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How Can the ECB be Credible?

Lorenzo Bini Smaghi

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Bini Smaghi: *How Can the ECB be Credible?*

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ROBERT SCHUMAN CENTRE

How Can the ECB be Credible?

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Introduction[1]

Central bank credibility is essential for the achievement of monetary stability. This widely accepted principle is based on two axioms, shared by the main stream post-"rational expectations" macroeconomics literature: first, monetary stability, in particular price stability, is ultimately the result of monetary policy; second, credibility is a crucial factor for the effectiveness of policy: a lack of credibility is an obstacle to welfare-maximising policies.

The paper aims at examining the issue of how the ECB, which will be in charge of conducting the single monetary policy of the European Monetary Union, can be credible. Credibility can be assessed in terms of the probability that market participants attribute to the achievement of the objective explicitly pursued. Credibility has a dynamic dimension, as this probability may vary over time, depending in particular on effective performance. The ECB's credibility can be expected to evolve, in line with the results achieved in terms of price stability. However, at the start of Stage Three of EMU, the ECB will have no track record. This makes the issue of ECB's credibility no less interesting.

Indeed, even before the start of Stage Three of EMU market participants try to anticipate to what extent the transfer of monetary sovereignty to the ECB will entail a change in the monetary policy stance, at least compared to that of the Bundesbank, and eventually lead to adjust long-term inflationary expectations. Fears that the ECB may not be as tough as the Bundesbank in fighting inflation has been quoted as one factor underlying capital flight towards the Swiss franc and the increase in German yields in the second half of 1995.

The paper aims at analysing the factors that may affect the credibility of the ECB at the start of its life, i.e. its "genetic" credibility. The paper does not adopt a theoretical approach. It rather aims at examining some factors, few mentioned in the literature, others in public debate, that may be expected to affect the credibility of the ECB at the start of Stage Three.

The paper examines three broad factors that may influence central bank credibility. The first keeps with the recent literature on policy delegation and optimal policy contracts, focusing on central bank independence. Section 1 examines, on the basis of the prevailing criteria used in the literature, the degree

[1] This paper has been prepared for the Conference "What monetary policy for the European Central Bank?", held in Frankfurt on 9-10 June 1995. The author is the only responsible for the opinions expressed.

of central bank independence that the ECB can be expected to enjoy. However, inflation performance and central bank credibility do not depend only on central bank independence. Other factors play an important role. They regard in particular the environment in which the central bank operates. Section 2 examines some environmental factors which are likely to influence ECB's behaviour at the start of Stage Three and which may have a bearing on its credibility. These factors relate in particular to the economic conditions prevailing at the start of Stage Three, in particular concerning the degree of convergence of member countries, financial markets' development in the period preceding Stage Three, and political considerations, affecting inter alia the acceptability of EMU and the process underlying the selection of participating countries. The third factor likely to influence credibility, examined in Section 3, is the monetary policy framework of the ESCB. In absence of a track record, market participants will assess the likely performance of the ECB on the basis of their judgement on the effectiveness of the monetary policy framework chosen by the ECB and its capacity to conduct a single monetary policy aimed at achieving price stability.

1. The independence of the ECB

An important body of literature has examined the issue of how institutional arrangements for central banks can solve the problem of time inconsistency faced by political authorities in the conduct of monetary policy. Time inconsistency arises from the fact that the effectiveness of monetary policy depends on agents' expectations about such policy. With respect to nominal variables, such as inflation, monetary policy is most effective when agents perfectly anticipate policy actions. On the contrary, with respect to real economic variables, such as output or employment, monetary policy is most effective when it is not anticipated. However, the latter effectiveness is short lived and may lead to a longer term loss of effectiveness as agents tend to anticipate that monetary policy may diverge from their expectations.

One way of resolving the dilemma is to achieve long term effectiveness with respect to nominal variables by prohibiting the central bank from pursuing short term objectives in terms of real economic variables. The conduct of monetary policy would be directed only at nominal variables and separated from that of other economic policies. The central bank would be entrusted with a sufficient degree of independence to pursue primarily the objective of price stability. Incentive compatible contractual arrangements would solve the problems of delegation of power, providing the central bank with both independence of action and accountability of results.[2] Central bank independence is therefore seen as an important element of a time-consistent policy framework.

This section examines the extent to which the ECB can be expected to be independent. The analysis can clearly be only conjectural, since the ECB will come into life just few months before the start of Stage Three. However, there are already some elements for an assessment on how independent the ECB can be expected to be.

1. Measuring the independence of the ECB

In recent years a growing literature has tried to analyse the degree of central bank independence (CBI) on the basis of quantitative indicators. Measures of CBI have generally been based on a set of objective criteria, referring to the legal and economic status of the central bank.

One of the broadest analyses on this subject was conducted by Cukierman (1992). On the basis of sixteen criteria defining four main areas of CBI (appointment of the Board, policy formulation, policy objectives and financing of the government), an index of legal central bank independence is established and then applied to several industrial countries and LDCs. The Deutsche Bundesbank and the Swiss National Bank emerge as the two central banks with the highest degree of legal independence, followed, among others, by the Federal Reserve. This ranking is similar to that of other measures presented in the literature.[3]

Cukierman (1992) runs regressions aimed at relating inflation performance to the degree of central bank independence. For industrial countries, legal central bank independence is found to have a negative effect on average inflation over the period 1950-89. These results are in line with those obtained in other research in this field, although the degree of significance of the relationship between CBI and inflation tends to vary widely.[4]

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[2] See Tabellini and Persson (1994).

[3] See, among others, Bade and Parking (1980), Alesina (1988), Grilli, Masciandaro and Tabellini (1991).

[4] See Alesina (1988), Grilli, Masciandaro and Tabellini (1991), Eijffinger and Schaling (1993), and Fischer (1995).

The methodology followed by Cukierman can be implemented as a first step for analysing the independence of the ECB. The basis of the ranking system for the sixteen criteria used by Cukierman is provided in the annex. Table 1 reports, in the first three columns, Cukierman's results for the Bundesbank, the Swiss National Bank and the Federal Reserve. The results for the ECB, obtained on the basis of the Statutes annexed to the Maastricht Treaty, are reported in the fourth column.

The results show that the ECB has the highest score in terms of legal independence, higher than those of the other three central banks considered by Cukierman to be among the most independent. The ECB has a higher score for the formulation of monetary policy, given the protection from interference granted by its Statute and the prohibition on monetary financing of the government inserted in the Treaty. It has a lower score than the Bundesbank, however, for the shorter average term of office of the ESCB Governing Council.[5] The ECB and the Bundesbank are granted an equal degree of legal independence with respect to the objective of price stability and the powers to resolve potential conflicts with political authorities on monetary policy matters.

The straightforward application of Cukierman's objective criteria suggests that the ECB should be among the most, if not the most, independent of central banks.[6] Extending Cukierman's empirical results on the relationship between central bank independence and inflation performance, one would expect, ceteris paribus, that the inflation performance of the ECB would be as good if not better than that of the Bundesbank or the Swiss National Bank.[7]

2. The limits of measurement

In spite of the numerous attempts that have been made to measure CBI, the latter can hardly be assessed only on the basis of objective criteria. First, it is difficult to define a complete list of criteria that can provide a precise picture

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[5] The term of office of the members of the Executive Board is eight years, as for the Bundesbank, but that of the other members of the ECB Governing Council depends on national legislation, with a minimum of five years, as against eight years in the Bundesbank.

[6] This is in line with the analysis of Alesina and Grilli (1992) using another indicator of CBI.

[7] During the 1980s Germany and Switzerland recorded an average yearly inflation rate of around 3%.

of the legal status of a central bank. Even with a wide list, such as that suggested by Cukierman, important elements may be omitted. One example concerns the economic independence of a central bank, without which the scope of its activities in the conduct of monetary policy operations may be seriously limited. Rules concerning the use of collateral and the procedure for allocating profits and losses may have an impact on the room for manoeuvre available to the central bank. These aspects are practically ignored in the literature. Another important element affecting central bank independence which is often ignored is the participation in the decisions concerning the exchange rate regime and policy. This issue will be examined below. It is obvious that in a small country a legally independent central bank can have little control over monetary policy if it does not participate actively in the definition of the exchange rate policy.[8]

A further difficulty concerns the application of objective criteria to interpret legal provisions. The ranking used in the Cukierman system can be disputed on several grounds. As an example, in the case of the Bundesbank the ranking used by Cukierman for policy formulation suggests that the German central bank participates in the formulation of monetary policy, but has little influence over it; on the other hand, the bank is considered to have the final word in the resolution of conflicts with the Government, at least on issues defined by law as being directly related to its objectives. A close reading of the Bundesbank Statutes and the historical experience of Germany's monetary policy could suggest a slightly different interpretation. With respect to the formulation of monetary policy, the Bundesbank has always had a high degree of autonomy. Its Statute clearly assigns to it the task of defining Germany's monetary policy with the aim of safeguarding the currency. On this criterion, the Bundesbank could therefore be given a higher score. On the other hand, concerning the resolution of conflicts with the Government on issues of common interest, the Bundesbank Act does not clearly specify who has the last word. However, the Government has the right to suspend a decision of the Bundesbank Council for two weeks, although this has never happened. Furthermore, for exchange rate policy issues, the Government has the final word, as experience has shown. On this latter criterion, therefore, a strict interpretation of the Statutes would suggest that a lower ranking than Cuckierman's should be given to the Bundesbank.

An additional problem with the elaboration of a CBI index is the interpretation to be given to certain criteria. For instance, a low marking is given by Cukierman to a central bank whose executive Board is nominated by the executive branch of the government rather than through a more complex

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[8] This point has been made by several authors, including Fisher (1995).

procedure involving other public bodies. This ranking is based on the assumption that the former procedure may lead to the appointment of persons who are more favourably inclined towards the government than the latter procedure. This assumption is not necessarily correct. If CBI is considered as desirable by society, a government nominating a member who is not fit for the job may be held objectively responsible by citizens and therefore be penalised. If the procedure is too complex, there may be no clear responsibility for the nomination of a person who proves to be unfit or not sufficiently independent. Another example is the low rating of CBI which is given by Cukierman to a central bank which does not participate in the government's budgetary process. The opposite view could be held, according to which, to preserve its independence, the central bank should rather abstain from participating in the budgetary process so that it can more freely express a public judgement on it and retain autonomous margins of manoeuvre for its monetary policy.

Overall, it proves to be rather difficult to assess independence only on the basis of legal texts, not taking into account the country-specific experience and environment. Historical experience and customary developments can have as much if not more influence than formal law in defining the boundaries of central bank action. A central bank may de facto be more independent than it appears to be from legal texts, because its publicly recognised status has given it independence that goes beyond the formally established limits. Taking again the Bundesbank as an example, its Statutes contain little limitations with respect to the lending to the Government and does not prohibit interventions in the primary market for government securities, thereby suggesting a low degree of independence with respect to the monetary financing of the Government. Indeed, on this criterion, the Bundesbank is given a relatively low marking in Cukierman's index (Table 1). However, experience shows that, although there is no explicit prohibition in the Bundesbank Act on lending to the Government, monetary financing has historically remained very low. The Bundesbank Act was revised in 1993, in particular concerning Chapter 20 of the Act, following the ratification of the Maastricht Treaty, and monetary financing has been formally forbidden. On the basis of Cukierman's classification, this revision should lead to an increase in the index of CBI of nearly 30%. However, it can hardly be thought that the independence of the Bundesbank has changed significantly as a consequence of the new law.

In summary, the independence of a central bank cannot be assessed independently of historical experience, the general economic environment and the political economy of a country.[9] Applying the legal status of one central bank to that of another country does not necessarily make the latter as independent as the former. In practice, central bank independence tends to establish itself through a sequence of specific events, some eventually entailing conflicts with other organs of government. The way these conflicts are resolved marks the boundaries of central bank independence and defines the limits of the central bank's future scope for action. Such scope for action cannot be fully separated from that of the other branches of government policy, because central bank's actions inevitably impact on the overall equilibrium of the economy. Central banks know that although there may be no long-run trade-off between growth and inflation, there is a short-term relationship.

Conflict or potential conflict with other government bodies is intrinsic in central bank activity even in the case in which the central bank has the primary objective of pursuing price stability. This is because price stability cannot be achieved at each and every point in time. This is an aspect often ignored in the literature on CBI, which starts from Barro-Gordon's simplifying assumption that the central bank has full control over the inflation rate at each point in time. If this assumption is removed, especially for the short term, some margins of discretion emerge in central banks' action, which thus creates scope for conflict. This implies, in particular, that in modulating the intensity of its policy action, for instance after a shock which has brought the economy away from price stability, the central bank may have to take into account the impact of its action on the whole economy.

The way the conflict is resolved, or is expected to be resolved, defines the limits of the independence of a central bank. This is often associated in the literature to the concept of accountability of a central bank. Accountability is the way in which a central bank justifies its action, in view of the objective that it is assigned. This presumes that objectives can be specified in a contractual way so as to enable a clear-cut and adequate assessment of central bank performance. This, however, is not the case, precisely because the rate of inflation does not depend only on monetary policy. There is not a one-to-one instantaneous and deterministic relationship between central bank action and the rate of inflation. The latter is, in the short run, affected by several other stochastic factors in the economy. Maintaining price stability at each and every point in time is not realistic. Price stability is an objective to achieve over a certain period of time. Escape clauses have therefore to be established for possible short-term deviations that are not directly caused by monetary policy actions and that cannot be

[9] See Volcker (1994).

instantaneously remedied, simply because monetary policy takes time to impact on the price level. The problem thus arises of who has the responsibility of assessing the case for escape clauses. If the assessment is made by the political authorities, the problem of time inconsistency remains unsolved and accountability and central bank independence are of little use.[10] Indeed, the authorities may have little incentive to put a central bank under pressure if the inflation rate has overshot the objective, as they may have themselves obtained advantages from such overshooting.

Ideally, the performance of the central bank should be assessed by those that, over time, benefit from price stability. This can only be society at large. This is obviously a vague concept for the practical implementation of accountability. In Germany, where the way in which the resolution of conflicts between the Bundesbank and the other branches of government is not formally defined, the support given by the citizens to the Bundesbank is considered to be the basis of central bank independence and accountability. Indeed, the withdrawal of public support from political authorities that have in the past publicly challenged the Bundesbank on monetary matters has probably contributed more to the latter's independence than most articles of its Act. This is not to minimise the importance of the legal statutes, but just suggests that they cannot be the only basis for assessing independence.

Concerning the ECB, it is difficult at this stage to attempt making an assessment based on anything else than the legal texts since there is yet no experience. However, some elaboration of the simple quantitative criteria is required. This is the aim of the next section.

3. Strength and weaknesses of the ECB's independence

This section examines the main features of the ECB Statute with the aim of assessing the potential for its independence. Four main areas of independence will be examined: i) statutory; ii) functional, iii) economic, iv) personal.

3.1. Statutory independence

The constitutional status of the ECB is recognised to be one of the points of strength of the ECB's independence. It is the only central bank whose Statute is enshrined in a constitutional text and whose basic founding principles, in particular the concept of independence and the primary objective to "maintain

[10] See McCallum (1995).

price stability", have a constitutional value. Indeed, the Maastricht Treaty has the same legal ranking as that of a constitution. Its adoption by the Member States of the European Union has, in some countries, implied a modification of the constitution. A modification of the Statute requires a new Treaty between the Member States, which has to be agreed and ratified by each of them.[11]

The explicit mentioning of price stability as the main objective of the ECB - rather than a generic reference to monetary stability or the safeguarding of the currency, which may be interpreted in the same way but, as will be suggested below, is not necessarily the case - further safeguards the ECB in the event of conflict with other organs of government. Indeed, the concept of monetary stability or of safeguarding the value of the currency which are mentioned in most other central bank statutes can be extended to incorporate other objectives.[12] If money is defined in broad terms, embracing forms of financial wealth, the stability of its value is not necessarily in all cases associated with the stability of the price level. Under certain conditions, the objective of achieving price stability may temporarily come into conflict with the overall stability of monetary and financial wealth of the economy. For instance, a restrictive monetary policy aimed at achieving price stability can be associated with a temporary reduction in the value of financial assets and substantial turmoil in the financial system. These latter factors, which can certainly not be ignored, can however lead under normal circumstances to attenuate the degree of strictness of monetary policy required to achieve price stability.

Even a narrower concept of monetary stability referring to the stability of the value of central bank money is not necessarily consistent with price stability. Indeed, the value of money can be defined in at least three ways. The first is the internal value, or the purchasing power of money measured in terms of the general level of prices. Under this concept monetary stability and price stability do coincide. The second definition of monetary stability refers to the external value of the currency, expressed in terms of the exchange rate. Under this definition monetary stability and price stability do not necessarily coincide, especially in the short and medium term where exchange rate developments can depart from relative inflation performance. Such ambiguity was one of the

[11] For a restricted number of articles that do not concern the main tasks and functions of the ECB or the principle of independence, a more flexible procedure is possible, requiring a qualified majority of the Council when the proposal is made by the ECB itself (subject to unanimity of the Governing Council of the ECB) or unanimity when the proposal is made by the Commission (see Article 41 of the Statute).

[12] See Ciocca (1992).

elements at the origin of the conflict between the Bundesbank and the Federal Government in the late 1960s over the appropriate parity of the Deutsche Mark vis-à-vis the dollar in the Bretton Woods system. The final decision to revalue the Deutsche Mark, long requested by the Bundesbank, helped strike the balance in favour of the internal aspects of monetary stability. The third concept of monetary stability is that measured in terms of the opportunity, or the intertemporal, value of money, i.e. the rate of interest. Under this interpretation, monetary stability implies stability of the conditions at which central bank money is provided to the economy and in particular exchanges with outside money. This concept was clearly in the minds of the drafters of the Federal Reserve Act, which specifies that the task of the Federal Reserve is to "furnish an elastic currency"; it was further specified in the 1946 Employment Act, which indicates that the Federal Reserve should set its monetary targets "so as to promote effectively the goals of maximum employment, stable prices and moderate interest rates". Under this definition, monetary and price stability do not necessarily coincide, as maintaining a stable rate of interest may lead to the accommodation of inflationary pressures in the economy and therefore to accelerating price dynamics.

The ECB Statute does not give a specific definition of the concept of price stability. It should be noted, however, that the objective of the ECB is not just to "pursue" but to "maintain" price stability, which implicitly and ambitiously excludes any departure from it. On the other hand, Article 2 of the Statute clearly mentions that the ECB "shall contribute to the general economic policies of the Community", therefore avoiding a mechanistic interpretation of its role. Therefore, unlike some central banks whose statutes have been recently modified - such as the Central Bank of New Zealand, where the inflation path is defined and decided jointly with the Government - the ECB, like the Bundesbank, may decide on the specific inflation path it seeks to attain. The ECB is therefore not only allowed independence with respect to its instruments, as will be described below, but also with respect to its short-term goals within the framework in which price stability is the overriding objective.

In summary, the status given to the ECB provides it with instruments of defence to face possible conflicts with other European and national institutions. Several commentators have in fact called attention to the fact that no other Community institutions could challenge the ECB. According to this line of thinking, the Treaty, in its present form, does not provide the necessary balance of power. Indeed, the procedures or the institutions responsible for defining and implementing "the general economic policies of the Community" mentioned in Article 2 of the ECB Statute appear to be as yet rather weak. Without venturing into this debate, an issue of relevance concerns the accountability of the organs of the ECB. The Treaty provides several ways and means by which the ECB should be accountable. Some would have preferred a contractual-based system similar to the one adopted in New Zealand.[13] However, as suggested above, the latter system is not necessarily preferable in terms of incentive compatibility. The system of accountability chosen for the ECB is more similar to that of the Bundesbank, with regular reporting addressed to the public, although parliamentary hearings similar to those foreseen in the United States for the Federal Reserve are also prescribed. However, it cannot be denied that such system of accountability based on "public opinion" presupposes the existence of a European constituency that monitors and expresses judgements on the ECB's performance and penalises, or rewards, any body trying to pressure the ECB to depart from its primary objective. At the European level this situation is far from present. It should be the objective of the political union leg of the Treaty, whose revision is planned for the next intergovernmental conference, to provide ways for such a European-wide constituency to express itself.

3.2. <u>Functional independence</u>

The ECB is provided with a wide range of instruments and procedures that enable it to perform its functions with a high degree of independence. Several prohibitions further strengthen its independence in the exercise of its functions. The prohibition of monetary financing of the government, in particular through the granting of any sort of overdraft facilities or the undertaking of transactions in government securities in the primary market, represents an unprecedented severance of monetary links between the central bank and the government. This has implied modifying central bank legislation in all EU countries to bring it into line with that of the ECB. The norm is clearly not sufficient in itself, but establishes an important principle to which all countries were obliged to abide by 1st January 1994.

Another implicit prohibition is incorporated in the indication, mentioned in Article 2 of the ECB Statute, that "the ECB shall act in accordance with the principle of an open market economy with free competition". This principle, which is also mentioned in Article 3a of the Treaty, gives constitutional status to the concept of free competition in European countries, something whose political implications have not yet been fully analysed. This Treaty article protects the ECB from possible pressures to introduce administrative or other

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[13] See Goodhart (1992).

means whose aims have generally been to distort the allocation of financial resources in favour of the government.

A final aspect of functional independence concerns the role of the ECB in exchange rate policy. Several commentators have indicated that this is a weak point in the Treaty, and one which restricts the independence of the ECB.[14] This concern cannot be fully shared.

The text of Article 109 of the Treaty, which specifies the responsibilities of the Council, the Commission, the European Parliament and the ECB in the definition of the foreign exchange policy of the Union is rather complex and required lengthy negotiations. De facto, the limitations that may be placed on the ECB's monetary policy are very limited if not non-existent.

The constraint exerted on monetary policy depends on the nature of the exchange rate regime. The constraint can be very strong in case of a unilateral peg of the country's currency to the currency of another country. This is generally the case of a small country, who accepts to bear the burden of adjustment and therefore, in practice, accepts to have its monetary policy severely constrained. Such a system can hardly be foreseen for the European Union. It is unlikely that the EMU will agree to participate in an exchange rate regime where the ECU is unilaterally pegged to a foreign currency with the Union bearing all the burden of adjustment. While this was the case under the Bretton Woods system, where European currencies were unilaterally and separately pegged to the US dollar, such a situation cannot be imagined for the single currency of the Union, which is expected to be the largest or one of the largest economies in the world. This would hardly be rational from an economic or political point of view.

If the exchange rate system is of a multilateral nature, where the burden of adjustment is not pre-assigned, the latter will tend to fall on the weakest currency, i.e. the currency of the country with persistently higher inflation. In a system of fluctuation bands, with intervention obligations for all countries, the limited availability of reserves means that the country whose currency experiences downward pressure sooner or later has to adjust or devalue. Even when the possibility of financing interventions by borrowing reserves exists, the central bank that borrows to intervene in defence of its currency has to reimburse the reserves some day. This implies that there can in practice be no unlimited financing, except in a monetary union. A country whose currency is

[14] See Begg and others (1991), Giovannini (1992) and Kenen (1992).

strong can hardly be permanently affected by the financing of other countries' interventions, since reserves have to be reimbursed over a given time period. The country may not even be affected in the short term, if the effect of capital inflows on the money base can be fully sterilised. This may depend on the amount of assets available to the central bank. In any case, it is hardly difficult for a large country to sterilise inflows arising from foreign exchange interventions. This has been the experience in the EMS, where the Bundesbank has always been able to sterilise the impact of foreign interventions on its operational target, even in the presence of substantial flows. This condition is even more likely to be fulfilled by the ECB.

Therefore, if the ECU participates in a multilateral exchange rate system such as, for instance, the EMS, the Union's monetary policy can hardly be deflected from its price stability objective. On the other hand, the possibility of a deflationary bias may not be so easily avoided. If another major currency of the system appreciated, defending the parity of the ECU could imply borrowing reserves or restricting monetary policy. However, to the extent that this would entail an appreciation of the currency which would not be consistent with price stability in the sense that it would create deflation, the request for a realignment by the central bank would hardly be refused by the political authorities, who would also have an interest in avoiding a recession.

In summary, excluding the possibility that the Union decides to unilaterally peg its own currency, participation in an exchange rate system may not influence in a significant way the conduct of monetary policy by the ECB.

It should be pointed out, finally, that in all countries the choice of the exchange rate regime is generally left to the Government. Parliament is most often not involved. In the United States, the Treasury has the responsibility for international monetary relations and is the owner of the country's official reserves. However, this does not seem to raise substantial institutional issues or impinge on the Federal Reserve's monetary policy. In the case of the European Union, the process leading to decisions on foreign exchange relations is so complex and involves so many institutions that international monetary relations are likely to be very cumbersome and impose few constraints on the ECB.

3.3. Economic independence

The economic independence of the ECB relies on a set of elements whose importance will emerge fully only over time. To mention just a few: the rules for establishing, paying up and raising the ECB's capital are the exclusive responsibility of the Governing Council; the external auditors are to be "approved by the Council" on a recommendation by the ECB's Governing Council; the foreign reserve assets of the member countries are owned by the ESCB and a part of these is transferred to the ECB; the ECB's Governing Council decides on whether and in what form further foreign reserve assets may be called; the accounting rules for implementing the financial accounts of the ECB are established by the ECB Governing Council; finally, the provision for the allocation of profits and losses is established with wide margins of manoeuvre to enable the ECB to preserve its financial independence.

The global impact of these provisions on the ability of the ECB to perform its tasks in an independent way is difficult to assess. However, it is recognised that the ECB has been provided with a very high degree of financial independence compared to most other central banks.[15]

3.4. Personal independence

The provisions of the Statute grant the members of the ECB governing bodies wide personal independence. Without seeking to be exhaustive, the following aspects are worth underlining.

A first, important notion, aside from the principle of independence mentioned in Article 7 of the Statute, is the principle of "one man one vote". Irrespective of the country of origin, each member of the ECB Governing Council has the same vote.[16] The Governor of the Institut Monétaire Luxembourgeois has the same vote as the President of the Bundesbank, although Germany is over 150 times the size of Luxembourg in terms of income and population. This principle, which was proposed in the first draft of the ECB Statute prepared by the Committee of Governors in mid-1991, creates a strong presumption for the members of the governing bodies to take their decisions in the interest of the whole Union.

A second aspect is the security of tenure for the members of the Executive Board (for eight years), who have to perform their functions on a full-time basis. Their salaries are established by the Governing Council. The members of the Executive Board are nominated through a complex procedure, requiring unanimity of the Heads of State or of Government, on a recommendation from

[15] See Goodhart (1992).

[16] Except for certain provisions relating to financial resources.

the Council. The ECB Governing Council and the European Parliament have to be consulted. The members of the Executive Board are explicitly required by the Statute to be "persons of recognised standing and professional experience in monetary or banking matters".

A third aspect is that the ECB Governing Council is fully responsible for the decisions concerning the ECB's tasks and functions. A representative from the Commission and the President of the Council may participate in the meetings of the ECB Governing Council but neither has the right to vote or suspend a decision, which is currently possible for instance for the Minister of Finance in Germany or in the Netherlands.[17]

A point that may be considered a weakness of the ECB is the potential size of the ECB Governing Council. With the present members of the European Union all participating in Monetary Union the Governing Council would be composed of twenty-one persons. Experts in management organisation consider fifteen to be the maximum number for an efficient decision-making body. This number will be reached as nine countries participate in Monetary Union. Beyond this number, efficiency may be jeopardised, while dedication to a common goal and therefore personal independence may be weakened. In addition, as the number of countries increases, the number of central bank Governors will tend to outweigh those of the Executive Board. This has been considered as a possible danger for the independence of the ECB.[18]

This aspect is recognised by most as being a politically sensitive problem, which may have to be dealt with at a certain stage.

2. The external environment

As indicated in the previous section, the credibility of monetary policy can hardly depend on the degree of central bank independence alone. Central banks do not operate in a vacuum. Inflation performance, especially in the short term, does not depend only on the autonomous conduct of monetary policy but on a series of other factors, affecting in particular aggregate demand and cost factors. Given the discretionary nature of fiat monetary standards, departure from price stability cannot be expected by economic agents to be temporary unless the

[17] A decision by the Bundesbank Council can be suspended for two weeks. See Eizenga (1987). This possibility has never been resorted to in practice but, according to some commentators (Marsch, 1992), it has at times acted as an implicit deterrent.

[18] See Goodhart (1992).

determination to restore price stability by the central bank is clearly perceived as outweighing the effects that this policy will entail in terms of short-term output and employment loss. Such expectation does not depend only on central bank independence but also on the size of the disturbance and, more generally, on the acceptance by society as a whole of price stability as a priority objective which has to be pursued even at a short-term cost. This section examines some of the factors that may influence the conduct of a stability-oriented monetary policy at the start of Stage Three.

1. The economic conditions

At the beginning of Stage Three, the ECB will be confronted with an economic environment in the participating countries that will in part be the result of actions previously taken by the respective national authorities. Although market participants may expect the ECB to behave as the most independent of all central banks and to quickly establish its credibility and reputation, the past behaviour of national authorities, in particular the NCBs that have become part of the ESCB, may influence their judgement. Financial markets have long memories and may continue weighing past performance for a long time in assessing future prospects. This is the reason why convergence was considered to be a prerequisite for selecting the countries that are fit to enter the Union without creating disruptive effects and to provide the ECB with the best possible environment. This is not to say that starting in a convergent environment is sufficient to establish credibility. As indicated in the previous section, credibility is lastingly established only after conflicts, and depending on how they are resolved. Entering the Union in a favourable environment would improve the prospects for establishing the ECB's credibility but not relax the pressure on the ECB to stand ready for possible conflicts.

Assessing the degree of convergence necessary to establish which countries are fit to enter EMU will not be an easy task. It has been difficult enough to define the concept of convergence and the procedure to assess it in a treaty format. Establishing clearly defined and measurable variables to be inserted in a legally binding document has been a very difficult task and one which remains partly unfinished. Although a mechanical rule would not be appropriate to assess convergence, full discretion would also be detrimental, as it would provide no economic basis on which to make the political judgement. In the end, the Treaty provides the criteria and the flexibility to make an economically sensible decision about which countries are fit to participate in EMU.[19]

Convergence of inflation is a crucial prerequisite for a smooth transition to Monetary Union. If countries start with significant differences, the initial inflation rate of the Union will be higher than desirable, which would have two negative effects. First, it would require a more restrictive monetary policy and higher interest rates, at least compared to those previously prevailing in the best-performing countries, in order to reduce inflation. This would have a differentiated impact on the various regions of the union, with the more negative effects falling on the countries entering the Union with relatively lower inflation.[20] Second, it would burden the ECB with the negative heritage of the worst performers and negatively affect its credibility.

Inflation convergence is not sufficient for establishing the ECB's credibility at the start of Stage Three. Indeed, according to the procedure established in the Treaty, convergence of inflation is measured not in absolute terms but in relative terms. It cannot be excluded that a large number of countries are within the 1.5 percentage points difference required, while the reference inflation rate based on the three best performers is not consistent with price stability. This would imply that the Union could start with a relatively high average rate of inflation, thereby making it rather difficult for some time for the ECB to achieve its primary objective of <u>maintaining</u> price stability.[21] Its credibility would be jeopardised from the start. Fortunately, the available forecasts on inflation performance in EU countries seem to exclude this possibility as inflation is expected to remain subdued in the next few years in several countries.

The level of the budget deficit also has an impact on the starting economic conditions in the Union. An excessive deficit may create pressure on the economy which jeopardises the maintenance of price stability not only at the very start of Stage Three but also later on. This criterion has the advantage of being defined in absolute terms, although a 3% deficit has a different economic impact, in particular on price stability, depending on the situation of the cycle. A 3% deficit may have negligible short-term effects on price stability, and may

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[19] See Bini Smaghi, Padoa-Schioppa and Papadia (1995).

[20] See Bini Smaghi and Del Giovane (1992).

[21] It could be held that the 3 per cent limit on budget deficits and the limit on the debt-to-GDP ratio represent, in some way, an implicit constraint on inflation rates.

to a certain extent be acceptable in a recession, while it may be disruptive at the peak of the cycle. Measures of cyclically adjusted deficits are controversial and could not represent a reliable indicator to be inserted in the Treaty. However, there would be risks for a credible start of the ECB if the latter was to be confronted with a Monetary Union beginning its life in a relatively favourable cyclical situation but with budgetary deficits of around 3% of GDP. Financial markets would immediately anticipate the widening of such deficits as soon as the economy started to slow, thereby undermining the medium-term sustainability of countries' fiscal positions.

The long-term interest rate and the level and growth of the public debt are criteria to assess the longer-term credibility of the move to EMU and therefore the credibility of the policy to be implemented by the ECB. To some extent, both criteria measure the same condition, although from a different point of view and with a different degree of strictness. The long-term interest rate, which takes into account the market's assessment of credibility and longer-term sustainability of a country's policy, allows for a wide margin, 200 basis points with respect to the best performers in terms of inflation (which may not be the best performer in terms of interest rate), which represents a very large premium in capital markets. Examining issues denominated in the same currency, such differentials are hardly ever reached, even for very low-quality issuers. Clearly, up to the start of Stage Three, the exchange rate premium will play a role, but as the starting-date gets closer, the longer-term forward premium tends to diminish, with possibly peculiar effects on yield curves. Furthermore, if the commitment to participate in the third stage of EMU is perceived as being strong for one country, expectations may become self-fulfilling and render this criterion practically useless.

The debt criterion is the more difficult one to apply since it involves a discretionary judgement on the speed of reduction and the approaching of the reference level of 60% of GDP, when government debt exceeds this level. The definition of an excessive deficit in terms of debt ratio and dynamics has been one of the most complex tasks of the intergovernmental conference. The result has been among the most criticised in the literature.[22] However, the lack of available theoretical and empirical analysis was a major difficulty. The way in which this criterion will be implemented will have an impact on the credibility of the ECB. The stock of public debt of the Member States of the Union should not constrain the room for manoeuvre of the ECB in the conduct of monetary policy. This requirement will have to be ensured also in the course of Stage

[22] See for instance Buiter, Corsetti and Roubini (1993).

Three of EMU, not only at the start. Sanctions are being considered for those countries which incur excessive deficits. However, several commentators have indicated that while the sanctions are very strong before Stage Three, entailing non-participation in EMU, they may not be as strong once a country enters the Union. To the extent that past budget laxity is an indicator of future laxity, this means that either the sanctions foreseen in Stage Three need to be strengthened or that the debt criterion should be applied in a more restrictive way before the start of Stage Three than thereafter.

To be credible, the ECB should be expected to stand ready to counteract the effects of expansionary fiscal policy on price stability. On the other hand, countries which are more disciplined would tend to suffer from the increase in interest rates produced by the ECB to counter fiscal expansion in the whole area or in some countries. This would induce the former group to put pressure on less disciplined countries to reduce or avoid excessive deficits. Indeed, in a Monetary Union the impact of an expansionary fiscal policy in one country is transmitted negatively to the other countries via the higher level of interest rates. In this sense, Monetary Union creates an obvious need for closer ties between countries to co-ordinate or discipline other areas of economic policy.

In sum, the convergence criteria to be met for the passage to Stage Three of EMU should be considered as a set of conditions that enable EMU to be viable and the countries that participate in it to reap all its benefits. These benefits largely depend on the ECB being credible from the start. A use of the criteria that would undermine this credibility would lead to a Union that would not fully benefit its participants.

2. The financial markets

According to the Treaty, right after the decision is made on which countries can participate in the single-currency area, the ECB will be created and the members of the ECB Executive Board will be nominated, in particular the President and Vice-President. Stage Three starts after an interim period expected to last around one year. During the interim period the ECB has to finalise the preparatory work in order to be able to conduct a single monetary policy from the start of Stage Three. On the other hand, it is foreseen that national authorities will continue to maintain, until the start of Stage Three, the ultimate responsibility for domestic monetary policy.

These provisions are the result of two contrasting objectives pursued in the Treaty.[23] On the one hand, the final decisions concerning the framework for the single monetary policy can be taken only by the ESCB, whose governing bodies are composed of members of the NCBs of the countries that have been selected to participate in the single-currency area. As a consequence, the creation of the ECB cannot take place too much in advance of the start of Stage Three, i.e. before these countries have been selected. Furthermore, as the ECB will not have direct monetary policy responsibilities until the start of Stage Three, there is a risk of it being considered an "empty shell" and confusion might arise about which institutions is effectively responsible for monetary policy if the ECB is in existence much before the start of Stage Three. On the other hand, given the time necessary to complete the preparatory work and to implement the ECB's decisions, the ECB cannot be created just before the start of Stage Three. The compromise solution is that the ECB is created one year before the start of Stage Three.

The credibility of the ECB at the start of Stage Three will depend on what happens during the first year of life of the ECB, which takes place before the start of Stage Three. During this year, the ECB has to complete the preparation of the monetary policy framework for Stage Three but does not have responsibility over the monetary policies implemented in the member countries. The credibility of the ECB at the start of Stage Three will be strongly affected by market developments in the interim period. It will therefore be essential that the monetary policies of the future member countries are very closely co-ordinated. The high degree of convergence that will be reached by the selected economies, on the basis of the assessment made with the convergence criteria, should grant a high degree of harmony of monetary conditions. However, exogenous temporary shocks cannot be excluded. In addition, financial markets are known to react not only to economic fundamentals. It cannot be ruled out that tensions emerge in the markets that may render policy co-ordination more difficult. As an example, elections taking place within the interim period may give rise to unforeseen speculation in financial markets.[24] Without a very strong mechanism of monetary policy co-ordination, temporary tensions may fuel market speculation and give rise to self-fulfilling developments; in addition, the incentives of national monetary authorities to defend prevailing exchange rates on the eve of the irrevocable fixing of conversion rates may not be well defined or perceived by the markets. This would be to the detriment of the ECB, which

[23] See Bini Smaghi, Padoa-Schioppa and Papadia (1994).

[24] It should be borne in mind that 1998 will be a year in which there will be legislative elections in France and in Germany.

would have to stand by, powerless, and watch developments that may produce longer lasting effects, in particular on its future credibility. The risk of being an "empty shell", even if only for one year, may have long- term repercussions. Therefore, the ECB should have a central role in co-ordinating and binding national policies during the interim period so as to ensure a smooth transition to Stage Three. De facto, although full Monetary Union starts formally at the beginning of Stage Three, a major step towards it will taken when the ECB is created.

3. The political environment

The credibility of the ECB, the new institution in charge of running monetary policy in the Union, will also depend on the political environment surrounding the decision to move to EMU. Two aspects may play a particularly important role:
- the acceptability of EMU, and
- its irreversible character, as perceived by economic agents.

3.1. Acceptability

The move to the third stage of EMU is a major monetary reform, leading to a change in currency which implies, inter alia, a non-decimal redefinition of the numeraire. Given the fiduciary nature of modern monetary systems, the confidence of economic agents is a crucial element for monetary stability and therefore credibility. Monetary reforms have in the past been resorted to mainly to try to regain public confidence in money after periods of monetary instability. The EMU reform is substantially different. It will take place in an environment in which monetary stability is expected, even required, to have a prior long-standing record. Such an environment of stability may even become an obstacle to EMU, as some citizens may have so much confidence in their own currencies that they may doubt the need for EMU or be scared that it may lead to a weaker currency. In sum, the elements of a successful reform are necessarily different in the case of EMU than in other previous monetary reforms. A few of them are discussed in the following section.

The first element of concern for public acceptability regards the selection of countries which will participate in Monetary Union from the start. Clearly, the initial choice has a much stronger impact on agents' expectations and on the credibility of the ECB than the subsequent decisions to admit new entrants. The convergence criteria have been discussed above. To ensure acceptability, the assessment leading to the selection of countries participating in EMU has to be clearly understood by the general public. In this respect, an oversimplification of the criteria may risk misleading public opinion when the selection is made. For instance, suggesting, as is sometimes done, that the debt criterion sets a limit of 60% for the debt-to-GDP ratio, without mentioning the dynamic aspect of the criterion, may then make it very difficult to explain why some countries have been selected although their ratio was higher. The Netherlands and Austria are possible examples. These countries, which are certainly among the candidates to participate in the single-currency area, having experienced long-lasting stability of their currencies, are unlikely to record a debt-to-GDP ratio which is lower than 60% even if they undertake very restrictive budgetary policies. In sum, citizens should not be led to think that a country has been admitted because a criterion has been bent for "political" or other reasons, but because the criterion was applied correctly.

The procedure of selection will start in 1996. This will provide an occasion for the authorities to explain how they intend to proceed in applying the criteria. The application of the criteria should be consistent throughout the years. It would be difficult to exclude (or include) a country from the group fit to start EMU one year but to include (or exclude) it the following year, as this would not easily be understood by citizens unless some really substantial changes in performance had occurred. For instance, excluding country A one year, because its debt ratio was considered too high and not sufficiently decreasing, while accepting the same country the next year, maybe with a similar if not worse performance, would hardly be understood by citizens and may be interpreted as a watering-down of the criteria. Therefore, being more restrictive in the first assessment than in subsequent ones may, to some extent, also create problems of credibility; doing the opposite may be difficult for political reasons. In sum, the procedure followed the first time to assess convergence should be applied consistently also in subsequent exercises and clearly explained to citizens and market participants.

A further aspect to be mentioned in this context, which is related to the discussion on independence, concerns the possibility of conflicts between the monetary and other government authorities. It was suggested in Section 1 that the independence of the central bank is often established following the way conflicts with the government are resolved. According to this line of reasoning, if there were a conflict between the monetary authorities, including the EMI, which is the forerunner of the ECB and is required to produce regular reports on convergence, and the political authorities on the selection of countries participating in EMU, this would greatly jeopardise the credibility of the ECB at the start of Stage Three, especially if it were not resolved in favour of the latter.

The final element in the acceptability of the move to EMU regards the advantages entailed in the monetary reform. The discussion of the issue of the advantages and disadvantages of EMU has remained at a very academic level and has not yet reached the citizens. Just as the authorities preach the credo of monetary stability to ensure support for their policies and explain the advantages, a similar attitude will have to be taken with regard to the new currency. If the citizens perceive that the reform is not fully backed by the authorities, they may feel that this has been imposed on them. This interpretation would lead to a loss of credibility of the reform and of the institution in charge of managing it. Historical examples underline this risk.

3.2. Irreversibility

The credibility of the ECB depends on the irreversible character of the monetary reform. If the political process leading to the start of Stage Three does not signal a lasting reform, the risks of a fallback may become evident to financial markets and economic agents.

Irreversibility depends largely on the cost of breaching the contract. This cost must appear to be much greater than the possible advantages, even in extreme situations, so as to convince market participants that the process is indeed irreversible. Otherwise, the possibility of an escape clause would be incorporated in agents' expectations and give rise to risk premia. The benefits of the reform itself would not be fully reaped. Therefore, it is important that clear signals are given by the authorities that the process is irreversible and lasting. This entails action in the field of legislation, market practices and public sector procedures. These refer not only to the purely monetary aspects of the Union but also in related fields. As an example, the discipline on public sectors cannot be relaxed but on the contrary must be strengthened after the start of Stage Three. Applying pressure to further improve discipline, perhaps through a stronger and more constraining procedure than the one currently foreseen, can be a way to ensure a long-lasting impact on market expectations.

To ensure the irreversibility of the process authorities need to take the lead in introducing the single currency and in promoting a smooth transition by all economic agents. Authorities are requested to provide a framework for the changeover to the single currency that enables private agents to adequately plan their adjustments in a co-ordinated and orderly fashion. This will be one of the main tasks of the EMI and other EU and national authorities in the transition leading to the single currency.

3. The operational framework of the ESCB

On the first day of Stage Three the ESCB will conduct the single monetary policy on the basis of instruments and procedures decided by the ECB Governing Council. This framework will comprise, in particular, the definition of a strategy in terms of an operational target and an intermediate or final policy target, and a set of policy instruments and procedures through which the central bank operates with its counterparties.[25] Over time, the credibility of the ECB will be established through the way policy is implemented. At the start of Stage Three, credibility will depend on the assessment that the markets make of the framework chosen by the ECB to conduct its monetary policy and on whether it is considered appropriate for the achievement of the ECB's objective of price stability.

It will be the task of the ECB to define the framework in a way that maximises the credibility of the policy that will be implemented through it. The market's assessment of the framework can be expected to be made according to a few general principles: i) efficiency, ii) market orientation, iii) simplicity and transparency, iv) continuity.[26]

1. <u>Efficiency</u>

The credibility of the ECB will partly depend on the market's assessment of whether the monetary policy framework chosen by the ECB is efficient to enable it to achieve its targets. This framework entails both strategic and operational aspects.

Concerning the strategic aspects of monetary policy, the choice of an intermediate or final target will be a crucial decision, to be made by the ECB. It will also be evaluated by market participants on the basis of the expected stability of financial and economic relations that justify one strategy or another. Two types of issues are likely to emerge: first, whether to have an intermediate target, and, if so, whether just one or several targets; second, which targets. It is not the scope of this section to examine the pros and cons of the various

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[25] See Monticelli and Viñals (1994) for a discussion of the main options available to the ECB.

[26] See *EMI Annual Report* (1994).

possibilities. However, the search for credibility requires that markets' reaction are taken into consideration. The literature suggests that the announcement of intermediate targets has been perceived in a favourable way by markets, it being interpreted as a signal of the commitment to pursue the objective of price stability.[27] This clearly holds under the condition that the target chosen by the authorities had proved to be or was perceived as being instrumental and efficient in achieving the final objective.

The choice of a monetary targeting strategy will be assessed on the basis of the available evidence concerning the stability of money demand in EMU. If unconvincing evidence is presented, a strategy of monetary targeting may lead agents to doubt the efficiency and effectiveness of the policy to be followed by the ECB, thereby undermining credibility. Research on the stability of the demand for an EU-wide monetary aggregate undertaken in recent years can be expected to be pursued and to include discussion of the possible implications of the move to Monetary Union.[28] In particular, it will be essential to understand to what extent the move to Stage Three will entail extensive currency substitution and financial changes that could, at least temporarily, affect the velocity of money circulation. If the start of Stage Three is accompanied by major portfolio shifts or currency substitution, due for instance to a lack of full credibility of the move to EMU, the velocity of currency circulation would be affected, rendering a strategy based on monetary targeting ineffective. The perception of such ineffectiveness by market participants is likely to undermine the credibility of the ECB.

Concerning the operational framework, in particular the set of instruments and procedures, the assessment of their effectiveness is essential to ensure credibility from the start. This depends not only on theoretical considerations but on the practical evidence that will emerge from the first day of use. From the first market operation conducted by the ESCB, the operational framework has to be seen as perfectly functioning. This implies, for instance, that if a rather decentralised implementation framework is chosen, the execution has to be fully consistent with a centralised decision-making process. For the first repurchase agreement operation, for example, the various steps to be normally followed by a central bank - from the calculation of the liquidity need of the banking system in the Union, to the definition and publication of the tender conditions, in terms of price or volume, to the collection of the bids, the calculation of allotments,

[27] See Bernanke and Mishkin (1992).

[28] See Van Riet (1992) and Monticelli and Papi (1995), Chapter 4.

and the crediting of the accounts held by the bidders with the NCBs - have all to be executed smoothly, as if they were a routine operation in a central bank. Any misfunctioning would lead market participants to think that the ECB's framework is not fully appropriate. This would obviously have negative repercussions on the credibility of the ECB.

If, instead, a rather centralised approach is adopted for the execution of monetary policy, it is essential that the transmission mechanism to the policy-relevant targets, in particular money market rates, is fully operational. This requires in particular that monetary impulses sent by the ECB are transmitted to all major financial markets in the Union and implies that interest rates at the same maturity are affected uniformly across the Union. No differential should emerge that could give the impression that no single monetary policy is prevailing. This requires a payment system which enables funds to be transferred in real time between market participants located in different areas of the Union in order to exploit arbitrage opportunities. If, due to imperfections in the payment system or high transaction costs, arbitrage is not be able to operate and price differences, even small ones, remain across markets, monetary policy would not appear as having a single stance. Confusion would be engendered in market participants and the ECB would be held liable for the imperfect functioning of markets. An efficient functioning of the payment system is therefore a prerequisite for a credible single monetary policy.

2. Market orientation

An element which is likely to affect the credibility of the ECB's monetary policy framework is the extent to which it relies on market mechanisms. This principle is already enshrined in the Treaty and in the ESCB Statute. It needs to be visibly implemented. This means in particular that markets are put in a position to operate smoothly, as suggested above.

Furthermore, the principle of open and competitive markets has to be followed also in the practical implementation of the single monetary policy, either at a centralised or at a decentralised level. This has a multiplicity of implications for the monetary policy framework. For example, the choice of counterparties or the access by banks to central bank liquidity, be it at the ECB or the NCBs, should not give rise to discrimination, in particular based on nationality. Otherwise, the impression could emerge that objectives other than EMU-wide ones are being pursued in the conduct of monetary policy, which would jeopardise the credibility of the ECB as an institution aiming at price stability in the Union as a whole.

The application of the principle of market orientation could be expected to give prominence to market instruments, in particular open market or repurchase agreements, by which liquidity is injected into the market through tender operations. Instruments entailing non-market features and a certain amount of discretion, involving in particular bilateral relations between the counterparties and the central bank, might have to be given less importance.

3. Simplicity and transparency

Credibility of the monetary policy framework is enhanced if the latter is clearly understood by market participants. This implies that it has to be relatively simple and explained by the ECB to the public.

Concerning the monetary policy strategy, its effectiveness requires that it be publicly announced, possibly in advance of the start of Stage Three. Part of the underlying technical analysis will have to be made public and debated. The ECB cannot rely on a track record to convince agents that whatever it does will be the right thing; agents will have to be convinced, some of them with rather technical arguments. The ECB will have to undertake in-depth research in the interim period on the stability of certain macroeconomic relations and compare its results with outside analysis. It is too early at this stage to forecast the content of such a strategy. However, to be easily understood by all market participants, it should be relatively simple. Complexity may be interpreted as a way to hide different objectives. In this respect a strategy of monetary targeting has, *ceteris paribus*, the advantage of being relatively simple and can be easily monitored by agents.

Concerning the operational aspects of monetary policy, the choice of instruments and procedures will have to be disclosed to market participants well in advance of Stage Three. A testing period will have to be allowed for, to ensure that the framework is fully operational from the start. The simpler the structure the more likely agents will adapt to it. Indeed, given the present diversity of monetary policy instruments and procedures in the member countries, the different structures of markets and degrees of sophistication of participants, adjustment will be facilitated if the new instruments are simple. To preserve equal access, while having to consider some changes in all countries, the chosen system could give priority to simplicity as a main feature of its framework.

4. Continuity

Market participants do not generally like major changes in market practices, unless these are generated by them and are consistent with improved business opportunities. Continuity may therefore represent a useful principle to follow in order to make market participants more easily accept the ECB's framework. However, to the extent that up to the start of Stage Three differences still remain between the monetary structures of the member countries - due for instance to the fact that small countries will have an exchange rate target while larger ones, certainly the anchor country, has a monetary target - this principle cannot be fully implemented. On the other hand, the situation at the start of Stage Three will have to be assessed against the prevailing situation in the existing member countries and continuity may only apply for those cases that more closely resemble that of the future Union. It should therefore be no surprise that some continuity is maintained between the structure prevailing in some countries and that of the ESCB. Market participants would certainly expect so. On the other hand, this principle should be weighed against the fact that the start of Stage Three will imply changes in monetary and financial relations. Applying too strictly the principle of continuity may lead market participants to think that the authorities are underestimating the changes and are content with continuing to operate as if nothing had happened. Such excess could also undermine credibility.

Conclusions

A successful transition to EMU requires that the credibility of the ECB to conduct a stability-oriented monetary policy is firmly established in the eyes of market participants. This is not an easy task since the ECB will have no track record at the start of its life on which to establish its reputation.

The credibility of the ECB at the start of Stage Three will depend on a series of factors that this paper tried to examine. An important one is already enshrined in the Treaty, establishing an unprecedented degree of independence for the ECB from other national or EU authorities. Other factors will also be required, but have not yet been established. First, a high degree of stability, in particular in terms of price performance and public finances, in the participating member countries. This will depend on the adjustment policies adopted in the course of Stage Two of EMU and on the fulfilment of the convergence criteria by the participating countries. Second, the ECB's credibility will depend on the political support that it will have in pursuing its primary objective of price stability. The establishment of an EMU-wide constituency to which the ECB is accountable has to be organised within the process of deepening the political integration of the European Union. Finally, the credibility of the ECB at the start of EMU will depend on the way the transition to the single currency is organised. A smooth transition, that strengthens the credibility and irreversibility of the EMU process will contribute to reassure market participants of the stability-oriented nature of the new union. It will be the task of the competent EU and national authorities in the coming years to take the appropriate measures in the above areas, with a view to ensure that all guarantees are provided to the ECB to start Stage Three of EMU with the highest possible credibility.

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Annex

Variables for Legal Central Bank Independence

Variable number	Description of variable	Weight	Numerical coding
1	Chief executive officer (CEO)	0.20	
	a. Term of office		
	Over 8 years		1.00
	6 to 8 years		0.75
	5 years		0.50
	4 years		0.25
	Under 4 years or at the discretion of appointer		0.00
	b. Who appoints CEO?		
	Board of central bank		1.00
	A council of the central bank board, executive board, and legislative branch		0.75
	Legislature		0.50
	Executive collectively (e.g. council of ministers)		0.25
	One or two members of the executive branch		0.00
	c. Dismissal		
	No provision for dismissal		1.00
	Only for reasons not related to policy		0.83
	At the discretion of central bank board		0.67
	At legislature's discretion		0.50
	Unconditional dismissal possible by legislature		0.33
	At executive's discretion		0.17
	Unconditional dismissal possible by executive		0.00
	d. May CEO hold other offices in government?		
	No		1.00
	Only with permission of the executive branch		0.50
	No rule against CEO holding another office		0.00

2	Policy formulation	0.15	
	a. Who formulates monetary policy?		
	Bank alone		1.00
	Bank participates, but has little influence		0.67
	Bank only advises government		0.33
	Bank has no say		0.00
	b. Who has final word in resolution of conflict? (a)		
	The bank, on issues clearly defined in the law as		
	its objectives		1.00
	Government, on policy issues not clearly defined		
	as the bank's goals or in case of conflict within the		0.80
	bank		
	A council of the central bank, executive branch, and		0.60
	legislative branch		0.40
	The legislature, on policy issues		
	The executive branch on policy issues, subject to due		0.20
	process and possible protest by the bank		0.00
	The executive branch has unconditional priority		
	c. Role in the government's budgetary process		1.00
	Central bank active		0.00
	Central bank has no influence		
3	Objectives	0.15	
	Price stability is the major or only objective in the charter,		
	and the central bank has the final word in case of conflict		
	with other government objectives		1.00
	Price stability is the only objective		0.80
	Price stability is one goal, with other compatible objectives,		
	such as a stable banking system		0.60
	Price stability is one goal, with potentially conflicting		
	objectives, such as full employment		0.40
	No objectives stated in the bank charter		0.20
	Stated objectives do not include price stability		0.00

(a) Often the law does not contain a separate provision on the resolution of conflict. In those cases, the variable was coded on the basis of the impression from reading the law in its entirety. If the law gives the impression that the government formulates policy guidelines that the bank simply follows, then the ranking is low.

Variable number	Description of variable	Weight	Numerical coding
4	Limitations on lending to the government		
	a. Advances (limitation on nonsecuritized lending)	0.15	
	No advances permitted		1.00
	Advances permitted, but with strict limits (e.g., up to 15 percent of government revenue)		0.67
	Advances permitted, and the limits are loose (e.g., over 15 percent of government revenue)		0.33
	No legal limits on lending		0.00
	b. Securitized lending	0.10	
	Not permitted		1.00
	Permitted, but with strict limits (e.g., up to 15 percent of government revenue)		0.67
	Permitted, and the limits are loose (e.g., over 15 percent of government revenue)		0.33
	No legal limits on lending		0.00
	c. Terms of lending (maturity, interest, amount)	0.10	
	Controlled by the bank		1.00
	Specified by the bank charter		0.67
	Agreed between the central bank and executive		0.33
	Decided by the executive branch alone		0.00
	d. Potential borrowers from the bank	0.05	
	Only the central government		1.00
	All levels of government (state as well as central)		0.67
	Those mentioned above and public enterprises		0.33
	Public and private sector		0.00
	e. Limits on central bank lending defined in	0.025	
	Currency amounts		1.00
	Shares of central bank demand liabilities or capital		0.67
	Shares of government revenue		0.33
	Shares of government expenditures		0.00
	f. Maturity of loans	0.025	
	Within 6 months		1.00
	Within 1 year		0.67
	More than 1 year		0.33
	No mention of maturity in the law		0.00
	g. Interest rates on loans must be	0.025	
	Above minimum rates		1.00
	At market rates		0.75
	Below maximum rates		0.50
	Interest rate is not mentioned		0.25
	No interest on government borrowing from the central bank		0.00
	h. Central bank prohibited from buying or selling government securities in the primary market?	0.025	
	Yes		1.00
	No		0.00

Note: The ranking under each criteria indicates the degree of independence of central banks - the higher the code, the more independent the central bank.

Source: Various central bank laws, Aufricht (1961, 1967); Bank for International Settlements (1963); Effros (1982); and the IMF's computerized files on central bank laws.

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