

Economic Policy Coordination in EMU: Institutional and Political Requirements

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Abstract

This paper looks at the macroeconomic performance of EMU since it started in 1999. It argues that Euroland has benefited from a benign environment, appropriate monetary policy and structural reforms. However, there is no institution clearly in charge of formulating coherent economic policies in Euroland and this is reflected in the euro's external value.

The paper then evaluates the need for policy coordination, distinguishing between weak and strong forms of coordination failure. It shows that intergovernmental coordination may be an answer to the latter, pareto-improving multiple equilibria. However, overcoming weak coordination failure requires further policy delegation to the EU-level, particularly for the definition of an aggregate fiscal policy stance. Yet, this is only possible if the democratic deficit resulting from intergovernmental cooperation is closed by a European-wide policy consensus. To achieve this should be the objective of a European constitution.

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Economic Policy Coordination in EMU: Institutional and Political Requirements

So far, European Monetary Union (EMU) has been a success. Two years after it started, the economy of Euroland is in better shape with economic growth at 3.5 percent in 2000, the highest in over a decade, unemployment down, and price stability assured. Even in 2001 it seems relatively robust. Although the exchange rate has depreciated from its initial high level, it recently seems to have found a stable range for its fluctuations. However, these are early days and Europe was lucky. It has not suffered from major shocks and the few minor supply and demand shocks that occurred are better described as 'surprises' when actual inflation and growth rates deviated from forecasts. Even if growth forecasts are reviewed downwards, they still are above average. In fact, the quality of a policy regime should be assessed over the entire business cycle and the emergence of new policy challenges requires continuous monitoring of the process and efficiency of European policy coordination (Pisani-Ferry, 2001). The December 1999 Helsinki European Council underscored the need to press ahead with strengthening coordinating arrangements. Since then, national governments represented in the Euro group and the Commission have repeatedly attempted to make improvements in these procedures.¹ Many were purely technical, such as structuring the debate in the Euro group around lead speakers, or cosmetrical, such as putting Eurogroup meetings the evening before the Ecofin, in order to make it more 'visible'. However, I believe the issue of policy coordination poses more fundamental questions regarding the economic governance of Euroland that need to be addressed when thinking about the EU's finality and a proper constitution. In this paper, I will first review the experience of EMU after 2 years. I will then analyse policy coordination in Euroland and finally put forward some recommendations for improvement. The annex gives a formal model of consensus formation.

I – The economic performance of the first two years

In the beginning, European unification was based on economic integration through customs union and the creation of a single market. Inevitably, this led to a single currency. Prior to the introduction of the Euro, the economic debate had focused on two main points: microeconomic benefits for the private sector operating in the single market and macroeconomic improvements in the management of Europe's economy.

Microeconomic benefits.

Although the creation of European Monetary Union has been an eminently political decision, the process to get there was to a large degree driven by private companies. A European civil society has helped to shape national political interests. Elected politicians would hardly have had the courage to delegate sovereignty over monetary policy to an independent European Central Bank, had they not had the support of the business community who felt the limitations of a single market without a single currency. When former chancellor Helmut Schmidt and president Giscard d'Estaing turned to leading European businessmen in 1987 asking for their support to create a European currency and to form the Association for the Monetary Union of Europe, it was out of an understanding that political decisions for further integration needed public support. What was sought was a European wide consensus on monetary stability.

The theoretical foundations for such a consensus were two-fold. The first argument was based on 'negative integration', i.e. the elimination of barriers through the reduction of transaction costs (see Commission, 1990). In particular, companies in smaller countries considered the transaction costs of currency management related to risk hedging and transborder payments as a disadvantage compared to their competitors from larger countries. These transaction costs were estimated to amount to up to 1 percent of EU-GDP², but for some small countries they were significantly higher, reducing the potential for reaping the economics of scale that the single market promised. The second argument was based on regime preserving cooperation. With the European community agreeing on the Single Market Program, lifting all obstacles to the free flow of goods, services and capital between member states, it quickly became apparent that European economic policy suffered from inconsistencies. In an influential report, T. Padoa-Schioppa pointed out that "the community will be seeking to achieve the

¹ The most recent is European Commission (2001).

² For a full discussion of the costs and benefits of EMU, including data, see Collignon, 1999 (a).

impossible task of reconciling (1) free trade, (2) full capital mobility, (3) fixed (or at any rate managed) exchange rates and (4) national autonomy in the conduct of monetary policy. [...] These four elements cannot coexist, and at least one has to give way." (1988, p.373) Thus, lack of policy coordination threatened economic integration. From a business point of view, the appropriate way to resolve this 'inconsistent quartet' was to overcome the national autonomy of monetary policy by delegating it to a European institution, for eliminating any of the other measures would have put the single market into question. If proof was needed, it came in the form of the ERM-crisis in 1992-93 when distortions in the exchange rate levels (before and after the crisis!) did not only disturb capital markets, but also led to public protest against the free circulation of goods within the single market. In fact, the *elimination of exchange risk was a necessary condition for a fully integrated, competitive market economy* where firms compete through the quality of their products and the efficiency of production. Otherwise macroeconomic policy would always distort companies' level playing field in one way or another: exchange rate *levels* would bias relative prices in goods, services and labour markets; exchange rate *volatility* and divergent monetary policy would prevent the effectiveness of the law of one price in capital markets. Furthermore, high volatility creates a macroeconomic environment of uncertainty that is detrimental to investment and economic growth (Collignon, 1999b).

Since 1999, Euroland has made good progress in overcoming these obstacles. First, the single market has now been complemented by a unified payment system, which has reduced transaction costs and established a fully integrated money market with a single interest rate. One area where the reduction of transaction costs still remains insufficient is the retail transborder payment system. While the wholesale TARGET-system, set up by the European System of Central Banks, is cost-efficient and competitive, ordinary customers still find that transborder payments for small purchases and transactions across Europe are still more expensive than at home. While private banks claim higher costs as being the reason for this, public authorities could and should do more, in order to create a level playing field in Europe. Experience from the USA shows that it required the creation of the Federal Reserve System and the harmonization of the payment system to make sure a dollar was worth a dollar all over the US territory. With the introduction of notes and coins, this will hopefully also become a reality in Europe, but national governments must follow up on the initiatives by the European Parliament.

Secondly, by definition, EMU has eliminated all exchange risk between Euroland members. Thus, Euroland has effectively become a unified 'European economy' with participating member states as 'regional economies'. This statement needs elaboration. From a systemic point of view, it is money that bounds the limits of economic territory and not jurisdiction.³ In a properly functioning monetary economy it is the scarcity of money that establishes the hard budget constraint on private and public demand for goods that are constitutive for competition in the market. Thus, without money, markets cannot exist. Furthermore, as Eucken (1989, p 120-127) has pointed out, a market economy consists of *many* markets, which are linked and constrained by money. But this means that markets transacting with different currencies are not subject to a single constraint, as they are linked by the foreign exchange market. And this market establishes the trade-off ratio between different constraints. For this reason the coordination of individual economic plans and actions depends on the structure of the monetary system that establishes the coherence of economic decisions. Therefore, in economic terms a 'country' or economic territory is defined by its currency. With the creation of the single currency, most of the single market was put under the same budget constraint, making Euroland a single economic unit. However, the coexistence of a unified monetary authority and several autonomous national governments raises the question of the consistency between the views and actions of major policy makers, as we will discuss below.

The macroeconomic management of Euroland

"In all beginnings there is magic" said Hermann Hesse. Indeed, the macroeconomic performance during the first two years of EMU has been surprisingly good. While Europe suffered from high inflation, low growth, rising unemployment and public deficits in the 1980's and 90's, we now witness the opposite. For an assessment of EMU, price stability is the key.⁴ Although consumer price inflation measured by the HIPC-index, stayed within the ECB's target range of 0 to 2 percent during 1999, it started to overshoot in June 2000 and has stabilized in the 2-3 percent range since then. However, the ECB's inflation target has been achieved by the core inflation rate, which excludes energy and unprocessed food costs, and the GDP-deflator has increased by less than 1.7 percent in every quarter since EMU started. Probably more important is the management of inflation expectations – a crucial element in

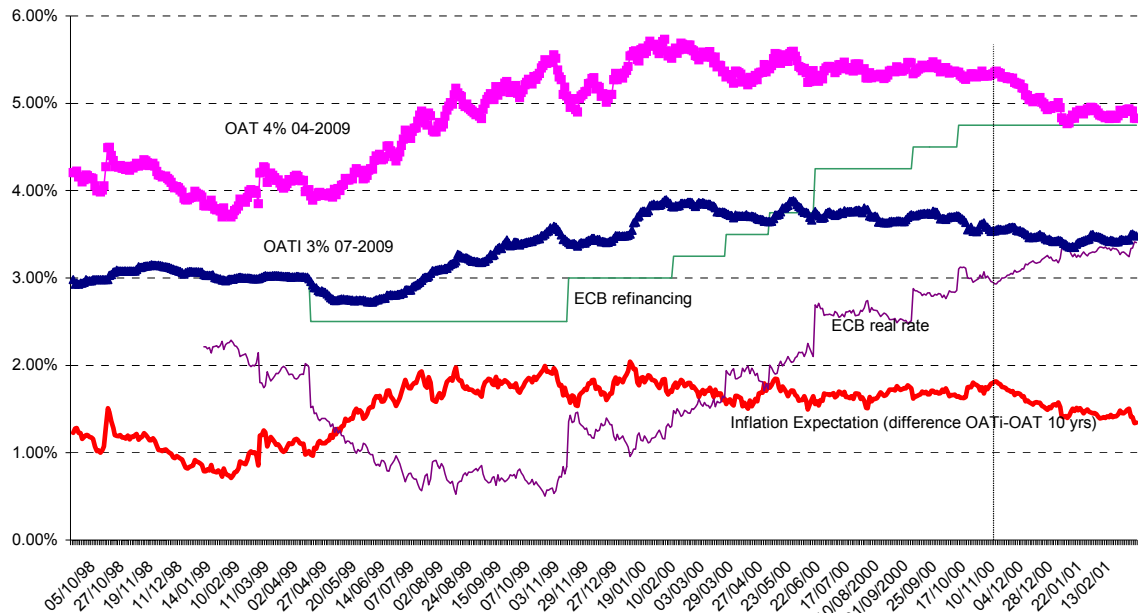
³ Except, of course, for the fact that the territory of money is determined by the jurisdiction of legal tender.

⁴ In Collignon 1999a, I have argued that price stability is a sufficient economic condition to make EMU sustainable.

the ECB's strategy.⁵ Figure 1 shows the expectations of future inflation, derived from the French indexed government bond (OATi) and the ECB's policy instruments. It appears that in early 1999, EMU was heading toward deflation, but this changed rapidly after the ECB lowered interest rates. Subsequently, inflation expectations by financial markets stabilized below 2 percent. The tightness of monetary policy can be measured by the ECB real rate. Usually, economic theory takes the real short-term interest rate as the critical monetary policy variable and calculates it as nominal minus current inflation rate. However, current inflation is determined by past policy. It may therefore be more significant to deflate short nominal rates by long-term inflation expectations as in figure 1. Between April 99 and March 2000, monetary policy seems to have been accommodative and stimulating profits and growth. This would also explain why the real return on OATi's increased during this period. Monetary policy moved into a more restrictive range in November 2000 when the HCPI-inflation reached its peak. Interestingly from that moment on, inflation expectations started to fall significantly below the 2% range. These developments show that the ECB has been very successful in maintaining the credibility of its commitment to price stability. The degree of euro-price stability reflected in these indicators contrasts favourably with the USA, where inflation fluctuated in a 2-4 percent range. It also documents the advantages of a unified monetary policy in periods of economic shocks: while in the 1970's after the demise of Bretton Woods and the oil shocks flexible exchange rates led to widely diverging policy responses in Europe, this time monetary policy was, by definition, coherent and aimed at preserving price stability.

⁵ See: ECB Monthly Bulletin, May 2000

Figure 1: Inflation Expectation derived from OATi



The highest European growth in over a decade is a direct consequence of EMU. This is not only because the elimination of all exchange risk in the single market and the establishment of a monetary framework of stability was in itself an important structural reform that improved conditions for investment, but also because it changed the conduct of economic policy in the EU. The reasons for Europe's growth-slowdown and high unemployment in the 1980s and '90s have been subject to heated debates. Conservative orthodoxy claims that it is all due to Europe's high regulations, rigid labour market, an out-dated welfare system and an over-dimensioned public sector – in short, it is all about supply side economics. For them, EMU was supposed to be a vehicle to impose the 'necessary structural reforms' on an unwilling population and polity. However, a closer look shows that these ideas do not always coincide with the facts⁶: The costs of regulation are not as high as they appear and the structure of unemployment, the patterns of worker and job turnover and the behaviour of wages in Europe is not so different from the USA as has often been assumed. It has also been noticed that Europe's supply side structures have not changed significantly between periods of high and low growth and if there has been change, it went in the 'wrong' direction (Blanchard, 2000). Recent studies even find "the absence of a truly European employment problem" (von Hagen and Mundschenk, 2001) because labour market structures and performances are too

⁶ See for example: Alogoskoufis et al., 1995

diversified to find a unifying explanation. However, aggregate unemployment continues to be high and this *is* a problem.

The alternative explanation emphasized insufficient demand and the suboptimal policy mix in the 1980's and 90's. Monetary policy was seen as the prominent culprit (Modigliani, 1997). Macroeconomic management must have had an important role in explaining why Europe's performance lagged behind the United States. This is evident when looking at output gaps. While the distribution of years with positive and negative output gaps was fairly balanced in the USA and Portugal, where unemployment always stayed low, it dramatically deteriorated in Europe during the 1980s and 90's (see table 1).

Table 1: Ratio of Number of Years with Positive to Negative Output Gaps

	1960-81	1982-99
EU 15	5.0	0.29
Germany	2.0	0.20
France	1.0	0.50
Netherlands	2.0	0.50
Belgium	1.3	0.29
Spain	1.4	0.38
Portugal	0.8	1.00
USA	1.0	1.00

Source: European Commission, AMECO; OECD.

Thus, an important difference in the macroeconomic management between Europe and America consists in the degree to which the output potential is actually realised. Economic theory readily recognises the crucial role of monetary policy in this context. This seems to be confirmed by the European experience, where monetary policy arrangements suffered from a double asymmetry: first, within the European Monetary system, the Bundesbank was the dominant authority and this implied higher interest rates for most other ERM-countries. Secondly, Frankfurt's monetary policy was overly restrictive, even for German consumption. Figures 2a and 2b show that the Bundesbank contrary to the American Fed frequently kept interest rates higher than output considerations under the *Taylor-rule* would have suggested. This overtightness-bias explains a good part of the excessive accumulation of negative output gaps.⁷ Fiscal policy seems to have had a more secondary and dependent role. (See Collignon and Mundschenk, 1999).

Figure 2a : Taylor rule and Bundesbank

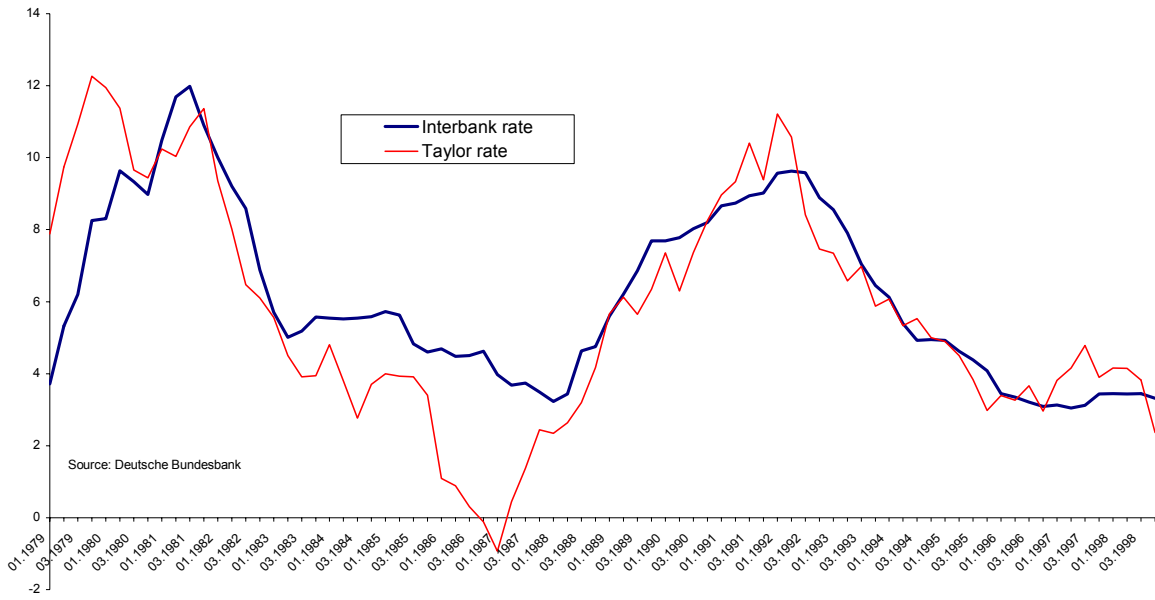
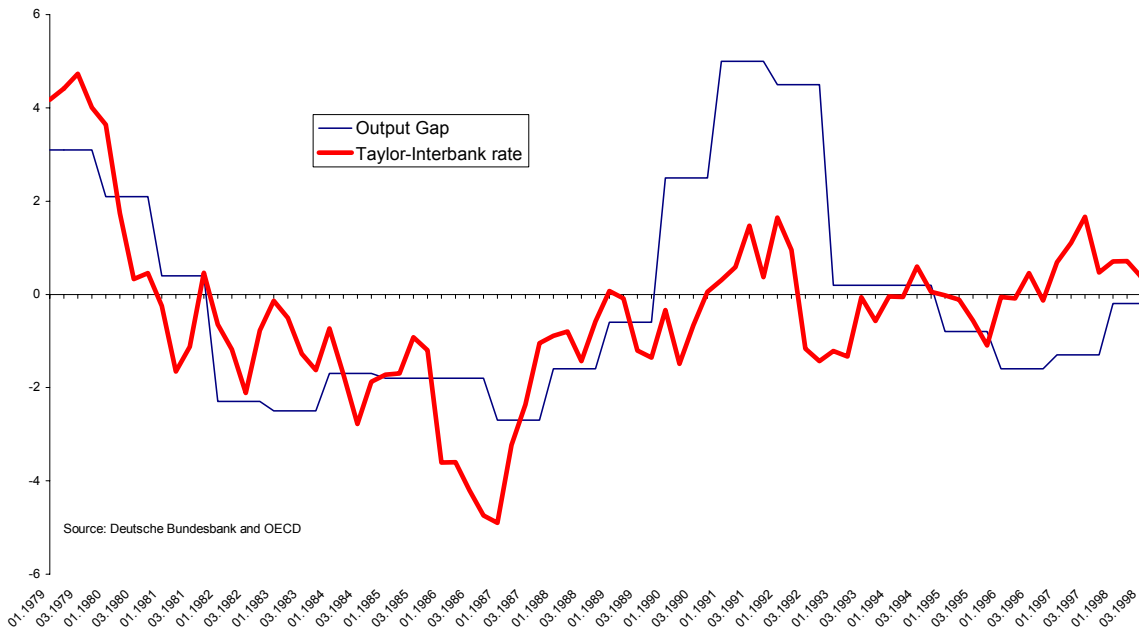


Figure 2b : Output gap and deviation from Taylor rule



⁷ On the asymmetric behaviour of the Bundesbank see also Clarida, R. and M. Gertler (1997).

However, the restrictive monetary bias intensified Europe's budgetary pressures. Higher interest rates and lower growth increased the tax burden of debt service and required extra fiscal consolidation in order to keep public debt sustainable. These macroeconomic problems could not have been solved by structural reforms. They would have implied a need to *lower* output to the insufficient demand level, while supply side reforms are aimed at *improving the output potential*. Hence the dominant Tietmeyer/Waigel policy mix (tight money, tight fiscal) re-enforced both the aggregate demand and supply problems in Europe.

Real change only came about when the ECB lowered interest rates in April 1999. Economic growth then resumed, closing output gaps and creating new jobs all over Europe. Incidentally, it also supported growth in the non-Euro member states. Subsequent interest rate hikes by the ECB remained in the neutral range, at least until the end of 2000. Figure 1 shows that the OATi real bond yield *and* the nominal yield started to fall when the ECB's real short rate exceeded 3 percent, i.e. when the monetary policy stance became restrictive.⁸ Hence both, inflation and growth expectations must have fallen after November, although growth is still expected to be higher than in early 1999. The monetary policy stance in Euroland also improved the macroeconomic environment for fiscal consolidation. Targets set in the Stability and Growth Pact were overfulfilled for the Euro-area as a whole and only minor slippages occurred in Finland (1999: -0.8 percent points), France (-0.1 in 200), Italy and Portugal (-0.2 in 2000) (see Pisani-Ferry, 2001). Dominique Strauss-Kahn, who was a leading voice in the intimate Euro-group of Finance Ministers, characterised the new combination of monetary and fiscal policy as the 'Clinton-Greenspan mix', which he contrasted with the 'Reagan-Volcker mix' of the 1980's. It implied a relatively accommodating monetary policy stance with strict control of public *expenditure* (rather than *deficits*). Low interest rates would then lead to a virtuous circle of renewed growth, extra revenue, and therefore shrinking public deficits.

However, in order to ensure the long-term sustainability of this positive policy orientation, a third element had to be integrated into the policy mix: wage developments. The reason is that

⁸ This conclusion can be reached from the Taylor rule of setting interest rates with respect to inflation and output gap or from the Ramsey rule of comparing real interest and growth rates.

the relatively accommodating monetary policy stance is dependent on price stability. But this requires that the price level be grounded on a nominal variable other than money supply. Given that wage contracts are set in nominal terms, the strategic variable for monetary policy must be unit labour costs. Unit labour costs are stabilised when *nominal* wage cost increases do not exceed aggregate labour productivity improvements.⁹ Hence, wage bargaining had to be taken in consideration when defining an optimal policy mix in Euroland. The new German government that came into office at the end of 1998 quickly adopted this philosophy.¹⁰ Under the German EU presidency it introduced the *Macroeconomic Dialogue* at the Cologne summit as an instrument to integrate Europe's social partners' views into the procedures of policy coordination. It institutionalised a twice-yearly informal process of consultations between public authorities and representatives of wage bargainers without setting constraining objectives. The dialogue discusses technical macroeconomic issues on a national level and reports them subsequently for a political exchange between Council, Commission, ECB and European Trade Unions and employers. The Macroeconomic Dialogue is a rather weak form of policy coordination. Some observers have criticized that such instrument of coordination cannot ensure the enforcement of any agreement on guidelines (von Hagen and Mundschenk, 2001) or that 'social partners' do not set wages in all EU countries (Pisani-Ferry, 2001). However, these objections underestimate the role of communicative action in the formulation of policy consensus (see annex). The underlying philosophy of the Macroeconomic Dialogue is to structure a debate in Europe where relevant policy information could be shared in a consensus building way. So far, the experience has been positive, as most partners who have participated would agree.

The improved demand management allowed the Portuguese EU-presidency, in spring 2000, to put forward an ambitious program of structural supply side reforms, creating a 'European New Economy'. This so-called Lisbon-Strategy gave new zest and direction to the structural reform processes, which were previously agreed in Cardiff (completing the single market for products and capital) and Luxembourg (improving the quality and flexibility of Europe's labour force). Only in the future will the effects of this modernisation policy become manifest.

⁹ See Collignon, 1999(c) and (d) for the underlying theory.

¹⁰ See Jahreswirtschaftsbericht (Economic Report) der Bundesregierung for 1999 and 2000.

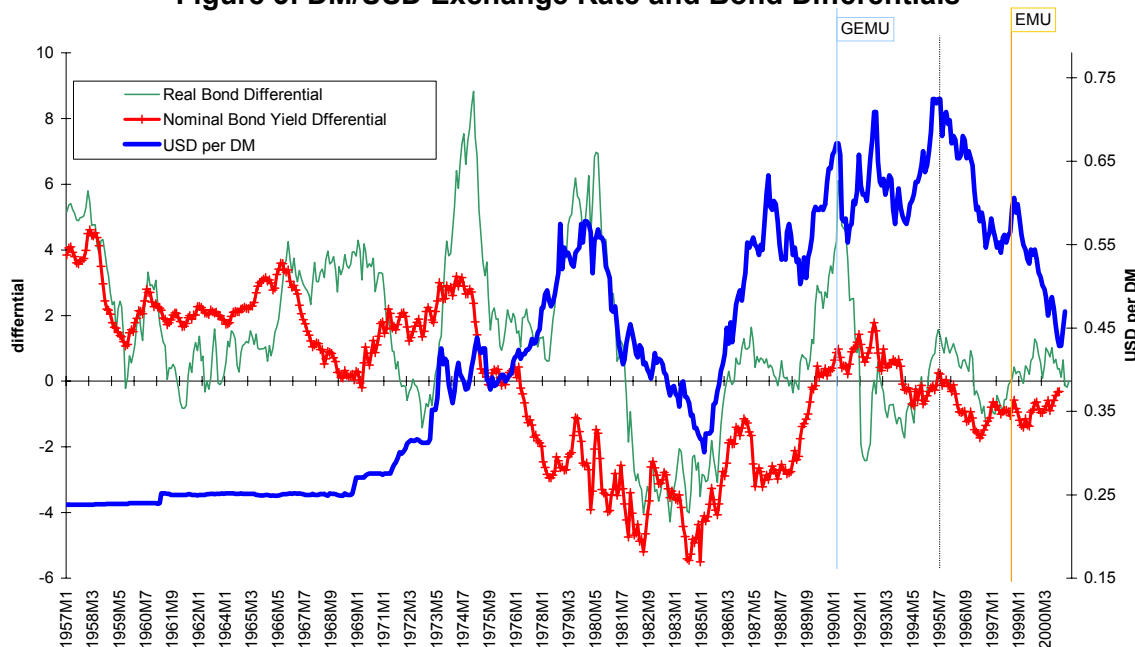
The exchange rate puzzle

To summarize, a lot of change has taken place in Europe. The open question is: are these changes sustainable? Financial markets do not seem to be convinced. In foreign exchange markets, the euro has been weak from the beginning (see figure 3). In view of all the positive changes this fact remains puzzling. However, I believe, one has to distinguish between conjunctural, structural and psychological explanations. First, on the side of more transitory factors, most analysts agree that the US-dollar's strength relative to the euro was largely due to the extremely buoyant perspectives of the US economy. The longest boom in US history had created many attractive opportunities for investment. As a consequence, the importance of US-dollar assets (US treasury securities, corporate bonds, equities, foreign exchange markets, derivatives) has increased in all market segments over recent years (IMF 2000). This did not necessarily reflect distrust in the euro. In fact, prior to the EMU-start in 1999, many international fund managers had taken large positions in euro-denominated paper and this explains why the euro temporarily appreciated. Only very few investment funds have subsequently shifted their portfolio in a significant way back into dollar assets, despite the Euro-depreciation. Especially Asian fund managers seem to expect that the euro will appreciate in the long run and therefore they do not wish to realize losses today. This is a sign of confidence, although it may also imply that they will liquidate some euro assets when the euro recovers, and therefore recovery could be slow.

On the other hand, new investment does seem to carry a higher return in the US. This has been quite obvious for the stock exchanges, but also in the bond market. Nominal yield differentials favoured the dollar, at least in the short and medium term. This is clear from figure 3. It is striking that the apparent euro-weakness is simply continuing the previous DM-trend, which has depreciated since 1995 exactly when the nominal bond yield differential turned against Europe. Frankel (1995, p.114) has pointed out that structural models based on interest differentials appear to work well in some periods, but not in others. It seems that the persistent negative interest differential since mid-95 has had a major impact on first the DM and now the euro. This must have encouraged outflows of new capital from Europe into dollar assets. Yet, Frankel's model used real government bond differentials. This is the correct approach when markets are taking economic fundamentals into account. But figure 3 shows that at the end of 1998, nominal and real bond differential went into opposite directions. The low inflation rates in Euroland turned the real yield differential in favour of Euro-bonds, but

the dollar continued to appreciate. This implies that financial markets ignored the loss of competitiveness of the US-economy which will require a depreciation of the dollar. Such behaviour is rational in a bubble economy. We may therefore conclude that the US-economy entered its bubble dynamic precisely at the time when the euro was introduced.¹¹ But when the bubble will finally burst, the euro is likely to appreciate again. Hence, the transitory factors in the exchange rate are mainly about dollar strength.

Figure 3: DM/USD Exchange Rate and Bond Differentials



Second, on the structural side, we find capital flows related to German difficulties to cope with unification as an explanation for euro weakness. The persistently high cost of German unification, with the related tax burden, led to a net outflows of foreign direct investment not only from Germany, but also the Euro area. The persistent volume of DM 200bn (Euro 100bn) *gross* transfers¹² p.a. into East Germany (6 percent of GDP) must imply significant

¹¹ In fact, the beginning of the bubble seems to coincide with the interest cuts by the FED in October and November 1998, that were meant to reassure markets after the LTCM crisis.

¹² Net transfers amounted to DM 150bn, which is the more frequently quoted figure. However, with respect to the burden of unification on the productive economy and the distortions it has caused, gross transfers seem more

distortions in the return on the German capital stock. Here are some facts: in 1998, East German GDP was DM 436bn, but absorption was DM 655bn or 50 percent more. Excess absorption in the new states was mostly financed by public transfers, only one third by private capital flows. The share of labour cost in total value added was roughly two thirds in the West and over 95 percent in the East. Thus, the aggregate German profit share fell by nearly 4 percentage points. Gross transfers amounted to 21 percent of West German profits, therefore reducing Western profit margins after transfers by nearly 7 percentage points. At a capital-output ratio of 3.7, this implies a reduction in the post (gross) transfer return on the West German capital stock of 190 basis points from 9.0 to 7.1 percent. In terms of net transfers, the reduction of the profit share is by 15.5 percent and the return on capital by 140 base points. By contrast, the return on capital before transfers would have been 1.1 percent in the East and 13.5 (respectively net 10.4) percent after transfers (assuming the same capital-output ratio).¹³ While these transfers were financed at first by public sector borrowing, they became an onerous charge when the government embarked on fiscal consolidation in 1995/6. These distortions must have led to a significant reallocation of West German capital – but in a globalized economy not necessarily in favour of East Germany.¹⁴ Given this background, the evolution of the Euro exchange rate appears somewhat less surprising, although few observers had anticipated it.

The third aspect concerns the uncertainties and the psychological effects resulting from the lack of transparency in economic policymaking. Jacquet and Pisany-Ferry and (2001) have discussed the weaknesses in the present arrangements for a coherent exchange rate policy. Together with many analysts, they claim that "a currency can be weak because market participants consider that there is no convincing economic strategy." (p.23). However, this is not only a question of exchange rate management. It goes to the heart of EMU.

relevant. For example Sinn (2000) shows that the cost of capital in East Germany became negative because of tax incentives.

¹³ I have used figures from Sinn (2000), DIW and Bundesministerium der Finanzen for these calculations.

¹⁴ The burden of unification transfers may also explain why the German economy did not respond with the same vigor to the interest rate cuts by the ECB in 1999 as other Euroland economies.

II. Policy coordination in Euroland

Europe has a myriad of amazing processes, strategies and devices for policy coordination. But there is no institution clearly in charge of formulating coherent economic policies in Euroland. In this section, I will first explain why this may be a problem, and then look at the existing methods and instruments for policy coordination and their shortcomings.

The need for policy coordination

Europe's jungle of policy processes (see figure 4) is a consequence of the Monnet-method of integration: create structures to make people cooperate and focus on what is feasible. With EMU, a single budget constraint was established for an integrated market economy, but many other functions of economic policy remain the domain of separate national and regional jurisdictions. When policy outcomes are rival and excludable between jurisdictions, the market mechanism will provide efficient solutions and policy decisions can be made independently of others. This is, for example, the case of public debt where the no-bail-out clause establishes excludability. By definition, independent national decisions are non-cooperative. If the government's policy choices in one country were completely irrelevant for all others, the notion of policy coordination would be redundant. But in a single market with a single currency the range for efficient independent policy decisions is reduced and the scope for both positive and negative externalities significantly enlarged. As is well known from economic theory, one cannot expect that purely independent decisions will necessarily result in the efficient provision of collective goods. The divergence between individually and collectively desired outcomes is frequently attributed to *coordination failure*.

If policy outcomes depend on common shared variables, no one who is operating in the euro-zone can be excluded from the benefits (or losses) that are derived from these variables. Hence, they can be viewed as public or collective goods. The supply of these goods can be *joint*, i.e. making them available to one member of the group means that they can easily be supplied to others as well; therefore, jointness of supply of a collective good relates to the degree of cooperation between those who provide it. Alternatively, collective goods are *non-joint*, meaning that the supply of a given collective good requires the *participation of all* who

will enjoy its benefits. Olson (1971, p. 36-43) has called the former *inclusive* collective good and the latter *exclusive*. The reason is that jointness in supply implies that an increase in the number and size of members will increase the benefits to all, so that the group is open to all. Benassi et al. (1994) call this a case of *strategic complementarity*, when the objectives of all other players induce a change in the same direction by any individual agent, because the typical individual actor is better off when aggregate output is higher.¹⁵ Strategic complementarity is a necessary, but not sufficient, condition for multiple equilibria and, therefore, for the possibility of *strong form* coordination failure. This occurs whenever the system is characterised by multiple, Pareto-rankable Nash equilibria. It is then possible to improve policy outcomes and stabilize the situation without necessarily realizing all the possible benefits from integration.

In the other case, when there is no jointness in supply, non-participation of one member in the provision of the public good could deprive all others of the benefits of this specific policy variable; hence members will wish to control access to the group and we have exclusive collective goods. If excludability in the provision of public goods is possible and externalities occur as well, there are *strategic substitutabilities* between the pay-offs occurring to different players. This leads to *weak form* coordination failure, i.e. the structure of policy making is such that the effects of national non-cooperative policy outcomes are inferior to cooperative ones and the supply of the collective goods is suboptimal. Situations with strategic substitutabilities have only one equilibrium and can therefore lead to weak form but never to strong form coordination failure. In this case, a unique low welfare Nash equilibrium is the solution of the 'race to the bottom'.

The distinction between weak and strong form coordination failure corresponds to the nature of externalities in collective goods (Benassi et al., 1994). While significant externalities exist in both cases, the methods of internalising them become absolutely crucial for the provision of exclusive collective goods and therefore for the performance (and ultimately the sustainability)¹⁶ of EMU. Olson (p.39) has emphasised that 'whether a group behaves exclusively or inclusively, ... depends on the nature of the objective the group seeks, not on any characteristic of membership'. Therefore, different policy objectives require different

¹⁵ Note, however, that the issues of the existence of multiple equilibria and their welfare properties are logically distinct. See Romer, 1996, p. 296.

¹⁶ See also Collignon, 1999 a.

forms of cooperative behaviour in order to provide the relevant collective goods. The need for policy coordination in Euroland is derived from these objectives. With the advent of EMU, the scope of shared variables and possible externalities has increased substantially. Numerous macro-economic objectives have now effectively become collective goods, i.e. their reality is felt by all who participate in the single currency: price stability, the level of interest rates, the external value of the currency, economic growth, employment, external balance. Von Hagen and Mundschenk (2001) call these variables *club goods* meaning they are shared by all members of a 'club' (the euro-zone), where access is limited. Although club theory has many fascinating implications for regional integration, that still need to be explored further, their central argument is that the nature of public goods shared in the euro-zone requires new approaches to macroeconomic management.¹⁷ In order to overcome policy coordination failures and to improve the outcome, both on a national and an aggregate level, ex-ante policy coordination is required (Benassi et al. 1994, chap. 9).

Coordination failure implies the absence of *binding* agreements, i.e. lack of consensus. In cooperating games people negotiate about the future course of action and the negotiation culminates in the signing of binding agreements. What matters in these games is the preference structure of agents since it is this structure that determines what contracts are feasible (Binmore 1998, p.38). If there is a parallelism of interests, cooperation is not only desirable but will also lead to binding agreements. Alternatively, an opposition of interests implies disjunct preferences and non-cooperation. In the formation of collective preferences the processing of information is crucial for the emergence of consensus. In the annex, I have given a formal model of how disjunct preferences can be aggregated into collective consensual preferences. It turns out that *consensual* decision-making can be described as a stochastic process where the institutional structures of communicative action determine the emergence of an equilibrium (i.e. consensus) and the speed of adjustment. *Dissensus* is described by the deviation from the consensual equilibrium vector and *conflict* means the absence of equilibrium. This model of consensus is relevant for our analysis because the fundamental distinction between strong and weak form policy coordination failure lies in the institutional structure by which the exchange of information affects policy objectives (i.e. political interests).

¹⁷ One should also remember that public goods require a 'public' that debates and decides on their production and allocation. See annex.

There are two different forms of coordination, which are reflected in the two main methods of European integration:

1. The first method is *intergovernmental cooperation*. In a symmetric strategic framework, strong form coordination failure (multiple equilibria) can be eliminated by simple *reciprocal information*. Examples are the informal discussions in the euro-group or the Macroeconomic Dialogue. Governments will then still act independently, but may be led to choose at least an improved non-cooperative solution. However, not all equilibria are symmetric. *Harmonisation* through formal rules and regulations is required when informational asymmetries are dominant. Typically, this applies to many issues related to the creation of a single market. In fiscal policy, the no-bail-out rule and the Stability and Growth Pact provide constraints on national policies that tend to limit the damage from informational asymmetries. More recently, the 'open method of coordination' emphasised at the Lisbon Summit in 2000 has added coordination by *competition for best practices and benchmarking*. This method stands half way between informal exchange of information and formal regulation. Many of its practices fall into the domain of the *subsidiarity principle* where governments seek to maintain national autonomy on grounds of democratic accountability and efficiency. However, the subsidiarity principle effectively states that not all member-states wish to make the same effort to provide public goods. Because of its low degree of commitment, intergovernmental policy coordination is only suitable for inclusive collective goods, where the benefits to each member increase with the number of cooperating partners. Even if these methods tend to Pareto-improve the selection of non-cooperative equilibria, they are not sufficient to eliminate weak form coordination failure.

2. To overcome weak-form coordination failure is more difficult. It requires external constraints to national policies, i.e. binding decision-making rules. These can be obtained by *delegation* of specific policy-making functions to common institutions. Others have called this delegation a *pooling of sovereignties* where regional networks fulfil certain functions that states can no longer perform on their own (Smith, 1995). Delegation implies a single, unified decision-making rule and would therefore always produce a coherent policy response. If the decisions are consensual, they are also binding. Hence, delegation is the appropriate instrument to overcome weak coordination failure, because it prevents defection in the provision of collective goods. Of course, there is no guarantee that a common institution could never make mistakes; but given the economic structure and the unified policy

objectives, the condition-set for policy optima is unambiguous: delegation solves coordination failure by internalising externalities. Examples are the Common Agricultural Policy, competition and trade policy and monetary policy.

Each of these approaches has its strength and weaknesses. The essential question is how the effects of externalities are appropriated or internalised. If European integration produces *inclusive collective goods*, *intergovernmental coordination is appropriate*. However, *in all areas where common policy objectives create exclusive collective goods, delegation of decision-making to the European level is required*.

To sum up, the logic of the European debate on policy coordination is as follows: those who *deny the need for coordination* implicitly assume that national policies are completely irrelevant for others. There are no positive or negative externalities and national policies can be treated like private goods. Yet, with the start of EMU, this proposition finds only a very limited range of applicability. The creation of a club also creates new collective goods. If externalities exist, policy coordination can Pareto-improve welfare. Those who promote *intergovernmental* policy coordination implicitly focus on the elimination of strong form coordination failure. They wish to choose Nash equilibria in government non-cooperation that yield higher welfare effects. But they do not solve the problem of policy externalities itself, i.e. they do not overcome weak form coordination failure. The solution to this problem is the *delegation* of policy making to a common European institution. This raises the question whether the instruments of European policy coordination are suited to their tasks.

The instruments of European policy coordination

Figure 4 shows the interrelations between different policy actors and coordination processes. The ECB sets the parameters of monetary policy as a fully integrated, federal body. Ecofin, the council of finance ministers, sets the economic agenda for the European Union as a whole and is the legislative body for harmonisation legislative and regulatory provisions. Ecofin also decides on the structural reforms under the Cardiff and Luxembourg processes and facilitates the Macroeconomic Dialogue with the social partners. The Euro-group, as a subset, entertains a privileged dialogue with the ECB that permits the reciprocal exchange of information. All these actors and processes contribute to the definition of an optimal policy mix for Euroland:

structural reforms determine the economic growth potential, the interplay of monetary and fiscal policy must guarantee that it is realised in the context of price stability.

The Treaty establishes the Broad Economic Guidelines (BEG) as the central coordination instrument (art. 99). Their purpose is to ensure that member states consider their economic policies as 'a matter of common concern' and shall conduct them 'with the view of contributing to the achievement of the objectives of the Community'. Thus, the BEG aim at the provision of inclusive collective goods. However, their efficiency remains doubtful. In reality, the EU produces an indigestible policy document where hordes of bureaucrats from national finance ministries re-write the original draft made by the European Commission. Their prime task is not to define common objectives, but to prune it of all aspects that could constrain their national governments. Thus, the BEG can hardly be called an external constraint that could overcome weak coordination failure. Occasionally, monitoring of the BEG receives public attention, like the recent discussion on Ireland's policy mix or the budget position of Italy in 1999. In most cases the public's perception is at significant variance from the internal debates among government officials on the subject, but the exchange between policy makers may Pareto-improve strong coordination failure.

Another form of information exchange takes place in the Euro-group, the regular meeting of finance ministers with the ECB president and the commissioner. Due to its informal character, the small number of participants, and the confidential nature of the debates, this forum has helped to speed up the formation of common views between the participating ministers and also the ECB. Discussions are very frank, often with a lead speaker and a discussant. The European Commission usually prepares policy-relevant analysis and the quality of these papers has greatly improved over the last two years. The brightest and best-trained ministers often dominate the debate. The dreary reading of prepared speaking notes is less common in the Euro-group than in Ecofin meetings where ministers speak under the scrutinising eyes of their top civil servants.

Unfortunately, due to its informal nature, the emerging political consensus within the Euro-group lacks commitment. Thus, when the French finance minister Ch. Sauter wanted to use windfall revenue from economic growth (*'cagnotte'*) in order to pay back public debt, he was overruled by his Prime Minister. When the German government announced a major tax reform in 2000, it did not even brief its partners in advance – not to mention taking any advice about its appropriateness in terms of the aggregate policy mix. The French EU presidency in

2000 declared better policy coordination as its objective and then decided to lower petrol tax three days before the informal Ecofin meeting at Versailles – contradicting the wishes voiced at previous consultations. And a cacophony of diverging ministerial statements on interest and exchange rates is the rule in Euroland, while unanimity and disciplined communication are – not surprisingly – the exception. Hence, in the last resort fiscal policy in Euroland is still guided by the principle '*chacun pour soi*' and not by 'common concern' as postulated by the Treaty. Although coordination failure in fiscal policy is of the strong form, the simple exchange of information is not sufficient to move to Pareto-improved policy mix equilibria – and certainly not to ensure optimal welfare states. What is missing is binding agreements on the aggregate fiscal policy stance. Below I will argue that this flaw is due to the institutional set-up of legitimating policy choices in Europe.

The EU-Treaty establishes price stability as the most important collective good of EMU and it assigns the pursuit of this objective to the European Central Bank. Political autonomy or independence of the European Central Bank is seen as a necessary condition to ensure that the budget constraint remains 'hard'. Implicitly this stipulation assumes that an independent central bank could ultimately always provide price stability. Therefore price stability is an inclusive public good, which could also benefit from the policy contributions of other actors. Yet, given that a hard budget constraint is the foundation of any monetary economy, the central bank's autonomy, i.e. its constitutional foundation, can never be an issue for policy coordination. But under certain conditions the bank's behaviour may fit into a cooperative game, because even if central bank independence is a necessary condition for efficient stabilisation policies, it is not sufficient. Monetary policy also has consequences for investment, growth, public finance, external balance etc. It is not taking place in isolation. Hence, the policy outcomes resulting from some actors' choices may depend directly on policy choices made by the central bank *and inversely*. The inclusive collective good character of price stability could cause strong form coordination failure. Coordinating behaviour between independent actors through informal exchange of information as in the euro-group or the Macroeconomic Dialogue may then produce superior outcomes compared to non-cooperation.

Policy coordination between governments may be of a different nature. I have argued that if government action in one country affects the utility of citizens in another country, policy

outcomes become a collective good and require some form of collective governance. The opposite view states that multiple government policies are a desirable feature because with heterogeneous economic structures and one single monetary policy for all, greater flexibility is required to adjust to asymmetric shocks. Assuming that mobility in labour markets is limited, it is often heard that different fiscal policy responses may provide the flexibility needed to deal with cyclical divergence among member states.¹⁸ Most of these arguments have a jurisdiction *bias*. People 'think in Nations' because they have been around for so long.¹⁹ Nations are based on territory and 'political territory' reflects the spatial extend of state power, i.e. the capacity to impose the collective rules and regulations. Yet, as we saw above, 'economic territory' is defined by money. Although there is some collective regulation in Europe, it is also clear that the degrees of integration in the economic and the political sphere are unbalanced and this fact can cause coordination failures. For example, the jurisdiction bias frequently leads to the assumption that idiosyncratic economic shocks are national and therefore need national responses. But this is not necessarily the case, as the BSE-crisis shows. Shocks can be regional or sectorial and border transcending. The appropriate reaction to a single and unique border-transcending shock is a single unified policy response and not divergent policies in different jurisdictions. In fact, the need to find remedies for undesired developments at the national level may be more often the consequence of previous policy mistakes made at that level. Some consider that non-coordination and competition among national policies is best because a portfolio of national mistakes reduces the risk of major damage (Vaubel, 1983). But surely it must be better to avoid mistakes altogether. Hence the significant focus on prudential constraints in European policy-making – which is one form of coordination. The desire to avoid moral hazard and free riding has been a driving force behind the European philosophy of 'no bail-outs' and the insistence on national policy responsibility. But this approach is limited to policy areas where externalities and spillover effects are small. If collective goods are exclusive, the assignment of policy responsibility to national jurisdictions becomes dysfunctional.

This concerns particularly the case of defining an optimal policy stance for the Eurozone. We may call an *efficient policy mix* any combination of fiscal and monetary policy that yields

¹⁸ It is, however, often overlooked that flexibility in capital movements has greatly increased with EMU. For example, Portugal's current account deficit presently stands at 15 percent of GDP – clearly an unsustainable situation if Portugal had its own currency, but perfectly normal with a single currency.

¹⁹ Smith (1995, p.62) makes the point very clearly.

price stability and full employment. Which combination is chosen depends on institutional constraints and collective preferences (see annex). If the realised outcome reflects collective preferences, it is called optimal.²⁰ While price stability is an inclusive public good, the definition of an aggregate fiscal stance is exclusive. The defection of only one fiscal actor from a previously agreed aggregate policy stance would prevent the provision of this collective good and require policy adjustments by the ECB and possibly other economic actors. Hence, the non-jointness of supply in the aggregate fiscal policy stance leads to weak form coordination failure.

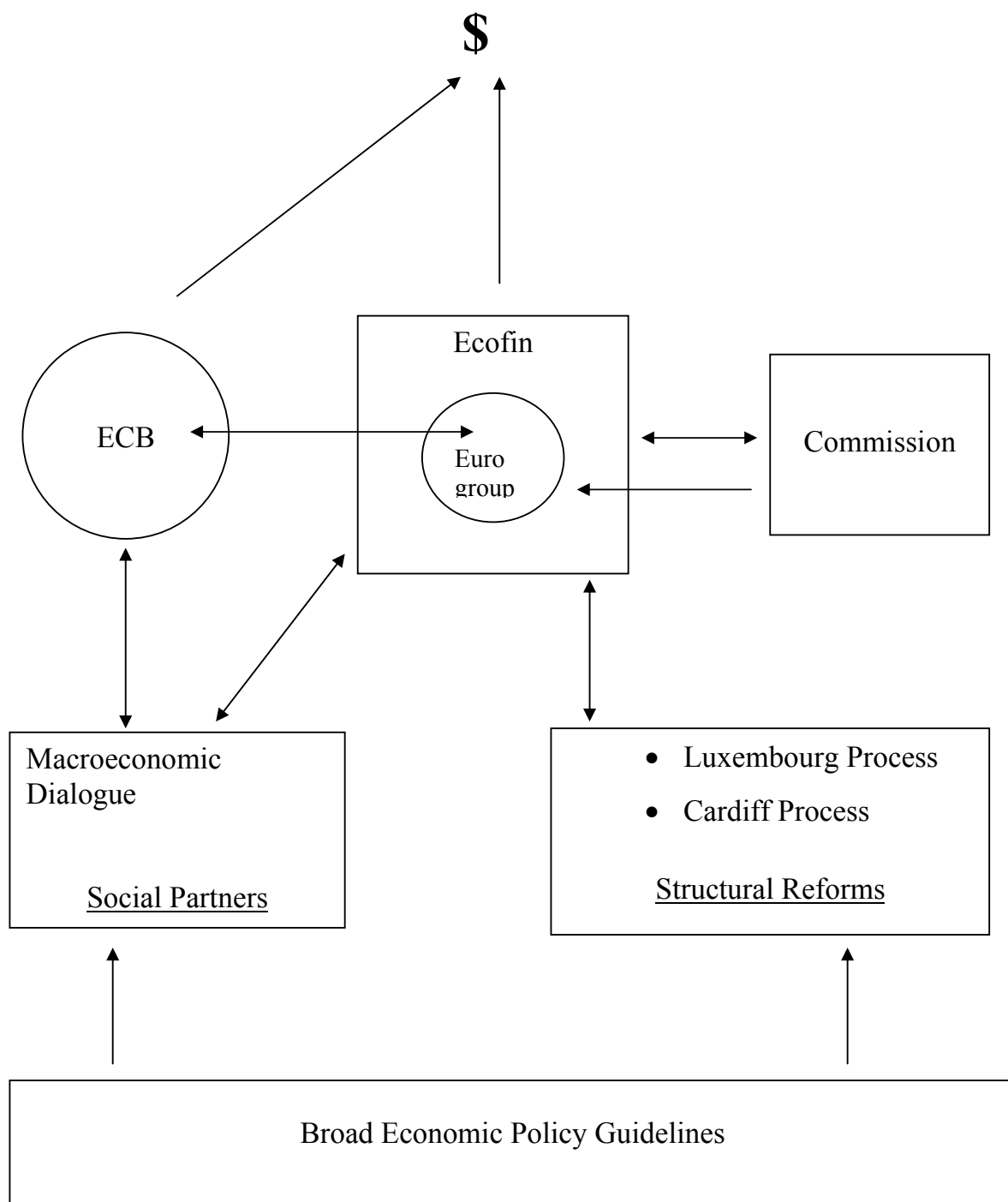
The rationale for maintaining autonomy in budget decisions is, of course, derived from the fact that the allocation function of fiscal policy can usually be assigned rather clearly to jurisdictional responsibilities. Thus, Jacquet and Pisani-Ferry claim that the introduction of the euro requires closer intergovernmentalism because 'a common economic policy can only emerge on the basis of coordinated action between independent actors, some of which (the ECB) are federal institutions and others (the governments) are not.' (2001, p.10) However, one has to distinguish between different government functions. Structural economic policies or allocative functions of fiscal policies can often be reduced to a regional level. Hence, for these functions intergovernmental cooperation is appropriate. But for essential variables of a monetary economy (such as interest and exchange rates) this is not the case. Macroeconomic externalities are the reason why fiscal federalism has always assigned the *stabilisation function* of budget policies to a central (federal) government agency. Yet, in EMU they are subject to an intergovernmental regime. Stabilisation policy in Euroland gives rise to a two-dimensional assignment problem. One is related to the fact that the European Central Bank targets union-wide aggregates, but there is no fiscal authority that determines the *aggregate fiscal policy stance* in relation to monetary policy. When fiscal authorities fail to internalise the area-wide effects of their policies, coordination failure is the result (Gatti and van Wijnbergen, 2000). In principle, alternative combinations of levying taxes, borrowing in interest-bearing form and printing high-powered money can finance government expenditure. All these methods have consequences for prices, interest rates, economic growth and exchange rates, i.e. the policy mix. Hence, a non-cooperative setting of national budgets is

²⁰ Most of the macroeconomic literature is about how to deal with shocks that cause temporary deviations from such efficient policy mix. I will not deal with such adjustment dynamics but focus instead on the choice of an optimal policy mix that reflects long term collective preferences.

unlikely to yield a coherent aggregate fiscal policy stance and makes the achievement of an optimal policy mix fortuitous, at best. The other dimension concerns *cyclical divergence* between member States. If markets are not fully integrated and regional booms led to regional price developments that affect the average price level in the union, then fiscal policy could assume a dampening effect at least for prices of non-tradable regional goods. Under these circumstances fiscal policy must be regionally differentiated. Such considerations have recently influenced the EU's assessment of the Irish policy stance. However, one should be sceptical how far the regional stabilisation function is a feasible policy option (Pisani-Ferry, 2001). In fact, market logic would suggest that under a given budget constraint a local boom kills itself via the loss of competitiveness. This could be a long and painful learning process; but unless the local shock has an emergency character (like earthquakes, BSE or foot-and-mouth disease), it might be more easily dealt with by income policies than by differentiated fiscal policies.

The need for coordination of national fiscal policies and euro-zone monetary policy arises from the need for a clearly defined aggregate policy stance and the potential costs of uncertainty regarding the direction of the policy mix in Euroland if such stance is not defined (Jacquet and Pisani-Ferry, 2001). In unitary democratic states, this dilemma is typically solved by a central budget that reflects (more or less) the collective preferences of voters. In federal states, only central authorities are in a position to internalise the externalities of regional policies. Different allocative functions are assigned to different jurisdictions and a redistributive mechanism (such as *Länderfinanzausgleich* in Germany) ensures the coherence of collective choices at different government levels with the overall budget constraint. In Euroland, this is not the case. The Stability and Growth Pact is a device to overcome free riding, but it gives no guidance about the coherent policy mix (Collignon 1996). There is a major gap in Europe's institutional set-up. The present arrangements are a *bricolage* of odds and ends; they do not ensure a coherent and sustainable optimal policy mix. In the next section, I will propose ideas how to overcome these shortcomings.

Figure 4: Policy Coordination in Euroland



III. The next step in building Europe

The need to improve economic policy co-ordination has been apparent for a long time. The former president of the Bundesbank H. Tietmeyer frequently emphasised the need for complementing monetary union by political union. Yet, when the French government called for a *gouvernement économique*, their German friends were quick to reject it, instead of using the proposal as a stepping-stone for their own declared objective. This may be due to the clumsiness of *neo-wilhelminian* diplomacy, but more fundamentally it reflects a profound resistance to see government power restricted and to surrender areas of national sovereignty. However, the dissensus between governments reflects a deeper disagreement between people. In terms of the consensus model in the annex, the chain of respect between individuals across national boundaries is still weak. Distrust, i.e. zero weight to another's argument, is still rampant despite 50 years of integration. As a consequence, dissensus on European policy options is significantly higher between countries than within them. What Europe now needs, if it wants to sustain its integration, is a proper policy consensus, shared by all citizens, and institutions that allow to create it.

The need for a European consensus

The reasons for the persistent European policy dissensus are grounded in the institutional arrangements of decision-making. In modern democracies, policy consensus arises from democratic debate, exchange of arguments and communicative action (Habermas, 1984; 1987). People *evaluate* potential outcomes of choices on the basis (background) of their *theories* of the world (Buchanan, 1991, p.52). Through dialogue, people seek to convince each other of the 'truth' of their advanced positions and the validity of rules and norms of action. Thus, disagreement over policies can reflect either genuine differences in *interests* (i.e. evaluative choices) or differences in *theories* (i.e. the analysis of the world and the prediction of outcomes). Conflicts of interests need to be solved by negotiation and compromise (finding terms that are acceptable to everybody); conflicts resulting from different views about the world require consensus on theory and analysis (Buchanan, 1991, p.61) In this perspective, democratic votes are a device to create *procedural agreement on choice* outcomes when further consensus fails. Electoral campaigns are a particular medium through which citizens

form their views and opinions about policy options and give weight to the arguments of others. The role of communication media is to transport these arguments. Only the final residual of dissent is then decided by a majority voting. *The jurisdictional framework, which structures the democratic debate, is therefore crucial for the cognitive foundations of policy consensus.*

In the European context, the mechanisms of collective consensus formation are much less developed than in the national framework. There exists a network of NGOs, associations and lobbying groups that express and contribute to the creation of European-wide policy preferences, but often these organisations stand at a great distance to day-to-day decision makers on the ground. European citizens are consulted every 5 years when electing a Parliament, but the mechanics of party politics and media coverage mostly confines the exchange of ideas to the domestic policy context.²¹ In addition, the general perception is often that participating in the European policy debate has little importance, given that national governments maintain the essential power. Because of this institutional set up, convergence to a shared theory and the emergence of a European-wide consensus are slow and the perceptions of dissensus are enduring. This dynamic is re-enforced by intergovernmental cooperation. Because democratic governments wishing to be re-elected need to reflect the consensus of their constituency, they have a national bias that perpetuates European dissensus. They therefore position themselves as defenders of clearly defined (although not necessarily stable) sets of national preferences and interests, and they act as unitary and rational players (Moravcsik, 1998). Policy agreement is then obtained as a bargaining compromise in the small circle of officials, but rarely as the reflection of the collective preferences that would emerge from a fully democratic policy process in Europe.²² Governments do not normally *create* consensus; they *reflect* it.

Some have argued that intergovernmental coordination is the appropriate method to deal with economic policies in Euroland.²³ The reason is that national governments spend the bulk of public money. However, apart from the uncertainties how the intergovernmental approach will work in a crisis, the growing public disenchantment with European integration hints at an ultimately fatal flaw in the intergovernmental co-ordination method: the growing democratic

²¹ Contrary to a widely held view, language is not the problem, as the different policy debates in Germany and Austria or in France, Belgium and Luxembourg demonstrate.

²² In any case, the stochastic noise in the variance-covariance matrix of democratic consensus makes the reading of the equilibrium vector rather difficult.

²³ See P. Jacquet et J. Pisani-Ferry, 2000

deficit. The more areas of competences fall into the domain of European policy-making - and the scope increases with the number of collective goods, their externalities and spillover effects from integration - the larger is the *legitimacy gap in intergovernmental policy decisions*. The problem results from the fact, that in a democratic system collective preferences are translated into government policy through the constitutional mechanism. If the public's preferences change, governments and policies will (eventually) adapt or change. Hence, democratic decisions remain potentially reversible and therefore open. This is one reason why an agreement on the procedure of voting can lead to the acceptance of disagreements on substance. Intergovernmental agreements have a different character. Here, each government enters negotiations with pre-established preferences (interests and objectives), which, in principle, reflect the preferences of its own constituency. During the negotiation, governments trade off some of their interests seeking compromise with their partners amongst themselves, although without giving feedback to their constituency. Economic theory calls this behaviour 'minimising a loss function'. Yet, public opinion in the national environment does not necessarily consent to the negotiated outcome. For them a loss is a loss, even if minimized and permanent losses create dissatisfaction with a given regime. Furthermore, an iron rule of international relations is: *pacta sunt servanda*. Hence, intergovernmental choice can only be reversed when a qualified majority of *countries* (i.e. governments!), decides to do so, but not necessarily the majority of *people*. This form of gerrymandering makes policy changes much more cumbersome and re-enforces the feeling of democratic frustration.²⁴

The need for a European constitution

There are two ways to overcome this problem: one is to revert back to nation-state politics, thereby undoing the benefits of integration. This is not unusual. History has seen many cases where regional co-operation has disintegrated. Some of the overtones in the debate about subsidiarity and the redefinition of competences between the EU, national and regional authorities could ultimately lead to Europe's demise, especially after the intake of a large number of new countries. For, the level of dissent and potential conflict will increase with the

²⁴ The US presidential elections of 2000 are a reminder of the institutional discrimination that jurisdictional-based voting can produce. But what is a rare exception in US constitutional reality, is a daily occurrence in Europe.

number of national actors, unless new structures of consensus building are created.²⁵ The alternative is *to delegate more* policy-making competences to community institutions. Based on our analysis in the previous section, it is obvious that such pooling of sovereignty should only apply to areas of significant exclusive collective goods in order to overcome weak coordination failure. Delegation has been at the core of European integration over the last 50 years, particularly in the field of agricultural policy, competition policy, and foreign trade. With the creation of the European Central Bank it has taken a new qualitative leap, for the coherence of the monetary foundations of Europe are now in one hand. It is only logical to build on this experience and generalize it. This is the approach taken by the German foreign minister F.J. Fischer in his speech at the Humboldt University in May 2000. He noted that the traditional Monnet method of integration has reached its limits; a quantum leap in the institutional approach was needed. In May 2001, the German Chancellor Schröder followed up with ideas on a European constitution. I will not discuss here the political implications of these proposals. Instead, I will focus on economic issues and suggest new institutional arrangements for defining an optimal policy mix that should be covered by such a constitution.

The purpose of institutional reform of economic policy making must be to give aggregate fiscal policy a degree of coherence that allows a sustainable optimal policy mix. This requires the emergence of a European collective utility function that reflects the consensual weights Euroland's citizens attach to different policy options. However, given the decentralized incidence of the allocational aspects of fiscal policy, collective choice on many aspects of government taxing and spending must remain on a regional/national level. With respect to fiscal policy this logic implies delegating the stabilisation function to the European level, but leaving the implementation to national governments. Yet, delegation to a higher level is only useful and acceptable if it leads to a larger and better European consensus. Therefore, *new forms of democratic legitimacy are needed that intergovernmental coordination cannot produce*. This would require disentangling the horizontal and vertical dimensions of collective choice. On the vertical side, re-definition of competences between the Union and member States is on the agenda since the Nice intergovernmental conference. Horizontally, one would have to distinguish more clearly between executive and legislative function. The requirement

²⁵ It has often been reported that Prime Minister M. Thatcher favoured East European enlargement in order to weaken the Brussels bureaucracy.

of fiscal coherence between the two dimensions would imply defining the aggregate fiscal stance by a European executive and legislature. Evaluative conflicts of interests could be dampened by a system of transfers or stabilisation funds, as they are in the German model. Optimising the economic policy mix would require the definition of a coherent *aggregate* fiscal policy stance which would allow the ECB to set interest rates in response, so that potential output is realized. Hence a binding rule or economic constitution for the aggregate budget position is needed. But this does not necessarily imply that the execution of this budget position must remain at the European level. One could imagine the following arrangement. The European executive, presumably consisting of the European Commission, would formulate an aggregate fiscal stance after consulting the Eurogroup (acting as a special subcommittee of the council). The proposed amount for the European aggregate public expenditure and income would have to be approved by the European Parliament and the Council. Within this general envelope, national governments would have the freedom to define their local budget position, while the coherence between their choices would be assured by bilateral bargaining and a stabilisation fund that allows for side payments in the bargaining process. This would guarantee the realisation of the agreed aggregate stance.²⁶ However, the need for a democratic ratification of the proposed aggregate fiscal position by Parliament and Ecofin would establish the democratic dialogue about policy objectives across borders that is necessary to create agreement and consensus. The ECB could then optimise the policy mix at the given European collective preference point by setting interest rates at the appropriate level (See annex).

The idea to separate the macroeconomic dimensions from the nitty-gritty of budget negotiations is not new. For example in France under the V. Republic, parliament first approves a macroeconomic policy stance (total planned income, total expenditure and deficit); only in a second step will it vote on individual titles (*arbitrages*) which will have to respect overall budget coherence. This prevents inconsistent budget decisions that hampered the IV. Republic. Along similar lines, one could imagine that national governments delegate the formulation of the fiscal policy stance in Euroland to a Community institution and in a second step, implement the so defined aggregate fiscal policy stance through their national budgets.

²⁶ The existence of transfers from a stabilization fund are also creating a powerful incentive to stick to the agreed policy mix.

However, given the prominent role of parliaments in democracies, it is clear that further delegation of national sovereignty requires greater democratic legitimacy for the decisions to be taken at the Union level. This does not necessarily require a fully blown federal state, but the European *res publica* will need the involvement of its citizens. Only a democratic debate and vote across borders about the right options for Europe's economy could create the necessary consensus around decisions, which the single currency will make unavoidable. The debate launched by the German Foreign Minister J. Fischer has opened new perspectives. Bringing them into concrete form is the next step for Europe.

Annex

Stefan Collignon

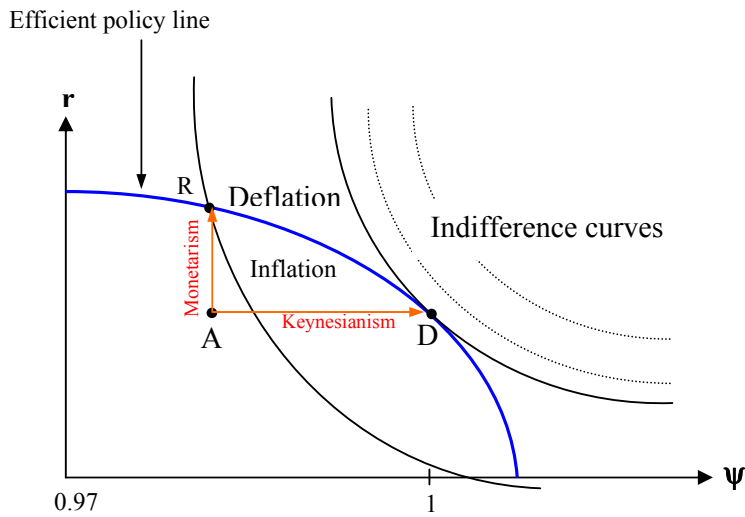
Policy Mix and National Preferences

We will here analyze the formation of collective preferences over a range of possible policy mixes. We will first look at a national unitary state, then highlight the structural difficulties resulting from the institutional set up in EMU and finally propose a solution for these difficulties.

1. The unitary national state.

Policy mix is understood to mean the combination of monetary and fiscal policy that yields a given macroeconomic state. An *efficient* policy mix is the combination of a monetary policy stance (real interest rate r) and budget position ψ (i.e. the ratio of revenue over primary expenditure) that achieves simultaneously full employment and price stability. There is neither aggregate excess demand nor excess supply. An *optimal* policy mix reflects an *efficient policy mix that maximizes a community's collection utility function*. The determinants of the efficient policy mix depend on a given economic model, i.e. the exogenous structure of parameters (production function, wage bargaining regimes, etc) and our two policy variables. In principle, the model could be generalized to any policy domain, but for reasons of simplicity, we will assume here a simple IS-LM model with a negative trade-off between interest rates and deficits. This trade-off is due to money being a hard budget constraint on public finances and risk averse portfolio investment of savers. Macroeconomic equilibrium is then represented by a concave function in the (r, ψ) -space. See Figure 1:

Figure 1: choosing an optimal policy mix



All points on the efficient policy line represent feasible policy combinations resulting in non-inflationary full employment. Points to the right of the line reflect an overly restrictive policy mix with insufficient growth, negative output gaps and high and possibly rising unemployment. Points to the left reflect excessively loose policies resulting in inflationary pressures. An inflationary state *A* is inefficient and can be pareto-improved by increasing interest rates ('Monetarism') or fiscal consolidation ('Keynesianism') or both. In our stylized world, Monetarists believe only monetary policy is needed to correct a disequilibrium; Keynesians believe in fiscal policy. The choice of an optimum policy mix consists in choosing between two efficient equilibrium states of the world; it is not, in our model, about policy instruments needed to reach equilibrium. Point *R* reflects the 'Republican' short-term equilibrium of a Reagan/Volker-type policy mix (tight money, loose fiscal), point *D* the 'Democratic' equilibrium of the Clinton/Greenspan mix (tight fiscal, loose money). As is well known, neither the Pareto-criterion nor the compensation criterion is of help in deciding whether *R* or *D* is to be preferred. There are good arguments to assume that *D* has better long

run effects on employment creation than R (see Collignon, 1998), but we will neglect this line of arguments here.²⁷

An independent central bank's job is to keep the economy on the optimal line. If monetary policy adjustment were without cost, the central bank would be a Stackelberg follower in welfare maximization.²⁸ Different points on the efficient policy line then simply reflect different time-preferences for tax payments. Governments reflect their voters' preferences in setting the budget. Thus, at D voters prefer a balanced budget and low interest rates. At R they have a high time preference for the short term, i.e. for spending today and paying back in the future. Obviously, Republicans and Democrats have different utility functions, for from the point of view of a Democrat, R lies at a lower indifference curve than D and inversely.²⁹ Hence, every point on the efficient policy mix line reflects a strict preference ordering for each individual citizen.

The utility functions of different individuals can be distinguished by the relative weight they give to the usefulness of monetary and fiscal policy. These weights may differ due to different information sets people possess. Taking a Cobb-Douglas utility function, the weight is reflected by the parameter α_i .³⁰ α_i reflects the weight individual i attributes to interest rates in assessing the utility or welfare effects of a policy mix, $(1 - \alpha_i)$ is the corresponding weight of the budget position. In a Cobb-Douglas function they can also be interpreted as a partial elasticity with which i 's utility assessment of each policy variable changes, when the interest rate or budget position changes.

$$(1) \quad U_i = U(r, \psi) = r^{\alpha_i} \psi^{1 - \alpha_i}$$

And its log form:

$$(1a) \quad \ln U_i = \alpha_i \ln r + (1 - \alpha_i) \ln \psi$$

The optimal policy mix that maximizes individual i 's utility is given by the slope of the indifference curve that is tangent to the efficient policy line:

$$(2) \quad \frac{dr}{d\psi} = -\frac{(1-\alpha_i)}{\alpha_i} \frac{r}{\psi} = -\frac{U_\psi}{U_r}$$

²⁷ The Waigel/Tietmeyer policy mix which dominated Europe in the 1990's reflects an inefficient point to the right of the efficient policy line.

²⁸ Central bank independence is, of course, required in order to ensure an incentive to return to the equilibrium. Otherwise the government could enforce an enduring deviation from the optimal policy line.

²⁹ Figure 1 does not show R 's indifference curves which are tangent to the optimal policy line at point R .

For a given combination of interest rates and budgets, a high weight given to monetary policy as a stabilization instrument (high α_i) corresponds to a low marginal utility of fiscal policy and a flat slope of the indifference curve. Thus, the Republican equilibrium is dominated by Monetarism. Inversely, Democrats give low weight to monetary relative to fiscal policy and therefore the slope of the utility function at the given efficient policy line is steep. Hence, the individual policy preferences between Democrats and Republicans are incompatible. The question is, which policy mix will prevail when individual preferences are aggregated into a collective policy mix choice?

The answer depends on picking a specific social choice rule (Sen, 1970), which may lead to different procedures and results. Here is not the place to review the logical assumptions behind different social welfare functions that try to integrate individual utility functions.³¹ What matters, however, is that *if collective choices are not based on agreement and consensus, individuals lack commitment to adhere to the collective decision*. The problem with welfare functions based *only* on individual preferences is that they unnecessarily restrict the information set which may be amalgamated to reach a social choice (Lehrer and Wagner, 1981, p.5). Collective choice based on agreement requires a process that resembles scientific discourse (Buchanan, 1991, p.7) and therefore a wider set of information and dialogue. As a consequence, models based on traditional welfare functions produce principles and recommendations for efficient collective choices, but they fail to explain why people with different informational sets would be committed to these principles and precepts. If these decisions are nevertheless obliging all members of society, they are in effect *dictatorial* in the Arrow (1951) sense: the preferences of a subset of individuals are ignored *and they do not agree to have them ignored*. By contrast, consensual decision-making allows for neglecting some individuals' preferences, but *everyone agrees* to this neglect in the collective choice because it is a rational consequence of *consulting the complete information set*. For example, the Republican may privately prefer the Reagan/Volker policy mix, because he only knows Monetarist theory. The Democrat chooses Clinton/Greenspan, because he was trained in Keynesianism. After a public debate of pros and cons regarding each policy mix and an exchange of relevant information, both individuals pay respect to each other or to some third

³⁰ Given that the fiscal parameter is $(1 - \alpha_i)$, the argument can also be made in terms of fiscal policy.

³¹ See Sen, 1977. For a textbook overview see Broadway and Bruce, 1984.

(new) authority (a journalist, a finance minister, a Nobel laureate...). Hence, their views might converge to consensual weights in the utility function with regard to the two policy instruments. The *binding effect* of a commitment comes as a result of communicative action: after the full exchange of information, everyone who can rationally appreciate the situation agrees (Habermas, 1987, p.93). If communication does not take place, however, the lack of commitment will lead to social disintegration.

Lehrer and Wagner (1981) provide a formal algorithm to model consensus, which we will use here to derive a consensual collective utility function. We start in the original position, where individual preferences are 'privately' formed (Kuran, 1985), based on an individual's limited original stock of information. Each individual assigns a weight α_i to monetary policy and $(1 - \alpha_i)$ to fiscal policy in determining their private utility function. Hence the distribution of private utilities in society can be written as:

$$(3) \quad \mathbf{u}_p = A\mathbf{p}$$

Where \mathbf{u}_p is the vector of the logarithm of private utilities for a n -member society, \mathbf{p} is the vector of the log value of m policy variables relevant for the optimal policy mix and A is the $n \times m$ -matrix of coefficients given to each policy variable in equation (1a). We will call A the *welfare matrix*. It has non-negative entries ($\alpha_{ij} \geq 0$) and row sums equal to one ($\sum_j \alpha_{ij} = 1$). In the policy model discussed here, every citizen has an opinion, (about monetary and fiscal policy, no "I don't know") so that $m = 2$ and the dimension of A is $n \times 2$. The task of finding a consensual utility function implies finding a rule whereby the individual weight for each policy variable converges to a unique equilibrium value ($\alpha_{1j} = \alpha_{2j} = \dots = \bar{\alpha}_j$). This equilibrium weight will reflect the best summary of the total relevant information in society and all n members of society will be rationally committed to the social consensus. This convergence is achieved by communicative action (Habermas, 1984, p.94-101). It can be modeled as follows. Person i (say the Democrat) notes that there is disagreement about the utility of a given policy mix, i.e. the coefficient α_D she assigned to monetary policy differs from those of others. Although she may be highly convinced of her opinion, she may question the reasons and motives of others. This new information leads her to assign some weight to the policy views of other members of society. This assignment may take the form of a statement like "In 3 out of 10 cases, the Republicans might be right." This weight (w_{ik}) given by i to another individual k 's utility coefficient (α_{kj}) reflects the trust and esteem that i holds for k 's expertise

and reliability. If every individual assigns some trust or confidence in the opinion of herself and all others, we obtain the weight matrix

$$W = \begin{bmatrix} w_{11} & \cdots & w_{1n} \\ \vdots & w_{ik} & \vdots \\ w_{n1} & \cdots & w_{nn} \end{bmatrix}$$

We will assume for the moment that every person gives some positive weight to the opinion of every other ($w_{ik} > 0$) and to herself ($w_{ii} > 0$) with $\sum_k w_{ik} = 1$. It is then rational for a person to accept the implications of the weights she assigns and attempt to improve her initial welfare matrix by taking a weighted average of the different views in society about policy parameters. Hence the person would move from the original state t to a new state $t+1$, such that:

$$(4) \quad \alpha_{i,t+1} = w_{i1} \alpha_{1,t} + w_{i2} \alpha_{2,t} + \dots + w_{in} \alpha_{n,t}$$

or more generally

$$(5) \quad A_{t+1} = WA_t$$

Given our assumption of non-negative entries and unit row sum, (5) describes a stochastic process known as finite homogenous Markov chain. As is well known, with $t \rightarrow \infty$, the process tends to converge³² to a unique weight matrix $W^t = \bar{W}$ with identical rows, which lead to consensual policy parameters. The speed of convergence of each individual's opinion (i.e. the number of iterations necessary to reach an infinitesimal deviation) depends on the characteristic equation of the weight matrix - i.e. an n th-degree polynomial equation. Convergence requires that every root of the characteristic equation is less than 1 in absolute value and the closer it is to zero in absolute value, the faster is the speed by which consensus is obtained. In general this means that fast convergence and little dissensus requires reciprocal weights in the chain of respect.

The consensual collective utility function is:

$$(6) \quad \mathbf{u}_c = \bar{W}A\mathbf{p}$$

where every individual i in the \mathbf{u}_c -vector agrees to the same preference ranking of policy mixes.

This interesting result implies that social consensus can be modeled as the equilibrium value of a stochastic process. Dissensus reflects the noise in the variance-covariance matrix.

Conflict implies absence of an equilibrium, i.e. disjunctive sets of preferences. A consensual collective utility function may be obtained, if some member of the group assigns a positive weight to his own views and to at least one other person in the group, provided there is a chain of positive respect from each member of the group to every other member of the group (Lehrer and Wagner, 1981, p.27). The equilibrium is independent from private utilities, but relies on the weight of arguments and the respect that individuals command for their own views. Hence in our model of an optimal policy choice in a unitary state, the consensually selected combination of monetary and fiscal policy will depend on the respect paid to Monetarists and Keynesians to each other.

The model by Lehrer and Wagner gives two conditions for the emergence of consensus:

- individual i assigning a positive weight to herself ($w_{ii} > 0$) and
- the existence of a chain of respect from individual i to k such that there is some sequence of individuals beginning with i and ending with k such that each individuals in the sequence respects the individual listed directly after him in the sequence. (p.130).

This implies that in a consensual group not everyone needs to respect everyone else, but that there is a chain of respect that links all individuals to the consensus. In a strong formulation, consensus even emerges if there is at least one individual such that there is a *chain of respect* from every other individual to k . We may take this as the model for democratic consensus where every citizen assigns at least some positive respect, however small it may be, to some elected representative (e.g. the president). The democratic debate leads to the emergence of a given weight matrix \bar{W} from which the public choice of the optimal policy mix results.³³

2. *The policy mix in EMU.*

In an autarchic world, citizens of other countries do not receive positive weights in the domestic policy debate. The chain of respect is broken and foreigners receive zero respect. In reality, some foreigners do receive respect, but convergence to consensus is extremely slow. Hence, each nation state establishes its own collective utility function and policy preference.

³² The convergence is to be seen as a model of information aggregation. Hence it is a synchronic rather than a dynamic model of rationality. Lehrer and Wagner, 1981, p.26.

As long as each state conducts monetary and fiscal policy separately, conflicting policy preferences are not problematic. However, with the creation of European Monetary Union, monetary policy has been unified and consequently Euroland has a unified economic structure to which corresponds a single efficient policy line. Yet, fiscal policy remains in the national domain. The definition of an optimal policy mix takes place on two levels:

1. A national preference emerges from the democratic debate among citizens.
2. Governments negotiate at the intergovernmental level in order to reach a consensus on a European policy mix.

This has two consequences. First, the optimal policy mix now needs to be formulated in terms of a *single monetary stance* and an *aggregated budget position*. Second, the intergovernmental utility function is necessarily different from the national consensual function. For, the national utility function is:

$$u_N = \bar{W} A p$$

where \bar{W} is a non $n \times n$ matrix, i.e. the national utility function makes efficient use of all the information relevant for the domestic policy debate. Backed by this national consensus, the government then negotiates with others.

The intergovernmental utility function is:

$$u_{IG} = \bar{G} \bar{W} A p$$

where G is the weight matrix that *governments* assign to their reciprocal national weight matrices. The \bar{G} -matrix has the dimension $g \times g$, with $g < n$, and the original $\bar{W} A$ matrix of dimension $n \times m$ has been reduced to $g \times m$ by the two-level policy making process. The reduction is significant: n is approximately 350 million, even if this matrix involves many zero entries; g is only 12 (!) in Euroland. Thus, the intergovernmental consensus always reflects a restricted information set and the commitment by individuals to the negotiated policy mix is always less than a fully democratic consensus. Hence, the intergovernmental utility function reflects a 'false' democratic consensus, because as a rule $\bar{G} \bar{W} A \neq \bar{W} A \bar{G}$, i.e. the intergovernmental solution overwrites consensual national preferences, without creating the *binding effect* of rational commitment. It takes into account the information set relevant to

³³ This is the model in its most simple form. We could introduce voting and other decision making procedures as a device to cut the iterative process short, when a sufficient initial convergence has taken place.

national governments, but not to the entire group of European citizens.³⁴ How this process works in practice is well described by Moravcsik for intergovernmental conferences. It is not substantially different from the process of month-by-month policy coordination in the Ecofin, even if the role of the Commission and the ESCB is more influential there (parliament's is less). Intergovernmental negotiating serves as a learning process in which governments transform national preferences into positions and agreements "by encouraging commitment to canvass domestic groups [*at home* - my addition], ascertain the preferences of their foreign counterparts and examine the full range of technical solutions" (Moravcsik and Nicolaïdis, 1999, p. 69). Hence collective preference building at the EU-level does not give positive weights and respect to interest groups in *other* countries, as a single-level model would require. Furthermore, if the aggregates weights that people in two countries give to each other are low (because they focus on domestic opinion makers), the convergence process is slow and dissensus is persistent. This leads to democratic frustration, as individuals form their preference in the national contexts of communicative action (democratic debate, media network, etc.), only to see that the subsequently realized policy mix does not reflect their national consensus on the optimum policy mix. The conflict in this model is radical. Intergovernmental decision-making violates a fundamental democratic assumption: the political choice is not the amalgamation of the information people possess; every single vote does not count.

The informational constraints of two-level decision-making do not only pose problems to the *legitimacy* of European policy options, but also to their *efficiency*. For if the binding effect of rational commitment is low, the incentives for free riding are high and the quality of the policy mix are likely to be sub-optimal (von Hagen and Mundschenk, 2001). Yet, what would be the point of defining an optimal policy mix, if member states do not behave in accordance with its requirements?

3. Decision making in a federal system.

The conflict described in the last section reflects weak coordination failure. It could be overcome, if we extended our consensus-building group to 'foreigners' and established *one-*

³⁴ This effect is further reinforced by the fact that majority voting stops the convergence to full consensus (Lehrer and Wagner, 1981, p. 138; on democracy and consensus see also p. 74-78), thereby excluding half of the dissenting population. In a two-level decision making process, this exclusion can take place twice, hence potentially excluding up to 75 percent of the popular preferences.

level decision-making. As long as there is a chain of respect extending to at least one neighbour who himself is part of his domestic chain of respect, the Markov chain would eventually yield a European-wide consensus. However, given the uneven distribution (the low weight given to one or few foreign individuals) the speed of adjustment in public opinion to the new integrated consensus will be slow. If the structures of political decision-making and communicative action are such that the respect for the opinions of individuals in other member states of Euroland is low, national preferences are likely to dominate policy decisions despite the slow convergence to a European-wide consensus. Hence, the efficient formulation of an optimal mix in Euroland requires institutional arrangements that facilitate the amalgamation of all relevant policy information by *each* individual living in Euroland. In democracies the most efficient instrument to do so are elections, because they require the exchange of information and democratic debate during electoral campaigns. However, if elections take place locally, the likelihood of giving positive weights to the opinions of non-voters is low. Instead, efficient democratic consensus on optimal policy requires that policy mix decisions, i.e. the definition of the fiscal policy stance is set at a European-wide level by an authority that obtains its legitimacy from amalgamating the information from all citizens, and not only a small number of governments. The democratically legitimized policy consensus should be reflected by a collective utility function of the form

$$(7) \quad u_E = \overline{W}_E A p$$

where \overline{W} is a $z \times z$ matrix for $n < z$. The binding commitment by rational individuals to the European cause would be strengthened.

BIBLIOGRAPHY

Alesina, A., O.Blanchard, J.Gali, F. Giavazzi, H.Uhlig (2001): Defining a Macroeconomic Framework for the Euro Area. Monitoring the European Central Bank 3; CEPR, London

Alogoskoufis et al. (1995), 'Unemployment: Choices for Europe' in *Monitoring European Integration* 5, CEPR, London.

- Arrow, K. (1951): *Social Choice and Individual Values*, Cowles Foundation, Monograph 12, Yale University Press, New Heaven and London, UK.
- Benassi, C., Chirco A. and Colombo C.: *The New Keynesian Economics*, Oxford, Blackwell 1994.
- Binmore, K. (1998): *Just Playing. Game Theory and the Social Contract*, The MIT Press. Cambridge, Massachusetts
- Blanchard, O. (2000): *The economics of Unemployment. Shocks, Institutions, and Interactions*; The Lionel Robbins Lectures, LSE October (<http://web.mit.edu/blanchar/www/articles.html>)
- Buchanan, James M.: *The Economics and the Ethics of Constitutional Order*, Ann Arbor, The University of Michigan Press, 1993.
- Clarida, R. and M. Gertler (1997): How the Bundesbank Conducts Monetary Policy; in: Ch; and D. Romer: *Reducing Inflation. Motivation and Strategy*; Chicago, University of Chicago Press.
- Collignon, S. (1999a): European Monetary Union, Convergence and Sustainability; A Fresh Look at Optimum Currency Area Theory; in: *Economia Internazionale* 1999 – Numero Speciale, Supplemento al Vol. LII, Num. 1, Febbraio.
- Collignon, S. (1999b): Bloc-floating and Exchange Rate Volatility: the Causes and Consequences of Currency Blocs; in: S. Collignon, J. Pisani-Ferry and Y. Chul Park, Routledge (ed.) 1999: *Exchange Rate Policies in Emerging Asian Countries*, Routledge, London, England.
- Collignon, S. (1999c): Sustaining Monetary Stability; in: *Economia Internazionale* 1999 – Numero Speciale, Supplemento al Vol. LII, Num. 1, Febbraio.
- Collignon, S. (1999d): Unemployment, Wage Developments and the European Policy Mix in Europe; in: *Empirica*, 26 :259-269, 1999.
- Collignon, 1996 *Geldwertstabilität für Europa*, Verlag Bertelsmann Stiftung, Gütersloh, Germany, December 1996.
- Collignon, S. (1988): *Does the Central Bank Set the Natural Rate of Unemployment?*, AUME Working Paper, No 30, October.
Download available at <http://www.stefanollignon.de/publications.htm>
- Collignon, S. and S. Mundschenk (1999): The Sustainability of Public Debt in Europe; in: *Economia Internazionale* 1999 – Numero Speciale, Supplemento al Vol. LII, Num. 1, Febbraio.
- Commission of the European Communities (1990): *One Market, One Money*; European Economy, No. 44.

- Commission of the European Communities (2001): *Commission Communication on strengthening economic policy co-ordination within the euro area*. Brussels, 7.2.2001. COM (2001) 82 Final.
- Eucken, W. (1989): *Die Grundlagen der Nationalökonomie*; Berlin etc. Springer Verlag. 9. Auflage
- Frankel, Jeffrey A. (1995): *On Exchange Rates*, The MIT Press. Cambridge, Massachusetts.
- Gatti, D. and Ch. van Wijnbergen (2000): *Coordinating Fiscal Authorities in the Euro-zone. A Key Role for the ECB*. Social Science Research Center (WZB), Berlin.
- Habermas, J. (1984): *The Theory of Communicative Action*, vol. 1, Polity Press, Cambridge, UK.
- Habermas, J. (1987): *The Theory of Communicative Action*, vol. 2, Polity Press, Cambridge, UK
- IMF (2000): *International Capital Markets. Developments, Prospects and Key Policy Issues*; September; Washington D.C.
- Jacquet, P. et J. Pisani-Ferry (2000): La coordination des politiques économiques dans la zone euro; bilan et propositions; in: *Questions européennes*. Conseil d'Analyse économique. Paris, La documentation française. English version, January 2001.
- Kuran, T. (1995) *Private Truths, Public Lies - The Social Consequences of Preference Falsification*, Harvard University Press, Cambridge, USA and London, UK.
- Lehrer, K. and Wagner, C. (1981) *Rational Consensus in Science and Society*, Reidel Pub Co, Dordrecht, Holland.
- Musgrave and Buchanan (1999): *Public Finance and Public Choice: Two contrasting visions of the States*, MIT Press.
- Modigliani, F. (1997): The shameful rate of unemployment in the EMS: Causes and cures; in: S. Collignon (Ed.), *European Monetary Policy*, Cassel Academic, London, England, 1997
- Mooslechner, P. and Schuerz, M. (1999): *International Macroeconomic Policy Coordination: Any Lesson for EMU? A Selective Survey of the Literature*. In: *Empirica*, Vol. 26, No 3
- Moravcsik, A. (1999): *The Choice for Europe, Social purpose & State Power from Messina to Maastricht*. UCL Press.
- Moravcsik, A. and Nicolaïdis, K. (1999) *Explaining the Treaty of Amsterdam: Interests, Influence, Institutions*; in: *Journal of Common Market Studies*, Vol. 37, No 1, pp.59-85
- Padoa-Schioppa, T. (1988): The European Monetary System: A Long-term View; in: F. Giavazzi, S.Micossi, M.Miller: *The European Monetary System*, Cambridge University Press, Cambridge, UK.

Pisani-Ferry (2001): *The EMU's Economic Policy Principles: Words and Facts*. Paper prepared for the DG ECFIN Workshop on 'The Functioning of EMU: Challenges of the Early Years', Brussels, 21-22 March 2001.

Romer, D. (1996): *Advanced Macroeconomics*; McGraw-Hill, USA.

Sen, A. (1977): *Choice, Welfare and Measurement*, Basil Blackwell, Oxford, U.K.

Sen, A. (1970): *Collective Choice and Social Welfare*, Elsevier Science Publisher, Amsterdam, Netherland.

Sinn, H.-W. (2000): *Germany's Economic Unification. An Assessment after Ten Years*; ifo Institute, Munich.

Smith, A. (1995): The Nations of Europe after the Cold War; in J. Hayward and E.C. Page: *Governing the New Europe*; Polity Press Cambridge.

Vaubel, R. (1983): Coordination or Competition among National Macroeconomic Policies?; in: Machlup, F. et al. (eds.), *Reflections on a Troubled World Economy. Essays in Honour of Herbert Giersch*, London; Trade Policy Research, pp. 3-28.

Von Hagen, J. and Mundschenk, S. (2001) *The Functioning of Economic Policy Coordination*; mineo, First Draft, Bonn, March

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