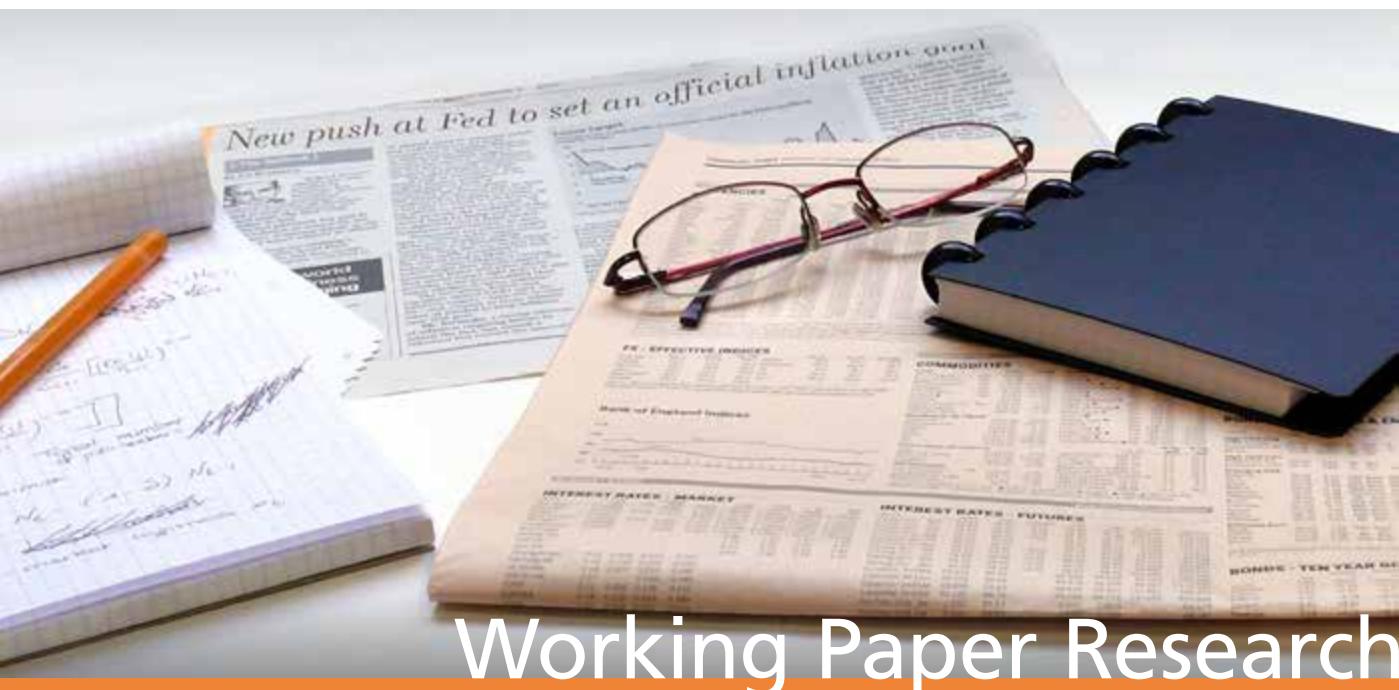


# Alexandre Lamfalussy and the monetary policy debates among central bankers during the Great Inflation



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## **Abstract**

The 1970s were a turbulent period in postwar monetary history. This paper focuses on how central bankers at the Bank for International Settlements (BIS), especially Alexandre Lamfalussy, the BIS's Economic Adviser, responded to the Great Inflation. The breakdown of Bretton Woods forced central bankers to look for new monetary policy strategies as the exchange rate lost its central role. Lamfalussy, in his early years a Keynesian in favour of discretionary policies, moved to a "conservative Keynesian" position, acknowledging that a medium term orientation and the credibility of monetary policy were important to break inflationary expectations. However, Lamfalussy never moved to "monetarist" positions. Lamfalussy certainly acknowledged that monetary targets could reinforce the credibility and independence of monetary policy. However, he rejected mechanical rules. In essence he aimed for a middle position: rules applied with a pragmatic sense of discretion. In the early 1980s, with the rise of financial innovations, Lamfalussy would stress even more the limitations of monetary targeting. His focus turned increasingly to systemic financial stability risks, preparing the ground for the macroprudential approach of the BIS. In Lamfalussy's view, central banking remained an art, not a science.

JEL codes: B22, E58, F44.

Keys words: Great Inflation, monetary policy, central banking, Alexandre Lamfalussy, BIS.

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The views expressed in this paper are those of the authors and do not necessarily reflect the views of the National Bank of Belgium or any other institution to which the authors are affiliated.



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## **1 INTRODUCTION**

This paper is about Alexandre Lamfalussy (1929-2015), and more specifically about the evolution in his thinking on monetary policy during the 1970s and early 1980s. Lamfalussy is interesting not only as an influential European economist in his own right, but also because of his position as Economic Adviser (and later General Manager) of the Bank for International Settlements (BIS), the central banks' bank.

Lamfalussy was not a pure academic economist. He did not actively participate in the theoretical debates of his time. That makes it sometimes hard to pin down his exact role in and contribution to the paradigm shift in economic theory and practice that took place in the 1970s. Nevertheless, by all accounts, Lamfalussy possessed a real talent for articulating economic and monetary policy dilemmas in a clear, analytical fashion that stimulated the internal discussions in the central banking world. He expressed his own views mostly internally – in informal discussions among central bankers or, more formally, in background papers prepared for BIS meetings – but also externally, in speeches and, most notably, through the BIS Annual Report. Oral tradition within the BIS confirms that Lamfalussy bore direct responsibility for setting the Annual Report's key messages and was the main author of its widely read conclusions.

Obviously, the views of the BIS Economic Adviser cannot be substituted for those of individual central banks or of the central banking community at large. Nevertheless, they do matter, as they are indicative of the issues at stake in the world of central banking. The BIS views can then be seen as a reflection, and sometimes even a catalyst, to the broader monetary policy debates. This was certainly the case during the 1970s-80s, when central banking underwent a profound paradigm shift under the influence of the collapse of Bretton Woods, the Great Inflation, financial liberalisation and the Latin American debt crisis. From his unique vantage point at the BIS, Lamfalussy can be said to have contributed to reshaping central banking during this crucial decade.

This paper aims to trace the origins and influences of Lamfalussy's thinking on monetary policy. The first two sections briefly review the formation and early career of Lamfalussy and the BIS monetary views before Lamfalussy's arrival. The next two sections look at the paradigm shifts in central banking and the evolution of Lamfalussy's ideas during the Great Inflation, with section four focussing on the, very important, Working Party on Domestic Monetary Policy. In 1981, Lamfalussy articulated his views in an illuminating essay – *Rules vs. Discretion* – which is the subject of section five. Section six goes into a theme of increasing importance: financial innovations.

The main sources for this paper are published and unpublished papers and speeches of Alexandre Lamfalussy, as well as archival material from the National Bank of Belgium and Bank for International Settlements. A problem in writing this paper was that, although Lamfalussy knew very well the academic literature (he taught a seminar on monetary theory and policy at the University of Louvain), he only rarely made explicit references to this literature. This makes it more difficult to situate him precisely in the academic debates.

## **2 THE FORMATION AND CAREER OF ALEXANDRE LAMFALUSSY**

Alexandre Lamfalussy was born on 26 April 1929 in Kapuvar, Hungary<sup>1</sup>. In January 1949, after the communists had monopolised power, Lamfalussy fled to Belgium, where he continued his studies at the Catholic University of Louvain. At that time, Louvain was one of the leading places for economics in the francophone world. The dominant figure was Léon-H. Dupriez. He was a leading scholar in business cycle analysis, to be considered in a broad sense: the interaction of growth and different types of cycles in economic life. Two elements were typical for Dupriez' approach to economics (Maes, 2008). Firstly, he based his analysis on extensive empirical investigations, paying a lot of attention to descriptive statistical methods, as well as to graphs and tables. Secondly, he was not in favour of Keynesian economics. He disliked the use of models, econometrics and national income accounts. For him, it was crucial that economic theory should go back to individual economic decisions. His theoretical framework and methodological approach were close to Hayek's general equilibrium-oriented business cycle theories of the late 1920s (Hayek, 1928).

Contrary to Dupriez, Lamfalussy took more "Keynesian" positions. While Dupriez disliked formal model-building, for Lamfalussy this was a way to make explicit the implicit model which one was using anyway.<sup>2</sup> Lamfalussy was also strongly in favour of government intervention and planning, including a selective government policy to stimulate investment in new industries, something which Dupriez abhorred (see the discussion in Dupriez, 1961). However, Dupriez's approach of basing economic analysis on empirical material would become a hallmark of Lamfalussy's style of economics.

Lamfalussy went to Oxford for his doctorate. The theme was investment and growth in postwar Belgium, with Philip Andrews as supervisor and Sir John Hicks as the main

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<sup>1</sup> For an overview of Lamfalussy's life, as told by himself, see Lamfalussy, Maes and Péters, 2014. An overview of Lamfalussy's main publications can be found in Maes, 2017.

<sup>2</sup> Later, Lamfalussy (1985a, 412) remarked about Schumpeter's growth theory: "When I read his writings, more years ago than I care to remember, I hardly understood what he had in mind and dismissed it anyhow because I could not convert it into equations".

examiner. Later, under the influence of Robert Triffin, Lamfalussy spent the academic year 1961-1962 at Yale University. It gave him an American experience as well as an opportunity to broaden his research to a comparative analysis of Europe's postwar economic growth performance (Lamfalussy, 1963).

So, in his early academic work, Lamfalussy focused on growth and investment theory and on growth patterns in postwar Europe. He emphasised virtuous (or vicious) circles, in which stronger export growth promotes higher investment, which in turn strengthens productivity and investment, further reinforcing exports. In the literature, Lamfalussy is considered as one of the main protagonists of the Keynesian approach of export-led growth in the postwar period (Crafts and Toniolo, 1996, 12).

In the summer of 1955, Lamfalussy returned to Belgium and began working at the *Banque de Bruxelles*, Belgium's second largest commercial bank at the time. He started as an economist in the Economic Studies Department, becoming the bank's Economic Adviser in 1962. In 1971, he became Chairman of the Executive Board. In the early 1960s, he was entrusted with responsibilities in the area of investment management. He was involved in the creation of certain mutual funds and played a role in international investment banking, an area which was then emerging. However, during Lamfalussy's chairmanship of the *Banque de Bruxelles*, in 1974, some traders took large open foreign exchange positions which caused significant losses (Moitroux, 1995, 217). At the end of 1975, Lamfalussy resigned from the bank. With his experience as a commercial banker, Lamfalussy developed a keen awareness of the financial markets, which became a constant characteristic in his analysis.

During his time at the *Banque de Bruxelles*, Lamfalussy's research interests shifted to monetary and financial issues. He was intellectually close to the – very controversial – Radcliffe Report<sup>3</sup>. As Lamfalussy (1961:114) observed: "The Radcliffe Report, as a whole, has had a rather mixed reception; but no part of it has called forth more sceptical remarks than the one that insists upon the role played by the "whole liquidity position" (as opposed to the money supply) in checking the development of effective demand." Lamfalussy defended the report, specifically against criticism from Robertson and Harrod who argued that the principle of "loans create deposits" applies only to banks. In their view, all other financial institutions were pure intermediaries, who can only lend what they get. Lamfalussy claimed that this argument breaks down if non-bank financial intermediaries provide near-money assets which are quasi-perfect substitutes for money held in excess of transaction balances. Consequently, effective demand in the economy may grow although the supply of money and liquidity preference remain unchanged. If non-bank financial intermediaries are able to create appropriate near-money assets, "they cease, of course, to be intermediaries: they become creators of near-money in just the

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<sup>3</sup> For a recent appraisal of the report, see Christiano and Paesani (2017).

same way as banks are creators of money" (Lamfalussy 1961:120). In his conclusion Lamfalussy emphasised the implications for monetary policy: "In an economy where there is a wide range of non-bank financial intermediaries (producing a wide range of near-money assets), the dividing line between 'intermediaries' and creators of money or near-money may become so blurred as to become unhelpful as a tool of analysis. And without a dividing line of some kind, there seems to be little hope for predicting, with a reasonable degree of accuracy, the impact of monetary measures on the rate of spending." (Lamfalussy 1961:123).

Lamfalussy was also involved in European and international monetary issues. He was a member of the Segré Committee, appointed by the European Commission, which investigated the integration of the capital markets in the EEC (CEC, 1966). He also participated in meetings of several groups on the reform of the international monetary system, one of the most famous being the Bellagio Group. As a result, he was well known by many central bank governors. It is remarkable that, in 1969, Lamfalussy, who was then a commercial banker and just 40 years old, was asked to give the sixth Per Jacobsson Lecture, on the theme *The Role of Monetary Gold over the Next Ten Years*. In this essay he sought explanations for the declining role of monetary gold and suggested a greater flexibility of exchange rates.

In January 1976, Lamfalussy became the Economic Adviser of the Bank for International Settlements in Basel.

### **3 MONETARY POLICY CHALLENGES AFTER THE FIRST OIL SHOCK: THE BIS VIEW**

The BIS had become the foremost collaborative forum between the main central banks of Europe, the United States, Canada and Japan (Group of Ten). From early on, the BIS underpinned its activities by collecting and analysing statistical series on banking and finance and by conducting its own research. The BIS Economic Adviser can be said to present the public face of the BIS research. At the same time he engages actively with the central banks behind the scenes, for instance through his participation in the traditional G10 Governors' meetings and in a series of expert meetings (Toniolo, 2005, 363).

Central banks in the 1950s and 1960s operated within the framework and constraints of the Bretton Woods fixed exchange rate regime<sup>4</sup>. As a result of the Great Depression and of the Second World War, central banks had lost a great deal of their independence. In many countries, economic and social policy objectives took precedence over monetary

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<sup>4</sup> In the academic world there was quite some criticism of the Bretton Woods system, especially by monetarist authors. An early critic was Milton Friedman (1950). He advanced two arguments in favour of flexible exchange rates: the freedom of each country to pursue internal stability and the attainment of unrestricted multilateral trade.

policy objectives. Moreover, as enshrined by the 1959 Radcliffe Report, the importance of trying to regulate the growth of money stock in a modern economy was downplayed in favour of controlling credit (Capie, 2010, 134-37).

The late 1960s and early 1970s represented a turbulent time in monetary history. The transition from the Bretton Woods fixed exchange rate system to floating was far from smooth. Two issues came to dominate the agenda of central bankers: financial (in)stability and inflation.

The high-profile bankruptcy of the US bank Franklin National and of the German Bankhaus Herstatt in 1974 caused a shock-wave in the international financial markets. The Herstatt episode in particular underlined the fact that banking supervision and regulation had failed to keep pace with the development of the international financial markets. It prompted the G10 central bank Governors to create the Basel Committee on Banking Supervision to develop common standards and ensure adequate supervision of internationally active banks (Goodhart, 2011).

Concerns about inflation were already voiced from the mid-1960s onward and would soon dominate the monetary policy debate. In the academic world, a key moment in the monetarist revival was Milton Friedman's presidential address to the American Economic Association, "The Role of Monetary Policy", in which he defended strongly the setting of money supply targets (Friedman, 1968)<sup>5</sup>. Moreover, an influential paper published in 1970 by William Poole gave further impetus to the debate on the choice of the optimal policy instrument in conducting monetary policy, with a stronger emphasis on the money stock.<sup>6</sup>

By 1970, the BIS worried about "an inflationary psychology underlying expectations and decision-taking throughout the economy".<sup>7</sup> Problems were compounded by soaring commodity prices and particularly by the huge increase in oil prices following the Middle East War in October 1973. The weight attached to the inflation problem went up in line with inflation itself, albeit with a certain time-lag, as illustrated by the growing frequency with which the term was used in the BIS Annual Reports (see graph 1).

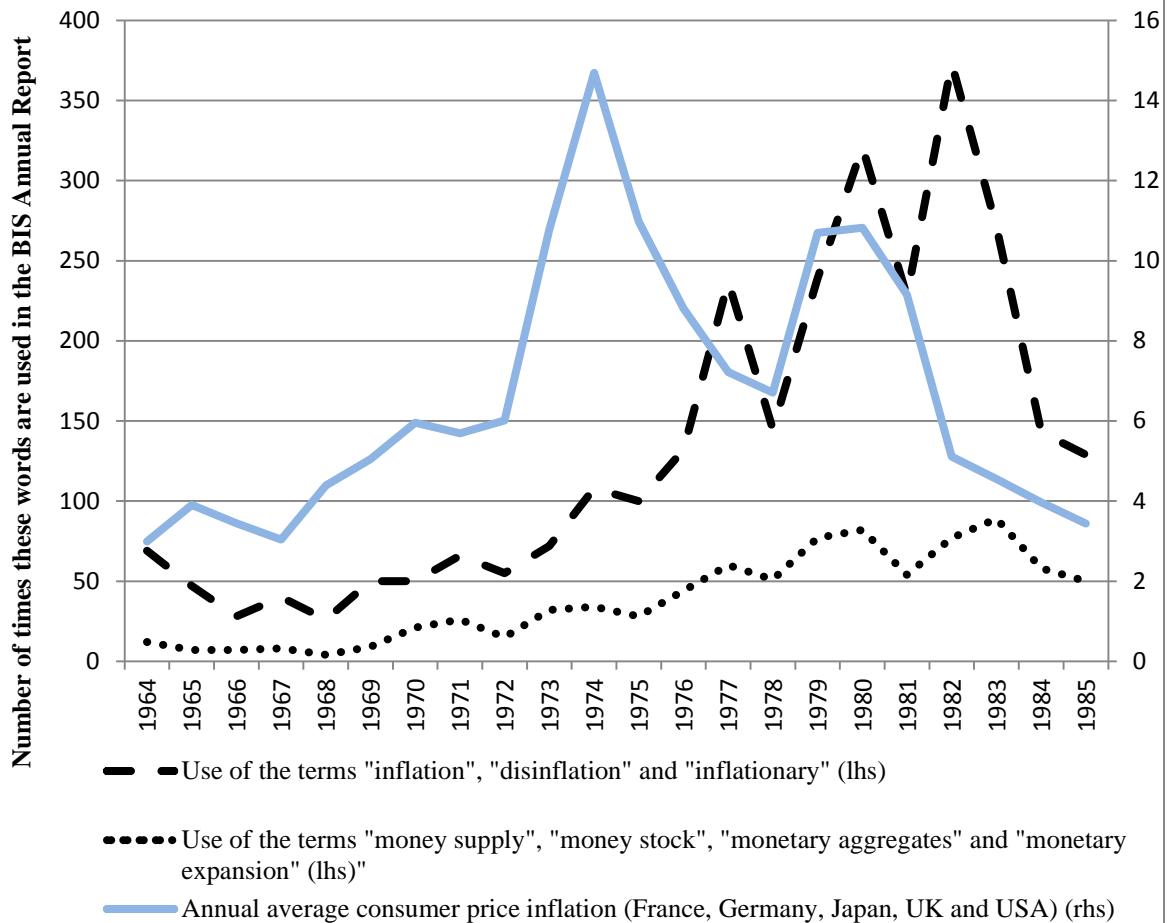
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<sup>5</sup> Friedman already "restated" the quantity theory in 1956. In his view, the demand for money was a highly stable function of income or wealth and the rate of interest, "of the same order as many of the uniformities that form the basis of the physical sciences" (Friedman, 1956, 111). It would give rise to significant controversies in the academic world, see, e.g., Modigliani (1977) or Tobin (1972).

<sup>6</sup> Poole (1970), in order to deal with uncertainty, introduced a stochastic model, that emphasised the relative importance of random disturbances in the IS and LM functions. See also Friedman and Schwartz (1982).

<sup>7</sup> BIS (1970), Fortieth Annual Report, p. 8 and p. 13.

**Figure 1 – BIS Annual Reports 1964–1985**  
**Frequency of terminology: "inflation" & "money supply"**



Monetary authorities across the industrialised world switched to restrictive policies to try to curb inflationary trends, most notably so in 1970-71 and again in 1973-74. Unsurprisingly, such policies led to an economic downturn and rising unemployment. Analysts were, however, confounded by the fact that monetary policy restraint did not have the expected effect on wage and price inflation in spite of rapidly rising unemployment (which contradicted the Phillips curve)<sup>8</sup>.

During the early phase of the Great Inflation, the focus of policy-makers was foremost on the phenomenon of cost-push inflation, and on the detrimental price/wage spiral it was feeding. In the BIS analysis, money growth was usually regarded as a consequence of inflation, and as being largely determined by exogenous factors over which monetary

<sup>8</sup> As the 1972 BIS Annual Report noted "wage/price trends were found to be less responsive than before to changes in demand pressures". BIS (1972), Forty-second Annual Report, p. 34.

policy had little influence. The 1975 BIS *Annual Report* insisted that what it termed a “dangerous” inflationary situation “did not simply reflect mechanistic quantity-of-money relationships”.<sup>9</sup>

In general, during the early 1970s, there was a more or less broadly shared opinion that monetary policy could only hope to achieve a limited restraining impact on inflationary forces, particularly because the consequences of severe monetary restraint were held to be unpalatable.<sup>10</sup> These views reflected, to a large extent, the discussions that took place among central banks, for instance during the regular meetings of the G10 central bank economists at the BIS.

The meeting of central bank economists of November 1971 discussed the money supply and its usefulness as an analytical tool for predicting and managing economic activity and prices. It emerged that while monetary policy had become more money-supply orientated in countries such as Germany, the United Kingdom and the United States, most other central banks had been reluctant to take that route. And even those central banks that did put more emphasis on controlling monetary aggregates, remained very cautious. Helmut Schlesinger, a future President of the Bundesbank, and regular participant of the monetarist Konstanz seminars (Fratianni and von Hagen 2001), warned that “strict adherence to Friedman’s monetary rule – if it were to be contemplated at all – would encounter serious practical difficulties (...). No one, for instance, can in the case of Germany say what the right definition of the money stock is, or what medium-term growth rate should be set as a target for it. It is also highly dubious whether the effects of monetary expansion controlled by Friedman’s monetary rule would always be acceptable on the political plane”.<sup>11</sup>

Milton Gilbert, the BIS Economic Adviser at the time, and many of the participants in these meetings, shared a broad macro-economic view on the inflation problem, looking in the first place at the impact of inflation on the real economy (Gilbert, 1980). There was a strong sense that anti-inflation policies which would push the economy further into recession would be socially and politically “unacceptable. As a result, the emphasis remained on measures aimed at reducing cost-inflation – for instance through incomes policies – and at steering the economy to a more productive use of capital resources – for instance through discretionary credit controls. The relative easing of inflationary pressures in many countries, after inflation had reached a post-war peak in the course of 1974, seemed to vindicate these policies.

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<sup>9</sup> BIS (1975), Forty-fifth Annual Report, p. 166.

<sup>10</sup> BIS (1971), Forty-first Annual Report, p. 41: “Severe monetary restraint under these circumstances would not only have put pressure on the solvency of business firms, but more generally would have had difficult political and social consequences”.

<sup>11</sup> BIS (1972), The Money Supply, Economic Activity and Prices, Central Bank Series CB 368, p. 56.

#### **4 ALEXANDRE LAMFALUSSY AS BIS ECONOMIC ADVISER: SHIFTING PARADIGMS**

It was in this context that Lamfalussy took up the position of Economic Adviser and Head of the Monetary and Economic Department at the BIS on 1 January 1976. He would hold this position until early 1985. He was General Manager from May 1985 until the end of 1993. Lamfalussy combined a strong academic background with the experience of a commercial banker. His profound knowledge of the financial markets was a significant advantage in the world of central banking. An indication of Lamfalussy's intellectual prominence was that he was mostly described as "Professor Lamfalussy" (he combined his position at the BIS with a professorship at the University of Louvain)<sup>12</sup>.

Lamfalussy's profile was quite different from that of Milton Gilbert, his predecessor as Economic Adviser, whose research focus was on the real economy, as well as on the international monetary system. The 1975-1976 BIS *Annual Report*, the first one published under the direction of Lamfalussy, showed some significant changes of emphasis. For instance, there was a new chapter entitled "Domestic credit and capital markets". Also, Lamfalussy focused the analysis more on broad themes and tendencies, like recession and recovery, and inflation and monetary policy, something which contrasted with the country-by-country approach under Gilbert.

Research and policy analysis were crucial areas of the BIS's activity. Lamfalussy played an important role in this field. During his time at the BIS, research was concentrated on three broad topics (Lamfalussy, 1985b): (1) the international banking scene (especially the Euro-markets and the rapid build-up of sovereign debt in the emerging economies), (2) domestic monetary control techniques, such as monetary targeting, on a comparative basis, and (3) the development of financial innovations in both the international and domestic markets. These were three areas of key interest to central banks and for which the BIS was well positioned because of the international or comparative dimension.

Lamfalussy used "his" first Annual Report of 1976, and even more so those of 1977 and 1978, to analyse the causes and impact of high inflation in the western economies, and to assess the policy reactions to it. Monetary targeting was looked upon more favourably in comparison to earlier Reports, although it was never considered a panacea. The 1976 Annual Report introduced a separate chapter on "Inflation and monetary policy", reviewing the monetary policy choices adopted by the main industrial countries in the wake of the deep recession of 1974-75 and the ensuing recovery.<sup>13</sup> The BIS saw three principal causes for the persistent inflationary pressures. Firstly, developments since 1973 had demonstrated that there was a strong interdependency between inflation and floating exchange rates, with movements in exchange rates exerting an effect on domestic

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<sup>12</sup> Interviews with several members of the BIS Staff.

<sup>13</sup> BIS (1976), Forty-sixth Annual Report, pp. 24-39.

price and wage inflation and vice versa. Secondly, the monetary financing of large public-sector deficits contributed to the rapid growth of money supply. Thirdly, in many countries wages continued to increase well in excess of productivity gains. To head off a renewed acceleration of inflation, the BIS recommended a combination of anti-inflationary policies. Incomes policies and credit controls had their role to play, although it was recognised that perhaps too much had been expected from such policies in the past, and that they therefore ought to be complemented by money supply policies. However, the BIS cautioned against a one-sided focus on the money supply, as it remained questionable in how far central banks were able to exercise effective control over the quantity of money.

In the 1977 and 1978 *Annual Reports* the BIS toughened its anti-inflationary stance. With inflation levels gradually coming down in most industrialised countries and the growth of output and employment remaining weak, it was tempting to revert to active demand management policies. The BIS was against this. Inflation remained high and was increasingly seen as a cause of weak growth and high unemployment. It was therefore right for central banks to maintain their focus on fighting inflation, making increasing use of new strategies and techniques – particularly in the area of monetary targeting. At the same time, the BIS worried about the growing divergence in policy responses to the stagflation crisis between the industrialised countries.<sup>14</sup>

From early on, Lamfalussy had made it clear that his apprehension stretched beyond a narrow concern with inflation. In the 1977 BIS *Annual Report*, Lamfalussy was very critical of the US balance of payments deficit.<sup>15</sup> The US current account deficit was singled out as the most important risk in the world economy: “While in the present circumstances such a deficit contributes to world recovery and facilitates the adjustment process elsewhere, it is in no one’s interest that it should reach excessive proportions or become lasting. It would be a grave mistake to believe, merely because the dollar floats, that the state and the structure of the US balance of payments simply do not matter. A deep US current-account deficit, even if it were offset by capital imports, could not be a permanent arrangement”.<sup>16</sup> These remarks caused something of a stir in the central banking community. Bundesbank President Otmar Emminger did not share Lamfalussy’s view: “the criticism about the American deficit voiced by the BIS in its latest Annual Report is regrettable”.<sup>17</sup>

In the late 1970s there were important differences between central banks concerning policy priorities. While the Federal Reserve and the Bundesbank emphasised the fight

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<sup>14</sup> BIS (1978), Forty-eight Annual Report, p. 59.

<sup>15</sup> BIS (1977), Forty-seventh Annual Report, p. 4.

<sup>16</sup> Low US interest rates in the second half of the 1970s contributed to the Latin American debt build up and the ensuing 1982 debt crisis.

<sup>17</sup> NBBA, Minutes of the 113th Meeting of the Committee of Governors, 12.07.1977.

against inflation, Lamfalussy focused much more on the debt build-up in the international financial markets (Maes, 2010). Throughout the 1970s, the massive recycling of petro-dollars, the rapid development of emerging economies and the deregulation of financial markets combined to fuel the hectic growth of international banking in general, and of the so-called Euro-currency market in particular. Central banks were concerned as they saw their domestic monetary policy independence as well as global financial stability threatened by increasingly volatile international capital flows.

In May 1979, the G10 Governors decided to investigate how the Euro-currency market could be better “controlled”. They set up three study groups, one of which was chaired by Lamfalussy, the so-called Working Party on Possible Approaches to Constraining the Growth of International Bank Lending. Within the Lamfalussy Group, there emerged “profound divergences”, mainly between Lamfalussy and Stephen Axilrod of the US Federal Reserve.<sup>18</sup> While Lamfalussy emphasised an approach to control international bank lending, as for him international debt was the key policy issue, the Federal Reserve focused on the control of international liquidity, as it considered inflation as the main policy challenge. Lamfalussy, and other meeting participants such as the Bank of England’s Kit McMahon, advanced a quite innovative *macroprudential* approach: “focusing on problems that bear upon the market as a whole as distinct from an individual bank, and which may not be obvious at the micro-prudential level” (Maes-Clement 2016, 9-13). Not surprisingly, given the many “divergences”, the Working Party’s efforts did not lead to practical results. However, they were significant in planting the seed of a macroprudential approach to financial stability, which would become paramount in the 2000s.

## **5 THE WORKING PARTY ON DOMESTIC MONETARY POLICY**

During the late 1970s, Alexandre Lamfalussy moved from a Keynesian discretionary position to conservative Keynesian ideas. Indeed, in the wake of the stagflation crisis of the 1970s, central banks were grappling with the search for new monetary policy strategies. During the meeting of the Committee of Governors of EC central banks on 13 December 1977, Gordon Richardson, the Governor of the Bank of England, suggested that Lamfalussy could play a key role in strategic reflections on monetary policy: Those

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<sup>18</sup> According to the minutes of the representatives of the National Bank of Belgium, notes of 29 June 1979 and 20 February and 6 March 1980, NBBA, C.416/6.

responsible for monetary policy in the central banks of the EEC member states and those from non-EEC states, such as the USA, Japan and Canada, might meet from time to time, perhaps under the chairmanship of Professor Lamfalussy, to exchange their views".<sup>19</sup>

Lamfalussy immediately prepared a draft mandate to formalize such a group. The idea was "to provide central bank policy makers with an informal opportunity for exchanging their views on, and their experiences in, domestic monetary policies".<sup>20</sup> The working party was to meet at least once a year in Basel. Representation was at a very senior level, in general the Board member responsible for monetary policy. Lamfalussy held the chair. The creation of this Working Party illustrates well how the central banks considered the BIS as a crucial forum for research and exchange of information and ideas. As chair of the Working Party, Alexandre Lamfalussy made important contributions to the discussions, not only by providing discussion notes but also by participating actively. Very fundamentally, the debates in the Working Party provide crucial insights in the paradigm shift in central banking, as well as in the evolution of the ideas of Lamfalussy himself.

In line with his Keynesian-Radcliffe ideas, Lamfalussy was rather sceptical about monetary targeting. In a meeting of the Committee of EC Governors in early 1978, he sounded a note of caution: "It is obvious that the Governors cannot commit to coordinating their monetary policies on the basis of quantitative objectives, because certain countries do not and cannot fix quantitative objectives, because the interpretation of quantitative objectives differs from country to country and depends on given circumstances, and because the simple, mechanical comparison of objectives would not seem to be useful".<sup>21</sup>

The first meeting of the working party took place in Basel on 23 October 1978 on the topic of "problems and techniques of monetary management". Lamfalussy circulated an annotated agenda, summarizing the main positions and formulating, in a slightly provocative style, some key questions for discussion.<sup>22</sup> He saw three main challenges. There was the persistence of high inflation in spite of the various policy measures. This reflected mainly the underlying, domestically-induced, cost-price inflation that remained stubborn. In Lamfalussy's view, there was broad agreement among central banks that this

<sup>19</sup> NBBA, Minutes of the 116th Meeting of the Committee of Governors, 13.12.1977. "Les responsables de la politique monétaire dans les banques centrales membres de la CEE ainsi que dans celles des pays non membres de la CEE, comme les États-Unis, le Japon et le Canada, pourraient se réunir de temps à autre, peut-être sous la présidence du Professeur Lamfalussy, pour échanger leurs réflexions".

<sup>20</sup> "BIS working party on domestic monetary policy", 14 February 1978, In BISA 7.18(15) – Papers Lamfalussy, box LAM 26, folder 69.

<sup>21</sup> NBBA, Minutes of the 119th Meeting of the Committee of Governors, 14.03.1978. "Il est clair que les Gouverneurs ne peuvent pas s'engager à coordonner leurs politiques monétaires sur la base d'objectifs quantitatifs, car: certains pays ne fixent pas et peuvent pas fixer d'objectifs quantitatifs, l'interprétation des objectifs quantitatifs est variable selon les pays et selon les circonstances données, et la comparaison simplement mécanique de ces objectifs ne semble pas utile".

<sup>22</sup> A. Lamfalussy, "Problems and techniques of monetary management", 11 October 1978, In BISA 1.3A(3)I – Experts' meeting: Working Party on Domestic Monetary Policy, vol. 1, 1978-1980.

situation called for “conservatism” in monetary policies, “either to support the credibility of incomes policies or simply to prevent price increases from accelerating again”. However, on the basis of previous experience some scepticism seemed warranted: “Conservative, and a fortiori restrictive monetary policies might possibly prevent a renewed *acceleration* of inflation; but on what grounds can we hope that they will ever bring about a further *reduction* in inflation rates?” (emphasis in original). The two other main issues were: (1) the prevalence of high public sector borrowing requirements limiting the degree of freedom of monetary policy, and (2) the “often difficult” relationship between exchange rates and exchange market interventions on the one hand and money supply and interest rates on the other. As regards monetary techniques, Lamfalussy highlighted some potential problems inherent to targeting the growth of money supply. One key issue was that it proved difficult for many countries to meet the monetary targets. The deviation of actual money supply figures from announced targets was bound to give rise to sudden changes in expectations and as a consequence to great instability in interest rates.

The discussions during the meeting in Basel followed broadly the outline provided by Lamfalussy.<sup>23</sup> It might be tempting to draw a crude distinction among the central banks represented at the meeting between the anti-inflation *hawks* (those who argued that monetary policy should bring its full force to bear to combat inflation) and *doves* (those who were more sceptical about the impact of monetary policy and in general pleaded for a gradual approach). This, however, would be an oversimplification. True, Henry Wallich of the Federal Reserve forcefully warned against “those who argue that inflation cannot be reduced except by incurring enormous costs in terms of lost production”, as such opinions only “fostered expectation of soft policies which tended to cause inflation to accelerate”. And the Bundesbank’s Helmut Schlesinger underlined that central banks should not capitulate – as the Reichsbank had done in the 1920s – but assume responsibility for formulating clear and explicit policies aimed at reducing inflation. At the other end of the spectrum, Renaud de la Genière of the Bank of France denied that the growth of money supply had been a cause of inflation in France and stressed the need for a gradual approach, while Beauvois from the National Bank of Belgium declared himself to be “more pessimistic than his colleagues with respect to what monetary policy could do”. Nevertheless, there was broad agreement that monetary targets could play a role in influencing inflation expectations, particularly when other instruments had failed. John Fforde of the Bank of England summed up the gist of the meeting: “I came away with two main impressions. One was the variety of complexity and difficulty being experienced by central banks with respect to “targetry”. The other, which came as rather a (welcome)

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<sup>23</sup> “Problems and techniques of monetary management, Informal record of the meeting of the Working Party on Domestic Monetary Policy, Basel, 23rd October 1978”, In BISA 7.18(15) – Papers Lamfalussy, box LAM 26, folder 69.

surprise to me, was the vehemence with which physical controls on bank credit were disliked by the principal central banks concerned with administering them".<sup>24</sup>

The inflation debate took on a new life following the second oil shock, triggered by the 1979 Iranian revolution. The second meeting of the Working Party was scheduled for 6 November 1979. Central banks, Lamfalussy observed, had "become increasingly concerned about the effectiveness of their control techniques and the adequacy of the instruments available to them". A key issue was the structural evolution towards increased non-bank financial intermediation – i.e. the market's search for alternative credit sources, either with non-banks or abroad – which directly affected monetary policy implementation (for instance by rendering central bank attempts at restraining bank credit less effective). Lamfalussy sent round a commented draft agenda for the meeting.<sup>25</sup> In addition, an overview of the instruments and techniques of monetary policy in the various countries was compiled.<sup>26</sup> One of the objectives of the meeting was to contrast the role and effectiveness of administrative (direct) control techniques – such as credit ceilings, interest-rate regulations and exchange controls – with market-oriented (indirect) controls – mainly exercised through open-market operations. In his comments, Lamfalussy pointed out that while "market-oriented policy instruments would seem to increase the flexibility of monetary policy and the equity of its impact", they also held the danger to increase the variability and unpredictability of domestic interest rates, and might therefore easily back-fire, as "interest rate changes are, from the political standpoint, a highly sensitive matter in practically all countries". Direct, administrative controls, by contrast, had the advantage that they are "precise, certain and quick in their application", but they were also costly in terms of the rigidities and distortions they imposed on the economies.

By the time the central bank representatives convened in Basel, momentous changes had taken place with regard to US monetary policy. At the beginning of October 1979, the Federal Reserve, under its new chairman Paul Volcker, announced a series of measures intended to "assure better control over the expansion of money and bank credit, help reduce excesses in financial, foreign exchange and commodity markets and thereby dampen inflationary pressures".<sup>27</sup> At the Working Party meeting, Wallich stressed that these changes had been contemplated before, but it had been the sudden rise in inflationary expectations and in speculative pressures on the dollar exchange rate over the

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<sup>24</sup> Letter John Fforde, Bank of England, to Alexandre Lamfalussy, 26 October 1978, In BISA 7.18(15) – Papers Lamfalussy, box LAM 26, folder 69.

<sup>25</sup> "The implementation of monetary policy: an outline for a discussion of changing techniques and problems", 5 September 1979, In BISA 7.18(15) – Papers Lamfalussy, box LAM 26, folder 69.

<sup>26</sup> "Instruments and techniques of monetary policy: country summaries", 12 October 1979, In BISA 1.3A(3)I – Experts' meeting: Working Party on Domestic Monetary Policy, vol. 1, 1978-1980.

<sup>27</sup> "Instruments and techniques of monetary policy: country summaries", 12 October 1979, In BISA 1.3A(3)I – Experts' meeting: Working Party on Domestic Monetary Policy, vol. 1, 1978-1980, pp. 38-9.

summer of 1979 that had prompted the Federal Reserve to take “dramatic action to show that [it] was getting the situation under control”. Wallich and Axilrod left it in no doubt that the most important aspect of the new policy was the change in operating procedures with regard to the Federal Reserve’s open-market operations. The Fed had possibly focused too much on the Federal funds rate as an instrument to control money supply. As a result, all interest rates across the financial system had become very sensitive to any changes in the Federal funds rate, and so had politicians. Consequently, the Fed had become rather cautious in changing the Federal funds rate, with the risk that monetary policy might become pro-cyclical rather than anti-cyclical as rate changes were postponed for too long. To avoid this problem, the Fed had decided to try to bring the money supply under better control by acting directly on the level of reserves available to the banking system, at the same time allowing the Federal funds rate to fluctuate between much broader margins. After all: “The use of money supply as a basis for policy might be an expedient necessitated by inflation. At other times central banks might be well advised to operate through interest rates. At times of inflation it was uncertain what the real interest rate was and reliance had to be placed on the simple primitive wisdom that more money was more inflationary and less money was less inflationary – of that at least one could be reasonably confident”<sup>28</sup>.

For the third meeting of the Working Party, on 27 October 1980, Lamfalussy explicitly discussed the stricter anti-inflationary attitude, which most central banks had in the meantime adopted, and the economic slowdown in a growing number of countries. Lamfalussy himself took a “conservative Keynesian” position, something which contrasted with his more “activist Keynesian” views in earlier years. Lamfalussy opened the meeting with a provocative question: “Should the fight against inflation still be regarded as a target of first priority, despite the more widespread economic slowdown and the noticeable deceleration in observed inflation rates in most industrial countries?”<sup>29</sup> He immediately answered this question in the affirmative, because he considered the observed decline in inflation rates as somewhat deceptive, but also because of his “growing scepticism regarding the wisdom of trigger-happy demand management”. Then the question really was how much monetarism ought to be contained in the monetary policy analytical framework. On this issue, Lamfalussy felt himself more drawn to what he called, in stylised terms, a “conservative-Keynesian” attitude. In the prevailing circumstances, Lamfalussy wrote, “I would be inclined to favour a policy stance which would still be moderately restrictive – even now. The reason for this conservative-Keynesian attitude is not that I ignore the existence of excess supply and of unemployment, or that I underestimate the

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<sup>28</sup> “The implementation of monetary policy. Informal record of the meeting of the Working Party on Domestic Monetary Policy, Basel, 6 November 1979”, In BISA 1.3A(3)I – Experts’ meeting: Working Party on Domestic Monetary Policy, vol. 1, 1978-80, p. 39.

<sup>29</sup> Lamfalussy, A., “Working Party on Domestic Monetary Policy meeting at the BIS on 27 October 1980, Introductory remarks by the Chairman”, 24 October 1980, In BISA 1.3A(3)I – Experts’ meeting: Working Party on Domestic Monetary Policy, vol. 2, 1980-83.

cost-push origin of current inflation in most countries, but that I believe in the importance of the “signal” given by monetary policy to price and wage setters, businessmen and trade unionists alike. How can one attach credibility to the monetary authorities’ determination to fight inflation in the long run unless monetary policy remains (at least moderately) tight in the short run? And how can one hope to break inflationary expectations and thus put an end to the cost price spiral unless credibility is ensured?” The main drawback of the monetarist approach as he saw it was that “the sharp volatility of interest rates implicit in the monetarist approach raises problems of its own even from a strictly domestic point of view. It raises even bigger ones internationally”. With reference to Lamfalussy’s distinction between the Keynesian and monetarist analytical frameworks, Wallich argued that: “... individuals were not constantly married to one or the other of these positions, but were driven to a particular framework by considerations of inflation or business activity”. However, with inflation high the interest rate instrument had become blunted as real interest rates were hard to interpret. A focus on the money supply, as a means of indirectly getting interest rates to an appropriate level, was the logical consequence: “inflation made monetarists of everyone to some degree”.<sup>30</sup>

The fourth meeting of the Working Party on Domestic Monetary Policy on 18 November 1981, was an occasion for taking stock. It was remarkable that by now almost all major industrial countries placed strong emphasis on monetary policy in their struggle against inflation. While this, in the words of Helmut Schlesinger of the Bundesbank, “represented an important convergence of views”, differences remained mainly in emphasis. Lamfalussy, for his part, warned against over-reliance on the announcement effect of changes in policy: “The view that behaviour can be changed merely by announcements seems extraordinarily naïve”.<sup>31</sup>

## **6 ALEXANDRE LAMFALUSSY’S VIEW OF “RULES VERSUS DISCRETION”**

Lamfalussy articulated his views publicly in a major essay *“Rules versus discretion: an essay on monetary policy in an inflationary environment”*, which was published as a *BIS Economic Paper* in April 1981. Samuel Brittan wrote in the *Financial Times* of 7 May 1981: “The title of the paper “Rules versus Discretion” is a sufficient summary of why the central bankers regard doctrinal monetarists as threats rather than as allies against inflation”. He further remarked: “One of the most amusing aspects of the debate is the way in which U.S. monetarists have switched from wanting to strengthen the freedom of the Fed from political pressure to wanting to bring it under closer control.” (Brittan, 1981)

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<sup>30</sup> “Informal record of the meeting of the Working Party on Domestic Monetary Policy”, Basel, 27 October 1980, In BISA 1.3A(3)I – Experts’ meeting: Working Party on Domestic Monetary Policy, vol. 2, 1980-83, p. 1.

<sup>31</sup> “Informal record of the meeting of the Working Party on Domestic Monetary Policy”, Basel, 18 November 1981, In BISA 1.3A(3)I – Experts’ meeting: Working Party on Domestic Monetary Policy, vol. 2, 1980-83, pp. 13 and 43.

In the essay, Lamfalussy focussed on the conduct of monetary policy, and especially two new trends: firstly, the increasing reliance on monetary policy in fighting inflation; and, secondly, in the field of monetary policy techniques, the move away from discretion towards rules.

Lamfalussy distinguished two schools of thought: the monetarist (quantity-theory) one and the “conservative Keynesian demand-management” (CKDM) school.<sup>32</sup> In his presentation he focused on the features of these schools that were of direct relevance to practical policy issues, especially the heavy reliance on monetary policy in combating inflation.

In Lamfalussy’s view, the monetarists’ stylised position was easier to sum up: “The process of inflation is always and everywhere a monetary phenomenon; an appropriate monetary policy is, therefore, a necessary and sufficient condition for bringing inflation under control.” (Lamfalussy, 1981, 10). He then outlined the stylised position of the “conservative Keynesian demand-management” school. As mentioned, Lamfalussy, during the meeting of the Working Party on Domestic Monetary Policy in October 1980, had explicitly expressed his sympathy for this school (something which he would not do explicitly in his essay). According to Lamfalussy, the CKDM economist had lost some of his faith in demand management, but not all of it. Monetary policy was one of the tools of demand management and was especially effective in the direction of restraint. A key issue for the CKDM economist was the establishment of the credibility of anti-inflationary policies, which was “a protracted, long-term affair in which success will be achieved only by consistently resorting to a broad set of anti-inflationary policy measures.” (Lamfalussy, 1981, 23)

Lamfalussy had to admit that monetarism and the use of rules in monetary policy was gaining ground. He identified two main reasons for this trend: firstly, the “apparent” failure of discretionary Keynesian demand management, coupled with incomes policies, to solve the problems of inflation and unemployment; and, secondly, the breakdown of the Bretton Woods system of fixed exchange rates. Lamfalussy stressed this second factor: “Floating has made the setting and the effective meeting of money-supply targets both possible and desirable. Possible, by avoiding central-bank intervention in the foreign exchange market leading to excessive money creation; and desirable, by driving home the truth that excessive domestic monetary expansion rapidly leads to the external depreciation of the currency, which then in turn fuels domestic inflation, thus pushing the country into the vicious spiral of depreciation/inflation.” (Lamfalussy, 1981, 7).

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<sup>32</sup> In the paper Lamfalussy makes no reference at all to any academic publications, making it more difficult to identify precisely the authors to which Lamfalussy was referring to.

Lamfalussy, who despised a mechanistic approach, raised a number of technical issues regarding the use of the monetary aggregates as a rule in monetary policy: “What is the functional relationship between high-powered money and not the money supply, but lending? How can the central bank influence credit flows? What is the specified list of claims held by what specified list of financial intermediaries that should enter into the targeted aggregate of domestic credit expansion? And how will this aggregate relate to the money supply – it being understood that there may be quite a few longer-term liability items issued by the lending institutions? It would seem highly unlikely that the answers to these questions could become sufficiently clear-cut as to enable the authorities to use mechanistic control techniques”. (Lamfalussy, 1981, 41-42).

Lamfalussy stressed the need for discretion and flexibility. He emphasised that it was neither desirable, nor in many instances feasible, to dogmatically follow predetermined rules. Moreover, he argued that rules were not limited to money supply targets, but that they could also comprise other targets, like the exchange rate.

Lamfalussy distinguished three broad arguments in favour of rules over discretion. Firstly, rules would strengthen the credibility of monetary policy, “setting rules and sticking to them will provide the best basis for establishing credibility, and without credibility monetary policy will neither quickly nor decisively defuse inflationary expectations.” (Lamfalussy, 1981, 46). Moreover, he added that any rule should be relatively simple and understandable to the public, and that adherence to it should be easy to verify. Moreover, Lamfalussy, as a good central banker, stressed that, in order to establish credibility, promises concerning the intermediate or even the operational targets should be kept.

Lamfalussy saw a second “political” argument, that rules could strengthen the position of the central bank against pressure for more inflationary policies: “Monetary authorities ... will come under considerable pressure from all social groups that actually benefit from inflation, as well as from those who are the first to be hit by an anti-inflationary policy, to ease their policy stance ... To prevent this from happening, the pursuit of a publicly announced money-supply or exchange rate target may be of great help. This will be so especially when the setting of such targets rests on a broad social consensus which the above-mentioned pressure groups would be unwilling or unable to call into question directly.” (Lamfalussy, 1981, 48).

Lamfalussy then turned to the third argument in favour of rules. This argument stated that, unless the authorities possess perfect information on how the economy works, there is no reason why they should be able to make correct discretionary decisions, especially in an environment dominated by uncertainty and unpredictable shocks. Lamfalussy referred here to ideas like those of Kydland and Prescott. They argued, in a seminal article, that discretionary policies were “not a game against nature but, rather, a game against rational economic agents.” (Kydland and Prescott, 1977, 473). They further argued that “active

stabilization may very well be dangerous and it is best that it not be attempted. ... policymakers should follow rules rather than have discretion. The reason that they should not have discretion is not that they are stupid or evil but, rather, that discretion implies selecting the decision which is best, given the current situation. Such behavior either results in consistent but suboptimal planning or in economic instability." (Kydland and Prescott, 1977, 487).

Lamfalussy argued that practitioners could present two counter-arguments to this proposition: "The first is that there is a world of difference between assuming that the authorities are perfectly well informed and assuming that, on balance, they are more often than not misinformed. What if, on the whole, they are relatively well informed? But I do not want to take this counter-argument too far, for the second seems to me far more important. It is that, carried to its logical extreme, the "poor information" proposition destroys not only the case for discretionary policy measures based on ad hoc judgments, but the case for any policy measures whatsoever for the simple reason that the definition of policy rules and their practical implementation will always require judgement." (Lamfalussy, 1981, 48-49). In Lamfalussy's view, the only logical conclusion to be drawn from the "poor information" argument would be to condemn all government interference in economic matters which would imply "doing away with monetary policy", leaving the creation of money to market forces. However, in Lamfalussy's view, this went against a very strong consensus in society that money was a public good.

In his conclusion, Lamfalussy dismissed as "unhelpful and unpractical" any a priori dogmatic discussion of the rules versus discretion issue. He admitted that both the credibility and the political arguments suggested that monetary policy rules could perform a useful function in the fight against inflation. But he warned that, "the fact that we live in an untidy world which does not lend itself to any easy schematisation also suggests that the rules should be defined, interpreted and implemented with flexibility." (Lamfalussy, 1981, 50). So, Lamfalussy, while closely following the academic debates, very much kept a pragmatic approach, seeing where these theories could help shed light on policy debates. Lamfalussy took up the time-consistency and credibility ideas, an important factor in his shift towards a conservative Keynesian position<sup>33</sup>.

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<sup>33</sup> Indeed, time consistency is probably related to more "conservative" positions. For instance, Brunnermeier, James and Landau (2016) offer an overview and analysis of the euro area crisis, focussing on the "Battle of ideas" between Germany and France. The crucial elements of the contrasting German and French philosophies are the northern vision about rules, rigour, and consistency, while the southern emphasis is on the need for flexibility, adaptability, and innovation. The rule-based approach worries a great deal about insolvency and about avoiding bailouts that will set a bad example and encourage inadequate behaviour among other actors (the moral hazard issue). The discretionary approach sees many economic issues as temporary problems that can be easily solved with an injection of new lending. Here the provision of liquidity is essential. To this, the adherents of the moral hazard view point out that costs will pile up in the future from the bad example that has been set.

## **7 FINANCIAL INNOVATIONS**

As mentioned, the third focus of Lamfalussy's research agenda at the BIS was financial innovation. For Lamfalussy, it would become a further reason to be cautious with respect to monetary policy rules.

In the mid-1970s, financial innovations increasingly became a topic of discussion among economists and policy-makers. There was a significant acceleration of financial innovation, initially in the United States. A crucial driving force was the interaction of rising inflation with regulations which limited interest rates on certain financial products. An important policy consequence was that conventional money demand functions began to overpredict the quantity of money in circulation, leading to the "puzzle of the missing money" (Goldfeld, 1976). Further research pointed to financial innovations and regulatory changes as playing an important role in these shifts (Judd and Scadding, 1982, Laidler, 1984). Financial innovation and its effects on monetary policy thus became a crucial issue for central bankers.

Under the impulse of Lamfalussy, financial innovation became a main topic of research at the BIS. This was clearly apparent in the June 1983 Annual Report which included for the first time a chapter entitled "Financial Markets and Financial Innovations". The main preoccupation was the impact financial innovations could have on monetary policy. In the autumn of 1983, the theme of the annual central bank economists' meeting was "Financial innovation and monetary policy".

Lamfalussy quickly took a cautious attitude towards financial innovations. He questioned whether, on balance, financial innovations were a good thing. Lamfalussy accepted that financial innovations might improve efficiency and help protect market participants against uncertainty. However, in his opinion, financial innovations also create problems, especially for monetary policy-making, "if the result is that we end up in a monetary policy mess, and therefore major policy mistakes ... then I begin to have doubts about the balance of pros and cons" (Lamfalussy, 1983, 4).

In the following years, Lamfalussy would become more and more cautious about financial innovations, not only because of their impact on monetary policy, but also because of their effects on the stability of the financial system (Maes, 2010). Lamfalussy was an early architect of the BIS macro-prudential approach, which focuses on the financial system as a whole, paying special attention to the risk of correlated failures and to institutions that have a systemic significance for the economy. This approach further emphasizes that systemic risk arises primarily through common exposures to macroeconomic risk factors. There are here important similarities with the work of Hyman Minsky, who was well

appreciated at the BIS (see Borio et al., 2001)<sup>34</sup>. In a certain sense, Lamfalussy always kept a “Keynesian” *Weltanschauung*, with a certain scepticism about the functioning of financial markets<sup>35</sup>.

In January 1985, at the invitation of Charles Kindleberger, Lamfalussy was the speaker at a joint luncheon of the American Economic Association and American Finance Association. The topic was “The changing environment of central bank policy” (Lamfalussy, 1985a). Lamfalussy emphasised that the financial systems of the Western industrial countries were in the midst of several interconnected evolutionary processes: disinflation, internationalisation, innovation and deregulation. Lamfalussy started with the disinflation process. He stressed that the process of disinflation was going slowly, “which implied significant uncertainty regarding future inflation rates.” (Lamfalussy, 1985a, 410). Thereafter, he turned to the internationalisation process. For Lamfalussy, a crucial implication was that no country could isolate itself from other countries, whatever its exchange rate regime (an old theme of Lamfalussy’s). The third evolutionary process concerned the accelerating speed of financial innovation. This was leading to a flow of new financial instruments and techniques, as well as the blurring of dividing lines between institutions and between markets. An important concern for Lamfalussy was that, with financial innovations, the transparency of the financial system was waning. This also had serious consequences for the statistics which the BIS had been constructing, “progressively eroding the usefulness of traditionally defined international banking statistics and removing the little transparency which we have managed to create in this particular field” (Lamfalussy, 1985a, 411). His most fundamental question concerned the effects on financial stability of the redistribution of risk by these new techniques and instruments, “You may argue that when risk-averse market participants shift risks associated with unexpected interest and exchange rate developments onto willing risk takers, everybody is going to be better off. This may well be the case, but increased collective happiness does not necessarily mean greater systemic stability. Or does it?” (Lamfalussy, 1985a, 411)

Lamfalussy emphasised that financial innovations created three main types of technical problems for the conduct of monetary policy: “There is the problem of identifying suitable targets among the monetary aggregates, broad and narrow, and of recognizing circumstances when it seems appropriate to deviate from these targets. At a time when almost all bank liabilities are beginning to carry interest, I fear that the concept of transactions balances itself may be becoming elusive. Then, second, there are problems related to the narrowly defined monetary control techniques, that is, to the operational

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<sup>34</sup> White (2006) also noted some interesting similarities with Austrian business cycle theories: a focus on imbalances in the economy, the assumption of systemic errors of judgment by economic agents, and an inherent tendency towards periodic crises.

<sup>35</sup> As also other central bankers, like Bernanke (2010: 6). See also Rajan 2010.

methods by which central banks try to hit their targets. Third, central banks would like to know whether and, if so, how the transmission mechanism from these targets to nominal income is affected, for example, by the proliferation of new instruments, the spreading use of floating interest rates or of financial futures.” (Lamfalussy, 1985a, 411).

In his conclusion, Lamfalussy emphasised that policy-makers had to avoid to succumb to two opposite temptations: “One temptation is to return to complete “ad hoc-ry”, that is, to what the French would call “naviguer à vue”. He argued that this would be a grave mistake, “full discretion cannot counteract uncertainty; in all likelihood it increases it. Rules, be they monetary aggregates or an exchange rate target, are needed to provide some anchor for the wildly fluctuating expectations of market participants; to make monetary policymakers accountable for their action, including their decisions to deviate from predetermined targets; and to give them leverage in their dealings with governments and parliaments”. However, he also argued against the temptation of retreating into a world of rigid rules, “it is difficult to define such rules; it is sometimes impossible to apply them; and it would often be irresponsible to stick to them. The road to follow is somewhere in between: rules applied with a pragmatic sense of discretion. Admittedly, this is more easily said than done, but then monetary policy, like all other policies, remains an art not a science.” (Lamfalussy, 1985a, 412-413)<sup>36</sup>.

## **8 CONCLUSION**

The 1970s, with the end of the Bretton Woods system, the two oil shocks and accelerating inflation were a turbulent period in postwar economic history. The breakdown of Bretton Woods implied that central bankers had to look for new monetary policy strategies, as the exchange rate lost its central role, especially between big economies. Moreover, financial stability became a major preoccupation, certainly at the BIS, thereby marking a first, timid step towards what would become the macro-prudential approach typical for the BIS at a later stage. In this sense, and contrary to the Bundesbank and the Federal Reserve, Alexandre Lamfalussy, the BIS’s Economic Adviser at the time, was less concerned about the growth of the money supply and its inherent inflationary risks, than with the expansion of credit and the threat of a debt crisis. The Latin American debt crisis of the early 1980s would confirm his fear.

This paper focused on how central bankers at the BIS thought about and reacted to the Great Inflation in the developed countries. Monetarist ideas, focused on flexible exchange rates and monetary targeting were already in the ascendency in the academic world in the 1960s. In the 1970s, with the Great Inflation, monetarism also gained ground in the

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<sup>36</sup> An old theme in central banking, cf. Hawtrey, 1932.

central banking community, especially in the Bundesbank and the Federal Reserve System. The discussions that took place at the BIS reflected this shift, but also the widespread scepticism regarding purely quantitative monetary targeting.

The BIS Annual Reports, even before the 1973 oil shock, identified inflation as a major policy problem. However, the analysis, strongly under the influence of Milton Gilbert, focused very much on cost push factors as causes of inflation. From 1976, with Alexandre Lamfalussy as Economic Adviser, the BIS gave much more attention to monetary and financial developments. The high-level BIS Working Party on Domestic Monetary Policy, which was created in 1978, focused specifically on problems and techniques of monetary management.

During the debates at the end of the 1970s, Lamfalussy, in his early years a Keynesian in favour of discretionary policies, moved to a “conservative Keynesian” position, arguing that a medium term orientation and the credibility of monetary policy were important to break inflationary expectations. However, Lamfalussy and the BIS never moved to purely “monetarist” positions. Lamfalussy certainly acknowledged that under the right conditions, monetary targets could reinforce the credibility and independence of monetary policy. However, he stressed that also other rules, like an exchange rate target, could play this role. Moreover, he rejected mechanical rules. In the early 1980s, with the rise of financial innovations, Lamfalussy would stress even more the limitations of monetary targeting. In essence he aimed for a middle position: rules applied with a pragmatic sense of discretion. In his view, central banking remained an art, not a science.

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