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A Framework for Monetary Stability - General Report

by

Sylvester C.W. Eijffinger

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A Framework for Monetary Stability – General Report

SYLVESTER C.W. EIJJFINGER*

CentER and Tilburg University

Opening and Keynote Speeches

(Wim Duisenberg and David Mullins Jr.)

Recently, in many countries both political and monetary authorities have shown an increasing interest in the objective of monetary stability and the position of the central bank. In Western Europe, there is a clear tendency to establish (more) independent central banks and to foster, thereby, monetary stability. According to the Maastricht Treaty, the independent European Central Bank is only committed to the goal of price stability in the final stage of Economic and Monetary Union (EMU) by 1997 or later.

Furthermore, in some Anglo-Saxon countries, e.g. Canada, New-Zealand and the United Kingdom, monetary authorities are trying to achieve monetary stability by an inflation-reduction target. Countries in Central and Eastern Europe, such as Hungary, Poland and the Czech republic, and in Latin America, like Argentina, Chile and Mexico, are looking for a way to strengthen the position of their central bank in order to realize some degree of price stability.

It is not by accident that a conference under the theme “A Framework for Monetary Stability” is held in the Netherlands. De Nederlandsche Bank (DNB) is one of the most independent central banks in the world and this country has a long-standing tradition of monetary stability. Moreover, this stability-oriented monetary policy was founded on the so-called “Dutch monetarism”, tracing back to Professor *Koopmans*’ famous essay “Zum Problem des ‘Neutralen’ Geldes” of 1933. In his opening speech President *Duisenberg* emphasized, once more, the importance of monetary stability as a precondition for economic growth in the long run. This view was also supported by Vice-Chairman *Mullins Jr.* (Federal Reserve Board), although he considers price stability not as an objective *per se*, but as a means to accomplish higher growth and welfare.

* The author wants to express his gratitude to Eric Schaling for his essential support in making this general report.

In this General Report, I will give my personal view on the papers and comments presented during the last two days. It is however not my intention to give a complete overview of the conference. Finally, I will close my report with three personal conclusions which can be inferred from this conference.

Formal Targets for Inflation Reduction: The Canadian Experience

(Charles Freedman)

Charles Freedman discusses the Canadian experience with formal target bands for reducing the rate of inflation (CPI) setting out an explicit time path towards price stability. These inflation-reduction targets were announced in early 1991 both by the Bank of Canada and the government to achieve not only the short-term objectives of preventing a further wage-price spiral and reducing the prevailing inflationary expectations, but also the longer-term goals of realizing price stability and gaining credibility in monetary policy. By the end of 1992 the floor of the first target band (2–4%) was achieved with a twelve-month inflation rate of 2.1% suggesting that such targets should not be introduced at a time of upward inflationary pressure, but rather of downward pressure by, among others, sluggishness of the economy.

According to Freedman, inflation-reduction targets have played a useful role in communicating and making more concrete the Bank's policy of moving to price stability. Furthermore, he argues that these targets can be thought of as allowing for a form of automatic stabilization in response to demand shocks and, thus, for partial stabilization of output fluctuations. Consequently, he ignores the problem of long and variable transmission lags from monetary instruments to the policy goal. Finally, Freedman concludes that, although inflation-reduction targets are neither necessary nor sufficient to achieve price stability, the Canadian experience thus far proves that they can be helpful in attaining price stability and in improving credibility. However, he admits that one should await the inflation performance over a whole business cycle before drawing firmer conclusions about the role of these targets.

John Driffill states that the introduction of inflation targets does commit the Canadian government to sticking to a low inflation policy in the future, when economic conditions would be less favourable (i.e. less recessionary). He argues that in the context of economic theory, especially game theory, the way the Canadian government announced the targets can be described as "cheap talk". According to Driffill, this is because the targets *per se* impose no restrictions on the future actions of the authorities, and there are no costs involved in the announcement *per se* of one target rather than another.

The Costs and Benefits of Disinflation

(Stanley Fischer)

Stanley Fischer analyses the costs and benefits of disinflation. The basic theory of disinflation states that there is a trade off between the short-term costs of lower output and recession, associated with the reduction of inflation, and the longer-term benefits of a lower inflation rate and better economic performance associated with it. He makes a distinction between a long-run inflation target and a long-run price stability target, meaning that the goal is to keep the price level constant and predictable. By taking inflationary uncertainty into account, short-term price variability will generally be larger with a price stability target than with an inflation target (and long-term variability will be smaller).

The argument for a low inflation target are the negative effects of inflation on output growth because real balances serve as a factor of production: i.e. higher inflation means less certain inflation and price level uncertainty decreases the efficiency of the price system. The evidence points, according to Fischer, to an optimal inflation range of 1–3%. However, it is questionable whether lower inflation within this range is associated with higher productivity growth (because of the limited gains of very long-term nominal contracting and the possibility of a Phillips-curve trade off at very low inflation rates).

Once inflation has been brought down, the challenge is to keep it within the optimal target range and to preserve the gains of low inflation. For industrialized countries, Fischer recommends an independent central bank as part of the solution, stressing that the fundamental support of the public is needed to make the central bank an effective inflation fighter. In this respect he refers to the example of the Deutsche Bundesbank. Moreover, he emphasizes the accountability of the central bank, i.e. that it has to explain its actions, to subject itself to cross-examination and to be held responsible for not achieving its goals. Fischer states that the Bundesbank is not accountable in these senses. However there is, in my opinion, a trade off between central bank independence and accountability.

At the end, he suggests that the cost of inflation and price level uncertainty could be reduced by providing hedges against unanticipated price level changes, for instance, through the introduction of indexed government bonds (as has been the case in the United Kingdom).

In his comment on Fischer's paper, *José Luis Malo de Molíns* states that – due to the irrefutable existence of output costs of disinflation – the inflation target cannot be set independent of the initial inflation rate. However, the implied gradualism may give rise to time inconsistency and credibility loss. Finally, Malo de Molíns remarks that the proper functioning of the economic system implies

constant changes in relative prices, and that the existence of information costs and uncertainty may favour a positive – albeit minor – rate of inflation. The latter argument reinforces Fischer's preferred 1–3% target range and may explain why no central bank has succeeded in sustaining absolute price stability.

Commitment through Delegation, Political Influence and Central Bank Independence

(Alex Cukierman)

Alex Cukierman takes the view that the delegation of authority over monetary policy to (partly) independent central banks is used as a (partial) commitment device by politicians in office. By specifying the objectives of a central bank more or less tightly and by giving it broader or narrower powers, politicians determine the extent of commitment to a policy rule. The stronger this commitment and the more independent a central bank is, the more politically costly it is for politicians to override the decisions of the central bank.

Therefore, Cukierman wants to identify the economic and political factors that induce politicians to delegate more or less authority to the central bank. Of course, attempts to use monetary policy for stimulating economic activity and financing public expenditure lead to a (suboptimally) high inflation rate. This inflationary bias may be reduced by giving the central bank independence, i.e. the mandate to focus on price stability as the single policy goal. See e.g. the Deutsche Bundesbank and De Nederlandsche Bank. According to Cukierman, a certain degree of independence is granted in order to reduce interest payments on government debt and, in many cases, the larger the debt the more politicians tend to delegate authority to the central bank. An example is the "divorzio" between the Banca d'Italia and Italian Treasury in 1981. When capital markets are deep (e.g. in Germany and the U.S.) it is likely that government will try to raise more funds through the capital market and, thus, will delegate more authority to the central bank. However, counter-examples are Japan and the U.K.. Referring to the U.K. and the anti-inflation stance of its civil service, Cukierman states that the tendency to delegate authority to the central bank is likely to be lower if there is a strong preference for price stability within the executive branch of government.

Finally, he concludes that the stronger the inflationary bias under discretion and the larger the political polarization and instability are, the greater the need to rely on central bank independence.

In his comment on Cukierman's paper *Eduard Bomhoff* points to the recent literature on political business cycles supporting a relation between the nature of the party system on the one hand and government debt and inflation on the other hand. However, the model of Cukierman only features a two-party system. Bomhoff thinks the analysis would benefit from more sophisticated modelling of the political process. Among other things, this means that parties should be able to influence their election probabilities (which are exogenous in

Cukierman's model). Moreover, the analytical framework lacks uncertainty about the way the economy works. Including the latter real world phenomenon would also improve Cukierman's otherwise very advanced analysis.

Central Bank Autonomy: Policy Issues

(Onno de Beaufort Wijnholds and Lex Hoogduin)

Onno de Beaufort Wijnholds and *Lex Hoogduin* analyse a number of policy issues related to central bank autonomy on the presumption that central banks should be autonomous. First of all, they conclude that it appears possible to maintain central bank autonomy both in case of the separation and combination of monetary policy and (micro) prudential supervision. The choice between separation and combination depends on the structure of the banking system, as well as the conduct of monetary policy in a country.

Furthermore, central bank autonomy requires a codified legal basis but is not hampered by accountability in the general sense of explaining and making visible a central bank's policy. It may even strengthen its credibility and policy acceptance by the public.

However, *De Beaufort Wijnholds* and *Hoogduin* emphasize that price stability should be the final objective of monetary policy which should be conducted in a medium-term framework. Autonomy can be reinforced by using intermediate targets in monetary policy making: preferably a monetary target or, for an open economy, an exchange rate target against the currency of a large economy (e.g. Germany).

Moreover, they stress that central banks should be granted a considerable degree of freedom in designing and using their instruments. Central banks should not be "too visible" in the money markets leaving some scope for market participants' influence on short-term interest rates.

Finally, *De Beaufort Wijnholds* and *Hoogduin* admit that there are reasons to make the political authorities responsible for decisions on exchange rate regimes and parity changes within an adjustable peg system despite the possibility of conflicts with the objective of price stability. The central bank should protect its autonomy in this respect mainly by making public its advice on exchange rate matters and other practical actions.

In his comment on *De Beaufort Wijnholds* and *Hoogduin*, *Manfred Neumann* argues that the functions of monetary policy making and banking supervision should be kept institutionally separated, both in smaller and larger countries. Further, he stresses the securing of a Thomas-Becket effect, i.e. inducing central bankers upon appointment to safeguard the value of the currency as their personal *leitmotif* and to cut all former political ties. Finally, *Neumann* pleads for completing central bank independence by transferring the

sovereignty over exchange rate matters (including parities) to central banks to provide them with the undivided power over monetary and exchange rate policies. In the discussion, the authors pointed out that, to their knowledge, there is no central bank with complete autonomy over exchange rate matters. If this were the case, it would have far-reaching constitutional implications.

Intermediate Targets versus Information Variables as Operating Guides for Monetary Policy

(Benjamin Friedman)

Benjamin Friedman focuses on the role of intermediate targets and information variables as operating guides for monetary policy, particularly in the United States. Since 1975 the Federal Reserve System has been required under law to set money growth targets and to report semi-annually to Congress on its success or failure in meeting them. He stresses that the basic challenge of most central banks is to maintain price stability and/or full employment and that stable money growth is not the most reliable way to achieve these objectives, because the empirical relationships between money and income, and between money and prices have largely broken down. The latter explains Chairman Greenspan's statement in July 1993 that M2 "has been downgraded as a reliable indicator of financial conditions in the economy, and no single variable has been identified to take its place".

After discussing the distinction between an intermediate target and an information variable and the collapse of intermediate targets (M1, M2 and broad credit) in the United States, Friedman makes the case for an alternative class of policy making procedures relying on money and other indicators as information variables. Instead of the automatic pilot of an intermediate target procedure, under which every deviation of the target requires corrective action, he prefers a judgemental information variable procedure implying that divergences merit attention and may warrant action depending upon circumstances. Clearly, Friedman chooses for an eclectic approach to monetary policy.

First of all, rather than aiming at only one intermediate target, the central bank should use as information variables a broader range of financial and non-financial measures with potential predictive content, varying from the term and risk structure of interest rates to goods orders, building permits, ground breakings etc.. This is already done by the Federal Reserve. Furthermore, information variables should be exploited intensively through frequent re-examinations of what they are signalling about the current and future development of the economy and about the effects of the central bank's own actions.

Friedman concludes that judgemental discretion will always be needed, because even the most reliable information variables can give false signals as a consequence of changing exchange rate regimes, financial market structures and business practices. However, simply proceeding on an intermediate target is, in his view, an invitation to error.

Regarding Friedman's argument in favour of the information variable approach to monetary policy, *Alexandre Lamfalussy* argues that even with a

dependable intermediate target, its behaviour may be quite at variance with that of asset prices. According to Lamfalussy, this is the new dimension of monetary policy in an increasingly deregulated and integrated global financial environment. The question is then whether and how monetary authorities should respond to asset price bubbles. This question is difficult because of poor fundamental knowledge of asset price determination.

Monetary Policy Strategy in the EMU

(Omar Issing)

Omar Issing evaluates the design of a monetary policy strategy for the third stage of EMU. He stresses that the transition to stage three will be difficult, vitally depending on the confidence of the public in the European currency. Therefore, it will be important to fall back on the experience of a strategy which has proved itself in practice, e.g. that of the Deutsche Bundesbank. In stage three the European Central Bank is committed to the ultimate objective of price stability and granted independence from European and national authorities.

However, the monetary policy strategy of the European Central Bank is still to be decided upon. According to Issing, the wide range of proposals for this strategy can be roughly categorised in: a two-step approach of pursuing the ultimate objective indirectly by using an intermediate target and a one-step approach of achieving the final objective in one move, directly. The one-step approach is nowadays popular in some Anglo-Saxon countries, such as the United Kingdom, Canada and New-Zealand, not because they consider such a strategy superior, but because they cannot identify any suitable intermediate target. On the contrary, the two-step approach is used in many continental European countries, e.g. Germany, as a consequence of "the long and variable lags" in monetary policy making.

Issing prefers a two-step approach with a broad monetary aggregate as an intermediate target for a number of reasons. First of all, the link between money growth and inflation has a sound theoretical and empirical basis. Further, the control of the money supply reflects the central bank's responsibility and is easily to assess by the public. Finally, with a policy based on rules and incorporating monetary targets based on medium-term considerations the European Central Bank can ensure, similar to the Bundesbank over the past decades, a relatively high degree of price stability. He sees, just like *De Beaufort Wijnholds* and *Hoogduin*, no good alternative to a medium-term monetary targeting strategy. Although monetary policy and, thus, monetary targeting will not succeed without an element of pragmatism, it is important that the rule always remains the point of reference.

According to *Paul de Grauwe*, Issing's discussion of monetary targeting by the future ECB is based on the assumption that in the final stage of EMU, one currency will have displaced the national currencies, and that the ECB manages this currency. However, de Grauwe points out that it is more likely that initially the third stage will see an incomplete monetary union, i.e. one characterized by the continued existence of national currencies, albeit at 'irrevocably' fixed exchange rates. In the latter regime, in case of asymmetric shocks European monetary targeting leads to under- and overshooting of targets at the national level.

Rules versus Discretion in Monetary Policy

(Andrew Crockett)

Andrew Crockett analyses the debate on rules versus discretion in monetary policy both theoretically and empirically for the postwar period. Rules are advocated to commit central banks to a predetermined time path for an intermediate variable, mostly a monetary aggregate (M1, M2 or M3), while discretion is favoured because of unpredictable shifts in the demand for and supply of money by a variety of factors. He argues that neither pure discretion, nor fixed rules have proved to be satisfactory, but that the elements of a consensus are now beginning to emerge.

After discussing some terminological issues (objectives, targets, instruments and indicators) and the theoretical case for rules against judgemental discretion, Crockett examines how this case has worked in practice for the main industrial countries. He discerns three broad phases in monetary policy making during the postwar period: until the late 1960s, a substantial amount of discretion was taken for granted; from the early 1970s to the 1980s, increasing emphasis was put on rules by adopting targets for money growth ('monetary targeting') in order to reduce inflationary expectations; and by the late 1980s the pendulum began to swing away from rules to more discretion. By the loosening of the relationship between money and income, many central banks – even the Bundesbank – were forced to downgrade their monetary targets and to take a wider range of indicators into account. Crockett concludes, however, that this need for greater discretion does not imply a return to the earlier postwar practice. The lessons about the importance of credibility and time-consistency in monetary policy have been painfully learned. He refers to the inflation-targeting framework in the United Kingdom as one example of a possible synthesis of rules and discretion. Rules are appropriate for the ultimate objective of monetary policy, i.e. price stability, because there is nothing to be gained by varying or concealing this objective. Nevertheless, discretion is appropriate in the setting of monetary instruments but the decision making must be as open and transparent as possible to improve the information available to market participants.

Jacques Sijben agrees with Crockett that, because of regulatory changes and financial innovations, the velocity of circulation of money can shift in a relatively unpredictable way, thus favouring discretionary elements in monetary policy. However, Sijben points out that in turn the financial innovations and the associated shifts in velocity were induced by highly inflationary – i.e. discretionary – monetary policies in the first place. According to Sijben, these unpredictable shifts in velocity can be diminished by reducing monetary uncertainty, i.e., by stable rules of the game.

The Role of Monetary Policy in IMF Programs

(Manuel Guitián)

Manuel Guitián discusses the role of monetary policy in IMF programs within the context of the basic principles of, firstly, the interest of member countries in a firm assurance of the conditions for access to IMF resources and, secondly, the interest of the IMF in an equally firm assurance of the fostering of its purposes by member countries. Of course, both principles have consequences for the design and implementation of monetary policy. Although money growth influences the inflation rate and balance of payments position, Guitián argues that this relationship should not imply the control of monetary aggregates. Even if the control of money growth would be possible, its relationship to inflation and external developments reflects a link of domestic credit expansion (DCE) with aggregate demand in the economy. Clearly, his analysis is based on the familiar monetary approach to the balance of payments. Therefore, the monetary authorities have to formulate targets for domestic credit expansion in order to realize the goals of price stability and balance of payments or exchange rate stabilization.

Furthermore, Guitián stresses two important challenges facing the national monetary authorities in many countries: on the one hand the process of deregulation of domestic financial markets and of liberalization of international capital movements, on the other hand the corresponding trend towards internationalization and integration of financial markets during the last decade. Financial deregulation and liberalization has blurred the boundaries between banking and other financial services and, thereby, the differences between money and other financial assets (*All Finanz* or *bancassurance*). Thus, it has affected the stability of the demand for money and has impaired the usefulness of money demand forecasts as a basis for monetary policy making. Finally, financial internationalization and integration has weakened the national economic frontiers between countries and has increased the substitutability of national currencies. Ultimately, both challenges put heavy constraints on the effectiveness of domestic monetary policy by the mobility of international capital flows.

In his comment on Guitián's paper, *Henk Jager* criticizes Guitián's view that the new challenges of financial liberalization do not really matter for the choice of intermediate targets. With respect to Guitián's belief that the drawback of domestic credit as an intermediate target is insignificant, because of adjustments of the monetary reserve component of the money supply, Jager remarks that Guitián implicitly assumes an exogenous price level. This assumption distorts the outcome in the event of high capital mobility. According to Jager, under more realistic assumptions the money supply is better suited as an intermediate target, because it is a better indicator of inflation performance.

Italy's Experience within and without the European Monetary System: A Preliminary Appraisal

(Marcello De Cecco and Francesco Giavazzi)

De Cecco and Giavazzi evaluate Italy's experience within and out of the EMS exchange rate mechanism. Almost 15 years of partnership in the exchange rate mechanism did not result in the siding of Italy with the "strong currency" countries. The currency crisis of 1992 has triggered a balance of payments crisis inducing a heavy Lira devaluation. Until September 1992, the ease with which the Italian monetary authorities could keep the Lira well above its PPP level reduced the urgency for politicians to restructure the economy. Foreign short-term capital inflows validated the virtuousness of monetary authorities and the profligacy of politicians, creating a fool's paradise. The currency crisis did hit Italy, while it was walking on the tightrope of debt sustainability after the lifting of exchange controls. The accumulation of national debt during the 1970s and 1980s had made Italian monetary policy too easily destabilized by fluctuations of world growth rates and interest rates.

Nevertheless, *De Cecco and Giavazzi* consider the currency crisis as a *deus ex machina*, which made the adoption of stern economic reform possible by allowing the politicians to break loose of the demagogic stalemate in which they were frozen before. The question remains whether the extremely strict package of policy measures adopted by the Italian government in the last 18 months will be sufficient to induce a more structural adjustment process. However, the public debt stock will still require interest payments to be a very high share of GDP in the near future, despite the advantage that two thirds of total debt is in the hands of individuals who see their holdings as the equivalent of trust or pension funds. This does not imply that the demand for Italian public debt will remain as stable as it used to be. The monetary authorities should lay the ground for an orderly transition to a more orthodox structure of public debt ownership by designing alternative assets for institutional investors and by encouraging ownership by them much more openly.

In his comment on *De Cecco and Giavazzi's* paper *Gunter Baer* argues that the evaluation of exchange rate regimes depends on whether they are based on multilateral or individual country agreements. In the latter case unequivocal commitment to the exchange rate is successful only, if the implied loss of autonomy is accepted and if appropriate macroeconomic policies are adopted now and in the future. In the case of a multilateral agreement exchange rate regimes require close policy-cooperation and the establishment of a mutually-agreed mechanism to solve possible conflicts. According to *Baer*, in practice this may imply a strong institutional framework, like a move in the direction of EMU.

Monetary Policy and Exchange Rates: The French Experience (*André Icard*)

André Icard examines the French experience of monetary policy making within the EMS exchange rate mechanism since 1979. The conduct of monetary policy is based on two objectives: an external objective, stemming from compliance with the rules of the exchange rate mechanism, and an internal objective, aiming at the control of money growth within the framework of monetary targeting used by the Banque de France from 1977 on. The external exchange rate target has been an important tool for eliminating inflationary expectations and has guided policy in the (very) short run, while the internal money growth target (until 1991 M2 and presently M3) is a long-term benchmark for financial markets and reflects the central bank's commitment to price stability.

Icard emphasizes that stable exchange rates are imperative for Europe and for France, explaining the prominent role of exchange rate policy in French monetary policy. Furthermore, he stresses that exchange rates are the dominating transmission mechanism in France. The pegging of the (nominal) exchange rate of the franc to the Deutsche mark has been crucial for reducing French inflation over the last ten years. The temporary widening of the EMS fluctuation bands to $\pm 15\%$ from August 1993 is only meant to make use of intra-marginal exchange rate movements (two-sided risk), but it does not imply that the goal of price stability has been abandoned. However, this widening of the bands carries a message and a danger. The message is that the bilateral parities are consistent with the economic fundamentals of the member countries. The danger is that erratic and uncontrolled short-term fluctuations of exchange rates are not compatible with the long-term functioning of the single market and even of the common market, if these swings create invisible borders like those that occur between the U.S., Japan and the European Community.

According to Icard, there are reasons to be optimistic about the outlook for future monetary policy in France. First of all, the French long-term commitment to price stability has been acknowledged by the financial markets. Moreover, the law to make the Banque de France (more) independent from government has reinforced this commitment. Finally, public support for the policy of stabilizing the franc is still growing both domestically and externally.

In his comment on Icard's paper *Ralph Bryant* is puzzled about the contention that it is possible for France *both* to maintain an exchange rate peg *and* to

successfully pursue a domestic monetary aggregate target. According to Bryant, German reunification – being a huge asymmetric shock – is a classic example of a situation in which monetary and exchange rate targets are incompatible. As a North American economist, Bryant finds it hard to understand why this shock failed to produce a realignment, i.e. he thinks the policies of the ERM countries are hard to understand.

Can Russia Control Inflation?

(Richard Layard)

Richard Layard discusses the way in which Russia can control inflation and the difficulties associated with it. He starts by reviewing the recent history of Russian monetary policy. Since the reform, monetary policy has gone through three phases: from January to June 1992 a phase of relative tightness (i.e. low money growth), until October 1992 a phase of substantial loosening and, after that, a phase of gradual tightening. In April 1993 declining targets for central bank credit were agreed upon, reducing inflation progressively from a steady 20% per month. Next, Layard considers five major problems connected with this policy of bringing inflation down gradually.

Firstly, can central bank credit to the budget and to enterprises really be controlled? The control of central bank credit is under heavy pressure, e.g. by the role of enterprises as providers of housing and health care.

Secondly, the controllability of credit to the rouble area, i.e. other former republics of the Soviet Union. This would be easier if all countries in the area have an own currency and if their currency was fully convertible with the rouble.

Thirdly, will control of central bank credit lead to control of commercial bank lending? If the reduction of base money growth is offset by an explosion of the money multiplier, as frequently happens in a credit squeeze, inflation will not decrease.

Fourthly, the velocity of circulation of money (M_2) may also explode. The velocity is quite low (about seven times per year) because of the primitive payments system, but could rise rapidly when this system improves.

Fifthly and finally, the velocity of money can increase as well by more inter-enterprise credit instead of bank credit. He states that the limited solvency of enterprises makes this danger unlikely. However, Layard concludes that, despite the above mentioned problems, Russia will not experience hyperinflation so long as the present reform government remains in power, but the period of disinflation might be prolonged by these problems.

In his comment on Layard's paper, *Oleh Havrylyshyn* argues that Layard makes too brief an effort to go below the surface notion that inflation can only be stopped if direct credits to enterprises are sharply reduced. According to Havrylyshyn, Layard should have addressed the role of smaller elite interest groups effective in lobbying for continued credits such as the directors of enterprises, of kolkhoz, of retail organisations and of "new" commercial structures.

Stabilization and Monetary Reform in Latin America

(*Rudiger Dornbusch*)

Rudiger Dornbusch evaluates the process of stabilization and monetary reform in Latin America. In some countries, like Chile, this process has already been completed, in other countries – e.g. Argentina and Mexico – it is en route and in a country such as Brazil the reform has not even started.

He distinguishes two kinds of inflation: extreme inflation, meaning inflation rates of more than 20% per month, and moderate inflation, i.e. 15 to 30% per year. Extreme inflation is mostly driven by money financed budget deficits and, thus, a huge creation of money. Hyperinflation may only be stabilized by controlling money creation through the balancing or external financing of the budget. In this respect, Dornbusch discusses the case of Argentina in the 1980s.

Moderate inflation is, however, not caused by high budget deficits, but is kept going by implicit or explicit indexation of wages. It can be brought down by a real appreciation of the currency, a big recession to force down wage inflation and/or incomes policy. Examples are Chile in the first half of the 1980s and Mexico during the 1980s and early 1990s. While stabilization in Chile has been orthodox and successful, the softer approach of Mexico resulted in no growth and high real interest rates.

Nevertheless, in Brazil there is no stabilization and reform at all. Brazil has three options to stabilize hyperinflation: further fiscal consolidation, dollarization of the economy and/or fighting inflation inertia. Dornbusch's conclusion from the experience of the 1980s is that the process of stabilization, difficult or not, is a prerequisite for rapid economic growth. Moreover, this process should be supplemented by four measures: the establishment of an (more) independent central bank to assure confidence and stability, like in Argentina, Chile, Mexico and Venezuela; incomes policy to take the sting out of stabilization; improving the supply side and increasing real aggregate demand to stimulate economic growth; and access to the world capital market to draw upon external financing.

Guillermo Ortiz's comment – delivered by *Martin Werner* – addresses Dornbusch's view on the Mexican economy. Ortiz points out that the *composition* of investment is left aside. He argues that in the last decade the Mexican economy experienced a fundamental transformation due to a surge in private investment. With respect to the overvaluation of the currency, he stresses that – prior to the current stabilization – the peso had experienced a strong devaluation. Therefore, the following appreciation process is a natural – and not necessarily negative – consequence of the reform process.

Some Personal Conclusions

(Sylvester Eijffinger)

What may be concluded from the papers, comments and discussions presented at this conference? I think at least three general conclusions can be drawn on the conduct of monetary policy and the position of the central bank not only in Western Europe and North America, but also in Central and Eastern Europe, Latin America and other continents. Of course, these conclusions are not exhaustive.

The *first conclusion* is associated with what are, in my opinion, the two basic elements of monetary policy making in the main industrial countries. The conduct of monetary policy comprises a *structural* element, based on the degree of central bank independence, and a *cyclical* element, depending on the influence of the political cycles on policy decision making by the central bank. With the overall tendency to establish (more) independent central banks in many countries, the structural element increases and, thus, the cyclical element decreases but will never vanish completely. Even in countries with a very independent central bank (e.g. Germany, the Netherlands and Switzerland) monetary policy making is still influenced to a lesser extent by the political cycle.

Nevertheless, both theory and empirical evidence give further support to the well-known inverse relationship between the degree of central bank independence and the level of inflation. Moreover, neither theory nor empirical evidence find a clear-cut relationship between central bank independence and the level of real output growth in the long run. Hence, there is wide-spread support for the proposition that having an independent central bank is like having a *free lunch*: the benefits of lower inflation are high and the costs in terms of real output growth are not apparent.

The absence of a long-run trade off between inflation and economic growth has also important implications for the rules versus discretion debate in monetary policy. Independent central banks will put much emphasis on rules for monetary growth (if they have an internal target) or for their exchange rate vis-à-vis the anchor country (if they have an external target) to reach and maintain the goal of price stability. Dependent central banks will place more weight on discretion both in case of monetary targets and of exchange rate targets. Although there have been changes in the trade off between rules and discretion during the postwar period in the main industrial countries, these changes were relatively greater for dependent central banks (like the Federal Reserve and the Bank of England) than for independent central banks (such as the Deutsche Bundesbank and De Nederlandsche Bank).

The *second conclusion* is that the earning of reputation in the financial markets is best achieved in "*bad weather*" (low economic growth) rather than in "*good weather*" (high economic growth). Naturally, the independence of a central bank is the basis for its reputation and credibility. However, only in periods of low (or even negative) economic growth can an independent central bank prove its decisiveness to stick to the ultimate goal of price stability by not accommodating inflationary pressures from politicians, labour unions and other economic agents. Just then this stubbornness of the central bank not to inflate and to stimulate economic growth will pay in the long run because of the higher reputation of that central bank in the financial markets and, thereby, of a less than otherwise necessary restrictive monetary policy in future.

In this respect one may compare the *German-Dutch* model (the Bundesbank and De Nederlandsche Bank) with the *Anglo-Saxon* model (the Federal Reserve and the Bank of England). Both the Bundesbank and De Nederlandsche Bank cherish their image of a "*hard-nosed*" policy maker preserving and extending their reputation and, thus, reducing inflationary expectations. On the contrary, the Federal Reserve and the Bank of England behave more as a "*soft-nosed*" policy maker excavating their reputation ("too little, too late"). Therefore, these central banks conduct a stop-go policy raising inflationary expectations and uncertainty and, subsequently, risk premia demanded by investors.

The mobility of international capital flows and the integration of financial markets in most industrial countries have made the reputation and credibility of the central bank its only instrument of monetary policy. Therefore, politicians and other policy makers should restrict themselves as much as possible from policy advice to their central bank. Otherwise, they force the central bank to prove its reputation unwillingly by a more than necessary restrictive monetary policy.

The *third conclusion* is that every country gets the central bank it deserves. Although one could favour a (very) independent central bank for every country (based on the theoretical and empirical arguments given before), not every government or public will accept such a position of its central bank. In this respect, the difference between the German-Dutch model and the Anglo-Saxon model is also striking.

In Germany and the Netherlands public and, thereby, political support for an independent central bank and a policy directed to monetary stability is widespread and overwhelming. The Bundesbank and De Nederlandsche Bank know that their policies are backed by the vast majority of the people. This puts them in a relatively comfortable position.

However, in countries such as the United States and the United Kingdom central banks have a limited autonomy. Government and parliament may give

directives to the central bank or even override its decisions. The Federal Reserve has some autonomy in monetary policy making but is "independent *within* government". If the Federal Reserve would conduct a really restrictive monetary policy (e.g. in the early 1980s under Chairman Volcker) for a long time, it is almost certain that Congress will ultimately restrict its legal autonomy further by amending the Federal Reserve Act. The Bank of England is clearly less independent than the Federal Reserve. British politicians and policy makers are always stressing the accountability of the central bank to parliament.

Finally, in many countries the position of the central bank is being discussed and sometimes new legislation is underway. Especially in Europe, the process of monetary integration has triggered a trend to make central banks more independent: the Banque de France, the Banca d'Italia, the Banco de España and, perhaps in the future, the Bank of England. However, it should be emphasized that *legal* independence is a necessary but not a sufficient condition for the *actual* independence of a central bank. In my opinion, actual independence implies a tradition and culture of monetary stability not only within the central bank but also within the government and parliament of that country. Such a tradition will not be established overnight.

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