Richard A. Werner (2006), What accession countries need to know about the ECB: A comparative analysis of the independence of the ECB, the Bundesbank and the Reichsbank, in: Emerging European Financial Markets: Independence and Integration Post-Enlargement, *International Finance Review*, Volume 6, 99-115,
ISSN: 1569-3767/doi:10.1016/S1569-3767(05)06005-X

What Accession Countries Need to Know About the ECB: A Comparative Analysis of the Independence of the ECB, the Bundesbank and the Reichsbank

Richard A. Werner[1]

1. INTRODUCTION

The popular rejection of the European constitution in France and the Netherlands triggered much debate in and around the European Central Bank (ECB) concerning the long-term viability of the euro. The region of European Monetary Union (EMU) member countries has suffered from economic strains for several years: while Germany has been in a severe economic downturn since 2001, and thus its government has implored the ECB to adopt more stimulatory monetary policy, other countries, such as Ireland and Spain, have been in the midst of an economic boom. With the prospect of a slowdown in the political process of forming a United States of Europe, a number of observers and policy-makers have begun to review the long-term viability of the European currency system. In early June 2005, politicians in Italy even publicly contemplated the possibility of leaving the euro-system and re-introducing their domestic currency, thus enabling Italy to conduct its own monetary policy, suitable for its own policy goals. Meanwhile, policy-makers in a large number of East European and Asian countries continue to favour joining the EMU and adopting the euro at the earliest possible date. Given the most recent events and discussions, and after several years of experience with the euro, it may be a suitable time to reconsider some of the potential benefits and disadvantages for new accession countries to join the euro system in the future.

A comprehensive cost-benefit analysis of joining the euro would include many aspects of monetary union, including the ability to achieve domestic policy goals such as stable prices, stable growth and low unemployment, as well as an assessment of whether the proposed currency union meets the recognized criteria for optimal currency areas. Before engaging in such a comprehensive exercise, however, potential accession countries need to be certain that the current institutional set-up of the ECB is appropriate and likely to achieve its self-declared goals. The question potential new entrants to the European monetary system (EMS) need to ask is whether, given the empirical record (i.e. the relevant historical experience), we can expect the present institutional and legal framework of the ECB to provide a suitable incentive structure for achieving the officially declared goals of stable prices, stable growth and low unemployment. This is the question considered in this chapter. Only if one can answer this question in the affirmative should accession to the euro be contemplated and a full-blown cost-benefit analysis be conducted. It is thus the purpose of this chapter to focus on the institutional design of the ECB in order to reconsider whether the lessons of historical experience have been learned.

2. CENTRAL BANK INDEPENDENCE NOT A REQUIREMENT FOR LOW INFLATION

The Bundesbank is commonly considered one of the most successful central banks in the world, and usually the most successful in Europe. Before introduction of the

euro, the Deutsche Mark was the anchor currency of the EMS. After the US dollar, it was the second most widely used currency in the world. After the collapse of the Iron Curtain, it had quickly become the common currency for international trade in Eastern Europe. Several
Eastern European countries adopted explicit currency boards linked to the Mark, while some even adopted the Mark outright as their currency.[2]

Given its generally acknowledged success, it is little wonder that the officially declared goal of a common European currency has been to emulate the Deutsche Mark, and likewise, for the ECB to be modelled on the Bundesbank. The question asked in this chapter is therefore more specifically whether the lessons of the Bundesbank have indeed been learned and reflected appropriately in the structure of the ECB.

The main policy mistake made by central banks is usually considered to be inflation. Many economists have therefore reduced the definition of successful central bank policy to the requirement that there be little inflation. Indeed, during much of the postwar era, German inflation has been modest by international comparison. Defining the success of the Bundesbank solely by inflation, the next step is to identify the reasons for the success of the Bundesbank to achieve low inflation.

A substantial literature makes the claim that the Bundesbank - and indeed any other central bank - mainly achieved low inflation due to its legal independence. This is the reported result of research on the link between central bank independence and inflation (Cukierman, Webb & Neyapti, 1992; Alesina & Summers, 1993; Eijffinger, Schaling, & Hoeberichts, 1998), which often claims that there is significant empirical evidence for a negative correlation between independence and inflation. From this it would appear that the less influence governments can exert over central banks, the more stable the currency.[3] The scientific evidence in favour of central bank independence that was relied upon in the Maastricht Treaty derives from a study commissioned by the European Commission itself (Emerson & Gros, 1992). Published under the name *‘‘One market, one money,”* the study purported to demonstrate that central bank independence leads to low inflation.

However, these findings have been subjected to severe criticism by a number of scholars. Forder (1998) finds a large number of severe problems with Emerson and Gros (1992). The study arbitrarily selects a number of countries, then arbitrarily determines the degree of independence of their central banks and then finds that this is correlated with the past inflation performance of the country concerned. There were no robustness tests to determine whether the results vary if a different time period is used for average inflation or if a different selection of countries is chosen.[4] The methodology employed to determine the degree of central bank independence of the countries that were examined is also subject to criticism, such as subjectivity bias. Even leaving aside these criticisms, Forder (1998) confirmed whether the researchers followed their own definitions of independence and hence were at least consistent in their argument - the most basic, necessary but not sufficient requirement for scientific research. Correcting for apparent mistakes made by the studies used in Emerson and Gros (1992), Forder finds that some of the data points from the countries most crucial for obtaining the result suddenly differ. After correction, no statistically significant correlation could be detected between independence and inflation. The conclusion: The data and method used by the economists commissioned by the European Commission do not provide evidence of any apparent relationship between central bank independence and inflation.

Other studies have since confirmed Forder's conclusion. Mangano (1998) shows that the most commonly used indices of central bank independence are subject to a rather large subjectivity bias. It is also often argued (Posen, 1998; Forder, 1998; Hayo, 1998) that central bank independence and the commitment to a low inflation rule is determined jointly and endogenously by social attitudes. Thus independent central banks may be successful in implementing low and stable inflation merely because their independence reflects a social attitude that supports low inflation. Other researchers conducted multi-country tests of the relationship between central bank independence and inflation and concluded that there is no evidence that greater central bank independence results in lower inflation and price stability (Daunfeldt & de Luna, 2003). It must therefore be concluded that central bank independence is not shown to be consistently linked to low inflation.

3. OTHER DEFINITIONS OF SUCCESSFUL CENTRAL BANK POLICY

While it is commonly argued that the success of the Bundesbank is described by its inflation record, it is not clear that this statement has been established scientifically. Inflation is not the only example of central bank policy mistakes. Japan's inflation rate has been lower than German inflation for much of the post-war era. Hence if success is solely defined by low inflation, then the Bank of Japan beat even the highly respected Bundesbank at its game. Japanese consumer price inflation averaged 1.5 per cent in the last 20 years, compared to 2.5 per cent in Germany. Consumer price inflation in the late 1990s even turned negative in Japan, averaging 0.8 per cent during the 1990s (compared to 2.3 per cent in Germany). Yet, few economists would consider Japanese monetary policy a success over the last two decades. Especially for the past 15 years Japan's economy has operated below its potential growth rate, resulting in unemployment. Hence the Bank of Japan is not usually considered a highly successful central bank. This demonstrates that low inflation cannot be the sole requirement to measure the success of central bank policy.

Apart from inflation, there appear to be other serious problems that central bank policy can create - such as recessions. In this case, inflation may be low, but the economy may suffer from large-scale unemployment. Central banks can also create deflation, which increases the debt burden of borrowers, such as house owners with mortgages. Again, by the measure of absence of inflation, a central bank would have been successful.

Central bank policy can also provide fertile grounds for speculative booms and asset inflation. Many economists would argue that central bank policy has been a factor in the rise of equity prices in the Nasdaq market, or the movement of real estate prices in countries as diverse as the USA, UK, Spain, Australia, the Scandinavian countries, Japan and much of Asia. These asset booms are often followed by busts and financial crises.

Systemic banking sector crises, involving significant corporate and financial distress and economic dislocation have occurred in many countries during the past two decades. Caprio and Klingebiel (1999) identified 93 countries in which a systemic financial crisis occurred during the 1980s and 1990s, of which five were in industrial countries and the remainder in the developing world. Well-known examples include the crises among Scandinavian countries in the 1990s, the prolonged Japanese crisis of the 1990s, the Mexican crisis of 1994, the so-called Asian financial crisis, involving Thailand, Korea, Indonesia and Malaysia and crises in transition economies. In all these instances, consumer price inflation may have been low or stable, yet many observers would be reluctant to classify central bank policy as ''successful''. It is apparent that the mainstream definition of successful central bank policy is derived from an excessively [on] focus on one area of potential central bank error - probably based on the experience of the early 1970s, when expansionary central bank policy was a significant cause of inflation in many countries (Barsky & Kilian, 2000; IMF, 2000; Werner, 2003).

In all these cases, central bank policy must be considered unsuccessful. Returning to the main focus of attention - the success of the Bundesbank - it becomes apparent that its success was not merely characterized by low inflation (as there are other countries, such as Japan, with lower inflation), but by the successful avoidance of boom-bust cycles, asset inflation and deflation. In general, the Bundesbank not only achieved stable prices (including asset prices), but also stable economic growth, with a reasonably high capacity utilization (and hence reasonably close to potential).

German economic growth was fairly high throughout the post-war era, recording 6 per cent in real terms in the 1950s and 1960s, and averaging 2.7 per cent in the 1970s, the 1980s and again the 1990s. Unemployment, while rising especially in the mid-1980s and late 1990s, remained significantly below that of other European countries.[5] This placed Germany among the best performers of all industrialized countries. Moreover, there has neither been a deflationary credit crunch, nor a nationwide asset bubble based on excessive speculation in financial investments in Germany - as happened in so many other countries the world over.

It is this broader definition of success that is relevant in order to identify the institutional features that may have been responsible for this success, and in order to confirm whether these lessons have been learned in the establishment and conduct of the ECB. When defining success more broadly to include stable growth and the avoidance of cycles and financial crises, what have been the institutional features that ensured the Bundesbank’s success?

4. INDEPENDENCE AND SUCCESSFUL CENTRAL BANK POLICIES

There is no evidence that the central bank policies leading to asset inflation, financial crises or deflationary recessions over the past twenty years were mainly due to the influence by other players, such as governments. Instead, the relevant monetary policies were taken by central banks that were already largely independent from government interference concerning their credit quantity policies. This suggests that central bank independence alone does not guarantee economic success of monetary policy. For instance, no author in the literature suggests that the US central bank leadership was influenced by political pressure when it increased credit creation steadily throughout the 1990s, thus contributing to asset inflation. Meanwhile, research has indicated that the central banks of Thailand and Korea independently encouraged the commercial banks to increase lending to the real estate sector and set policies that encouraged the corporate sector to borrow from abroad.[6] These independent policy mistakes were followed by excessively tight credit policies, triggering deep recessions.[7] The case study that has been researched in greatest detail is the central bank of the second largest economy in the world: here the latest literature shows that the Bank of Japan acted independently when it forced the Japanese banks to create the 1980s asset bubble (via its informal ‘‘window guidance” credit controls) and when it maintained excessively tight quantitative credit policies throughout the 1990s, triggering a prolonged economic slump.[8]

An appropriate analysis of the determinants of the success of German central banking must include the question of when this success began. Abstracting from the temporary ‘‘Bank der deutschen Laender”, the predecessor of the Bundesbank was the Reichsbank. Unlike the Bundesbank, this German central bank is not generally credited with successful policies. Therefore, a comparative analysis of the institutional design and degree of independence of the Reichsbank and the Bundesbank should yield some insights into the relevance of legal independence for successful monetary policy and the potential identification of other relevant institutional features.

Like the Bundesbank, the Reichsbank was legally independent from the government. This independence existed to a great extent de facto since its foundation in 1875, because the central bank was largely privately owned and accountable to the shareholders.[9] Independence was explicitly written into law in May 1922, and lasted until 1939.[10] In August 1924, a new Banking Law again confirmed the Reichsbank's independence from the government - ''but greatly increased the influence over the central bank of Germany's foreign creditors''.[11] Thus unlike the Bundesbank, the Reichsbank was also legally independent from any other German institution, including the democratically elected parliament. While the Reichsbank was totally independent from German democratic institutions, it was under the control of the Reparations Commission, which was dominated by Wall Street banks.[12]

Thus we find that the Reichsbank was far more independent than the Bundesbank ever was. Indeed, at the time the Reichsbank was the most independent central bank in history. It is therefore relevant to examine the policy track record of this unprecedently independent central bank. As is well known, this track record is not impressive. The Reichsbank was responsible for one of the world's greatest inflations, namely the hyperinflation of 1922 and 1923 (in the latter year consumer prices rose 2 billion-fold). Subsequently, from the mid-1920s until 1933, the Reichsbank adopted highly restrictive policies and implemented a regime of direct credit controls, which forced banks to implement credit quotas imposed by the central bank. The first phase of credit tightening, between 1924 and 1926, was followed by an even worse credit crunch in 1931. Between 1924 and 1930, the decisionmaking power over Reichsbank policy was in the hands of one central banker, who therefore also became a politically powerful figure in German history, the economist Dr. Hjalmar Schacht. While Schacht set interest rates, the true monetary policy tool used by him was the quantity of credit, which he used to engage in structural policy, as well as regional policy. In other words, the highly independent Reichsbank used its powers over the creation and allocation of purchasing power in order to pursue political goals which went beyond what would normally be considered the mandate of a central bank's monetary policy. During the phase of tight control over the quantity of credit, from 1924 to 1930, Schacht pursued the goal to accelerate ''rationalization'', a process referred to by today's central bankers as "restructuring" and structural change.[13]

When US banks withdrew their deposits from German banks in the aftermath of the US credit crunch that began in 1929, the Reichsbank insisted that the banks call in their loans to German industry to pay the US depositors. As had been expected, industry had invested the funds in plant and equipment. The policies of the independent Reichsbank meant that firms had to close down and sell their assets. Overnight, mass unemployment was triggered. Germany was thrown into the great depression. For those who trust that such disastrous policies will not be repeated, it may instructive that the central banks of Thailand, Korea and Indonesia virtually followed the extraordinary policies of the Reichsbank 70 years earlier. In a further parallel to events of the 1920s, international bankers, this time represented by the International Monetary Fund (IMF), not the Reparations Committee, demanded deep structural changes from these Asian nations.

The economic instability that doomed the Weimar Republic was not only due to the substantial separation demands of the victors of the First World War. It was at least as much due to an unaccountable central bank that had excessive powers. Germany's first democracy had little chance, since the powers of the government were severely limited by the fact that an independent and unaccountable central bank set the policies that determined economic growth. Economists concluded that the Reichsbank had become a ‘‘second government’’ *(Nebenregierung)* that acted independently from the elected government.[14] The democratically elected government was the less powerful one.

Being independent from the German government did not prevent the Reichsbank from adopting the misguided policies of the 1920s and early 1930s that ultimately proved fatal for Germany and the world, as they set the stage for the arrival of a pro-growth party, the NSDAP. It remains to be added that the key central banker, having become so powerful due to the institutional design of the Reichsbank, become the single most influential person supporting the candidacy of Adolf Hitler as Chancellor of Germany. This lesson in the benefits of central bank independence serves to remind ourselves that arguing in favour of independent central banks effectively is to say that politicians cannot act in the national interest. Only central bankers, neutral and objective technical experts as they are, can take decisions for the benefit of the people.

No doubt this is a cynical view of democracy as a system. It was also the view taken by the NSDAP, which argued that politicians could not be trusted. It is a view that is not without dangers, as it effectively proposes technocratic totalitarianism. The evidence suggests that this approach is also naive. The highly acclaimed monetary technician Hjalmar Schacht, for one, used his skills and legal powers to actively and purposely hand Germany over to Adolf Hitler. He was rewarded for his services by being reappointed as head of the Reichsbank from 1933 to 1939 and as powerful minister in Hitler's cabinet.[15]

5. THE INSTITUTIONAL FEATURE RESPONSIBLE FOR THE SUCCESS OF THE BUNDESBANK

This analysis of the legal predecessor of the Bundesbank helps in the quest to identify the institutional features that rendered the Bundesbank successful. Considering the official goal of monetary policy, it must be recognized that legally the Bundesbank was not just required to work towards price stability. In 1967, 10 years after the founding of the Bundesbank, parliament passed the Stability and Growth Act, which clearly set out the objectives of Bundesbank policy as ‘‘price stability, a high level of employment, external equilibrium, steady and adequate economic growth’’. Put simply, the law mandated the Bundesbank to produce low inflation and stable growth. This was also what the Bundesbank had in mind when it made its policies. Bundesbank President Klasen, for instance, is said to have ‘‘accorded economic growth equal priority to monetary stability’’ (Holtfrerich, 1999, p. 194).

The Bundesbank is often thought to have been the most independent central bank in the world. In reality, the independence of the Bundesbank was clearly limited. Firstly, central bank independence was not enshrined in the constitution and was thus not irrevocable. Moreover, the Bundesbank was only given “independence from government instructions”. When this was formulated, the law makers, presumably remembering the lessons from Weimar, explicitly warned that this phrase ‘‘of course must not be interpreted to mean that the central bank become a state within the state’’.[16] While being independent from direct instruction from the government, the Bundesbank was *not* independent from Parliament, which could pass laws or give instructions if it so wished. Moreover, it was not independent from other institutions of the Federal Republic, but was subject to German laws, was accountable to the federal audit agency *(Bundesrechnungshof)* and the decisions of German law courts.

But even the independence from the government was limited, for the Bundesbank Law also said explicitly that ‘‘it is the duty of the Bundesbank ... while fulfilling its tasks to support the general economic policy of the Federal Government”. And there is virtually no time period when the government’s main policy aim was not to achieve satisfactory economic growth. Despite the inability to give direct instructions to the central bank, government representatives could join the policy board meetings of the Bundesbank and expect the bank to support their policy objectives of nearfull employment. As legal experts point out, if the government placed a different emphasis among the goals of the Stability and Growth Act than the Bundesbank - for instance by pursuing economic and employment growth - then as long as price stability was not neglected, the Bundesbank was obliged to follow the policies of the government. Ignoring the goals of the Stability and Growth Act would have been illegal.[17]

There were other incentives embedded in the legal structure that helped make the Bundesbank successful. For instance, the Bundesbank had a decentralized structure that included representatives of the German states in the policy decision-making, which were appointed by the Bundesrat. Moreover, each regional representative was in turn advised by representatives of the various occupations, including trade unions.[18] As a result, the decisionmaking process of the Bundesbank was usually well balanced, reflected the various parts and regions of society, had to take government policy into consideration and was subject to legal checks and balances.

This multi-faceted accountability and consensus orientation produced the Bundesbank's successful monetary policy. There are many instances where the government would have liked it to stimulate the economy more, but the Bundesbank refused. The downfall of three chancellors - Ludwig Erhard in 1966, Kurt Georg Kiesinger in 1969 and Helmut Schmidt in 1982 - was directly or indirectly linked to tight Bundesbank policies.[19] Often the government, not the Bundesbank turned out to be right.[20] But ultimately there were political limits on the Bundesbank to act alone against the interests of the population.[21]

Ironically, it must therefore be concluded that the success of the Bundesbank was less due to its independence, but instead to its subtle *dependence* on the other elements of the democratic system. The legal design rendered the central bank highly accountable for its policies, and it was always clear that these policies could not solely consist of producing low inflation, but had to reflect the goal of stable economic growth. By contrast, the Reichsbank's failure was due to its excessive independence without accountability and recourse. Thus comparing the Reichsbank and the Bundesbank, we find that the *reduction* in central bank independence and the introduction of accountability and dependence on democratic institutions that was undertaken in the post-war period greatly enhanced the performance of central bank policy. Contrary to popular opinion, the Bundesbank's success was due to its comparative *lack* of independence. Thus in order to determine whether the ECB's institutional setting provides for the ingredients of success, as identified from German monetary history, one must determine whether the ECB is similarly accountable to the people to implement the twin goals of low inflation and stable growth.

6. RESURRECTION OF THE REICHSBANK

With the introduction of the ECB system, the German government has lost its influence over monetary policy. With the creation of the ECB, the Bundesbank Law was also revised. In the new Bundesbank Law, the German central bank not only became subject to the ECB instructions, but it is also no longer required to support the general policies of the government.[22] Neither is the ECB required to support the policies of the German government. It is, however, required to support the ‘‘general policy goals of the European Union (EU)’’. The Maastricht Treaty, which defines the role of the ECB, says that the ECB has a primary mandate to maintain stable prices. It also says that, ‘‘where it is possible without compromising the mandate to maintain price stability’’, the ECB will also support the ‘‘general economic policy of the EU’’, which includes, among others, ‘‘steady, non-inflationary and environmentally friendly growth’’ and ‘‘a high level of employment’’.[23]

This could be interpreted to mean that the ECB, like the Bundesbank, has to work towards the twin goals of low inflation and stable economic growth. However, the emphasis is explicitly on price stability. Moreover, unlike in the case of the Bundesbank, there are virtually no checks and balances on the actions of the ECB. It is therefore practically impossible for anyone, for instance a government, parliament or even the (unelected) EU Commission to enforce goals besides price stability. Unlike the Bundesbank, the ECB is not only independent from the government, but also from parliaments, democratically elected assemblies or other institutions of or within the EU. Moreover, the Maastricht Treaty, defining the ECB’s status, includes the unprecedented clause that no democratic institution within the EU is even allowed to *attempt* to influence the policies of the ECB, without acting illegally.[24] This is unprecedented among contemporary democracies.

In addition, the ECB is far less transparent than the Bundesbank was. For instance, the deliberations of its decision-making bodies are secret.[25] It is not required to publish the detailed information about its transactions (this requirement was also abandoned for the Bundesbank with the establishment of the ECB). While it has the power to obtain data from any bank or company in the EU, the ECB is not obliged to publicize such or any specific statistics.

Not surprisingly, the ECB’s statutes are already being interpreted as virtually exclusively aimed at price stability. Wim Duisenberg, when he was head of the ECB’s predecessor organization, the EMI, told us that he favours ‘‘a single monetary policy which strictly aims at price stability in the euro area as a whole’’.[26]

7. CONCLUSIONS

The ECB is far more independent than the Bundesbank has ever been. It is also far more independent than the US central bank, the Federal Reserve, whose legal status is far weaker and which is directly accountable to Congress and the government.[27] We find that the ECB is the least accountable central bank among advanced nations. Its degree of independence has only one precedence: the Reichsbank, a central bank with one of history’s most disastrous records.

One must conclude that there is a danger that the incentive structure of the staff at

the ECB is not sufficient to guarantee optimal economic policies. This is worrying. It suggests that the lessons of German history were not interpreted correctly and the ECB was created on the wrong foundations. Instead of adopting those features that made the Bundesbank successful - accountability and interdependence with other democratic institutions - the creators of the ECB revived the corpse of the unaccountable
Reichsbank. The ‘‘human wisdom nurtured by history’’ (cited by Bank of Japan governor Mieno (1994) to support central bank independence, see Bank of Japan, 1994) tells us that it is dangerous to hand vast powers without checks and accountability into the hands of a few unelected officials. Human wisdom is not to revive the Reichsbank. But the creation of the ECB seems to have done that. These are the issues that any country considering accession to the euro must debate and analyse appropriately before coming to a final decision.

Another issue that remains under-researched concerns the details of monetary policy implementation of the ECB. While officially monetary policy is set via interest rates, it is apparent that despite the same interest rate for all member countries of euroland, very diverse quantity policies are implemented under the instruction of the ECB by the various national central banks. For instance, in 2001 and 2002 the Bundesbank, under orders the ECB, reduced its credit creation by a record amount, thereby precipitating a recession in Germany, while at the same time the central banks in Ireland and Spain increased their credit creation. While interest rates are identical, information value is gained from scrutiny of the quantitative credit policies. Furthermore, recent research in macroeconomics suggests that due to imperfect information and consequent pervasive market rationing, quantities may in any case be more relevant for observers, forecasters and policy-makers (Werner, 2005). Given these open questions, potential entrants would be well advised to engage in further research concerning these issues, before giving up economic control to the ECB.

Economic theory suggests that for potential new entrants to the EMU a comprehensive assessment of the costs and benefits is advisable. Before such comprehensive analysis can be conducted, it is necessary to determine whether the current institutional design of the ECB and control over the euro follows the best practice that empirical evidence would suggest, based on the experience of a successful central bank, such as Germany’s. This paper first considered the definition of “successful” monetary policy, and then engaged in comparative institutional analysis in order to identify the true lessons of German central banking experience and whether these have been heeded in the design of the ECB. The conclusion is devastating: the ECB does not follow the best practice suggested by the experience of the Bundesbank. Instead, it is in line with the institutional design of one of the least successful central banks in history, the German Reichsbank. This sounds a strong note of caution, as a number of important issues require further research, before a hasty decision is made by any country about handing over monetary policy control to the ECB.

NOTES

1. The author is grateful to Dirk Bezemer and James Forder for valuable comments and active contribution to this research program. Research assistance by Jim MacDonald and support by the Profit Research Center Ltd., Tokyo, are gratefully acknowledged. This paper draws heavily on an older version reported in Werner (2003).

2. The success of the Bundesbank was so obvious that many observers called its planned abolition a ''puzzle'': ''The Deutsche Mark became the key currency of the EMS and one of the world's major currencies; by the 1980s it was second to the US dollar in terms of the proportion of world trade that was invoiced in it. That so much was achieved in such a relatively short time makes the history of the currency remarkable. What is perhaps even more remarkable is its future. That a currency which achieved so much, and which was for that reason so popular with the citizens of the country which used it is to disappear into EMU in 2002 is, at the least, surprising. An observer who simply saw what had happened ... would be as at a loss to understand ... One could not but be surprised that a currency at once a cause and a symbol of Germany's recovery should be abandoned in a democracy.'' Capie and Wood (2001).

3. Klaus Stern argues that it is ''right'' to give independence to central banks, for ''never has a central bank destroyed a currency on its own volition'' (Stern, 1998, p. 183). See also other contributors to Baltensperger and Deutsche Bundesbank (1999), such as Neumann, who asserts that ''monetary stability cannot be maintained unless governments are prevented from gaining access to the country's money supply'', p. 275.

4. For instance, the study failed to include many members of the EU, such as Austria, Luxembourg, Portugal, Ireland and Greece.

5. German unemployment averaged 5.3 per cent between 1975 and 1997, compared to 9.1 per cent for France, 7.1 per cent in Italy and 8.7 per cent in the UK. Data according to the US Bureau of Labour Statistics.

6. See Werner (2000a, b).

7. This time they were influenced - by the IMF. See the letters of Intent.

8. Werner (1998, 2002a, 2005).

9. Rudolf von Havenstein, for instance, became President of the Reichsbank in 1908 and strongly defended the principle of central bank independence. See Stern (1998).

10. In January 1939, the Reichsbank Law was changed, the central bank renamed Deutsche Reichsbank, and made directly accountable and subordinate to the Reich government.

11. Marsh (1992). Article 1 of the Banking Law said that ''The Reichsbank is a bank independent form the Reich government''.

12. Article 14 gave half of the seats on the Reichsbank's 14 strong general council to foreign members from Britain, France, Italy, Belgium, America, Holland and Switzerland. Article 19 established a Commissioner for the note issue, who was required to be a foreigner. The appointment of all of the members, including the German ones, fell under the sway of the

Reparations Commission and the banks that controlled it (Marsh, 1992). This commission had no mandate to operate in the interest of the German people. To the contrary, its job was to efficiently extract the Reparations imposed on Germany by the Treaty of Versailles. Officially the payments were to the UK and France. But Britain had been vastly indebted to US Wall Street banks. Thus the Reparations Commission was staffed with members from JP Morgan and other US banks and the reparations payments were dollar denominated.

13. For details, see Werner (2002b).

14. See, for instance, Bosch (1927); Dalberg (1926); Mueller (1973).

15. For an introduction to Schacht's activities to help Hitler into power, see, for instance, Marsh (1992); Weitz (1997); Werner (2003).

16. Stern (1998), p. 186.

17. See, for instance, Stern (1998), ibid.

18. The Bundesbank had two decision-making bodies, the Zentralbankrat, consisting of the Direktorium and the Presidents of the state central banks, which decides policy; and the Direktorium, consisting of the President, Vice-President and up to six other members, which is responsible for implementing this policy. While the Direktorium is suggested by the government, the Presidents of the state central banks are proposed by the Bundesrat.

19. Marsh (1992).

20. For instance, in 1972, when Economics and Finance Minister Karl Schiller correctly argued that the excessive credit creation by the USA and massive flight from the dollar should be countered by revaluing the Deutsche Mark, the Bundesbank under President Klasen refused. The highly popular and hitherto successful minister was forced out of the government and resigned. A year later the Bundesbank took exactly his advice. See, for instance, Marsh (1992).

21. As was clearly seen with German monetary union, the details of which the Bundesbank clearly disagreed with. With Karl-Otto Poehl's resignation it seemed that, for once, a Bundesbank president was the one to resign as a result of a disagreement with the government, not the chancellor or finance minister.

22. The new paragraph in the Bundesbank Law says that the Bundesbank will only support the general economic policy of the government as far as this is possible with its task as part of the European System of Central Banks (ESCB).

23. Protocol no. 3 on the ESCB and the ECB, as well as the Maastricht Treaty, Article 105, says that ''the primary objective of the ESCB shall be to maintain price stability. Without prejudice to the objective of price stability, the ESCB shall support the general economic policies in the Community with a view to contributing to the achievement of the objectives of the Community as laid down in Article 2. The ESCB shall act in accordance with the principle of an open market economy with free competition, favoring an efficient allocation of resources, and in compliance with the principles set out in Article 3a.'' The goals mentioned in Article 3a of the Maastricht Treaty are: stable prices, healthy public finances and general monetary conditions, as well as a sustainable current account balance. Article 2 lists as purpose of the EU, the harmonious and balanced development of the economy, steady, non-inflationary and environmentally friendly growth, a high degree of convergence of economic performance, a high level of employment, a high degree of social security, the raising of the standard of living and the quality of life and the economic and social cohesion and solidarity between member states.

24. Article 107 establishes an independent and unaccountable apparatus: ''When exercising the powers and carrying out the tasks and duties conferred upon them by this Treaty and the Statute of the ESCB, neither the ECB, nor a national central bank, nor any

member of their decision-making bodies shall seek or take instructions from Community institutions or bodies, from any government of a Member State or from any other body. The Community institutions and bodies and the governments of the Member States undertake to respect this principle and not to seek to influence the members of the decision-making bodies of the ECB or of the national central banks in the performance of their tasks.

25. Article 108a, 2 says: The ECB may decide to publish its decisions, recommendations and opinions. It does not mention the possibility of publicizing the content of the deliberations itself, only the results.

26. I am convinced that the risks [of Monetary Union] can be contained, if not fully avoided, by a high degree of sustainable convergence of those countries which participate in Monetary Union, by a single monetary policy which strictly aims at price stability in the euro area as a whole, by stability-oriented economic and fiscal policies and by sound wage developments in Stage Three.'' There is no hint that monetary policy will aim at both price stability and stable economic growth, as the Bundesbank did. He also said that he interpreted the mentioning of the ''general economic policies'' of the EU as an opportunity, but not an obligation for the ECB to give advice. He makes no mention of active support. "Furthermore, one may argue that Article 105.1 of the Treaty gives the ESCB the opportunity, if not the obligation, to support the general economic policies in the Community also by giving appropriate advice to those responsible for these policies and that this advice should be given with a view to supporting price stability and an open market economy with free competition, favouring an efficient allocation of resources.'' (Duisenberg, 1998).

27. Since the US constitution explicitly assigns the right to issue money to the government, a number of scholars even dispute the constitutionality of the Federal Reserve itself. This line of reasoning is also supported by well-known US economists. See, for instance, the writings of the economist Murray Rothbard, members of the so-called Austrian School of Economics and the Ludwig von Mises Institute (http:// www.mises.org/).

REFERENCES

Alesina, A., & Summers, L. (1993). Central bank independence and macroeconomic performance: Some comparative evidence. *Journal of Money, Credit and Banking, 25,* 151-162. Baltensperger, E., & Deutsche Bundesbank (Eds) (1999). *Fifty years of the Deutsche Mark: Central bank and the currency in Germany since 1948.* Oxford: Oxford University Press. Barsky, R. B., & Kilian, L. (2000). *A monetary explanation of the great stagflation of the 1970s.*
Mimeographed. University of Michigan. NBER Working Paper no 7547.

Bosch, W. (1927). *Die Epochen der Kreditrestriktionspolitik der Deutschen Reichsbank 1924/26.* Stuttgart.

Capie, F., & Wood, G. (2001). The birth, life and demise of a currency: 50 years of the Deutsche Mark. *The Economic Journal, 111*, F449-F461.

Caprio, J., & Klingebiel, D. (1999). *Episodes of systemic and borderline financial crises.* Mimeographed. World Bank, October, Washington, DC.

Cukierman, A., Webb, S. B., & Neyapti, B. (1992). Measuring the independence of central banks and its effects on policy outcomes. *World Bank Economic Review, 6*, 353-398. Dalberg, R. (1926). *Deutsche Wahrungs- und Kreditpolitik, 1923-26.* Berlin: R. Hobbing. Daunfeldt, S.-O., & de Luna, X. (2003). Central bank independence and price stability: Evidence from 23 OECD-countries. Paper presented at the *Eighth international conference on macroeconomic analysis and international finance.* 27-29 May 2004, University of Crete,

Crete, Greece. Available at: http://www.econ.umu.se/ues/ues589.pdf

Duisenberg, W. F. (1998). EMU - *How to grasp the opportunities and avoid the risks.* Speech delivered by the President of the European Monetary Institute, at the Forum de l'Expansion, Paris, 22 January 1998. See http://www.ecb.int/emi/key/key18.htm

Eijffinger, S., Schaling, E., & Hoeberichts, M. (1998). Central bank independence: A sensitivity analysis. *European Journal of Political Economy, 14,* 73-88.

Emerson, M., & Gros, D. (1992). *One market, one money.* Oxford: Oxford University Press.

Forder, J. (1998). The case for an independent European central bank: A reassessment of evidence and sources. *European Journal of Political Economy, 14,* 53-71.

Hayo, B. (1998). Inflation culture, central bank independence and price stability. *European Journal of Political Economy, 14,* 241-263.

Holtfrerich, C.-L. (1999). In: E. Baltensperger & Deutsche Bundesbank (Eds), *Fifty Years of the Deutsche Mark: Central Bank and the Currency in Germany since 1948.* Oxford: Oxford University Press.

IMF (2000). *The impact of higher oil prices on the global economy, staff report*. Available at: http://www.imf.org/external/pubs/ft/oil/2000/oilrep.PDF

Mangano, G. (1998). Measuring central bank independence: A tale of subjectivity and of its consequences. *Oxford Economic Papers, 50,* 468-492.

Marsh, D. (1992). *The Bundesbank: The bank that rules Europe*. London: Heinemann.

Mieno, Y. (1994). The conduct of monetary policy by the Bank of Japan. *Bank of Japan Quarterly Bulletin,* August, Bank of Japan, Tokyo, pp. 6-12.

Mueller, H. (1973). *Die Zentralbank als eine Nebenregierung.* Westdeutscher Verlag Opladen.

Posen, A. (1998). Central bank independence and disinflationary credibility: A missing link? *Oxford Economic Papers, 50,* 335-359.

Stern, K. (1998). In: Deutsche Bundesbank (Ed.) (1998). *Fuenfzig Jahre Deutsche Mark. Notenbank und Waehrung in Deutschland seit 1948.* Muenchen: Verlag C. H. Beck.

Weitz, J. (1997). *Hitler's banker.* Boston: Little, Brown and Company.

Werner, R. A. (1998). Bank of Japan window guidance and the creation of the bubble. In: F. Rodao & A. Lopez Santos (Eds), *El Japon Contemporaneo.* Salamanca: University of Salamanca Press. Also available from www.profitresearch.co.jp

Werner, R. A. (2000a). Indian macroeconomic management: At the crossroads between government and markets. In: *Rising to the challenge in Asia: A study of financial markets, Vol. 5, India.* Manila: Asian Development Bank, September. Also available from www.profitresearch.co.jp

Werner, R. A. (2000b). Macroeconomic management in Thailand: The policy-induced crisis. In: Ghon S. Rhee (Ed.), *Rising to the challenge in Asia: A study offinancial markets, Vol. 11, Thailand.* Manila: Asian Development Bank, September. Also available from www.prof- itresearch.co.jp

Werner, R. A. (2002a). Monetary policy implementation in Japan: What they say vs. what they do. *Asian Economic Journal*, 16(2), 111-151.

Werner, R. A. (2002b). A reconsideration of the rationale for bank-centered economic systems and the effectiveness of directed credit policies in the light of Japanese evidence. *The Japanese economy,* 30(3), 3-45. New York: M.E. Sharpe.

Werner, R. A. (2003). *Princes of the Yen, Japan's central bankers and the transformation of the economy.* New York: M.E. Sharpe.

Werner, R. A. (2005). *New paradigm in macroeconomics*. Basingstoke: Palgrave Macmillan.