THE FUTURE OF THE EURO: A PUBLIC CHOICE APPROACH Roland Vaubel

The future of the euro will not be like its past. The institutions, the rules, and the persons governing the European Monetary Union have been selected in a very special historical setting. They are not resistent to change, and they will adapt to normal conditions.

The overture to the euro game has been very special because initially one country—Germany—enjoyed veto power. Without German assent, the EMU would not have started. Moreover, Germany had most to lose, or least to gain, from the EMU because its central bank had won a position of monetary dominance in Europe. It is true that in December 1989 the German government under Chancellor Helmut Kohl had committed itself to the EMU in principle—in exchange for French assent to German reunification. But the implementation of that promise was a matter of choice and negotiation up to the very end in the second guarter of 1998. The German government was the driving force behind the statute, notably the independence of the European Central Bank; it imposed the Stability and Growth Pact on its reluctant partners; it delayed the redistribution of seigniorage which is at Germany's expense; it carefully screened the candidates for the Executive Board (including the president); and it made sure that the Economic Directorate would go to a German monetary conservative with a maximum term of office. Even though 7 of the 11 participating states had socialist-led governments in 1998, only 1 of the 6 executive directors had a socialist background, and even he, President Wim Duisenberg, was known to be a monetary conservative. This choice was not an attempt to correct for time inconsistency by appointing conservative central bankers à la Rogoff (1985) but the result of the German veto position.

Once the EMU had started, the German veto was gone. The

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Roland Vaubel is Professor of Economics at Mannheim University.

participating countries cannot even leave the EMU without leaving the European Union (EU) altogether. Appointments and policies are no longer determined by the most inflation-averse member country (as under currency competition) but by the median. The effects are already visible. They are the beginning of a shift away from initial conditions and toward the long-run politico-economic equilibrium of the game.

Decisionmaking

As in 1998, the executive directors have to be appointed unanimously.1 But now the EMU would also persist without the appointment of new executive directors. In the extreme case, the ECB could be run by a Governing Council exclusively composed of the national central bank governors. This means that the government which most closely shares the inflation preferences of the median national central bank governor will have the strongest bargaining power. I have shown elsewhere (Vaubel 2003a: Tables 6.1 and 6.2) that, in terms of both past inflation experience (1976–93) and popular preferences as revealed in opinion surveys, the median position among the national central bank governors has been held, with a short interruption in 2002–03,² by the two French members. Unlike in 1998, the German representatives are marginalized. If the two medians did not coincide, public choice theory would predict that, gradually, monetary conservatives on the Executive Board would be replaced by more inflationprone central bankers until the median of the Governing Council is the same as the median among the central bank governors.

An extremely important change of personnel will be the retirement of the German executive director in charge of economic affairs in May 2006. I expect that his successor at the Economic Directorate will not be a German and that the new German executive director will be nominated by the current left-wing government of Germany.

The constitutional convention chaired by Valery Giscard d'Estaing has proposed that various decisions about the instruments of monetary policy and the distribution of seigniorage should no longer be taken unanimously but by qualified majority (Article 107, section 5 TEU in the version of Nizza). This would enable a majority of

¹In November 2003, the Italian presidency had proposed that executive directors, except for the ECB president, ought to be appointed by a qualified majority.

²When the French vice president of the Executive Board was replaced by a Greek in May 2002, Finland took the median position until the Finnish member of the Executive Board was replaced by an Austrian in May 2003.

member states to raise the cost of minimum bank reserves at the expense of the minority of member states that host the main financial centers.

The Commission proposed in November 2003 that the European Council should be empowered to amend important parts of the ECB statute (Articles 10 to 12 and 43), acting unanimously and on a recommendation of the Commission, but without the assent of the ECB, without an intergovernmental conference and without any parliamentary control. This would enable the European Council, for example, to redefine price stability (Article 12) or to dismiss individual members of the ECB Council on charges of misconduct (Article 11.4).

Money and Inflation

In 1991, the member states agreed that price stability should be the primary objective of ECB monetary policy. But, unfortunately, the Treaty does not say what price stability means. So price stability had to be defined by the Governing Council of the ECB. Its initial definition was an inflation rate between 0 and 2 percent. The ECB Council did not announce money supply targets. This was to be expected from public choice theory. After all, only 1 of the 11 central banks (the Bundesbank) had done so in the recent past. Moreover, it is easier to agree on an inflation target and leave open how it may be attained. If it is not attained, this might be attributed to factors other than monetary policy. Failure to attain it will not be sanctioned.

Nevertheless, initially and, at German insistence, the Governing Council adopted a "reference rate for monetary expansion" of 4.5 percent (M3) as its primary indicator for monetary policy. But in May 2003, the Governing Council demoted this indicator to second rank.

The ECB, has explicitly derived its reference rate for monetary expansion from the quantity-theoretic equation

$$\Delta p = \Delta m - \Delta y + \Delta v$$

where Δp is the inflation rate, Δm is the rate of monetary expansion, Δy is the real growth rate of the economy and Δv is the rate of change of velocity. The ECB has declared that it assumes $\Delta y = 2.0$ to 2.5 and $\Delta v = -0.5$ to -1.0. Since $\Delta m^* = 4.5$, the equation implies an inflation target of 1 to 2 percent with a midpoint of 1.5 percent. But in May 2003, the ECB raised the inflation target above 1.5 percent. The new objective is to keep inflation close to, but below, 2 percent. An

inflation target of 1.999 . . . percent? This is something of a joke reminiscent of the worst excesses of Brussels diplomacy.

In the first two years of monetary union (1999–2000), inflation was low (1.75 percent on average) and below the upper limit of the target band. But since the price level reacts to monetary policy with a lag of about two years, these low inflation rates were simply inherited from the German Bundesbank. The ECB is only responsible for exceeding the ceiling in every single year since 2001, with an average of 2.27 percent.³

An inflation rate of 2.27 percent, it is true, is not particularly high by postwar European standards, but it is more than what other industrial countries with independent central banks achieved in the same period—such as Switzerland (.73 percent), Britain (1.30 percent), the United States (2.23 percent), and Sweden (2.17 percent).

Another worrisome sign is that the range of inflation rates within EMU was extremely wide. In 2002, inflation was 1.6 percent in Belgium but 4.7 percent in Ireland. In 2001, prices rose 1.8 percent in France but 5.1 percent in the Netherlands. These countries would have needed different monetary policies but in a monetary union this is not possible. As I have argued elsewhere (Vaubel 1978), such large real exchange rate changes indicate that the eurozone is probably not an optimum currency area (OCA).

Up to now, the ECB has also exceeded the monetary reference rate in every single year: M3 grew at a rate of 5.7 percent in 1999, 4.9 percent in 2000, 5.5 percent in 2001, 7.3 percent in 2002, and close to 8.0 percent in 2003. In April 1999, the ECB even cut its main financing rate at a time when the economy was already recovering and monetary expansion was exceeding its reference rate by a wide margin. If the ECB had kept monetary expansion in 1999 and 2000 at 4.5 percent—that is, 0.8 percent lower than it actually did—the inflation rate in 2001 and 2002 would have been 1.47 percent instead of 2.2 percent. In other words, if the ECB had stuck to its monetary reference rate, it would have kept inflation within its target range of 0 to 2 percent and very close to 1.5 percent, its original target point.

Central Bank Independence

Is the ECB as independent as the Bundesbank has been? On the one hand, the ECB is more independent because amendments to the

³Originally, the measured inflation average was 2.45 percent. But in March 2003 the index construction was changed, resulting in the lower average inflation rate of 2.27 percent. All inflation data are taken from *OECD Economic Outlook*, June 2004.

EC Treaty require the assent of 15 parliaments (each voting by simple majority) while the Bundesbank Law may be amended by a single parliament (also with a simple majority). On the other hand, the individual members of the ECB Governing Council enjoy less personal independence. The members of the German Central Bank Council have always been reappointed (after eight years) if they wished so and if their ages permitted. This is not prescribed by the Bundesbank Law but is a tradition that has evolved over the years. By contrast, as I have shown elsewhere (Vaubel 2003a: Table 6.5), most national governors in the ECB Council depend on their governments for reappointments (usually after five or six years). The members of the Executive Board, it is true, may not be reappointed but they may need career assistance from their governments when their terms are over and they return to their home countries.

Thus, it is an open question whether, on balance, the ECB is more or less independent than the Bundesbank has been. In any case, however, their incentives are different because the sources of central bank (in)dependence have changed. On the one hand, the ECB is less threatened by amendments of its legal statute. So it is less likely to seek the support of public opinion—the more so as a European public opinion does not exist. But on the other hand, the members of the ECB Council enjoy less security of tenure. So government objectives will matter more for European than for German central bankers. In this respect, the individual members of the ECB Council will pay more attention to the ideology of their governments and to the election cycles at home.

How important is central bank independence for inflation? The cross-sectional evidence for the initial 11 EMU member states (Hayo 1998; Vaubel 2003a: Table 6.3) shows that the average inflation rates over the period 1976–93 were less affected by central bank independence than by people's sensitivity to inflation as revealed in opinion surveys. If inflation is regressed on both central bank independence and the national sensitivity to inflation, central bank independence does not have a significant effect at all, whereas the coefficient of the sensitivity to inflation remains significant at the 1 percent level. This is also true when allowing for the exchange rate regime and the openness of the economy. While central bank independence is significantly affected by the sensitivity to inflation, the latter depends on the country's experience of hyperinflation since 1900 (Vaubel 2003a: 151–52, equations 6.1 and 6.2).

As the sensitivity to inflation is a better and more fundamental predictor of inflation than central bank independence, any median voter analysis of the ECB Council should focus on the national sensitivities to inflation. The two French members of the ECB Council occupy the median position in this respect (Vaubel 2003a: Table 6.2).

The Political Business Cycle

Since monetary policy can affect the outcome of elections, the ECB, too, may generate political business cycles. But in a monetary union political business cycles are less likely than in a nation state because the national election dates are dispersed over time (Williamson 1985, Fratianni and von Hagen 1990). A government of the EMU does not exist, and the elections for the European Parliament are comparatively unimportant. By accident, however, there may be clusters of national election dates such as the series of the eight national elections between May 2002 and May 2004. Even central bankers who are independent of their government may have partisan preferences and be loyal to the government that has appointed them. Evidence from the United States and Germany supports this view (McGregor 1996; Vaubel 1997).

An analysis for the eurozone shows that the eight governments standing for reelection between May 2002 and 2004 commanded a majority of party loyalists in the ECB Council in May 2001 when the ECB began to lower its main financing rate (Vaubel 2003a: Tables 6.5 and 6.6). Of course, this does not exclude other, additional explanations.

When an electoral monetary policy cycle cannot be generated by a majority coalition in the ECB Council, the incumbent governments are likely to resort to fiscal policy. According to the Stability and Growth Pact, sanctions require a qualified majority decision of the Council of Ministers (excluding the government under consideration). So it may be easier to assemble a minority coalition blocking a verdict and sanctions in the Council of Ministers than to form a majority coalition in the ECB Council. The Pact stipulates that if a member state exceeds the 3 percent limit for government borrowing relative to GDP, the Council should impose sanctions—initially a noninterest-bearing deposit—within 10 months after the deficit figures have been published, unless adequate remedies have been taken in the meantime. According to the projections of the European Commission, France and Germany will exceed the 3 percent threshold in 2004 for the third consecutive year, and the outlook for 2005 is also unsatisfactory, but sanctions have not even been considered. In November 2003, even the Commission's proposal to call for larger deficit reductions in France and Germany was defeated in the Council. The

president of the European Commission has called the Pact "stupid" and appointed a committee (chaired by André Sapir), which, in July 2003, recommended watering the Pact down. Similar proposals have been made by French and German commissioners and by members of the Italian, French, and German governments.

When the Pact was negotiated in 1995–96, the German government demanded that all breaches should be sanctioned automatically. By introducing qualified majority decisions in each particular case, the EU has opened the way for blocking coalitions of the "sinners." The current minority coalition contains France, Germany, Italy, Portugal, and Luxembourg.

In summary, political business cycles in the eurozone are more likely to be driven by national fiscal policies than by the common monetary policy. However, the incumbent politicians will prefer an electoral monetary-policy cycle, if possible, because it does not implicate them directly and is less expected coming from a legally independent central bank.

Exchange Rate Policy

When the EMU started in 1999, the French and the German ministers of finance—both had to resign somewhat later—argued for a system of target zones among the euro, the dollar, and the yen. The president and vice president of the ECB as well as the chairman of the Federal Reserve Board rejected the idea. Exchange rate targets imposed by politicians constrain the discretion and power of central bankers.

According to the Maastricht Treaty, formal agreements on an exchange rate system for the euro require a unanimous decision of the Council of Ministers, whereas exchange rate adjustments within such a system may be decided by a qualified majority. Both types of decisions have to be recommended either by the Commission or by the ECB. The German Bundesbank since 1979 had permission to abandon interventions in the exchange market whenever it might see a threat to price level stability. It made use of this permission in August 1993. The ECB does not seem to have this right. Thus, the possibility of an exchange rate target vis-à-vis the dollar is the main threat to its policy autonomy. But since the introduction of a parity system requires a unanimous decision by the Council, the ECB may confine its efforts to one participating country that has a tradition of distrusting a dollar peg, for example, Germany.

It is well known that adjustable peg systems are inherently unstable. But as I have shown (Vaubel 2003a: Tables 6.7 and 6.9), the

theory of OCAs does not favor target zones for the dollar-euro exchange rate either. With respect to the openness criterion, the average of eurozone exports to, and imports from, the United States is less than 2 percent of eurozone GDP. Viewed from the United States, trade with the eurozone is even less than 1.5 percent of GDP. The need for real exchange rate adjustment has been well taken care of by the flexible nominal exchange rate between the United States and the EMU countries. From 1987 to 1998, for example, the nominal exchange rate trend between the dollar and the EMU-11 currencies closely followed the real exchange rate trend—as it should—with a difference of only 0.26 percent per annum. This was much better than under the Bretton Woods system that produced a trend differential of 1.68 percent per annum in 1954–69.

The initial weakness of the euro can easily be explained by ECB monetary policy. In 1999 and 2000, monetary expansion (M1) minus real GDP growth was 11.8 and 10.7 percentage points higher in the eurozone than in the United States (Vaubel 2003b: Table 4).

EMU Enlargement

In the medium term, enlargement of the eurozone will be a major issue. Two groups of potential entrants have to be distinguished: (1) Britain, Sweden, and Denmark, and (2) the Eastern European countries that joined the EU in May 2004.

In terms of openness vis-à-vis the eurozone, the countries in the first group differ very little from the present EMU members. The British ratio of euro-trade to GDP is even slightly larger than the French. But the required real exchange rate adjustment vis-à-vis the eurozone is larger for Britain than for any other member state of the EU (Vaubel 2003a: Table 6.10). Moreover, Britain faces some public choice problems that have not been discussed so far.

The first concerns minimum reserve requirements. At present, the opportunity cost to British banks of meeting cash reserve requirements is almost nil. The same is true for banks in the eurozone because the ECB decided to pay interest, equal to its main financing rate, on the 2 percent minimum reserve requirement. But the countries of the eurozone have a long tradition of requiring high non-interest-bearing minimum reserves. Before the establishment of EMU, the median country required 2 percent without remuneration. Why did the ECB Council choose an opportunity cost of zero rather than the median national arrangement? President Duisenberg and his deputy have declared that competition from London was the reason.

If so, the ECB Council is likely to raise the cost of reserve requirements as soon as Britain joins the eurozone. It can do so by a simple majority. This would impair London's competitiveness vis-à-vis New York, Zurich, and all other financial centers outside the eurozone.

British entry, however, may impose costs on some current eurozone members commanding a blocking minority. Any new member has to be accepted by a qualified majority of the club. As in 1998, the convergence criteria leave much room for discretion. Two types of cost are to be distinguished.

First of all, when a new country joins, the current median in the ECB Council may lose his decisive position in determining monetary policy and the inflation rate. The majority coalition to which he belongs may veto the accession or demand some quid pro quo raising the cost of joining for the applicant.

Second, the enlargement of the eurozone affects the seigniorage that the old members will receive. This is because the distribution of seigniorage does not correspond to the members' shares in the euro's monetary base but to their shares in the ECB's capital. The capital shares are the averages of the GDP and population shares. Thus, seigniorage is redistributed in favor of member states characterized by large money multipliers and high income velocities. As public choice theory would predict, the winners from this redistribution command a majority. The losers are Germany, Spain, and Austria (Roesl 2003). Britain would be a winner and the same is true for all East European countries that recently joined the EU (Feist 2001: Table 1). Most current EMU members would lose seigniorage (Feist 2001, Table 2). However, the accession of Greece, which also receives a (small) gain from seigniorage redistribution, indicates that seigniorage is not the only issue.

The main concern in the current eurozone countries is that an Eastern EMU enlargement would shift the median in the ECB Council toward a higher preferred inflation rate. All these transition countries have a record of very high inflation. They may be able to keep

⁴If B denotes the monetary base, Y gross domestic product, M the money supply, $m \equiv M/B$ the money multiplier and $v \equiv Y/M$ the income velocity of money, the base-to-income ratio is

$$\frac{B}{Y} = \frac{B}{M} \cdot \frac{M}{Y} = \frac{1}{m} \cdot \frac{1}{v}$$

Thus, the income share is large relative to the base share in countries that have a large m and v. Since m = (1+c)/(c+r) and since r (the reserve ratio) is smaller than one and identical in all EMU countries, a small c (currency/deposit ratio) makes for a large money multiplier (m) and a gain from seigniorage redistribution.

their inflation rates down for two years to meet the convergence criteria but their long-run aversion to inflation seems to be rather weak.

The economic case for entering the EMU is dubious as well. They are, it is true, at least as open toward the eurozone as the average current eurozone member (Vaubel 2003a: Table 6.13). But they have very high trend rates of real exchange rate appreciation vis-à-vis the EMU. Thus, to achieve price level stability, they require a strong nominal exchange rate appreciation vis-à-vis the euro. But joining the eurozone prevents the nominal exchange rate from appreciating. The convergence criteria will not prevent East European countries from joining the EMU.

Since the different criteria of OCA theory give contradictory signals and since they cannot be weighed against each other in a scientific way, it would be safer to let the euro circulate in Eastern Europe as a parallel currency. The only way to find out which areas are OCAs is to leave the choice of currency to the market—that is, to those who demand and use money (Vaubel 1990).

Conclusion

Up to now, the performance of the ECB has been tolerable but below average as compared with other industrial countries. In the long and medium term, however, there are considerable risks. I expect that inflation will permanently rise to a higher level. The monetary union is likely to survive but the internal political and economic tensions will increase.

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⁵The real exchange rate (q) is defined as the nominal exchange rate (e) multiplied by the ratio of the two price levels (P^E and P°). Taking rates of change we obtain $\Delta\%$ q $\equiv \Delta\%$ e $-\Delta; ^*P^E + \Delta\%P^\circ$. With a large equilibrium real appreciation (i.e., a highly negative $\Delta\%$ q) and a given low inflation average in the three "best" member states ($\Delta\%$ P^E), the East European countries cannot permanently keep both their nominal exchange rate vis-à-vis the euro and their price level stable.

 6 Since monetary expansion affects the nominal exchange rate immediately and the price level with a lag of two years, the East European countries can meet both the inflation and the exchange rate criterion for two years by first attaining inflation parity with the three best eurozone countries and then preventing the currency from appreciating vis-à-vis the euro by means of an expansionary monetary policy. The inflationary effects of the expansionary monetary policy will hardly be felt during the two-year test period. Moreover, it is not clear whether the exchange rate criterion still refers to the narrow \pm 2.25 percent band of 1991 or to the wide \pm 15 percent band introduced in August 1993.

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