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VOLKSWIRTSCHAFTLICHE DISKUSSIONSBEITRÄGE



UNIVERSITÄT - GESAMTHOCHSCHULE - SIEGEN FACHBEREICH WIRTSCHAFTSWISSENSCHAFTEN

MONETARY POLICY IN EUROPE: TOWARDS A EUROPEAN CENTRAL BANK AND ONE EUROPEAN CURRENCY

by

Axel A. Weber, Universität-GH Siegen and CEPR
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ABSTRACT

Most alternative blueprints for European Monetary Union (EMU) differ in their opinions about convergence requirements or the need for binding fiscal rules and controls of individual national governments' debt policies, but there is, if not complete consensus, widespread agreement that the European Central Bank (ECB) should be independent of political control from both European Community (EC) institutions and national governments. The main argument for an independent European central bank is empirical: those countries in which central banks are insulated from the political process and charged with maintaining price stability have experienced the lowest and most stable inflation rates in recent decades. The present paper reviews and critically evaluates this political economy literature which relates inflation performances to the constitutional features of central bank statutes. Based on this assessment the draft statutes of the ECB and the constitutions of the individual European national central banks are discussed in terms of the independence they grant central bank board members from partisan influences. Furthermore, concrete country-specific suggestions for enhancing central bank independence during stage two of the gradual transition to EMU, which is to be completed by 1999, are made. It is argued that in some countries laborious constitutional reforms of central bank statutes are overdue and must be implemented in order to make these institutions fit for an anti-inflationary EMU.

MONETARY POLICY IN EUROPE: TOWARDS A EUROPEAN CENTRAL BANK AND ONE EUROPEAN CURRENCY

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1. INTRODUCTION

During the December 1991 European Summit in Maastricht a Draft Treaty for the transition to European Economic and Monetary Union (EMU) was agreed upon. Those countries with healthy economies should after a short "stage two" (which is due to start in 1994) be allowed to move ahead to "stage three" of EMU (possibly by early 1997, but at the latest by early 1999), provided that the remaining European Community (EC) countries can join at a later date. The Draft Treaty thereby requires countries which want to join the currency union to meet strict monetary and fiscal convergence criteria: inflation and interest rates are to converge to a narrow range of 1-2 percent of the rates of the lowest EC member country, budget deficits should not exceed 3 percent of gross domestic product (GDP), and public debt should not amount to more than 60 percent of GDP. These fiscal convergence criteria of the Draft Treaty are at the centre of the current academic and political debate, and have been criticized and contested on several grounds.¹

Whilst opinions in both academic and political circles differ drastically with respect to these convergence issues, there is a widespread, if not unanimous agreement that the European Central Bank (ECB) should be independent of political control from both EC institutions and national governments. The Draft Statutes of the ECB grant the ECB Council - the main decision and executive Board - this far-reaching political independence. The Delors proposal further demands that in stage two of the transition to EMU the individual national central banks are to be freed from the political influence of national governments and that the fore-runner of the ECB, the European Monetary Institute (EMI), should engage in coordinating monetary policies of the then still fully sovereign national central banks. Establishing independent national central banks and uniting them in one European system of central banks is likely to require far-reaching statutory changes and constitutional reform, but a discussion of these issues is largely missing in the current literature.² The present paper aims at filling this gap by trying to identify those institutional characteristics which more independent European central banks have in common, and it also attempts to derive an agenda for concrete institutional changes, which are required if the central banks of individual EC member countries and potential future EC participants from the European Free Trading Area (EFTA) are to

¹ Giovannini and Spaventa (1991) put forward arguments in favour of such fiscal criteria, and a detailed discussion of counter-arguments is found in Wyplosz (1991), Begg et. al (1991), and Corsetti and Roubini (1991).

² Alesina and Grilli (1991) and Fratianni, von Hagen and Waller (1992) discuss some of these issues for the ECB statutes, but a systematic analysis of the implications of EMU for national central bank statutes is largely missing to date.

establish more independence from national governments. Along the same lines the institutional design of the ECB will be critically evaluated and supplementary statutory provisions which may further increase its independence will be suggested.

The remainder of the paper is organized as follows: section 2 reviews the evidence from the political economy literature on the link between inflation performances and central bank independence. Section 3 evaluates the statutes of national EC central banks in terms of their economic and political independence and makes suggestions for country-specific provisions which may enhance independence. Section 4 concludes the paper with a summary of the main arguments and policy recommendations.

2. INFLATION AND CENTRAL BANK INDEPENDENCE

The recent literature on the political economics of inflation argues that central banks' institutional design is a key determinant of the inflation bias of market economies. Bade and Parkin (1985), Masciandaro and Tabellini (1988), Alesina (1989), Alesina and Summers (1991), Grilli, Masciandaro and Tabellini (1991) and Alesina and Grilli (1991), amongst others, show that more independent central banks tend to create less inflation than more dependent ones. As is emphasized by Alesina and Grilli (1991), measuring the independence of a central bank is thereby far from being straightforward, since no single indicator can properly take into account all the different institutional aspects which are relevant in this context. Nevertheless, several attempts have been made to measure central bank independence.

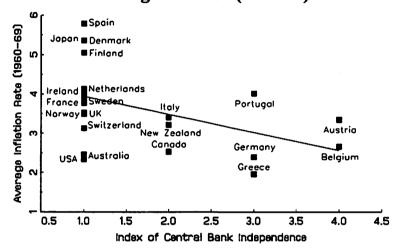
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A first courageous attempt to classify the degree of central bank independence is found in Hahn (1968a,b), who provides an extensive global account and comparison of the constitutional and statutory features of central banks.³ Most of the discussion in Hahn (1968a,b) centres around descriptive classifications of world central banks, but in his analysis of the independence of central banks from obligations of government financing he constructs an independence index consisting of five categories: no limits or completely ineffective limits to government financing (1), limits on book credits only (2), limits on book credits and treasury bill operations (3), limits on operations in all government papers (4), and complete prohibition of all forms of government financing

³ The institutional features of the 115 central banks which are analyzed in Hahn (1968) include such issues as political independence (who appoints the Governor, Executive Board and Decision Board for how long) and economic independence (degree of independence from government financing obligations, capital ownership of the central bank, coinage right, etc.), but the link between these institutional features and economic outcomes is not addressed.

(5). Figure 1 links Hahn's (1968b) fiscal independence index to a country's inflation performance during the 1960s, and shows a marginally significant inverse relationship between central bank independence and inflation.

FIGURE 1: Hahn (1968b) Index of Central Bank Independence and Average Inflation (1960-69)

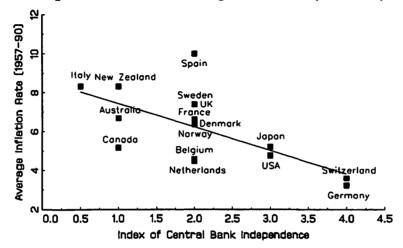


A more explicit analysis of the link between central bank independence and inflation performances is found in Bade and Parkin (1985), who consider two dimensions of independence - political and financial. Political independence is a function of the institutional and formal relationships between central banks and government, involving such issues as who appoints central bankers for what period, the presence of government officials in the board of directors of the bank, and the requirement of government approval for certain policies. Economic independence, on the other hand, concerns budgetary and financial relationships between the central bank and the government, such as the availability and terms of direct government credit facilities and more generally the existence of rules forcing the central bank to accommodate fiscal policies. Based on these criteria, Bade and Parkin (1985) classify twelve countries into four groups and detect a significant inverse relationship between central bank independence and inflation performance: the most independent central banks (index 4) are associated with the lowest inflation rates, and the most dependent ones with some of the highest. They also

⁴ The Bade and Parkin (1985) index used here is based on an updated version reported (in Table 9) by Alesina (1988), who employs results from Fair (1980) and Masciandaro and Tabellini (1988) to extend the analysis to 13 countries. To enable comparisons, the present paper displays all independence indices against the average 1957-90 consumer price inflation rates (IMF, IFS, line 64).

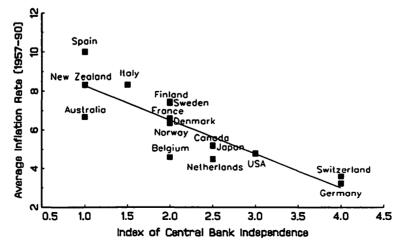
find that political rather than economic independence appears to be more particularly relevant in explaining the inflation bias of market economies.

FIGURE 2: Bade and Parkin (1985) Index of Central Bank Independence and Average Inflation (1957-90)



Alesina (1989), and more recently Alesina and Summers (1991), consider a larger sample of seventeen OECD countries and use a similar index of central bank independence, based on a number of measures, including the length of tenure of the central bank Governor and the frequency of contacts between the government and central bank officials. Their results, shown in Figures 3, also confirm that those countries with more independent central banks have tended to have lower and less volatile (not shown here) inflation rates in recent decades.

FIGURE 3: Alesina and Summers (1990) Index of Central Bank Independence and Average Inflation (1957-90)



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Grilli, Masciandaro and Tabellini (1991) recently proposed a much more comprehensive index of central bank independence, which is composed of fifteen statutory characteristics of central banks. The components of this index are displayed in Table 1, which also contains separate entries for the Scandinavian EFTA countries (own evaluations) and for the ECB (borrowed from Alesina and Grilli (1991)). In constructing this index the authors distinguish between the economic and the political determinants of central bank independence, and according to Figure 4 Germany, Switzerland, the Netherlands, and the United States, as well as Canada, Finland and Italy enjoy more political independence than the other central banks. Economic independence of central banks is seen to be high in Germany, Switzerland, the United States and Canada, and also in Australia, Austria and Belgium. Furthermore, Figure 4 shows that whilst political and economic independence are on average positively correlated (solid regression line), this correlation is widely dispersed and inverse for in some countries. Figure 5 further suggests that inflation tends to be lower the higher the degree of both political and economic independence of central banks.

FIGURE 4: Grilli, Masciandaro and Tabellini (1991) Indices of Political and Economic Central Bank Independence

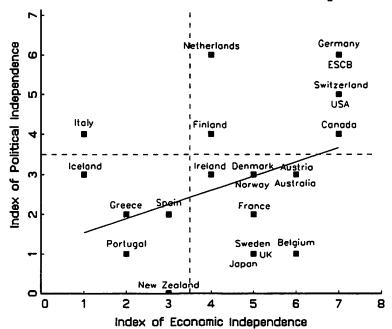
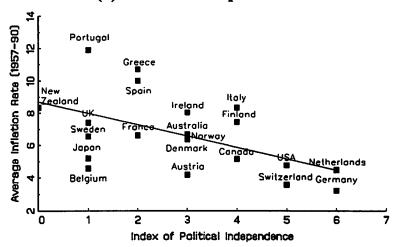
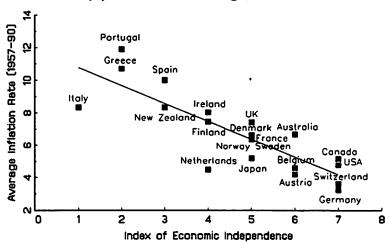


FIGURE 5: Grilli, Masciandaro and Tabellini (1991) Indices of the Political and Economic Central Bank Independence and Average Inflation (1957-90)

(a) Political Independence



(b) Economic Independence



By using regression analysis, Grilli, Masciandaro and Tabellini (1991) further establish that economic independence appears to contribute more to explaining the apparent cross-country differences in inflation than political independence, which except for the 1970s is insignificant in their regressions. The authors also do not find an EMS effect on inflation.

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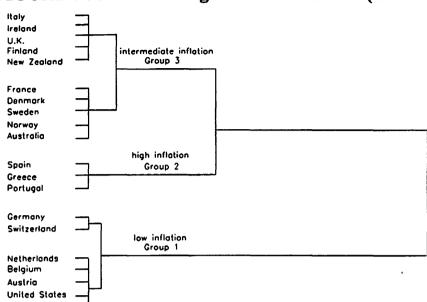
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3. CENTRAL BANK INDEPENDENCE AND THE TRANSITION TO EMU

The key role of economic independence in the above political economy account of inflation has important implications for the gradual transition to EMU: in order to increase the independence of national central banks and to prevent the system from having an inflation bias, it may suffice to grant the ECB and the national central banks economic independence, say by prohibiting any operations involving government debt, and to endow them with the monetary policy instruments required to pursue their tasks. In order to check the robustness of this result and to identify those aspects of central bank independence which contribute most to explaining differences in inflation between European countries, it is instructive to use clustering and discriminant analysis.

In a first step the OECD countries are classified into distinctive inflation groups on the basis of the similarity of their average (1957-90) inflation performances (using Ward's (1963) agglomerative clustering method). The resulting grouping is visualized in the form of a so-called *dendrogram* in Figure 6, which displays the stages at which two countries are merged into one inflation group (indicated by the vertical lines) against a normalized measure of the dissimilarity of the inflation performances between these two countries (proportional to length of the horizontal lines between the various clustering stages). Figure 6 clearly suggests that most of the dissimilarity in inflation performances is taken into account by forming three distinctive groups: the low-inflation group is comprised of eight countries, Germany, Switzerland, the Netherlands, Belgium, Austria, the United States, Canada and Japan, whereby average inflation performances have been even more similar between Germany and Switzerland than between these two countries and the remaining low-inflation countries. Greece, Spain and Portugal on the other hand form a relatively homogeneous high-inflation group, and the remaining ten OECD countries analyzed here fall into an intermediate inflation category, where again two relatively homogeneous sub-groups may be identified.

⁵ Using a measure of "Euclidean distance", given by the standardized squared average inflation differences (1957-1990), this hierarchical agglomerative clustering technique successively joins those countries with minimum distance into clusters until there remains just one cluster with all countries in it. For a more formal discussion of this procedure see Weber (1992).



Canada Japan

FIGURE 6: OECD Average Inflation Clusters (1957-90)

Using the above optimal grouping of countries into three major inflation categories it is now possible to analyse which institutional aspects of central bank independence contribute most to explaining both the similarity of inflation performances within each group as well as the dissimilarity between them. By considering only the EC countries and applying discriminant analysis (using Rao's (1973) step-wise method)6 to the Grilli, Masciandaro and Tabellini (1991) data set of political and economic independence indicators, the results summarized in Table 2 can be derived.

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A striking finding of Table 2 is that the dissimilarity between the three major inflation groups of EC countries can be almost totally explained in terms of major differences in economic independence factors (column 1). This strongly supports the finding of Grilli, Masciandaro and Tabellini (1991) and points towards the robustness of this result. An interesting aspect of the estimates of the canonical discriminant function from the EC sample is that it is now possible to allocate non-EC countries to the three inflation

⁶ Discriminant analysis aims at identifying those linear combinations of variables (here zero-one institutional factors) which discriminate best between given groups of inflation countries. The step-wise procedure used here successively includes in the analysis those factors which contribute most to the discriminatory power of the estimated linear canonical discriminant function. This process of adding explanatory factors is thereby terminated as soon as the increase in discriminatory power becomes insignificant. For a more formal discussion of this procedure see Weber (1992).

categories by exclusively considering the constitutional features of their central banks. Due to their relatively high economic independence the ECB, and also Switzerland, the United States and Australia are predicted to fall into the low inflation category.

Another way of looking at the data is to ask in which constitutional aspects each of the EC inflation groups differs from the remaining EC countries (column 2 to 4). Interestingly, the central banks in countries from the low-inflation group (Germany, Belgium and the Netherlands) differ from those in the remaining EC countries largely in terms of political independence, which accounts for eighty percent of the explanatory power of the canonical discriminant function (column 2). On the basis of these primarily political factors the ECB, and also the central banks of Switzerland, Austria, the United States and Canada are predicted to fall into the low-inflation category. Both economic and political independence aspects contribute to explaining group membership in the intermediate-inflation group, with the latter dominating slightly (column 3). The reverse result holds for the high-inflation group (column 4). Finally, it is interesting to know which aspects of the Bundesbank's constitution, on which the ECB to a greater extent is modelled, differ most from the statutes of the remaining EC central banks. Discriminant analysis identifies two major factors (in column 5): direct credits to the government are at the discretion of the Bundesbank, and explicit conflicts between the Bundesbank and the Federal Government are possible.

The above results cast some doubt on the previous assertion that economic independence factors play the dominant role in explaining differences in the inflation bias of market economies. Whether or not central banks produce low inflation outcomes appears to be determined in the first instance by political independence factors, whilst lack of economic independence resulting from obligations to finance government debt appears to be highly correlated with an extensive use of seigniorage (inflation tax) revenues in the high-inflation countries. With respect to the transition to EMU these results seem to suggest that in order to bring down the high Southern European levels of inflation a strengthening of the economic independence of these central banks should have top priority, but to establish a truly counter-inflationary European system of central banks these more operational steps have to be followed by granting national central banks far more political independence from governments.

3.1. STRENGTHENING ECONOMIC INDEPENDENCE

Increasing the economic independence of central banks, both at the Community and national level, may be achieved rather quickly without laborious institutional reform. Article 21.1 of the ECB's draft statutes forbids the ECB to extend overdraft credit, not even on a temporary basis, to Community or national governments, or to purchase debt instruments directly from them in the primary market. Before the ECB enters operation in stage three, similar provisions aimed at fulfilling the same purpose may easily be added to national central bank laws. Table 3 suggests that the need for such provisions is most pressing in countries where the overdraft credits have to be made available to governments automatically with no term and free of interest, as is the case in France, Italy, Belgium, and Portugal⁷ (column 1). Slightly less accommodative monetary policies are possible if governments are granted automatic access to these free-of-interest book credits up to a limited amount and on a short-term basis only, as is the case in the Netherlands, Denmark, Spain, and Greece. An even more restrictive clause is found in Germany, where it is at the discretion of the central bank to allow limited amounts of short-term book credit against interest (discount rate) charges. In Ireland, as in the ECB statutes, such book credits are explicitly prohibited, and this provision should be taken over by all EC central banks.

Purchasing government debt in the primary market is an alternative means of direct government financing, which is explicitly ruled out for the ECB, and also prohibited in the central bank statutes of Germany and France. In the remaining countries such a provision should be added to the central bank laws, despite the fact that the Netherlands, Belgium and Denmark have during the EMS period refrained from participating in the primary market without such a constitutional provision.

A third way in which the central bank can finance the treasury is indirectly through open market operations in the secondary market for government debt. Provisions about the use of this monetary policy instrument differ somewhat across Europe. Whilst by definition all open market operations are at the discretion of the central bank and occur at markets rates, both terms and/or limits on the overall permitted amount of these operations are written into the statutes of the central banks in France, Germany, Greece and Portugal (column 3), but not in those of the remaining EC countries or the future ECB. Indeed, Article 21.3 explicitly allows the ECB to purchase debt instruments from

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⁷ This evaluation disregards the most recent reform of the Portuguese central bank law and is based on the old statutes.

publicly-owned credit institutions, which in countries with a large nationalized banking industry means that the government is allowed to borrow indirectly from the ECB via the state-owned banks, as Fratianni, von Hagen and Waller (1992) point out. These authors also criticize that Article 18.1 allows the ECB to buy financial instruments from credit institutions and unspecified "other market participants", which may include public enterprises and nationalized corporations. This may grant governments unconditional indirect credit by allowing them to shift from tax-financing to debt-financing of these public sector institutions. The Bundesbank law is much stricter in this respect as it specifies exactly the type of operations, maximum amounts and terms of business with public sector institutions. Without such specific restrictions there is an undesirable potential for abuse of the ECB's credit market instruments, in particular if in stage three the national central banks -- like the provincial main offices of the Bundesbank (Landeszentralbanken) in Germany -- are charged with conducting business with governments and public administrations within their own area of operation. To safeguard the system against such an abuse, an exhaustive catalogue and more specific restrictions on transactions with Community and national governments, public administrations and state-owned enterprises should be added to the ECB draft statutes as well as national central bank laws.

Another important form of indirectly supporting the market acceptance of government debt titles is to allow private banks to use them in their refinancing operations through the discount window. Again provisions about the use of this monetary policy instrument differ across Europe. As pointed out in Grilli, Masciandaro and Tabellini (1991), all EC central banks except those of Italy and Ireland, have complete authority over the setting of the discount rate. Central banks in most countries are only allowed to discount government titles with a short term to maturity (1-4 month), whereas in Belgium and Denmark medium terms are also admitted, and in the Netherlands and Spain no restrictions on the terms exist (column 4). Furthermore, in most countries there is no explicit limit on the amount of discountable government papers, only in Greece and Portugal do such limits exist. Finally, in all EC countries the access of commercial banks to the discount window is automatic, whereas in Austria the central bank is given the right to refuse discounts without having to state the grounds for such action. The ECB's statutes follow the Bundesbank's statutes in this point by allowing only government papers with a short term to maturity to be discounted. Stricter provisions which grant the central bank the right to refuse discounts of government papers should be made. Terms and explicit upper limits (in per capita terms) on the total amount of government securities acquired by the ECB under all types of operations

involving public debt would further increase the economic independence of the ECB. To prevent monetary accommodation of deficits such provisions should be added to the draft statutes of the ECB and the constitutional laws of all national central banks.

The final aspect of economic independence of a central bank concerns its capital and the distribution of its profits. The ECB statutes specify that the national central banks would provide foreign exchange reserves (Article 30) and capital (Article 28) to the ECB. This capital transfer is problematic in the case of all not exclusively state-owned national central banks. Private central bank share holdings are allowed in Switzerland, Belgium (50%), Austria (50%) as well as Greece (90%), and state ownership of the central bank is even prohibited in Portugal and Italy. Since governments have to own the capital which is to be transferred to the ECB, they may have to partly (or fully) pay out private shareholders. This is likely to boost government debt in the high-debt EC countries Belgium, Italy, Greece and Portugal. Thus, instead of enhancing fiscal convergence, the transition to stage three of EMU may itself cause fiscal divergence.

Closely related to the issue of capital ownership of the central bank is the question of the distribution of central bank profits. Article 33 of the ECB Draft Statutes specifies that profits should be divided between some reserve accumulation (20%) and distribution to the ECB's capital holders, that is EC national central banks, which in turn distribute these profits between reserve accumulation, government transfers and dividends to their capital-owners. Part of the ECB's profit transfers will thus automatically accrue to the treasury and is likely to be anticipated in budget planning. This tends to raise government expenditure and will have inflationary consequences which are in conflict with the primary objective of maintaining price stability.

3.2. STRENGTHENING POLITICAL INDEPENDENCE

The Grilli, Masciandaro and Tabellini (1991) indices of central bank independence discussed above suggest that fundamental institutional changes aiming at increasing the political independence of national central banks in Portugal, Greece, Spain, Belgium, the United Kingdom, France and to a lesser extent in Ireland and Denmark have to made in order to reduce the potential danger of an inflationary bias of the future European monetary order. What then are the concrete steps that should be taken in the process of strengthening the political autonomy of national central banks? Table 1 grants the ECB the same political and economic independence score as the Bundesbank, on which it is modelled. In a political economy context this suggests that the envisaged institutional design of the ECB may to a large degree reduce the risks of an inflationary bias in stage

three of EMU. But what provisions should be made about national central banks, which, in order to be fit for stage three, are to gain independence in stage two of EMU? To be able to address these issues, a more detailed analysis of the constitutional features of European central banks is in order.

A key determinant of the political independence of central banks lies in the appointment schemes for board members which are summarized in Table 4 (columns 3 and 4).8 The question of the ownership of the central bank plays a major role in this context: in purely state-owned central banks governments or parliaments typically appoint all the board members, whereas the General Meeting of Shareholders in Italy proposes all, in Belgium, Greece, Portugal the majority, and in Switzerland and Austria the minority of the board members. Such appointment schemes involving shareholders may enhance the independence of the central bank boards from governments, but this is likely to be swapped for a dependency of central board members on major shareholders. Such dependency is undesirable for three reasons: first, since a re-appointment of board members is explicitly allowed in the statutes of all not exclusively state-owned central banks (column 6), end game behaviour may result. Second, since in all cases dividends and parts of the annual central bank profits are distributed amongst shareholders (up to 50% in Greece) or added to the bank's reserves (Table 3, column 5) this may create incentives for board members to maximize central bank profits or the market value of its shares via seigniorage rather than achieving monetary stability. The incentive incompatibility of private central bank ownership and monetary stability is likely to be particularly strong in Italy, Belgium and Portugal, where central banks have no specific monetary stability objective in their statutes (see Table 5). Abstaining from seignoirage (inflation tax) maximization may thereby be even harder if central bank board members are allowed to participate directly in the central bank's profits by holding shares. Whilst this is prohibited in the statutes of the central banks of Switzerland, Austria and Portugal and Greece, it is not explicitly ruled out in the Belgian and Italian central bank laws.

Appointments schemes are, however, only one side of the political independence of central bank boards, since board members are also likely to be subject to political pressure if they can be freely dismissed by governments. With the exception of Germany and Denmark, provisions for such early dismissals of part of the Board are contained in the central bank statutes of most EC countries (column 7). Partisanship of board

⁸ Table 4 summarizes, modifies and extends Tables C1 and C2 from Grilli, Masciandaro and Tabellini (1991). The focus here is on the main decision board of the central bank, but in those cases where the executive board also has separate decision powers, the features of both boards are listed.

members is highly probable if the government is granted the unconditional right to dismiss the complete board, as in the Netherlands (column 7). Some protection against partisan behaviour is, however, granted if dismissals are limited to certain circumstances, such as ill health (UK), criminal prosecution (UK), or violation of duties (Greece, Spain), or combined with certain conditions, such as the requirement that the board has to agree (Ireland). In this context it is interesting to note that in all not fully state-owned EC central banks (Italy, Belgium, Portugal, Greece), the government typically can only dismiss those board members which it appointed, whilst the *General Meeting of Shareholders* has the right to deliberate over the dismissal of its appointees to the board. In all cases the latter group is in the majority. With respect to the ECB draft statutes, it has to be noted that they explicitly grant protection against early dismissal of all ECB Council Members, and that such a provision is unique amongst EC central banks. However, since this clause also extends to the Governors of national central banks in the ECB Council, the statutes of *all* EC national central banks will have to be changed in this respect during stage two of EMU.

A third important determinant of the political independence of central bank board members is their term of office (column 5). As Alesina (1988) notes, only long-term appointments can isolate monetary policy from short-run partisan or electoral pressure. The key point thereby is that such fixed term appointments are required to extend over a period exceeding the electoral cycle, which is shown in Alesina, Cohen and Roubini (1992) to range between four and five years in most EC countries. Appointment terms, however, range between two and eight years, and terms of more than 5 years are only granted to central bank board members in Germany, Belgium and the Netherlands. Some tentative evidence on the significant negative correlation between the term of office and inflation performances is provided in Figure 7.

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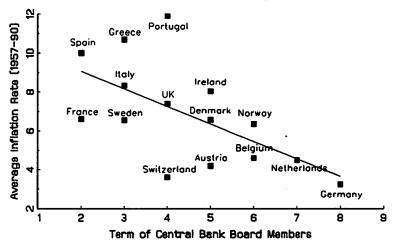
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As is postulated by all indices of central bank independence above, longer terms appear to coincide with low levels and low volatility (not shown) of inflation. It is an interesting fact that in the two most inflation averse EC countries, Germany and the Netherlands, both the Board and the Governor have identical terms of eight and seven years respectively, whilst in the remaining EC countries the terms of the Governors exceed those of the board: the appointments of central bank Governors have no time limit in France, Italy and Denmark, whilst the Governor in Ireland is granted seven, in Belgium, the United Kingdom and Portugal five, and in Spain and Greece four years in office. The proposed statute of the ECB demands an eight year term for the Governor and those ECB Board Members appointed by the European Council (Art. 11.2), and a minimum of five years for the national central bank Governors (Art. 14). In the light of

the above numbers this appears to be close to a minimalist solution, since only Spain and Greece would have to increase slightly the tenure of their Governors to meet this requirement,9 whereas a uniform tenure of eight years for all board members would necessitate substantial increases in tenure in Spain, Greece, Portugal, the United Kingdom, and to a lesser extent in the Netherlands and Ireland. Only uniform ECB board terms, however, can ensure that board members are not subject to varying degrees of partisanship and should therefore be written into the ECB's Statutes.

FIGURE 7: Terms of European Central Bank Boards and Average Inflation (1957-90)



Fratianni, von Hagen and Waller (1991) question whether the eight years term of the ECB Council is sufficiently long enough to insulate from political/partisan influences. They conclude that this is probably the case since it exceeds national electoral cycles by a safe margin, even though it may not hurt to extend the term to ten or more years. Neumann (1991) further notes that in addition to the term of office the appointment age may play a role in determining the degree of partisanship if it is possible to reappoint board members, which amongst OECD countries is prohibited only in the United States: partisan behaviour may arise if towards the end of their term board members start campaigning in political circles in order to increase their reappointment probability. Neumann (1991) suggests that a uniform retirement age combined with a variable, age-dependent contract length (of 15-25 years) may rule out such partisanship. The ECB Draft Statutes rule out the reappointment of members of the Executive Board, which are appointed by the European Council. A similar clause for the Governors of national

⁹ See also Alesina and Grilli (1991) on this point.

central banks is missing, but such provisions would be highly desirable in order to rule out varying degrees of partisanship of ECB board members.

The possibility of "board packing" is another important issue raised by Fratianni, von Hagen and Waller (1991). Whilst the appointment schemes and federal structure of the ECB rule out "board packing" in the sense that not all the board members are appointed by the same individual or group, no provision for a gradual turnover of central bank board members exists. Waller (1989) shows that such a gradual turnover of boards greatly reduces private sector uncertainty about future policy actions. A complete turnover of central bank boards further implies the great danger that, in order to signal their toughness on inflation, newly appointed central bankers may initially pursue overly restrictive monetary policies, as Vickers (1986) points out. The obvious way to reduce these potential dangers of "board packing" is to write a rotation scheme for board members into the statutes. Such provisions are found in the central bank laws of all EC countries except Germany, Belgium and Spain. Typically an equal number of board members must retire every year (Italy, the Netherlands, Denmark, Ireland, Greece and Portugal) or every two years (France) so that by the end of a complete term the board is turned over once. As in the Bundesbank statutes, such a provision is missing in the current draft of the ECB statutes and should be added to enhance the continuity of future European monetary policies.

Another major determinant of central banks' political independence is the extent to which they are free from direct interference by governments in board decisions. A mandatory participation of government representatives in central bank board meetings is found in France, Belgium, Denmark, Ireland, and Greece (column 9), but government representatives are missing in the boards of Germany, the Netherlands (except in the Bank Council), Italy, the United Kingdom, Spain and Portugal (except in the General Council). This absence of government officials is, however, insufficient to establish that these boards are removed from government interference, since government approval of monetary policy is explicitly required in France, Italy, Belgium, the United Kingdom, Portugal and Spain. The central bank statutes of Italy, the Netherlands and Belgium furthermore grant the government the right to issue directives to the central bank in case of disputes. (see Grilli, Masciandaro and Tabellini (1991), Table C4). This effectively leaves Germany as the only country in which all three forms of direct government interference in monetary policy are absent, but even here the government is granted the right to transitorily defer (postpone for no more than two weeks) decisions which run counter to its interests. The draft statutes for the ECB explicitly allows only the passive, non-mandatory participation of a small number of EC officials in board meetings (Article

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46.2). Moreover, as Alesina and Grilli (1991) stress, the ECB statutes do not require any approval of monetary policy, either by EC institutions, or by national governments. The ECB is also free from any form of government interference in case of disputes. Article 7 states that:

"... neither the ECB nor a national central bank nor any member of their decision making bodies may seek or take any instructions from Community institutions, governments of member states or any other body. The Community and each Member State undertake to respect this principle and not to seek to influence the ECB, the national central banks and the members of their decision making bodies in the performance of their tasks." (ECB Draft Statutes, emphasis added)

In view of the almost complete lack of political autonomy of some European national central banks it is highly unlikely that the provisions of Article 7 will be met simply by governments tying their own hands. To enforce Article 7 far-reaching constitutional reforms of national central bank laws are required and the agenda for effective institution building, which is currently limited to the ECB, has to be extended to national central banks.

4. SUMMARY AND POLICY RECOMMENDATIONS

The paper discusses the Draft Statutes of the ECB and the constitutions of the individual European national central banks in terms of the independence they grant central bank board members from partisan influences, and makes a number of concrete suggestions for enhancing central bank independence during stage two of the gradual transition to EMU. It is argued that this requires constitutional reforms, since such independence is unlikely to be achieved simply by central banks tying their hands on inflationary finance and all forms of government interference in monetary policy.

The evidence on the link between central bank autonomy and inflation performances presented in the paper suggests that in order to bring down the high Southern European levels of inflation a strengthening of the economic independence of these central banks should have top priority. To ensure that the future European system of central banks is truly counter-inflationary, these more operational steps have to be supplemented by granting national central banks far-reaching political independence from governments. In this process the statutes of national central banks have to converge to the ECB standard, that is, no national central bank Board and Governor should be less independent than the corresponding ECB organs.

To strengthen the economic independence of national central banks a catalogue of minimal requirements has to be fulfilled. To start with, national central banks should be prohibited from granting direct credit, even on a temporary basis, to national governments. The need for such provisions is most pressing in countries like France, Italy, Belgium, and Portugal, where overdraft credits have to be made available to governments automatically and free of interest charges. The same applies for the Netherlands, Denmark, Spain, and Greece, where term for overdraft credits exist. The participation of the national central banks in the primary market for government debt should also be ruled out. These provisions already hold for the ECB, but should also be enforced at the national level. However, the current statutes allow the ECB and all national central banks to help finance the treasury indirectly, both through open market operations in the secondary market and supporting the market acceptance of government debt by allowing commercial banks to use it in their refinancing operations via discount window. In contrast to the Bundesbank, the ECB is also explicitly allowed to purchase debt instruments from publicly-owned credit institutions. To safeguard the ECB system against a potential abuse of monetary policy instruments for indirect government financing, it is necessary to formulate an exhaustive catalogue and more specific restrictions on transactions with Community and national governments, public administrations and state-owned enterprises. In this context an explicit upper limit on the total amount of government securities acquired by the ECB and its national central banks under all types of operations involving public debt would further increase its economic independence. These limits may be formulated as country-specific quotas in per-capita terms, and should involve a penalizing element related to the credit worthiness of national governments (measured, for example, by the ratio of national debt per capita relative to EC average). The above mentioned exhaustive catalogue of operations and the limits on public debt holdings should be added to the ECB Draft Statues and all national central bank laws. Along the same lines the use of operating profits should not be allowed to be used for indirect government financing at national levels.

As for economic independence, a catalogue of minimum requirements for the political independence of national central banks must be formulated. The mandatory participation of government representatives in central bank board meetings should be ruled out in France, Belgium, Denmark, Ireland, and Greece. The need for government approval of monetary policy in France, Italy, Belgium, the United Kingdom, Portugal and Spain should be abolished, and governments in Italy, the Netherlands and Belgium should no longer be granted the explicit right to issue directives to the central bank in case of disputes. In order to eliminate the influence of non-democratically elected bodies, such as

the General Meetings of Shareholders, on monetary policy in Italy, Belgium, Greece and Spain, the national central bank Governor and all the Board Members in EC countries should in stages two and three of EMU be exclusively appointed by national governments, but at the same time freed from any form of government interference. To minimize partisanship only long-term appointments should be made and both early dismissals and re-appointments should be ruled out at the Community as well as the national level. The terms of all national central bank Governors should be prolonged to eight years in order to match the terms of the ECB Council Members appointed by the European Council. To enhance the continuity of ECB policies a semi-annual rotation scheme for ECB Council Members should be written into the ECB's statutes. This would turn the Board over completely once every nine years, and may be taken as an argument for a nine year term of all ECB Board Members. It is obvious that most of the above provisions demand far-reaching constitutional reforms of national central bank laws in all EC countries. The agenda for effective institution building, which is currently limited to the ECB, therefore has to be extended to national central banks.

The explicit formulation of minimum requirements with respect to the political and economic independence of EC central banks, which is advocated in the present paper, has the additional advantage that it defines a clear scenario for monetary reform in those EFTA countries (and at a later stage Eastern European countries) seeking full EC membership, as Austria and Sweden are currently doing: constitutional reform as a prerequisite for participation in stage three demands a much stronger commitment to EMU than simply negotiating to irrevocably fix the parity grid of bilateral EC exchange rates. It signals national government's determinedness to tie their hands on inflationary deficit financing, whether in a strictly national context or within the framework of the European system of central banks.

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TABLE 1: The Grilli, Masciandaro and Tabellini (1991) Index of Central Bank Independence

	A	A	A	A	R	R	C	C	P	D	D	D	D	D	M	M	E	T
	P	P	P	P	G	G	0	0	0	C	C	C	C	C	I	I	C	0
Country	1	2	3	4	1	2	1_	2	L	1	2	3	5	6	1	2	0	<u>T</u>
ECB	0	1	0	1	1	1	1	1	6	1	1	1	1	1	1	1	7	13
Germany	0	1	0	1	1	1	1	1	6	1	1	1	1	1	1	1	7	13
France	0	1	0	1	0	0	0	0	2	0	0	0	1	1	1	2	5	7
Italy	1	1	1	0	1	0	0	0	4	0	0	0	1	0	0	0	1	5
Netherlands	0	1	0	1	1	1	1	1	6	0	0	1	1	1	1	0	4	10
Belgium	0	0	0	1	0	0	0	0	1	0	1	0	1	1	1	2	6	7
Denmark	0	1	0	0	0	1	1	0	3	0	1	0	0	1	1	2	6	9
Ireland	0	1	0	0	0	1	1	0	3	0	1	1	1	0	1	0	4	7
UK	0	0	0	0	1	0	0	0	1	1	1	1	1	0	1	0	5	6
Greece	0	0	1	0	0	0	0	1	2	0	0	0	1	0	1	0	2	4
Spain	0	0	0	1	1	0	0	0	2	0	0	1	1	0	0	1	3	5
Portugal	0	0	0	0	1	0	0	0	1	0	0	0	1	0	1	0	2	3
Switzerland	0	1	0	0	1	1	1	1	5	0	1	1	1	1	1	2	7	12
Austria	0	0	0	0	0	1	1	1	3	0	0	1	1	1	1	2	6	9
Sweden	0	0	0	0	1	0	0	0	1	0	0	1	1	0	1	2	5	6
Norway	0	1	0	1	1	0	0	0	2	0	1	1	0	0	1	2	5	7
Finland	0	1	0	1	1	0	1	0	4	0	1	0	0	0	1	2	4	8
Iceland	0	0	0	0	1	0	1	1	3	0	0	1	0	0	0	0	I	4
USA	0	0	0	1	1	1	1	1	5	1	1	1	1	1	1	1	7	12
Canada	1	1	0	0	0	0	1	1	4	1	1	1	1	0	1	2	7	11
Japan	0	0	0	0	0	0	1	0	1	1	0	1	0	1	1	1	5	6
Australia	0	1	0	0	0	0	1	1	3	1	1	1	1	1	1	0	6	9
N. Zealand	0	0	0	0	0	0	0	0	0	0	0	1	1	0	1	0_	3	3

Sources of Table 1: ECB from Alesina and Grilli (1991) Table A1 and A2, Germany to Austria and USA to New Zealand from Grilli, Masciandaro and Tabellini (1991), Tables 12 and 13; Sweden, Norway, Finland and Iceland composed from Aufricht (1967), Hahn (1968a,b) and national legislation.

Key to Table 1: AP1 Governor not appointed by the government; AP2 Governor appointed for more than 5 years; AP3 All the Board not appointed by government; AP4 Board appointed for more than 5 years; RG1 No mandatory participation of government representative in the Board; RG2 No government approval of monetary policy is required; CO1 Statutory requirements that central bank pursues monetary stability amongst its goals; CO2 Legal provisions that strengthen the central banks position in conflicts with the government are present; POL index of political independence, sum of columns AP1 to CO2; DC1 Direct credit facility: not automatic; DC2 Direct credit facility: market interest rate; DC3 Direct credit facility: temporary; DC4 Direct credit facility: limited amount; DC5 Central bank does not participate in the primary market for public debt; MI1 Discount rate set by central bank; MI2 Banking supervision not (2) or not alone (1) entrusted to the central bank. ECO index of economic independence, sum of columns DC1 to MI2, TOT index of central bank independence, sum of POL and ECO.

TABLE 2: Discriminating Between Groups of Inflation Countries on the Basis of Indicators of Political and Economic Central Bank Independence

	(1)	(2)	(3)	(4)	(5)
AP1 Governor not by Government		26.7			
AP2 Governor's term min. 5 years	2.9	10.2	19.1	16.7	
AP3 Board not by Government		14.2			
AP4 Board's term min. 5 years		13.1	11.1		
RG1 Government not Board Member			14.7		
RG2 No Government approval				17.6	
CO1 Price stability objective					
CO2 Explicit conflicts possible		15.5	20.0	7.5	34.5
DC1 Direct credit: not automatic			22.2		39.1
DC2 Direct credit: market rate	15.8	8.5	13.0	17.0	
DC3 Direct credit: temporary	4.2				
DC4 Direct credit: limited amount	10.6				
DC5 No debt from primary market	30.3			21.2	
MI1 Decision over discount rate	12.9	12.0			
MI2 No banking supervision	23.2			20.2	26.5
% between-group variance explained	98.2	100	100	100	100
Classification of ECB	1	1	1	1	1
Classification of Switzerland	1	1	1	1	2
Classification of Austria	2	1	1	2	2 2
Classification of Sweden	3	2	1	2	2
Classification of Norway	3	2	1	1	2
Classification of Finland	3	2	1	1	2
Classification of United States	1	1	1	2	1
Classification of Canada	3	1	2	1	1
Classification of Japan	2	2	2	1	1
Classification of Australia	1	1	2	1	1
Classification of New Zealand	3	2	2	2	2

Sources of Table 2: Own calculations using software programme SPSS PC+, version 4.0. Data employed are the institutional data from Table 1 and average (1957-1990) consumer price inflation data, calculated from International Monetary Fund, *International Financial Statistics*, line 64, various issues.

Key to Table 2: The numbers displayed are the relative contributions of the significant arguments to the explanatory power of the estimated canonical discriminant function for the tests in columns (1) to (5). These test aim at identifying for the sample of EC countries which constitutional variables discriminate best:

- (1) between all three groups of inflation countries;
- (2) the low-inflation countries and the remaining EC countries;
- (3) the intermediate-inflation countries and the remaining EC countries;
- (4) the high-inflation countries and the remaining EC countries;
- (5) Germany and the remaining EC countries;

TABLE 3: Economic Independence and Selected Aspects of Government Financing by Central Banks

Country	Direct book credits, overdrafts (1)	Direct credit via primary market (2)	Indirect credit via open market operations (3)	Indirect credit via discounting (4)	bank profits (5)
EEC	No,	No,	-	no provision for	
	explicitly ruled	explicitly ruled	the ECB,	the ECB,	primarily capital
	out for the ECB	out for the ECB	see below for	see below for	repayment (to
		and the national		national Central	
~	Central Banks	Central Banks	Banks	Banks	Banks)
Germany	discretion	No	discretion limited	automatic	reserves, residual to
	limited		no term	limited term (3m)	Governm.
	term (short) disc. rate		market rate	disc. rate	Governin.
France	automatic	No	Fixed maturity:	automatic	primarily
Flance	unlimited	110	discretion	unlimited	reserves, some
	no term		unlimited	term (3m)	to Governm.
	no rate		no term	disc. rate	
			market rate		
			Others:		
			discretion		
			limited		
			term (3m)		
			market rate		
Italy	automatic	discretion	discretion	automatic	reserves,
	limited	unlimited	unlimited	unlimited	dividents, residu
	no term no rate	no term market rate	no term market rate	term (4m) disc. rate	al to Governm.
Netherlands	automatic	discretion	discretion	automatic	come recomies
Mether lands	limited	unlimited	unlimited	unlimited	some reserves, primarily
	term (temp.)	no term	no term	no term	Governm.
	no rate	market rate	market rate	disc. rate	
Belgium	automatic	discretion	discretion	automatic	primarily
J	limited*	unlimited	unlimited	unlimited	reserves, some
	no term*	no term	no term	term (short and	to
	no rate*	market rate	market rate	medium)	dividents, Staff,
	* Council			disc. rate	and Governm.
	decisions	••	•• .•		
Denmark	automatic	discretion	discretion	automatic	some reserves,
	limited term (1-6m)	unlimited	unlimited	unlimited	primarily Governm.
	renewable	no term market rate	no term market rate	no terms disc. rate	Governia.
	no rate	mainet late	mainu idu	uist. Ialt	
Ireland	No	discretion	discretion	automatic	No provisions
_		unlimited	unlimited	unlimited	
		no term	no term	term (12m) disc.	
		market rate	market rate	rate	
United	automatic	discretion	discretion	No provisions	No provisions
Kingdom	limited	unlimited	unlimited		
	term (short)	no term	no term		
	no rate	market rate	market rate		

Table 3 continued

		I abic c	Continued		
Country	(1)	(2)	(3)	(4)	(5)
Spain	automatic	discretion	discretion	automatic	reserves
	limited	unlimited	unlimited	unlimited	
	term (12m)	no term	no term	no term	
	no rate	market rate	market rate	disc. rate	
Greece	automatic	discretion	discretion	automatic	equally reserves
	limited	limited	limited	limited	and Governm.
	term (temp.)	term (6m)	term (6m)	term (3m) disc.	
	agreed rate	>disc. rate	>disc. rate	rate	
Portugal	automatic	discretion	discretion	automatic	some re-serves
	limited	limited	limited	limited	and dividents,
	no term	no term	no term	term (1m) disc.	primarily
	no rate	market rate	market rate	rate	Governm.
Switzerland	No	discretion	discretion	automatic	some re-serves
		unlimited	unlimited	unlimited	and dividents,
		no term	no term	term (3m)	primarily
		market rate	market rate	disc. rate	Governm.
Austria	automatic	No	discretion	discretion	reserves
	limited		exceptional	exceptional	
	term (12m)		term (3m)	term (3m)	
	no rate		market rate	disc. rate	
Sweden	No	discretion	discretion	automatic	some re-serves,
		limited	limited	unlimited	rest Par-liament
		no term	term (12m)	term (6m) disc.	
		market rate	market rate	rate	
Norway	No	discretion	discretion	automatic	reserves,
		unlimited	unlimited	unlimited	dividents, and
		no term	term (6m)	term (6m) disc.	Governm.
		market rate	market rate	rate	
Finland	Statutes:	No	discretion	automatic	some re-serves,
	to be specified		limited	unlimited	rest Par-liament
	seperately		no term	no term	
			market rate	disc. rate	
Iceland	discretion	discretion	discretion	automatic	some re-serves
	unlimited	unlimited	unlimited	unlimited	and dividents,
	term (short)	no term	no term	no term	primarily
	no rate	market rate	market rate	disc. rate	Governm.

Sources: Aufricht (1963, 1967), Hahn (1968a,b), Grilli, Masciandaro and Tabellini (1991), Committee of Governours of the Central Banks of the Member Countries of the European Economic Community (1992) and national legislation.

TABLE 4 :Political Independence and Selected Aspects of European Central Bank Constitutions

Country	Type of Central Bank Board (1)	Number of Board Members (2)	Appointing Institution (3)	Institution which proposes the Appoint- ment (4)	of	Reappointment possible (6)	•		Honor- ary to Full Time Votes	Q u o r u m
EEC	Integrated	18		G: European		G,D:	G,D:	No	0:18	Y
	Professional		Council 1	Council 1	eight	No	Yes,			_
	Board:		D: European				condi-			12
	ECB Board		Council 5	Council 5			tionally			•-
	(includes		B: Member	B: Member	B :	B :	B:	·		
	Executive		States	States	see Gs	see Gs	see Gs			
	Board)		Central Bank	Central Bank	below,	below	below			
			Gover-	Gover-nours	min. 5					
			nours 12	12						
Germany	Integrated	21	G: Presid. 1	G: Fed. Gov.	G,V,D	•	No	No	0:21	Y
	Professional		V: Presid. 1	V: Fed. Gov.	eight					
	Board:		D: Presid. 8	D: Fed. Gov.						14
	Zentral-		B: Presid. 11	_						
_	bankrat			Governments	~					
France	Mixed	13		G: Council of		Yes	<i>G,V,D</i> :	•	9:3	Y
	Professional		Ministers 1	Ministers 1	-		Yes,	2 Auditors		9
	/Honorary Board:		Ministers 2	V: Council of Ministers 2	mmi,		condi-	(superviso- ry right)		9
	Conseil		B:Minister of		B :		(neclec	ly light)		
	Général		Fin. 9	of Fin. 9	two		t of	Secretary of		
	<i></i>		B: Bank's	B: Bank's	••••		duties)	State for		
			Staff 1	Staff 1			0	Finance)		
Italy	Mixed	14	G: Board 1	G: Board 1	G :	Yes	Yes,	No	13:0	Y
•	Professional		(Governm.	(Governm.	no.		G: by		G votes	
	/Honorary		approval)	approval)	limit		Board		only in	7
	Board:		B: Regional	B: Regional	<i>B</i> :		only		a tie	
	Consiglio		Meetings of		three					
	Superiore		Sharehol-	Sharehol- ders 13						
Nether-	Professional	5-7	ders 13 G: Queen 1	G,V,D:	G,V,D	Vec	Yes	Yes,	0:5-7	
lands	Board:	J-1	V: Queen 1	Fin. Minister		163	163	Royal	0.5-7	•
141143	Directie		D: Queen 3-5		501011			Commis-		
				of Commis-				sioner		
				saries				(advisory		
					_			right)		
Belgium	Mixed	14-17	G: King 1	<i>G,V,D</i> :	<i>G</i> :	Yes	<i>G,V,D</i> :	•	10:4	Y
	Professional		V: King 1	Council of	five		•	Governm.	10:7	8-9
	/Honorary Board:		D: King 2-5	Regency 4-7 B: Fin.Min.3	V,D:		Govern	Commis- sioner		0-7
	Conseil de		B: General	B: Banks 2	six B:		ment B:	(superviso-		
	Régence		Meeting of		three			ry / suspen-		
	110801100		Sharehol-	Institut. 2				sive rights)		
			ders 10	B: Industry 3			holders	5 3		
Denmark	Professional	25	G: King 1	G: King 1	<i>G,V</i> :	<i>G,V</i> :	-	Yes,	0	Y
	Board:		V: Board 2	V: Board 2	no	-		Royal Bank		
	Board of			D: Parliam. 8				Commis-		15
	Directors		B: Trade	B: Trade	D,B:	D,B:		sionar		
			Minister 2 B: Board 15	Minister 2 B: Board 15	five	Yes		(superviso-		
			D. Dogra 13	D. Doald 13				ry right)		

Table 4 continued

				ole 4 conti						
Country	(1)	(2)	(3)	(4)	(5)	(6)	<u>(7)</u>	(8)	(9)	10
Ireland	Mixed	5-8	G: Presid. 1	G: Governm.		Yes	Yes,	Yes,	3:3	Y
	Professional		•	D (Banking):			condi-		(min)	
	/Honorary		Minister of	Banks 3	D:		tionally	Secretary of	6:3	4
	Board:		Finance 3	D (Service	five			Minister of	(max)	
	Board of		D (Service	and Others))			Finance		
	Directors		and Others) Minister of Finance 2-5	Finance 2-5						
United	Mixed	18	G: Queen 1	G, V,D:	G,V:	G,V:	Yes,	No, but	12:6	Y
Kingdom	Professional		V: Oueen 1	Governm. 18		Yes	condi-	Govern-		9
Ū	/Honorary		D: Queen 4		D:	D:	ionally	ment may		
	Board:		D: Queen 12		four	Yes	•	give		
	Court of		-					directives		
	Directors									
Spain	Mixed	16-17	G: Council of	G:Council of	G:	-	G :	No, but	13:3	N
_	Professional		Ministers 1	Ministers 1	four		Yes	Govern-	(min)	
	/Honorary		V: Council of	V: Finance	V :		V:	ment	13:4	
	Board:		Ministers 2-3	Minister 2-3	three		Yes,	approval of	(max)	
	Consejo	•	B: Govern-	B: Finance	B :		B :	policy	•	
	General		ment 5	Minister 5	two		Yes	required		
			B: Finance	B: Banking				_		•
			Minister 8	Sector 8						
			B: Finance '	B: Bank's						
			Minister 1	employees 1						
Greece	Mixed	12	G: Council of	G: Board of	G,V:	Yes	G,V,D:	Yes,	9:3	Y
	Professional		Ministers 1	Directors 1	four		Yes,	Govern-		
	/Honorary		V: Council of	G: Board of			condi-	ment		6
	Board:		Ministers 2	Directors 1				Commis-		
	Board of		B: General	B: General	B :		B: Yes,	sioner		
	Directors		Meeting of	Meeting of	three		by	(suspensive		
			Sharehol-	Sharehol-			Share-	right)		
			ders 9	ders 9	•		holders			
Portugal		11	G: Govern-	G: Govern-	G,V:	G,V:	G,V:	No, but the	7:4	Y
	Professional		ment 1	ment 1	five	$\mathbf{Yes}D$:		Governor		
	/Нопогату		V: Govern-	V: Govern-	D :	Yes	D :	can		6
	Board:		ment 2	ment 2	four		Yes by	-		
	Conselho de		B: Sharehol-	B: Sharehol-			share-	decisions		
	Adminis-		ders 8	ders 8			holders	counter the		
	tracao							state's		
~ •.		40	0.0	<i>a.</i> 0.	<u> </u>	<i>C</i>	0115	interests	0:40	37
Switzer-	Professional	40	C: Govern-	C:Govern-	<i>C</i> :	<i>C</i> :	C,V,B:	No	0:40	Y
land	Board:		ment 1	ment 1	four	yes	Yes,			
	Bankrat		V: Govern-	V:Govern-	V:	V :	condi-			
			ment 1	ment 1	four	yes	tionally			
			B: Govern-	B: Govern-	<i>B</i> :	B :				
			ment 23	ment 23	four	yes				
				B: Shareholders 15						
Aggaduda	Uonom-	14	ders 15		C.	C·	C.V.D:	Vec	14.0	Y
Austria	Honorary Board:	14		C:President 1	C: five	C:		res, Govern-	14:0	1
			V: Govern-	V: Govern-	nve V:	yes V:	Yes,			
	Generalrat		ment 2 D: Govern-	ment 2 D: Govern-	v: five		circum	Commis-		
			ment 5	ment 5	nve B:	yes B:	- stancial			
			D: Sharehol-	D: Sharehol-		D: yes	aunidi	(advisory		
			ders 6	ders 6	MAC	yes		/suspensive		
			4013 0	ucis u				rights)		
								. 151163 <i>)</i>		

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Table 4 continued

Country	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	10
Sweden	Honorary	7	C: King 1	C: King 1	<i>C,B</i> :	<i>C,B</i> :	<i>C,B</i> :	No	7:0	N
	Board:		D: Parlia-	D: Parlia-	three	yes	yes			
	Fulmäktige		ment 6	ment 6						
Norway	Professional	5	C:King 1	C, V:Parlia-	C,V:	<i>C,V</i> :	C, V:	No	0:5	Y
	Board:		<i>V</i> : King 1	ment	no	•	Yes			
	Board of		D: Parlia-	D: Parlia-	limit	D :	D :			
	Directors		ment 3	ment 3	D: six	•	-			
Finland	2 Seperated	2-5	C::Presi-dent	C::Presi-	C,D:	C,D:	<i>C,D</i> :	No	0:2	N
	Professional		1	dent l	no	-	•		(min)	
	/Honarary		D: Presi-dent		limit				0:5	
	Boards:		1-4	dent 1-4					(max)	
	Managing									
	Board/									
	Council of	9	B: Parlia-	B: Parlia-	<i>B</i> : no	<i>B</i> :	B :	No	9:0	Y
	Supervisors		ment 3	ment 3	limit		Yes			
Iceland	2 Seperated	3	C::Board of	C::Finance	<i>C,B</i> :	<i>C,B</i> :	<i>C,B</i> :	No	0:3	Y
	Professional		Governours		no	•	Yes	•		
	Boards:		B: Finance	B: Finance	limit					
	Board of		Minister 2	Minister 2	_					
	Governours		C, V: Finance	•	C,V:	C,V:	C,V,B	No	0:5	N
	/Board of	5	Minister 2	ment 2	four	-	No			
	Directors		D: Parliam. 3	D: Parliam. 3	D: -	D: -				

Sources: Aufricht (1963, 1967), Hahn (1968a,b), Fair (1980), Caesar (1981), Grilli, Masciandaro and Tabellini (1991), Committee of Covernors of the Central Banks of the Member States of the European Economic Community (1992) and national legislation.

	TABLE 5: Statutory Central Bank Objectives
Country	Objectieves Stated in the Statutes (Article No. in parenthesis)
EEC	"the primary objective of the ESCB shall be to maintain price stability. Without prejudice to the objective of price stability, it shall support the general economic policy of the Community" (Art. 2)
Germany	" shall regulate the note and coin circulation and the supply of credit to the economy with the aim of safeguarding the currency. (Art. 3) shall be obliged insofar as it is consistent with its functions to support the general economic policy" (Art. 12)
France	no specific objective in statutes
Italy	no specific objective in statutes
Netherlands	" has as its task to regulate the value of the Netherlands currency in
	such a manner as shall be most conductive to the country's welfare, and in that connection to stabilize the said value as far as possible."(Art. 9.1)
Belgium	no specific objective in statutes
Denmark	" shall have the objective of maintaining a safe and secure currency
	system in this country and facilitating and regulating the circulation of money and the extension of credit." (Sec. 1)
Ireland	"safeguarding the integrity of the currency and ensuring that the constant and predominant aim shall be the welfare of the People as the whole (Sec. 6.1)
U.K.	no specific objective in statutes
Spain	no specific objective in statutes
Greece	"the first duty of the Bank shall be to ensure that the gold value of its notes remain stable." (Art. 4)
Portugal	no specific objective in statutes
Switzerland	" The primary task shall be to regulate the country's monetary
	circulation, to facilitate payments transactions and implement a credit and monetary policy serving the general interests of the country."(Art.2)
Austria	" shall ensure with all the means at its disposal that the value of the Austrian currency is maintained with regard both to its domestic purchasing power and to its relationship with other stable foreign currencies." (Art. 3)
Sweden	no specific objective in statutes
Norway	no specific objective in statutes
Finland	" The object is to maintain stability and security in the monetary
	system of Finland and to assist and facilitate the circulation of money in the country." (Art. 1) "The Board of management shall in all its
	dealings act in such a way as to maintain the legally established value of the currency of Finland." (Art.16)
Iceland	" The purposes of the Central Bank are to issue bank notes and
	endeavor to keep the supply of money and credit appropriate for the maintainance of a stable price level qand for the fullest and most rational utilization of the productive capacity of the country's industries."
`	(Art. 3.1)

Source: Aufricht (1963, 1967), Hahn (1968a,b), Committee of Governours of the Central Banks of the Member States of the European Economic Community (1992) and national legislation.

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