

Accountability of central banks: aspects and quantification*

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«Economists and practitioners in the area of monetary policy generally believe that the degree of independence of the central bank from other parts of government affects the rates of expansion of money and credit and, through them, important macroeconomic variables, such as inflation and the size of the budget deficit.» (Cukierman, Webb and Neyapti 1992, pp. 353-54.)

«Monetary policy is a key determinant of the economy's macro economic performance. [...] That this key determinant of what happens to society [...] should be so removed from control of the democratically elected officials should at least raise questions.» (Stiglitz 1998, p. 19.)

1. Introduction

As follows from the first citation above, nowadays it is widely believed that a high level of central bank independence (CBI) coupled with some explicit mandate for the bank to restrain inflation are important institutional devices to assure price stability. It is thought that an independent central bank can give full priority to low levels of inflation, whereas in countries with a more dependent central bank

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other considerations (notably, re-election perspectives of politicians and a low level of unemployment) may interfere with the objective of price stability (Cukierman 1992). In other words, CBI makes a monetary policy directed towards low levels of inflation more credible. Indeed, there is quite some evidence for a negative relationship between central bank independence and inflation (see Eijffinger and de Haan 1996 for a review).

Popular as the view referred to above may be, the concept of central bank independence always had its critics.¹ As follows from the second citation above, one potential objection towards a completely independent central bank is lack of accountability. CBI reduces the credibility problem at the cost of placing monetary policy in the hands of unelected officials. Levy (1995) therefore argues that democracy requires that central bank independence be limited so that the makers of monetary policy cannot stray far from the will of the people as embodied in their duly elected representatives. We do not share this view. Still, delegation of power to an unelected authority might be interpreted as a dilution of democracy: an empowered, but unaccountable, central bank gives rise to a democratic deficit (Briault, Haldane and King 1996). Indeed, the basic argument for the democratic accountability of central banks is that delegation of powers to unelected officials can only be acceptable in a democratic society if central banks are one way or another accountable to democratically elected institutions.² In a democratic society, Parliament represents the views of the electorate. Therefore, it is crucial that either the central bank is directly accountable to Parliament, or that the central bank is accountable to government who in turn is, of course, accountable *vis-à-vis* Parliament. In the latter case, government should have instruments to influence the central bank as it otherwise cannot be held responsible for monetary policy (e.g. the possibility to override policy decisions of the central bank).

An important issue is the relationship between accountability and central bank independence. It is very often thought that an independ-

¹ For a general critique we refer to McCallum (1995), Posen (1995) and Forder (1996).

² Still, one should not conclude that delegation of power to unelected officials in itself lacks democratic legitimation. In the case of central banks, such a legitimation can be found in the legal basis of the central bank, which generally constitutes an act of Parliament. Yet, this one time act of legitimation cannot replace mechanisms of democratic accountability.

ent central bank cannot be very accountable and *vice versa*. However, according to Eijffinger and de Haan (1996) such a trade-off does not exist in the longer run. A central bank, continuously conducting a policy which lacks broad political support, will sooner or later lose its independence. In a similar vein, Bini Smaghi (1998) argues that accountability can be seen as a complement, if not a necessary requirement, for central bank independence. Recently, Nolan and Schaling (1998) have come up with another view. They argue that for a given target level of inflation the optimal degree of central bank accountability (in their definition) is higher the lower the degree of central bank independence.³

This paper has several purposes. First, we provide a definition of accountability and its various aspects. Second, on the basis of this definition we construct an indicator for central bank accountability based on central bank laws for 16 central banks (including the ECB). This indicator is based on information, which relates to the situation in 1997. Third, we use this indicator to examine the relationship between CBI and accountability.

The remainder of the paper is structured as follows. Section 2 offers our definition of accountability and compares it with some others. Section 3 presents our indicator for accountability, while section 4 analyses the relationship between our indicator and the Eijffinger-Schaling indicator for CBI. The final section offers some concluding comments.

2. The concept of accountability

The Oxford English Dictionary defines accountable as "obliged to give a reckoning or explanation for one's actions; responsible". The latter is defined as: "legally or morally obliged to take care of something or to carry out a duty; liable to be blamed for loss or failure".

³ Using an indicator of central bank accountability as recently developed by Briault, Haldane and King (1996) and the Eijffinger-Schaling index for independence, Nolan and Schaling (1998) report a significant negative relationship between central bank accountability and central bank independence. De Haan (1997) shows, however, that if the Grilli-Tabellini-Masciandaro and Cukierman indicators for CBI are used, this relationship vanishes. So the conclusion of Nolan and Schaling that accountability may serve as a partial substitute for independence is not very well founded.

How can this general concept be made operational in relation to central bank accountability?

In our view the concept of central bank accountability has three main features:

1. decisions about the *explicit definition and ranking of objectives* of monetary policy;
2. *transparency* of actual monetary policy;
3. who bears *final responsibility* with respect to monetary policy.

In a democratic society, elected politicians should decide on the *explicit definition and ranking of objectives of monetary policy*. It is questionable whether it is legitimate in a democratic system to leave the decisions on the objectives of monetary policy in the hands of an independent institution, which is not subject to elections or ministerial responsibility (Roll Report 1993). Furthermore, these objectives should be clearly defined. For instance, the primary objective of the ECB as described in primary Community law is to maintain price stability. Although many central bankers would consider an inflation rate between zero and two percent consistent with price stability, one may wonder whether a somewhat higher inflation rate is still in accordance with the mandate of the ECB. More fundamentally, the objective of price stability has different interpretations: price level constancy versus zero inflation. Depending on which interpretation is chosen, monetary policy has to smooth out random shocks to the price level or not. Fischer (1994) has shown that the objective of long-run price level constancy implies a strategy for monetary policy that provides low uncertainty as regards the price level for the long run but comparatively high uncertainty for the short run, while the objective of zero inflation yields lower price level uncertainty for the short run but high and rising uncertainty for the long run. So, there is some room for manoeuvre for the ECB with respect to the goals of monetary policy (de Haan 1997). Where a central bank has both instrument and goal independence the body charged with holding the central bank accountable is not provided with an effective statutory yardstick to evaluate the performance of the bank, and thus to hold the bank accountable for its conduct of monetary policy.

The choice of a single objective also simplifies the monitoring of central bank performance. The announcement of a single goal (or

primary goal), rather than several unranked goals, enables authorities and public opinion to control performance more effectively. It is easier to control a narrowly defined target than a broadly defined objective (Lastra 1997). The difficulties resulting from multiple objectives may be avoided to some extent by the introduction of a clear hierarchy according to which any secondary objectives may only be pursued as long as they do not conflict with the primary objective.

The statutes of many central banks are rather vague in terms of final objectives, or contain various (possibly conflicting) objectives without giving indications as to their prioritisation. For instance, the Bundesbank had a prime objective (formally referred to as defence of the value of the currency) which is not very specific. Even more vague was the objective of the Dutch central bank (to regulate the value of the guilder in a welfare enhancing way). The Federal Reserve System faces multiple objectives which may be conflicting (maximum employment, stable prices and moderate long-interest rates). Neither the Federal Reserve Act nor any other law provides for any hierarchy. A good example of a clear prescription of objectives is the Reserve Bank of New Zealand which has as its primary objective the pursuit of price stability. The governor of the Reserve Bank of New Zealand has to agree with the government a tight target range for inflation. In this so-called Policy Target Agreement (PTA) the concept is clearly defined and a target range for the inflation rate is provided.

Transparency is a very important element of accountability. Accountability requires that the central bank explains and justifies its policies or actions, and gives account for the decisions made in the execution of its responsibilities (Lastra 1997). Whatever other arrangements concerning democratic accountability may exist, their scope is limited without transparency because information concerning the behaviour of the central bank is crucial for the evaluation of its performance (see also Demertzis, Hallett and Viegli 1998). As Alan Greenspan (1993, p. 1005) put it: "In a democratic society all public policy making should be in the open, except when such a forum impedes the primary function assigned to an institution".

The transparency of the central bank policy depends upon whether and to what extent decision-making bodies of the bank are required to publish minutes of their meetings and/or the (reasoned) decisions they have taken. Where the reasons for a certain monetary policy decision lay open, it is easier to make a judgement and to hold

central bank officials and/or government officials accountable for their behaviour. Moreover, a central bank could be required to report – in one way or another and in regular intervals – on its past performance and future plans for monetary policy in accordance with the monetary objective. This is even more important where a clear monetary objective is missing because in such cases the central bank can only be judged on the basis of its own statements. As follows from the citation from Greenspan, sometimes there may be sound policy reasons not to reveal everything. Still, only those matters of policy-making should remain closed which are really essential (one can think of interventions on exchange markets). To this end it would be useful if explicit rules were provided for in the legal basis of a central bank laying down the conditions under which minutes and decisions may be withheld. The new Bank of England Act sets a positive example in this respect, as it regulates such conditions profoundly.

With respect to the *final responsibility for monetary policy*, we think that three issues are crucial: the relationship with Parliament, the existence of some kind of override mechanism and the dismissal procedure for the central bank governor.

The relationship between the central bank and Parliament has to play a major role in any evaluation of the democratic accountability of the central bank itself. It has been argued that Parliament always holds the ultimate responsibility for monetary policy since it can change the legal basis of the bank. Parliament sets the rules with which the central bank must comply. Moreover, it can also in principle function as a mechanism of (*ex post*) accountability because Parliament may decide to change the legal basis of the bank as a reaction to a certain behaviour. A closer look reveals the diversity in the legislative procedure applicable in the different constitutional systems. On the one hand, a difference between single and dual chamber parliamentary systems can be observed. In parliamentary systems with two chambers the procedure for amending the legal basis is more complex. Firstly, two chambers rather than one chamber will examine the legislative proposal. Secondly, if the second chamber does not agree with the first chamber, the hurdles for the legislation to be adopted are higher (see section 3 for more details).

The central bank may not be directly accountable to Parliament but to government which is, in turn, accountable to Parliament. In that case it is important that the government is able to influence cen-

tral bank behaviour. Without such instruments, accountability would not go beyond mere reporting by government to Parliament of central bank policies, for which government can in that case not be held responsible. An override mechanism for government would be an instrument to change central bank policy. If the government does not interfere, it apparently agrees with central bank policies and can be held accountable for this by Parliament.

In examining override mechanisms attention has to be paid to the type of override mechanisms and the procedure for its application. Generally, three types of override mechanisms can be distinguished, including (in descending order): the right to issue instructions, the right to approve, suspend, annul or defer decisions, and the right to censor decisions on legal grounds. Especially the first one may enhance the accountability. For instance, under the previous Bank Law 1948, the Minister of finance had the right to give the Dutch central bank certain instructions concerning the conduct of monetary policy. Whether he really uses this right is of limited importance. If he does not, the Minister thereby implicitly approves of actual policy and is to this extent accountable *vis-à-vis* Parliament. Similarly, the Reserve Bank Act 1989 gives the New Zealand Minister of finance the right through a so-called Order in Council to override the objective of price stability; the Bank remains in charge of monetary policy but should aim for the objective as specified by the government. This type of override mechanism is of a very different nature than e.g. the right that the German government had to suspend a decision of the governing council (Zentralbankrat) of the Bundesbank, since only the first gives the government the power to really change monetary policy.

The simple fact that government can override the central bank does not necessarily add to the democratic accountability of monetary policy. The conditions under which an override mechanism can be applied should be laid down in detail. The necessity for detailed provisions on the conditions under which the central bank can be overridden increases with the seriousness of the override mechanism. It has to be ensured that the mechanism is not used as a tool for undesired political influence. The procedure for the application for the override mechanism itself needs to be transparent. The decision to apply the override mechanism should be made public. Furthermore, the procedure to apply an override should provide for some kind of

review (like a possibility for the central bank to appeal) to make sure that the override is being used carefully.

Finally, the dismissal procedure for a central banker can account to a mechanism of *ex post* accountability if a central bank official can be dismissed on grounds of bad performance in terms of realising stated objectives.⁴ Dismissal may function as a sanction for poor performance by linking the tenure of central bank officials to policy results, *i.e.* meeting the predetermined monetary policy target. This is the case for the Reserve Bank of New Zealand where the Policy Targets Agreement between the governor of the Bank and the Minister of finance lays down the policy targets, which the former has to achieve. Inadequate performance can result in the dismissal of the governor. In contrast, the president of the ECB can only be dismissed if he no longer fulfils the general conditions required for his performance or in case of serious misconduct.

In the final part of this section, we compare our general definition of democratic accountability with those offered in some recent studies. It is clear that we do not adopt the definition of accountability as the degree to which central banks explain or make visible their policies to Parliament and/or the public, as suggested by De Beaufort and Hoogduin (1994). This view on democratic accountability clearly misses crucial elements, as it focuses only on what we have called transparency. This is also true for the concept of accountability as used by Nolan and Schaling (1998). They define accountability as a mechanism whereby agents' actions are made apparent to the principal.

The definition of Demertzis, Hallett and Viegi (1998) comes close to ours. They focus on performance and define accountability as meaning that policy makers can and will be held to account for the economic performance of the targets in their care, *i.e.* policy makers will be held responsible for how close the indicators of economic performance come to the target values set.

⁴ The appointment of central bank officials may be considered less important for the democratic accountability. It can be argued that it amounts to an *ex ante* mechanism of control by choosing the persons entrusted with the power over monetary policy. Yet, the appointment of central bank officials may be better described as a mechanism of democratic legitimisation rather than accountability.

Finally, Bini Smaghi (1998) focuses on three aspects of accountability: *ex ante* control (defining the rules, standards and principles laid down in advance by a democratically elected body), answerability (the act of listening to criticism and respond to questions put forward by a democratically elected body); and popular mandate (referring to the attribution of power through democratic procedures). This comes very close to our definition, but Bini Smaghi does not include the taking of sanctions as being part of accountability, which is in our view a crucial element of accountability. If a democratically elected body disagrees on a very fundamental issue with the central bank, to which it has delegated certain tasks, it should be able to redress the central bank.

3. An indicator for central bank accountability

In this section we will quantify the concept of accountability as outlined in the previous section. In line with indices for central bank independence, our analysis is based on central bank laws. In other words, we take the views of the legislator as our starting point. This is not to say, however, that only laws determine actual central bank accountability. Indeed, sometimes a central bank may be more accountable than can be inferred from the law. This may be true for the ECB as well (Bini Smaghi 1998). We will come back to this issue at the end of this section.

With respect to decisions about the *explicit definition and ranking of objectives of monetary policy* we distinguish between the following aspects:

1. does the central bank law stipulate the objectives of monetary policy?
2. Is there a clear prioritisation of objectives?
3. Are the objectives clearly defined?
4. Are the objectives quantified (in the law or based on documents based on the law)?

As explained in the previous section, we think that the central bank law should provide the objective(s) of monetary policy. To be

sure, from the point of view of democratic accountability it is secondary, what the objective consists of. Thus, although in the majority view price stability is the favourable monetary objective, it is not a precondition for an accountable central bank. Yet, the less a central bank is bound to specific objectives, the more difficult it becomes to evaluate the bank's performance, since a suitable yardstick is missing. The evaluation of central bank performance is the central element of central bank accountability and a clearly stated objective is therefore essential (see also Bini Smaghi 1998). It is also important that in case of various objectives a clear prioritisation is provided. Without a clear prioritisation given by Parliament and enshrined in the law, it is up to the central bank to decide upon the ultimate objectives of monetary policy. This is undesirable for two reasons. First, democratically elected politicians should decide upon the objectives, and second, if there is no clear yardstick the central bank cannot really be held responsible for its policies. As follows from our discussion of the objective of price stability, it also helps if the objective is clearly defined. The provision of quantified objectives – e.g. a maximum inflation rate – may enhance accountability. For instance, in the case of New Zealand politicians decide on the rate of inflation they consider to be acceptable *ex ante*. The electorate can then decide – also on the basis of realised inflation rates – whether they agree with these policy choices. Very often, however, these quantifications are missing.

With respect to the *transparency* of actual monetary policy we distinguish between the following aspects:

5. must the central bank publish a monetary policy report of some kind, in addition to standard central bank bulletins/report?

6. Must minutes of meetings of the governing board of the central bank (or something similar) be made public within a reasonable time?

7. Must the central bank explain publicly to which extent it has been able to reach its objectives?

As explained in the previous section, without transparency, a central bank cannot be held accountable. It is therefore crucial that the law prescribes certain procedures about explaining monetary policy (see also Bini Smaghi 1998). There are various possibilities, ranging from reports (item 5), minutes (item 6) and other communication de-

vices (item 7). A monetary policy report, like for instance the *Inflation Report* of the Bank of England, reveals information on the authorities' actions, objectives and intentions (see also Briault, Haldane and King 1996). It therefore clearly enhances transparency. As explained before, we ask whether the law prescribes publication of such a report. In practice, a central bank may publish a report even if it is not required doing so. Indeed, as will be explained at the end of this section, this is the case for the ECB.

In a similar vein, transparency will be improved if the minutes of the governing council are publicly available. Of course, to be meaningful this should not take thirty years as in Germany. Under the proposed new Bank of England Act the obligation to publish minutes of the Monetary Policy Committee (MPC) is included. According to this, the minutes will have to include the voting preferences of the members of the MPC taking part in a particular meeting. The importance of minutes in enhancing transparency is not undisputed. For one thing, minutes may not reveal much. Furthermore, there may be other mechanisms to explain in public why certain decisions have been taken (see below). Still, we have decided to include this issue in constructing our indicator of accountability (see also Briault, Haldane and King 1996 and Bini Smaghi 1998).

Transparency will be improved if the monetary authorities have to explain the extent to which they were able to reach the final objectives of monetary policy. Whether this obligation is prescribed in the law or has another origin is less important, as long as it is clearly prescribed what the central bank is supposed to do. The legal basis of the ECB/ESCB foresees the publication of reports on the activities of the ESCB on at least a quarterly basis. Whether and to what extent they will include details on the past performance and projections on the future development of monetary policy and/or self-proclaimed targets for monetary policy is left to the ECB to decide, as the Maastricht Treaty and ESCB Statute do not include any details on the contents of these reports. The Fed does not publish regular monetary policy or inflation reports as such. However, the Chairman of the Board of Governors is obliged to forward a report on its objectives and plans with regard to the development of the monetary and credit aggregates twice a year. The Reserve Bank of New Zealand and the Bank of England are obliged by law to publish reports on the development of monetary pol-

icy on a regular basis. The New Zealand central bank is obliged to deliver a policy statement, which includes a review and assessment of the implementation of monetary policy in the period subsequent to the previous statement and a statement including the Bank's proposal for the implementation of monetary policy with the goal of achieving price stability for the succeeding 5 years. Similar to the Reserve Bank of New Zealand, the Bank of England publishes a monetary policy report in the form of an inflation report, which not only assesses the past developments, but also includes an outlook concerning the development of inflation.

With respect to the *final responsibility* for monetary policy we distinguish between the following aspects:

8. is the central bank subject to monitoring by Parliament?
9. Has the government (or Parliament⁵) the right to give instructions?
10. Is there some kind of review in the procedure to apply the override mechanism?
11. Has the central bank possibility for an appeal in case of an instruction?
12. Can a simple majority in Parliament change the central bank law?
13. Is past performance a ground for dismissal of a central bank governor?

As has been pointed out in the previous section, a crucial element of accountability is the relationship with Parliament. So, one obvious item is whether the central bank is monitored by Parliament (see also Briault, Haldane and King 1996). Indeed, while the transparent conduct of monetary policy supports Parliament in its decision-making process about the performance of the bank, institutionalised contacts support the overall transparency of monetary policy. Parliament has the opportunity to review the performance of the central bank with regard to monetary policy on a regular basis, while the central bank at the same time can explain and justify its conduct.

⁵ In Sweden Parliament could give instructions.

These contacts have to be foreseen in the legal basis of the central bank.

As explained before, the presence of an override mechanism may improve accountability, especially if the central bank is not directly accountable to Parliament. We consider only government's right to give instructions in certain (well-defined) circumstances to be relevant for accountability. Furthermore, it is important whether some kind of review procedure is part and parcel of the override mechanism (item 10). The possibility of the central bank to appeal should be part of this procedure (item 11).

Question 12 is included since we believe it is important that Parliament should be able to change the central bank law. Indeed, it has been argued that the mere threat of a change of the law will ensure that even independent central banks (like the Bundesbank) will ensure that monetary policy will in general be in accordance with the wishes of elected politicians (Gormley and de Haan 1996). There are, however, some cases in which the power of Parliament may be restricted somewhat. In the US, for instance, the President has the power to veto a change, in which case a two-third majority in Congress is required to change the law. Still, for the ECB the power of Parliaments is much less as a change would require amendment of primary Community law, which implies that all countries have to agree.

Finally, as argued in the previous section we think that if past performance is a ground for dismissal of the governor of the central bank, this may enhance accountability.

In constructing our indicator we simply add the number of positive answers on all the aspects that we have distinguished. This implies of course that we think that the aspect of the final responsibility is most important. The answers to the questions relate to the laws as prevalent in 1997. A special situation arises in this respect for the UK. With the change of government in 1997 the new Labour government has announced major institutional changes to grant the Bank of England more independence in the implementation of monetary policy while at the same time ensuring the accountability of the Bank. It has been agreed upon between the executive government and the Bank of England that these new arrangements which have been announced by the Chancellor of the Exchequer operate *de facto* until the proposed bill has been accepted by Parliament. Therefore, we have used the proposed

new Act as the relevant basis for the UK. Table 1 provides our assessment of the accountability of 16 central banks at the time of writing.⁶

It is shown by this index that the ECB has a low degree of (legal) democratic accountability. The assessment of the Bank of England, which is based on the proposed new legislation, shows that the envisaged reforms provide for a high degree of accountability of the Bank. In fact the envisaged arrangements provide for a higher degree of democratic accountability than is the case for the Reserve Bank of New Zealand.

One serious objection that can be raised against our indicator is that it is based on central bank laws only. As pointed out before, we have followed the same approach here as in the previous literature on CBI indicators. Still, the law prescribes a minimum level of accountability and a central bank may – at least in some respects – go further. This is also the case for the ECB. First, a precise definition of its primary objective is no longer lacking, as the Governing Council of the ECB agreed that price stability is defined as being a year-on-year increase in the Harmonised Index of Consumer Prices (HICP) for the euro area of below 2 per cent. The HICP is a comprehensive measure for inflation, reflecting the focus of the general public on consumer goods. It is the only harmonised price index available in the euro area. The aim of an inflation rate “below 2 per cent” clearly delineates the maximum rate of inflation deemed to be consistent with price stability. The wording “year-on-year increases” implies that persistent price decreases – that is to say deflation in the measured price index – would not be considered to be consistent with price stability either. The Governing Council explicitly announced that price stability is to be maintained over the medium term, thereby acknowledging that price levels may be temporarily distorted by short-term factors. The

⁶ Our index differs in many ways from that of Briault, Haldane and King (1996). Their index is based on four criteria: *a*) whether the central bank is subject to external monitoring by Parliament; *b*) whether the minutes of meetings to decide the setting of monetary policy are published; *c*) whether the central bank publishes an inflation or monetary policy report of some kind, in addition to standard central bank bulletins; and *d*) whether there is a clause that allows the central bank to be overridden in the event of certain shocks. If the central bank law mentions an explicit escape clause a country receives a numerical value of 2.0. If overriding the central bank is not *a priori* excluded they assigned a value of 1.0. Finally, if no provision exists they assigned 0. The other characteristics are simply given zero/unity values, and added to a base level of one. Our index is more refined and derived from an explicit definition of accountability.

TABLE 1

AN INDICATOR FOR CENTRAL BANK ACCOUNTABILITY

Aspect	Australia	Belgium	Canada	Denmark	France	Germany	Italy	Japan	Netherlands	New Zealand	Spain	Sweden	Switzerland	UK	US	ECB
1.	*	-	*	*	*	*	-	*	*	*	*	-	*	*	*	*
2.	-	-	-	-	*	*	-	-	-	*	*	-	-	*	-	*
3.	-	-	-	-	*	-	-	-	-	*	*	-	-	*	-	*
4.	-	-	-	-	-	-	-	-	-	*	-	-	-	*	-	-
Subtotal	1	0	1	1	3	2	0	1	1	4	3	0	1	4	1	3
5.	-	-	*	-	-	-	-	-	-	*	*	*	-	*	*	-
6.	-	-	-	-	-	-	-	-	-	-	-	-	-	*	*	-
7.	*	-	*	*	*	-	*	*	-	*	*	*	-	*	*	*
Subtotal	1	0	2	1	1	0	1	1	0	2	2	2	0	3	3	1
8.	*	-	*	*	*	-	*	*	-	*	*	*	-	*	*	*
9.	*	*	*	-	-	-	*	*	*	*	-	*	-	*	-	-
10.	*	-	*	-	-	-	-	*	*	-	-	-	-	*	-	-
11.	*	*	-	-	-	-	-	-	*	-	-	-	-	-	-	-
12.	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13.	-	-	-	-	-	-	-	-	-	*	-	-	-	-	-	-
Subtotal	5	3	4	2	2	1	3	4	4	4	2	3	1	4	2	1
Total	7	3	7	4	6	3	4	6	5	10	7	5	2	11	6	5

wording "for the euro area" highlights that area-wide developments, instead of specific national or regional factors, will be the only determinants of decisions regarding the single monetary policy.

Second, the ECB has agreed upon various measures to enhance transparency. The ECB publishes a *Monthly Bulletin*. Furthermore, the Governing Council of the ECB has decided that it will regularly inform the public about its monetary policy decisions. The Council will meet every fortnight. The first meeting in every month will be followed by a press conference. When policy decisions are made, the reasoning behind specific decisions will be communicated to the public immediately after the meeting at which they have been taken. Minutes of the meetings will not be published. However, the idea behind presenting the reasoning of the Governing Council is, of course, exactly the same as those of who are in favour of publishing minutes, i.e. the explanation of the decisions taken. The only difference is that minutes could also reveal voting patterns in the Governing Council. As the Council has a clear collective responsibility, the usefulness of making voting behaviour public seems limited (see also Bini Smaghi 1998).

Third, apart from the yearly presentation of an annual report of the activities of the ESCB by the President of the ECB, the European Parliament (EP) can ask the members of the Executive Board to appear before the Subcommittee for Monetary Affairs. The ECB has gone some way again as Duisenberg has expressed his willingness to appear before the EP at least four times a year, apart from the presentation of the *Annual Report*.

4. Independence and accountability

As outlined in the introduction, nowadays it is widely believed that central bank independence may foster price stability. Rogoff (1985) shows that if monetary policy is set at the discretion of a conservative central banker, a lower average time-consistent inflation rate will result. However, while such central bankers will, in equilibrium, produce a lower inflation than does the government, stabilisation of the real economy will in this case be suboptimally low. Lohmann

(1992) therefore argues that partial delegation of monetary policy yields superior outcomes. She introduces the possibility to override the central banker at a strictly positive but finite cost. Now government can choose: either override the central bank or accept monetary policy of the central bank (see Eijffinger and de Haan 1996 for further details). A real world example of such a construction is the aforementioned possibility for the Dutch Minister of finance to override the central bank. It will be clear that in that case the independence of the central bank will be reduced in comparison to the situation without the possibility of an override.

It follows from the foregoing that there is a clear link with the third aspect of accountability as exemplified in the previous section. In case there is an override mechanism, government ultimately decides about monetary policy. Whether it uses the override mechanism is of less relevance, since simply the possibility of such an override will influence the behaviour of the central bank. This link with accountability is also present in an alternative line of research which has 'solved' the dynamic inconsistency problem by contracting (Persson and Tabellini 1993, Walsh 1995, Svensson 1997). The idea is to let the principal of the central bank impose an explicit inflation target for monetary policy and make the central banker explicitly accountable for his success in meeting this target. Walsh has argued that an optimal linear inflation contract can eliminate the inflationary bias.

In general, if the central bank is not always able to decide on monetary policy as government is able to interfere, this may enhance accountability and reduce independence. Still, on the basis of the foregoing analysis, we would argue that on theoretical grounds this reduction in independence is welfare increasing. In both the Lohmann and Walsh models government (or Parliament) ultimately bears the final responsibility for monetary policy and this yields more superior outcomes in comparison to the situation where the central bank bears ultimate responsibility. Also on empirical grounds, it can be argued that for the inflation performance of central banks the issue of who bears the final responsibility for monetary policy is not crucial. Recently, de Haan and Kooi (1997) have decomposed various indicators of central bank independence and they conclude that in fact only instrument independence is related to the inflation performance in OECD countries.

With respect to the objectives aspect of accountability there is no inherent trade-off between accountability and independence. If the law stipulates that the objective of the central bank should be price stability, the central bank, of course, no longer has goal independence. However, both in the theoretical and empirical literature on central bank independence, this has been considered as positive. For instance, in constructing his measure of central bank independence, Cukierman (1992) takes this issue into account as follows. If the statute of a central bank defines price stability as the primary policy goal, the central bank concerned gets a high score on this part of his index, since "in Rogoff's terminology, it measures how strong is the "conservative bias" of the central bank as embodied in the law" (Cukierman 1992, p. 377).

One important reason that some authors argue that there is a trade-off between independence and accountability has to do with the concept of a 'conservative' central banker. From a practical point the concept of a 'conservative' central banker seems void, if only since the preferences of possible candidates for positions in the governing board of a central bank are generally not very easy to identify and may change after they have been appointed. This uncertainty is crucial in a number of models, like that of Nolan and Schaling (1998). Defining accountability as a mechanism whereby agents' actions are made apparent to the principal, these authors argue that if agents are unsure of how the central bank is going to act (i.e., there is uncertainty over the central bank's inflation versus output stabilisation preferences), their expectations of inflation are less accurate than they otherwise would be. Generally, it is likely that inflation expectations will be higher. It follows that inflationary expectations may be reduced both by an increase in accountability (in the definition of Nolan and Schaling), and/or an increase in the degree of central bank independence. For a given target level of inflation the optimal degree of central bank accountability is higher the lower is the degree of central bank independence.

So, how is legal central bank independence related to legal accountability in practice? Before we can answer this question by comparing the relationship between our index of accountability and a measure of central bank independence, we have to update the chosen measure of independence, i.e. the Eijffinger-Schaling index as this index does not relate to the same year as our accountability index (i.e. 1997). Eijffinger and Schaling (1993) and Eijffinger and van Keulen (1995) have constructed an index for CBI which is based on three issues: the loca-

tion of the final responsibility for monetary policy, the absence or presence of a government official on the board of the central bank and the fraction of board appointees made by government. Table 3 shows the updated indicator. As various central bank laws have been changed over the last years, it is important that our indicator for central bank accountability and the indicator for CBI refer to the same moment.

Figures 1-3 show the relationship between the various aspects of accountability and the updated indicator of CBI. Table 2 shows the regressions. It follows that there appears a negative relationship between CBI and two aspects of accountability, albeit that the relationship between CBI and transparency is a weak one. Our first aspect of accountability shows a positive relationship with CBI, albeit that this relationship is not significant.

Finally, we have investigated whether there was any significant relationship between inflation and accountability, using the inflation rates in 1997. This was not the case (the estimated coefficient was 0.09, with a t-statistic of 1.07). Using more observations for inflation does not make much sense, as the central bank laws in many countries have changed considerably over the last few years.

5. Concluding comments

Most politicians in Europe nowadays seem to be convinced that the ECB should be very independent. Indeed, there are compelling reasons for this view (de Haan 1997). However, as Issing (1998, p. 4) points out:

"The independence of a central bank is not an end in itself but only a means of achieving an objective set by the legislature. The associated purpose-oriented transfer of responsibility implies that the central bank is to be held accountable for its decisions. In particular, it has to disclose and justify the progress it has made in attaining its final goal, its monetary policy strategy, and its ongoing monetary policy measures".

Democratic accountability should not necessarily be regarded as a restrictive mechanism limiting the independent position of the central bank but, on the contrary, can be seen as a validating mechanism le-

gitimising the independent position of a central bank. Thus, the relationship between central bank independence and democratic accountability is characterised not primarily by a trade-off between the two principles. A central bank with a proper accountability mechanism is not simply a central bank which has been stripped of its independence (central bank accountability = the reciprocal of central bank independence). However, the drafters of the Maastricht Treaty seem to have forgotten that the democratic accountability of a central bank is also important. This could be due to the idea among policy makers that there is a trade-off between independence and accountability. Although this might be true regarding the final responsibility for monetary policy, a clear and quantified objective and transparency of monetary policy will certainly be beneficial to the position of the central bank. The ECB seems to be aware of this and has made it clear that it strives for a transparent conduct of monetary policy.

TABLE 2

THE UPDATED EIJFINGER-SCHALING INDICATOR FOR CENTRAL BANK INDEPENDENCE

Aspect	Australia	Belgium	Canada	Denmark	France	Germany	Italy	Japan	Netherlands	New Zealand	Spain	Sweden	Switzerland	UK	US	ECB
1.	-	*	-	**	**	**	-	*	**	*	*	*	**	*	*	**
2.	-	*	-	*	*	*	*	*	*	*	*	-	*	*	*	*
3.	-	-	-	-	-	*	-	-	-	-	-	-	*	-	-	*
Total	1	3	1	4	4	5	2	3	4	3	3	2	5	3	3	5

TABLE 3

SIMPLE REGRESSION BETWEEN CBI AND ASPECTS OF ACCOUNTABILITY

Aspect of accountability	Constant	Accountability	R ² (adj.)
Objectives	2.71 (5.44)	0.29 (1.23)	0.03
Transparency	3.92 (8.16)	-0.58 (-1.92)	0.15
Final responsibility	5.31 (9.85)	-0.75 (-4.30)	0.54
Total	4.43 (5.59)	-0.22 (-1.69)	0.11

FIGURE 1

ACCOUNTABILITY AND INDEPENDENCE

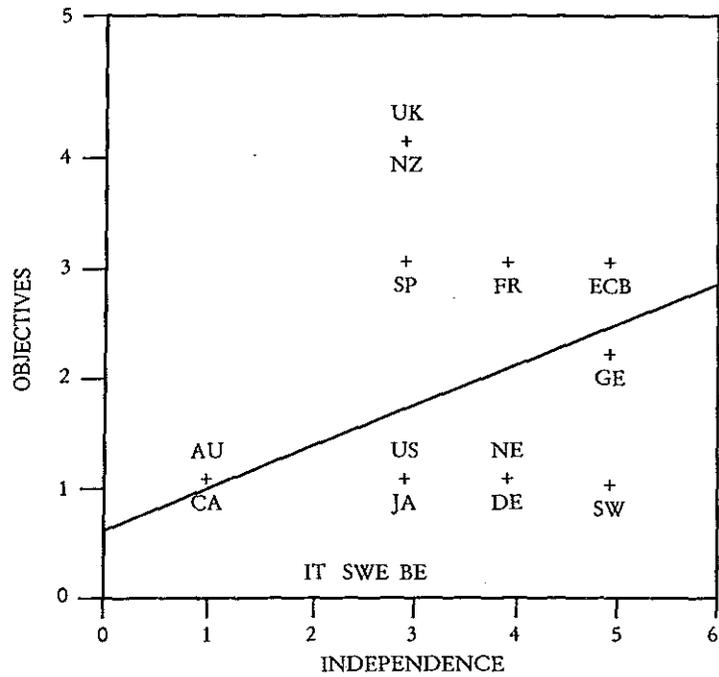


FIGURE 2

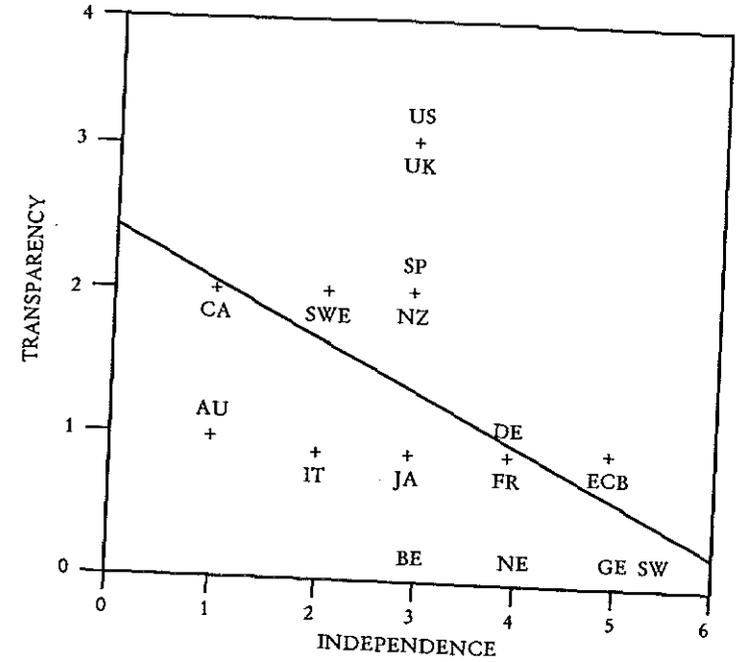
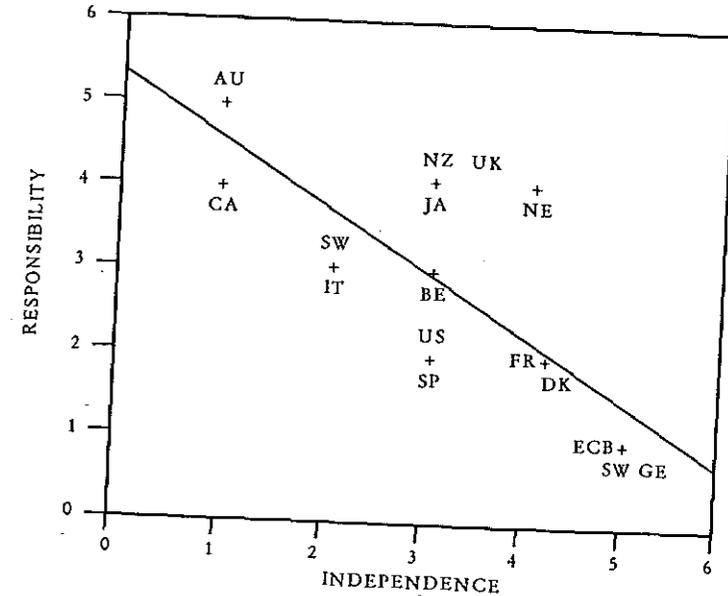


FIGURE 3



- GREENSPAN A. (1993), *Statement before the Committee on Banking, Finance, and Urban Affairs*, U.S. House of Representatives, October 13.
- ISSING, O. (1998), "The European Central Bank as a new institution and the problem of accountability", in Deutsche Bundesbank, *Auszüge aus Presseartikeln*, Nr. 19, 24 März, pp. 1-7.
- LASTRA, R.M. (1997), "European Monetary Union and central bank independence", in M. Andenas, L. Gormley, C. Hadjimenamou and I. Harden eds, *European Economic and Monetary Union: The Institutional Framework*, Kluwer Law International, London, pp. 291-329.
- LEVY, D.A. (1995), "Does an independent central bank violate democracy?", *Journal of Post Keynesian Economics*, vol. 18, pp. 189-210.
- LOHMANN, S. (1992), "Optimal commitment in monetary policy: credibility versus flexibility", *American Economic Review*, vol. 82, pp. 273-86.
- MCCALLUM, B.T. (1995), "Two fallacies concerning central-bank independence", *American Economic Review, Papers and Proceedings*, vol. 85, pp. 207-11.
- NOLAN, C. and E. SCHALING (1998), "Monetary policy uncertainty and central bank accountability", *De Economist*, vol. 146, pp. 585-602.
- PERSSON, T. and G. TABELLINI (1993), "Designing institutions for monetary stability", *Carnegie-Rochester Conference Series on Public Policy*, vol. 39, pp. 53-84.
- POSEN, A.S. (1995), "Declarations are not enough: financial sector sources of central bank independence", *NBER Macroeconomics Annual 1995*.
- ROGOFF, K. (1985), "The optimal degree of commitment to an intermediate monetary target", *Quarterly Journal of Economics*, vol. 110, pp. 1169-90.
- ROLL, E. et al. (1993), *Independent and Accountable, A New Mandate for the Bank of England*, The Report of an Independent panel chaired by Eric Roll, Centre for Economic Policy Research, October.
- STIGLITZ, J. (1998), "Central banking in a democratic society", *De Economist*, vol. 146, pp. 199-226.
- SVENSSON, L. (1997), "Optimal inflation targets, 'conservative' central banks and linear inflation contracts", *American Economic Review*, vol. 87, pp. 98-111.
- WALSH, C.E. (1995), "Optimal contracts for central bankers", *American Economic Review*, vol. 85, pp. 150-67.