major fundamental challenges even before the pandemic hit, and its economic fabric has to continually adjust to be able to create prosperity for the medium and long terms. It is therefore imperative that the economy grows sustainably and has the resilience to withstand any negative shocks that might occur.

The Belgian economy is marked by a series of favourable, but also some unfavourable structural factors. Its strengths definitely include its high level of prosperity, as traditionally measured by GDP per capita. This figure is significantly higher than the euro area average and slightly ahead of the average for Belgium's three main neighbouring countries, although it lags the average levels recorded in the three Nordic EU

Member States (Denmark, Finland and Sweden). On a number of other indicators, Belgium outperforms all European reference areas mentioned above. For instance, the Belgian economy boasts high productivity levels as it adds more value per hour worked; it is more integrated into the global economy; and has a strongly positive net international investment position, indicating that it has significantly more external assets than liabilities.

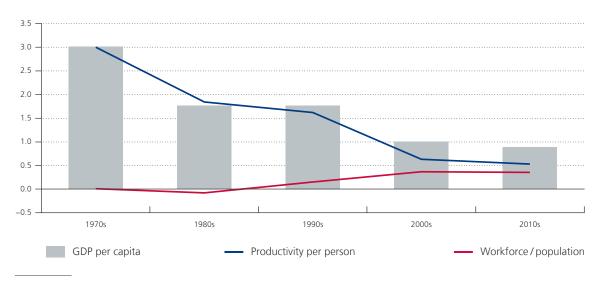
All that said, Belgium's public debt as a percentage of GDP is much higher than in other countries, leaving it with less fiscal margin to promote socially desirable initiatives and absorb negative shocks. Also, the Belgian economy is more emissions-intensive, as its businesses emit more greenhouse gases per unit of value added created than those in its reference zones. Consequently, the necessary transition to a low-carbon economy will involve much more effort in Belgium. And lastly, relatively fewer of its residents are in work, meaning that relatively smaller numbers of people are actively contributing to wealth creation, and productivity growth is also structurally lower than elsewhere in Europe.

Subdued productivity growth stems from a trend decline that is visible in most developed economies but markedly more pronounced in Belgium. In the

Chart 7.2

Drop in productivity growth slows prosperity growth

(average year-on-year change in relevant periods, in %)



Sources: OECD, NBB.

1970s, productivity per worker¹ was still growing by an average 3 % per annum, but the subsequent two decades saw rises of only 1.8 % and 1.6 % respectively. In fact, during the 2000s and 2010s, productivity growth shrank even further, to a little over 0.5 % per annum on average. Such subdued productivity growth is cause for concern. After all, productivity trends used to be the key source of prosperity, given systematically slow employment growth in Belgium. Over the past five decades, then, the pace of wealth creation has fallen significantly in the country.

To retain and grow economic prosperity, it is essential to get more people into the workforce and boost their productivity. And the climate challenge is making it important for Belgium to be able to make the transition to less carbon-intensive activities and to a renewable energy supply that is still reliable and affordable. These challenges can only be taken on properly if the sustainability of public debt is assured.

These various challenges are discussed in more detail in this chapter.

All these goals are interlinked to some extent, and progress in one area may contribute to a favourable development of other factors. Measures to enhance productivity, such as training and education, can make work more attractive as real wages go up. When the low-educated join the workforce, this may temporarily reduce measured average productivity, but as they train and gain experience, long-term productivity may well go back up. Both higher employment and increased productivity benefit public finances, helping to bring public debt down to more sustainable levels. This, in turn, creates margins to absorb negative shocks, and to focus more government support on productivity-enhancing, inclusive and net-zero policy measures. Lastly, the greening of Belgium's economy will undoubtedly require a reallocation of labour and capital. Although this may temporarily affect productivity, this does not need to lead to a permanently less dynamic productivity trajectory. Innovation is the key to align further economic growth with caring for our climate.

Belgium has many key advantages that need to be preserved and enhanced to make its economy

¹ Data on the volume of labour and therefore also on productivity per hour worked have only been available since the 1990s, which is why productivity per person has been used for this long-term comparison. For the entire period for which data are available, particularly during the 2000s and 2010s, the conclusion still stands: productivity growth (per person and per hour worked) has persistently slowed.

more inclusive, more dynamic and carbon-neutral, while ensuring the sustainability of its public finances. The country has weaknesses, too, which need addressing.

Among Europe's innovation champions, with a few areas that need more focus

Its innovation capacity is one of the Belgian economy's key strengths and the country has been at the forefront of European innovation for years.

During the health crisis, it reaped the benefits from its strong specialisation in pharmaceutical research

and, in 2021, it joined the Nordic EU countries in the group of *innovation leaders* according to the European Commission's Innovation Scoreboard ¹.

1 The group of innovation leaders consists of all countries whose Innovation Scoreboard rating exceeds 1.25 times the European average. When the scoreboard was first drawn up, Belgium ranked among the group of strongly innovative countries, with innovation performances between 1 to 1.25 times the European average.

Belgium has improved its performance since the Innovation Scoreboard was first launched, notching up a 20.7 point advance between 2014 and 2021, from 122.8 to 143.5 points. By contrast, the European average increased by a mere 12.5 points in the same period. Belgium's improvement ties in directly with its R&D spending, which has been on the up and up since 2005 on the back of some of the most generous direct and indirect government aid programmes within the EU. In fact, these accounted for nearly 3.2 % of GDP in 2019 and for the first time exceeded the 3 % target set down in the Europe 2020 strategy.

Belgium is one of the EU's innovation leaders

It may look hard to marry these generally excellent scores on innovation with

the weak productivity growth that has been Belgium's bane for many decades now.

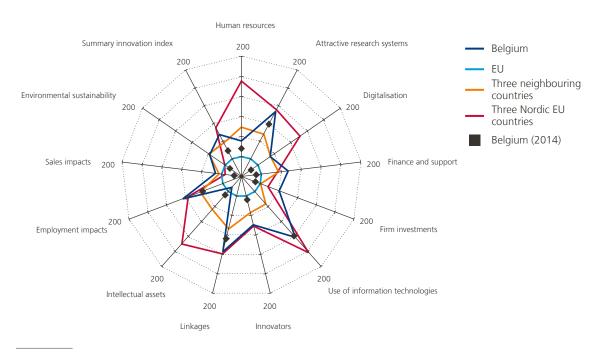
As argued in previous editions of this Report, these overall weak aggregate productivity growth figures mask a wide variety of very different performances indeed. Belgium's leading technology companies continue to innovate and lock in major productivity



Chart 7.3

Belgium among European innovation champions

(12 sub-indicators of the Innovation Scoreboard, data 2021, EU average = 100)



Source: Eurostat.

gains, whereas the technologically laggard invest little in R&D and merely succeed in keeping the gap from widening further in the best-case scenario.

So, the challenge is not so much to boost innovation efforts as to get more companies to innovate. A broader-based corporate innovation drive could enhance aggregate productivity growth as it could reduce the concentration of R&D on a limited number of sectors and businesses and the related concentration of specialisation in a number of innovation types (the intellectual assets dimension on the Innovation Scoreboard).

In addition, spreading innovation across the country's economic fabric should be enhanced and facilitated, and the digitalisation of whole segments of the economy – rapidly imposed by the health crisis – could bolster productivity. Companies will then have to make the additional effort to invest in tangible (IT equipment, robotisation, 3D printing, etc.) and intangible assets (software, data, etc.) as well as in training their workforce, so as to make the best possible use of the new organisation of production facilitated by such digitalisation.

And there are other weaknesses or potential bottlenecks in the innovation arena. For one thing, the Belgian innovation ecosystem would benefit from better performance on lifelong learning for employees (the human resources dimension), which would, in the main, have a positive impact on productivity and the employment rate (see section 7.2).

Lastly, Belgian production of innovations in environmental technologies is well below the European average, even if the country is sixth on the European ranking for ecological sustainability of the innovation ecosystem. To make a success of the transition to a low-carbon economy and actually play a leading role, Belgium will have to create additional incentives to increase production of green innovations.

An economy that is digitalised to a large degree, but still has some gaps to close

The degree of digital transformation is another advantage for Belgium. Perhaps less striking than its innovation capacity, but in 2021 it came 12th among

the 27 EU countries in the Commission's DESI ranking (Digital Economy and Society Index) and ended up 6th on the integration

of digital tools in companies (online sales, social media presence, electronic information-sharing between businesses, etc.).

That said, the DESI index also flagged a number of weaknesses in Belgium's digital transformation. More specifically, the country is trailing in its roll-out of 5G and of high-speed fibre-optic networks. Investment is planned to address these issues 1, including in Belgium's National Recovery and Resilience Plan.

Digital human capital is another area of concern. The percentage of the Belgian population with basic or advanced digital knowledge exceeds the European average, but the proportion of information and communication technology (ICT) graduates is lower, and this is reflected in significant shortages of ICT specialists in the labour market.

A recent study² revealed that companies with a skilled workforce in science, technology, engineering & mathematics

(STEM) benefit the most from digital transition and innovation. Businesses' innovation and digitalisation efforts therefore need to include training policies to ensure their people have, acquire and retain the necessary skills.

A final weakness is Belgium's underperformance relative to the EU average in terms of the digitalisation of government services, and particularly in terms of open data. To improve this situation, Belgium's

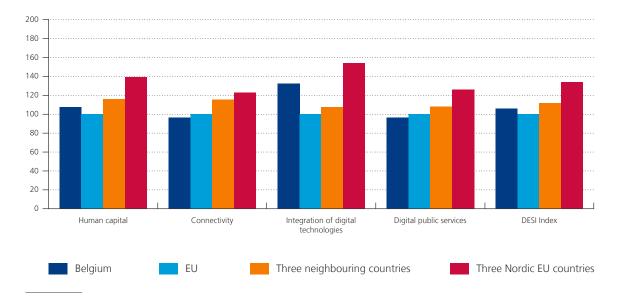
Chart 7.4

The Belgian economy is amply digitalised but still has weaknesses in fibre-optic connections and digitalisation of government services

The shortage of ICT specialists in the

labour market is depressing growth

(DESI index and components, 2020, EU average = 100)



Source: Eurostat.

¹ Historical operator Proximus is planning to have 70% of households on its high-speed fibre-optic network by 2028.

² See Bijnens G. and E. Dhyne (2021), The return on human (STEM) capital in Belgium, NBB Working Paper 401.



National Recovery and Resilience Plan has earmarked € 796 million for capital spending on the digitalisation of government services.

Better rules and regulations for smoothly operating markets

A stable regulatory framework, setting out fair rules and sending clear signals to the various economic actors so as to allow them to make optimum investment and consumption decisions is essential for the recovery of productivity growth and the fight against global warming.

One particular aspect of regulations that influence productivity growth lies in the rules governing corporate demographics. However, the small numbers of

companies starting or ceasing to trade in the past two decades may well have affected the process of reallo-

cating resources. The post-2008-2009 financial crisis zombification of the Belgian economy described in

numerous studies may have been partly due to excess protection of existing businesses and to cumbersome incorporation and liquidation procedures for companies – even if other factors may have come into play.

Low risk of zombification following the health crisis

The historically low bankruptcy rates recorded in 2020 and 2021 might suggest that the COVID-19 pandemic could cause a fresh wave of zombification, but various factors appear to suggest that this risk is not as high as it was after the financial crisis.

For one thing, a lot of new companies have been established in recent years, even throughout the

health crisis. And, secondly, the forced disruption or closure of selected activities, which

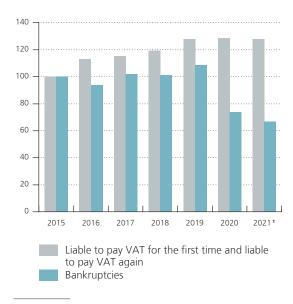
coincided with periods of moratorium on corporate bankruptcies, inspired many entrepreneurs – as

Chart 7.5

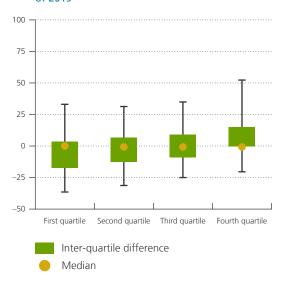
Dynamic business demography has gone hand in hand with efficient reallocation of resources, even in the midst of the crisis

(left-hand chart: index 2015 = 100, right-hand chart: in %)

Company incorporations and bankruptcies



Change in employment between December 2019 and June 2021 based on productivity at the end of 2019



Sources: Statbel, NBB.

noted in chapter 5 – to partly tap into their own money to get their business back on track and redefine their business models. This should fuel renewed growth.

Lastly, during the crisis, various Belgian governments have taken measures to protect businesses and employees to keep Belgium's manufacturing fabric from fraying. This would not appear to have hindered an efficient reallocation of resources. Companies that cut their workforces the hardest between December 2019 and June 2021 were precisely those that were performing at the bottom end of their sectors by the end of 2019, whereas the best-performing companies continued to grow and recruit people during the crisis.

¹ Companies that became liable to pay VAT for the first time and those that became so again in the first ten months of 2021; bankruptcies in the twelve months of 2021.

Sustainable development indicators

By the Law of 14 March 2014 amending the Law of 21 December 1994 containing social and miscellaneous provisions, the Parliament instructed the Federal Planning Bureau (FPB) to devise a set of beyond-GDP indicators measuring quality of life, human development, social progress and the sustainability of the Belgian economy. To honour this, the FPB and the National Accounts Institute have, since 2016, published an annual report on beyond-GDP indicators. From 2022, to achieve greater consistency, these indicators will be joined with those measuring progress on the United Nations' sustainable development goals (SDGs). In keeping with the Law, what follows is a summary of this report under the title "Sustainable development indicators".

A broad selection of individual indicators

Since the 2019 edition, the individual indicators are also grouped around the 17 SDGs. The data for the 1990-2020 period will be exclusively available via www.indicators.be, together with notes on 81 indicators for the SDGs plus five supplementary beyond-GDP indicators.

The report also recounts the progress achieved on the indicators' transition to the SDGs, under the evaluation brief given to the FPB by the Law of 5 May 1997 on the coordination of federal policy for sustainable development. These evaluations are also reported online. In keeping with its brief, the FPB constantly updates the indicators of sustainable development and aligns them with developments in knowledge and public debate.

Evaluation of individual indicators

Progress made towards the goals – set at Belgian, European or global level – is evaluated depending on the indicators:

- For indicators that come with a targeted number and a deadline, the evaluation considers whether the target can be achieved within the timeframe set if current trends are continued over the 2015-2030 period. These targets are set by a range of programmes and agencies (SDGs, the Europe 2020 strategy, the National Reform Programme, the federal long-term view for sustainable development) or to reflect international commitments made by Belgium.
- For indicators that have qualitative targets only e.g. up, down or stable in relation to the SDGs and the federal long-term vision for sustainable development the evaluation determines whether the indicator's historical trend (since 2000) is moving in the right direction in a statistically significant manner. This evaluation is less pertinent, as no firm pronouncements can be made on its level and the speed at which it is changing.





Progress towards the SDGs

Out of the 86 indicators featuring in this year's edition, the FPB takes stock of progress made towards the SDGs, based on a selection of 51 indicators (three per SDG).

An evaluation on the available data in November 2021 does not throw up a clear trend: on current trends, 35 of the 51 indicators are rated as unfavourable or undetermined, with additional efforts needing to be made to achieve the SDGs. Out of the four components that make up sustainable development (social, environmental, economic and governance) the indicators for the environmental component (16 out of 51 indicators) received the most favourable evaluation, whereas those for the social component (23 indicators) are rated more unfavourably. The economic and governance components (7 and 5 indicators respectively) comprise too few indicators to arrive at any trends.

Considered by the various relevant categories of the population, the report finds that, for breakdowns by gender (40 indicators) many gaps are narrowing (life expectancy, unemployment rate, employment rate), with the exception of a small number of indicators (long-term incapacity for work, inactivity for family responsibility reasons, higher education graduates). Unsurprisingly, breakdowns by income levels (20 indicators) and education levels (11 indicators) are more favourable for those on higher incomes or higher levels of education – differences that typically increase, particularly in terms of poverty risk. Beyond age-related differences – on health, incapacity for work, employment rate and joblessness), no general trend may be ascertained when drawing distinctions based on age categories. Breakdowns by region (43 indicators) are also available but have not been analysed.

Composite well-being indicators

The synthetic well-being indicators developed by the FPB concern three dimensions of sustainable development: the development of society and well-being of the current generation in Belgium ("Here and now"), the well-being of future generations ("Later") and the impact of Belgian society on the well-being of the population of other countries ("Elsewhere"). Only the composite indicators of the "Here and now" and "Later" dimensions are evaluated for the period up to and including 2020, depending on data availability. Assessments of the recent situation have been made more complex as the health crisis has made it harder to gather the relevant data.

Current well-being between 2005 and 2019

The composite indicator devised for the "Well-being here and now" dimensions (W_{HN}) gauges trends in current well-being in Belgium and aims to capture any changes as adequately as possible. Between 2005 and 2019, this indicator recorded a major drop (see FPB, 2021 Report), attributable to a steeper deterioration in the population's general state of health – the key determinant of well-being in Belgium – relative to improvements at the social and economic levels (unemployment rate, severe material deprivation and school drop-out). Refining the analysis by category of the population, the decline in well-being is found to be statistically significant for men, the 16-24 and 50-64 age groups and the middle class (third income quintile). Only the indicator for those aged 65 and over rose significantly between 2005 and 2019.



The impact of the pandemic on well-being in 2020

On FPB projections in its 2021 report, Belgians' average well-being – already very low in 2019 – clearly deteriorated in 2020 and hit its lowest level since reporting started. In fact, in its last report, the FPB decided not to update the underlying indicators for measuring the composite well-being in 2020, as the indicators' comparability for these successive years was impacted by the pandemic, which has disrupted the collection of traditionally collected data. Instead, the FPB used *ad-hoc* surveys conducted over the course of the pandemic, in which respondents were asked about their life satisfaction, general health and mental health.

In terms of life satisfaction, these surveys point in the same direction, i.e. that satisfaction has been falling relative to past perceptions since March 2020, with variations depending on the societal health background (satisfaction went up when the pandemic slowed in the summer). Satisfaction rates remained lower than before 2020 – and by a very wide margin for some categories of people, such as women, young people, single people, students, unemployed or disabled people.

The pandemic also hit the key determinant of well-being: health. Belgians' perception of their state of health deteriorated and changed in tandem with the epidemiological situation. COVID-19 turns out to have affected the health of nearly one-third of Belgians, more particularly those in the 30-49 age group. The pandemic also damaged the mental health of the Belgian population, which had not been robust even before 2020, and caused psychological problems of varying intensity depending on people's situations during the health crisis. Anxiety and depression disorders remain at significantly higher levels than previously, affecting primarily women, young people and people who were already facing psychological difficulties even before the pandemic.

It is imperative for the future health condition of Belgians to be monitored, especially as so many treatments were postponed. The absence of any data on the pandemic's impact on children – who do





not feature in the surveys reviewed – is another point of concern, as well-being during one's childhood years impacts well-being as an adult.

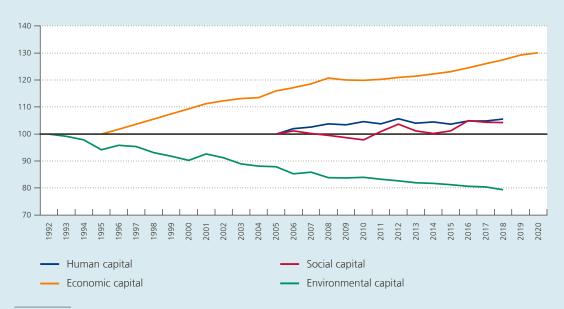
The well-being of future generations is eroded by environmental capital deterioration

A society's sustainable development implies that the lifestyle of the current generation should not come at the expense of the ability of future generations to meet their own needs. As it is impossible to predict what will constitute well-being for later generations or how such well-being will be achieved, the FPB uses an approach based on capital stocks to gauge this future well-being ("Later" dimension). This approach involves measuring changes in the stocks of resources necessary to create well-being for future generations and considers that a society is developing sustainably if it ensures that future generations can enjoy stocks of capital at least equivalent to the current level. In the conceptual framework used in this report, development is sustainable if it at least maintains all capital stocks at the same time.

Any assessment of the situation in 2020 is hampered by the limited availability of statistical data. Only the "economic capital" indicator, which captures all economic assets, could be updated. This indicator has surged since 1995 and reached an all-time high in 2020, with both physical stocks and knowledge capital contributing. The "human capital" indicator reflects individual health as well as qualifications and skills that contribute to employability and improved labour incomes. This gauge has significantly improved since 2005, thanks to the growing number of higher education graduates; by contrast, the

Composite indicators to measure sustainability of well-being

 $(100 = reference year^{1})$



Source: FPB

¹ Indicators have been standardised at 100 for the baseline year coinciding with the first year for which all components of the composite indicator are available. Capital types are not collated into a single indicator, as they are not interchangeable.



literacy and healthy life expectancy indicators have worsened. "Social capital" concerns the quality of relationships between people, at the level of both individuals and the community. It remained fairly stable in the 2005-2018 period. "Environmental capital" breaks down into air, water, land and biodiversity, all four of which contributed to the indicator's steep fall. This deterioration does not match the previously discussed favourable evaluation of the indicators for sustainable development's environment component. The assessment of progress made on the SDGs reflects a variety of indicators of favourably performing flow variables – such as the reduction in annual greenhouse gas emissions – and positive environmental policy effects, but these were not enough to halt the worsening picture in terms of environmental capital (environmental capital stock).

Based on these indicators and taking account of the deteriorating indicator for environmental capital, the FPB "Sustainable development indicators" report shows Belgium's current development to be not viable in the longer term, all the more so as other components of future well-being are liable to be adversely affected by the recent deterioration of various components of current well-being, such as education and healthy life expectancy.

7.2 Getting and keeping more people in the labour market

Structural tensions in Belgium's labour market

Every year, the country's regional public employment services review vacancies that are harder to fill and that require a lengthier recruitment process, known as bottleneck occupations. Jobs in technology, health care, trade and education are proving hard to fill across the country, but the three different Belgian Regions have their own peculiarities. In Brussels, Actiris has flagged specific recruitment issues for administrative posts, but also for ICT and technical positions. For the Flemish public employment service

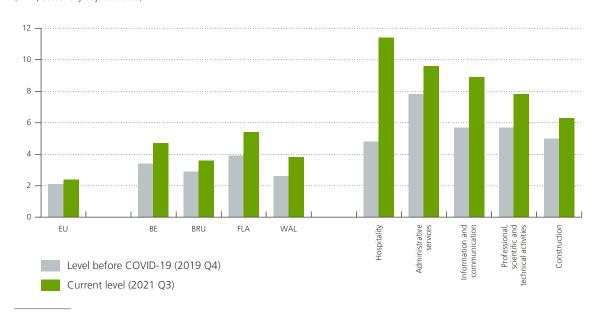
VDAB and its counterpart Forem in Wallonia, the greatest pressure is on professions in construction and industry.

In the third quarter of 2021, a total of 196 000 jobs in Belgium were unfilled, adding up to an exceptionally high vacancy rate of 4.7%, nearly double the EU average (2.4%).

In Flanders, tensions are at their worst, resulting in a vacancy rate of 5.4 %, followed by Wallonia (3.8 %) and Brussels (3.6 %). Not all sectors are facing the same recruitment problems. The hospitality industry,

Chart 7.6

Exceptionally high vacancy rate ¹
(in %, seasonally adjusted data)



Source: Eurostat.

¹ Ratio between the number of vacancies and the total number of filled and unfilled positions.

which lost a lot of people during the crisis and is now grappling with major recruitment issues, recorded

the highest vacancy rate, at 11.4%. Meanwhile, vacancy rates are also significant in administrative services (in-

There are currently nearly 196 000 vacancies

cluding agency work), information and communication, professional, scientific and technical activities, and in construction.

The indicator's structurally high levels show up both quantitative and qualitative imbalances between the supply and demand of labour.

Too few workers who are immediately employable

In quantitative terms and according to the International Labour Office definition, Belgium had an average of 332 000 job-seekers in the first two quarters of 2021 and its unemployment rate is

therefore relatively low, at 6.5 % of the labour force compared with the European average of 7.4 %.

Theoretically, if all these people could be put to work, the problem would be solved as there would be nearly two

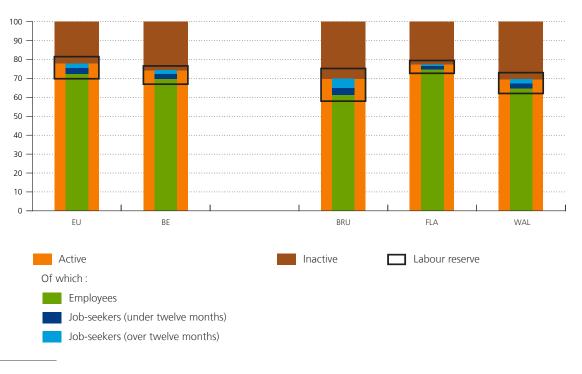
people for every job opening. However, 41 % of job-seekers have been out of work for 12 months or longer and are considered less easily employable. What is more, not all of them have the skills that today's labour market demands.

The number of people able to meet the demand for workers is not limited to these job-seekers alone, of course, as the definition of available workers can be expanded to include part-time workers that would like to work more, people who are available to work but not actively looking, and people looking for work who are not immediately available. All these people add up to the concept of the labour reserve that the Commission uses to gauge the so-called labour market slack. In the course of the first half of 2021 this

Chart 7.7

Few workers rapidly employable in Belgium, particularly in Flanders

(breakdown of the population aged 20-64 by socio-economic status, in %, average of the first two quarters of 2021 for the EU and Belgium, 2020 for the three Regions)



Source: Eurostat.

was 646 000 people in Belgium, i.e. 12.6 % of the extended labour force, which is below the EU average of 14.3 %

The situation is not the same in all three Regions of the country. In the first two quarters of 2021, joblessness in Flanders averaged 4.1%, virtually equal to the floor of frictional unemployment, whereas Wallonia and Brussels are still dealing with massive joblessness of 9% and 12.4% respectively. Allowing for the extended labour reserve, the labour market slack was at 8.8% in Flanders in 2020, at 15.2% in Wallonia and at 23.1% in Brussels.

It is important that this labour reserve is matched with vacancies so as to lessen the tensions in the Belgian labour market. To a degree, this may be achieved by encouraging Brussels and Walloon job-seekers to apply for vacancies in Flanders – an essential action point in the mobility policies of the public employment services, which share vacancies and ensure basic

language training. All that said, just getting job-seekers into work will not be enough.

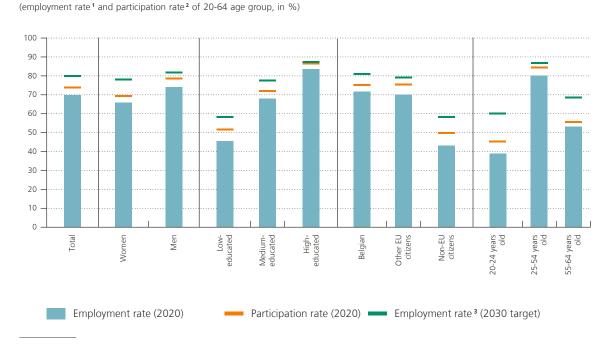
Matching labour supply and demand must be improved if Belgium is to contribute to European employment targets ¹ and, most of all, if the federal government's employment rate of 80 % by 2030 is to be achieved. This means that an additional 660 000 or so people in the 20-64 age group will need to find work.

The 80% target can only be met if the number of people in work increases for all categories of the population. An exercise by the High Council for Employment (HCE) suggests that the employment rate of particularly the 20-24 and the 55-64 age groups,

1 The European Pillar of Social Rights Action Plan envisages an employment target of 78 % for the 20-64 age group by 2030. To make an adequate contribution to this overall target, the Commission reckons that Belgium should achieve an employment target of 76.5 %.

Chart 7.8

To achieve the 80 % employment target in 2030, Belgium will also have to raise its participation rate

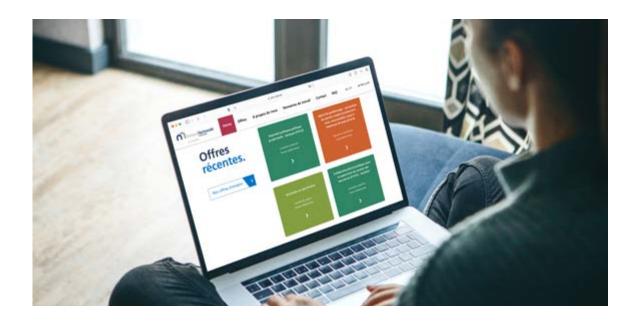


Sources: Eurostat, HCE.

¹ People in work as a % of the working-age population between 20 and 64.

² Labour force, i.e. people in work plus job-seekers, in % of the working-age population between 20 and 64.

³ Target per population group needed to achieve overall employment rate of 80 % for 20-64 age group, based on an HCE exercise.



as well as that of non-EU citizens, the low-educated and women will have to go up very sharply indeed 1. Of course, there are different ways to achieve the target but less of an increase in one category must then be offset by bigger ones in others.

Women could help boost Belgium's employment numbers significantly. Although their employment rate

has been rising for years now, it is still below that for men, even if their levels of education are typically higher on average. The gap is even wider if the employ-

The inactive will also have to be mobilised if the shortage of workers is to be addressed

ment rate is considered in full-time equivalents (FTEs). A recent analysis² shows that becoming a mother still has a negative impact on female employment and increases women's tendency to work part-time.

Even before the federal target was set, the various regional authorities had been on a mission to raise their employment rates. The Flemish government agreement, for instance, also set its target at 80 % by 2030, while Wallonia is aiming for 68.7 % by 2025. With regional employment rates widely different at this point in time – 75.1 % in Flanders, 64.7 % in Wallonia and 61.5 % in Brussels – the Regions with the lowest ratios will have to make the biggest efforts, even if all three of them will have to achieve a major advance if targets are to be met.

Incidentally, if it is to achieve its 80 % target, Belgium will also have to sharply push up labour market

participation. The HCE exercise clearly showed that all sections of the population would have to see their employment target exceed current participation rates by 2030, often by a wide margin, meaning that the target is unachievable even if all the unemployed were to step into jobs. What this boils down to, then, is that a significant proportion of the currently inactive working-age population needs to

be mobilised – and that goes for all the Regions, even in Flanders, which has the lowest proportion of inactive people.

A mismatch between required and acquired skills

In qualitative terms, one of Belgium's key advantages is its very highly educated population. Between 2000 and 2020, the proportion of low-educated people fell to 20% among the 20-64 age group, from 39%. Meanwhile, the proportion of highly-educated rose in the same period, to 41% from 26%.

- 1 The exercise compared Belgium's employment rate for all sections of the population with the figures for Germany, France, the Netherlands, Denmark, Sweden and Finland. This scenario saw the employment gap between men and women in Belgium halve and saw some of the difference with the employment rate of the best-performing reference country erased for all groups, taking the country's total employment rate to 80 % (HCE, 2021).
- 2 See Nautet M. and C. Piton (2021), "How does parenthood affect the careers of women and men?", NBB, Economic Review, December.

Higher levels of education typically also mean higher labour market participation: not only are the highly-educated more frequently active, their integration in the workforce also tends to stick more. Diploma levels are not everything, though: it is the choice of fields of study that determines matching between the demand and supply of workers. In Belgium, STEM studies attract relatively few students, while there is massive labour market demand for graduates in these fields. Meanwhile, hardly 2 % of graduates opted for ICT, compared with an average 4 % in the EU. This may explain why no less than 11 % of Belgian companies report having difficulty recruiting such experts – the highest percentage in the EU, where the average is below 5 %.

Digitalisation and the greening of the economy are also impacting labour markets. Some professions are disappearing, new positions are emerging and most if not all jobs are changing. The changes are causing businesses to look for different skillsets – not merely new technical skills, the so-called hard skills, that these new types of jobs require, but increasingly also soft skills, such as relationship competences and communication skills, innovation capabilities and adaptability.

First lever: activation

To meet workers' needs and create an inclusive growth dynamic, it is not enough just to keep people in work, as happened during the health crisis. The country also requires an efficient system of activation and reallocation of resources based on recruitment incentives, assistance when seeking jobs and training programmes for frequently sought positions and bottleneck occupations.

When drawing up the 2022 budget, the government took a wide range of measures aimed at greater activation of workers, by aiming to make work financially more attractive and encouraging lifelong learning (see below), but also by addressing labour shortages, reintegrating people in disability schemes and facilitating greater flexibility in terms of working time.

Belgium's recently approved National Recovery and Resilience Plan also includes activation measures. These longer-term reforms are looking to encourage a combination of part-time work and unemployment payments or integration income, stamp out discrimination and provide better assistance and guidance to

job-seekers from vulnerable groups. For many of these reforms, including the announced overhaul of the pensions system, the actual impact on the labour market will greatly depend on real-world implementation.

All that said, any such measures are very welcome indeed, as the Belgian labour market is excessively rigid, with a range of structural rigidity factors also getting in the way of any optimum allocation or real-location of resources – e.g. the lack of occupational and geographical mobility, too strong a link between wages and seniority instead of productivity, high taxes on wages and financial unemployment traps, to name but a few.

Second lever: making work more financially attractive

Accepting a job should always be financially more attractive than joblessness or inactivity. Gross wages, social charges and tax on earned income are not the only factors that come into play, so does the fact that social advantages such as unemployment benefits or integration income cease when people move into work. Despite a wide range of reforms in recent years - including the introduction of a social and fiscal employment bonus, tapering unemployment payments and the 2016-2020 tax shift unemployment or inactivity traps continue to exist, making it non-viable for some people to work. With the lowest benefit payments in Belgium below poverty level, an undesirable course of action would be to cut benefits further just to make work more attractive. In fact, to combat poverty, the federal government started to raise a number of social benefits in 2021, including integration income¹. The lowest benefits will be ratcheted up further up to and including 2024, with such increases coming on top of indexation and through the allocation of the so-called "welfare envelope". Such adjustments, although advisable from a societal perspective, do increase the danger of the low-educated on low wages stumbling into a joblessness or inactivity trap. To get and keep these people active, financial incentives must be adequate, for instance by way of higher gross wages or less of a fiscal and/or parafiscal burden on labour.

¹ Including indexation and the welfare adjustment, integrated income was raised by 4.7 % on 1 January 2021, followed by a further increase of 8.9 % on 1 January 2022.

The 2021 agreement by the social partners on a phased increase in the average guaranteed minimum monthly income should make work more financially attractive even for the lowest-paid jobs. The increase, which is on top of automatic indexation, will be the

first real such raise of the national minimum wage since the 2007-2008 interprofessional agreement. In real-world terms, the min-

Work must be made more (financially) attractive to mobilise the labour force

imum wage should go up in 2022, 2024 and 2026, while a further 2028 raise is a possibility based on a comparison with Belgium's neighbouring countries ¹. To ensure that higher national gross minimum wages

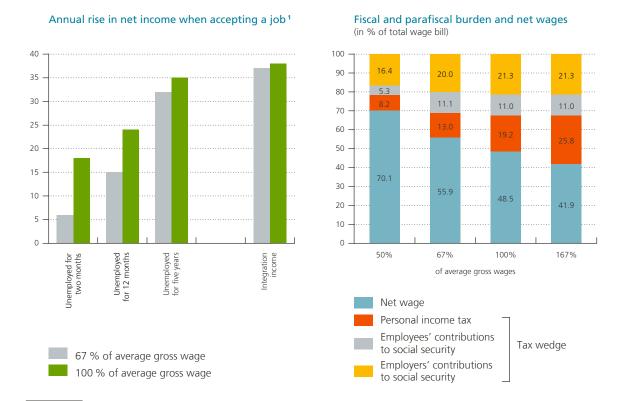
also lead to higher net wages, cut-off amounts for the social and fiscal employment bonuses will go up as well. Employers will be compensated for higher wage bills through an adjustment of their structural contribution reductions for low wages.

The number of employees with wages close to the national minimum wage is small in Belgium. In fact,

the proportion of employees on wages that outstrip the national minimum wage by up to 5% came down from 3% in 2000 to 2.1% in 2015². All that said, a higher minimum wage should at least

Chart 7.9

The financial advantages of being in work remain small in Belgium and tax on labour quickly rises (in %, 2020, for a single person with no children)



Source: OECD.

¹ The average guaranteed minimum monthly income currently stands at € 1 691 a month for an 18-year-old without any seniority in a company. In April 2022, that will go up by € 76 gross a month, and by further increments of € 35 in both April 2024 and April 2026.

² See Vandekerckhove S., Desiere S. and K. Lenaerts (2020), Minimum wages and wage compression in Belgian industries, NBB Working Paper Research 387, July.

¹ This indicator captures the degree to which net income goes up when an unemployed person or beneficiary of integration income finds work, factoring in tax on labour and loss of benefits payment. Calculations based on the assumption that annual income consists of twelve times the payment of wages and, in the event of joblessness, that the new wage equals the last income earned.

contribute to the relative attraction of work, as the absolute floor for wages in Belgium will go up as a result and the risk of unemployment or inactivity traps become slighter.

Lastly, fiscal and parafiscal levies are the key determinants of whether being in work is worthwhile, as any decision to work is not based on gross but on net wages. The 2016-2020 tax shift has reduced tax on labour in Belgium for all wage levels in recent years, with the contraction the highest at the lower wage end. Despite this, fiscal and parafiscal levies on labour remain significantly higher in Belgium than in its three main neighbouring countries. What is more, tax on labour rapidly rises when gross wages go up, which is related in particular to personal income tax and employee contributions to social security. This not only increases the chances of unemployment or inactivity traps, but may set up a promotion trap as well. In the latter case, a higher gross wage does not - or not sufficiently - translate into higher net wages, reducing the financial incentive to work more hours or to seek promotion.

Various Belgian authorities have devised measures to address this issue. The federal government, for one,

is looking to reduce the special social security contribution percentage in 2022, helping employees to keep more in the

More training is needed to better align skills with requirements

way of net wages. As this contribution rises along with gross wages, this adjustment should also stem the risk of a promotion trap for people on low and average wages. Likewise, the Flemish authorities want to make work more attractive for people on low incomes by introducing an allowance in 2022 – the Flemish job bonus – of \leqslant 600 a year for the lowest of wages and steadily falling to zero for gross monthly wages in excess of \leqslant 2 500. Meanwhile, the federal government is also planning to introduce broad tax reform to help further reduce the tax burden on labour.

In this context, it should not be forgotten that any decision to actively join the labour market is not merely a matter of financial considerations, but also factors in working conditions, household situation, state of health and various other social and cultural considerations. To encourage labour market activity, government authorities should not focus their attention exclusively on financial aspects, but also consider these numerous other obstacles.

Government action is key to making work more attractive while at the same time combating the risk of poverty and preserving companies' competitiveness. However, this does come at a direct price for public finances, which can only be offset by a sustainably higher employment rate.

Third lever: education

Initial training and lifelong learning help to reduce qualitative mismatches in the labour market. As noted, students' choices of study or professions do not always match what companies need – and this does not just affect the highly educated. Numerous bottleneck occupations do not require high qualifications, and technical studies coupled with the system of apprenticeships ("alternative learning") offer countless employment opportunities and should therefore be encouraged. Addressing school drop-outs could reduce the problem of integration in the labour market and the need to learn new professional skills in later life. In 2020, 8% of Belgium's young left school without a secondary school diploma or the equivalent. Although better than the EU average (10 %), the percentages differ between the Regions: 7 % in Flanders,

while Wallonia and Brussels both report 10%.

Lifelong learning means that workers remain employable

throughout their careers and allows them, where appropriate, to expand or adapt their skills to developments on the labour market.

The latest available Eurostat survey findings about adult education (AES, 2016) revealed that, despite a whole range of measures and resources, only 54% of employees in Belgium had taken part in any kind of lifelong learning in the preceding year, a slightly higher ratio than the EU average of 52%. Participation in lifelong learning tends to be lower for job-seekers, but in Belgium this still worked out at 42%, compared with an average 28% in the EU, thanks to a very comprehensive training offering from the country's public employment services. The situation is less favourable for the inactive, with involvement in lifelong learning amounting to 20%, compared with 22% in the EU.

EU agency Cedefop noted that 40 % of Belgian employees require training to stay in work or to be able

to reorient professionally. This group primarily but not exclusively comprises the low-educated. Medium-educated and high educated people with weak digital skills or who lack selected general competencies – such as communication and organisational skills or personal resilience – would likewise benefit from such training.

People do not sufficiently grasp the necessity and purpose of lifelong learning, and the 2016 AES survey found that four out of ten adults have no desire to do any training whatsoever, mostly because they feel they do not need it. Practical obstacles are also cited, including lack of time, distance, scheduling of training programmes, health and cost.

Participation in lifelong learning diverges widely, with the low-educated and over-55s the least involved.

All that said, the vast majority of Belgian companies (84 %, as against an average 71 % in the EU) are facilitating education and training for their employees,

even if strategies differ per sector. Some sectors are trailing behind – such as the hospitality industry and retail – while others are ahead of the pack, such as financial services. Company size is a key determinant of training intensity. On average, small businesses offer less in the way of education and training, although efforts in this area vary hugely depending on the company's activities. It has also been observed that more productive companies also boast the highest training intensity, without this necessarily being a matter of cause and effect.

The lifelong learning system has many players from the public and private sectors, as well as associations. The country's federal structure and the division of authorities between the various policy levels do make it more complex to arrive at a comprehensive policy of lifelong learning. Having dedicated its 2021 report to lifelong learning, the HCE¹ has drawn up a series

1 HCE (2021), Lifelong learning for employees: investing in the future, November.

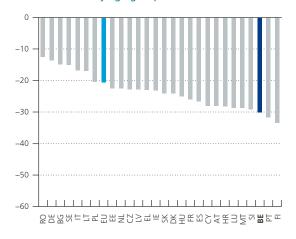


Chart 7.10

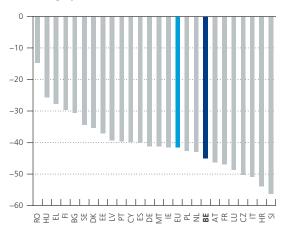
Low-educated and over-55s less involved in lifelong learning

(differences in rates of participation in formal and non-formal training over a period of one year, in percentage points, 2016)

Difference by age group: 55-64 vs 25-34



Difference by diploma: low-educated vs highly-educated



Source: Eurostat.

of recommendations relating to (1) coordinating the various players and simplifying the system, (2) as well as to the necessity for a forward-looking vision and to match training and education with labour market needs and (3) increase the participation of underrepresented groups, and (4) to the importance of better statistics and an evaluation of policies.

7.3 The climate challenge and the energy transition

Global warming is a very serious long-term risk for economic activity and for life on Earth. For Belgium, too, its consequences may be very significant indeed, as was visible from the devastation caused by the floods in July. To limit climate warming to 1.5 degrees Celsius, as set out in the 2015 Paris Climate Agreement, global emissions of greenhouse gases must be cut swiftly and significantly¹. However, the current trend is still clearly upwards: following a slight fall in 2020 in the wake of the COVID-19 crisis, worldwide emissions went right back up in 2021.

Against this backdrop, the European Union has committed to cut emissions hard. The Commission launched its "Fit for 55" package in July 2021, whose purpose is to achieve climate neutrality by 2050. Its interim target for 2030, meanwhile, has been set

1 Swift emission reductions are imperative, as the planet heats up from the total amounts of greenhouse gases emitted into the atmosphere and as these diminish only very slowly.

at a 55% reduction in greenhouse gas emissions when compared with 1990. These targets still have to be translated into reduction figures for the EU's various Member States, but even without knowing the precise arrangements it will undoubtedly be a major challenge to cut Belgian greenhouse gas emissions sufficiently. After all, the Belgian economy emits more greenhouse gases than other European countries per euro of value added created, and household consumer patterns also cause more emissions per head of the population.

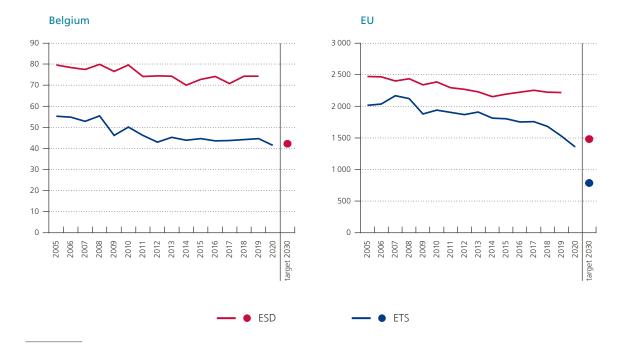
The EU has opted for a two-pronged approach to emissions. Emissions by highly energy-intensive companies in selected sectors – such as power generation, oil refining, the steel, cement and metals industries, chemicals and aviation within Europe – are regulated by the EU Emissions Trading System (EU-ETS). The system (see box 8), which covers around 40 % of emissions in the EU, operates fully within the European sphere, and ETS sectors are governed by



Chart 7.11

Ambitious emission reduction targets 1

(emissions of greenhouse gases, in million tonnes CO₂ equivalent)



Sources: EC. EEA.

A clear price signal for all greenhouse

gas emissions would be useful

European targets. All other emissions¹ are subject to the effort-sharing decision (ESD) arrangement, which sees an EU-set emission target translated into goals at the level of the Member States, which then have to take necessary measures to achieve the targeted reduction.

The Commission has translated the total targeted emissions reduction goal of 55 % into separate targets for ETS and ESD sectors, with emissions of greenhouse gases expected to be, respectively, 61 % and 40 % below their 2005 num-

bers by 2030. Compared with 2019 – the most recent year for which availa-

ble data are not distorted by the coronavirus crisis – this means that emissions will have to come down by around half and one-third respectively. To help get ESD sectors emissions down by 40 % at the European

level, the Commission proposes that this reduction should be pegged at 47% for Belgium. In view of the very minor cuts Belgium has achieved since 2005, this implies that emissions must come down by 43% compared with 2019.

In view of the little time that remains, these targets are highly ambitious. In keeping with the allocation of responsibilities in Belgium, it is mostly left to the Regions to take the requisite measures. Unlike ETS, for which a price signal was chosen – more pre-

cisely, the implicit carbon price arising from trading a limited and diminishing number of emission allow-

ances – the various Belgian authorities have, to date, mostly opted to regulate in order to cut ESD sectors' emissions, for instance by imposing minimum insulation requirements for housing or gradual phase-outs of cars driving on fossil fuels. But even for these sectors, a price signal would be useful. Taxation levied based on the carbon content of the type of energy would make fossil fuels relatively more expensive

¹ The EU Emissions Trading System (ETS) governs the emissions of the EU's most energy-intensive businesses, while the effort-sharing decision (ESD) scheme governs all emissions that are not part of ETS.

¹ With the exception of "land use, land-use changes and forestry". In net terms, this sector does not emit carbon in Belgium but rather (slightly) absorbs it (around 1 % of total emissions in 2019).

than renewable energy sources. Provided the future development of such taxation is announced in a timely fashion, such carbon prices could strongly steer businesses and households towards the most cost-efficient way to help achieve the target. Also, a carbon tax, announced well ahead of time, would result in much less price volatility, in contrast to ETS, which pins down the quantity of emission allowances.

Even if the authorities in Belgium decided not to go down the carbon tax route in the non-ETS sector, a whole range of fiscal instruments still result in an indirect tax on emissions. That said, the implicit carbon prices these reveal are very wide-ranging indeed. For example, the effective carbon rate is currently close to zero for heating family homes while company cars enjoy very favourable tax treatment, which means that - particularly coupled with fuel cards supplied by companies – the pollution costs of these cars are not shouldered by users 1. In contrast, emissions by other road users is relatively highly taxed, with implicit prices much higher than current ETS prices for Belgian industrial companies. Belgium could massively improve the efficiency of carbon taxation by making these levies more emission-neutral, with such a tax shift actually encouraging the most efficient emission-reducing technologies².

Taxing fossil fuels means that gas, oil and gas and oil-derived products and services become more expensive. Such policies do not, however, imply an instant repeat of the 2021 energy crisis, when energy suddenly became much more expensive. For

one thing, that particular surge was not driven by taxation related to climate policies, but by steeply

higher prices for the energy component itself. As energy commodities are largely imported, these higher prices flew out of the country and impoverished the Belgian economy. A carbon tax, by contrast, generates additional tax revenues that may be invested in the economy, or redistributed to absorb some of the consequences for more vulnerable groups. Secondly, energy price increases in 2021 were brutal and

unexpected, while an optimum carbon tax should tick up gradually and in keeping with a previously communicated trajectory, allowing all actors to adapt their investment decisions accordingly and fostering a permanent change in behaviour. Note that predictability and a sufficiently long transition period are just as important for other climate-related measures – such as regulation – to guide choices in the right direction. In fact, 2021's high energy prices are not needed to make investing in green energy financially attractive, as alternative energy sources are already competitive and viable at notably less steep prices for fossil fuels, and will be even more so if and when the cost of green technologies declines further.

Technological progress and economies of scale at wind and solar energy facilities have pushed down the average levelised cost of electricity (LCOE) for the relevant technologies. According to a study commissioned by the EC, in 2018, these costs for plants operational in the EU were estimated at € 59 and € 84 per MWh for onshore and offshore wind energy, € 87 per MWh for large-scale solar photovoltaic (PV) energy projects and € 133 per MWh for individual solar PV installations. Various options, in fact, have levelised costs that are below those for combined cycle gas turbines (€ 98 per MWh) and well below electricity prices observed in the markets in the final guarter of 2021, i.e. around € 152 per MWh for delivery in 2022. That said, such estimates do not take into account the cost arising from the intermittent nature of these power generation options. But these cost levels suggest that electricity prices following the transition would still be

lower than levels observed at the end of 2021.

Carbon prices do not imply a repeat of the 2021 energy crisis

All things considered, the

transition to a low-carbon economy would involve a smaller³ and more gradual rise in energy costs than in 2021, making it easier for households and businesses to change their behaviour.

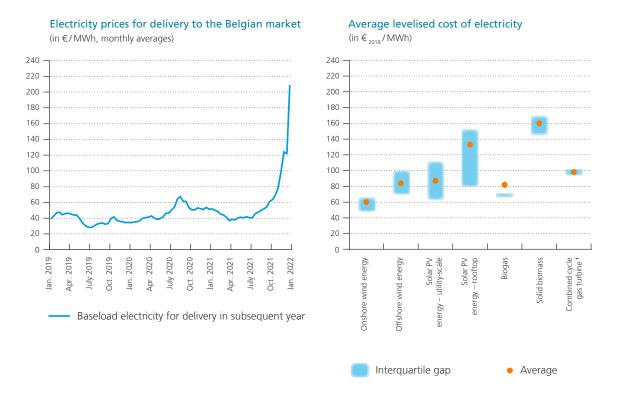
Appropriate climate-related policies also require devising an intelligent accompanying energy policy to help integrate intermittent renewable sources in an efficient way. Abruptly higher prices as in 2021 and dependence on the rest of the world could be limited that way as well.

¹ As discussed later in this chapter, the federal government has decided to wind down the favourable tax treatment for company vehicles running on fossil fuels.

² For more details, see Cornille D., R. Schoonackers, P. Stinglhamber and S. Van Parys (2021), "Fiscal policy instruments to mitigate climate change – A Belgian perspective", NBB, Economic Review, December.

³ See, for instance, EC (2021), "Impact assessment report", Commission Staff Working Document.

Chart 7.12 Production costs for green electricity increasingly competitive



Sources: Refinitiv (an LSEG company) – own calculations; Altmann M., T. Badouard, D. Moreira de Oliveira, P. Torres and J. Yearwood (2020), Final Report – Cost of Energy (LCOE): Energy costs, taxes and the impact of government interventions on investments.

1 Based on fuel costs for natural gas of \in 2018 25/MWh in 2019 to around \in 2018 40/MWh in 2040.

The case for carbon pricing

Some choices by economic actors cause environmental costs that do not automatically show up in fossil energy sources' market prices. These costs may be internalised in the shape of a carbon price that forces economic actors to always include the cost of their ecological footprint when deciding on their consumption and investment. To achieve the capital spending inherently needed in the transition, and particularly on energy projects, it is essential that uncertainty is reduced by providing a clear, predictable and credible view of the medium- and long-term developments in this price.

Carbon prices may come about either by imposing them via a carbon tax or by setting an emission allowance that will then throw up an implicit price through a market-based mechanism. In the European arena, the choice was made in 2005 to implement indirect carbon pricing in selected high-emitting sectors. To this end, a limited number of greenhouse gas emission allowances is allocated that may be traded on a European-wide market, essentially curbing the emission amounts permitted to the relevant sectors. The system imposes an ever-lower ceiling on the emissions of these sectors and emission allowances in the amount of this maximum are allocated via auctions. A limited proportion is allocated free of charge to sectors competing outside the EU-ETS. Emission allowances can then be traded between companies with excess allowances and companies that emit more than the allowances they hold – so-called cap-and-trade system that is designed to leverage planned scarcity of allowances. This approach actually pinpoints the sectors' emission volumes and emission prices are determined endogenously in the markets. Over the short term, then, this type of carbon price can be highly volatile.

EU-ETS has been expanded at various stages. Up until March 2018, carbon prices under the scheme were at \leq 10 per tonne of CO_2 – not exactly a price level that promotes investment in the technologies needed to work efficiently towards reducing emissions in the long term, especially as these still require a great deal of innovation. However, EU-ETS prices have been advancing steadily in the past three years and nudged an average \leq 69/tonne CO_2 in the final quarter of 2021.





Prices for EU-ETS emission allowances

(in € per tonne CO, equivalent)



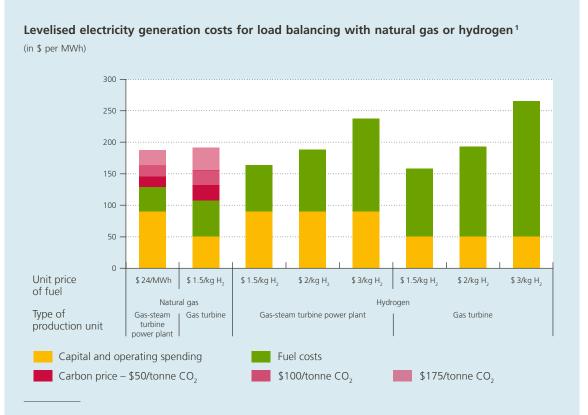
Source: Refinitiv (an LSEG company).

Following the EU's more ambitious climate-related commitments, the Commission tabled a proposal in July 2021 to overhaul EU-ETS in order to accelerate the emission reduction efforts of the relevant sectors. The Commission would be looking to recalibrate various components of the scheme, including a steeper reduction of the ceiling on emission allowances by 2030 – by 61 % compared with 2005, instead of the previously envisaged 43 % – by speeding up annual cuts to 4.2 % from 2.2 %. Free allowances would also be cut back and allocated on the basis of more restrictive criteria, while the system would be expanded to include shipping, buildings and road transport. New conditions for the use of the income from the auctions would be put in place to encourage innovation and to address the redistribution effects, so as not to endanger the societal acceptance of these ambitious commitments. And lastly, the Commission proposes the introduction of a carbon border adjustment mechanism (CBAM) to factor in carbon content in imported goods prices, so as to prevent leakage of polluting activities to countries outside the EU.

By tightening up the European market for emission allowances, the authorities are sending a clear signal of rising carbon prices in the years ahead, which should encourage investment in low-carbon options as well as the development of innovative technologies. Technologies such as carbon capture and storage, the production of green hydrogen through electrolysis and power from renewable energy sources should all benefit from higher carbon prices. With higher costs for projects using fossil energy sources, carbon-free technologies – which are currently not very profitable – should become sufficiently viable in technical and economic terms to be permanently adopted.

Hydrogen could replace fossil fuels in a range of processes. Usage of local electrolysis units, for instance, could help support the flexibility of the electricity system – i.e. power generation for load balancing and peak load generation. Data from the International Energy Agency (IEA) suggest that, at natural gas prices of 24/MWh – comparable to average prices in the 2010s – a price of 100/tonne of 1





Source: IEA (2019), The Future of Hydrogen. All rights reserved; adapted by NBB.

threshold increases in tandem with the price of hydrogen: at a hydrogen price of \$ 2/kg the price of a tonne CO_2 should go up to \$ 175. That said, hydrogen-based production units should be competitive at the current cost of carbon and hydrogen (\$ 3/kg) in view of the natural gas prices being charged in the final quarter of 2021 (\$ 73/MWh for delivery to the European market in 2022).

¹ Average levelised electricity generation costs focused on load balancing – at a load factor of 15% – according to various fuel cost scenarios: for a natural gas price of \$ 7/MBtu, i.e. \$ 24/MWh, and for hydrogen prices of \$ 1.5, \$ 2 and \$ 3/kg respectively. For information on the scenarios underpinning the chart, see IEA (2019), The Future of Hydrogen.

Safeguarding reliable and affordable low-carbon power supply

The transition to a low-carbon energy system requires adaptation to new environmental requirements for both demand and supply of energy.

For energy demand, such adaptation implies greater energy efficiency and more electrification of applications. After all, if consumption is better managed by measures for rational energy use and energy-efficient equipment, this helps to reduce energy costs, boosts security of supply and reduces emissions of greenhouse gases in the proportion of power in the electricity mix that is still generated using fossil fuels. How

the demand for electricity develops also depends on the pace of electrification of applications. Electricity

is likely to replace fossil energy sources in both transport (electric vehicles), the heating of buildings (heat pumps) and even in some industrial processes.

In Belgium electrification is supported by government measures such as limiting access to a growing number of city centres for cars with internal combustion engines, or, more broadly, promoting electric vehicles through a greener tax system: Flanders has scrapped registration and road tax for electric vehicles, while Wallonia and Brussels have sharply cut these levies. At the federal level, tax relief will gradually be phased out for corporate cars with internal combustion engines, currently at 50% to 100% depending on carbon emissions and the type of fuel; such relief will no longer apply to any new cars bought from 2026. For cars not emitting carbon, relief will initially be kept at 100% and from 2027 reduced to 67.5% in 2031.

Tax incentives – applicable for three years and subject to conditions – were put in place on 1 September 2021

for private individuals and companies installing smart charging points: a tax cut of up to € 1 500 for pri-

vate individuals and a higher deduction of investment costs for companies if the charging point is publicly accessible. The three Regions are also looking to install more public charging points – a necessity if the sale of cars with internal combustion engines is prohibited from 2035, as proposed by the Commission.



Evolution and (r)evolution

in electricity demand

In terms of energy supply, the change must be supported by electricity production that is as neutral as possible in terms of greenhouse gas emissions. At this point, Belgium's electricity system is largely

underpinned by gas and nuclear power plants. Power generated by solar and wind energy is on the

Guaranteeing affordable lowcarbon power supply

introduced a capacity remuneration mechanism (CRM) with the aim to spark replacement capacity until the country has enough renewable energy sources and flexibility mechanisms, i.e. demand-side management

solutions and/or storage capacity. Under this mechanism, the government pays remuneration for the

maintenance of production capacity – as well as for the energy produced – to suppliers selected on the basis of two auctions, held four years and one year before the year of actual supply.

At the first auction for supply in 2025-26, capacity to the tune of around 4 450 MW was selected, at a cost price of € 141 million. Eligible bids to a large extent involved existing generation units − 56% of capacity on offer, including mostly existing gas power plants − plus demand-side management installations and some new storage capacity. Two new gas power plants − in Vilvoorde and Les Awirs, each around 800 MW − were also qualified. Their licence applications are being processed.

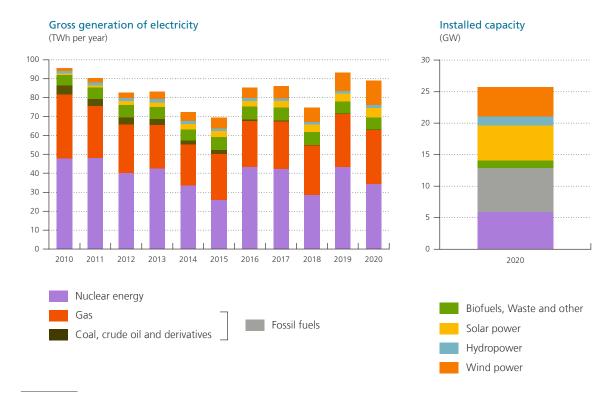
rise – as is appropriate for a transition to low-carbon energy – but the government's decision to get out of nuclear power will require a fast and deep adjustment of the country's electricity system. After all, nuclear energy still accounts for nearly 40 % of electricity generation.

This change should not come at the expense of the security of energy supply needed to keep the economy attractive and guarantee the comfort of households. The federal government has committed to both by guaranteeing a sustainable and affordable supply.

To offset the dismantling between 2022 and 2025 of 5.9 GW in nuclear power, the government has

Chart 7.13

The electricity mix must change in the years ahead



Sources: Eurostat, FPS Economy.

In 2024, a second auction will be held for the same term to help refine contractual volumes and ensure a wide diversity of available technologies, and it will also be open to non-Belgian capacity. When approving the procedure and the regulatory framework, the government paid very close attention to the CRM cost management to ensure this would not result in additional charges for citizens and companies.

The federal government is also aiming for more production from renewable energy sources by further developing wind farms in the North Sea. It is aiming to grant a new concession for 3.2–3.5 GW in additional wind energy capacity by 2030, taking total offshore wind energy capacity to between 5.4 and 5.8 GW.

Under Belgium's National Recovery and Resilience Plan, this will be supplemented with the construction of an offshore energy island that will be hooked up to other offshore production zones, as recently started with Denmark. Belgium's rather limited offshore production potential will be boosted by integration into the European network of offshore connections.

Similar aspirations are visible in proposed infrastructure for onshore transport (Boucle du Hainaut and the Ventilus projects), which should enhance the high-volt-

A coherent and credible energy policy

to attract the requisite investment

age grid to transport the power so generated to consumption centres in Belgium and the EU. Distribution

networks will also have to be adapted to the ever higher share of decentralised renewable energy sources and to demand-side management solutions, requiring bi-directional flows and increased digitalisation of equipment. By better matching the profiles of electricity consumption and generation, it should be possible to use the generation potential through renewable energy sources, despite their higher variability, as well as to limit the need for back-up capacity. It is not enough to encourage consumers to display appropriate behaviour - both through awareness and information campaigns and through pricing that encourage active participation – it is also essential to develop the infrastructure and energy services that enable them to make the most suitable choices. The platform for the exchange of information between distribution network operators, suppliers and regulators, which came on stream in November 2021, is an important step in creating an environment better adjusted to developments in the market, such as the use of smart meters, the ongoing integration of prosumers (i.e. those who both consume and produce) and dynamic pricing.

Ensuring adequate supply that meets long-term targets requires efforts from both private actors and the political authorities. The government should establish a stable and credible regulatory framework for the energy market without delay, to reduce uncertainty and thus support much-needed private investment. Realisation of such investment is under-

pinned by rules devised and enforced by the various levels of government. A coherent approach and

efficient coordination between the various authorities are thus absolutely essential to facilitate as affordable a transition as possible for both citizens and companies.

228

7.4 Ensuring the sustainability of public debt

The pandemic and the floods have

proven the need for fiscal buffers

No prosperity without sustainable public debt

Even though government debt can make economic and societal sense, certain boundaries should not be overstepped. After all, the smooth operation of the fi-

nancial system is based on the confidence of lenders that borrowers are able to meet their obligations – in

their solvency, in other words. In the case of governments, solvency implies that they are able to meet their current and future financial commitments, without resorting to dire economic or socially untenable policy measures. If they were incapable of doing so,

lenders would charge insurmountable risk premiums or even discontinue their lending.

The likelihood of a government losing control of debt dynamics increases the higher public debt gets. To be safe, the government's debt ratio must be suf-

ficiently low for negative shocks to be able to be absorbed and the government to be able to keep

control of debt dynamics. The coronavirus crisis and the floods have proven the need for fiscal buffers to handle crises. Structural challenges, such as an ageing population and climate risks, are also easier to address when public debt is lower.

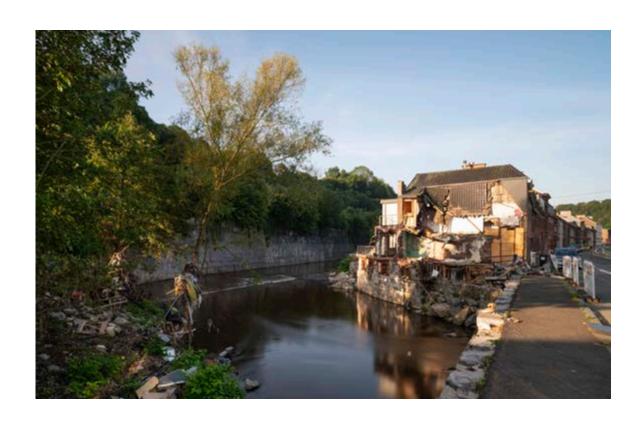
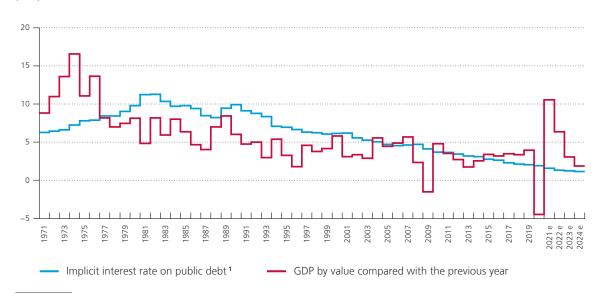


Chart 7.14

Favourable interest growth dynamic: a recent phenomenon in Belgium



Sources: NAI, NBB.

1 Ratio between interest charges in the current year and debt at the end of the previous year.

To keep the development of public debt under control, the government must keep a tight rein on the budget balance at any interest rate level. That is less of a challenge when economic activity is growing fast and interest rates are low. After all, when GDP growth exceeds interest rates – as has been the case for a while now – a minor primary deficit ¹ will not cause an increase in the public debt ratio. However, when interest rates exceed GDP growth – a more familiar phenomenon in the past – a primary deficit causes the public debt ratio to explode and primary surpluses are needed to stabilise the debt ratio.

Although current market funding conditions are enabling the government to take on deficits needed to manage the coronavirus crisis, it is unwise to consistently keep deficits high, as favourable conditions are never forever. History suggests that interest hikes can suddenly be triggered by risk premiums and that low interest rates offer no protection against debt crises, even if they last for a long time.

The sustainability of individual countries' public finances sets the tone for the euro area's financial stability and price stability: what therefore matters is how strong the weakest link is. And whereas monetary policy has been unified, budgetary policies remain the exclusive remit of the Member States and only they are responsible for the sustainability of their public debt.

High and growing public debt jeopardises sustainability of public finances

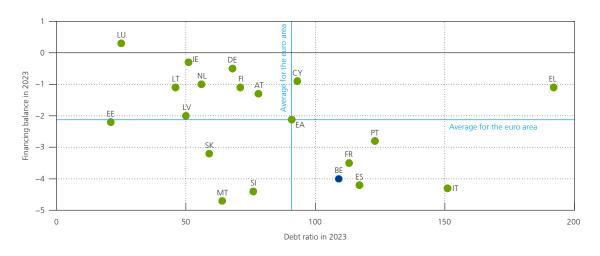
Fiscal policy undoubtedly proved its use during the COVID-19 crisis, but it also left its mark in the shape of an exceedingly steep debt ratio and more heterogeneity between euro area Member States. Even before the pandemic, Belgium had been among the group of countries with high debt ratios and it was one of the Member States that saw their public debt rise the steepest. Extremely worryingly, the Belgian debt ratio is set to continue on this upward path, on the Bank's autumn projections, despite historically very favourable interest growth dynamics. This state of affairs reflects a significant

¹ The primary budget balance is the balance excluding interest charges.

Chart 7.15

Public debt ratio and deficit structurally high in Belgium

(in % of GDP)



Sources: EC. ESCB. NBB.

budget deficit, which, in the absence of a change in policy, will remain systematically above 4 % of GDP in the years ahead.

In a federal state such as Belgium, we should look at the sustainability of public debt for each of the government subsectors. Normally, public debt is expressed as a percentage of GDP, which serves as a good gauge for a country's potential tax base. However, a comparison of the sustainability of public debt between the various government subsectors requires a more specific indicator for the resilience of each subsector. The relationship between gross debt and revenues is a relevant measure of public debt. This ratio's denominator is consciously restricted to available revenues, i.e. less any transfers to other government subsectors, to prevent the same resources being allocated to various entities. This approach makes very plain the heterogeneity of the budgetary situations.

At the end of 2020, the public debt ratio of the federal government and social security together accounted for the highest level, at 3.5 times their annual revenues. However, the federal level has full fiscal autonomy, giving it a powerful lever to change its budget path when necessary. Within the Belgian institutional framework, the Regions have less scope

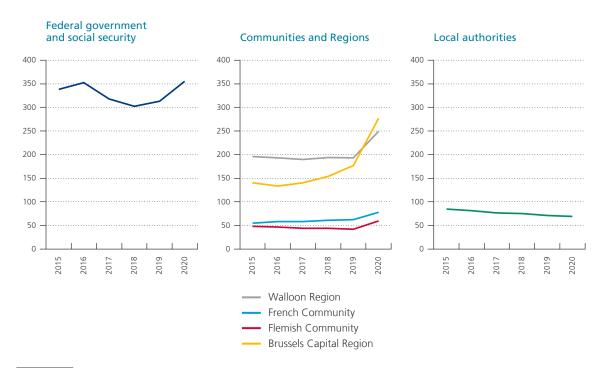
in terms of revenues, as a large proportion is furnished in the shape of transfers from the federal government. This margin is insignificant for the communities, whose revenues derive almost exclusively from federal resources.

Among the federated entities, the Walloon Region is displaying worrying dynamics. Its public debt rose to 2.5 times its annual revenues in 2020. Walloon public finances had been in sizeable deficit even before the health crisis, but the aftermath of the crisis for revenues and spending, the budgetary consequences of the floods and Wallonia's highly ambitious recovery plan will conspire to sharply push up its public debt in the years ahead. The fiscal state of affairs in the Brussels Capital Region is equally disturbing. The Region has seen its budget balance deteriorate persistently in the past few years and it now has the dubious honour of having the highest debt ratio: 280% of its revenues. Meanwhile, the French Community's sustainability of public debt (80 % of its revenues) would appear less problematic, but it has no sources of own revenues and relies almost completely on revenues provided by the federal government. At a little over half of its revenues, the public debt of the Flemish Community is less of a concern, provided it manages to halt the upward trend that started in 2020.

Chart 7.16

Level and dynamics of public debt worrying in some government sub-sectors

(gross debt in % of revenues less transfers to other government sub-sectors)



Sources: NAI, NBB.

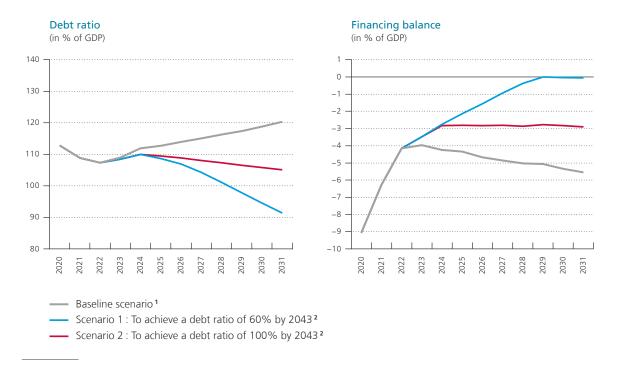
To return public debt ratios to sustainable levels requires tremendous effort

To get an idea of the sheer budgetary effort that will be required to turn around general government's public debt ratio, it is useful to simulate a range of scenarios for public debt and the financing balance. In the absence of any change in policy, the baseline scenario sees the budget deficit go up further, falling in with the Bank's December 2021 projections until 2024. Then, from 2025 onwards, assuming an average real GDP growth of 1.3 % per annum, the situation would deteriorate year-on-year in the wake of steadily rising population ageing costs (based on the latest report by the Study Committee on Ageing or SCA). Under this scenario, the deficit would widen to around 6% of GDP by 2031, pushing the public debt ratio to above 120 % of GDP. This analysis does not take into account the possible occurrence of negative shocks nor their resulting budget balance deterioration.

The alternative scenarios envisage public finances being consolidated by linking the financing balance path to a target for the public debt ratio. A first scenario sees the financing balance improve from 2023 and, all other things being equal, achieve the targeted debt ratio of 60% of GDP within a period of 20 years the current debt criterion of the Stability and Growth Pact. In accordance with the guidelines of the Pact's preventive arm, the annual additional budget effort is pegged at up to 0.6 percentage point of GDP and continues until a deficit is achieved that meets the scenario target. Under this scenario, the balance should reach equilibrium from around 2028. Another, less demanding scenario applies the same mechanism to financing balance improvement to arrive at a debt ratio of 100% of GDP within 20 years. At a normal rhythm, the deficit should then be reduced to a maximum of 2.8% of GDP.

The analysis shows that achieving a debt ratio of 60 % of GDP in 20 years' time would require a significant and consistent effort to achieve a balanced budget.

Chart 7.17
Significant fiscal restructuring needed to reduce general government debt ratio



Sources: NAI, NBB

This would be difficult to pull off in view of the rising costs of an ageing population and climate policy challenges. Such a scenario in keeping with current European fiscal rules appears very or even too ambitious and would become even more so if interest rates and growth were to develop less favourably than the baseline scenario envisages. In that case, the primary balance would have even more improving to do.

The more moderate scenario, which sees the public debt ratio first stabilise before very gradually reverting to 100% of GDP, may be considered the minimum scenario for the sustainability of public debt. Even this scenario still requires a substantial consolidation effort to get the deficit at or just below 3% of GDP. And here too, a negative economic shock could cause a further deterioration in the financing balance. To build margins that could help absorb such shocks or interest rate rises, a much lower deficit than the reference value of 3% of GDP will be essential in the medium term.

¹ The baseline scenario reflects the Bank's December 2021 macroeconomic projections, which ran until 2024. For the 2025-43 period, it is working on the 2024 primary balance and factoring in the ageing population costs and GDP hypotheses underpinning the July 2021 SCA report. Nominal interest rates reflect market expectations at the end of November 2021, with inflation – here the same as the GDP deflator – amounting to 2 % from 2025. Other hypotheses include the term to maturity of public debt remaining stable at an average ten years and the public debt ratio not being influenced by exogenous factors.

² From 2023, the annual additional consolidation effort compared with the previous year is limited to 0.6 percentage point of GDP, until the deficit reaches the level required for the target.

Government spending should come down or economic growth should go up

Even before pandemic, in 2019, government spending in Belgium exceeded the euro area average. These relatively high levels have been recorded in Belgium for many decades.

A recent study 1 by the Bank, which compares government spending levels in Belgium with those in its neighbouring countries, showed that this higher spending chiefly relates to salaries and subsidies. Broken down by category, spending was found to be relatively high in "economic affairs", "education" and "general public services", even before the health crisis. In the "economic affairs" category the key item of concern is wage subsidies, which have

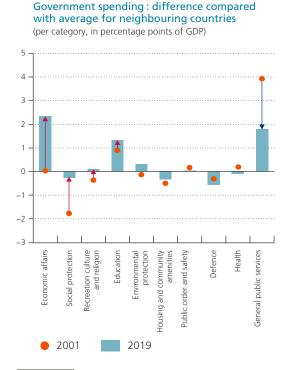
surged since the early 2000s. Interest charges on public debt, which fall into the "general public services" category, have remained relatively high even despite some decline. As for education, the gap with the neighbouring countries' average is predominantly explained by spending on primary and secondary education; the differences are particularly marked on the cumulative wage bill. Lastly, social protection spending has gone up markedly. In 2001, there had still been a negative difference with the country's neighbours, but spending has shot up since, and the gap with neighbouring countries had disappeared by 2019.

According to the Bank's economic autumn projections, primary spending – i.e. government spending excluding interest charges on public debt – as a percentage of GDP is likely to continue its upward trend in the years ahead, ending up at around 53 % of GDP by 2024 compared with 50 % in 2019.

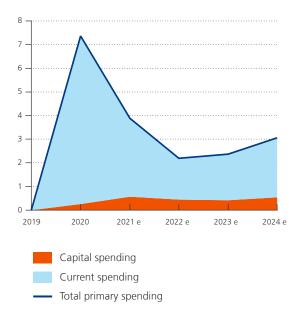
The rise predicted by 2024 largely reflects higher current expenditure, a category comprising wages,

Chart 7.18

Spending already high compared with neighbouring countries and set to rise further



Primary spending since 2019 (in percentage points of GDP)



Sources: EC, NAI, NBB.

¹ See Godefroid H., P. Stinglhamber and S. Van Parys (2021), "What kind of public expenditure is high in Belgium? A comparison with neighbouring countries", NBB, *Economic Review*, September.

subsidies and social benefits. The latter two will feed the post-pandemic advance but are not exactly the most economic growth-friendly type of spending for the longer term. By contrast, capital spending – consisting of government investment and investment subsidies to companies – has only a limited impact on rising primary spending.

To ensure the sustainability of public finances, government spending cannot keep rising in the next couple of years, while the spending mix must change to enhance the economy's growth potential and address fu-

ture challenges, including the transition to a low-carbon economy and its digitalisation. Restructuring of government spending

requires both managing current expenditure and creating margins to increase capital spending and, more particularly, economic growth-enhancing investment.

In the absence of any change in policy, current government spending looks set to expand in the decades ahead as the population ages. In its 2021 report, the SCA puts the peak in social benefits at 30.2% of GDP in 2049, an increase by 3.7 percentage points of GDP compared with 2022. In fact, by 2070, the gap is forecast to still be at 3.3 percentage points of GDP. Between 2022 and 2027, these benefits are set to add an average 0.3 percentage point of GDP per year. Pension measures approved by the federal government at the end of 2020 have pushed up population ageing costs: higher minimum pensions, higher wage ceilings (for employees) and income ceilings (for the self-employed) towards pension calculations, and the abolition of the correction factor for the self-employed, which meant that only a proportion of their income qualified for the calculation of their pensions.

The federal government has yet to decide on pension systems reforms to help cut its fiscal cost over time. To ensure the financial sustainability of social security, it is counting on a broader economic base and an increased employment rate (with an employment target at 80 % in 2030, as discussed in section 7.2).

At the European level, the budgetary impact of population ageing is also the subject of projections, the outcomes of which are reported once every three years in the Ageing Report, the most recent of which was released in May 2021. Together, the

Commission and EU Member States draw up longterm projections for age-related public expenditure, covering pensions, health care and education. These projections cannot be compared directly with those of Belgium's SCA, as data, methodologies and assumptions differ. That said, the report's coherent methodology does allow for a comparison between EU countries.

On the data provided by the most recent Ageing Report, in 2019 age-related public expenditure amounted to 24.6% of GDP in the euro area as

Expected rise in public

spending mostly due to higher

current expenditure

a whole, with major differences between Member States. At 25.6 % of GDP, Belgium was among the Member States

recording higher-than-average spending, while the

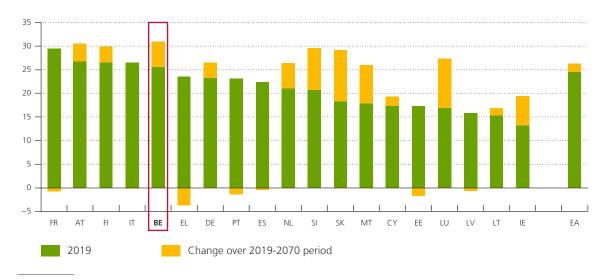
expected spending increase by 5.4 percentage points of GDP in the 2019-2070 period - according to the reference simulation for Belgium – is among the highest of all countries. Steeply higher pensions spending is mostly to blame. As a result, Belgium's age-related public expenditure in 2070 would be at the very top of the euro area, at 30.9 % of GDP.



Chart 7.19

Age-related public expenditure is high in Belgium and looks set to grow more than in most other euro area countries

(in % of GDP)



Source: EC.

The Ageing Report figures underline that population ageing will be a key challenge for most euro area Member States when it comes to the sustainability of public finances in the long term. The Ecofin Council has called on Member States to address high age-related expenditure by raising employment rates and productivity, closing the gender gap in the labour markets and adapting pension and health care systems. This is all the more pertinent to Belgium, given the country's high age-related spending.

Credible European and Belgian fiscal frameworks are crucially important

A sound fiscal framework, covering the full range of procedures, institutions and fiscal rules, is an essential instrument to create a healthy fiscal policy. Such a framework exists at the European level in the shape of the Stability and Growth Pact (SGP), whose aim is to ensure the sustainability of Member States' public finances and encourage fiscal discipline. In its 2020 evaluation of the SGP, the Commission flagged up a number of weaknesses including the complexity of the rules, the lack of national ownership, the often procyclical nature of fiscal policy, persistently high public debt in some Member States and the lack of focus

on public investment. Based on this evaluation, the Commission initiated a public debate on the reform of the European fiscal framework. Having been postponed in the wake of the coronavirus crisis, the debate was reopened in October 2021 and interested parties were invited to share their views. Drawing on their input, the Commission will attempt to arrive at a broad-based consensus view well before 2023. It is crucially important for Member States to have clarity on this new framework when preparing their budgets for 2023.

The European fiscal framework must be supported by robust and efficient national frameworks, as these should help improve compliance with the European framework and enhance national ownership. An analysis of the key elements of Belgium's fiscal framework and a comparison with best practices in other euro area countries reveals a number of areas for improvement in the Belgian framework ¹.

It is highly recommended for all levels of the Belgian government to implement a multi-year budget plan,

¹ For more details, see Bisciari P., H. Godefroid, W. Melyn, R. Schoonackers, P. Stinglhamber and L. Van Meensel (2020), "Belgium's fiscal framework: what is good and what could be better?", NBB, Economic Review, December.

as most budgetary measures have an impact beyond the fiscal year. Having such a framework in place should encourage timely planning and a closer observance of budgetary targets in the medium term. On a separate note, an expenditure rule might have a key role to play in such a multi-year budget. In fact, such a rule already exists at the European level, but is only applied after the fact, i.e. when

the Commission evaluates the budget numbers. In a country such as Belgium, in particular, where government spending is high,

an expenditure rule could serve as a key tool to increase visibility of selected trends and to implement medium-term targets. A number of technical exercises have already been started in this regard. For example, the Flemish authorities are working on a Flemish expenditure standard, while the Public Sector Borrowing Requirement section of Belgium's High Council of Finance has joined forces with the Commission and the OECD to develop an expenditure rule at the Belgian level.

In addition, budget numbers put forward by governments must be a transparent reflection of all expenditures and revenues that influence their budget

balances, in keeping with ESA accounting rules. This implies that the budget balance should not be creatively accounted by leaving out certain expenditure, even if it might pay back over time, as in the case of some investment spending.

Lastly, Belgium needs effective budget coordination between the various policy levels, as this contributes

Strongly recommended:

multi-year budget planning at all

levels of Belgian government

to general government

fiscal discipline. The cooperation agreement of 13 December 2013 between the country's feder-

al government, Communities and Regions provides a formal framework for budget coordination in Belgium. To date, the various authorities have never agreed on the breakdown of the general government budget path as envisaged in the stability programme. The High Council of Finance, the Commission and the Ecofin Council have repeatedly emphasised the necessity to fully implement the 13 December 2013 agreement.

It is important to forge ahead on these areas of concern, as the suggested further changes should help make public finances healthier, enhance the efficiency of government and thus ensure the sustainability of Belgian public finances in the long term.

Prudential regulation and supervision

A. Introduction

In 2021, the economic recovery was faster than expected in Belgium and elsewhere in Europe, although there are some persisting uncertainties, particularly concerning the latent risk of renewed waves of the COVID-19 pandemic. In these circumstances, the Bank's prudential activities have progressively returned to normal and certain exceptional support measures specific to the crisis have been gradually withdrawn.

While 2020 had brought the need for adjustments to the regulatory and legal framework concerning crisis-related aspects, in 2021 it became possible to refocus on matters relating to structural developments which had begun or been announced before the pandemic erupted. At microprudential level, the Bank is responsible for the supervision of credit institutions under the single supervisory mechanism (SSM), investment firms, insurance undertakings, financial market infrastructures and payment institutions. Changes in the regulatory and legal framework specific to certain sectors are described in chapter B, which also deals with developments applicable to all sectors. Among other things, the Bank continues to devote increasing

resources and attention to checking compliance with the provisions on the prevention of money-laundering and the risks connected with climate change.

In 2021, it became possible to refocus the Bank's prudential activities on more structural risks for the financial sector

In this context with prudential activities steadily returning to normal, the priorities for the operational surveillance of institutions subject to the Bank's supervision are gradually undergoing a shift of focus from a policy of managing the repercussions of the crisis towards management of the more

structural risks facing the financial sector, notably those relating to digitalisation, the low interest rate environment and the climate transition. The operational aspects relating to the supervision of financial institutions in 2021 are presented in chapter C.

The digitalisation of financial services gained further importance in 2021. Innovative developments, in particular, generate opportunities for the financial sector so long as financial institutions make the necessary investment, otherwise they will start lagging behind their competitors in that regard. These developments also create risks which justify the adoption of appropriate measures at regulatory and prudential level. Chapter D deals with the aspects of regulation and prudential supervision specifically connected with the digitalisation of financial services.

Finally, the Bank is also the national resolution authority in Belgium. In 2021, one of the main advances in this respect was the transposition of the second Bank Recovery and Resolution Directive (BRRD2) into Belgian law. Details of the action taken under this mandate are given in chapter E.

Apart from its microprudential missions, the Bank also exercises a macroprudential mandate, the Law of 24 April 2014 having officially designated the Bank

as the macroprudential authority in Belgium. Recent initiatives pursuant to that mandate are described in box 5 of the section of the Report on "Economic and financial developments". The Macroprudential Report published annually by the Bank describes the macroprudential framework in more detail.

Regulatory and legal framework

A number of specific prudential

measures relating to COVID-19

were phased out in 2021

1. Banks

1.1 Aspects relating to management of the **COVID-19 crisis**

1.1.1 Prudential measures during the COVID-19 crisis

The COVID-19 crisis also left its mark on the prudential regulatory framework of the banking sector. The previously announced modifications to that framework were suspended and specific COVID-19related measures were adopted at global, European

and national level. In that regard, the emphasis was on support for bank lending to the real economy, and on the control of

credit risks. The many modifications to the regulatory framework and the prudential measures adopted in the context of the COVID-19 crisis are described in last year's Report (see section II.B.1.1. of the Annual Report 2020). A number of those modifications and measures remained in force in 2021 but were phased out during the year.

Lending to Belgian businesses and households

The maintenance of lending to the Belgian economy was vitally important during the COVID-19 crisis. The Bank therefore continued to keep a very close watch on what was happening, monitoring the loans granted by Belgian banks to Belgian households and firms at the level of both individual banks and individual economic sectors. For that purpose, lending in neighbouring countries and in the euro area provided the basis for comparison. The conclusions regarding loans to Belgian firms were notified monthly to the federal Parliament.

Recourse to the system of State guarantees and moratoria on loan repayments established during the pandemic was also monitored. In order to provide temporary support for businesses, selfemployed workers and households, the federal government and the Belgian financial sector had concluded an agreement on the subject in 2020 with the support of the Bank. That agreement was based on two pillars: the grant of new Statequaranteed loans to firms and the option of deferring payment on existing loans to firms and households. The first of these pillars was maintained throughout 2021. Thus, banks and SMEs were

> still able to use a federal government scheme for loans with a maturity of between one

little use was made of this scheme. That indicates first that the banks remained willing to continue lending to the real economy during the pandemic, even without that aid measure, and next that demand - particularly for new investment loans was modest during that period. The second pillar of that agreement, namely the general deferral of payments on existing loans to firms and households, came to an end during 2021, after having been extended several times. This measure was very successful: it was used for 6 % of outstanding household mortgages and 13% of outstanding business loans. This payment deferral therefore

Finally, the European Central Bank (ECB) and the Bank kept a close eye on the management of credit institutions' credit risks. In that regard, they were primarily interested in non-performing loans, the creation of adequate provisions, classification

provided significant support for those businesses

and households in getting through the crisis.

of loans according to their credit quality in accordance with the International Financial Reporting Standards (IFRS), etc. (see also section C.1.2.). In order to ensure a sustainable recovery following the shock caused by the pandemic, banks must not only continue lending to the economy and supporting viable borrowers facing temporary financial difficulties. It is also vital that they recog-

nise crisis-induced losses promptly and in full, that they make proper provisions for future losses, and that they adopt pro-

active credit risk management practices.

The recommendations limiting profit distributions ended on 30 September

1.1.2 Dividend policy

At the start of the COVID-19 crisis, the prudential supervisory and regulatory authorities eased some aspects of the regulatory capital requirements in order to support lending and absorb the losses caused by the crisis. In order to avert inappropriate use of these available buffers, with effect from March 2020. the ECB, the European Banking Authority (EBA), the European Insurance and Occupational Pensions Authority (EIOPA), the European Systemic Risk Board (ESRB) and the Bank adopted various micro- and macroprudential measures to limit the distribution of profits in the form of dividends, share buybacks or variable remuneration (see section II.B.1.3. of the Annual Report 2020).

While all forms of profit distribution were strongly discouraged in 2020, the ESRB's updated Recommendation of 15 December 2020 allowed scope for the limited resumption of dividend distributions from 2 January 2021 to 30 September 2021 1. In accordance with the ensuing ECB Recommendation addressed to significant credit institutions², during that nine-month period, the Bank therefore recommended that Belgian less-significant credit institutions should not pay out amounts to their shareholders representing more than 15% of their cumulative profits for the years 2019 and 2020, or more than 20 basis points in terms of the Tier 1 capital ratio, whichever is

the smaller³. Similar restrictions were introduced for Belgian insurers (see section B.2.1.). A macroprudential Recommendation by the Bank extended these new recommendations to all Belgian banks and insurers, including subsidiaries of international groups 4.

As the outlook for the economy and the financial

sector improved during the year and the measures supporting the economy were gradually withdrawn, it became possible

after 30 September 2021 to remove these exceptional conservation measures aimed at strengthening the financial sector's resilience. In accordance with the decisions of the ECB and the ESRB not to adopt new Recommendations in this area, the Bank decided to let the micro- and macroprudential Recommendations expire on that date. However, the Bank does encourage financial institutions to remain cautious in their decisions on dividends, share buybacks and variable remuneration, and to base those decisions on a forward assessment of their capital needs 5.

1.1.3 The European Commission's strategy for non-performing loans

In December 2020, the European Commission published its strategy for preventing the future build-up of non-performing loans (NPL) in the EU in the aftermath of the COVID-19 crisis. That strategy follows on from the measures taken since 2017 by the European Commission, but also by the European Central Bank and the European Banking Authority (in particular, the measures on minimum provisions and the NPL reduction strategies). This strategy aims to ensure continuity of access to funding sources for households and businesses during the crisis. The proposed strategy is structured around four goals.

First, the Commission intends to develop secondary markets for trading impaired assets while guaranteeing debtor protection. That would enable credit

¹ ESRB Recommendation of 15 December 2020 amending Recommendation ESRB/2020/7 on the restriction of distributions during the COVID-19 pandemic (ESRB/2020/15)

² ECB Recommendation of 15 December 2020 (ECB/2020/62).

³ Circular NBB 2020 049 of 22 December 2020 on measures in the context of coronavirus – Expectations concerning the dividend policy and remuneration policy with effect from 2 January 2021.

⁴ Macroprudential Communication of the Bank dated 18 December 2020 on the restriction of profit distribution by Belgian financial institutions.

⁵ Press release by the Bank: "The National Bank calls for prudent dividend policy after 30 September", 28 September 2021.

institutions to effectively reduce the proportion of NPLs on their balance sheet and thus to concentrate on their role of granting loans.

In order to enhance transparency on these markets and improve the exchange of information between the various players, the Commission also proposes setting up a central data hub at European Union level. In that connection, the EBA conducted a consultation in May 2021 on the revision of the non-performing loan reporting tables.

Second, in order to enhance legal certainty and speed up debt recovery, the Commission proposes reforming the EU corporate insolvency and debt recovery legislation in order to ensure closer convergence between the various existing frameworks.

Third, the Commission proposes supporting the creation of national asset management companies. These companies should enable struggling credit institutions to remove NPLs from their balance sheet, the aim being for these institutions to be able to concentrate on lending. The Commission also intends to promote cooperation between these national asset management

companies, particularly in regard to the exchange of good practices and the coordination of measures.

The Bank continues to favour the full and speedy implementation of the Basel III standards

Finally, the Commission draws attention to the option available to the authorities in accordance with the BRRD and the State aid framework to implement precautionary public support measures where needed in order to ensure the continued funding of the real economy.

1.2 Activities of the Basel Committee on Banking Supervision

After finalising the Basel III rules at the end of 2017, the Basel Committee on Banking Supervision (BCBS) announced a pause in the drafting of new regulations. The Committee turned its attention to implementing the latest elements of the Basel III framework (see section B.1.3. on the publication of a new banking package by the European Commission), assessing the operation of its regulatory framework in the context of COVID-19 and, more generally, analysing the current structural trends in the banking world, such as digitalisation, the impact of the low interest rate environment on

business models, and the approach to climate-related financial risks.

In the course of this latest work, the Committee published analytical reports on the integration of climate-related financial risks in banks' risk management, and a consultative document setting out principles for the effective control and monitoring of these risks in internationally active banks (see section B.3.2.).

The Committee is currently also processing the responses to a consultative document on the prudential treatment of crypto-assets (see section D.1.3.). Although banks' exposure to them is limited at this stage, the steady advance of these assets and the associated services, and the innovations in this field, combined with the growing interest in them on the part of some banks, could heighten the risks to financial stability and to the banking system in the absence of clear prudential treatment.

Finally, the Committee published new principles designed to strengthen the banks' operational resilience, to enable them to cope better with

serious events such as pandemics, cyber-security incidents, technological failures or natural disasters, and to adapt and

recover from them. Apart from these principles, the Committee updated a number of related principles concerning good management of operational risks on the part of banks. In view of their vital role in the global financial system, bolstering the banks' resilience in the face of operational shocks should make the financial system as a whole more resilient.

1.3 Integration of the definitive Basel III standards into European legislation

On 27 October 2021, the European Commission presented a new package of changes to the banking legislation, comprising a Directive amending the Capital Requirements Directive (CRD6)¹ and two Regulations, namely an updated version of the Capital

¹ Proposal for a Directive of the European Parliament and of the Council amending Directive 2013/36/EU as regards supervisory powers, sanctions, third-country branches, and environmental, social and governance risks, and amending Directive 2014/59/EU, 27 October 2021.

Requirements Regulation (CRR 3¹) and a Regulation on resolution-related subjects².

The main aim of this set of texts is to implement the final elements of the Basel III standards for European banks. The BCBS completed its reforms of the banking regulations at the end of 2017 by publishing measures for calculating the risk-weighted assets (RWA), which form the denominator of the risk-based capital ratio. During the financial crisis, there were frequent questions concerning the under-calibration, complexity and opacity of the calculation of the risk-weighted assets via internal models, and the unjustified variability in that regard. The Committee therefore decided to abolish the use of internal models for risks considered incapable of being modelled (e.g. operational risks and credit risks inherent in equity exposures) and to limit it for other risks. The last part of these restrictions was named the "output floor". It specifies that the total risk-weighted assets calculated via internal models must not be less than 72.5 % of the risk-weighted assets calculated by the standardised, more conservative approach. The Basel Committee plans to introduce these standards on 1 January 2023, with the output floor initially set at 50 %, and then to be raised gradually to reach 72.5 % in 2028.

Apart from the implementation of the Basel III standards, the new package of measures also concerns greater harmonisation of certain powers and supervision tools. Thus, the package includes proposals for the regulation of European branches of third-country banks, with closer cooperation and the exchange of information between the supervisory authorities concerned, harmonisation of the minimum capital and liquidity requirements, and the possibility of subjecting systemically important branches to stricter supervision, or asking the banks concerned to convert those branches into subsidiaries. If these proposals are adopted, they will permit more uniform supervision of such

One of the final parts of the new banking package consists in the more detailed drafting of the rules on the management and monitoring of environmental, social and governance – or ESG – risks. In particular, the supervisory authorities are required to integrate these risks into their supervision process and organise regular climate stress tests. Institutions must include these risks in their risk management and report on them to both the supervisory authority and the general public.

The Bank welcomes both the implementation of the Basel III standards for European banks and the aspects of this package mentioned above which are not related to own funds, but it regrets that the European Commission has opted to introduce standards which are not entirely in line with the BCBS stipulations. For instance, the transitional measures for the introduction of the output floor go much farther than those advocated by the BCBS and continue for longer. The proposal also maintains the pre-existing deviations from the current Basel rules, which make the requirements less strict for European banks. The Bank continues to favour the full, speedy implementation of the Basel III standards. In the long term, it is very much in the interests of the European economy to be able to rely (very) largely on a robust financial system in which the banks have adequate own funds. Deviating from the Basel III Agreement could have an adverse impact on confidence in both the European banking sector and the EU regulatory framework. That in turn is liable to have a detrimental effect on financial stability and on the economy. It is therefore important to implement international agreements in full and in a timely and consistent manner. With that in mind, the Bank joined more than 25 other European central banks and supervisory authorities in signing a letter to that effect, addressed to the European Commissioner for Financial Services.

branches. These measures also further specify the requirements concerning expertise, availability and aptitude ("fit and proper") for the management and key personnel of credit institutions, strengthen the supervisory authorities' power to impose sanctions, give them a greater say in significant operations such as mergers or the acquisition of interests in commercial undertakings, and finally consolidate the independence of the supervisory authorities by banning them from trading in the financial instruments of institutions subject to their supervision or performing duties in such institutions.

¹ Proposal for a Regulation of the European Parliament and of the Council amending Regulation (EU) No. 575/2013 as regards requirements for credit risk, credit valuation adjustment risk, operational risk, market risk and the output floor, 27 October 2021.

² Proposal for a Regulation of the European Parliament and of the Council amending Regulation (EU) No. 575/2013 and Directive 2014/59/EU as regards the prudential treatment of global systemically important institution groups with a multiple point of entry resolution strategy and a methodology for the indirect subscription of instruments eligible for meeting the minimum requirement for own funds and eligible liabilities, 27 October 2021.



In addition, the output floor is only imposed at consolidated level for international banking groups. In the past, the banking rules have always applied both at consolidated group level and to individual local banking subsidiaries. This would create a regrettable precedent for Member States such as Belgium which host banks from other EU Member States, in view of the currently incomplete state of the banking union.

1.4 Amendment of the Banking Law

The Law of 11 July 2021, which transposes the CRD5 Directive and anticipates the transposition

of some of the Directive's provisions concerning the prudential supervision of investment firms (Investment Firms Directive – IFD), came into force on 23 July 2021 ¹.

¹ Law of 11 July 2021 transposing Directive 2019/878 of the European Parliament and of the Council of 20 May 2019, Directive 2019/879 of the European Parliament and of the Council of 20 May 2019, Directive 2019/2034 of the European Parliament and of the Council of 27 November 2019, Directive 2019/2177 of the European Parliament and of the Council of 19 December 2019, and Directive 2021/338 of the European Parliament and of the Council of 16 February 2021, and containing miscellaneous provisions (Moniteur belge/Belgisch Staatsblad of 23 July 2021, Ed. 3, pp. 76062 ff.).

The main changes which this law makes to the Banking Law concern financial holding companies and mixed financial holding companies, third-country

groups operating via regulated subsidiaries in the EU, the introduction of the Pillar 2 guidance (P2G) and the leverage risk. In regard to the macroprudential

tools, the systemic risk buffer is now supplemented by the option of specifying one or more sectoral systemic risk buffers.

Changes were likewise made to the Banking Law concerning the definition of a strategic decision and the remuneration policy.

Finally, a proportional regime was also introduced. This specifies that submission of the report by the effective management on internal control by less significant institutions (LSIs) and the updating of the recovery plans of certain credit institutions can take place less frequently. From now on, LSIs will only have to submit a full internal control report by the effective management every two years. In the year in which a full report is not required, a brief summary note will be sent. The recovery plan will only need to be updated every two years by credit institutions subject to simplified obligations.

1.5 Transposition of the Covered Bonds Directive into Belgian law

By means of the Covered Bonds Directive¹, the European Union aims to establish a minimum harmonised framework for the issuance of such bonds. Covered bonds are debt securities covered by a pool of segregated loans. In the event of insolvency or resolution of the credit institution which issued the covered bonds, bond-holders have an exclusive or preferential right to those segregated loans and a general right of recourse against the credit institution.

Since the minimum harmonisation is based on best practices derived from existing legal frameworks of the Member States, the changes to be made to the

1 Directive (EU) 2019/2162 of the European Parliament and of the Council of 27 November 2019 on the issue of covered bonds and covered bond public supervision and amending Directives 2009/65/EC and 2014/59/EU Belgian legal framework are minor. In order to be able to offer investors a high degree of protection and to guarantee the quality of the debt instru-

The Covered Bonds Directive

aims to establish a minimum

harmonised framework for the

issuance of covered bonds

ments issued, the current level of requirements under Belgian law was maintained. Provisions which go beyond the Directive's minimum requirements are

thus retained. Some changes were made in order to exercise some of the options set out in the Covered Bonds Directive. The main changes lie in the introduction of new requirements concerning extendable maturity structures and the publication of information for investors, and in various additional clarifications concerning (i) valuation methods, (ii) eligibility criteria for cover assets, (iii) use of derivative contracts, (iv) liquidity and coverage tests, and (v) conditions for including acquired cover assets in the cover pool. The Covered Bonds Directive is transposed into Belgian law² by a law and an as yet unpublished Royal Decree. These texts will enter into force on 8 July 2022.

Apart from the Covered Bonds Directive, Regulation (EU) 2019/2160³ which essentially amends Article 129 of the CRR⁴, was adopted. These amendments are primarily related to the identification of high-quality covered bonds eligible for a preferential risk weighting. This Regulation will also enter into force on 8 July 2022.

² Law of 26 November 2021 amending the Law of 25 April 2014 on the status and supervision of credit institutions and investment firms for the purpose of transposing Directive (EU) 2019/2162 of the European Parliament and of the Council of 27 November 2019 on the issue of covered bonds and covered bond public supervision, and amending the Law of 11 March 2018 on the status and supervision of payment institutions and electronic money institutions, the taking up and pursuit of the activities of a payment service provider and the activity of issuing electronic money, and access to payment systems.

³ Regulation (EU) 2019/2160 of the European Parliament and of the Council of 27 November 2019 amending Regulation (EU) No. 575/2013 as regards exposures in the form of covered bonds.

⁴ Regulation (EU) No. 575/2013 of the European Parliament and of the Council of 26 June 2013 on prudential requirements for credit institutions and investment firms and amending Regulation (EU) No. 648/2012.

1.6 Reporting

In order to monitor the solvency position and financial situation of financial institutions subject to their supervision, the supervisory authorities (the Bank, the ECB, the Single Resolution Board (SRB) and the EBA) regularly request information from those institutions. To that end, various reporting requirements are

imposed at both European level (by the EBA, the ECB and the SRB) and at national level (by the Bank). In this connection, proportionality and the overall

reporting burden borne by the institutions are always taken into account.

However, the authorities concerned recognise that in recent years the reporting obligations have become much more numerous and complex and wish to address this. In this context, the CRR gave the EBA a number of mandates ¹ to explore ways of alleviating the reporting burden and the associated costs for the institutions.

Cost-benefit analysis

Under the mandate given by the CRR, the EBA conducted a cost-benefit analysis which included examination of the costs that institutions incurred in complying with the (European) reporting requirements on reporting to the supervisory authorities. The analysis also assessed whether those costs were proportionate to the benefits for prudential supervision and made recommendations on how the costs could be reduced, especially for the smallest institutions². The final cost-benefit report was published on 7 July 2021. It contains 25 recommendations aimed at making the European reporting framework more proportionate, continuing to promote coordination between the various supervisory authorities that draw up reporting obligations, and encouraging institutions to further automate their internal reporting processes³. The EBA considers that the combined effect of these recommendations could ease the burden on institutions in general, especially in the case of the smallest banks.

The report's recommendations will be implemented gradually in the years ahead.

Feasibility report on the creation of an integrated reporting system

The authorities concerned are

aware of the reporting burden and

are taking measures to alleviate

it to some extent in the future

Apart from the cost-benefit analysis, the EBA was also asked to draft a feasibility report for the de-

velopment of an integrated system for collecting statistical data, prudential data and resolution data, in cooperation with the authorities responsible for

prudential supervision, deposit guarantee schemes, resolution and the European System of Central Banks (ESCB). Among other things, that feasibility study and integrated reporting framework should lead to the definition of processes for harmonising the existing and future reporting obligations, easing the financial and administrative burdens associated with reporting, and improving the efficiency of the overall reporting process. The final feasibility report was published 4 on 16 December 2021 and presents a long-term view of the organisation of reporting procedures and the way in which they can be streamlined and improved in the future, and of cooperation between the authorities concerned. The report identifies certain measures that might be feasible in the short term and aspects requiring more detailed research.

For some time the ESCB has been working, via its Integrated Reporting Framework (IReF), to integrate the various statistical reporting requirements which it has introduced under its mandate. This ESCB project gathered momentum over the past year as a result of the ECB's public cost-benefit analysis⁵. The findings of that ECB analysis will provide guidance for this project. The lessons to be drawn from this ESCB project could give considerable impetus to the next steps of the EBA's broader feasibility report, aimed at integrating not only statistical data but also prudential and resolution data.

The Bank has always actively supported the above-mentioned European initiatives and, within the limits of its mandate, has also taken measures

¹ See Article 430 (8)(c) of Regulation (EU) No. 575/2013 (CRR).

^{2 &}quot;Smaller institutions" means institutions which conform to the definition of "small, non-complex institutions" in Article 4 (1), point 145, of Regulation (EU) No. 575/2013 (CRR).

³ EBA Study of the cost of compliance with supervisory reporting requirements report (EBA/REP/2021/15), 7 June 2021.

⁴ EBA's feasibility study on integrated reporting system provides a long-term vision for increasing efficiencies and reducing reporting costs (EBA/REP/2021/38), 16 December 2021.

⁵ ESCB long-term strategy for banks' data reporting, November 2020.

to alleviate to some extent the reporting burden imposed at national level. In revising "Scheme A" (Book 1 of the scheme for the periodic information which credit institutions have to submit concerning their financial situation), which it uses for prudential and statistical purposes, the Bank has attempted to alleviate the reporting burden by removing some of the obligations ¹.

1.7 EBA guidelines and Bank Circular on loan origination and monitoring

In June 2020, the EBA published new guidelines on

The new EBA rules on loan origination

and monitoring aim to strengthen

financial stability and the soundness

of the European banking system

loan origination and monitoring (EBA/GL/2020/06). These guidelines form part of the final component of the EU's July 2017 action plan² in response to the

problem of non-performing loans³ (NPLs).

These new guidelines aim to improve the credit quality of new loans and the monitoring of existing loans in order to limit the future incidence of NPLs and thus to strengthen financial stability and the soundness of the European banking system. But they also aim to reflect supervision priorities and developments in supervision policy relating to lending, such as the development of socially responsible investment.

These guidelines should help institutions to improve their internal governance practices, arrangements, processes and systems in order to ensure that their loan origination and their credit risk management and monitoring comply with sound, prudent standards ⁴. Institutions must abide by the regulations, particularly in regard to consumer protection, mortgage lending and measures to combat money-laundering, but they must also deal appropriately with the new emerging risks, such as those concerning technological innovations, while taking care to develop more socially

responsible investment, e.g. by taking better account of environmental, social and governance (ESG) factors.

However, the EBA stresses that these guidelines should be implemented proportionately. For instance, in regard to loan origination, that proportionality can be applied according to the size, nature and complexity of the loan, while in regard to loan monitoring it may also be applied according to the type, size and risk profile of the borrower.

Circular NBB_2021_18 transposed these EBA guide-lines in full. They came into force on 30 June 2021.

However, in order to take account of the substantial operational adjustment efforts that institutions made during the COVID-19 pandemic, the Bank decided to

grant them a 6-month tolerance margin for conforming to that Circular in practice.

In the case of new loan origination, institutions had to conform to the Circular by 31 December 2021. However, they have until 30 June 2022 to comply in the case of some old loans renegotiated after the Circular came into force. Finally, in regard to the monitoring of existing loans, institutions have to comply with the Circular by no later than 30 June 2024.

The scope of these guidelines is very broad since – with a few specific exemptions – it covers all the institutions' credit risks on both a consolidated and a non-consolidated basis, throughout the lifecycle of those loans. Finally, certain sections of these guidelines also apply to non-bank lenders who come under the Financial Services and Markets Authority (FSMA) and the Federal Public Service (FPS) Economy.

For institutions subject to the Bank's supervision, these guidelines cover internal governance for loan origination and monitoring in accordance with Circular NBB_2018_28⁶, lending procedures, loan pricing and the loan monitoring framework. They also cover the valuation and revaluation of movable and immovable property.

¹ See on this subject the Bank's Circulars NBB_2021_001 of 12 January 2021 and NBB_2021_11 of 1 June 2021 on changes to Scheme A, Book 1.

² See https://www.consilium.europa.eu/en/press/ press-releases/2017/07/11/conclusions-non-performing-loans/.

³ These guidelines therefore supplement the EBA guidelines on non-performing exposures and restructured exposures (EBA/GL/2018/06 of 31 October 2018 transposed in Circular NBB_2019_21) and the guidelines on the publication of non-performing and forborne exposures (EBA/GL/2018/10 of 17 December 2018 transposed in Circular NBB_2019_11).

⁴ Based in particular on the EBA guidelines on internal governance (EBA/GL/2017/11 of 21 March 2018).

⁵ If the renegotiation follows specific approval and if its implementation entails the conclusion of a new loan agreement or an amendment to the existing agreement.

⁶ Transposing the EBA guidelines of 26 September 2017 on internal governance (EBA/GL/2017/11).

The guidelines thus specify that, when granting loans, institutions must in particular make sure that real estate is valued by internal or external valuers, in order to ensure reliable valuation of the collateral. For that purpose they can use advanced statistical models for residential mortgage loans if they comply with specifical conditions for the use of such models. Given the maturity of the Belgian housing market, however, the Bank expects ¹ that in most cases the banks will use these statistical models to assess the value of residential property.

Also, in order to ensure the proportionate implementation of these requirements, the guidelines mention that valuations can be conducted with due regard for the size, nature and complexity of the loan and the collateral, and the link between the loan and the collateral. Institutions will therefore have to ensure above all that they establish an internal policy determining the type of valuation to be used for each type of collateral.

Finally, the Bank expects that, over time, institutions will improve their loan origination and monitoring practices and their collateral valuation procedures. Among other things, it therefore expects them to develop a holistic approach in order to take greater account of ESG factors and the associated risks in their risk appetite policies, and in their credit risk policies, procedures and management.

1.8 Recording of interest rate risk hedging operations under Belgian bank accounting law

The way in which credit institutions record their interest rate risk hedging operations in the statutory accounts (solo) is governed by Article 36bis of the 1992 Royal Decree on accounting².

That provision was amended by the Royal Decree of 29 August 2021³ for two reasons. On the one hand, the aim was to enshrine in law the accounting practices previously developed on the basis of

individual exemptions granted by the Bank (and prior to that by the ex-CBFA) in regard to macro-hedging operations used by institutions as part of the overall management of their interest rate risk exposure. The changes to that provision also aimed to resolve various practical application issues which have arisen in recent years, in particular in the event of hedging operations breaking down or being ineffective. On this specific point, the approach adopted should limit distortions in the statutory profit and loss account compared to the treatment of the same aspects in the consolidated accounts based on the IFRS international accounting standards (but without aligning the other accounting rules with the IFRS). The Decree also requires institutions to divulge more information on these operations in an annex to their statutory annual accounts.

The new regime in force allows institutions to apply a special method for recording macro-hedging operations subject to fulfilment of a set of conditions, particularly in regard to the institution's monitoring of its interest rate risk and the effectiveness of its hedging operations. Institutions wishing to use this approach must first request permission from the Bank on the basis of an application for which the details are described in a Bank Circular 4 dated 5 October 2021, accompanied by a special authorised auditor's report. This Circular likewise clarifies various points concerning the practical implementation of the new Article 36bis.

The said decree of 29 August 2021 also specifies that the exemptions previously granted by the Bank (and the ex-CBFA) remain valid until 31 December 2022. Authorisation is therefore required for continuing to apply the special accounting practice to macro-hedging operations beyond that date.

¹ As clarified in its press release on questions and answers concerning the new mortgage rules and in Annex 5 (detailed FAQ) to Circular NBB_2021_18.

² Royal Decree of 23 September 1992 on the annual accounts of credit institutions, investment firms and companies managing collective investment funds.

³ Royal Decree of 29 August 2021 amending the said Royal Decree of 23 September 1992,

⁴ Circular NBB_2021_20 of 5 October 2021 on rules for applying Article 36bis of the Royal Decree of 23 September 1992 on the annual accounts of credit institutions, investment firms and companies managing collective investment funds.

2. Insurance undertakings

2.1 Aspects relating to management of the COVID-19 crisis

Dividend distribution policy

In April 2020, amid the great uncertainty surrounding the COVID-19 crisis, the Bank set out its expectations concerning dividend payments, share buybacks, variable remuneration and profit sharing.

Following the publication on 15 December 2020 of the ESRB Recommendation¹ calling on the national authorities to take the necessary steps to permit dividend distribution or share buybacks solely under

strict conditions, the Bank published its new policy on 26 January 2021 via Circular NBB_2021_05, in

The Bank calls on insurers to remain cautious in regard to dividends

which the Bank insisted that all Belgian insurance and reinsurance undertakings and groups must suspend their discretionary dividend distributions and own share buybacks until at least 30 September 2021, unless they adopted a very cautious approach in implementing these distributions and fulfilled certain conditions concerning solvency and the amount of

1 Recommendation of the European Systemic Risk Board of 15 December 2020 amending Recommendation ESRB/2020/7 on restriction of distributions by European financial institutions during the COVID-19 pandemic.

the distribution. This new policy, which is slightly less stringent than in 2020 in that it allowed some undertakings to distribute profits, was based essentially on three criteria: the first criterion, applicable without distinction to all undertakings, aimed to limit the amount of the distributions (compared to the two years preceding the COVID-9 pandemic); the other two criteria divided undertakings into three categories: those with a solvency ratio of less than 150% were asked not to distribute any dividends; those with solvency ratio of over 200 % were able to distribute cautiously, and for undertakings with a solvency ratio between 150 % and 200 %, a distinction was made according to the amount to be distributed in relation to the eligible own funds under Solvency II. Limited distributions, i.e. amounting to less than

10% of the eligible own funds, could be carried out, while larger distributions, i.e. above that 10%

threshold, had to be subject to convincing arguments discussed with the Bank concerning the prudence and sustainability of the distribution. This Circular also required (re)insurance undertakings and groups under its supervision to notify the Bank in advance of their intentions in regard to dividends.

On 23 September 2021, the ESRB decided to let its Recommendation on the restriction applicable to dividend distributions expire with effect from 30 September 2021. In accordance with that decision,



the Bank also decided to let Circular NBB_2021_05 of 26 January 2021 expire on that same date, while calling on undertakings subject to its supervision to remain cautious in their decisions on dividends, share buybacks and variable remuneration. From 1 October 2021, the Bank therefore resumed assessing the prudence of institutions' distribution policies via the ordinary supervision process.

Suspension of COVID-19 reporting

On 31 March 2020, for the purpose of quickly assessing the impact of the COVID-19 pandemic both at the level of the various insurance undertakings and on the sector as a whole, the Bank had introduced a new reporting in order to frequently collect updated key data. As the conditions on the financial markets had stabilised, that reporting was suspended after 31 March 2021 until further notice. An analysis of the impact of COVID-19 on the insurance sector, assessed up to 31 March 2021 on the basis of those reports, is available on the Bank's website 1.

Credit insurance support system

In both domestic and international trade, it is usual to underwrite credit insurance for the delivery of certain goods. That insurance offers protection against the insolvency or credit risk of the counterparty when the goods have been supplied but the invoice has not yet been paid. Credit insurance fosters confidence in trade and therefore stimulates economic growth. At times of crisis, however, the risks for credit insurers may increase. In order to control these risks, they are therefore tempted to reduce their credit lines. They may thus restrict or suspend the coverage of unpaid invoices with immediate effect. Obviously, in an already difficult economic context, that may create economic frictions and lower the volume of trade.

In order to avoid such a contraction of credit lines during the COVID-19 crisis, the government – assisted by the Bank – devised a reinsurance system to guarantee maintenance of the credit lines and thus to support the credit insurance sector. This support system was active from April 2020 to June 2021. It was structured so that the first loss was largely borne by the sector, which retained the necessary incentives to continue

managing claims properly. In this way, the Belgian State never had to bear the entire loss.

While the credit lines granted by the credit insurance sector totalled \leq 39.8 billion at the end of 2019, they had declined to \leq 30.9 billion at the start of the COVID-19 crisis, in March 2020. In April, when the system came into effect, that figure increased to \leq 39.4 billion. The support arrangements thus permitted the maintenance of domestic and foreign trade during the COVID-19 crisis.

2.2 July 2021 floods

The flooding that took place from 14 to 16 July 2021 caused a huge amount of damage, particularly to buildings and businesses, and had serious repercussions on many people's lives. Although not all the damage was insured, the insurance and reinsurance sector settled the bulk of the insured claims, primarily via the cover included under fire insurance for "ordinary risks" which also concern family homes, farm buildings, etc. as described in the legislation². For these risks, fire insurance must include cover against flooding. In the past, this obligation has been imposed by law in order to protect policy-holders against natural disasters. Furthermore, in order to preserve the financial stability of the insurance sector as

2 Article 5 of the Royal Decree of 24 December 1992 implementing the Law on terrestrial insurance contracts.



¹ See https://www.nbb.be/doc/cp/eng/2020/nbb_covid19reporting.pdf.

well, e.g. in the event of exceptional natural disasters, the legislation lays down specific mechanisms, such as limiting claims to a maximum amount of cover per insurer and per disaster, beyond which the regional disaster funds are mobilised. There is no mandatory insurance against natural disasters for other risks insured under fire insurance or other policies, such as motor insurance, but cover can be negotiated case by case with each policy-holder.

In view of the considerable impact of the July 2021 floods, the Regions and the insurance sector together devised specific protocols in order to compensate policy-holders as quickly as possible and to strike the right balance between the financing cost for the Regions and the financial stability of the insurance sector. The protocols make provision for exceptionally doubling the insurers' legal limit on cover, and state that insurers would be expected to prefinance sums in excess of that higher limit by means of a loan. The Walloon Region would be expected to repay these amounts to the insurance sector from 2024 onwards. The total damage caused by the flooding is currently estimated at ≤ 2.1 billion. However, these estimates may be adjusted in line with how the handling of claims is going.

While these protocols were being negotiated, discussions also began in order to examine how the legislation on natural disasters can be adapted to take account of the lessons to be learnt from the recent flooding. The aim is to design a more robust legal framework which offers greater legal certainty in the event of exceptional natural disasters. The emphasis will be placed in particular on calibrating the limit on cover for insurers and future adjustments to it. In a context in which research has shown that climate change may lead to more frequent and more severe natural disasters, this could have an impact on insurers and reinsurers which will be influenced by the degree of government intervention. The balance between the financing cost for the Regions and the stability of the insurance sector (insurers and reinsurers, where appropriate) will thus need to be guaranteed in a sustainable way. The appropriate calibration of the limit on cover must also ensure that any increase in premium remains affordable for policy-holders. The financing of disaster funds will thus have a prominent place in these discussions, as it is important to ensure that the necessary funds are available in the event of another natural disaster.

2.3 Changes to the regulatory framework

Revision of the Solvency II Directive

Solvency II, the prudential supervision framework for European insurers and reinsurers, has applied since 1 January 2016. It covers a broad range of quantitative and qualitative requirements on the taking up and pursuit of the business of insurance and reinsurance. The Solvency II framework also includes arrangements for revision to permit adjustments to the regulations on the basis of past experience. EIOPA's mandate to submit a technical opinion to the European Commission by the end of 2020 on the revision of the long-term guarantee measures and the equity risk measures therefore originated directly from the Directive itself. Following a formal request for a technical opinion, that mandate was extended on 11 February 2019 to a range of additional components which make up the main part of the Directive.

EIOPA's opinion was sent to the European Commission and published on 17 December 2020. It comprises specific proposals for amending the regulatory framework, together with the findings of a holistic impact assessment conducted at European and national level. EIOPA also published a detailed communication reporting on a large-scale consultation with market players concerning the revision proposals, and the reasons for the final proposals based on a cost-benefit analysis of the various technical options considered.

On 22 September 2021, following the detailed analyses by EIOPA, the European Commission formulated a set of legislative proposals for revision of the Solvency II Directive. Those proposals are based mainly, but not entirely, on EIOPA's opinion. They aim to improve the main quantitative, qualitative and reporting requirements under that framework and are also intended to support the EU policy priorities, such as the financing of the post COVID-19 economic recovery, completion of the capital markets union, and channelling of the necessary funds under the European Green Deal.

The proposals adopted aim in the first instance to amend the Solvency II Directive. A proposal for a new Directive on the recovery and resolution of insurance and reinsurance undertakings was also published. Surprisingly, the proposals on the delegated Regulation supplementing the Directive were not

published at the same time. However, in an official Communication, the European Commission announced the likely main adjustments.

Key points among the main proposals in the EIOPA opinion include better access to the principle of proportionality for low-risk undertakings and the introduction of a recovery and resolution framework for insurance undertakings, via the proposal for a new Directive (see section E.1). The main quantitative changes proposed concern the adjustment of the technique for extrapolating the risk-free yield

curve, for which longterm market data would be partly taken into account, refinement of the volatility adjustment per-

mitting better allowance for firms' asset and liability management in the calibration of that adjustment, and the application of shocks to negative interest rates as part of the capital requirements for interest rate risk.

The European Commission's proposal deviates considerably from EIOPA's opinion: in particular, it takes no account of firms' lapse and mortality risk in calculating their volatility adjustment, it does not apply a shock to the extrapolated section of the yield curve as part of the capital requirements for interest rate risk, it reduces the percentage used for the cost of capital in the risk margin, it introduces a transitional measure for the new risk-free yield curve, and it makes no provision for introducing certain macroprudential tools targeting systemic risks.

The reform package proposed by the European Commission will be analysed in more detail and discussed by working groups in the European Commission, the European Parliament and the EU Council. Those discussions will continue during 2022, in preparation for the next inter-institutional negotiations which, in the near future, should lead to a new, final agreement on the Solvency II supervision framework.

Amendment of the Insurance Supervision Law

The Law of 27 June 2021 on miscellaneous financial provisions amended the Insurance Supervision Law in two respects. First, various adjustments were needed following the entry into force of the new Code for

Companies and Associations. In addition, Belgium had to transpose Directive 2019/21771.

I. Adjustments relating to the new Code for Companies and Associations

The first adjustments to the new Code for Companies and Associations involve the formal amendment of numerous references which the Insurance Supervision Law made to the old Company Code. Next, taking account of the prudential objectives of the Insurance Supervision Law, a number of amendments were

The European Commission formulated

legislative proposals for the revision

of the Solvency II Directive

made in relation to the new Code's provisions.

Thus, having regar

Thus, having regard to their obligations concern-

ing own funds, the only legal forms that insurers can take are that of a cooperative society, public limited company, European Company or European Cooperative Society, or a mutual insurance association. Similarly, the possibilities for cooperative society shareholders to resign with repayment of their share in the capital were restricted.

In regard to the governance model, the dual structure specific to insurance undertakings was maintained. These undertakings still comprise a statutory management body (board of directors), responsible for strategy and supervision, and a management committee responsible for the actual management of the business. That committee is composed of at least three members, two of whom also have a seat on the board of directors.

Finally, this was the opportunity to cease requiring the presence of the chief risk officer on the management committee. EIOPA criticised that position via a peer review, owing to the implicit risks of a conflict of interests, notably because of the participation in the management committee's decision-making process which is, by definition, collegiate.

¹ Directive (EU) 2019/2177 of the European Parliament and of the Council of 18 December 2019 amending Directive 2009/138/ EC on the taking-up and pursuit of the business of Insurance and Reinsurance (Solvency II), Directive 2014/65/EU on markets in financial instruments and Directive (EU) 2015/849 on the prevention of the use of the financial system for the purposes of money-laundering or terrorist financing.

II. Adjustments relating to transposition of Directive 2019/2177

There are four main components to the transposition of Directive 2019/2177. The first concerns the volatility adjustment, which aims to avoid procyclical investment behaviour. The amendment to Article 131 of the Insurance Supervision Law permits more frequent recourse to activation of the country com-

ponent in the volatility adjustment mechanism. The second amendment now requires the prudential supervisory authorities to notify EIOPA of all requests

for approval of an internal model for calculating the capital requirements.

The third series of amendments concern cross-border activities and introduce new information requirements. These new requirements are aimed at improving reciprocal information between the authorities of the home Member States and the host Member States on the activities that undertakings conduct outside their home Member State, particularly from the point of view of policy-holder protection. It is also possible for EIOPA to set up collaboration platforms to enhance the exchange of information in the same circumstances.

Finally, the fourth change concerns the procedure for approval of centralised risk management in insurance and reinsurance groups.

3. Cross-sectoral aspects

As a prudential supervisory authority, the Bank has jurisdiction over a range of spheres which cover several sectors and were therefore not discussed in previous sections of this Report. The aspects examined in this section include the Bank's initiatives concerning the prevention of money-laundering and terrorist financing, and regulatory and prudential developments relating to the risks associated with climate change.

3.1 Prevention of money-laundering and terrorist financing

European Union

In 2021, the European Commission

published legislative proposals

to strengthen the fight against

money- laundering in Europe

The European legal and regulatory framework

On 20 July 2021, in line with its May 2020 action plan for strengthening measures to combat

money-laundering and terrorist financing (AML/CFT) in Europe, the European Commission published a set of ambitious legislative proposals for that pur-

pose ¹. That set of proposals includes four separate, but closely linked, texts.

A first proposal for an EU Regulation on prevention of the use of the financial system for the purpose of money-laundering or terrorist financing (ML/FT) aims to define – with a view to full harmonisation at European level – the obligations with which the entities covered by this Regulation will have to comply regarding, in particular, internal organisation, vigilance and notification of suspicious transactions. When this Regulation enters into force, those obligations will take the place of the ones currently set out by national legislation on the subject in all Member States and, in Belgium, in particular, by the Law of 18 September 2017 on the prevention of money-laundering and the financing of terrorism, and limits on the use of cash.

A second proposal for an EU Regulation establishes a European AML/CFT Authority. This new European authority will be responsible for supporting the national financial intelligence units (FIUs) of the Member States with a view to enhancing their efficiency and cooperation. It will also take on the central role of the European system for supervising all entities subject to the AML/CFT rules ("obliged entities"), with the involvement of the national supervisory authorities. This second role will first include drafting the technical regulatory standards and guidelines which will be necessary to supplement the European legislative texts and to permit their effective implementation. In that regard, the AML/CFT powers currently exercised by the EBA will be transferred to this new European

¹ See https://ec.europa.eu/info/publications/210720-anti-money-laundering-countering-financing-terrorism_en.

authority. The authority will also be responsible for direct exercise of the power of supervision over effective compliance with the AML/CFT obligations in the case of obliged entities whose characteristics are such that the effectiveness of that supervision is better guaranteed if it is conducted at European level. For that purpose, the authority will rely on the cooperation of the national authorities. In regard to obliged entities which are not selected to come under the direct supervisory powers of this European authority, however, it will also ensure the convergence of the national authorities' supervisory practices by exercising surveillance over their supervision activities. At first, the European authority's top priority will be to focus on the supervision of obliged entities in the financial sector, but the plan in the longer term is to reinforce its powers in regard to non-financial obliged entities, such as auditors, accountants, solicitors, lawyers, real estate professionals, traders in high-value goods (particularly diamonds), art dealers, gambling firms, etc.

A third proposal for a Regulation aims to revise the EU Regulation on funds transfers¹, essentially in order to extend its application to the transfer of cryptographic assets by providers of services relating to those assets.

Finally, taking account of the above, a new anti-money-laundering Directive will replace the current directive on the subject ² and will define the arrangements that Member States must set up or maintain at national level for the prevention of ML/FT, particularly the rules to be respected in defining the duties, powers and operating arrangements of their FIUs and their national supervisory authorities in regard to AML/CFT.

The EU Council began examining these proposals as soon as they were published. The aim is to create the European authority in 2023. It is to begin operating on 1 November 2024, and at first will focus mainly on drafting the technical regulatory standards and guidelines necessary for the full application of the new European legal framework. It is to begin exercising its direct supervision powers in 2026.

Work of the EBA

The Standing Committee set up within the EBA to deal with issues concerning its AML/CFT powers (the AML Standing Committee) continued its work during the seven meetings chaired by a representative of the Bank which it held in 2021 with a view to adopting a large number of documents required to complete the European legal and regulatory framework on the subject, or in response to requests by the European Commission, the Council or the European Parliament. In some cases, the EBA undertook the drafting of such documents on its own initiative when that seemed necessary to promote convergence of the application of the AML/CFT rules. While most of those documents specifically relate to AML/CFT, others – drawn up in consultation with other EBA standing committees aim to organise, clarify and facilitate cooperation between the national AML/CFT supervisory authorities and the prudential regulators, including the ECB acting under the SSM. The main documents are mentioned below.

Thus, on 1 March 2021, the EBA published its updated guidelines on the risk factors that credit institutions and financial institutions should take into account in their risk-based approach³, followed on 3 March by its updated opinion on the money-laundering and terrorist financing risks concerning the European Union's financial sector⁴. Similarly, on 16 December 2021, the EBA adopted and published an updated, more detailed version of its guidelines on risk-based supervision⁵.

In November 2021, the EBA also adopted its draft technical regulatory standards creating the central database for collecting data on significant weaknesses in the AML/CFT systems of the financial institutions identified by the national supervisory authorities and facilitating the exchange of information between those authorities or with other competent authorities, particularly prudential regulators, whenever necessary ⁶. The draft technical regulatory standards were passed to the European Commission for their adoption,

¹ Regulation (EU) 2015/847 of the European Parliament and of the Council of 20 May 2015 on information accompanying transfers of funds and repealing Regulation (EC) No. 1781/2006.

² Directive (EU) 2015/849 of the European Parliament and of the Council of 20 May 2015 on the prevention of the use of the financial system for the purposes of money laundering or terrorist financing, amending Regulation (EU) No. 648/2012 of the European Parliament and of the Council, and repealing Directive 2005/60/EC of the European Parliament and of the Council and Commission Directive 2006/70/EC.

³ See https://www.eba.europa.eu/regulation-and-policy/anti-money-laundering-and-e-money/revised-guidelines-on-ml-tf-risk-factors.

⁴ See https://www.eba.europa.eu/eba-highlights-key-money-laundering-and-terrorist-financing-risks-across-eu.

⁵ See https://www.eba.europa.eu/regulation-and-policy/ anti-money-laundering-and-countering-financing-terrorism/ guidelines-risk-based-supervision-revised

⁶ See https://www.eba.europa.eu/regulation-and-policy/ anti-money-laundering-and-countering-financing-terrorism/ regulatory-technical-standards-central-database-amlcft-eu.



publication in the Official Journal of the European Union, and entry into force.

On 5 January 2022, it also adopted and published an opinion based on a detailed report concerning de-risking ¹.

In addition, the EBA developed guidelines on cooperation between the prudential supervisors, the AML/CFT supervisors and financial intelligence units in accordance with Article 117 (6) of the CRD. Those guidelines were adopted and published on 16 December 2021².

Finally, the action taken by the EBA in response to the major incidents concerning AML/CFT which affected the European banking sector a few years ago, consisting in assessing the effectiveness of supervision over AML/CFT by each of the national

See https://www.eba.europa.eu/eba-alerts-detrimental-impact-unwarranted-de-risking-and-ineffective-management-money-

laundering-and.

authorities (peer review), continued in 2021 despite the disruption and delays caused by the public health crisis. In particular, in the summer of 2021, the EBA began assessing the supervision exercised by the Bank (see below).

The Bank's action on AML/CFT

In 2021, the Bank was closely involved in the European AML/CFT developments mentioned above.

Thus, in the Belgian delegation in the Council, the Bank makes a substantial, active contribution to the discussions on the legislative proposals of the European Commission mentioned above and the work of refining these legal texts, crucial for the future of AML/CFT and its supervision both in Belgium and throughout the European Union.

The Bank also actively supported the EBA's work described above, not only in chairing the AML Standing Committee but also in taking part in producing numerous draft technical regulatory standards, guidelines and opinions already mentioned in regard to AML/CFT.

² See https://www.eba.europa.eu/regulation-and-policy/anti-money-laundering-and-countering-financing-terrorism/guidelines-cooperation-and-information-exchange-between-prudential-supervisors-amlcft-supervisors.

Similarly, the Bank takes part in the ongoing work of drafting the EBA guidelines on more specific aspects of the AML/CFT arrangements, such as the procedures for entering into remote business relationships with customers, in particular via the use of new technologies ¹, and the AML/CFT compliance officer function in financial institutions ².

Another point to mention is that, as part of the peer review, the EBA embarked on a detailed assessment of the Bank's internal organisation for the supervision of AML/CFT, its supervision methods and action taken in this field and the results obtained. The final conclusions of that assessment are not yet known. They

will identify the strengths of the supervision system applied by the Bank, but also the aspects where improvements will be recommended. Once these

conclusions are notified to the Bank, it will draw up an action plan in response to the EBA's observations.

At Belgian level, in June 2020, the Bank took part in the creation of a public-private platform (the AML Platform) linking stakeholders in the financial sector and the public sector. Its members are professional associations in the financial sector, the Financial Intelligence Processing Unit (CTIF-CFI), the FSMA, the Bank and FPS Finance – Treasury – which provides the secretariat. The purpose of the AML Platform is to enhance the effectiveness of the measures to combat money-laundering, terrorist financing and the proliferation of weapons of mass destruction (AML/CFT) in Belgium via exchanges and consultation between the participants. The AML Platform, which meets at least once a quarter, takes its decisions by consensus. In accordance with the protocol signed by the participants, this platform is expected to facilitate and encourage the exchange of information between the participants. In particular, it will permit the provision of feedback on the application of the statutory AML/ CFT obligations, notably those relating to the detec-

tion and notification of suspicious transactions. With

due regard for the legal powers of the participating

authorities, it will be able to propose guidelines for improving the operation of the AML/CFT systems.

On the subject of its organisation, the Bank continued its efforts to optimise its internal organisation, notably by refining and formalising its internal policies and procedures surrounding the implementation of effective risk-based supervision permitting the appropriate allocation of human and technical resources.

As regards the guidelines and recommendations that the Bank addresses to financial institutions, it took care to update the information which it publishes on its website concerning AML/CFT so that it contin-

The peer review conducted by the

EBA will identify the strengths

and the scope for improvement in

AML/CFT supervision in Belgium

ues to be a source of the most complete and up-todate information possible for financial institutions concerning their legal and regulatory obligations.

The Bank also continued and finalised its discussions with representatives of the financial sector on the interpretation and practical application of the legal and regulatory obligations concerning AML/CFT in the context of private banking, and in particular in regard to the repatriation of funds from abroad. That work led to a Circular distributed to financial institutions and published on the Bank's website, stating that – with due regard for the clarifications supplied – the Bank expects financial institutions to ensure, via an internal audit assignment, that they have taken adequate measures to check the origin of the funds which they currently hold on behalf of their customers, taking account of the rules in force when those funds were received, and if necessary to take adequate measures to remedy any weaknesses identified in that respect.

Within the limits of its powers, the Bank also endeavoured to respond to the concerns raised by de-risking, which involves generic decisions by financial institutions not to establish, or to end, business relationships with categories of customers deemed to present high risks of money-laundering or terrorist financing. Those decisions are taken without any individual assessment of the risks associated with each of the customers concerned, taking account of their specific characteristics and the rules surrounding these business relationships which could reduce the level of risks involved. The Bank notes that, while decisions not to establish, or to end, a business relationship may conform to the AML

¹ See https://www.eba.europa.eu/regulation-and-policy/ anti-money-laundering-and-countering-financing-terrorism/ guidelines-use-remote-customer-onboarding-solutions.

² See https://www.eba.europa.eu/regulation-and-policy/ anti-money-laundering-and-countering-financing-terrorism/ guidelines-role-amlcft-compliance-officers.

Law's requirements, the de-risking of entire categories of customers without due consideration of individual customers' risk profiles is a sign of ineffective management of the money-laundering/terrorist financing risk and may have a significant impact, notably in denying access to banking services for the categories of persons concerned. In rejecting these customers, such de-risking decisions could cause the persons concerned to turn to unsupervised parallel financial networks so that these de-risking decisions may facilitate rather than prevent the laundering of funds from illicit sources. In that context, the Bank renewed the dialogue on this subject with the associations representing financial institutions. It aims to publicise its expectations and recommendations on the subject as soon as possible in order to help to minimise the adverse effects of de-risking for society in general. Thus, the NBB is specifying and implementing the EBA opinion on de-risking dated 5 January 2022 (see above), which is addressed to the national authorities and calls on them to take appropriate steps to end this phenomenon which has potentially undesirable social repercussions.

As regards the operational supervision of ML/TF, apart from continuing its work of systematising its riskbased supervision for all financial institutions under its authority, in 2021, the Bank invested particularly substantial resources in the effective, practical implementation of the joint guidelines of the European supervisory authorities (ESA) dated 16 December 2019 on cooperation and the exchange of information for the purposes of Directive (EU) 2015/849 between the competent authorities responsible for the supervision of credit institutions and financial institutions 1. Those guidelines imply the creation of AML/CFT supervision colleges for every financial institution having branches or subsidiaries in at least two EU Member States other than the Member State where its head office is located. The purpose of these colleges is to increase and systematise the exchange of information and cooperation between the various national supervisory authorities concerned.

Apart from the resolution of interpretation issues concerning these joint guidelines, their implementation entailed mapping all the financial institutions subject to the Banks' supervisory powers in order to identify those institutions for which the Bank has to act as the lead supervisor, after which these colleges had to be actually set up. That also involves identifying all the other national authorities which have to be considered permanent members of the college, and the other Belgian, European and third-country authorities which it seems useful to invite to the college as observers. The effective operation of these colleges in a proper legal framework presupposes the preparation of written agreements on cooperation and the exchange of information, signed by the permanent members, and documents setting out the individual participation conditions which observers are to be asked to sign, taking account in particular of the need to respect the legal professional secrecy obligations which the various college participants must respect. On that basis, by the end of 2020, as the lead supervisor the Bank was able to arrange the first meetings of the colleges supervising the AML/CFT of 8 Belgian financial institutions, and it will continue its efforts in that regard in 2022. Over the same period, it also took part as a permanent member in inviting supervisory authorities of other Member States to the first meetings of the colleges supervising the AML/CFT of 30 financial institutions which also have establishments in Belgium and are subject to the authority of those lead supervisors.

Despite the significant efforts entailed in applying this cooperation arrangement between competent authorities, the Bank considers that it will permit greater account to be taken of the cross-border dimensions of financial institutions' activities, leading to the more effective and coordinated exercise of the supervisory powers of the various authorities concerned in regard to institutions conducting cross-border activities.

3.2 Developments in regulatory and prudential policy concerning risks relating to climate change

The risks relating to climate change are undoubtedly high on the agenda of supervisory authorities and central banks: climate change, the associated physical risks and the risks relating to transition to a more sustainable, low-carbon economy² may in fact have significant repercussions on the economy and on the stability of the financial system. That is why the prudential authorities are examining how to incorporate

¹ See https://www.nbb.be/doc/cp/eng/aml/20191216_esa_joint_ guidelines_cooperation_and_information_exchange_ on_amlcft.pdf.

² See the Bank's Financial Stability Report 2019 for more details on the various types of risk posed by climate change.

climate-related risks in the prudential regulations, and the supervisory authorities are making sure that financial institutions analyse, monitor and manage those risks. There are numerous initiatives in that regard at international, European and Belgian level.

International level

The Network for Greening the Financial System (NGFS) remains a key source of inspiration for regulators and supervisors. This is a body organising international cooperation between central banks and supervisory authorities with the aim of exchanging knowledge and experience on risks relating to climate change and the environment and on sustainable finance. The continuing development of methods and techniques for detecting, quantifying and reducing climate-related risks in the financial system is essential. In that regard the NGFS tries to ascertain more accurately the needs for specific data for analysing these risks

and examines how to incorporate them in microand macro-prudential regulation and supervision. Finally, it also examines

how central banks can contribute to the greening of the financial system. The NGFS has already published numerous reports on this subject. In 2021, for instance, it published a report on the importance of closing data gaps for improving the identification of risks relating to climate change 1 and a follow-up report for the supervisory authorities setting out guidelines for incorporating climate risks in their work². The NGFS also continued drafting various scenarios on the subject of risks relating to climate change³, which form a key source of inspiration for scenario analyses conducted at international level on the subject of these risks. They thus formed the basis for top-down scenario analyses conducted by the International Association of Insurance Supervisors (IAIS), EIOPA, the EBA and the ECB. The ECB's bottom-up test will also be based partly on the NGFS scenarios. The NFGS likewise published a report on the stress test exercises conducted and planned by the supervisory authorities 4.

1 NGFS progress_report_on_bridging_data_gaps, 26 May 2021.

In 2021, the BCBS published two reports examining how climate-related risks are transmitted to the financial system⁵ and how to measure them⁶. In November 2021, the Committee also published a consultative document containing some general principles regarding how these risks can be incorporated in Pillar 2 (assessment of firm-specific risks) of the Basel III framework. Finalisation of the principles relating to the management and control of these risks will continue in 2022. The Committee is also examining whether Pillar 1 (minimum capital requirements) could be adapted to take better account of climaterelated risks. However, it is important that these capital requirements are always based on the risks. Lower requirements therefore cannot be applied unless there is proof that the exposures concerned are less risky, while tougher requirements must be imposed for exposures highly sensitive to climate risks.

Work continued on the introduction of climate re-

The prudential authorities incorporate

climate-related risks in prudential

regulation and supervision

porting under Pillar 3 (disclosure obligations) in order to ensure that banks throughout the world take uniform account of their

climate-related risks. One of the major challenges facing the supervisory authorities is the lack of good quality, uniform, internationally comparable data for assessing these risks. That is why the BCBS supports the establishment of an International Sustainability Standards Board by the IFRS Foundation, which should permit a consistent and internationally comparable system of reporting on these risks.

Turning to the insurance sector, in May 2021, the IAIS – in addition to the activities of the NGFS – published a report 8 containing guidelines for the incorporation of climate-related risks in the supervision of the insurance sector. The report also describes some good practices by way of illustration. In September 2021, a second report was published on the impact of climate change on the investment and assets of insurance

² NGFS progress_report_on_the_guide_for_supervisors, 26 October 2021.

³ NGFS Climate Scenarios for central banks and supervisors, 24 June 2021.

⁴ NGFS, Scenarios in Action, A progress report on global supervisory and central banks scenario exercises, 19 October 2021.

⁵ BCBS, Climate-related risk drivers and their transmission channels, 14 April 2021.

⁶ BCBS, Climate-related financial risks – measurement methodologies, 14 April 2021.

⁷ BCBS, Consultative Document – Principles for the effective management and supervision of climate-related financial risks, 16 November 2021.

⁸ IAIS, Application_Paper_on_the_Supervision_of_Climate-related_ Risks_in_the_Insurance_Sector, 25 May 2021.

undertakings¹. It is estimated that climate change will affect at least 48 % of European insurers' investment. This report also contains several scenarios for assessing the future implications of climate change. Although the losses revealed by the scenarios analysed are substantial, the insurance sector as a whole seems capable of absorbing them.

European legislation

In order to support the transition to a sustainable economy in accordance with the Paris Agreement on Climate, the European Commission launched various initiatives under its Sustainable Finance Action Plan. The aim is to stimulate investment in sustainable economic activities. Thus, the Commission drew up a taxonomy for classifying activities as sustainable or non-sustainable. It also devised various regulatory initiatives on data disclosure. The proposal for a Corporate Sustainability Reporting Directive (CSRD), to replace the Non-Financial Reporting Directive (NFRD), implies that large and/or listed companies and financial institutions will be required to report on the environmental and social implications of their business activities. In accordance with the Taxonomy Regulation 2, these companies must state the extent to which their activities can be considered sustainable pursuant to that taxonomy. A first Delegated Regulation which

1 IAIS, Global Insurance Market Report, Special topic edition, The impact of climate change on the financial stability of the insurance sector, 30 September 2021. includes definitions of the activities which may be considered sustainable according to the climate goals was published in July 20213. In addition, a series of regulatory technical standards were developed upon the proposal of the three European supervisory authorities (the EBA, EIOPA and the European Securities and Markets Authority or ESMA) in connection with the Sustainable Finance Disclosure Regulation (SFDR)⁴ and the Taxonomy Regulation, which determine the information that financial market players must publish on the sustainability of their financial products. This legislation is an ambitious but crucial step aimed at protecting investors against greenwashing and enhancing financial market transparency. The requirements concerning environmental, social and governance risks (ESG risks) were also extended in the European Commission's recent CRD6/CRR3 proposal (see section B.1.3). ESG risks encompass a broader range of risks than just the ones relating to climate change. All environmental, social and governance issues which have a negative external impact on the financial performance or solvency of an undertaking, country or individual are called ESG factors. The ESG risks are therefore current or future financial risks

- 3 Commission Delegated Regulation (EU) 2021/2178 of 6 July 2021 supplementing Regulation (EU) 2020/852 of the European Parliament and of the Council by specifying the content and presentation of information to be disclosed by undertakings subject to Articles 19a or 29a of Directive 2013/34/EU concerning environmentally sustainable economic activities, and specifying the methodology to comply with that disclosure obligation, 6 July 2021.
- 4 Regulation (EU) 2019/2088 of the European Parliament and of the Council of 27 November 2019 on sustainability-related disclosures in the financial services sector.



² Regulation (EU) 2020/852 of the European Parliament and of the Council of 18 June 2020 on the establishment of a framework to facilitate sustainable investment, and amending Regulation (EU) 2019/2088.

which arise from these ESG factors and which financial institutions may face in their exposures.

For the banking sector, the EBA has taken numerous initiatives in order to incorporate ESG risks in the prudential framework. For instance, it drew up tech-

nical implementing standards on the integration of these risks in Pillar 3¹. It also published a report on the inclusion of ESG risks

in risk management and prudential supervision, which will pave the way to a series of directives on that subject². In addition, the EBA continues to examine the possibility of adapting Pillar 1 (minimum capital requirements) in order to take account of exposures to ESG risks. An interim report was due to be published on this subject at the beginning of 2022. The final report is expected at the end of 2023. In addition, the EBA conducted a sensitivity analysis on banks' exposures to climate-related risks³. On the basis of that analysis, banks are being urged to close their data gaps and speed up their reporting on ESG risks.

For the insurance sector, EIOPA conducted a study on how to include ESG risks in Solvency II. It expects the supervisory authorities to supply qualitative and quantitative data in the climate risk analysis that they conduct as part of their ORSA (own risk assessment)⁴. The European Union commssioned EIOPA to examine how natural disasters can be incorporated into supervisory practices, and EIOPA published a report on that subject in July 2021⁵. EIOPA was also asked to analyse

the scope for taking account of a green supporting factor or a brown penalising factor by mid-2023.

At the end of 2021, the ECB published a report 6 on the inclusion of climate risks in banks' risk management. The report contains the results of an analysis of

> the extent to which banks meet the expectations set out by the ECB in its guide to the management and disclosure of risks relating

to climate and the environment. That report describes various good practices, but it also mentions that specific, more ambitious measures are necessary to deal with current and future risks relating to climate change. In 2022, the ECB will conduct a bottom-up stress test concerning climate-related risks.

Initiatives by the Bank

The ECB published a report analysing

how banks include climate-related

risks in their risk management.

At the end of 20208, the Bank published a Circular detailing its expectations concerning the collection and incorporation into risk management of data on the energy efficiency or real estate exposures. Those data must also be notified to the Bank for new mortgage loans.

In addition, the Bank is a member of numerous European and international working groups on ESG and climate-related risks, in which it helps to develop the regulatory initiatives and analysis exercises described above. The Bank also decided to consolidate its leadership at European level in this sphere by chairing the EIOPA working group on sustainable finance.

¹ EBA, EBA draft ITS on Pillar 3 disclosures on ESG risks, 24 January 2022.

² EBA, Report on management and supervision of ESG risks for credit institutions and investment firms, 15 October 2021.

³ EBA, Mapping climate risk: Main findings from the EU-wide pilot exercise, 21 May 2021.

⁴ EIOPA, Opinion on the supervision of the use of climate change risk scenarios in ORSA, 19 April 2021 and Consultation on Application guidance on running climate change materiality assessment and using climate change scenarios in the ORSA, 10 December 2021.

⁵ EIOPA, Methodological paper on potential inclusion of climate change in the Nat Cat standard formula, 8 July 2021.

⁶ ECB, The state of climate and environmental risk management in the banking sector, 22 November 2021.

⁷ ECB Guide on climate-related and environmental risks – Prudential expectations regarding risk management and disclosure. November 2020.

⁸ Circular NBB_2020_45 – Collection and reporting of data on the energy efficiency of real estate exposures, 1 December 2020.

C. Operational supervision

1. Banks

In 2021, the supervisory authorities continued to pay close attention to banks' credit risk in a still uncertain economic context. Supervision also focused on the sustainability of the banks' business model, against the backdrop of low interest rates and structural changes in the sector resulting, in particular, from the digital and environmental transitions.

1.1 Mapping of the bank and investment firm sector

The number of banks governed by Belgian law declined by one in 2021 with the deregistration of Santander Consumer Bank, which was absorbed by the Spanish bank Santander Consumer Finance. The number of branches increased by one: two new European Economic Area (EEA) branches were registered (Santander Consumer Finance and Joh. Berenberg, Gossler & Co KG) and one was deregistered. At the end of 2021, a number of applications for the registration of EEA branches were still being processed.

The number of Belgian investment firms again decreased by three. This time, it only concerned branches of investment firms governed by the law of another EEA member country.

In the euro area, banking supervision is exercised by the SSM, backed by cooperation between the ECB and the national supervisory authorities. The ECB exercises direct supervision over all significant institutions (SIs) and is assisted in that by the national supervisory authorities. The latter continue to exercise direct supervision over less significant institutions (LSIs), though the ECB retains the option of assuming direct supervision over those institutions

if that is justified for the consistent application of its supervision standards.

As regards SIs, in 2021, the Bank formed part of eleven Joint Supervisory Teams (JSTs), which – under the direction of the ECB – supervise significant Belgian institutions, whether Belgian banks owned by a Belgian parent company, SSM-relevant Belgiumbased subsidiaries of a non-Belgian parent company,

Table C.1

Number of institutions subject to supervision
(end-of-period data)

	2020	2021
Credit institutions	102	102
Under Belgian law	31	30
Branches governed by the law of an EEA member state	46	47
Branches governed by the law of a non-EEA member state	6	6
Financial holding companies	8	8
Financial services groups	4	4
Other financial institutions ¹	7	7
Investment firms	28	25
Under Belgian law	14	14
Branches governed by the law of an EEA member state	13	10
Branches governed by the law of a non-EEA member state	0	0
Financial holding companies	1	1

Source: NBB

¹ Specialist subsidiaries of credit institutions and credit institutions associated with a central institution with which they form a federation.

Table C.2

Belgian banks grouped according to the SSM classification criteria

Significant institutions (SIs)	Less significant institutions (LSIs)
Belgian parent	Vodeno (financial holding company) – Aion
Argenta	Anbang (financial holding company) – Nagelmackers Bank
AXA Bank Belgium	Byblos Bank Europe
Belfius	CPH
Degroof Petercam	Dexia (financial holding company)
KBC Group – KBC Bank, CBC	Crelan – Europabank
Non-Belgian SSM-member parent	Datex (financial holding company) – CKV
BNP Paribas Fortis, bpost bank	Dierickx-Leys
Beobank, Banque Transatlantique Belgium	ENI
ING Belgium	Euroclear (financial holding company) – Euroclear Bank
MeDirect Bank	FinAx (financial holding company) – Delen Private Bank, Bank J. Van Breda
Non-Belgian SSM member parent not governed by	NewB
the law of an EEA member country Bank of New York Mellon	Shizuoka Bank
Datik Of New York (Vielloff	United Taiwan Bank
	Van de Put & C°
	vdk bank

focus on credit risk management

within the banks

Source: NBB.

or banks established in Belgium and owned by a non-Belgian parent company not subject to the law of an EEA member country. Following the absorption of the Belgian Santander Consumer Bank by a Spanish

bank belonging to the Santander group and its conversion into a branch, the Bank will no longer take part in the work of

the JST in charge of supervising this banking group under the SSM. The number of JSTs involving the Bank was thus reduced to ten at the end of 2021.

The group of Belgian LSIs comprises 17 local and/or specialist banks. That number rises to 25 if the Belgian and foreign financial holding companies of less significant institutions are included.

1.2 Supervision priorities

In view of the uncertainty created by the public health crisis regarding the situation of firms, particularly those operating in the sectors affected by compulsory closures, the SSM and the Bank continued to pay close attention to the credit risk situation and the management of credit risk by the banks.

One of the key points for attention concerned assessing credit institutions' ability to detect at an early stage any counterparties whose credit risk has increased significantly on account of the health

crisis. This detection exercise is made more difficult by government support measures such as moratoria and public financial

support, which in the short term may conceal the real problems that firms may encounter in meeting their credit commitments. In this context, the supervisory authorities conducted a horizontal analysis of credit institutions' practices in order to detect firms whose credit risk has risen significantly and which may no longer be viable, taking account of the ending of the public support measures, as well as classification and provisioning practices such as those specified by the IFRS 9 accounting standard. On that basis, the supervisory authorities sent recommendations to the credit institutions in which such weaknesses were identified.

The second point for attention was to ensure that credit instutions maintain a comfortable capital position, particularly since there is still some uncertainty

ank by a Spanish has increased significantle.

Close attention continues to

surrounding the economic recovery, and since termination of the government measures adopted in 2020 may ultimately have repercussions on businesses and households. Thus, credit institutions were subjected to a stress test coordinated by the EBA to assess their ability to withstand a serious deterioration in the economic situation (see box 9). On that basis, recommendations under Pillar 2 (P2G) were issued to participating credit institutions and – where appropriate – to some of their major

subsidiaries. Similarly, the supervisory authorities continued to ensure that credit institutions remain cautious regarding their dividend distributions to shareholders and variable remuneration. Since the supervisory authorities lifted the ban on dividend payments at the end of September 2021 (see section B.1.1.2), particular attention focused on the ability of credit institutions to meet the regulatory requirements continuously in the future, following the lifting of that ban.

BOX 9

2021 stress tests by the EBA and the Bank

In 2021, the EBA coordinated its biennial stress test involving 50 of the biggest banks in the European Union (EU), 38 of which – including Belfius and KBC Group – are subject to the ECB's direct supervision. ING Belgium and BNP Paribas Fortis took part in the exercise via their parent institutions.

The aim of the EBA stress test is to give supervisory authorities, banks and market participants a common analytical framework for comparing and assessing the resilience of the big banks in the face of a hypothetical adverse economic shock. The stress test comprises a baseline scenario and an adverse scenario, both over a three-year horizon. The assumptions concerning the macroeconomic variables in the baseline scenario are in line with the December 2020 economic projections published by the ECB. The adverse scenario, designed by the ECB and the ESRB, is based on assumptions reflecting the systemic risks deemed to represent the greatest threats to the stability of the EU banking sector at the start of the stress test in January 2021. Since the stress test's adverse scenario is hypothetical, the estimated impact of that scenario should not be regarded as a prediction of banks' profitability. Furthermore, the results take no account of any response to the shocks by the banks, since the stress test is based on the assumption of a static balance sheet. The stress test does not have any "pass/fail" threshold. It was designed for use as a significant contribution to the Supervisory Review and Evaluation Process (SREP), which forms the basis for determining additional capital requirements specific to each institution.

Two Belgian banks – KBC and Belfius – were put through the EBA stress test. The starting CET1 capital ratios (reported at the end of 2020) stood at 17.6 % for KBC and 16.4 % for Belfius. These values exceeded the average starting value of 14.7 % for the sample of euro area banks. In the adverse scenario, KBC and Belfius proved more resilient than most other euro area banks. In that scenario, KBC exhibited a 351 basis point deterioration in the CET1 capital ratio, while for Belfius that ratio was down by 270 basis points. By way of comparison, the average decline for euro area banks was 497 basis points. The CET1 capital ratios projected for 2023 in the adverse scenario thus came to 14.1 % for KBC and 13.7 % for Belfius, or well above the average ratio of 9.7 % projected for the euro area in 2023.



The starting positions of the two Belgian banks and their performance in the stress test are partly attributable to the continuing impact of the adjustments that those banks have made in recent years, including the strengthening of their solvency position, control of their operational expenditure and the provisioning efforts made during the COVID-19 crisis.

LSIs, which are subject to the Bank's supervision, are also put through a stress test on a regular basis. Since the results of these stress tests form a contribution to the SREP, the Bank decided that these two exercises would be held in the same year. During the year under review, the Bank conducted a stress test on nine LSIs. The scenarios and methodology were aligned with those for the EBA stress test, with the necessary simplifications. The desired proportionality was also ensured in that the LSIs were only asked to provide additional information on their starting position in December 2020, with the Bank taking on the task of producing projections for the years 2021-2023. The stress test results were not published but were discussed with the LSIs and helped to determine the additional capital requirements specific to each institution.

In addition, in view of the low interest rates and structural changes in the sector due to digitalisation, but also the need to adapt to the challenge of climate change, particular attention was devoted to assessing the sustainability of the business model and the banks' ability to respond to these developments. Thus, the impact of the persistently low interest rates on the revenues of Belgian credit institutions was assessed and their strategic plan was analysed to ensure that they were taking the necessary measures and actions (see box 10). On the subject of the impact of climate risk on credit institutions, the ECB conducted an initial examination of the state of preparations in major credit institutions. It showed that the sector saw climate risk as a factor which could have a significant impact on their business in the future, but also that a great deal still needed to be done to grasp and manage this risk properly in accordance with the requirements laid down by the ECB1. The credit institutions

concerned were informed of the weaknesses discovered and were asked to take corrective measures. In 2022, the ECB will conduct a stress test exercise to assess the impact of climate and environmental risk on the sector.

¹ ECB, The state of climate and environmental risk management in the banking sector, 22 November 2021.

Impact of the prolonged low interest rate environment and other factors on the business model of Belgian banks

This year, in its periodic analysis of the business models of credit institutions, the Bank focused on the impact of persistently low interest rates, digitalisation and the coronavirus crisis. This was a two-phase exercise: the first phase involved analysing the sustainability and viability of the banks' business model and the second concerned discussing the findings of that analysis with the most affected banks.

The analysis assessed the institutions on the basis of six tests, three of which concerned the impact of low interest rates. In the first test, the sensitivity of the banks' interest margins and interest income was analysed over the years ahead, on the assumption of continuing low interest rates. A second, more extensive macroprudential test also took account of factors such as the cost-income ratio and the search for yield. A third and final – microprudential – test examined the institutions' financial prospects on the basis of their strategic and financial plans, and their planned mitigating measures and risk appetite. In addition, the potential impact of the coronavirus crisis on the banks' balance sheet and capital buffers was analysed on the basis of two vulnerability assessments. Finally, there was a wide-ranging examination of the banks' activities and investments in regard to FinTech. Their strategic position on that subject was included in the general analysis (see also section D.2.3).

A prolonged environment of low, or even negative, interest rates has an adverse effect on banks' profitability, thus affecting the ability of some banks to build up sufficient capital reserves. The banks' risk profile may also change as a result of their quest for more profitable business, associated with different and potentially higher risks. The banks expect to take mitigating measures to improve their cost-income ratio, to apply negative interest rates to certain types of customer, or to increase the percentage of their total income derived from fees. The digitalisation of the banking sector and the financial world in general also entails substantial investments. In recent years, driven by technological innovations and changing consumer preferences, the financial sector has stepped up its digitalisation and the introduction of new processes, applications or products. The digitalisation initiated by major banks and a number of smaller niche banks has forced banks in general to become more ambitious.

The business model of smaller, less diversified banks seems to be under greater pressure in this context, so that some of those institutions should focus on particular niches, and try to form partnerships or achieve economies of scale.

2. Insurance undertakings

In 2021, the Bank continued to keep a close watch on the repercussions of the COVID-19 pandemic and maintained its increased surveillance of the financial situation of insurers and reinsurers subject to supervision. The financial markets, which have a significant impact on the financial health of businesses, recovered while the technical impact of insurance on most businesses remained limited. Combined with the low interest rate, the health crisis continued to put pressure on life insurance activities, prompting the Bank to impose special measures on a number of undertakings during the year under review. In 2021, attention also focused on outsourcing and record keeping, and on new businesses. In addition, the Bank conducted a relatively large number of horizontal analyses. That work focused in particular on the adequacy of technical life and non-life provisions and on the role of the actuarial function in that sphere, the profitability of the life insurance business, reinsurance and cyber risks (see section D.2.3 on that last subject).

2.1 Mapping of the sector

At the end of 2021, the Bank exerciseed supervision over 72 undertakings, and seven branches of undertakings governed by the law of another EEA member country. In the case of those branches, supervision was confined to verifying compliance with the money-laundering legislation.

In the figures, undertakings active as both insurers and reinsurers are only counted once. Two of the undertakings subject to the Bank's supervision are reinsurers in the strict sense.

The number of Belgian insurance groups subject to the Bank's supervision remained stable, at ten. Seven of these groups only have holdings in Belgian insurance undertakings (national groups), and three of them have holdings in at least one foreign insurance undertaking (international groups). Owing to the entry of new players on the market following Brexit, the Bank was represented in more supervisory authority colleges than previously.

The expectation is that more undertakings will set up business in Belgium in the near future. The Bank has been contacted multiple times by firms intending to begin operating in Belgium.

Table C.3

Number of undertakings subject to supervision

(end-of-period data)

	2020	2021
Active insurance undertakings	64	62
Insurance undertakings in run-off	0	0
Reinsurance undertakings	30	31
of which:		
Undertakings also operating as insurers	28	29
Other 1	8	8
Total ²	74	72

Source: NBB

- 1 Surety companies and regional public transport companies.
- 2 The total only takes account once of undertakings active as both insurers and reinsurers.

Table C.4

Belgian insurance groups subject to the Bank's supervision

Ageas
Navigators Holdings (Europe)
KBC Assurances

Source: NBB

Table C.5

Colleges for insurance undertakings subject to the Bank's supervision

The Bank is the group's supervisory authority	The Bank is one of the supervisory authorities		
Ageas	Allianz	Allianz Benelux	
		Euler Hermes	
KBC Assurances	AXA	AXA Belgium	
		Inter Partner Assistance	
Navigators Holdings Europe		Yuzzu Assurances	
	Assurances du Crédit Mutuel	Partners Assurances	
		NELB	
	Munich Re	D.A.S.	
		Ergo Insurance	
		DKV Belgium	
	NN	NN Insurance Belgium	
	Baloise Group	Baloise Belgium	
		Euromex	
	Monument Re	Monument Assurance Belgium	
	Athora	Athora Belgium	
	Enstar	Alpha Insurance	
	QBE	QBE Europe	
	MS&AD	MS Amlin Insurance	

Source: NBB.

2.2 Supervision priorities

New businesses

In 2021, the Bank approved one new insurance undertaking. This new entrant is an additional player in the international undertakings sector, as its business model involves the use of Managing General Agents to conclude contracts in other countries; this sector has developed in Belgium in the wake of Brexit. Supervision of these international undertakings implies specific supervision priorities, including the continued monitoring of outsourcing, the monitoring of activiities developed in other countries and a minimal presence in Belgium. The Bank paid particular attention to these aspects in 2021. Initial discussions also began in 2021 concerning the approval of new InsurTech undertakings. These initiatives – which also give rise to particular prudential concerns - will continue in 2022.

Outsourcing

For a number of years now, insurers and reinsurers have increasingly resorted to outsourcing, for various

reasons: (i) greater efficiency, (ii) access to specific expertise not available in-house, and innovative solutions and/or (iii) a need for flexibility and scalability. With constantly expanding digitalisation of operational processes and interfaces, recently accelerated further by the COVID-19 pandemic, that trend intensified in 2021.

Thus, in 2021, the Bank received twice as many notifications of critical outsourcing as in previous years. They mainly concerned: (i) information technology infrastructures, (ii) document storage, very often via clouds (implementation of Circular NBB_2020_18 on cloud computing and the Bank's Regulation published in the *Moniteur belge/Belgisch Staatsblad* of 11 September 2020 concerning the storage of insurance documents outside the undertaking's registered office), and (iii) underwriting (change relating to the recent presence on the Belgian market of international insurance undertakings whose business model is based on the use of Managing General Agents).

Analysis of these notifications led to identification of new risks, such as an increased risk of concentration (notably in the IT sphere), greater interdependence with new types of company (such as centralised service companies, unregulated companies created increasingly frequently in insurance groups) and

therefore became a supervision priority for the Bank.

Thus, various projects were implemented in 2021 to

strengthen that supervision (new forms of reporting,

horizontal analysis, detailed analysis of certain types

of outsourcing, direct inspection of service providers,

etc.). These projects will continue in 2022.

heightened risks concerning "vendor lock-in", data loss and compliance. Monitoring outsourcing

Wider use of outsourcing creates new risks for insurers

functions such as independent oversight, claims man-

agement, underwriting or document storage, firms were also reminded that

they remain ultimately re-

sponsible for the service ousourced. This means, for instance, that firms must set up the measures necessary to ensure access to relevant data and documents within a reasonable timeframe.

In the face of increasingly widespread outsourcing

by insurers and reinsurers for critical or important

During the period under review, outsourcing was a central theme of the inspections conducted in insurance and reinsurance undertakings. During the inspections, there was particular emphasis on the assessment of how the outsourcing was organised in the pre-contract, contract and post-contract phase. Particular attention focused on the adequacy of the internal control system, and especially the methods of selecting and assessing sub-contractors and the involvement of independent oversight functions. In that respect, insurers and reinsurers must ensure that they have efficient, objective tools such as performance indicators permitting proper assessment of the quality of the outsourced services.

In response to the Bank's request for more substance (significant presence) in the case of an undertaking which the Bank had approved as an insurer in Belgium and which made extensive use of outsourcing, some undertakings suggested the joint employment contract (JEC). This arrangement implies that workers are bound simultaneously be a contract of employment with the Belgian insurer and with another undertaking in Belgium or in another country. It can only be accepted as a way of giving more substance to the insurance undertaking approved in Belgium if these workers are actually employed under the usual employment contract conditions: line of reporting to the management bodies of the Belgian company, effective supervision by that undertaking of the work done, annual appraisal by the bodies of the Belgian



undertaking and the latter's right to terminate the contract of employment at any time if failures are identified, etc.

Non-life insurance technical provisions

During 2021, the Bank brought together all those responsible for actuarial functions on the Belgian market in a virtual workshop on the subject of horizontal supervision of the level of non-life technical provisions (Solvency II standard). This workshop provided an opportunity to explain to the sector how the data submitted via prudential reporting are used for supervision purposes. At this meeting, a questionnaire for the attention of those responsible for the actuarial function was also presented and discussed. It aimed to clarify the nature of some of those data in order to improve the analytical processes in which they are used.

Life insurance

For some years now, life insurance undertakings have conducted their business in an environment featuring persistently low interest rates. In order to cope with the reduction in earnings from fixed-income investment, the interest rate guarantees on life insurance have steadily diminished. The question is whether the two changes mirror one another or whether there is structural downward pressure on the profitability of life insurance.

An initial horizontal analysis showed that the gap between recurring financial income and the average guaranteed rates on life insurance had not narrowed systematically over time: in general, the progressive reduction in the guaranteed interest rates parallels the decline in financial income.

The profitability analysis does not only take account of the financial result. There are other potential profit sources, such as the mortality result (if firms record fewer deaths than expected according to the mortality tables used for pricing) and the cost result (which is the difference between the loadings included in the premiums and the actual costs). The cost result is generally negative (and is usually offset by the financial result), but owing to the constantly rising life expectancy and hence chances of survival at a given age, the mortality result generally represents a key source of profits for life insurance undertakings.

These profitability analyses supplement the horizontal analyses of reported technical provisions which are conducted periodically (under both the Belgian accounting standards and Solvency II).

In regard to the impact of the health crisis on undertakings' profitability via mortality, the vast majority of the deaths occurred in the non-insured age groups. Since death cover usually ends at retirement age, the excess mortality had no negative impact on profitability.

Reinsurance

On reinsurance, the Bank notes the emergence of innovative practices in the reinsurance of life insurance portfolios. Reinsurance is used as a tool to mitigate market risks, particularly the interest rate risk. That could prove attractive for undertakings holding life insurance portfolios with high guaranteed interest rates. While the reinsurance agreement does actually attenuate certain risks, the Bank is aware that these schemes generate other risks, essentially owing to the significant and immediate impact of this type of reinsurance on the solvency capital requirement (SCR) of supervised companies. The work done led the Bank to define a set of internal guidelines and develop supervision tools intended, for example, to limit the connection between the reinsurance agreement and compliance with the regulatory solvency requirements.

The various (non-exhaustive and non-exclusive) measures that may be taken include: (i) limiting the assignment rate (quota share treaty); (ii) recommending the establishment of robust collateral arrangements, (iii) insisting that the treaties include deterrent penalties for the reinsurer in the event of unilateral cancellation; or (iv) asking the undertaking to define, in its risk appetite, an SCR ratio offering additional scope to cover the risk of dependence on the treaty.

2021 stress tests by EIOPA and the Bank

In accordance with the Bank's policy on stress tests for insurance and reinsurance undertakings and groups, the insurance sector is subjected to a stress test at least once a year¹, and that test is aligned, where appropriate, with the European stress test. In 2021, EIOPA conducted a European stress test to assess the impact of an adverse scenario on the participants' capital (solvency margin) and liquidity. Two Belgian insurance groups took part in that European exercise from the capital angle, while three individual undertakings forming part of those two groups took part in the liquidity scenario. In addition, the Bank applied the same capital stress test to a series of individual insurers together making up a significant proportion of the Belgian insurance sector.

The 2021 stress test scenario was devised jointly by EIOPA and the ESRB and reflects the ESRB's assessment of the main risks for the European financial system. Its principal objective was to identify and assess the insurance sector's potential vulnerabilities resulting from a persistently low interest rate environment combined with the possible worsening of the COVID-19 pandemic. That took the form of a series of specifc shocks affecting market risks and insurance risks which had a severe but plausible dual impact on the insurance sector. The reference date for this exercise was 31 December 2020.

The scenario therefore affected both the assets and the liabilities of firms, owing to the combination of an environment with declining risk-free yield curves, shocks in key investment portfolio asset classes, and a bigger- than-expected rise in mortality and claims in certain non-life insurance branches. That scenario does not only form part of the Bank's framework for assessing the macroprudential risks, it also enables identification of any risks that might exist at microprudential level.

The average solvency ratio (SCR ratio) of the 14 Belgian firms taking part in the test was 190 % before application of the shocks, suggesting a comfortable starting position. After taking account of these shocks, the average SCR ratio dropped by 67 percentage points to 123 %. The fall was due mainly to the decline in the value of the investment portfolio, particularly bonds and equities (negative impact of 38 and 31 percentage points respectively on the SCR ratio). That fall was partly attenuated by the compensatory effects relating to certain assets and liabilities on the balance sheet, such as the hedging strategies via derivatives that some insurers use, which reduce the impact of the shocks. For the first time in a stress test, insurers were also able to apply post-shock management measures which had a positive effect of 21 percentage points on the post-stress-test ratio. The results of this stress test at Belgian level were published on the Bank's website 2 and the European results are available on EIOPA's website 3.

Finally, in parallel with the EIOPA stress test, the Bank also developed its own "low-yield" scenario which measures how a continuing decline in the risk-free yield curve would affect the solvency of



¹ In 2020, following the outbreak of the COVID-19 pandemic, the Bank concentrated its supervisory and regulatory measures on essential, critical tasks concerning the monitoring of the impact of the COVID-19 pandemic on insurers. So, the national stress test scheduled for 2020 was cancelled.

² See https://www.nbb.be/en/financial-oversight/prudential-supervision/areas-responsibility/insurance-or-reinsurance-38.

³ See https://www.eiopa.europa.eu/insurance-stress-test-2021_en#Publicationoftheresults.

Belgian insurers. The main aim of that scenario is to identify and assess the insurance sector's potential vulnerabilities resulting from a persistently low interest rate environment. The individual results are taken into account in assessing applications for exemption from creation of the flashing-light provision for interest rate risk.

3. Financial market infrastructures and payment services

The COVID-19 pandemic also affected the financial market infrastructures sector and payment institutions (for an overview, see the Annual Report 2020). This year, the Bank's supervisory activities were concentrated on human resources aspects. The next section goes into this in more detail. An exhaustive account of all the supervision activities concerning financial market infrastructures (FMIs) and payment services appears in the latest Financial Market Infrastructures and Payment Services Report, available on the Bank's website ¹. In the next edition of that Report to be published in June 2022,

a thematic article will go into more detail on the Bank's supervision activities concerning digital operational resilience. Another article will examine the risks associated with the growing use of services and products linked to information and communication technology (ICT) provided by third parties. That report will also include a series of articles on the latest developments concerning digital ledger technology (DLT)/blockchain and the European "DLT pilot regime" for the trading and settlement of "tokenised" securities². Finally, several articles will deal with the subjects of crypto-assets and central bank digital currencies from the point of view of the Bank as a supervisory authority and overseer responsible for financial stability.

1 See www.nbb.be/fmi

2 "Tokenised" securities are the digital representation via DLT of securities which exist outside the blockchain.



3.1 Mapping of the sector

The Bank is responsible for both the oversight and the prudential supervision of institutions in the post-trade sector and payment services. Oversight mainly concerns the security of the financial system, whereas microprudential supervision examines the security of the operators offering these services. In cases where the Bank exercises both oversight and prudential supervision, these two activities can be considered complementary.

The table below presents the systems and institutions subject to the Bank's supervision or oversight. As well as being classified according to the type of services provided, these institutions are also grouped according to: (a) the Bank's role (namely prudential supervision authority, overseer, or both) and (b) the international dimension of the system or institution (the Bank as the sole authority, international cooperation agreement with the Bank as the lead authority, or other role for the Bank).

Table C.6

Mapping of the financial market infrastructures and payment services sector

	International cooperation			The Bank acts	
	The Bank acts as lead authority	The Bank participates in the supervision, under the direction of another authority		as the sole authority	
Prudential supervision		<u>Custodian bank</u> The Bank of New York Mellon SA/NV (BNYM SA/NV)		Payment service providers (PSP) Payment institutions (PI) Electronic money institutions (ELMI)	
Prudential supervision and oversight	Central securities depository (CSD) Euroclear Belgium International central securities depository (ICSD) Euroclear Bank SA/NV Supporting institution Euroclear SA/NV	<u>Central counterparties (CCP)</u> LCH Ltd (UK), ICE Clear Europe (UK) LCH SA (FR), Eurex Clearing AG (DE), EuroCCP (NL), Keler CCP (HU), CC&G (IT)		<u>Payment processor and payment institution</u> Worldline SA/NV	
	<u>Critical service provider</u> SWIFT	Other infrastructure TARGET2-Securities (T2S) ¹		<u>CSD</u> NBB-SSS	
Oversight	<u>Payment system</u> Mastercard Clearing Management System ²	<u>Payment system</u> TARGET2 (T2) ¹ CLS		<u>Card payment schemes</u> Bancontact ¹ Mastercard Europe ¹ Maestro ¹	
				<u>Payment processors</u> Mastercard Europe equensWorldline	
				<u>Payment system</u> Centre for Exchange and Clearing (CEC) ¹	
Post-trade infrastructure		Securities clearing	Payments	Payment systems	
		Securities settlement		Payment institutions and electronic money institutions	
		Custody of securities		Payment processors	
Other infrastructures		T2S		Card payment schemes	
		SWIFT			

Source: NBB.

¹ Peer review in Eurosystem/ESCB.

² The NBB and the ECB act jointly as lead overseers (authorities responsible for oversight).

Table C.7

Number of payment institutions and electronic money institutions subject to supervision

(end-of-period data)

	2020	2021
Payment institutions	38	39
Under Belgian law	33	34
Limited status institutions 1	0	0
Foreign EEA branches	5	5
Electronic money institutions	8	7
Under Belgian law	7	6
Limited status institutions ²	0	0
Foreign EEA branches	1	1

Source: NBB.

- 1 Limited status institutions are registered as having limited status in accordance with Article 82 of the Law of 11 March 2018 and are subject to a limited regime.
- 2 Limited status electronic money institutions are registered as limited status electronic money institutions in accordance with Article 200 of the Law of 11 March 2018 and subject to a limited regime.

Belgium has 46 payment institutions and electronic money institutions, including European branches.

During the year under review, the Bank was again frequently approached by new applicants offering a large number of new business models. That implies that the number of institutions could increase next year.

3.2 Supervision priorities

One of the Bank's main supervision activities in 2021 consisted in implementing the requirements relating to rules on strong customer authentication (SCA) and common and secure communication (CSC) between payment service providers (open banking) on the Belgian market.

As described in more detail in chapter D on digitalisation, in 2021, the Bank also pursued its operational activities and its strategic activities concerning cyber risks and IT risks. In that connection, a number of inspections were conducted in market infrastructures and payment institutions, a number of payment institutions were asked to complete a questionnaire on IT risks, and there was more frequent monitoring of institutions' activities. Regarding policy, the work

of the EU Council's working group on the European Commission's proposal for a Digital Operational Resilience Act particularly merits a mention.

In 2021, the Bank also set up the National Retail Payments Committee (NRPC) and continued to analyse the impact of the CRD5 on the Euroclear group.

In addition, the Bank acting jointly with the ECB took the lead of a group of Eurosystem central banks which prepared the enhanced oversight regime for Mastercard Europe.

Finally, this section also examines in more detail the effects of the COVID-19 pandemic on the ability of financial market infrastructures to attract and retain skilled staff.

Strong customer authentication and open banking

The Bank kept a close eye on the migration plan which progressed step by step towards full compliance with strong customer authentication for all card transactions, leading in May 2021 to the complete and successful implementation of SCA for online card payments.

With a view to the successful integration of the open banking environment required by law, a number of obstacles in the institutions' interfaces were pinpointed and the Bank took the necessary measures to enforce the law in the event of the market failing to remove these last obstacles.

Particular attention was also devoted to the requirements concerning the custody of funds received by payment service providers from payment service users, giving rise to expansion of the periodic reporting permitting horizontal analyses.

Focus on cyber resilience

The pandemic had the effect of speeding up digitalisation, particularly via the rapid pace at which firms had to make the necessary adjustments to their processes and systems in order to introduce or expand remote working. Less well-intentioned players, such as hackers and organised criminal groups, also seized this opportunity. That situation increases the relevance of the Bank's TIBER-BE (Threat Intelligence-Based Ethical Red Teaming Belgium) programme, in which controlled

cyber attacks are carried out with the institutions. The starting point for these tests comprises scenarios devised on the basis of information on real, relevant threats obtained from the sector. The first cycle of tests will conclude at the beginning of 2022, and the positive response by the sector prompted the launch of a new cycle with an increased number of institutions concerned. Analysis of the implications of the Digital Operation Resilience Act (DORA) in the Threat-Led Penetration Testing (TLPT) also began in 2021. For more information on TIBER-BE and DORA, see chapter D below.

National Retail Payments Committee

In 2021, the Bank set up the NRPC whose activities focused on the following 4 areas via *ad-hoc* sub-groups:

- a) Instant payments: Three years after their introduction in Belgium, instant payments represent only a minor percentage of transfers. The sub-group aims to understand the reasons for this limited usage and to examine measures that might encourage their adoption.
- b) Central bank digital currency (CBDC): The sub-group aims to inform, consult and if the Eurosystem decides to analyse the digital euro in greater depth and/or develop prototypes to involve the various stakeholders in analysing the needs.
- c) Cash: The sub-group assessed access to cash in Belgium with the aid of a model developed by the Bank. It took account of both the current situation and the outlook for the future.
- d) Coins: This sub-group, chaired by the Treasury (FPS Finance), examines questions relating to the use of coins, in particular changes in the use of 1 and 2 cent coins following the introduction of rounding off.

Impact of CRD5

At the level of the Euroclear group, the analysis of corporate governance continued – particularly regarding the role of the financial holding company which has decision-making power within the group. Since the Belgian Law of 11 July 2021 transposed the fifth EU Capital Requirements Directive (CRD5) into the Belgian Banking Law, which provides for approval of the financial holding company with decision-making power in a banking group such as Euroclear, this analysis was necessary to understand

which entity formed the group's decision-making centre and which entities were responsible for implementing such decisions.

Mastercard Europe

In 2021, the Bank in conjunction with the ECB took the lead of a group of Eurosystem central banks which prepared the enhanced oversight regime for Mastercard Europe. This enhanced regime follows the Eurosystem's May 2020 designation of Mastercard Europe as a systemically important payment system (SIPS). Analysis of the increased requirements began in May 2021 and is expected to be completed in mid-2022. In the meantime, the Bank of England has also recognised Mastercard Europe as a systemically important payment system for the British market. Discussions began between the Bank of England, the ECB and the NBB to determine whether a partnership should be set up for the exchange of information and, if so, in what form.

COVID-19 and its impact on the ability to attract and retain staff

During the various phases of the COVID-19 pandemic, the Bank took heed of the measures which the FMIs adopted to organise their activities so as to give priority to their workers' health without compromising the operational continuity of their critical services.

FMIs are already considering how they will organise their activities after the pandemic. In that regard, they have to take account of a number of risks relating, in particular, to the challenge of attracting and retaining skilled staff: those risks require careful management.

Organisation of the FMIs' work during the pandemic

Working from home became the norm in FMIs, too. In some cases, however, they opted to continue carrying out certain critical activities on site. That was the case, for example, regarding the management and monitoring of the data centres for which it was important, from the point of view of risk management, for control to continue to be based in a particularly secure environment. It was also considered that, in order to ensure operational continuity, work on critical systems could be carried out more quickly and with less impact on users if the team responsible continued to work on site. For these staff, the usual

protection measures were applied: they were divided into two groups, present in alternate weeks, and had to respect the distancing rules and the obligation to wear a mask.

Monitoring of the rates of sick absence showed that they remained at the same fairly low level in FMIs and that, in most cases, they were actually slightly down against the figures for previous periods.

Challenges for the organisation of the work

Protracted working from home entailed significant adjustments in workers' behaviour. While that led to increased productivity, it also caused workers to suffer greater stress, some of them experienced motivation problems, and there was an increased risk of burn-out. Another point for attention concerned attracting new workers (from recruitment to talent development) and offering them the chance to expand their knowledge – including as regards the corporate culture – by means of informal networks within the organisation.

During the phase of the pandemic when restrictions could be eased and mandatory remote working could be gradually reduced, most FMIs continued to offer

their workers the option of voluntary attendance at the workplace, either on one or more days a week or every day. This was conditional upon not exceeding the maximum presence in the office so that the health measures imposed by the government or by the FMI itself could be respected. During this phase, some staff were very reluctant to return to the office. They were not so concerned about safety in the workplace but more about the supposed risks of travelling between home and the office if they had to use public transport. It will be a major challenge for FMIs to meet the expectations of (some) staff regarding the health risks, on the one hand, while also regaining the advantages of physical presence (brainstorming, informal contact, innovation and collaboration, better understanding of non-verbal communication).

FMIs are already thinking about how they can maintain a hybrid form of working in the future (combining remote working with work in the office). Options for consideration involve, on the one hand, rearranging offices to take advantage of physical presence mainly for the exchange of ideas, and on the other hand, offering workers more flexibility (e.g. if they do not have a suitable environment for working from home). It is still too soon to make a



definitive statement on exactly how this new form of working will be maintained, but it is clear that a shift has occurred

Fiercer competition for recruiting digital profiles

When the health measures were (temporarily) eased in the second half of 2021 and business resumed,

Owing to accelerating

digitalisation in practically all

sectors, FMIs are struggling to

recruit and retain IT specialists

there was an increase in economic activity, leading to a labour market revival and a rise in job offers. In addition, the compulsory switch to working from

home due to restrictions relating to COVID-19 speeded up digitalisation in almost every sector of the economy. That boosted demand for digital profiles in all sectors, while most of the staff recruited by FMIs have such a profile.

A significant, potential risk for FMIs is therefore that on an overheated jobs market for digital profiles – which are in any case already in fairly short supply in Belgium – it may become harder to recruit and retain IT specialists. FMIs are therefore already considering how they can maintain an attractive working environment for their staff, including after the pandemic, and how they can respond to staff expectations concerning the organisation of the work and the balance between office-based and remote working. It could become increasing difficult to attract IT specialists prepared to

work with "legacy" IT systems if there are job opportunities in growth sectors which make greater use of more modern information technologies and are

regarded as more attractive. FMIs are aware of this challenge, and that explains, for instance, why they introduced "Agile" working methods, which generally lead to greater satisfaction and greater involvement of IT workers. An alternative solution for FMIs consists in opting for diversification in the tapped talent pools, such as geographical diversification involving work with teams of IT experts in locations other than the current main centres of activity.

D. Digitalisation

The digitalisation of financial services continued to gain importance in 2021, as it enables consumers, workers and businesses to cope with the challenges associated with the COVID-19 pandemic. Many trends are becoming apparent in terms of innovation. For example, there are new business models based on innovative payment solutions, the quest for operating efficiency via the use of machine/ deep learning or robotic process automation, refinement of commercial strategies via data analysis and artificial intelligence, and the positioning of IT infrastructures and data aggregation in the cloud. These trends often reflect the aim of anticipating the fundamental changes expected in the structure of the financial services market, as the role of financial services and players is changing significantly

at global level. There is a progressive shift towards a market in which financial and non-financial services are structured

around integrated payment, e-commerce and social media platforms, with cooperative ecosystems covering these various aspects. These developments are facilitated in particular by the use of modular technologies enabling different financial and non-financial players to communicate via interfaces (application programming interfaces – APIs). Theinitiatives concerning global stablecoins which will facilitate payments in such ecosystems and platforms are taking shape.

These developments are already having a major influence on the risks facing financial institutions, and on consumers, monetary policy and/or financial stability. Since digitalisation leads to greater interconnectivity, (cyber) security and the continuity of the underlying systems and infrastructures are more crucial than ever. There is every indication that the

risks inherent in digitalisation will only increase in the foreseeable future.

In that context, the European Commission proposed a digital strategy designed to boost digital innovation, creation of a single digital market in financial services and a European financial data area encouraging access to and sharing of those data. That strategy also aims to achieve better control of the risks resulting from digital innovation. In September 2020, it led to a series of European legislative initiatives in which the Bank was closely involved.

Two of them, relating to operational resilience and crypto-assets, are examined below. Other sections look at the implementation of open banking, go-

verned by the second Payment Services Directive (PSD 2), and at the regulatory initiative aimed at defining harmonised rules

on artificial intelligence, launched by the European Commission in April 2021. This chapter likewise deals with the action taken by the Bank to support the ECB's initiative concerning the digital euro, and the efforts made to map FinTech/InsurTech developments in supervised institutions and to limit the cyber risks and IT risks to which they are exposed.

Digitalisation is already having a major influence on the risks facing financial institutions and financial stability

1. FinTech

1.1 Open banking: access to payment account systems under PSD 2

One of the main supervision activities in 2021 consisted in monitoring compliance with the rules on FinTech players' access to payment accounts in credit institutions.

To ensure technical feasibility, credit institutions are required to create a technical access channel (dedicated interface) which FinTech players can use to offer their services. The specific technical requirements were defined by the technical standard for SCA (strong customer authentication) ¹ & CSC (common and secure communication) , which came into force on 14 September 2019. Additionally, the EBA published an opinion in June 2020 on the obstacles in the dedicated interfaces and their elimination.

The Bank approved that EBA opinion and stated in a Communication dated 1 July 2020 that it was relying on this opinion for its interpretation of the ban on obstacles in the operation of the dedicated interfaces, and that it expected credit institutions to remove all hurdles from their dedicated interfaces by 31 December 2020.

The Bank has kept a close watch on this issue, but in the spring of 2021, on completing an in-depth analysis of the dedicated interfaces of each credit institution, it concluded that a number of obstacles still remained. That is why the Bank stipulated a deadline for the institutions concerned to remedy the situation. It is sure that most of these obstacles will be removed by mid-2022. It is also keeping a close eye on the interpretation of the current regulations on the subject, and providing additional technical information where necessary.

1.2 The digital euro

At the end of 2020, with its report on the digital euro, the ECB embarked on a detailed survey of the need to issue its own digital currency and how to proceed. In that context, experiments have already been conducted and a public consultation has been organised.

If the digital euro were to be launched, its aim would be to support the digitalisation of the European economy and to ensure its sovereignty in relation to foreign digital currencies or private means of payment. In view of the declining use of cash, at least in some Member States, this project could offer citizens an alternative way of ensuring access to central bank currency. That said, there is absolutely no question of discouraging or phasing out the use of cash. Nor is the aim to compete with the private sector. On the contrary, the idea is to promote cooperation with banks, payment institutions and other financial institutions.

The Bank is working with other euro area central banks on this project via the High-Level Task Force on Central Bank Digital Currency, a forum for discussing the main aspects relating to the design and characteristics of the digital euro. Indirect use is made of experts from within the Bank and outside. Various departments with experience in the sphere of cash and payments, macroeconomics, financial stability, technology and privacy protection, etc. are taking part in the project. To ensure that all stakeholders are involved in the project, the Bank keeps the private sector informed of its progress via the National Retail Payments Committee (NRPC – see section C.3.2).

1.3 Prudential treatment of crypto-asset exposures and draft European Regulation

Although the banks' crypto-asset exposures are currently limited, the expansion and continuing innovation of the market and services for these assets are arousing growing interest among banks. This could lead to new risks for financial stability and the banking system. In that context, on 10 June 2021, the BCBS launched a consultation on the prudential treatment of banks' crypto-asset exposures.

It proposes dividing these exposures into two groups according to certain characteristics of the crypto-assets:

The first group concerns assets deemed eligible for treatment according to the existing Basel framework, subject to certain modifications and additional guidelines. That eligibility is determined on the basis of certain conditions relating in particular to the robustness of the stabilisation arrangements for stablecoins, and the legal framework of rights and obligations relating to the crypto-asset. This group is divided into two

¹ Commission Delegated Regulation (EU) 2018/389 of 27 November 2017 supplementing Directive (EU) 2015/2366 of the European Parliament and of the Council with regard to regulatory technical standards for strong customer authentication and common and secure open standards of communication.

- sub-groups: crypto-assets representing tokenised versions of traditional assets 1, and stablecoins.
- The second group comprises assets which do not meet all the eligibility conditions in the first group. They will be subject to a new, conservative prudential treatment.

Owing to the evolving nature of these assets, a second consultation will be published during 2022. This initiative does not concern central bank digital currencies (CBDCs).

It should also be noted that, in September 2020, the European Commission had published a proposal for a Regulation on Markets in Crypto Assets (MiCA), which forms part of its digital strategy. With this Regulation, the Commission aims to provide a framework for crypto-assets which cannot be classed as financial instruments, electronic money, deposits, structured deposits or securitisation instruments, and for crypto-asset services not already covered by the rules in force (see section E.2.3 in the Report 2020).

1.4 Regulation and prudential expectations concerning the use of artificial intelligence

There have been various significant initiatives on the use of artificial intelligence.

On 21 April 2021, the European Commission published a proposal for a Regulation laying down harmonised rules on artificial intelligence (AI) in order to safeguard fundamental rights. It focuses the legislative effort on a small number of AI systems posing "high risks" for fundamental rights. In particular, this proposal provides for a preventive system which is based essentially on the establishment of compliance arrangements by suppliers of high-risk artificial intelligence systems and the supervision of those arrangements.

The proposal is not specific to the financial sector, though it does have a more tangible, immediate impact on lenders, as it considers that AI systems intended for assessing the solvency of individuals or to establish their credit rating are high-risk systems. Institutions deemed to be suppliers of that type of system will therefore be subject to additional obligations, such as the establishment of a risk management system, appropriate governance and data management practices, or human oversight.

Al system providers are covered by the draft Regulation if they develop an Al system or have an Al system developed in order to place it on the market or put it into service in their own name. However, there is an exception for Al systems put into service by small-scale providers and used exclusively by them.

Under the proposal, the Commission may, in the future, extend the list of high-risk systems to include other systems presenting a risk of negative consequences for fundamental rights, equivalent to or greater than the risk of negative consequences presented by the high-risk Al systems already identified. It is therefore possible that other systems such as certain specific systems used by insurers may ultimately be regarded as high-risk.

The EBA which, had already published a report in mid-January 2020 on the main trends in the use of big data and advanced analytics in the banking sector, has now concentrated on the use of machine learning for the purpose of the internal models used to calculate the regulatory capital for credit risk. Machine learning is used for various purposes in this context, such as validation, data quality improvement, or enhancing the model's predictive power. Thus, on 11 November 2021, the EBA published a consultation document on this type of use of machine learning. Among the problems associated with this type of use, the EBA mentions the interpretability and explainability of the results, complexity and governance, including knowledge and understanding of the model. The EBA proposes some recommendations in that connection.

1.5 FinTech survey and analysis for credit institutions

In 2017, the Bank launched a survey on FinTech and digitalisation covering a selection of banks and financial institutions. It provided a general picture of the impact of FinTech on the Belgian financial sector and facilitated the launch of a dialogue with market

¹ The consultation document defines crypto-assets as "private digital assets that depend primarily on cryptography and distributed ledger or similar technology". Crypto-assets which represent tokenised versions of traditional assets are therefore those which use alternative means of recording the ownership of the traditional assets based on these technologies, rather than a central depository account.

players on various digital themes. The analysis of the survey responses was communicated to the participants and the public in 2018, together with a range of best practices concerning governance, organisation and monitoring in regard to FinTech and digitalisation.

Since that first survey, financial technologies and the resulting business models have continued to evolve, and new technology-based financial services have emerged. Customer preferences are also constantly changing, making the digital provision of banking services ever more important. That trend was further reinforced by COVID-19. Finally, some regulatory initiatives such as PSD 2 (see above) have since come fully into force. In 2020, the Bank therefore decided to conduct a new survey to update its knowledge of developments in the field, to gauge the response of institutions to the problems pinpointed, and to continue the dialogue with the sector.

To that end, in the second half of 2020, the Bank sent out a second structured questionnaire on the

impact of FinTech, asking participants about a number of general environmental aspects relating to FinTech and digitalisation, recent and future developments in business

models and financial technologies in each institution, projects relating to certain FinTech applications and their maturity, and finally, the overall strategic vision concerning FinTech and digitalisation. At the beginning of 2021, the responses were analysed and, in some cases, clarified by the institutions concerned. The results of that analysis were shared with the sector during 2021 and published separately¹. In general, the survey revealed that the banks had taken account of a number of best practices regarding organisation and governance identified following the first analysis in 2017. Thus, most banks have now included profiles with knowledge of digital technology and IT in their management bodies, and have taken steps to adapt their organisation in order to encourage and facilitate innovation. Nonetheless, many of them are having difficulty attracting the necessary talent to support the digital initiatives. Most institutions have also defined a strategic vision regarding FinTech and

digitalisation. However, key indicators of actual performance providing a clear view of how this vision is translated into reality are often lacking. In practice, that is reflected in significant variations between institutions in terms of digital performance and the development of new, innovative or digital applications. It is also evident that the smallest banks are often positioned as "followers". There is a risk that the business model of some banks may come under pressure, not only because of competition from new players such as BigTech, but also because the banks which are farthest advanced along the road to digitalisation and the integration of FinTech solutions will set the bar higher for all players in the sector by providing a more appropriate and/or more effective response to customers' wishes.

1.6 InsurTech survey and analysis for insurance undertakings

The Bank sent out a new

questionnaire to financial institutions

on the impact of developments

concerning FinTech/InsurTech

In a world where digitalisation is occupying an ever more prominent position, new technologies will also

> have a great influence on the insurance sector and on insurers' business model. That will open the way to financial innovation, but it will also lead to the emergence of new risks.

In that context, the Bank conducted an initial analysis on the scope and impact of digitalisation in the insurance sector on the basis of the data at its disposal.

It found that both insurers and InsurTech firms were actively contributing to innovation on the Belgian market, and that more or less all aspects of the value chain were concerned, even if the effects are mainly felt in the distribution or underwriting of insurance policies and claims management. The Bank likewise found that an array of technologies was already in use, such as digital platforms offering existing or new services on line, or services using robotic process automation. Innovative technologies such as artificial intelligence are also used to improve pricing. The analysis showed that this development primarily affected the non-life branches (such as motor and fire insurance) and to a lesser extent health insurance and credit insurance.

To develop this analysis further, the Bank sent out a new questionnaire to the insurance sector to obtain more information on insurers' vision and

¹ See www.nbb.be/fr/articles/la-banque-nationale-publie-une-nouvelle-analyse-de-la-transformation-numerique-dans-le.

strategy regarding digitalisation, new technologies, and the costs and potential benefits of using these technologies.

2. Digital operational resilience

2.1 Cyber risks and IT risks

The COVID-19 pandemic was again the dominant feature of the year in 2021. The financial sector has therefore long since switched to large-scale remote

working. While widespread working from home does reduce the health risks, it increases the cyber risks

and IT risks unless it is accompanied by supplementary measures and checks. For instance, the resolution of incidents is hampered not only because there are fewer operators physically present but also because of the large number of business computers simultaneously connected remotely to institutions via the internet. Finally, cyber criminals are likewise taking advantage of the new opportunities available to them in the pandemic situation. Fortunately, thanks to precautions taken by the institutions, there were no really serious operational incidents during the year under review.

In recent years, cyber attacks had already become a daily occurrence throughout the world. At the same time, the attackers are evidently continuing to refine

attacks targeting financial institutions worldwide. That document indicates the current situation regarding cyber threats facing the sector. In 2021, the listed attacks aimed, for example, to steal sensitive data, disrupt systems and initiate fraudulent transactions. Reported cases often included the use of ransomware or (crypto)malware, denial-of-service (DDoS) attacks, and the exploitation of institutions' vulnerabilities, particularly their supply chains, and/or staff credulity.

Insurance and reinsurance undertakings and groups are in a special position, being vulnerable to cy-

> ber risk on two fronts: as institutions, they are subject to cyber attacks, but they also feel the impact

of attacks on their customers, either via explicit cover (affirmative cyber insurance), or via implicit cover (silent insurance or non-affirmative cyber insurance). With the growing number of cyber attacks during the pandemic and the public's greater awareness of the possibility of being targeted, the Bank expects the growth of this cyber insurance market to gather pace.

Apart from cyber risks, the financial sector's heavy dependence on IT solutions also presents other challenges. Under pressure from innovative players, higher customer expectations regarding the services offered



Cyber attacks have become a daily

occurrence worldwide in recent years

and their availability, or growing security risks (e.g. by the use of end-of-life software which is no longer supported), traditional institutions are encouraged to renew their sometimes very obsolescent IT architecture in a fairly short space of time, but the complexity of their IT environment makes it a major challenge to achieve that under properly controlled conditions. There is likewise a high risk of growing dependence on third parties for IT services and other standardised IT system components. In particular, cloud solutions are increasingly being used, and for ever more important processes. That is also among the reasons why, at sectoral level, a small number of critical service providers present an ever-increasing concentration risk for the financial industry. The need for sufficiently extensive testing of software and recovery solutions to cover a range of extreme but plausible scenarios remains another key point for attention.

It is therefore important for the management bodies of financial players to have the necessary expertise and information to monitor the risks appropriately, and to incorporate adequate measures in their strategic planning to keep the risks within acceptable limits. However, many institutions state that they have difficulty in recruiting sufficient staff with the required skills and expertise. In addition, all the staff of those institutions must be aware of the cyber risks and IT risks in order to understand how those risks could arise and be ready to respond to them as expected.

2.2 Legislative guidelines and developments

In recent years, the Bank has made a substantial contribution to a regulatory framework designed to improve the control of cyber risks and IT risks. The prudential Circular on the Bank's expectations concerning the operational business continuity and security of systemically important institutions remains a key reference point. The Bank also makes an active contribution to establishing a European regulatory framework for the management of cyber risks and IT risks. Under the auspices of the EBA, this resulted in the publication of the EBA guidelines for supervisory authorities on ICT risk assessment under the SREP, guidelines on outsourcing arrangements, and guidelines on ICT and security risk management. Under the aegis of EIOPA, a comparable regulatory framework was likewise set up for the insurance sector in the form of guidelines on outsourcing to cloud service providers and guidelines on ICT security and governance. These guidelines have meanwhile all become part of the Bank's supervision and policy framework. For payment systems and market infrastructures, the ECB's oversight expectations concerning cyber resilience are the benchmark. There have likewise been significant developments at global level. As stated previously in section B.1.2, in March 2021, the Basel Committee published new principles aimed at strengthening banks' operational resilience. Those principles are obviously highly relevant in a digital context. There is also a specific principle concerning ICT and cyber security.

In September 2020, the European Commission published a proposal for a Regulation called the Digital Operational Resilience Act (DORA). This proposal aims to mitigate the risks associated with the digital transformation of the financial sector by laying down strict, common rules on ICT governance and risk management, ICT incident reporting and information-sharing, security tests and risks relating to ICT third parties. These rules would apply to a wide range of financial institutions, but also to critical ICT service providers (third-party providers), such as cloud service providers, who would be subject to a form of oversight. As a member of the Belgian delegation, the Bank plays an important advisory role in discussions on draft legislative texts at European level and will probably also be closely involved in the subsequent development of technical standards.

2.3 Operational activities

Assessing cyber risks and IT risks and encouraging control over those risks are top priorities for the Bank, and European and international cooperation in that sphere is becoming increasingly important. Here, the Bank focuses on the security of individual financial institutions and FMIs and the confidence that they inspire, and on cross-sectoral control strategies.

The approach concerning individual institutions is two-pronged. On the one hand, institutions subject to prudential supervision are required to hold capital to cover their operational risks, including cyber risks and IT risks. Also, the operational security and robustness of the critical processes of financial institutions and FMIs are subject to close monitoring. The availability, integrity and confidentiality of the IT systems and data are crucial here. In 2021, the Bank conducted a number of inspections (for banks under the SSM) to check on compliance with the regulatory framework and

the proper management of IT systems in relation to cyber risks and IT risks. In addition, it monitors these risks in financial institutions and FMIs in the course of its ongoing and recurrent supervisory activities. The COVID-19 health crisis obliged the Bank to revise its approach to these supervision activities. On the one hand, the content of the activities was adjusted to the new reality, with particular emphasis on COVID-19, while working methods were also adapted to give preference where possible to remote meetings and technological resources.

In 2018, the Bank established a framework for ethical hacking, known as TIBER-BE (Threat Intelligence-Based Ethical Red Teaming Belgium). This programme forms the Belgian part of a methodology devised by the Eurosystem and aims to boost individual financial institutions' and FMIs' cyber resilience by means of sophisticated tests, and to supply important insight into the cyber security of the Belgian financial sector as a whole. The Bank encourages these exercises in its capacity as the guardian of financial stability. In 2020, an updated version of the TIBER-BE framework was published on the Bank's website, in which the methodology is refined on the basis of the experience gained from tests already carried out. The sector seems convinced of the methodology used and the benefits offered by these specific tests. Meanwhile, the TIBER-BE team also successfully conducts cross-border tests, in close and effective collaboration with other EU countries which have implemented the TIBER framework, and with the UK, which has developed a similar framework, called CBEST. Nevertheless, the TIBER-BE pro-

gramme is coming to the end of its first cycle and the experience gained is being actively



incorporated into the reference framework for a second cycle which will begin shortly.

The Bank is also paying closer attention to sectoral initiatives. For instance, the SSM regularly conducts transversal analyses on cyber- and IT-related subjects and cybernetic aspects. In 2021, for example, all significant banks and some less significant banks were again asked to complete a questionnaire which is to provide important data on IT aspects for the annual SREP and will permit cross-sectoral analyses. A large number of insurance undertakings, investment firms, payment institutions and electronic money institutions were also asked to provide such information for a similar purpose.

The Bank used another questionnaire to ask the entire insurance sector in Belgium about various aspects of cyber risk, and informed the firms of the results of its analysis, particularly those implying a lack of control on certain points (see box 12).

BOX 12

Principal observations on the cyber risk questionnaire for the insurance sector

On the subject of cyber risk that companies in the insurance sector directly face, the Bank's analysis based on a questionnaire showed that:

- Cyber attacks most frequently target international and significant undertakings;
- International and significant undertakings understand the cyber risk better thanks to specific risk management frameworks and processes for collecting data and assessing the risk;
- Phishing e-mails are the most widely reported incidents in terms of frequency, but ransomware incidents are top of the list in the case of international undertakings.



The analysis also revealed that the cyber insurance market was still small in Belgium, with most undertakings not offering any cyber risk cover in 2019. Nevertheless, over the past four years, the Bank has seen this market expand.

Regarding cover for cyber risks, undertakings should be concerned about silent cyber risk (also known as non-affirmative exposure), i.e. the cyber risk implicitly covered by traditional non-life policies without insurers or reinsurers being aware of it. Insurance undertakings offering non-life cover that does not explicitly exclude cyber risk should revise their contracts in the future, because silent cyber risk cover can give rise to significant financial losses.

Qualitative methods are the commonest way of pricing cyber insurance, as quantitative approaches are difficult to implement owing to the lack of relevant data.

In its role as the sectoral authority for application of the law on the security and protection of critical infrastructures (principally systemic banks and FMIs), the Bank also assesses the effectiveness of the control systems of these critical financial infrastructures. In that context, the Bank likewise organises and coordinates periodic sectoral crisis simulation exercises in order to prepare the Belgian financial sector for potential operational incidents of a systemic nature. Under the law on network and information system security (NIS),

the Bank acts as the sectoral point of contact for major incidents in the sector.

The Bank also takes part in various international working groups and forums to gain a better understanding of the risks which could become systemic for the financial sector and to examine mitigation measures. Other initiatives aim to promote the exchange of information between institutions, supervisory authorities, central banks, etc.



E. Resolution

The Bank exercises its mandate as the national resolution authority within the Banking Union, alongside the SRB and the resolution authorities of the other participating Member States.

The principal mission for the Bank, as the national resolution authority, is to contribute towards improving the ability of the Belgian and European authorities to resolve problems arising from the failure of a credit institution or investment firm under Belgian law. The role that these financial institutions play in that context is crucial as they carry primary responsibility for achieving this aim of resolvability.

A key element in this process is the setting by the resolution authorities of a Minimum Requirement for Own Funds and Eligible Liabilities (MREL) which all credit institutions must respect. In 2019 the regulatory framework concerning the MREL underwent significant modification with the adoption of the BRRD2¹. The transposition of that Directive into Belgian law, which was finalised during the year under review, is among the most notable developments in 2021 in regard to resolution, since it entailed redefining the approach of the Bank and the other European resolution authorities to the calibration of the MREL.

Another feature of the year under review was the continuation of the specific conditions relating to COVID-19. Although those conditions necessitated some adjustments to the resolution authorities' requirements when the crisis erupted in 2020, e.g. postponement of some reporting requirements, they did not entail any special measures in connection with the 2021 cycle of resolution plans, even though the

resolvability requirements are being tightened up year by year. That bears witness not only to the importance that all credit institutions attach to the work relating to resolution, but also to the institutions' capability in regard to operational continuity.

1. Legislative and regulatory framework

1.1 Transposition of BRRD2 and miscellaneous provisions

During the year under review, the provisions of the BRRD2 were transposed into Belgian law by the Law of 11 July 2021². In addition, a number of adjustments were made to the provisions included when the BRRD was initially transposed³. First, the introduction of the concepts "resolution entity" and "resolution group" is an important new feature of the BRRD2. The group resolution plans must now identify, within a group, the entities to which the resolution authority expects to apply the resolution instruments in the event of failure, and those which should continue to operate without going into resolution. That distinction permits differentiation between single point of entry

¹ Directive (EU) 2019/879 of the European Parliament and of the Council of 20 May 2019 amending Directive 2014/59/EU as regards the loss-absorbing and recapitalisation capacity of credit institutions and investment firms and Directive 98/26/EC.

² Law of 11 July 2021 transposing Directive 2019/878 of the European Parliament and of the Council of 20 May 2019, Directive 2019/879 of the European Parliament and of the Council of 20 May 2019, Directive 2019/2034 of the European Parliament and of the Council of 27 November 2019, Directive 2019/2177 of the European Parliament and of the Council of 19 December 2019, and Directive 2021/338 of the European Parliament and of the Council of 16 February 2021, and containing miscellaneous provisions.

³ Directive 2014/59/EU of the European Parliament and of the Council of 15 May 2014 establishing a framework for the recovery and resolution of credit institutions and investment firms and amending Council Directive 82/891/EEC, and Directives 2001/24/EC, 2002/47/EC, 2004/25/EC, 2005/56/EC, 2007/36/EC, 2011/35/EU, 2012/30/EU and 2013/36/EU, and Regulations (EU) No. 1093/2010 and (EU) No. 648/2012, of the European Parliament and of the Council.

resolution strategies, in which it is generally only the parent company that goes into resolution, and multiple point of entry resolution strategies in which the resolution tools are applied to both the parent company and some of its subsidiaries, resulting in the break-up of the group.

In addition, the regulatory framework defining the MREL requirements underwent radical revision following up to the transposition of the BRRD2. Thus, the MREL requirement is now expressed as a percentage of both the total risk exposure amount (TREA) and the leverage ratio exposure (LRE) of the institution or entity concerned. This means that institutions or entities now have to satisfy simultaneously the levels set by each of these two calculations. Similarly, the rules on the subordination of the MREL instruments have been tightened up. Thus, alongside the existing

category of global systemically important institutions (G-SIIs), a new category of large institutions has been created, namely "top-tier" banks with a balance sheet

total in excess of € 100 billion. More prudent subordination requirements apply to this category of large institutions. In that connection, It should also be pointed out that the resolution authorities can apply the MREL regime for top- tier banks to institutions whose total assets are less than € 100 billion and whose failure would be reasonably likely to pose a systemic risk according to the resolution authorities (this is also known as the "fishing option").

The possibility for resolution authorities to impose a moratorium after the adoption of a resolution measure had already been included in the Belgian legislation following the transposition of the BRRD. With the transposition of the BRRD2, there is now also provision for a pre-resolution moratorium. In practice, the resolution authorities now also have the power to suspend certain contractual obligations for a limited period of no more than two working days before an institution or entity is placed in resolution, i.e. as soon as it is determined that the institution or entity is failing or likely to fail and there is no immediately available private sector measure which, in the opinion of the resolution authorities, could prevent the failure of the institution or entity within a reasonable timeframe. An additional condition specifies that the application of the pre-resolution moratorium must be deemed necessary to avert any further deterioration in the financial situation of the institution or entity. During this moratorium period, the resolution authorities may determine whether a resolution measure satisfies the public interest criterion, choose the most appropriate action, or ensure that one or more resolution tools are effectively applied. In cases where it is deemed desirable that the power to impose such a moratorium should also apply to covered deposits, the Belgian legislature made use of the option offered by the BRRD2 to oblige the resolution authorities to ensure that depositors have access to an appropriate daily amount of those deposits.

The BRRD2 also supplements the existing regulatory framework with a new article covering the situation in which the resolution authority considers that the first two resolution conditions are met (the institution or entity has defaulted or is likely to do so, and

Transposition of the BRRD2

into Belgian law was one of

the most notable developments

concerning resolution in 2021

there is no other measure

that could prevent its failure), but not the condition whereby resolution is necessary in the public interest. In that case, the

BRRD2 stipulates that the institution or entity is to be liquidated in an orderly manner in accordance with the applicable national law. The transposition into Belgian law provides that, in such circumstances, the resolution authority shall, on its own initiative, notify the bankruptcy court by means of a summons. It is then for the court to decide on the insolvency conditions.

The existing regulatory framework was also revised in respect of the obligation on institutions to include bail-in recognition clauses in contracts or instruments creating liabilities which come under third-country law. Following the transposition of the BRRD2, it is now acknowledged that, in some circumstances, it may prove legally or otherwise impractical to include such provisions in some contracts. If that is the case, the institution or entity must notify the resolution authority which will then conduct its own assessment.

Finally, another significant adjustment concerns abolition of the prior judicial review and validation of the disposition decision of the resolution authority. That system is replaced by an ex-post judicial review. This adjustment aligns the Belgian legal framework with the regime applied in almost all the EU countries and implements a recommendation made by the IMF during the 2017 Financial Sector Assessment Programme

(FSAP)¹. The possibility of appealing against a disposition decision or a resolution measure remains unchanged.

1.2 Revision of the bank crisis management and deposit insurance framework

The negotations on the revision of the bank crisis management and deposit insurance (CMDI) framework continued during the year under review. In the Bank's opinion, that revision which concentrates on the BRRD, the Single Resolution Mechanism Regulation (SRMR ²) and the Deposit Guarantee Schemes Directive (DGSD ³) is important for Belgium, as the CMDI initiative is one of the elements leading to completion of the Banking Union. Its aim is to assess the crisis management framework set up in 2014 in

order to strengthen certain elements where necessary. In regard to resolution, the preparatory work has shown that two key elements could be addressed. First, the expectation is

that a broader interpretation of the public interest test would improve the crisis management framework for small and medium-sized banks. Such a broadening of the public interest test is desirable in that, for most failing credit institutions, it would facilitate resolution within the existing Banking Union framework, under the SRB. Nevertheless, if such a broader interpretation were not possible, it would then be desirable to strengthen the normal insolvency framework by introducing transfer instruments for institutions whose resolution is not considered to be in the public interest. However, in that case the proposed system would need to be consistent and offer the minimum opportunities for potential arbitrage.

Second, the creditor hierarchy, and in particular the preference for covered deposits, could be revised. In a quantitative analysis conducted at the request of the

A non-mutualised system of national deposit guarantee schemes is acceptable but could hardly be called an EDIS

European Commission 4, the EBA shows that, in the event of resolution, the ability of the deposit guarantee systems to intervene is still very limited in view of the super preference enjoyed by covered deposits. Similarly, owing to the intervention conditions of the Single Resolution Fund (SRF), in many cases it might be necessary to proceed with a deposit bail-in before the SRF can intervene. The quantitative analysis shows that introducing a general preference which would go beyond covered deposits to include all deposits, would permit speedier mobilisation of the national deposit guarantee systems and would also reduce the risk of uninsured deposits being included in a bail-in, thereby cutting the risk of exporting the banking crisis to the real economy.

This last point raises governance issues. If more of the resolution costs accrue to the national de-

posit guarantee systems, it becomes necessary for that to be reflected in the governance of the resolution mechanism, because the governance of the system cannot be based

on centralised decision-making if the crisis costs are decentralised and borne by non-mutualised national deposit guarantee systems. It then becomes necessary to introduce a system of checks and balances ensuring that any decisions take due account of national interests.

One element of that balance will be determined by the characteristics of the future European Deposit Insurance Scheme (EDIS), and in particular the mutualisation of losses between national deposit guarantee systems. An ambitious EDIS providing for mutualisation of losses between national deposit guarantee schemes (DGSs) in the Banking Union, or even the creation of a single deposit guarantee scheme within that Union, is not essential to the smooth operation of the Banking Union as it stands. A non-mutualised system in which the only link between national deposit guarantee schemes is the option of providing credit lines on a mutual basis when necessary would probably be more realistic and widely acceptable, even if such a system could hardly be called an EDIS. In that connection, it should be noted that such a system

¹ See the Annual Report 2017, section on Prudential Regulation and Supervision, pp. 183-184.

² Regulation (EU) No. 806/2014 of the European Parliament and of the Council of 15 July 2014 establishing uniform rules and a uniform procedure for the resolution of credit institutions and certain investment firms in the framework of a Single Resolution Mechanism and a Single Resolution Fund and amending Regulation (EU) No. 1093/2010.

³ Directive 2014/49/EU of the European Parliament and of the Council of 16 April 2014 on deposit guarantee schemes.

⁴ See EBA replies to the European Commission's call for advice on funding in resolution and insolvency as part of the review of the crisis management and deposit insurance framework, 22 October 2021.



which would not introduce any loss mutualisation between national deposit guarantee schemes would be unable to bring about major changes in the existing balance between home and host countries because the system would remain essentially national. Loss mutualisation at the level of covered deposits is in fact necessary, but insufficient in itself, to ensure a group approach in the event of failure.

During the year under review the European Commission organised two public consultations in order to examine the framework. Its publication of a proposal for revision of the framework, initially scheduled for the fourth quarter of 2021, was postponed to 2022.

1.3 Proposal for a Directive establishing a framework for the recovery and resolution of insurance and reinsurance undertakings

In September of the year under review, the European Commission published a proposal for a Directive of the European Parliament and of the Council establishing a framework for the recovery and resolution of insurance and reinsurance undertakings (the "IRDD proposal" or the proposal for an Insurance Recovery and Resolution Directive 1). This IRDD proposal, developed in conjunction with Solvency II (see sub-section B.2.3), aims to establish a recovery and resolution system for the insurance sector similar to the one that already exists for credit institutions and investment firms,

In order to improve the crisis management preparations, the IRRD proposal – like the BRRD – provides for insurers and reinsurers to draw up recovery plans. These recovery plans have to examine the various available options for managing any crisis that occurs. In particular, the recovery plan determines what measures an insurer or reinsurer can adopt in the event of a serious crisis. Those measures aim to restore the financial health of the insurer or reinsurer implementing them.

Apart from the recovery plans, the IRRD proposal provides for the drafting of resolution plans. As in the case of the banking sector, those plans – which will be devised by a resolution authority to be designated – must include the resolution measures which that authority proposes to adopt if the resolution conditions are met. Those conditions are the same as the ones in force for the banking sector. First of all, it is necessary to ascertain that the insurer or reinsurer is failing or likely to fail. Next, there must be no alternative supervisory action or private sector measures which could solve the situation within a reasonable timeframe. Third, the resolution action must be necessary in the public interest. If the third condition is also

and recently also for central counterparties (CCPs)². The IRRD proposal obviously takes account of the specific nature of the insurance sector's activities. It covers the complete cycle of crisis management, from the preparations for a crisis situation to the resolution of an insurance or reinsurance undertaking.

¹ Proposal for a Directive of the European Parliament and of the Council establishing a framework for the recovery and resolution of insurance and reinsurance undertakings and amending Directives 2002/47/EC, 2004/25/EC, 2009/138/ EC, (EU) 2017/1132 and Regulations (EU) No. 1094/2010 and (EU) No. 648/2012

² Regulation (EU) 2021/23 of the European Parliament and of the Council of 16 December 2020 on a framework for the recovery and resolution of central counterparties and amending Regulations (EU) No. 1095/2010, (EU) No. 648/2012, (EU) No. 600/2014, (EU) No. 806/2014 and (EU) 2015/2365 and Directives 2002/47/EC, 2004/25/EC, 2007/36/EC, 2014/59/EU and (EU) 2017/1132.

met, the resolution authority must apply one of the resolution tools.

The resolution tools planned for insurers or reinsurers are similar to, but not the same as, those applicable to the banking sector. The actual tools are as follows:

a) the write-down or conversion tool, b) the solvent run-off tool, c) the sale of business tool, d) the bridge undertaking tool, and e) the asset and liability separation tool.

The IRRD proposal does not introduce any obligation for Member States to define an MREL, nor any obligation to establish a resolution fund or insurance guarantee scheme. However, Member States could voluntarily decide to create such a fund or guarantee scheme.

2. Resolvability of credit institutions and investment firms

The resolution plans follow an annual cycle. Year after year, specific elements are examined in more detail. As the resolution plans must be implemented rapidly in the event of an institution's failure, the work during the 2021 resolution cycle was devoted mainly to rendering the resolution strategies operational. The main tool for that purpose is the preparation of playbooks, both for the preferred resolution strategy and for the variant resolution strategy. For Belgian institutions, this concerns playbooks for the bail-in tool and for the sale of business tool. The SRB expects the institutions to test part of these playbooks during the 2022 resolution planning cycle. In that connection, the emphasis will be on both the operational aspects and the data points necessary for determining the conversion rate.

2.1 Institutions under the remit of the SRB

Apart from the operationalisation of the resolution plans, certain specific aspects of resolvability are examined in depth in each resolution planning cycle. The SRB document "expectations for banks" is used as the guidance for establishing the annual priorities. For the 2021 resolution planning cycle, the emphasis

was on three priorities, namely: a) liquidity and funding during resolution, including examination of the potential causes of liquidity needs, b) management information systems and capabilities for valuation data, and c) operationalisation of the bail-in tool with the aid of a playbook and a management information system for the bail-in data points. For the 2022 resolution planning cycle, particular attention will be paid to the following aspects: a) identification of the assets that could be used as security or collateral for obtaining additional liquidity; in that connection, institutions are asked to conduct an analysis of the assets not used as collateral in normal circumstances, b) plans for reorganising the business after application of the bail-in tool, and c) the possibilities for separating a resolution group or entity.

Since the SRMR2 came into force at the end of 2020. the Bank has been able to ask the SRB to apply the MREL regime for top-tier banks to certain resolution entities which are not top-tier banks (fishing option). During the 2021 resolution plan cycle, the Bank identified all the institutions eligible for implementation of that option. First, the option can only be applied to resolution entities. Institutions or entities not designated as resolution entities, such as certain subsidiaries, are therefore ineligible. Second, the resolution entity concerned must also form part of a resolution group with a balance sheet total of less than € 100 billion. Finally, the Bank must consider that the failure of the entity concerned could reasonably pose a systemic risk. After identifying the resolution entities which meet the application conditions, the Bank conducted a proportionality analysis in order to ensure equality of treatment for less significant institutions and institutions deemed significant but having a balance sheet total of less than € 100 billion. The SRB only needs to consider the Bank's request when taking an MREL decision during the current resolution planning cycle. The option is therefore exercised and reassessed annually, in parallel with the resolution planning cycle.

Resolutions plans are drawn up not only for institutions for which resolution would be effected by applying the resolution tools and powers, but also for institutions which could be wound up via a normal insolvency proceedings. That procedure is followed if the resolution authority decides that it is not in the public interest to put the institution into resolution. The Bank favours a broader interpretation of the "public interest" which would permit the use of resolution tools and powers to deal with the failure of a

¹ The SRB's expectations regarding resolvability were published in the form of a document containing guidelines for the banking sector on the measures that institutions must adopt in order to be able to demonstrate their resolvability by the end of 2023. See the SRB's website https://www.srb.europa.eu/system/files/media/document/efb_main_doc_final_web_0_0.pdf.

greater number of institutions. Moreover, the choice of resolution strategy also affects the MREL. The regulatory framework stipulates that if the resolution plan provides for an institution's liquidation via a normal insolvency proceedings, the resolution authority must assess whether it is justified to limit the MREL to the loss-absorbing amount or whether that amount should be adjusted. As mentioned below, the Bank is in favour of an appropriate calibration of the MREL, whereby the loss-absorbing amount would be increased for institutions which could be wound up via a normal insolvency proceedings but whose

failure could, in certain cicumstances, affect the stability of the Belgian financial system.

14 MREL decisions were adopted in 2021 for institutions subject to the direct authority of the Bank

Since the introduction of the BRRD 2, a distinction has applied between a) decisions on external MREL for resolution entities, and b) decisions on internal MREL for subsidiaries which belong to a resolution group but are not themselves resolution entities. The regulation stipulates that these requirements must be met with effect from 2024. Although the scope is clearly defined in the legislation, decisions on internal MREL are not yet applied to all subsidiaries which come into consideration. That is due to the progressive approach whereby the SRB takes account of the subsidiary's importance within the resolution group. Since the legislation makes no provision for waivers from internal MREL for subsidiaries which are not based in the same country as their parent company, the Bank considers that an MREL should be imposed on those subsidiaries as soon as possible, e.g. during the next resolution planning cycle.

2.2 Institutions under the Bank's direct remit

In the case of institutions falling under the Bank's direct authority, 14 MREL decisions were adopted in 2021. For 13 of those institutions, the decision concerned the 2020 cycle, as it had not been possible to finalise it before transposition of the BRRD 2 into Belgian law (see above). In regard to the 2021 resolution planning cycle, the resolution plan and the MREL decision were finalised for one institution.

In Belgium, less significant institutions are divided into three categories, each subject to a different MREL calibration. The first category comprises institutions whose failure would not harm the stability of the financial system in Belgium and which could therefore be wound up by normal insolvency proceedings. This category of institution is subject to an MREL equivalent to their loss-absorbing amount. In other words, the MREL of these institutions is equal to their capital requirements.

The second category comprises institutions whose resolution plan specifies that, in all probability, they could be wound up by normal insolvency proceedings but their failure could in certain circumstances, e.g. in the context of a systemic crisis, affect the

> stability of the Belgian financial system, particularly in view of their links with Belgium's real economy and the amounts of their covered deposits. For this

category of institutions, the amount necessary to absorb the losses was adjusted upwards so that their MREL exceeds their capital requirement. However, this upward revision is calibrated in accordance with the limits imposed by the regulations and by the SRB: their MREL is therefore still below that of institutions in the third category.

This third category comprises institutions for which the resolution plan considers that the public interest criterion would be met in the event of failure. Such a situation would therefore necessitate the use of the resolution tools and powers. In that context, the MREL includes not only a loss-absorbing amount but also an amount for ensuring recapitalisation and market confidence after completion of the resolution procedure.

3. Set-up of resolution financing arrangements

The BRRD stipulates that a resolution fund financed by collecting contributions from credit institutions and investment firms must be established in each Member State. Each resolution fund must represent a target level of at least 1% of the total covered deposits by no later than 31 December 2024.

Under the SRMR, the SRF was established within the Banking Union on 1 January 2016. The SRF replaces the national resolution funds in the case of credit institutions, and investment firms and financial institutions subject to the ECB's consolidated supervision.

The resolution fund is used to support the measures taken by the resolution authorities when a banking group is failing. It can guarantee the assets or liabilities of a failing institution, grant it loans, acquire some of its assets or – under certain conditions – make contributions to it. The resolution fund can also intervene in relation to a bridge institution, an asset management vehicle or even a purchaser if the business is sold. Conversely, the resolution fund cannot directly absorb the losses of an institution in resolution.

In 2021, the institutions subject to the SRF jointly contributed the sum of € 10.4 billion. Of that total, € 357 million came from Belgian institutions required to contribute, as opposed to € 301 million in 2020. That increase is mainly due to the steep rise in the amount of covered deposits, which determine the SRF target amount. This increased the size of the fund to € 52 billion. The SRB considers that the SRF target, which is 1% of the total covered deposits of institutions approved in the Banking Union, could approach € 70 billion by the end of the transitional period for creation of the fund, which will expire in 2023. However, a further rise in covered deposits in the coming years could drive that target to a higher level.

Apart from its own resources, the SRF will have a renewable credit line from the European Stability Mechanism with effect from the beginning of 2022. This is a supplementary emergency fund which can be used and which can, if appropriate, double the size of the SRF. This credit line is initially supplied by public funds in order to restore market confidence immediately. However, this credit line funded by Banking Union Member States has to be repaid by all the institutions required to contribute to the Banking Union in the years following its use.

During the year under review the General Court¹, followed on appeal by the Court of Justice of the European Union², ruled on the actions for annulment brought by a number of institutions from other Member States against the SRB's decisions on the ex-ante contributions for 2016 and 2017. One of the points mentioned by the court in its judgment was that the SRB had not correctly fulfilled the obligation

to state its reasons when taking the decisions in guestion, even though the infringement stemmed from the partly illegal nature of Commission Delegated Regulation (EU) 2015/63³. Under that Regulation, the SRB is required to include data on other institutions in the basis of calculation⁴. However, since those data are confidential, the individual decisions cannot include an adequate explanation of how the specific institution's contribution is calculated, and the institution concerned cannot verify whether the calculation is correct. Nevertheless, on appeal the Court of Justice of the European Union annulled the decision of the General Court, considering that the statement of reasons need not necessarily include all the data enabling an institution to verify whether the amount of the contribution was correctly calculated. That point of view would inevitably imply the establishment of a calculation method not requiring the use of confidential data on the sector as a whole, which would impose excessive constraints on the legislature's discretionary power in the choice of a calculation method. The EU Court of Justice takes the view that it is sufficient if institutions have enough information to understand. in essence, how their individual situation is taken into account, having regard to the aggregate situation of all the other institutions concerned. Delegated Regulation (EU) 2015/63 therefore does not hinder fulfilment of the obligation to state reasons, and the Court confirmed its legality.

Institutions which are not subject to the SRF, namely Belgium-based branches of third-country credit institutions or investment firms, and Belgian stockbroking firms not subject to the ECB's consolidated supervision of their parent company, are required to pay a contribution to the national resolution fund. After payment of the national resolution fund contributions in 2021, the fund's reserves amounted to just over € 2.1 million. In 2023, the national resolution fund's reserves should reach € 2.6 million, the current target figure.

¹ General Court, Landesbank Baden-Württemberg v. Single Resolution Board, case T-411/17.

² Court of Justice of the European Union, European Commission v. Landesbank Baden-Württemberg, C-584/20, and Single Resolution Board v. Landesbank Baden-Württemberg, C-621/20 (joined cases).

³ Commission Delegated Regulation (EU) 2015/63 of 21 October 2014 supplementing Directive 2014/59/EU of the European Parliament and of the Council with regard to ex ante contributions to resolution financing arrangements.

⁴ The total target for the SRF was set at 1 % of the amount of the covered deposits of all the institutions together, each institution's annual basic contribution being calculated according to the ratio between its liabilities (excluding own funds) after deduction of the covered deposits, and the total liabilities (excluding own funds) after deduction of the covered deposits of all institutions approved in the territory of the Member States as a whole.

Annexes

Annex 1

Main macroeconomic indicators in the euro area and other major economies (1-2)

(percentage changes compared to the previous year, unless otherwise stated)

Euro area 2019 2020 Germany 1.5 -6.5 France 1.8 -8.0 Italy 0.4 -9.0							
1.5	020 2021	2019	2020	2021	2019	2020	2021
1.1 1.8	6.5 5.1	7.6	7.9	7.7	1.2	0.3	2.6
1.8		3.2	3.9	3.6	1.4	0.4	3.2
4.0	8.0 6.7	8.4	8.0	8.0	1.3	0.5	2.1
		10.0	9.3	9.5	9.0	-0.1	1.9
Spain 2.1 –10.8	0.8 4.5	14.1	15.5	15.0	0.8	-0.3	3.0
Netherlands – -3.8	3.8 4.5	3.4	3.8	3.3	2.7	1.1	2.8
	5.7 6.1	5.4	5.6	6.3	1.2	0.4	3.2
Austria 1.5 –6.8	6.8 4.9	4.8	6.1	6.3	1.5	1.4	2.8
1.8	9.0 7.2	17.3	16.3	15.7	0.5	-1.3	9.0
1.3	2.9 3.5	6.7	7.8	7.7	1.1	0.4	2.1
2.7	8.4 4.8	9.9	7.0	9.9	0.3	-0.1	6.0
Ireland 4.9 5.9	5.9 15.8	5.0	5.9	6.7	6.0	-0.5	2.4
Slovakia 2.6 –4.4	4.4 3.1	5.8	6.7	6.9	2.8	2.0	2.8
3.3 –1.8	1.8 6.0	5.4	6.3	5.8	1.6	0.0	3.5
Slovenia 3.3 –4.2		4.5	5.0	4.8	1.7	-0.3	2.0
5.3		7.1	7.6	7.5	0.5	1.1	2.3
Estonia 4.0 –2.6	2.6 8.0	4.4	6.8	6.2	2.3	9.0-	4.5
Malta 5.7 –8.3	8.3 6.0	3.6	4.3	3.4	1.5	0.8	0.7
Latvia 2.4 –3.6		6.3	8.1	7.8	2.7	0.1	3.1
Lithuania 4.6 0.0	0.0	6.3	8.6	7.1	2.2	1.1	3.8
United Kingdom 1.5 –9.4		3.8	4.5	4.5	1.8	0.9	2.6
United States –3.4		3.7	8.1	5.4	1.8	1.2	4.7
Japan 0.0 –4.5		2.3	2.8	2.8	0.5	0.0	-0.3
China 6.0 2.3	2.3 8.1	3.6	4.2	3.8	2.9	2.5	6.0

Sources: BLS (US), CEIC, EC, ECB, Eurostat, IMF, OECD, ONS (UK), Refinitiv (an LSEG company), NBB.

¹ Calendar adjusted volume data. ECB projections (December) for the euro area and its countries and IMF projections (January) for the other countries.

² Ratio between the number of unemployed and the working population, in %. ECB projections (December) for the euro area and its countries, OECD projections (December) for the other advanced countries and IMF projections (October) for China.

³ Eurostat for euro area countries, ONS for the United Kingdom, BLS for the United States, CEIC for China and Refinitiv for Japan. 4 NAI, NBB.

Annex 2

Main macroeconomic indicators in the euro area and other major economies (2-2)

(in % of GDP)

	Balance of	Balance of payments current account ¹	account1	Overall bala	Overall balance of general government ²	ernment²		Public debt ²	
	2019	2020	2021	2019	2020	2021	2019	2020	2021
Euro area	2.4	1.8	2.0	9.0-	-7.2	-5.9	83.6	97.3	9.96
Germany	7.6	7.1	6.7	1.5	-4.3	-6.5	58.9	68.7	71.4
France	8.0-	-2.6	-2.4	-3.1	1.6-	-8.1	97.5	115.0	114.6
Italy	3.2	3.8	3.5	-1.5	9.6-	4.6-	134.3	155.6	154.4
Spain	2.1	0.8	0.3	-2.9	-11.0	-8.1	95.5	120.0	120.6
Netherlands	9.4	7.0	8.4	1.7	-4.2	-5.3	48.5	54.3	57.5
Belgium	0.2	0.8	2.0	6.1-	1.6-	-6.2	7.76	112.8	108.6
Austria	2.2	1.9	-0.1	9.0	-8.3	-5.9	70.6	83.2	82.9
Greece	1.4-	-7.9	-6.3	1.1	-10.1	6.6-	180.7	206.3	202.9
Finland	-0.3	0.8	1.2	6.0-	-5.5	-3.8	59.5	69.5	71.2
Portugal	0.1	-1.2	6.0-	0.1	-5.8	-4.5	116.6	135.2	128.1
Ireland	-11.3	-2.8	15.4	0.5	-4.9	-3.2	57.2	58.4	55.6
Slovakia	-2.0	-0.8	-1.7	-1.3	-5.5	-7.3	48.1	59.7	61.8
Luxembourg	-2.4	3.7	5.5	2.3	-3.5	-0.2	22.3	24.8	25.9
Slovenia	6.1	7.6	5.4	0.4	7.7-	-7.2	9.59	79.8	7.77
Cyprus	-5.7	-10.1	1.6-	1.3	-5.7	-4.9	91.1	115.3	104.1
Estonia	2.0	-0.8	1.1	0.1	-5.6	-3.1	9.8	19.0	18.4
Malta	7.7	1.6	0.4	0.5	7.6-	-11.1	40.7	53.4	61.4
Latvia	7.0-	2.9	1.1	9.0-	-4.5	-9.5	36.7	43.2	48.2
Lithuania	3.5	7.3	2.6	0.5	-7.2	1.4-	35.9	46.6	45.3
United Kingdom	-2.7	-2.6	-2.8	-2.3	-12.9	-9.1	118.5	154.4	155.6
United States	-2.2	-2.9	-3.6	-6.4	-15.4	-12.5	108.5	133.9	131.2
Japan	3.4	2.9	3.2	-2.9	-9.5	-6.4	223.0	237.3	242.0
China	0.7	1.9	1.7	-6.3	-11.2	-7.5	57.1	66.3	68.9

Sources: EC, ECB, IMF, OECD, NBB.

¹ ECB (December) for the euro area total, EC (autumn) for the euro area countries, NAI-NBB for Belgium, OECD (December) for the other countries.

2 ECB (December) for the euro area total, EC (autumn) for the euro area countries, NAI-NBB for Belgium, OECD (December) for the other advanced countries, IMF (October) for China.

Annex 3

GDP and main categories of expenditure, by volume

(calendar adjusted data; percentage changes compared to the previous year, unless otherwise stated)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021 e
Household final consumption expenditure	1.5	1.7	9.0	1.6	1.6	1.9	1.9	1.8	-8.2	6.3
General government final consumption expenditure	1.2	0.1	1.2	0.3	0.5	0.2	1.3	1.7	0.2	4.5
	9.0	-2.3	5.4	3.7	4.2	1.4	3.0	4.5	-6.2	9.6
	0.2	-3.2	5.9	1.0-	2.6	1.0	1.5	5.1	-6.8	10.4
	0.1	-1.5	4.0	5.5	5.4	1.6	2.4	4.8	-7.0	9.2
	5.1	-5.0	13.2	1.0	9.0-	1.1	10.2	1.7	9.0	10.9
p.m. Final domestic expenditure 1, 2	1.2	0.4	1.8	1.7	1.9	1.3	2.0	2.4	-5.7	6.5
Change in inventories and acquisitions less disposals of valuables ¹	9.0-	-0.4	0.0	0.4	0.3	0.0	0.4	-0.5	-0.3	6.0-
Net exports of goods and services 1	0.2	0.5	-0.2	-0.1	6.0-	0.3	9.0-	0.3	0.4	0.5
	-0.5	0.4	5.2	3.7	6.2	5.5	9.0	2.0	-5.5	0.6
	-0.7	-0.2	5.5	3.9	7.5	5.2	1.4	1.6	-5.9	8.5
	0.7	0.5	1.6	2.0	1.3	1.6	7.8	2.1	-5.7	6.1
Trade surplus (+) or deficit (-) due to the change in the terms of trade 3	0.0	0.2	0.3	8.0	0.7	-0.4	-0.7	9.0	0.4	-0.4
Net primary incomes received from the rest of the world ³	2.2	0.2	-0.3	9.0-	-0.4	0.0	0.0	0.1	0.0	0.1
	2.9	6.0	1.5	2.1	1.5	1.2	1.1	2.9	-5.3	5.9
p.m. Total domestic expenditure ⁴	9.0	0.0	1.8	2.2	2.2	1.4	2.5	1.9	-6.1	5.7
	0.1	0.2	3.3	2.9	3.9	3.2	1.6	1.9	-5.8	7.1
General government expenditure ⁶	1.5	-0.3	2.3	0.3	0.4	0.3	2.2	1.7	0.2	5.1

Sources: NAI, NBB.

1 Contribution to the change in GDP.

² Household and general government final consumption expenditure and gross fixed capital formation and acquisitions less disposals of valuables.

³ Contribution to the change in GNI.

⁴ Final domestic expenditure and change in inventories.

⁵ Total domestic expenditure and exports of goods and services.

⁶ Final consumption expenditure and gross fixed capital formation of general government.

Annex 4

GDP and the main categories of expenditure, at current prices

(data not adjusted for calendar effects, in € million)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021 e
Household final consumption expenditure	200 594	206 110	208 801	213 930	220 597	229 077	238 209	245 798	226 961	246 230
General government final consumption expenditure	93 853	95 520	69 26	98 404	100 047	102 506	106 227	109 857	113 117	120 356
Gross fixed capital formation	88 673	87 113	91 908	689 56	100 114	103 601	108 530	115 493	109 321	123 830
Housing	19 550	19 144	20 322	20 248	20 897	21 652	22 670	24 713	23 652	27 003
Enterprises	59 530	58 833	61 258	65 053	68 852	71 219	73 789	78 302	73 131	82 393
General government	9 593	9 136	10 328	10 388	10 366	10 731	12 071	12 478	12 538	14 434
p.m. Final domestic expenditure¹	383 120	388 743	398 372	408 023	420 758	435 184	452 966	471 149	449 399	490 415
Change in inventories and acquisitions less disposals of valuables	2 812	1 003	1 331	2 769	4 191	5 242	8 174	3 879	1 070	7 353
Net exports of goods and services	243	3 135	3 300	2 909	5 136	4 624	-1111	3 133	6 425	7777
Exports of goods and services	310 502	311 650	321 601	324 216	341 615	370 203	381 989	392 989	365 577	429 326
Imports of goods and services	310 259	308 515	318 301	318 307	336 479	365 579	383 100	389 855	359 153	421 549
GDP	386 175	392 880	403 003	416 701	430 085	445 050	460 029	478 161	456 893	505 545
Net primary incomes received from the rest of the world	8 961	629 6	8 456	5 897	4 125	4 080	4 072	4 594	4 836	5 406
GNI	395 136	402 559	411 459	422 599	434 211	449 130	464 101	482 755	461 729	510 952
p.m. Total domestic expenditure²	385 932	389 745	399 704	410 793	424 949	440 426	461 140	475 027	450 468	497 768
Final expenditure ³	696 433	701 395	721 304	735 008	766 564	810 630	843 130	868 016	816 046	927 094
General government expenditure⁴	103 446	104 656	107 992	108 792	110413	113 237	118 298	122 336	125 655	134 790

Sources: NAI, NBB.

¹ Household and general government final consumption expenditure and gross fixed capital formation and acquisitions less disposals of valuables.

² Final domestic expenditure and change in inventories.

³ Total domestic expenditure and exports of goods and services.
4 Final consumption expenditure and gross fixed capital formation of general government.

Annex 5

Labour market

(annual averages, thousands of persons)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021 e
Population of working age 1	7 247	7 259	7 268	7 284	7 300	7 312	7 325	7 343	7 358	7 365
Labour force	5 212	5 223	5 255	5 277	5 309	5 356	5 396	5 455	5 471	5 529
National employment	4 653	4 639	4 658	4 698	4 756	4 830	4 901	4 979	4 977	2 065
Frontier workers (balance)	81	80	80	81	81	82	83	84	83	83
Domestic employment	4 572	4 559	4 577	4 617	4 675	4 748	4 818	4 895	4 894	4 982
Self-employed	743	750	756	992	778	791	804	819	833	852
Employees	3 829	3 809	3 821	3 851	3 897	3 957	4 014	4 077	4 061	4 130
Branches sensitive to the business cycle ²	2 394	2 368	2 367	2 386	2 414	2 450	2 488	2 525	2 496	2 541
Public administration and education	805	808	814	814	816	824	831	842	848	861
Other services 3	630	632	639	651	299	683	695	709	717	728
Unemployment⁴	559	584	298	579	553	525	495	476	494	464

Sources: FPB, NAI, NEO, Statbel, NBB.

1 Persons aged 15 to 64.

² The branches agriculture; industry; construction; production and supply of electricity, gas, steam and air conditioning; water supply; sewerage, waste management and remediation activities; trade; repair of motor vehicles and motorcycles; transportation and storage; accommodation and food service activities; information and communication; financial and insurance activities; real estate activities; specialist, scientific and technical activities and administrative and support service activities.

³ The branches human health and social work, culture, entertainment and recreational activities; other service activities and activities of households as employers.

⁴ Unemployed job-seekers.

Annex 6

Employment rate

(in % of the corresponding population aged 20 to 641, annual averages)

	2012	2013	2014	2015	2016	20172	2018	2019	2020	20213
Total	67.2	67.2	67.3	67.2	67.7	68.5	69.7	70.5	70.0	70.3
p.m. Total (from 15 to 64 years)	61.8	61.8	61.9	61.8	62.3	63.1	64.5	65.3	64.7	65.0
According to gender										
Women	61.7	62.1	62.9	63.0	63.0	63.6	65.5	66.5	62.9	66.2
Men	72.7	72.3	71.6	71.3	72.3	73.4	73.9	74.5	74.1	74.3
According to age										
20 to 29	59.4	57.9	57.8	57.6	57.6	57.5	58.9	6.09	58.1	58.9
30 to 54	79.9	79.8	79.7	79.3	79.9	80.4	81.3	81.4	81.2	81.0
55 to 64	39.5	41.7	42.7	44.0	45.4	48.3	50.3	52.1	53.3	54.1
According to Region										
Brussels	58.2	56.8	58.7	58.7	59.8	8.09	61.4	61.7	61.3	61.5
Flanders	71.5	71.9	71.9	71.9	72.0	73.0	74.6	75.5	74.7	75.1
Wallonia	62.5	62.3	61.8	61.5	62.6	63.2	63.7	64.6	64.6	64.7
According to educational level										
Lower secondary education or less	47.1	46.8	46.6	45.6	45.6	45.9	45.6	46.3	45.6	44.2
Upper secondary education	68.5	9.89	67.2	67.2	67.7	8.79	0.69	8.69	68.1	67.3
Higher education	81.8	81.0	82.0	81.8	82.2	82.2	83.5	83.8	83.6	83.8
According to nationality ⁴										
Belgian	9.89	68.7	9.89	68.5	0.69	8.69	71.0	71.8	71.5	71.5
Other EU nationals	65.2	63.6	65.7	66.4	8.79	68.2	69.2	70.1	70.2	72.5
Other	38.9	39.9	40.5	42.7	41.8	41.6	43.4	43.2	40.3	43.1

Source: Statbel.

¹ These employment rates are calculated on the basis of the harmonised data taken from the labour force survey.

² As a result of the reform of the labour force survey, in which a rotary panel was introduced in particular, the results from 2017 are not fully comparable with those of the previous years. For more information, see https://statbel.fgov.be/en.

³ Averages of the first three quarters. Changes to the definitions of employment and unemployment with the consequence that the figures up to and including 2020 are not fully comparable with those of 2021. For more information, see statbel.fgov.be/en/changes-labour-force-survey-lfs-2021.

⁴ From 2020, new EU configuration without UK.

Annex 7

Unemployment rate

(in $\,\%$ of the corresponding labour force aged 15 to 641, annual averages)

	2012	2013	2014	2015	2016	20172	2018	2019	2020	20213
Total	7.6	8.5	8.6	8.6	7.9	7.1	0.9	5.4	5.6	6.5
According to gender										
Women	7.4	8.2	8.0	7.8	7.6	7.1	5.6	5.0	5.4	6.3
Men	7.7	8.7	1.6	9.5	8.1	7.2	6.3	5.8	5.8	9.9
According to age										
15 to 24	19.8	23.7	23.2	22.1	20.1	19.3	15.8	14.2	15.3	19.2
25 to 54	6.7	7.4	7.6	7.7	7.1	6.2	5.4	4.8	5.0	5.5
55 to 64	4.5	5.4	5.4	5.6	5.7	5.9	4.3	4.1	4.2	2.0
According to Region										
Brussels	17.5	19.3	18.5	17.5	16.9	15.0	13.4	12.7	12.4	12.9
Flanders	4.6	5.1	5.1	5.2	4.9	4.4	3.5	3.3	3.5	4.1
Wallonia	10.1	11.4	12.0	12.0	10.6	8.6	8.5	7.2	7.4	0.6
According to educational level										
Lower secondary education or less	14.2	16.0	16.4	17.0	16.2	14.8	13.3	12.2	12.3	15.2
Upper secondary education	7.8	8.3	89.	8.7	8.0	7.2	0.9	5.3	5.8	7.2
Higher education	4.0	4.9	4.7	4.6	4.2	4.3	3.5	3.2	3.5	3.7
According to nationality ⁴										
Belgian	6.5	7.4	7.5	7.6	7.0	6.2	5.2	4.8	5.0	5.8
Other EU nationals	11.1	12.5	11.4	11.0	6.6	6.6	8.3	7.2	7.2	7.4
Other	30.7	29.9	31.0	26.6	27.2	25.0	23.2	19.5	19.7	21.3

Source: Statbel.

1 These unemployment rates are calculated on the basis of the harmonised data taken from the labour force survey.

2 As a result of the reform of the labour force survey, in which a rotary panel was introduced in particular, the results from 2017 are not fully comparable with those of the previous years. For more information, see https://statbel.fgox.be/en.

3 Averages of the first three quarters. Changes to the definitions of employment and unemployment with the consequence that the figures up to and including 2020 are not fully comparable with those of 2021. For more information, see statbel.fgov.be/en/changes-labour-force-survey-lfs-2021.

4 From 2020, new EU configuration without UK.

Annex 8

Inactivity rate

(in % of the corresponding population aged 15 to 641, annual averages)

	2012	2013	2014	2015	2016	20172	2018	2019	2020	20213
Total	33.1	32.5	32.3	32.4	32.4	32.0	31.4	31.0	31.4	30.5
According to gender										
Women	38.7	37.7	37.0	37.0	37.1	36.8	35.7	35.1	35.5	34.6
Men	27.5	27.3	27.6	27.8	27.7	27.2	27.2	26.9	27.4	26.5
According to age										
15 to 24	68.5	0.69	8.69	70.0	71.5	71.9	70.4	0.69	71.6	8.69
25 to 54	15.0	14.7	14.4	14.9	14.9	15.2	15.0	15.2	15.5	14.9
55 to 64	58.6	55.9	54.9	53.4	51.9	48.7	47.4	45.7	44.4	43.0
According to Region										
Brussels	34.6	34.9	33.4	34.3	33.5	33.9	34.5	34.8	35.4	34.9
Flanders	31.0	30.2	30.1	30.0	30.1	29.4	28.2	27.3	28.1	27.2
Wallonia	36.3	35.6	35.8	36.1	36.1	36.1	36.2	36.2	36.1	34.9
According to educational level										
Lower secondary education or less	55.6	55.3	55.4	9.99	57.0	58.3	29.0	59.0	60.4	60.4
Upper secondary education	29.3	28.9	30.0	29.9	30.0	29.9	29.1	28.5	30.1	30.6
Higher education	14.9	14.8	14.0	14.2	14.2	14.1	13.6	13.4	13.5	13.1
According to nationality ⁴										
Belgian	32.6	32.0	31.9	32.0	32.0	31.7	31.0	30.4	30.8	30.1
Other EU nationals	30.1	30.7	29.4	29.1	28.6	27.8	28.3	28.2	28.2	25.6
Other	47.8	46.4	45.0	45.6	45.9	47.3	46.1	49.0	51.9	47.7

Source: Statbel.

¹ These inactivity rates are calculated on the basis of the harmonised data taken from the labour force survey.

² As a result of the reform of the labour force survey, in which a rotary panel was introduced in particular, the results from 2017 are not fully comparable with those of the previous years. For more information, see https://statbel.fgov.be/en.

³ Averages of the first three quarters. Changes to the definitions of employment and unemployment with the consequence that the figures up to and including 2020 are not fully comparable with those of 2021. For more information, see statbel.fgov.be/en/changes-labour-force-survey-lfs-2021.

⁴ From 2020, new EU configuration without UK.

Annex 9

Employment rate: regional details

(in % of the corresponding population aged 20 to 641, annual averages)

		Brussels	sels			Flan	Flanders			Wallonia	onia	
	2018	2019	2020	2021 2	2018	2019	2020	20212	2018	2019	2020	20212
Total	61.4	61.7	61.3	61.5	74.6	75.5	74.7	75.1	63.7	64.6	64.6	64.7
p.m. Total (from 15 to 64 years)	56.8	56.9	56.5	29.7	69.4	70.3	69.4	8.69	58.4	59.2	59.2	59.2
According to gender												
Women	56.6	56.0	55.3	55.5	7.07	71.5	70.9	71.5	59.3	61.1	2.09	9.09
Men	66.3	67.4	67.3	9.79	78.5	79.3	78.5	78.6	68.2	68.2	68.5	68.9
According to age												
20 to 29	47.3	48.2	45.1	46.1	66.4	69.2	9.59	66.2	50.5	51.6	50.4	51.5
30 to 54	70.3	70.4	70.1	70.2	86.7	86.4	86.2	86.2	75.6	76.5	76.4	75.8
55 to 64	49.5	49.6	52.9	52.7	52.5	54.9	55.7	9.99	46.4	47.4	48.8	49.9
According to educational level												
Lower secondary education or less	40.9	39.9	39.2	37.3	52.1	54.2	52.9	50.6	38.5	38.5	38.1	38.4
Upper secondary education	53.3	56.5	54.0	51.8	73.6	74.2	72.7	72.4	63.9	64.8	62.7	61.8
Higher education	78.5	78.5	77.8	78.8	85.9	86.1	85.6	86.1	8.08	81.7	82.0	81.3
According to nationality ³												
Belgian	6.09	61.1	61.8	59.9	75.5	76.3	75.7	76.0	65.0	66.2	66.2	0.99
Other EU nationals	72.9	72.9	72.9	75.7	73.0	75.7	74.4	76.0	60.3	60.7	61.8	62.7
Other	40.2	41.9	37.6	40.9	50.4	50.5	48.8	47.1	36.2	32.1	28.6	39.1

Source: Statbel.

1 These employment rates are calculated on the basis of the harmonised data taken from the labour force survey.

2 Averages of the first three quarters. Changes to the definitions of employment and unemployment with the consequence that the figures up to and including 2020 are not fully comparable with those of 2021.

For more information, see statbel.fgov.be/en/changes-labour-force-survey-lfs-2021.

From 2020, new EU configuration without UK.

Annex 10

Unemployment rate: regional details

(in % of the corresponding labour force aged 15 to 64° , annual averages)

		Brussels	sels			Flan	Flanders			Wall	Wallonia	
	2018	2019	2020	2021 2	2018	2019	2020	20212	2018	2019	2020	20212
Total	13.4	12.7	12.4	12.9	3.5	3.3	3.5	4.1	8.5	7.2	7.4	9.0
According to gender												
Women	11.9	12.6	12.8	12.7	3.3	3.1	3.6	3.8	8.0	0.9	6.5	9.2
Men	14.5	12.8	12.1	13.1	3.5	3.3	3.5	4.3	0.6	8.2	8.2	∞ ∞.
According to age												
15 to 24	30.6	29.2	29.1	33.8	10.9	9.5	10.8	14.3	22.5	21.9	21.7	26.3
25 to 54	12.5	11.6	11.4	12.0	2.8	2.6	2.9	3.0	7.9	6.4	9.9	8.1
55 to 64	10.6	12.8	12.0	10.8	3.0	2.8	2.8	4.0	5.4	4.5	4.7	5.4
According to educational level												
Lower secondary education or less	25.8	24.8	25.6	29.7	6.9	6.5	6.3	9.2	18.3	16.2	16.4	18.6
Upper secondary education	16.6	13.5	14.3	16.0	3.3	3.4	3.6	4.6	9.1	7.6	8.3	10.4
Higher education	7.0	7.6	6.9	6.4	2.5	2.1	2.6	2.5	4.1	3.4	3.7	5.0
According to nationality ³												
Belgian	12.7	12.8	12.2	13.3	3.0	2.9	3.1	3.6	7.9	8.9	7.1	8.7
Other EU nationals	9.4	8.4	8.7	7.5	0.9	5.5	5.9	6.4	10.2	8.1	7.2	∞ ∞.
Other	29.5	24.6	25.0	26.3	16.1	13.5	13.8	18.2	27.7	25.2	25.6	20.1
			Ī									

Source: Statbel.

1 These unemployment rates are calculated on the basis of the harmonised data taken from the labour force survey.

² Averages of the first three quarters. Changes to the definitions of employment and unemployment with the consequence that the figures up to and including 2020 are not fully comparable with those of 2021. For more information, see statbel.fgov.be/en/changes-labour-force-survey-lfs-2021.

³ From 2020, new EU configuration without UK.

Annex 11

Inactivity rate: regional details

(in % of the corresponding population aged 15 to 641, annual averages)

		Brussels	sels			Flan	Flanders			Wall	Wallonia	
	2018	2019	2020	2021 2	2018	2019	2020	20212	2018	2019	2020	20212
Total	34.5	34.8	35.4	34.9	28.2	27.3	28.1	27.2	36.2	36.2	36.1	34.9
According to gender												
Women	40.5	40.7	41.4	41.3	31.8	31.1	31.5	30.8	40.8	40.3	40.5	39.0
Men	28.4	28.9	29.5	28.5	24.5	23.6	24.7	23.7	31.5	32.1	31.7	30.9
According to age												
15 to 24	77.6	79.0	80.7	81.5	66.1	63.1	67.3	65.1	75.1	75.6	75.6	73.6
25 to 54	21.2	21.6	22.7	21.4	11.4	11.6	11.7	11.4	19.3	19.3	19.5	18.6
55 to 64	44.6	43.1	39.9	40.9	45.9	43.5	42.7	41.1	50.9	50.4	48.8	47.3
According to educational level												
Lower secondary education or less	56.1	57.9	58.4	58.5	56.8	55.2	57.5	58.2	63.2	64.5	65.3	64.3
Upper secondary education	38.4	36.9	39.3	41.4	26.4	25.7	26.9	27.0	31.9	32.0	34.0	34.6
Higher education	15.6	15.1	16.5	15.9	12.0	12.1	12.2	11.7	15.9	15.4	14.9	14.4
According to nationality ³												
Belgian	36.6	36.3	36.2	37.3	27.8	26.9	27.6	26.9	35.6	35.3	35.1	34.3
Other EU nationals	23.2	24.7	24.7	22.8	26.9	23.8	25.0	22.7	36.0	37.1	36.4	34.0
Other	45.9	47.2	51.5	47.4	42.4	44.6	45.8	45.0	52.3	59.5	63.6	52.3

Source: Statbel.

¹ These inactivity rates are calculated on the basis of the harmonised data taken from the labour force survey.

2 Averages of the first three quarters. Changes to the definitions of employment and unemployment with the consequence that the figures up to and including 2020 are not fully comparable with those of 2021. For more information, see statbel.fgov.be/en/changes-labour-force-survey-lfs-2021.

³ From 2020, new EU configuration without UK.

Annex 12

Revenue, expenditure and overall balance of general government

(in € million)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021 e
Revenue ¹	201 426	208 175	211 755	213 796	218 288	228 517	236 441	238 776	228 978	249 928
Fiscal and parafiscal revenue	173 164	179 089	182 238	185 206	187 625	196 578	203 559	205 135	196 759	215 514
Levies weighing chiefly on earned income	100 724	103 657	105 204	107 012	106 100	109 771	112 638	114313	113 824	120814
Personal income tax ²	44 483	46 131	46 935	47 161	46 849	48 804	50 271	49 866	50 391	53 832
Social security contributions ³	56 242	57 526	58 269	59 850	59 250	296 09	62 367	64 446	63 433	66 982
Taxes on profits of companies ⁴	11 624	12 192	12 585	13 644	14 640	18 098	19 788	17 736	14 943	17 742
Levies on other income and in respect of property ⁵	15 433	17 320	17 912	17 510	17 518	17 923	18 198	18 806	17 435	20 004
Taxes on goods and services	45 383	45 920	46 537	47 041	49 368	50 787	52 935	54 280	50 558	56 954
Non-fiscal and non-parafiscal revenue 6	28 261	29 086	29 517	28 590	30 663	31 939	32 882	33 641	32 219	34 414
Expenditure excluding interest charges	204 634	207 607	211 159	211 825	216 932	221 062	230 539	238 489	261 505	273 010
Social insurance benefits	95 761	99 059	100 878	102 923	106 102	109 350	113 156	117 056	128 586	133 115
Replacement incomes	55 274	57 857	58 778	59 827	61 637	63 239	65 564	67 460	78 264	77 595
Pensions	38 102	39 877	40 817	42 100	43 789	45 735	47 488	49 280	51320	53 382
Private sector pensions	24 194	25 311	26 029	26 825	27 982	29 306	30 682	32 091	33 638	35 239
General government pensions	13 908	14 566	14 788	15 276	15 808	16 429	16805	17 189	17 681	18 143
Old people's guaranteed income	456	200	541	545	536	572	577	598	629	718
Unemployment benefits with employer top-up?	1 626	1 611	1 548	1 477	1 405	1 269	1 149	891	682	535
Unemployment benefits ⁸	6 816	7 080	6 627	6 035	5 738	5 326	2 006	4 7 5 2	12 687	9 2 5 4
Career breaks and time credit	832	833	831	721	089	629	639	640	999	632
Sickness and disability insurance benefits	6 172	6 622	7 042	7 449	7 843	8 2 1 2	8 794	9 3 5 0	10 155	10977
Industrial accidents and occupational diseases	487	202	499	490	487	489	510	523	528	535
Integration allowance	783	830	874	1 010	1 160	1 278	1 400	1 427	1 549	1 562
Other social insurance benefits	40 487	41 202	42 100	43 096	44 465	45 811	47 593	49 596	50 322	55 521
of which:										
Health care	25 931	26 680	27 385	27 966	28 636	29 510	30 642	31 984	31 967	36 274
Family allowances	5 995	6 192	6 282	6 308	6 373	6 498	6 6 1 3	6 887	7 051	7 152
Other primary expenditure	108 873	108 548	110 281	108 902	110 830	111 711	117 382	121 433	132 919	139 895
Compensation of employees	49 150	50 694	52 174	52 330	53 619	55 310	56 794	58 656	60 354	62 182
Current purchases of goods and services	16 623	16 536	17 288	17 162	17 567	17877	18 901	19 443	19 839	20 976
Subsidies to enterprises	14 887	15 363	15 767	15 982	16 005	16255	16 904	17 929	22 642	22 322
Current transfers to the rest of the world	4 711	5 128	4 782	5 087	5 545	4 284	5 1 1 6	5 226	9209	6 653
Other current transfers	3 660	3 432	3 616	3 459	3 749	3 664	3 922	4 120	7 537	7 3 1 8
Gross fixed capital formation	9 593	9 136	10 328	10 388	10 366	10 731	12 071	12 478	12 538	14 434
Other capital expenditure	10 248	8 258	6 328	4 495	3 980	3 591	3 675	3 580	3 934	8009
Balance excluding interest charges	-3 208	268	296	1 971	1 355	7 456	5 902	287	-32 527	-23 082
Interest charges	13 468	12 863	12 910	12 026	11 519	10 499	9 7 7 5	9 4 1 0	8 905	8 204
Overall balance	-16 677	-12 295	-12 315	-10 054	-10 164	-3 043	-3 873	-9 123	-41 432	-31 286

Sources: NAI, NBB.

1 In accordance with the ESA 2010, general government revenues do not include the tax revenues transferred to the EU, nor revenues collected directly by the EU.

² Mainly withholding tax on earned income, advance payments, assessments and proceeds of additional percentages on personal income tax.

³ Total social contributions, including the special social security contribution and the contributions of non-active persons.

⁴ Mainly advance payments, assessments and the withholding tax on income from movable property payable by companies.
5 Mainly the withholding tax on income from movable property payable by households, the withholding tax on income from immovable property (including proceeds of additional percentages), inheritance taxes and registration fees.

⁶ Property incomes, imputed social security contributions, current and capital transfers from other sectors and sales of produced goods and services, including activation of capital expenditure for own account.

⁷ New name for pre-pensions (early retirement).

⁸ Including temporary unemployment and bridging allowances.

⁹ Apart from the two main sub-categories mentioned in the table, this item also includes mainly allowances to handicapped persons and transfers to the institutions accommodating them, payments by subsistence funds and pensions to war victims.

Annex 13

Overall balance of general government, by sub-sector

(in € million)

		Entity I			Entity II		General
	Federal government ¹	Social security	Total	Communities and Regions ¹	Local authorities	Total	,
2012	-13 729	-389	-14 119	-745	-1 813	-2 558	-16 677
2013	-10 133	-362	-10 495	-1 060	-740	-1800	-12 295
2014	-10 171	-153	-10 324	-1 512	-479	-1 991	-12 315
2015	-9 922	788	-9 134	-1 411	491	-921	-10 054
2016	-10 681	-279	-10 960	-129	925	797	-10 164
2017	-5 121	805	-4 316	329	943	1 272	-3 043
2018	-920	-209	-1 129	-2 127	-617	-2 744	-3 873
2019	066 8-	1 298	-7 692	-1 421	-10	-1431	-9 123
2020	-31 581	8888	-30 693	-11 258	519	-10 738	-41 432
2021 e	-21 660	-237	-21 897	-9 448	58	-9 390	-31 286

Sources: NAI, NBB.

¹ With effect from 2015, these figures take account of advance payments of the regional surcharges on personal income tax, even though – according to the ESA 2010 methodology – these advance payments should be regarded as purely financial transactions, and the regional surcharges should not be taken into account until the time of the tax assessment. The approach adopted here corresponds to that used for formulating the budget targets set out in the recommendations of the Public Sector Borrowing Requirement section of the High Council of Finance and in the stability programmes.

Annex 14

Consolidated gross debt of general government¹

(end-of-period outstanding amounts, in € million)

		2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
<u> </u>	1. Official debt of the Treasury	364 815	371 401	380 599	389 578	404 913	385 668	388 857	393 641	424 570	452 477
	In euro	364 815	370812	380 599	389 578	404 913	385 668	388 857	393 641	424 570	452 477
	At up to one year	39 324	32 080	35 116	35 643	37 495	37 432	36 400	38 799	42 296	43 902
	At over one year	325 491	338 732	345 484	353 934	367 418	348 236	352 458	354 841	382 274	408 575
	In foreign currencies	0	290	0	0	0	0	0	0	0	0
2.	Valuation difference ²	98	28	5 031	4 323	3 684	-129	-116	-129	-139	-156
m.	Other adjustments ³	15	12	6	7	2	m	m	2	~	-
4.	Other federal government liabilities ⁴	11 832	14 329	16 846	16 903	16 995	16 474	16 442	16 342	16 688	Ċ.
5.	Consolidation between federal government units ⁵	33 169	33 705	39 638	40 671	42 176	14 895	14 303	13 281	10 943	Ċ.
	of which: Ageing Fund assets ⁶	19 174	19 963	25 776	25 896	26 076	0	0	0	0	Ċ.
9.	Consolidated gross debt of federal government $(1+2+3+4-5)$	343 579	352 065	362 847	370 140	383 421	387 122	390 882	396 575	430 178	Ċ
7.	7. Consolidated gross debt of Communities and Regions	46 943	47 292	20 866	52 352	59 678	59 094	60 484	63 027	77 955	Ċ.
∞i	Consolidated gross debt of local authorities	22 190	23 155	25 251	24 603	24 451	23 830	23 726	23 348	23 360	Ċ.
9.	9. Consolidated gross debt of social security	6 610	7 600	7 822	8 177	2 2 4 0	2 105	2 0 1 5	746	684	Ċ.
10	10. Consolidation between the general government sub-sectors?	14 570	15 679	15 407	16 780	18 181	18 158	17 732	16 496	16 939	Ċ.
1	11. Consolidated gross debt of general government 1 (6 + 7 + 8 + 9 - 10)	404 752	414 432	431 379	438 493	451 609	453 992	459 375	467 200	515 238	548 892 e

Sources: FPS Finance, NAI, NBB.

¹ Concept of debt as defined in Council Regulation (EC) No. 479/2009 of 25 May 2009 on the application of the Protocol of the excessive deficit procedure annexed to the Treaty establishing the European Community.

² Adjustment to the valuation of Treasury Certificates and Treasury bills to convert the discounted value to the face value, and since 2014, adjustment to the valuation of Ageing Fund assets in the establishment of the Maastricht debt.

³ Adjustments permitting the transition from a net debt concept to the gross debt concept; certain assets being recorded in the official debt of the Treasury.

⁴ Mainly the debudgetised Treasury debt, the debts of the Caisse des dépôts et Consignations – Deposito- en consignatiek as and the RIF (from 2005 to 2008), coins in circulation and the imputed debt resulting from Belgium's participation in the mutual support mechanism of the European Financial Stability Fund (EFSF) (from 2011).

⁵ Federal government debt, the counterpart of which is an asset of the federal government unit. Since 2014, adjustment to the valuation of Ageing Fund assets in the establishment of the Maastricht debt.

⁶ Including the capitalised interest on Ageing Fund Treasury Bonds.

⁷ Debt of a general government sub-sector, the counterpart of which is an asset of another general government sub-sector.

Annex 15

Overview of institutions subject to National Bank of Belgium supervision 1

(end-of-period data)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Financial holding companies										
Total	7	7	9	7	9	5	9	00	00	00
Credit institutions										
Credit institutions governed by Belgian law Belgian branches of credit institutions governed by the law of	42	39	37	37	34	34	32	31	31	30
a non-EEA country	6	10	10	10	00	∞	00	9	9	9
Belgian branches of credit institutions governed by the law of another EEA country	53	55	26	52	20	46	47	48	46	47
Total credit institutions	104	104	103	66	92	88	87	85	83	83
Payment institutions governed by Belgian law	6	11	15	17	21	24	22	26	33	34
Electronic payment institutions governed by Belgian law	9	10	10	10	00	∞	7	7	7	9
Tota/	15	21	25	27	29	32	29	33	40	40
Central securities depositories approved in Belgium										
Total	7	2	2	7	7	2	7	2	2	2
Card payment schemes ²										
Tota/	2	7	2	2	2	2	2	2	7	2
Retail payment systems										
Tota/	1	1	1	1	1	1	1	1	1	2
Financial message service provider										
Tota/	1	1	1	1	1	1	1	1	1	1
Insurance and reinsurance companies										
Insurance and reinsurance companies governed by Belgian law	88	84	81	92	73	89	69	89	99	64
Belgian branches of insurance companies governed by the law of another EEA country	46	46	47	43	45	46	46	45	37	34
Belgian branches of insurance companies governed by the law of										
a non-EEA country	0	0	0	0	0	0	0	0	0	0
According to specialisation	(((Č	ć	Ċ	,	,	7	,
Life insurance companies	24	23	7.0	17	77	70,00	1 0	1 0	4 (71
Non-III e insurance companies	n XX	×	2	7/	0/	/9	7/	_	64	79
Mixed insurance companies	25	24	24	24	24	25	24	24	23	21
Reinsurance companies	2	2	2	2	2	2	m	2	2	Э
Total insurance companies	134	130	128	119	118	114	115	113	103	86
Freedom to provide services										
Credit institutions	299	673	683	709	640	672	672	677	889	582
Insurance companies	942	933	950	920	666	917	1 095	1 118	1 123	961
Total freedom to provide services	1 609	1 606	1 633	1 679	1 639	1 589	1 767	1 795	1811	1 543
Stockbroking firms with Belgian licence ³										
Total	21	20	20	20	20	19	17	17	14	14

Source: NBB.

¹ The list of names of the institutions subject to the Bank's supervision can be consulted on the website: www.nbb.be.

² Bancontact and Mastercard (including Maestro).

³ In accordance with the allocation of tasks agreed with the FSMA, the Bank also supervises 10 branches of stockbroking firms governed by the law of another EEA country.

Methodological note

Unless otherwise indicated, when data are compared from year to year, they all relate to the same period of the years in question. In the tables, the totals shown may differ from the sum of the items owing to rounding.

In order to provide an update on various key economic data relating to Belgium in the year 2021 as a whole, it has been necessary to make estimates, as the statistical material for that year is sometimes still fragmentary. In the tables and charts, these estimates, which were based on information available on 28 January 2022, are marked "e". They represent mere orders of magnitude intended to demonstrate the trends which already seem to be emerging. The Belgian sources used are mainly the NAI, Statbel and the Bank. The comments on the international environment and the comparisons between economies are usually based on the latest data or estimates originating from institutions such as the EC, the IMF, the OECD and the ECB.

The monetary unit used in the Report for the data concerning the euro area member countries is the euro. Amounts relating to periods before the introduction of the euro, on 1 January 1999 in Belgium and in most of the Member States, are converted at the irrevocable euro conversion rates. Except in the chapters on monetary policy and prices, where the definition coincides with the historical reality, the euro area is defined wherever possible in this Report as consisting of all the EU countries which adopted the single currency during the period 1999-2015. Apart from Belgium, the area therefore consists of Austria, Cyprus, Estonia, Finland, France, Germany, Greece, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Portugal, Slovakia, Slovenia and Spain. For convenience, the term "euro area" is also used to designate this group of countries for periods prior to the start of Stage 3 of EMU. For some analyses, the preferred source was the OECD which includes in the euro area only the countries which are members of that international institution, i.e. excluding Cyprus and Malta. In view of the small size of those economies, the OECD data are perfectly representative of the euro area as a whole. In this Report, the European Union (EU) comprises the 27 countries which were members at the end of 2021.

For the sake of simplicity, the sectoral breakdown groups together, under the heading "individuals", households and non-profit institutions serving households, which constitute separate sectors according to the ESA 2010 methodology. Nevertheless, the terms "individuals" and "households" are used as synonyms. The terms "corporations", "firms" and "enterprises" are also frequently used as synonyms, whereas in the commentary from the GDP expenditure angle, "enterprises" also covers self-employed people, who are included under households in the real and financial sectoral accounts.

Conventional signs

- the datum does not exist or is meaningless

e estimate by the Bank

e.g. for example etc. et cetera n. not available p.m. pro memoria Q quarter % per cent cett

Abbreviations

Euro area countries

EA	Euro area
AT	Austria
BE	Belgium
CY	Cyprus
DE	Germany
EE	Estonia
EL	Greece
ES	Spain
FI	Finland
FR	France
IE	Ireland
IT	Italy
LT	Lithuania
LV	Latvia
LU	Luxembourg
MT	Malta
NL	The Netherlands
PT	Portugal
SI	Slovenia
SK	Slovakia

Other European Union countries

EU	European Union
BG	Bulgaria
CZ	Czech Republic
DK	Denmark
HR	Croatia
HU	Hungary
PL	Poland
RO	Romania
SE	Sweden

Other countries

AR Argentina ΑU Australia BR Brazil CA Canada CN China Indonesia ID India IN JΡ Japan South Korea KR MXMexico RU Russia SA Saudi Arabia TR Turkey

UK United Kingdom
US United States
ZA South Africa

Other abbreviations

ABEX Association of Belgian Experts
Actiris Brussels regional employment office

AES Adult education survey
Al Artificial intelligence

AML/CFT Anti-money-laundering and combating the financing of terrorism

API Application programming interface
APP Expanded Asset Purchase Programme

BAR Brexit Adjustment Reserve

BCBS Basel Committee on Banking Supervision
BEL20 Brussels stock exchange share index

BLS Bank lending survey

BRRD Bank Recovery and Resolution Directive

CBDC Central bank digital currency

CBFA Banking, Finance and Insurance Commission

CEC Central Economic Council
CCP Central counterparty
CCT Collective labour agreement
CCyB Countercyclical capital buffer

Cedefop European Centre for the Development of Vocational Training

CEIC Census and Economic Information Center

CET 1 Common equity Tier 1

CMDI Crisis management and deposit insurance

CNT/NAR National Labour Board CO, Carbon dioxide

COICOP Classification of Individual Consumption by Purpose

COVID-19 CoronaVirus Disease 2019

CPB Central Planning Bureau (Netherlands)

CPAS Public Centre for Social Welfare
CRD Capital Requirements Directive

CREG Commission for Electricity and Gas Regulation

CRM Capacity remuneration mechanism
CRR Capital Requirements Regulation
CSC Common and secure communication

CSD Central securities depository

CSRD Corporate Sustainability Reporting Directive

CTIF Financial data processing unit

DESI Digital Economy and Society Index

DGS Deposit guarantee scheme

DGSD Deposit Guarantee Schemes Directive

DLT Digital ledger technology

DORA Digital Operational Resilience Act

EBA European Banking Authority
EC European Commission
ECB European Central Bank

EDIS European Deposit Insurance Scheme

EEA European Economic Area
EEA European Environment Agency
EFSF European Financial Stability Fund
EIA Energy Information Administration

EIOPA European Insurance and Occupational Pensions Authority

Eonia Euro OverNight Index Average
ERMG Economic Risk Management Group
ESA European supervisory authority

ESD Effort Sharing Decision

ESA 2010 European System of Accounts 2010
ESCB European System of Central Banks
ESG Environmental, social and governance
ESMA European Securities and Markets Authority

ESRB European Systemic Risk Board
EU-ETS EU Emission Trading Scheme
Eurostat European Statistical Office

FATF Financial Action Task Force
FinTech Financial technology
FIU Financial Intelligence Unit
FMI Financial market infrastructure

Forem Walloon public service for vocational training and employment

FPB Federal Planning Bureau FPS Federal Public Service

FPS ELSD Federal Public Service Employment, Labour and Social Dialogue

FSAP Financial Sector Assessment Programme

FSB Financial Stability Board

FSMA Financial Services and Markets Authority

FTA Free Trade Agreement

FTSE Financial Times Stock Exchange

FTE Full-time equivalent

G20 Group of 20

GAMMI Guaranteed average minimum monthly income

GDP Gross domestic product

G-SIB Global Systemically Important Bank

GW Gigawatt

HCE High Council for Employment HCF High Council of Finance

HICP Harmonised index of consumer prices

IAIS International Association of Insurance Supervisors

IAS International Accounting Standard

IBPT Belgian institute of postal and telecommunications services

ICS International Capital Standard

ICT Information and communication technology

IEA International Energy Agency
IFD Investment Firms Directive

IFR International Federation of RoboticsIFRS International Financial Reporting StandardIRRD Insurance Recovery and Resolution Directive

ILO International Labour Office
IMF International Monetary Fund

Infrabel Belgian railway infrastructure manager

InsurTech Insurance technology

IOSCO International Organisation of Securities Commissions

IPCC Intergovernmental Panel on Climate Change

IT Information technology

JST Joint Supervisory Team

kg Kilogramme kWh Kilowatt hour

LCOE Levelised cost of electricity

LCR Liquidity coverage ratio

LFS Labour force survey

LRE Leverage ratio exposure

LSEG London Stock Exchange Group

LSI Less significant institution

LTRO Longer-term refinancing operation

LTV Loan-to-value ratio

MBtu One million British thermal units
MiCA Regulation on Markets in Crypto Assets

MREL Minimum Requirement for Own Funds and Eligible Liabilities

MSCI EM Morgan Stanley Capital Emerging Markets

MWh Megawatt/hour

NACE Nomenclature of economic activities of the European Community

NAI National Accounts Institute
NBB National Bank of Belgium

NEO National Employment Office NFRD Non-Financial Reporting Directive

NGEU Next Generation EU

NGFS Network for Greening the Financial System NIS Network and information system security

NPI Non-profit institution
NPL Non-performing loan

NRPC National Retail Payments Committee

NSFR Net stable funding ratio
NSSO National Social Security Office

OECD Organisation for Economic Cooperation and Development

OIS Overnight swap
OLO Linear bond

OPEC Organisation of Petroleum Exporting Countries

ORSA Own Risk and Solvency Assessment

P2G Pillar 2 guidance

PELTRO Pandemic Emergency Longer-Term Refinancing Operation

PEPP Pandemic Emergency Purchase Programme

PMI Purchasing Manager's Index PSD Payment Services Directive

R&D Research and development
RRF Recovery and Resilience Facility
RES Renewable energy source
RWA Risk-weighted asset

SARS-Cov Severe acute respiratory syndrome coronavirus

S&P Standard & Poor's

SCA Strong customer authentication
Sciensano Scientific Institute for Public Health
SDG Sustainable development goal
SCA Study Committee on Ageing
SCR Solvency capital requirement

SFDR Sustainable Finance Disclosure Regulation

SGP Stability and Growth Pact
SI Significant institution

SILC Statistics on Income and Living Conditions
SIPS Systemically important payment system
SME Small and medium-sized enterprise
SNCB Belgian national railway company

SPE Public employment service SRB Single Resolution Board

SREP Supervisory Review and Evaluation Process

SRF Single Resolution Fund SRM Single Resolution Mechanism

SRMR Single Resolution Mechanism Regulation

SSM Single Supervisory Mechanism Statbel Belgian statistical office

STEM Science, technology, engineering and mathematics

TFEU Treaty on the Functioning of the European Union
TIBER Threat Intelligence-Based Ethical Red Teaming

TLPT Threat-Led Penetration Testing

TLTRO Targeted longer-term refinancing operation

TFP Total factor productivity
TREA Total risk exposure amount

TWh Terawatt hour

VAT Value added tax

VDAB Flemish public employment service

UJS Unemployed job-seeker

UN United Nations

UNCTAD United Nations Conference on Trade and Development

 $W_{\mbox{\tiny HN}}$ Composite indicator of current prosperity "Here and now"

WTO World Trade Organisation

5G Fifth generation of wireless networks

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