

## INDEXATION IN BELGIUM: SCALE, NATURE AND CONSEQUENCES FOR THE ECONOMY, AND POSSIBLE ALTERNATIVES

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### Executive summary

1. This report analyses indexation in Belgium, its scale, its nature and its consequences, and examines some possible alternatives. This analysis is carried out against the backdrop of the Belgian economy's recent performance, its strengths for the future and the challenges which it faces.
2. It is hardly surprising that the National Bank of Belgium is studying this issue. First, such an analysis is necessary from the point of view of the Eurosystem monetary policy aimed at price stability. In addition, economies that are members of a monetary union do best if they have a high degree of price and wage flexibility, whereas indexation is known to impair the economy's ability to adapt to certain shocks. Moreover, since Belgium has a significantly higher degree of indexation, indexation could be a source of asymmetry. The fundamental objective of this study is therefore to make a contribution to securing the Belgian economy's capacity to create prosperity by functioning in the optimum way within the monetary union.
3. This study does not examine policy alternatives aimed at correcting existing problems concerning competitiveness, though that does not imply any denial of the fact that the Belgian economy has seen its cost competitiveness deteriorate, or any suggestion that a correction would be inappropriate. That is essentially a different debate – centring on solutions to the problem – whereas this study specifically focuses on prevention. The study also disregards aspects relating to the measurement of inflation. That is a totally separate question from the indexation issue.
4. This study does not consider whether compensating for inflation is justified, as in the long term it is desirable and will, indeed, always take place. The debate is about the best way of arranging that compensation: via the current system or via other mechanisms offering more flexibility, and therefore augmenting the economy's adjustment potential without becoming a source of inflation themselves.  

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5. Belgium's economy has many strengths which have enabled it to attain a high standard of living and, in recent years, to achieve satisfactory and – moreover – fairly balanced growth. Nonetheless, it has to address a number of challenges if it wants to continue generating a high standard of living in the future, and provide the necessary economic support for the existing social model, in the context of increasing globalisation and population ageing. Those challenges lie principally in boosting the employment rate (particularly for certain vulnerable groups), bringing down long-term unemployment, consolidating public finances and avoiding an adverse dynamic in the balance of payments current account by adequately supporting the competitiveness of the Belgian economy.

6. In regard to employment, the Belgian economy has so far come through the period of the economic recession and the financial crisis relatively well. However, in structural terms, the unemployment rate remains high and employment expressed as a percentage of the population of working age is low compared to neighbouring countries. That is particularly true for vulnerable groups, such as young people, those aged 55 and over, people of foreign origin and – across the board – the low-skilled. In order to encourage the integration of those groups into the labour market, it is necessary to fulfil a number of basic conditions. For instance, wages must be commensurate with productivity, and specific measures are needed in regard to training, activation, promoting mobility and combating unemployment traps. Also, a significant proportion of new jobs in Belgium receive direct or indirect government support. Although those jobs meet legitimate needs – e.g. in health care – there are nevertheless fewer employment opportunities in market services in Belgium than in Germany or the Netherlands, even though part-time jobs make up a large proportion in that last country.
7. These developments regarding public sector employment or heavily subsidised jobs, together with the limited opportunities in other jobs and hence the narrow tax base, are among the reasons why, between 2000 and 2011, the primary budget balance deteriorated significantly more sharply than in Germany and France, hampering the debt reduction process. Nonetheless, the public debt declined from around 135% of GDP in 1993 to roughly 84% in 2007. After that it increased again to over 92% in 2011. In view of the expected demographic trend, it is important to make sufficient effort to consolidate public finances.
8. While the financial position of the private domestic sectors – households and corporations – is fundamentally sound, the deterioration in the public sector's primary budget balance was accompanied by the decline in the current account balance with the rest of the world. That deterioration is largely attributable to the reduction in the balance of trade in goods, while the services balance improved, albeit to a lesser extent.

There are two key factors underlying that adverse trend. First, the Belgian economy had to contend with a deterioration in the terms of trade due to the increase in commodity prices, as most commodities are imported. Also, the volume of exports lagged behind the growth of the potential markets, as was also the case in France. In contrast, Germany and the Netherlands succeeded in maintaining their position in that respect. In Belgium there was a symptomatic fall in the number of export firms. Of course, exports are not the only engine of economic growth. However, for a small, open economy where domestic demand is liable to slow down as a result of population ageing, the presence of dynamic foreign markets is crucial for safeguarding and reinforcing the population's prosperity.

9. The national economy's ability to adapt to progressive globalisation depends on a large number of factors, which concern not only costs and price competitiveness, but also less tangible aspects that determine the attractiveness of an economy and its innovation and adaptation potential via the quality and diversity of products offered and the organisation of production processes.
10. Apart from its location in Europe, at the heart of a closely integrated region, the Belgian economy has strengths in that respect; its biggest asset is human capital with top class basic training. In addition, businesses continue to perform well thanks to the amount of capital employed and the application of process innovations. Nonetheless, expertise and research ought to result to a greater degree in innovative products in terms of technology, design and marketing - products which are in demand precisely because of their innovative character. However, the availability of personnel who have studied scientific and technical subjects and the continuing training of employees are points requiring attention. Equally, entrepreneurship needs to be supported to encourage the entry of new players who can develop specific products and launch them on the market.

Analysis of Belgium's export figures shows that the losses of market share are particularly significant for goods produced primarily by the use of equipment or labour. For those products, which account for a larger share of exports for Belgium than for the three main neighbouring countries, competition from the new EU Member States or the emerging economies is fiercest. These new economic growth centres no longer have just ample, cheap supplies of labour, but increasingly also have advanced equipment and technology. In contrast, in the case of products with a high research and innovation content – including in particular electrical and electronic devices, medicinal and pharmaceutical products, and plastics in their primary form – Belgium's market share has risen. The strong competition in standardised products also depresses export prices. Producers of those goods therefore have little scope for passing on the increased cost of inputs, including energy, in their selling prices.

11. The production costs confronting Belgian firms are largely linked to inputs of foreign origin, and that is a particular reflection of the small size of the economy. However, the importance of intermediate imports should not obscure the impact of wage costs on the competitiveness of the Belgian economy because – in a context of fragmented production processes – wage costs influence decisions on the location of production units.
12. More generally, it is clear that appropriate wage formation, keeping wages in line with productivity, is a significant determinant of both international competitiveness and an economy's ability to create jobs in a sustainable manner. That is precisely why the 1996 Law on the Promotion of Employment and the Preventive Safeguarding of Competitiveness stipulates that the movement in hourly labour costs in the Belgian private sector must tally with that in the three main neighbouring countries. From that angle, it is necessary to analyse the role of indexation, in view of its central position in the setting of prices, wages and incomes in Belgium. Although the factors which determine the performance and competitiveness of the Belgian economy are numerous, that certainly does not make it irrelevant to examine this one aspect, namely indexation. For a central bank which gears its monetary policy to the maintenance of price stability, such an analysis is also advisable in the light of the role that indexation plays in the persistence of inflationary pressure.

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13. With its general, institutionalised system of automatic wage indexation, Belgium differs from most other euro area countries, certainly as the few countries that apply such a system do so on a considerably smaller scale, and – except for Spain – those countries are very small. The special feature of the Belgian system is also that past inflation is formally used as the benchmark for indexation, an approach that heightens the risk of an inflationary wage-price spiral. Moreover, indexation is also commonly used in pricing products for consumption, with – depending on the case – a mechanical link to the movement in commodity prices, or general or ad hoc price indices, and many firms make de facto use of predetermined rules that link their selling prices to the movement in consumer prices.
14. Nonetheless, the risk of the inflationary spiral mentioned above was tempered by the introduction of the health index in 1994 as the reference for wage indexation - the aim being to partially neutralise the effect of oil price shocks - and by the approval in 1996 of the Law on the Promotion of Employment and the Safeguarding of Preventive Competitiveness, which implies that, in wage negotiations, the social partners must take account of the expected and past effects of indexation, to ensure that hourly labour costs in the private sector in Belgium keep in step with those in the three main neighbouring countries.
15. However, in recent years Belgian hourly labour costs have risen faster in relative terms. The discrepancy in relation to the three neighbouring countries is due mainly to the gap in relation to Germany. It is even larger for unit labour costs, and since 2007 a wage handicap has also become apparent in relation to the euro area average, which was not previously the case. In these circumstances, the leading international organisations (IMF, OECD, EC) recommend Belgium to

reform its wage indexation to make the negotiation method more flexible, to take greater account of productivity, and to reduce the risk of second-round effects as a result of oil price shocks. The European Commission recently reiterated that recommendation. These organisations are also advising the Belgian government to make Belgium's product markets more competitive, particularly in retailing and in the gas and electricity sector, in view of the abnormally large contribution of those categories of goods and services to inflation.

16. It is evident from examination of the economic literature and simulations using a neo-Keynesian model that wage and price indexation makes economic activity more volatile in the event of supply shocks (productivity and cost shocks, primarily concerning energy). Price and/or wage inflation based on past inflation also increases the volatility and persistence of inflation, regardless of the nature of the shock, and that complicates the conduct of monetary policy. However, these model simulations also show that indexation based on long-term inflation reduces the wage and price dispersion resulting from the nominal trend in the economy, and that, for example, paying new recruits on the basis of the existing wage structure is a greater source of real wage rigidity than wage indexation. In the relevant literature, flexibility in setting the wages of new recruits leads to productive efficiency. It complements forms of indexation advocated from the point of view of optimum risk-sharing. A number of these findings support the arguments put forward in various proposals for adjusting – rather than abolishing – indexation in Belgium, with the aim of tempering the impact of supply shocks or shocks concerning the terms of trade.
17. From 1999 to 2007, consumer price inflation in Belgium was relatively stable, whereas in the recent period it has been more volatile than in the rest of the monetary union, that increased volatility being attributable to petrol, diesel, heating oil, gas, electricity and processed food. Moreover, the underlying inflation trend was higher than in neighbouring countries as a result of somewhat more marked second-round effects, more particularly on account of the automatic wage indexation and the widespread practice of formal and informal price indexation in the service sector.
18. Detailed analysis of the effects of the oil price on inflation reveals that, while the impact had diminished in the period 1986-1998, it subsequently tended to intensify, and at the same time, the ability of the health index to partly neutralise the repercussions weakened significantly; the neutralising effect declined from roughly half in 1998 to just one-fifth in 2010.
19. Consumer prices in Belgium are more sensitive than in neighbouring countries to the first-round effects associated with an oil price rise, owing to the greater weight of heating oil, gas and electricity in the price index. Rising energy prices have increased the energy content of those products, and hence also the sensitivity to oil prices. Moreover, in Belgium that sensitivity is greater because the excise duty and other forms of flat-rate tax on these products are considerably lower than in neighbouring countries: such taxes, being fairly constant, attenuate the impact of an increase in the price excluding tax on the price including tax. In the case of gas, Belgium differs from the other countries in that the prices charged to households are adjusted much more regularly – namely monthly – according to the movement in international prices, and there are various factors which have heightened that sensitivity since 2007, namely the change in the reference parameters of the formula that suppliers use to calculate their prices and the decision, in conformity with the European directives, to stop including the gas price in the price index on the basis of the average price stated in the annual bills to households, and instead to take the actual monthly rates charged. As a result, the impact of gas price increases is taken into account sooner in the index. The sensitivity of electricity also increased owing to a change in the method of inclusion in the price index similar to that for gas, and owing to the increase in transport and distribution charges from 2008 to 2011; moreover, the transmission of increases in energy commodity prices is totally different from that in neighbouring countries.
20. Making sure that consumer prices are set correctly must be an absolute policy priority, and the irregularities found in the setting of electricity and gas tariffs must be brought to an end. First, there is a need to increase the effective degree of competition on these markets. The market-

distorting competitive advantage enjoyed by nuclear power stations that have already been amortised should be eliminated by taxing the "nuclear gains" or by arranging for a central buyer to purchase their output and make it available to the market. Making it easy for households to switch their supplier is another way of boosting competition. Furthermore, the CREG ought to play a more active role in increasing price transparency. The Law of 8 January 2012 which transposes the third "package" of energy directives into Belgian law contains provisions to that effect; for example, the CREG is accorded power to check price and tariff adjustments in advance, and the number of price changes is limited to four a year. In addition, the government's decision to freeze the tariffs for nine months – from April to December 2012 – should give the CREG the opportunity to assess whether or not the prices charged by the various suppliers are "acceptable" and to establish a new framework in which justified tariff changes can take place. In that context, and recognising that it is beyond question that permanent price increases should be passed on to the consumer, there is a need for a fundamental review of the systematic, automatic method of indexing consumer prices of gas and electricity in Belgium; such a practice is not seen anywhere else in Europe, and could impair competitiveness. It is also important for the competent regulators to examine the amount and structure of the distribution tariffs, including the public service obligations. More generally, competition should be encouraged, in particular by strengthening the Competition Council, and the Price Observatory should play its role to the full. Finally, there are ways of simplifying the regulations in a number of economic sectors, and more particularly in the retail trade.

21. But even if this type of action leads to improvements in the setting of gas and electricity tariffs, the prices of those goods naturally cannot escape the effects of the fundamental, upward trend in the prices of energy sources, against the backdrop of increasingly scarce resources and efforts to develop cleaner ways of producing energy. Taking account of this trend and of the greater sensitivity of Belgium's price index, there is therefore also a need to shield wage-setting better against the direct effect of those shocks, especially as households whose wages reflect the impact of those shocks have less incentive to reduce or modify their energy consumption, even though everyone acknowledges the need to do so.
22. Wage indexation methods in Belgium, which vary from one sector to another, can be divided into two main groups: a first group in which indexation takes place in fixed steps each time the reference index goes over a threshold, and a second group in which indexation takes place at fixed intervals; however, it is a common feature of both groups that they do to some extent delay the transmission of inflation to wages. That delaying effect varies according to the methods used and the level of inflation, but in the end the impact of inflation on wages is comparable. That therefore means that reforms aimed at greater smoothing or a longer delay in making the adjustments have no long-term impact, and their only advantage is that they reduce the short-term volatility of the reference index.
23. Experience in neighbouring countries shows that purchasing power is not necessarily eroded in the long term if there is no formal indexation, since inflation is taken into account in wage negotiations, but the absence of indexation does make it easier to cope with the repercussions of economic shocks necessitating an adjustment to real wages. The indexation debate is therefore not about whether it is justifiable to compensate for inflation. In the long term, this will always happen, and it is actually desirable. The debate is about the best way of compensating for inflation: via the current system or via other mechanisms which offer more flexibility and therefore boost the adjustment potential of the economy without themselves becoming a source of inflation.
24. Moreover, in the short term it is clear that wage indexation is a factor behind the divergence between wages in Belgium and wages in the three neighbouring countries, since fluctuations in the inflation rate are passed on more quickly in wages. In addition, it is evidently difficult to assess the indexation effect accurately at the time of the negotiations, and the tendency to underestimate that has contributed to the creation of the wage handicap. Furthermore, the automatic indexation system has impeded wage moderation in Belgium, particularly in periods of strict wage moderation in competing economies, in this case Germany. Of course, another reason for the accumulation of

a competitive disadvantage is that the ex post correction mechanism under the 1996 Law has not worked properly, since indexation has resulted in too small a margin for making such corrections. In its economic policy recommendations to the Belgian government, the European Commission asks Belgium to ensure that the correction mechanism is properly applied.

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25. If the effects on the Belgian economy of an oil price shock are examined with the aid of a dynamic stochastic general equilibrium model comprising three economies – Belgium, the euro area and the United States – it is evident that: 1° owing to the openness of the Belgian economy, the impact of automatic indexation is reinforced by the effect on competitiveness; 2° the impact of an oil shock can be tempered to some extent by using the health index instead of the full index; 3° delaying the transmission of the rise in the health index to wages has no noticeable effect; 4° these repercussions would be considerably reduced by an indexation system in which the reference index excluded all energy products, or similarly by a system based on a fixed inflation rate corresponding to the definition of price stability. These findings are largely borne out by a contrafactual analysis covering the period 2007-2010, but if all the shocks identified during that period are taken into account, then indexation based on a fixed inflation figure seems a more effective way of protecting the economy against the adverse impact of supply shocks than an index which excludes energy products. Indexation on the basis of a fixed inflation percentage offers more protection against other sources of cost shocks, and those are precisely the type of shocks that played a major role in that period.
26. It is absolutely vital to improve the pricing of gas and electricity, but in view of the fundamental upward trend in the energy price, the waning power of the health index to offer protection and the findings which emerged with the aid of the model are points in favour of an indexation mechanism that shelters the economy better against the effects of shocks which may trigger a price and wage dynamic different from that in neighbouring countries. The search for possible alternatives did not only take account of the above variants which were explicitly modelled, but also extended to a number of options which are often suggested. For instance, the following possibilities were also considered: systematic application of the 1996 Law implying automatic correction of any excess wage increase relative to the 3 neighbouring countries, indexation based on the GDP deflator, indexation by a fixed amount ("cents rather than percentages"), and finally, generalised application of "all-in" agreements.
27. A variant often mentioned in the indexation debate states that indexation can be maintained subject to systematic application of the correction mechanisms provided for by the 1996 Law. Although analysis has shown that the 1996 Law has undeniably fostered discipline in wage setting, it is nevertheless evident that, in practice, the social partners have not managed to implement those corrections. The reason is that the remaining margin for such corrections – where indexation is maintained and in view of the reduction in the size of real wage increases – has been very small and there are few indications of that changing in the future. Moreover, the drawback of that approach is that it is remedial rather than preventive in character and that the imposition of restrictions on real wage increases further narrows the effective scope for pay differentiation.
28. Further delaying the transmission of the health index to incomes, e.g. by opting for greater smoothing or introducing bigger steps (for systems based on thresholds), has only a limited effect in the case of permanent shocks, though it can offer some protection against the short-term volatility of the reference index.
29. Another possible option is to eliminate additional products from the health index, particularly heating oil, gas and electricity, and possibly also food, in order to get closer to underlying inflation. Such an index would be more stable and less volatile, and at the same time would be a more reliable benchmark for wage negotiations. In a context in which greater use is made of indirect

taxation in order to promote employment and reduce the use of polluting energy, it also makes sense to eliminate such tax increases from the index since their efficiency is very limited if their effect is offset in incomes. Indexation based on the GDP deflator would have a comparable effect in qualitative terms, even though the deflator is specifically designed to offer protection against shocks concerning the terms of trade, and does not make adjustments for supply shocks of domestic origin (and therefore not for indirect taxation hikes either).

Both options imply that indexation based on unexpected inflation is retained in part, which reduces the volatility of the real economy in the event of a demand shock but increases it if the unexpected inflation is due to supply shocks whose impact on inflation is still included in the new reference index. Research has shown that supply shocks are more dominant than demand shocks in explaining the pattern of inflation, and that is particularly true in a monetary policy regime aimed at price stability. Of course, this type of indexation makes inflation more volatile, regardless of the type of shock.

This approach threatens to impair the representativeness of the reference index or, in the case of the GDP deflator, to introduce a reference index which is unfamiliar to the general public and, furthermore, which is subject to significant statistical revision, whereas it would offer only partial, and perhaps asymmetric, protection against the shocks for which indexation is particularly detrimental.

30. An indexation method based on the definition of price stability in the euro area – an inflation figure of less than, but close to 2% – would be better at protecting the economy against supply shocks than indexation based on a restricted reference index or the GDP deflator, without abandoning the principle of indexation which is deeply anchored in the country's social traditions. A switch to such a system would therefore imply, in principle, hardly any need to adjust the other aspects of wage-setting (frequency of wage negotiations, focus on the real component, etc.). Ideally, the fixed indexation figure should be selected so that it matches long-term inflation in the neighbouring countries. Such a system may somewhat increase the volatility of the real economy in the event of a demand shock, but minimises fluctuations in inflation and is consistent with the monetary policy regime.
31. However, all these alternatives which would improve the working of the Law of 26 July 1996 by reducing the need for ex post correction, or by actually switching to ex post correction in the event of a derailment, imply that the scope for pay differentiation between sectors, and between firms in the same sector, or to take account of productivity differences, would still be limited. Moreover, those limits are more of a problem when slower productivity growth reduces the scope for real wage increases. Full application of "all-in" agreements which leave the nominal component free offers the most scope for wage differentiation. However, the design of the "all-in" agreements hitherto concluded – and applicable to roughly 25% of private sector workers in the period 2007-2008 – was less far-reaching, in that they only limited the impact of unexpected inflation on wage-setting in so far as it could be deducted from the real wage increases initially agreed.
32. Of course, the question arises of the potential purchasing power implications of alternative indexation systems, and whether those systems might in certain circumstances tend to have a destabilising effect rather than promoting stability, owing to a potential fall in demand. However, the openness of the Belgian economy is the first factor that reduces the relevance of such a Keynesian effect. This is partly because much of the purchasing power leaves the country via imports, and partly because the competition channel is important, as shown by the model simulations. Moreover, consumption is not necessarily mainly driven by what is happening to real wages at the moment itself: instead, employment and permanent income may play a major role. Thus, consumption in Belgium is more stable than in the neighbouring countries, not because disposable incomes are more stable in themselves but because fluctuations in disposable incomes are neutralised by variations in the savings ratio. Regarding more specifically the role of indexation during the 2008-2009 recession, another point is that its support for disposable incomes in 2009 was due at least in part to the specific configuration of the shocks affecting the

economy at that time, and to the rules for applying indexation. Thus, the "great recession" was preceded by strong increases in prices of crude oil and food commodities, and it is only this last factor (and not the recession itself) that explains why indexation continued its upward trend when activity was declining sharply. Furthermore, that only happened because of an inherent delay in the Belgian indexation system. For those reasons, indexation had an upward impact at a time when economic activity was in marked decline.

33. In addition, purchasing power cannot be viewed in isolation, since changes in purchasing power can only persist if they correspond to the economy's capacity to generate income, and that capacity is specifically subject to a number of restrictions. Thus, productivity growth is the driving force behind sustainable growth of purchasing power. Moreover, in an open economy the resulting scope for an increase in purchasing power is influenced by the terms of trade. For instance, since crude oil is an import, an increase in its price will - *ceteris paribus* – lead to collective impoverishment of the economy, the consequences of which have to be borne equally, in principle, by all the economic agents. The existing indexation mechanism hampers such a balanced distribution.
34. Nevertheless, it is necessary to examine the specific issue of the purchasing power of households on the lowest incomes. Owing to their pattern of expenditure (in which food and energy for domestic purposes represent a relatively greater proportion), those households are more vulnerable to commodity price shocks, whereas in view of their low or even negative savings, they have much less scope to absorb those shocks than is suggested by the macroeconomic pattern of consumption. In that connection, the alternative of income indexation based on a flat rate instead of a percentage ("indexation in cents instead of percentages") is suggested as a way of safeguarding the lowest incomes. Since indexation on the basis of unexpected inflation is partially retained, this variant's qualitative effects on the volatility of the real economy and inflation are similar to the effects of variants which introduce a different reference index. In this case, however, protection against the damaging consequences of supply shocks is not derived from the fact that this indexation method specifically aims to make adjustments for that type of shocks, but depends on the chosen threshold beyond which incomes are indexed by no more than the fixed amount. In the long term, this alternative could complicate the wage negotiation system and increase the "low productivity trap" for the lowest skilled workers: yet, work is the best guarantee against poverty and social exclusion, and the employment rate of these risk groups is already particularly low in Belgium.
35. The traditional social policy instruments available to the government are therefore more appropriate for creating a fairer society. In short, while there is no question about the need to take account of social cohesion in conducting policy, it is doubtful whether indexation in general, and particularly the method of implementing it discussed above, is the best instrument for that.
36. Finally, it is obvious that any modifications to the indexation system should preferably apply not just to wages and salaries but to all incomes – i.e. including the incomes of self-employed persons and professionals, and rents – and they should also apply to price indexation, which in fact implies that profit margins are also indexed. That is easy to implement for the variants based on greater smoothing or the use of an alternative reference index, or for indexation based on a fixed inflation rate. The other options examined in this report are, by their nature, more geared to wage-setting, so that their application would need to be accompanied by specific measures concerning the indexation of other incomes and prices.
37. In this report the National Bank of Belgium has examined various proposals and drawn attention to their advantages and disadvantages. It is now up to the social partners and the Belgian government to draw the appropriate conclusions.



## Alternatives to the system of automatic indexation based on the health index: a summary (1)

	Advantages	Disadvantages
<b>Systematic application of the 1996 Law: automatic correction mechanisms</b>	Avoids any lasting competitive disadvantage	Is remedial rather than preventive  Is difficult to implement so long as the current form of indexation is retained
<b>Further delay the transmission of the health index to incomes*</b> (e.g. by greater smoothing or larger steps)		Limited effect
<b>Further restrict the coverage of the current health index*</b>  by excluding: •all energy products •idem + food •idem + increases in indirect taxes	Better protection against commodity price and cost shocks reduces volatility of real economy and inflation  Partial indexation reduces the volatility of the real economy in the event of a demand shock  Wage negotiations: more reliable reference index/less need for ex post corrections	Partial indexation increases the volatility of the real economy and inflation in the case of remaining commodity price and cost shocks  Partial indexation increases the volatility of inflation in the event of a demand shock  Limited margin for differentiation between sectors and firms, and for taking account of productivity  Less representative reference index
<b>Indexation based on the GDP deflator*</b>	Full protection against cost shocks of foreign origin reduces the volatility of the real economy and inflation  Partial indexation reduces the volatility of the real economy in the event of a demand shock  Wage negotiations: more reliable reference index/less need for ex post corrections	Partial indexation increases the volatility of the real economy and inflation in the case of remaining cost shocks (of domestic origin)  Partial indexation increases the volatility of inflation in the event of a demand shock  Limited margin for differentiation between sectors and firms, and for taking account of productivity  Reference index unfamiliar to the general public, only available quarterly, and subject to frequent revision

\* Easy to apply to all incomes and in the case of price indexation.

## Alternatives to the system of automatic indexation based on the health index: a summary (2)

	Advantages	Disadvantages
<b><u>Replace the health index with a fixed value compatible with price stability ("less than but close to 2%")*</u></b>	<p>Full protection against commodity price and cost shocks ensures maximum reduction in the volatility of the real economy and inflation</p> <p>Reduces the volatility of inflation in the event of a demand shock</p> <p>Wage negotiations: more reliable reference index/less need for ex post corrections</p> <p>Compatible with the monetary policy regime</p>	<p>Increases the volatility of the real economy in the event of a demand shock</p> <p>Limited margin for differentiation between sectors and firms, and for taking account of productivity</p>
<b><u>"All-in" agreements</u></b>	<p>Same advantages as the above system</p> <p>Leaves scope for differentiation between sectors and firms, and for taking account of productivity</p>	<p>Increases the volatility of the real economy in the event of a demand shock</p>
<b><u>Indexation based on a flat rate ("in cents instead of percentages")</u></b>	<p>Reduces the volatility of the real economy and inflation in the event of commodity price and cost shocks</p> <p>Partial indexation reduces the volatility of the real economy in the event of a demand shock</p> <p>Wage negotiations: less need for ex post corrections</p>	<p>Less scope for protection the higher the threshold for switching to cents</p> <p>Partial indexation increases the volatility of inflation in the event of a demand shock</p> <p>More complicated negotiation system</p> <p>Disadvantageous for low-skilled employment (<i>low productivity trap</i>)</p>

\* Easy to apply to all incomes and in the case of price indexation.

