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THE CONVERGENCE OF MONETARY POLICY - GERMANY AND FRANCE AS AN EXAMPLE

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THE CONVERGENCE OF MONETARY POLICY

- GERMANY AND FRANCE AS AN EXAMPLE

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1. Introduction

In July 1978 the European Council of the heads of state and government agreed in Bremen to the establishment of the European Monetary System (EMS). The EMS went into operation as of March 13, 1979 and replaced the "snake arrangement" for the exchange rates of some member states of the European Community. All former member countries of the European Community -Belgium, Denmark, France, Germany, Ireland, Italy, Luxembourg, the Netherlands and the United Kingdom- decided to participate in the EMS and -except the United Kingdom- its exchange rate mechanism. Of the more recent members only Spain joined as from June 16, 1989 the EMS- exchange rate mechanism. After prolonged abstinence, just recently -from October 8, 1990- the United Kingdom entered this mechanism owing to political motives. The exchange rate mechanism of the EMS has succeeded in creating "a zône of increasing monetary stability", at the same time gradually relaxing capital controls, and has improved monetary policy coordination between the central banks of member countries. However, the fiscal policy coordination between the Ministers of Finance was lagging behind. As stated in the Delors Report, the EMS has benefited from the rôle played by the Deutsche mark as an "anchor" for participants' monetary and intervention policies. 1) This resulted in an asymmetrical functioning of the EMS, in that respect that Germany focuses on a target for money growth and the other participants on a target for the exchange rate of their currency vis-à-vis the D-mark. As a consequence of the Single European Act, the member states of the Community confirmed the objective of progressive realization of Economic and Monetary Union (EMU) in June 1988 at Hanover. The European Council decided in June 1989 at Madrid to begin stage one towards EMU as from July 1, 1990. At the end of last year an intergovernmental conference started to discuss the composition of stage two and three towards EMU. In June 1990 President Pöhl of the Deutsche Bundesbank proposed the possibility of an two-speed EMU with France, Germany and the Benelux countries moving ahead and the other countries -including Italy, Spain and the United Kingdom- following later. 2) Of course, there was much objection to this proposal by the "following" countries. Nevertheless, the arguments in support of the two-speed approach are strong. The budget deficits in Greece, Portugal, Spain and also Italy are (very) high and persistent and will burden the convergence of monetary policy to a large extent, Moreover, the lack of wage flexibility and labour mobility within the Community will undermine the competitiveness, especially in the mentioned countries, and will require hugh regional and structural funds for financial assistance of these countries. Both in case of a one-speed approach and a two-speed approach towards EMU, the convergence of monetary policy between Germany and France will be decisive. The purpose of this article is to investigate the degree of convergence of monetary policy which has already been realized in both countries. Firstly, we will discuss the convergence in the implementation of monetary policy during the eighties: policy goals, monetary targets, monetary instruments and exchange and money market policy. Secondly, we will analyse the convergence in the performance of monetary policy during the last decade: inflation rates, real exchange rates, real capital and money market rates.

The conclusion of the article will be that the convergence of monetary policy between Germany and France has accelerated since 1986 and reached a high degree at present. The other side of this convergence is the strong dependence of the monetary policy in France on that in Germany.

2. Policy goals

The policy goals of the Deutsche Bundesbank are founded legally by the "Gesetz über die Deutsche Bundesbank" of July 26, 1957. The task of the Bundesbank is embedded in section 3 of the Bundesbank Act: 3)

"Die Deutsche Bundesbank regelt mit Hilfe der währungspolitischen Befugnisse, die ihr nach diesem Gesetz zustehen, den Geldumlauf und die Kreditversorgung der Wirtschaft mit dem Ziel, die Währung zu sichern, und sorgt für die bankmässige Abwicklung des Zahlungsverkehrs im Inland und mit dem Ausland".

The Act emphasizes the responsibility of the Bundesbank for monetary stability which means the stability of the value of the D-mark. The central bank should consult the federal goverment and other economic policy makers on general economic developments and the rôle of monetary policy. However, the primary task of the Bundesbank must always be its function as the guardian of the currency. As a consequence, section 12 of the Act has made the central bank independent of instructions from the federal goverment in stabilizing both the internal value, as the external value of the currency. The internal value corresponds with the domestic price level and may be considered as the main policy goal of the Bundesbank. It aims at price stability by the control of the growth of the money stock, at present measured by M3. The external value is regarded by the central bank as the purchasing power of the D-mark vis-à-vis other currencies and thus as the (effective) real exchange rate of the D-mark, i.e. the (effective) nominal exchange rate corrected for inflation differences between Germany and other countries. In Germany the objective of exchange rate stability has been subordinated to that of domestic price stability. This implies that the Bundesbank is only concerned with the consequences of the exchange rate development for the domestic price level.

The policy goals of the Banque de France are provided for in article 1 and 4 of "Les Statuts de la Banque de France" of January 3, 1973: 4)

"La Banque de France est l'institution qui, dans le cadre de la politique économique et financière de la nation, reçoit de l'État la mission générale de véiller sur la monnaie et le crédit...", and "...Elle contribue à la préparation et participe à la mise en oevre de la politique monétaire arrêtée par le Gouvernement et, avec le concours, dans le cadre de sa competence, du Conseil National du Crédit..."

Both articles reflect the responsibility of the Banque de France for monetary policy and its relation with the government. The central bank is the guardian of the currency and credit and functions as the adviser of the government. Nevertheless, the government determines the economic and financial policy to which the monetary policy has been subordinated. The Banque de France contributes towards the preparation and participates in the implementation of monetary policy by the government in cooperation with the Conseil National du Crédit. Although the central bank is not independent of instructions from the government according to the statutory mandate, its Governor decides in consultation with the Minister of Finance on the monetary policy in practice. In that respect the Governor focuses on the stability of the value of the French franc. The Banque de France tries to stabilize the internal value of the currency, corresponding with the domestic price level, by controlling the growth of monetary aggregates such as M2 and M3. Stabilizing the external value implies the stability of the nominal exchange rate of the French franc vis-à-vis the D-mark as an "anchor" for monetary stability and may be considered the rule of conduct for the monetary authorities. In France the objective of the control of money growth has been subordinated to that exchange rate stability. Since 1987 the Banque de France aims at stability of the nominal French franc/D-mark rate by its exchange and money market policy. It is trying to reduce the difference between the French and German money market rates.

Table 1. Conflicts between internal and external stability

external stability internal stability	appreciation of own currency by increase of money market rate	depreciation of own currency by decrease of money market rate
restriction of money growth by increase of money market rate	no conflict because internal and external objective in line	conflict of objectives Germany: 1986, 1987 France: 1987, 1988
expansion of money growth by decrease of money market rate	conflict of objectives Germany: - France : -	no conflict because internal and external objective in line

Of course, on the long term the internal and external objective are in line with each other. However, on the short term there is always the possibility of conflicting objectives. By the abolishment of direct credit controls -in France only since 1986- central banks are entirely committed to indirect credit control for internal stability. Thus the control of monetary aggregates is implemented by money market policy. Besides exchange market interventions, central banks use money market policy to influence exchange rates for external stability, e.g. within the framework of the EMS-exchange rate mechanism. An increase (decrease) of the domestic money market rate is expected to result in an appreciation (depreciation) of the own currency vis-à-vis the other currencies. Therefore, central banks may be confronted with conflicts between their internal and external objective and have to give priority to one of both. In recent years the Bundesbank had chosen for internal stability and the Banque de France for external stability.

3. Monetary targets

At the end of 1974 the Deutsche Bundesbank announced as the first central bank publicly a monetary target, i.e. a desired rate of growth for a monetary aggregate on annual base. The Bundesbank decided to target the central bank money stock ("Zentralbankgeldmenge" or ZBG), a kind of weighted M3, because this aggregate takes into account the degree of liquidity of the various liquid assets and appears to be strongly correlated with the total domestic expenditures in practice. 5) Since 1979 the flexibility regarding the external and cyclical circumstances was formally expressed by the introduction of a target zône ("Zielkorridor") for ZBG-growth. Until 1985 the actual ZBG-growth met the target zônes on annual base by the flexible, but restrictive policy of the Bundesbank. Nevertheless, its credibility was somewhat undermined by the substantial overshooting of the target zônes at the end of 1986 and 1987. This resulted from the high growth of currency and banknotes which have by definition a large share -more than 50%- within ZBG and distorted the monetary development. As from 1988 the Bundesbank turned to a target zône for the "unweighted" aggregate M3 which behaved on the medium term more or less the same as ZBG and was monitored next to ZBG since 1979. The reasons for this transition are the false interpretation of ZBG by the public as a monetary base concept and the higher sensitivity of ZBG for large fluctuations of domestic money market rates and exchange rates of the D-mark, especially vis-à-vis the US dollar. This phenomenon can be explained by the strong preference of residents for currency and banknotes and the currency hoarding of D-marks by non-residents.

Table 2. Monetary targets and rates of growth*)

	Germany		France	
Year	ZBG	M3	M2**)	M3
1980	5-8 (4,8)		11 (9,8)	
1981	4-7 (3,5)		10 (11,4)	
1982	4-7 (6,0)		12½-13½ (11,5)	
1983	4-7 (6,9)		9 (10,2)	
1984	4-6 (4,7)		5½-6½ (7,6)	
1985	3-5 (4,4)		4-6 (6,9)	
1986	3½-5½ (8,3)			3-5 (4,5)
1987	3-6 (8,2)		4-6 (4,0)	3-5 (9,0)
1988		3-6 (6,8)	4-6 (3,7)	
1989		ca.5 (4,8)	4-6 (4,5)	
1990		4-6 ( )	3½-5½ ( )	

*) Actual rates of growth between parentheses

**) For 1984 and 1985: M2R = M2 with residents

Sources:
Deutsche Bundesbank, Geschäftsbericht, 1980-89 and Banque de France, Compte Rendu, 1980-89.

The lower sensitivity of M3 for interest and exchange rate fluctuations implies also a more limited effect of money market policy than in the case of ZBG and thus a longer policy horizon of the central bank. While the actual M3-growth exceeded the target zône in 1988 only slightly, it deed meet the objectives for 1989 and 1990.

The Banque de France announced in December 1977 for the first time publicly a target for the growth of aggregate M2 on annual base. [6)] Until 1985 the actual M2-growth exceeded in most years the target (zône) in France which was in the beginning considerably higher than in Germany.
After a temporary switch to a target zône for the growth of M2R (M2 with residents) in 1984 and 1985 respectively M3 in 1986 and 1987, the Banque de France returned to a target zône for M2-growth since 1987. The central bank motivated the announcement of target zônes not only as benchmarks for the formation of inflationary expectations, but also by stressing its own responsibility for monetary stability and the "zône franc". [7)] According to the view of the Banque de France the objective of exchange rate stability alone is not sufficient for a large open economy as France. The choice of M2 as a target variable is based on the simplicity, clarity and controllability of this aggregate. It is a familiar concept to the public and consists of assets which bear no or a fixed interest. On the other hand, the rise of new financial instruments such as CDs, CPs and "sociétes d'investissement à capital variable" (SICAV's) induced a transfer of liquidity from M2 to M3 and L. This transfer is empirically confirmed by the contrary development of the income velocities of M2 and M3 as from 1986. Ever since the velocity of M2 increases and that of M3 decreases gradually. [8)] Therefore, it is no surprise that the actual M2-growth developed from 1987 within or even under its target zône, while the actual M3-growth exceeded its target zône in 1987 substantially. Furthermore, by the introduction of a plan for tax-deductable pension savings ("plan d'épargne populaire" or PEP) in February 1990 very large amounts were withdrawn from the savings accounts ("comptes sur Livret"). Because of its very long maturity the PEP is not a component of M2, M3 or even L. This excavates the meaning of M2 for policy purposes. As a consequence, the Banque de France may be expected to turn to a broader monetary aggregate -e.g. $M3^*$- which comprises all liquidity with residents.

4. Monetary instruments

The monetary instruments of the Deutsche Bundesbank can be divided in temporary and permanent instruments. [9)] The temporary instrument ("Feinsteuerung") have a (very) short policy horizon and are intended to smooth short-term interferences. To the temporary instruments belong the exchange market interventions, including swaps, and the important repurchase agreements ("Wertpapierpensiongeschäfte") of which the rate ("Pensionsatz") has become directive for the interbank money market

rate in recent years. The permanent instruments ("Grobsteuerung") have a medium policy horizon and are used to counter longer-term disturbances. Permanent instruments are the official credit facilities and the cash reserve requirements for the banks. The official credit facilities can be subdivided in the regular discount facilities ("Rediskont-Kontingente"), for which the central bank charges the discount rate ("Diskontsatz"), and the additional Lombard facilities ("Lombardkredite"), which are daily advances by the central bank against the Lombard rate ("Lombardsatz"). The discount rate was formerly the under limit for the interbank money market rate, but nowadays -from February 1985- the Treasury bill rate ("Schatzwechsel-Abgabesatz") acts as such. Treasury bills are issued by the federal government and sold by the Bundesbank at a rate which is on average a half point higher than the discount rate. The Lombard rate lies in general 1,5 till 2 points above the discount rate and may be seen as the upper limit for the interbank money market rate, in Germany represented by the call money rate ("Tagesgeldsatz").
Before 1976 the cash reserve ratios ("Mindestreserven") were regularly changed by the Bundesbank, but after that less and less because of the long time which the banks needed to adjust their cash reserves. However, the cash reserve ratios remained relatively on a high level because these requirements function as an "automatical break" for monetary expansion and are therefore indispensable for the Bundesbank.

Since December 1986 the monetary instruments of the Banque de France consists of the exchange market policy and the money market policy. [10)] The exchange market interventions do not only influence directly the exchange market but also indirectly the money market so far as they are not sterilized by the central bank. The money market policy comprises of those instruments which operate through the interbank money market ("marché interbancaire"): the official credit facilities, the money market operations and the cash reserve requirements of the Banque de France.
The first official credit facility is the calls for tender ("appels d'offres") with a maturity till three weeks which the central bank place at the disposal of the banks according to the expected money market volume. Its rate ("taux des appels d'offres") acts as a "hard" under limit for the interbank money market rate. The second official credit facility is the five-to-ten-days repurchase agreements ("pensions de 5 à 10 jours") which the banks may use daily on their own initiative. Its rate ("taux des pensions de 5 à 10 jours") is determined by the central bank and can be considered as a "soft" upper limit for the interbank money market rate, in France also represented by the call money rate ("taux du jour le jour"). Since the end of 1986 the spread between both official rates varied from a half to one point. Besides, the Banque de France can carry out in more specific circumstances money market operations at the market rate for fine tuning. The money market operations may be subdivided in direct interventions in the interbank market ("pension à moins de 5 jours") during one or two days and open-market operations ("concours/reprises de liquidité") by purchases/sales of Treasury bills against cash, to influence the interbank market through the open market. While the direct interventions in the interbank market are very effective in directing the money market rate in the short term, the effectiveness

of open-market operations is limited because of the small volume of the open market in France. As from 1985 the cash reserve requirements ("système des réserves obligatoires") play an important rôle despite that the cash reserve ratios are internationally quite low. The Banque de France pursues with this instrument three functions. Firstly, it has to provide for a structural money market deficit to make the money market operations sufficiently effective. Secondly, the cash reserve have to act as an "automatical break" on monetary expansion, just like in Germany. Thirdly, the Banque de France wants to use the cash reserve ratios as an "active" instrument to control the growth of the monetary aggregates in the short term.

Table 3. The transmission mechanism of monetary policy in Germany and France (since 1986)*)

Transmission mechanism	Germany	France (since 1986)
Monetary instruments	Official credit facilities Money market operations Cash reserve ratios Exchange market interventions	Official credit facilities Money market operations Cash reserve ratios Exchange market interventions
Monetary indicators	Interbank money market rate (Call money rate)	Interbank money market rate (Call money rate)
Monetary targets	Main target: M3 Additional target: Real US dollar/D-mark exchange rate	Main target: Nominal French franc/D-mark exchange rate Additional target:M2
Policy goals	Domestic price level	Domestic price level (before 1986 also: Gross national product)

*) For the analysis of the transmission mechanism of monetary policy see: S.C.W. Eijffinger, Over de beheersbaarheid van de geldhoeveelheid (on the controllability of the money stock), Amsterdam, 1986, pp. 85-95.

5. Exchange and money market policy

The exchange and money market policy of the Deutsche Bundesbank are aimed at different targets, while those of the Banque de France have been directed since 1986 on the same target, i.e. stability of the nominal exchange rate of the French franc vis-à-vis the D-mark.

In Germany the exchange market interventions by the central bank are less frequent than in France. This can be explained by the difference between the Bundesbank and the Banque de France regarding their independence from the Minister of Finance in the field of exchange market policy. At present there is an important discrepancy between both central banks with respect of the frequency and thus of the effectiveness of exchange market interventions. As influencing exchange rate expectations of market participants is empirically the main effect of exchange market policy nowadays, (very) frequent interventions in this market imply generally less effective interventions. [11)] Furthermore, the short-term objectives of the exchange market policy in Germany and France differ as a consequence of the asymmetry within the EMS. While the Bundesbank tries to smooth mostly fluctuations of the D-mark/U.S. dollar rate, the Banque de France focuses more on the French franc/D-mark rate. When not abstaining from intervention, the Bundesbank conducts a policy of "leaning against the wind" to counter disorderly exchange market conditions. [12)] The Banque de France follows the same policy of "leaning against the wind" and tries to avoid marginal interventions -interventions at the limits of the EMS-band- to maintain a two-sided-risk. Of course, both central banks do not sterilize the exchange market interventions by money market operations on the short run.

At the midst of the seventies the Bundesbank put more emphasis on its money market policy to control the growth of ZBG and from 1988 of M3 through the interbank money market rate. A rise of the interbank rate both slows down the granting of credit by the banks to the private sector and stimulates the demand by the public for assets outside ZBG and M3. The central bank controls the money growth indirectly by its money market policy which means that the policy lag will be longer than in the case of direct credit controls.
In February 1985 the Bundesbank decided to fine tune the money market more by its repurchase agreements ("Wertpapierpensiongeschäfte"). The reason for this change was the big signaling effect of adjustments of both official rates by which the money market policy had lost its flexibility.
The result was that the interbank money market rate -i.c. the call money rate- since then less depended on the discount and Lombard rate and more on the "Pensionsatz". From then on the Bundesbank kept the repurchase agreements in normal circumstances tight, i.e. smaller the expected money market need. Moreover, the money market participants were more and more focusing on small adjustments of the "Pensionsatz". So the interbank rate became increasingly volatile in the (very) short run as a consequence of the greater flexibility of the money market policy. Despite its volatility the Bundesbank tries to keep the interbank rate between the Treasury bill rate ("Schatzwechsel-Abgabesatz") and the Lombard rate, thus within a band of one to one-and-a-half point. While the "Pensionsatz" is very effective with regard to the interbank rate on the (very) short term, it has no effect on the debit and credit rates which the banks charge. On the other hand, by its discount and Lombard rate the Bundesbank influences the interbank rate on the medium term and thereby also the debit and credit rates of the German banks.

Only in December 1986 the Banque de France decided to switch to completely market-oriented instruments to stabilize the French franc/D-mark exchange rate, as well as to control its monetary aggregates. Once the decision was taken, the money market policy was developed very quickly and smoothly by the central bank. The official rates are solely determined by the Governor, after consultation with the Minister of Finance, and form the band within which the interbank money market rate fluctuates. Next to this medium term policy, the Governor fixes the amount and maturity of the calls for tender ("appels d'offres") on the very short term. In case of a turbulent money market -e.g. the end of a cash reserve period- the Banque de France may decide to turn to direct interventions in the interbank market ("pensions à moins de 5 jours") and eventually to open-market operations ("concours/reprises de liquidité). These money market operations are used for fine tuning of the interbank rate from day to day. In recent years the Banque de France is more and more aloof from influencing the interbank rate within the band of both official rates because of the unpredictable development of the autonomous factors ("facteurs autonomes") on the money market, such as the circulation of banknotes, the international reserves and the balance of the Treasury. According to the central bank the money market should regulate itself between the official rates as limits for the interbank rate. As a consequence of the objective of exchange rate stability between the French franc and D-mark, the official rates of the Banque de France are linked to those of the Bundesbank.

Therefore, the Banque de France needs an additional and (partly) independent monetary instrument for controlling the money growth in France. The cash reserve requirements are supposed to function as an partly independent and "active" instrument besides the official rates. Hence, the Banque de France has experimented two times -in June/July 1987 and May/June 1988- with a contrary policy mix of both the official rates and the cash reserve ratios. However, these experiments proved to be no independence between both monetary instruments at all. 13)

6. Convergence in performance

After discussing the convergence in the implementation of monetary policy during the eighties, we will now analyse the convergence in the performance of monetary policy between Germany and France. This performance can be measured by the development of four key variables in both countries during the eighties: inflation rates, real exchange rates, real short-term interest rates (money market rates) and real longterm interest rates (capital market rates).

The convergence of the German and French inflation rates (Consumer Price Index or CPI) has been quite remarkable in the period 1980-90. The inflation differential, i.e. the inflation rate in France minus that in Germany on an annual base, has declined from over 8% to less than 1% (see table 4). Of course, this resulted from the stable development of the nominal exchange rate of the French franc vis-à-vis the D-mark, in particular since 1986. Moreover, it was supported by the converging targets and growth rates of the monetary aggregates in Germany and France, especially since the midst of the eighties (see table 2).

Table 4. Inflation rates and differentials*)

Year	Inflation Germany	Inflation France	Inflation France ./. inflation Germany
1980	5,5	13,6	8,1
1981	6,3	13,3	7,0
1982	5,3	12,0	6,7
1983	3,3	9,8	6,5
1984	2,4	7,7	5,3
1985	2,2	5,8	3,6
1986	-0,2	2,5	2,7
1987	0,2	3,3	3,1
1988	1,3	2,7	1,4
1989	2,8	3,5	0,7
1990	2,7**)	3,4**)	0,7**)

*) Annual rates of growth of Consumer Price Index (CPI)
**) Estimates by OECD and the European Community.

Sources:
Deutsche Bundesbank, Geschäftsbericht, 1980-89; INSEE, Informations Rapides, 1980-89.

As a consequence of the nominal exchange rate stability and the declining inflation differential, there was also a stable development of the real exchange rate of the French franc vis-à-vis the D-mark, i.e. the nominal exchange rate corrected for the inflation differential, as from 1986 (see figure 1). 14) This reflects that the terms of trade between Germany and France did not change much since then. However, the performance of monetary policy in both countries may not be judged by the development of the inflation differential and the real exchange rate alone because these variables refer only to the past and the present and not to the future. To incorporate the expectations of the financial markets, we will turn to the development of the real interest rates in the short and long run.

FIGURE 1

After a temporary divergence in 1987 and the first half of 1988, there is again some gradual convergence of the German and French real short-term interest rates, i.e. the nominal short-term interest rates corrected for the inflation rates (see figure 2). The difference of the real money market rates in Germany and France reflects the exchange rate expectations of the financial markets in the short run. These expectations are fed by the inflationary and current account expectations in both countries on the short term. The markets are still expecting some depreciation of the franc against the D-mark in the short run for which they ask a risk-premuin on the French money market. Obviously, it takes a long time of stability-oriented monetary policy for the Banque de France to earn reputation in the financial markets.

FIGURE 3

Nevertheless, since the second half of 1988 there is a strong convergence of the German and French real long-term interest rates, i.e. the nominal long-term interest rates corrected for the inflation rates (see figure 3). The difference of the real capital market rates in Germany and France reflects the exchange rate expectations in the long run and thereby the inflationary and current account expectations in both countries on the long term. Apparently, the markets do not expect any depreciation of the franc against the D-mark in the long run. Therefore, a prolonged monetary policy by the Banque de France directed on domestic price stability ultimately pays. However, the monetary policy horizon proves to be rather long.

FIGURE 4

The declining inflation differential and the -since 1986- stable real exchange rate indicate that the performance of monetary policy in Germany and France has already converged to a large extent. On the contrary, the present difference between the real short-term and long-term interest rates suggest that the Banque de France still has to gain more reputation in the financial markets, but eventually will succeed. The reverse side of the medal of credibility is the loss of monetary policy sovereignity of the Banque de France with respect to the Deutsche Bundesbank. 15) The convergence of monetary policy has brought Germany and France nearer to an monetary union than many assume. This explains that France wants to accelerate the evolution towards EMU more than Germany.

7. Conclusion

Regarding the implementation of monetary policy, the convergence between Germany and France has accelerated since 1986 and reached a high degree at present. This process was triggered off by the large devaluation of the French franc against the D-mark in March 1983. After that realigment the French monetary authorities decided to turn to a restrictive fiscal and monetary policy to restore domestic price and exchange rate stability. Moreover, the authorities deregulated and liberalized the financial markets in France as from 1985 in order to intensify competition between the financial institutions and to bring down the interest rates eventually. Since 1986 the policy goals of the Bundesbank and the Banque de France are exactly the same, i.e. the stability of the domestic price level. However, it should be noticed that the objective of price stability is still not explicitly embedded in "Les Statuts de la Banque de France" or any other act. Legally, the Minister of Finance could force the Banque de France to stimulate economic activity as he did in 1981. Therefore, the test-case for the French government to move towards EMU is its willingness to make the Banque de France legally independent of its instructions.

Furthermore, the monetary targets of the Bundesbank and the Banque de France differ principally by the asymmetrical functioning of the EMS in which the D-mark plays a pivotal rôle. Whereas the Bundesbank is targeting only an internal objective -the growth of M3-, the Banque de France focuses mainly on an external objective -the nominal exchange rate of the French franc vis-à-vis the D-mark- and, in addition, tries to control the growth rate of M2. In future, the trade off between the internal and external objective in France might change as a consequence of the improvement of the domestic economic and monetary "fundamentals", such as the current account and the inflation rate. These developments would give the Banque de France more scope for controlling money growth at the expense of stabilizing the French franc/D-mark exchange rate. Besides, it is conceivable that the Banque de France switches to a broader monetary aggregate -e.g. $M3^*$- which comprises all liquidity with residents. This would fit into a general tendency in the Community to control broad monetary aggregates and facilitate the ex ante coordination of monetary policy by the Committee of Central Bank Governors.

The money market policy both in Germany and in France is directed on the interbank money market rate -i.e. the call money rate- as monetary indicator. For that purpose the Bundesbank, as well as the Banque de France try to keep the interbank rate within the band of their official rates and to fine tune the interbank rate by their money market operations. Nevertheless, there is still an important discrepancy with respect to the frequency and thus the effectiveness of exchange market intervention in Germany and France. This results from the diverging independence between both central banks in the field of exchange market policy. Also, another test-case for the French government will be its readiness to give the full responsibility for intervention to the Banque de France.

Finally, both in Germany and in France the monetary instruments are converged to a high degree as a consequence of the process of financial liberalization and integration in the Community. There is an obvious tendency to fully market-oriented, indirect instruments, such as:

- the official credit facilities (quantities and rates) as an "active" instrument on the short and medium term;
- the money market operations (interbank and open market) as an "active" instrument on the very short term; and
- the cash reserve requirements (ratios) as a "passive" instrument, i.e. an "automatical break" on monetary expansion.

Of course, these three instruments are overlapping as an consequence of their influence through the money market rate. Therefore, the monetary instruments of central banks, including the Bundesbank and the Banque de France, tend to become more limited and less effective. It is the paradox of monetary policy that the monetary instruments loose their effectiveness in a time in which the monetary policy is overburdened by the ineffectiveness of fiscal policy as a result of the relatively high budget deficits in most countries.

NOTES

1) Cf. Committee for the study of economic and monetary union (chairman: Mr. Jacques Delors), Report on economic and monetary union in the European Community, Luxembourg, April 1989, p. 12.

2) Cf. "Pöhl suggests dual -speed union", Financial Times, June 12, 1990. Mr. Pöhl states: "What I could envisage is a smaller number of countries would start with a European Central Banking System and other who have not reached the same degree of convergence are invited for later".

3) Cf. Die Deutsche Bundesbank-Geldpolitischen Aufgaben und Instrumente, Sonderdrucke der Deutschen Bundesbank, No. 7, Frankfurt-am-Main, April 1985, pp. 103-128.

4) Cf. Banque de France, La Banque de France et la Monnaie, Paris, 1986, pp. 149-157 and W. Eizenga, The Banque de France and Monetary Policy, SUERF Papers on Monetary Policy and Financial Systems No. 8, Tilburg, 1990, pp. 1-6.

5) The central bank money stock consists of the sum of currency and banknotes (C) and the cash reserve requirements for the banks against demand deposits (D), time deposits (T) and savings deposits (S):
$ZBG = C + 0{,}166D + 0{,}124T + 0{,}081S$.
Cf. H. Schlesinger, The Setting of Monetary Objectives in Germany, in: P. Meek (ed.), Central Bank Views on Monetary Targeting, New York, 1983, pp. 6-17.

6) The monetary aggregates in France are defined as follows:
M1 = currency + banknotes + checkable demand deposits;
M2 = M1 + non-checkable demand deposits + savings deposits;
M3 = M2 + foreign currency deposits + time deposits
+ money market securities by banks (incl. CDs);
L = M3 + contractual savings + Treasury bills
+ money market securities by non-banks (incl. CPs).

7) Cf. J.-P. Patat, Monnaie, institutions financières et politique monétaire, Economica, Paris, 1987, pp. 299-308.

8) For the income velocities of M1, M2 and M3 see: Conseil National du Crédit, Rapport Annuel 1989, Paris, 1990, p. 53.

9) Cf. H.J. Dudler, The Implementation of Monetary Objectives in Germany - Open Market Operations and Credit Facilities, in: P. Meek (ed.), op.cit., 1983, pp. 19-20 and 25.

10) Until 1986 the Banque de France used the "encadrement du crédit", a system of quantitative controls on credit to the private sector. It was abolished because of its increasing complexity and distortion of competition and its declining effectiveness on money growth. Cf. Y. Barroux & N. Dagognet, Analysis of the Relationship between Money Stock and Monetary Base: The French Experience during the period of Quantitative Controls on Credit (1973-1985), in: P. Artus & Y. Barroux (eds.), Monetary Policy-A Theoretical and Econometric Approach, Kluwer Academic Publishers, Dordrecht, 1990, pp. 117-129.

11) Cf. S.C.W. Eijffinger & A.P.D. Gruijters, On the effectiveness of daily interventions by the Deutsche Bundesbank and the Federal Reserve System in the U.S. dollar-Deutsche Mark exchange market, in: E. Baltensperger & H.W. Sinn (eds.), Exchange Rate Regimes and Currency Union, MacMillan Publishers, London, 1990.

12) Cf. S.C.W. Eijffinger & A.P.D. Gruijters, On the short term objectives of daily interventions by the Deutsche Bundesbank and the Federal Reserve System in the U.S. dollar-Deutsche Mark exchange market, Kredit and Kapital, Heft 1/2, Spring 1991.

13) In June 1987 the official rates were reduced by 1/4 point and next month the ratio for time deposits was raised with one point. Both official rates were also reduced by 1/4 point in May 1988, while next month the ratios for savings and time deposits were raised with 1,5 respectively 0,5 point.

14) In 1986 foreign exchange controls in France were considerably eased to some not onerous measures and quantitative controls on credit were removed: A. Icard, Exchange Rates and Interest Rates inside the EMS-The French Experience, Presentation to the IMF Visitors Center, Washington, April 18, 1990.

15) For an thorough analysis of the consequences of economic and monetary integration for monetary policy see: R. Raymond, The Conduct of Monetary Policy within a Monetary Zone, in: E. Baltensperger & H.W. Sinn (eds.), Exchange Rate Regimes and Currency Union, MacMillan Publishers, London, 1990.

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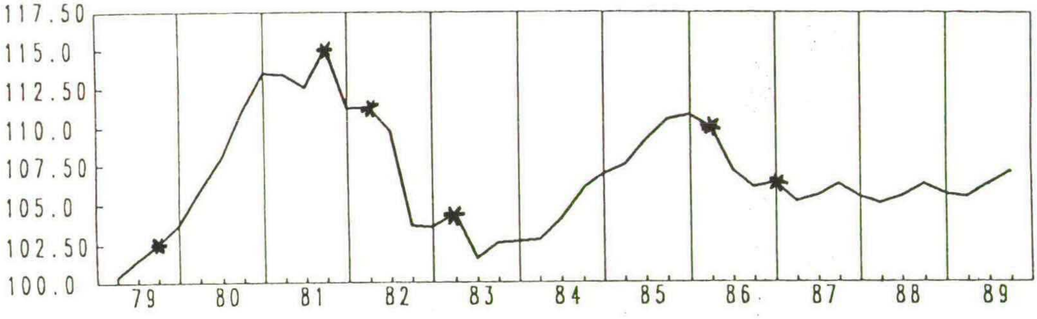
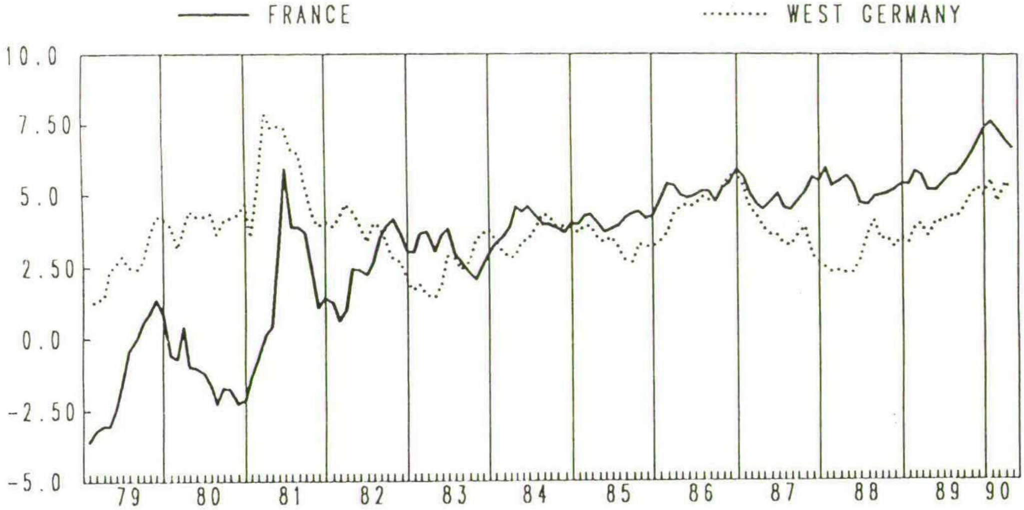
Figure 1. The real exchange rate of the French franc vis-à-vis the D-mark.
(January 1979 = 100; Dates of EMS-realignments = *)



Source: Banque de France, Direction Générale des Études.

Figure 2.
The real short-term interest rates in France and Germany (corrected for CPI).



Source: Banque de France, Direction Générale des Études.

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