Managing Monetary Policy facing U.S. External Constraint and Internal Macroeconomic Divergences: the Case of the Western European Central Banks in the 1980s

Alexandre Reichart
Renmin University of China
Université Paris 1 Panthéon-Sorbonne

Abstract

This paper offers a narrative description of Western European monetary policies during the 1980s, seen from a French and European perspective and based on the archives of the General Council of the Bank of France and of the Committee of Governors (*CoG*) of the central banks of the member states of the European Economic Community. We show that the external constraint faced by Western European central banks in the 1980s was composed of three factors. Western European monetary authorities had limited flexibility at that time, as the "direct" and "indirect influences" of the U.S. monetary policy, as well as macroeconomic divergences between France and West Germany, deeply restrained monetary policies. We show that European central banks were constrained by the evolution of the U.S. monetary policy ("direct influence"), by the variations of the U.S. exchange rate and their consequence on the German Mark exchange rate within the European Monetary System ("indirect influence"), and by the inflation rate differential between France and West Germany, which was the most important of the "internal macroeconomic imbalances". We also underline the evolution of these three elements of external constraint throughout the decade.

Introduction

The European Monetary System (EMS) was launched in March 1979. It quickly faced strong external constraints, as the U.S. Federal Reserve System implemented a very restrictive monetary policy in

October 1979, known as the "Volcker shock."[1] The U.S. dollar sharply rose on the foreign exchange markets, since U.S. monetary authorities rose their key interest rates while operating a strong monetary targeting. To limit capital outflows to the United States of America, European central banks had to implement key interest rates rises and maintain them at higher levels than those set by the Federal Reserve.

In addition, the rise in the U.S. dollar was not linear, but faced some downward periods that led to tensions on the U.S. dollar–German mark exchange rate, as many decreases of the U.S. dollar entailed increases of the German mark, the West German currency being a safe-haven in such cases. This subsequently entailed tensions within the EMS, especially on the German mark–French franc exchange rate, France and West Germany being the most powerful economies of the Exchange Rate Mechanism in the 1980s. West European central banks were therefore forced to use their foreign exchange reserves in order to manage their currency exchange rates.

EMS also faced internal macroeconomic divergences. France and West Germany being the most powerful economies within the EMS, our analysis is particularly focused on them. Not only did France face a trade deficit contrasting with West German trade surplus, but, most importantly, the French inflation rate was higher than that of West Germany. French monetary authorities therefore aimed at decreasing the inflation differential between France and West Germany. As such, the European Monetary System faced three different constraints during the 1980s, disturbing West European central banks monetary policies.

A major turning point in contemporary Western European history took place in May 1981, when left-wing candidate François Mitterrand was elected President of the French Republic. Led by Prime

[1] A parallel can be made with the current situation: since the beginning of the war in Ukraine at the end of February 2022, central banks have implemented restrictive monetary policies to fight against inflation. The U.S. Federal Reserve has deeply increased its federal funds target range from 0-0.25% in March 2022 to 5.25-5.50% in December 2023. The European Central Bank has also raised its key interest rate – the Main Refinancing Operations rate – from 0% in July 2022 to 4.50% in December 2023.

Minister Pierre Mauroy, the new French government implemented a new Keynesian-inspired fiscal policy, in a context of strong external constraints that deeply hindered the French monetary policy. An abundant literature has been devoted to French economic policy during the 1980s (see for instance Kindleberger, 1984, Muet & Fonteneau, 1985, Cameron, 1988, Bernstein, Milza & Bianco, 2001, Tiersky, 2003, Eichengreen, 2011, or Quennouëlle-Corre, 2018),[2] but authors tend to focus on fiscal policy rather than monetary policy. Our work was carried out using primary sources, i.e. the archives of the Bank of France and the archives of the Committee of Governors (*CoG*) of the central banks of the member states of the European Economic Community. The French primary sources have been adopted by Plessis (1982; 1985), Cavaterra (1998), Blancheton (2012) or Mouré (2012), in their studies devoted to the monetary policy of the Bank of France, but for other periods. However, the European archives have not yet been used to study the French monetary policy in the 1980s.

The primary sources of the Bank of France have also been used by Monnet (2014), to show that from 1948 to 1973 the Bank of France used quantitative instruments (quantitative controls on money and credit) rather than interest rates. Monnet especially identified six episodes of credit controls which took place during this era of "monetary policy without interest rates."[3] Kelber & Monnet (2014) stressed that, from 1945 to the 1970s, Western European central banks used a variety of quantitative instruments to attain their monetary targets, instead of steering interest rates.[4] After three decades

[2] If economists and historians devoted publications to economic policies implemented during the Mitterrand era, this period has also been commented by former practitioners. See for instance Favier & Martin-Roland (1990), Volcker & Gyohten (1992), Attali (1993), Feldstein (1994), Mitterrand (1996), Mauroy (2003) and Delors (2004).

[3] Based on the pioneering work of Friedman & Schwartz (1963), the "narrative approach" has been developed by Romer & Romer (1989) and Monnet (2014), identifying specific episodes of monetary shocks and highlighting the monetary policies put in place to counter those shocks.

[4] For a detailed version of German and French monetary targeting in the 1980s, see Reichart (2022).

of high economic growth following the Second World War, the so-called *Trente Glorieuses*, management of the key interest rates became more prominent, especially during the 1980s thanks to the efforts made by the former Governor of the Bank of France, Renaud de la Genière.[5] Figures 1 and 2 below show an active management of the key interest rates of the Bank of France throughout the 1980s.

Aftalion (1983) pointed out that the French Governor seemed to believe in the quantity theory of money, and that the monetary policy defined by La Genière included three objectives:

1) to provide money to the economy;
2) to regulate interest rates;[6]
3) to control the foreign exchange rate, "by manipulating interest rates and thus influencing capital movements, as well as by intervening on the foreign exchange market."[7]

Quintyn (1991) stressed that, from the reimplementation of credit controls in 1972 to the 1987 reform that introduced new instruments, the French monetary policy gradually reemphasized the importance of key interest rates management.[8] Monnet (2015) also stressed that the 1984 reform has been instrumental in this transition.

Furthermore, the importance of French key interest rates has been stressed by La Genière in a letter to the President of the French Republic in March 1982: "The monetary policy we have just described has been criticized as being unable to overcome inflation and as being harmful to growth. This criticism distorts our action by associating it with extreme monetarism. However, not only do the au-

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[5] Bank of France, Minutes of the General Council, 1984, Minutes of November 8.
[6] "[T]o regulate interest rates, in order to keep short-term rates slightly above the inflation rate and long-term rates above short-term ones. R. de la Genière contrasts this objective with the consequences of a purely monetarist policy under which interest rates can fluctuate widely and initiate a disruptive process if high interest rates are themselves a cause of inflation". Aflation (1983), p. 10.
[7] Aflation (1983), p. 10.
[8] "[O]n the 1972-86 period, this paper has argued that, de facto, monetary control and the transmission process have gradually changed throughout the years so that 1987 rather marked the end of a process than a thorough reform". Quintyn (1991), p. 24.

thorities in our country not reduce their monetary policy to quantitative measures alone and explicitly associate it with interest rate and exchange rate objectives, but they also explicitly place it in a general context encompassing fiscal policy, income regulation and sectorial aid."[9]

The importance of key interest rates has also been highlighted by the French Governor in the *CoG* who stated: "In terms of monetary technique, the attitude in France is pragmatic. While the quantitative monetary objective is important, it is often the subject of trade-offs with other objectives such as the level of interest rates and exchange rates. The mix of objectives in the various EEC countries is more or less implicit and can also vary significantly according to the importance of international relations regarding the domestic market."[10] French monetary policy in the 1980s was not a strictly quantitative monetarist-inspired policy: monetary aggregates and key interest rates both mattered. The Bank of France actively managed its rates instruments to reach monetary objectives.

1. The general framework: three elements of external constraint

Based on the archives of the Bank of France and the untapped archives of the *CoG*, we state that throughout the 1980s, the external constraint had a strong influence on Western European monetary policies. Accordingly, the European Monetary System central banks had little room for manoeuvre. We affirm that Western European monetary policies were hampered by three elements of external nature: the "direct influence" and the "indirect influence" of U.S. monetary policy as well as the "internal macroeconomic divergences." These three elements of external constraint weighted on Western European monetary policies throughout the decade, but the strength of each element has changed in different subperiods. The analysis

[9] Bank of France, Annual Report, 1981, p. 3.
[10] Committee of Governors of the central banks of the member States of the EEC, 166th meeting minutes, 11 May 1982.

of the superposition of these elements offers a complete panorama of the external constraint that weighted on the Western European monetary policies throughout the decade (see Figure 5.).

First, what we call the "direct influence" of U.S. monetary policy is the fact that the so-called monetarist-inspired "Volcker shock" of 1979-82 was followed by a strong appreciation of the U.S. dollar and of U.S. interest rates. To avoid capital outflows, Western European central banks were forced to increase their key interest rates every time the U.S. interest rates raised and to maintain higher interest rates. This clearly hampered the management of the Western European monetary policies, especially at the beginning of the decade, during the "benign neglect" period which started with the 'Volcker shock' and ended with a new era of international cooperation between central banks (October 1979 – September 1984; see 2.).

Secondly, the strong relationship between the U.S. dollar and its safe haven, the German mark, has exerted a strong influence on the evolution of the exchange rates within the EMS, since on many occasions Western European monetary authorities had been obliged to sell currencies held in reserve in order to buy back their own currencies and to stabilize their exchange rates in the European exchange rate mechanism. This is the "indirect influence" of the American monetary policy on Western European monetary policies. We therefore stress that this 'indirect effect' of U.S. monetary policy hindered EMS monetary policies during the subperiod of the global rise of the dollar (January 1981 – September 1985; see 3.), as well as during the subperiod of the global decline of the dollar (September 1985 – December 1989; see 4.).

Thirdly, we call "internal macroeconomic divergences" the French trade deficit, and especially the difference between French and German inflation rates. During the 1980s, the French economy had a higher inflation rate and French monetary authorities tried to reduce this differential by maintaining a differential of interest rates. French key interest rates had to be constantly higher than the West German key interest rates. This also hindered Western European monetary policies throughout the decade. The gradual decrease of

the French-German inflation rate differential nevertheless allowed a smooth relaxation of the French monetary policy (January 1980 – December 1989; see 5.).

This narrative study is consistent with the statistical literature[11] that has shown the limited independence of the French central bank on its monetary policy[12] at that time. Our study is also complementary to this literature, demonstrating how external constraints hindered French monetary policy, as well as how monetary authorities managed it from an internal perspective, using primary sources.[13] Our work is supplementary to this literature, demonstrating that French monetary policy during the 1980s is a relevant example of a central bank with limited autonomy that successfully managed to escape its external constraints. We demonstrate that the Bank of France finally escaped these three elements of external constraint during the 1980s, step by step, thanks to a change in the international monetary environment and the success of its fight against inflation.

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[11] Friedman's so-called k-percent rule (Friedman, 1960) has been advocated by the monetarist economist of Chicago in different ways during the 1960s in order to prevent Keynesian-inspired monetary policies. Friedman's k-percent rule was further developed by Bennett McCallum (1988; 1993). Contemporary Monetary Policy Reaction Functions (MPRF) appeared with Taylor (1993), who established the reaction function of the Federal Reserve System from 1987 to 1992. Taylor explained the level and variation of the federal funds rates by only taking domestic variables into account. MPRF have been developed by McNees (1992), Bryant, Hooper & Mann (1993), Svensson (1997; 1999), Rudebusch & Svensson (1999), Mehra (1997; 1999), Taylor (1999), Woodford (2001), Smets (2002), Peersman & Smets (2002), Orphanides (2003), Fourçans & Vranceanu (2004), Gerdesmeier & Roffia (2004), Carstensen & Colavecchio (2004), Carstensen (2006), Gerlach (2007), Gorter, Jacobs & de Haan (2008), Molodtsova & Papell (2009) or Castro (2011).

[12] See for instance: Artus, Avouyi-Dovi, Bleuze & Lecointe (1991), Britton & Whitley (1995), Drumetz & Verdelhan (1997), Smets (1997), Clarida, Gali & Gertler (1998a; 1998b), C. Loupias, F. Savignac, & P. Sevestre (2001), Chatelain & Tiomo (2001), Bec, Ben Salem & Collard (2002), Lemoine et al. (2018).

[13] Analyses of monetary policy could not be reduced to MPRF. Governors of central banks do not follow rules (Kohn, 1999) and central banking is much more complex than following rules (de Brouwer & Gilbert, 2005). Narrative and statistical studies are complementary.

2. The "direct influence" of U.S. monetary policy (October 1979 – September 1984)

Appointed by President James Earl Carter Jr., Paul Volcker became the Chair of the U.S. Federal Reserve System on August 6, 1979. He defined a new approach to monetary policy, inspired by the monetarist theory.[14] The Federal Open Market Committee explained the new monetary policy on October 6, 1979:

> "In the Committee's discussion of policy for the period immediately ahead, the members agreed that the current situation called for additional measures to restrain growth of the monetary aggregates over the months ahead. The members felt that growth of the aggregates at rates within the ranges previously established for 1979 remained a reasonable and feasible objective in the light of the available information and the business outlook. Given that objective, most members strongly supported a shift in the conduct of open market operations to an approach placing emphasis on supplying the volume of bank reserves estimated to be consistent with the desired rates of growth in monetary aggregates, while permitting much greater fluctuations in the federal funds rate than heretofore."[15]

At the head of the Federal Reserve, Paul Volcker targeted limits on the annual growth of U.S. money supply and on the "non-borrowed reserves" of second-tier banks.[16] Volcker aimed to indirectly target the money supply through the direct control of domestic central bank money. In addition, he let interest rates rise as high as the market desired to meet the strong reduction in liquidity in the United States and consequently break the inflationary spiral affect-

[14] About the influence of monetarism in the U.S. Federal Reserve System, see Reichart & Slifi (2016).
[15] Federal Reserve System, Federal Open Market Committee: Transcripts and Other Historical Material, 1979, October 6 Meeting, Record of Policy Actions.
[16] On the Volcker shock and policies implemented by the Federal Reserve during the 1980s, see for instance Denizet (1984), Bernanke & Blinder (1990), Havrilesky (1993), Goodfriend (1993), Goodfriend & King (2005), Axilrod (2009), Silber (2012) and Romer & Romer (2013).

ing developed economies since the Second oil crisis of 1979. Such a monetarist-oriented policy entailed a strong rise in interest rates, not only in the United States but also worldwide.[17] The so-called "Volcker shock" played an important role in the Mexican debt crisis of 1982, as recognized by Paul Volcker himself.[18]

While the importance of key interest rates decreased with the emphasis Volcker put on monetary targeting, U.S. rates still mattered. Variations of U.S. key interest rates, i.e. the discount rate and the Federal funds rates, directly influenced European key interest rates. In fact, after a modification of the U.S. discount rate, European central banks acted in unison, by changing their short-term rates at the same time, in the same direction and these variations appear to be of similar amplitude (see Figure 1). U.S. monetary policy therefore directly influenced European monetary policies, including that of the Bank of France. The attitude of U.S. monetary authorities, conducting their monetary policy solely on the basis of domestic issues with no consideration for the upward pressure the U.S. dollar put on European interest rates, has been labelled "benign neglect" by Karl Otto Pöhl, President of the German Bundesbank from 1980 to 1991,[19] and by Michel Camdessus, Governor of the Bank of France from 1984 to 1987.[20]

This "direct influence" of the U.S. monetary policy can clearly be seen in the central banks' primary sources, as well as in the archives of the *CoG*. In Basel, Alexandre Lamfalussy, Deputy General Manager of the Bank for International Settlements, pointed to the dual effect of the monetary policy launched by Volcker in 1979 and

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[17] Former Chancellor of West Germany Helmut Schmidt stated that real interest rates reached their highest level since the "birth of Christ" (quoted by Volcker & Gyohten [1992]). In turn, Nicholas Kaldor (1985) spoke about the highest rates since the American Civil War.

[18] See Volcker & Gyohten (1992), Introduction, pp. XIV-XV.

[19] The Committee of Governors of the central banks of the member states of the EEC, 159th meeting minutes, 30 October 1981. Tommaso Padoa-Schioppa also used that expression within the Committee.

[20] Bank of France, Minutes of the General Council, 1985, Minutes of 14 February. The "benign neglect" expression has been used afterwards by Quinn & Harvey (1998).

the arrival in the White House of Ronald Reagan's team to explain the "uncertainty" reigning in the foreign exchange markets at the beginning of 1981:

> "The traditional expectation of a weak dollar and a strong Deutsche mark was thus disrupted in 1980. As for the reasons behind this shift in expectations, we should first mention the implementation of a new method of monetary control in the United States since October 1979. The markets had difficulty interpreting these monetary developments, and while the new technique did not restore confidence in the dollar, it tended to blur expectations and create uncertainty, which was further heightened by the prospect of a new administration taking office."[21]

Lamfalussy later noticed that the monetary policy of the Federal Reserve, through the effects it had on short-term interest rates, was harmful not only to the interest rates, but also to the American economy itself.[22] The "direct effect" of the U.S. monetary policy that Renaud de La Genière, Governor of the Bank of France from November 1979 to November 1984, pointed out, was linked to the interest rate differential between the United States and Europe, as well as its consequence on the exchange rate of the dollar:

> "At present, all the factors affecting the exchange rate appear to be working in favour of a stronger dollar. These factors include political developments and technical factors, especially the high interest rate differential between the United States and Europe. Narrowing this gap would necessitate enormous and unsustainable interventions. Therefore, it can be argued that a more active

[21] Committee of Governors of the central banks of the member states of the EEC, 151th meeting minutes, 13 January 1981.

[22] "The instability of short-term interest rates has disadvantages both for the international economy and for the U.S. economy itself. The international economy suffers from unnecessary exchange rate movements, while in the United States short-term interest rate instability has the effect of: maintaining a general climate of uncertainty; causing confusion in the minds of economic agents about the general direction of monetary policy; and disrupting the functioning of markets and financial intermediation by periodically creating an inverted yield curve". Committee of Governors of the central banks of the member states of the EEC, 153th meeting minutes, 10 March 1981.

> intervention policy would be bound to fail as long as this interest rate differential is not at least partially addressed. Considering that it is improbable that US interest rates will ease significantly in the near future, this would imply an increase in rates in Europe."[23]

This opinion was shared by the President of the Bundesbank, Karl Otto Pöhl, who blamed the Federal Reserve for the sharp fluctuations in short-term interest rates linked to its policy. He stressed, however, that the American monetary authorities cannot change the direction of their policy because of the level of inflation in the United States. Renaud de la Genière frequently observed that the Fed neglected the external consequences of its monetary policy. In April 1981, he clearly stated that the U.S. monetary policy hampered France's own policy:

> "The American monetary authorities… try to control the internal money supply by a very strict supervision of the Federal Reserve System regarding the creation of central bank money and they show, at the same time, a very great reluctance to act on the consequences of this policy concerning internal interest rates or exchange rates. Given such a situation, we can understand that certain European countries are led to practice an interest rate policy which does not correspond to the necessities of their own internal situation, but to the necessities of supporting their currency on the foreign exchange market."[24]

It should be stated that the "Volcker shock" resulted in both a rise in interest rates worldwide and a strong appreciation of the U.S. dollar. In April 1981, a heated discussion took place between the Governors of EEC central banks. Italian Governor Carlo Azeglio Ciampi[25] and Belgian Governor Cecil de Strycker[26] claimed that the

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[23] Committee of Governors of the central banks of the member states of the EEC, 152th meeting minutes, 10 February 1981.
[24] Bank of France, Minutes of the General Council, 1981, Minutes of 16 April.
[25] "At the end of January, the Banca d'Italia took restrictive monetary policy measures to better control the expansion of domestic credit. But several events in February and March, namely the more restrictive policy in Germany and the subsequent rise in in-

U.S. monetary policy entailed a rise in the German interest rates that in turn forced other European central banks to rise their own key interest rates. West German Governor Pöhl explained:

> "The rise in interest rates in Germany has caused very unpleasant constraints for the Belgian franc and other currencies... Contrary to the hopes of the German authorities, the conditions for a gradual decline in the level of interest rates have not yet materialized. The rise in U.S. interest rates in recent days has put strong downward pressure on the Deutsche mark, and the situation is also complicated by the public discussion in Germany and abroad of the Bundesbank's policy. Under these conditions, a loosening of German monetary policy could have serious repercussions on the performance of the Deutsche mark on the international market."[27]

While the French domestic situation could allow for a decrease in short-term rates, this was prohibited by the international situation: European central banks had to maintain high interest rates to avoid capital outflows and to protect their exchanges rates, since they belonged to the EMS. In July 1981, while discussing the appreciation of the U.S. dollar, La Genière remarked that "[t]his very worrisome situation can obviously thwart the efforts which can be made regarding French internal interest rates."[28] This conflict between domestic and foreign goals also clearly appeared in a publication of the Bank of Italy:

> "In view of… the continual appreciation of the dollar, the conflict

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terest rates in that country and in other EMS member countries, made it necessary to resort to other economic measures". Committee of Governors of the central banks of the member states of the EEC, 154th meeting minutes, 14 April 1981.

[26] "As long as the Deutsche mark remained at the bottom of the band, the Belgian franc did not cross its divergence threshold, but after the Bundesbank's measures in February and the recovery of the German currency, the divergence rate rose well above the threshold and reached 95%. This movement therefore reflected a change in the relative situation of the Belgian franc and not its fundamental situation. In any case, the National Bank of Belgium raised its rates very sharply, from 12 to 16% for the discount rate and from 12 to 18% for the Lombard rate. These levels, which are far too high for the needs of the Belgian economy, had to be set to stop speculation". Ibid.

[27] *Ibid*.

[28] Bank of France, Minutes of the General Council, 1981, Minutes of 9 July.

> between domestic and external objectives induced the other industrial countries to be especially cautious about modifying their monetary policy stance to avoid exacerbating the tendency for their currencies to weaken against the dollar."[29]

That direct influence of the U.S. monetary policy undoubtedly hampered European monetary policies. At the beginning of 1982, French monetary policy was once again constrained by the evolution of West German and American interest rates. Alexandre Lamfalussy noted that "most of the problems facing the EMS seem to result more from international developments than from the internal functioning of the Community's exchange-rate mechanism,"[30] while Karl Otto Pöhl indicated that "the real question is how the European countries can detach themselves from the exclusive empire of U.S. interest rates."[31] It clearly appeared that "[t]he gaps between the situation of the fundamental elements which characterize the various economies and the interest rates led to very big uncertainties and very strong disturbances on the foreign exchange markets,"[32] as claimed by Governor La Genière in May 1982. More than anything, credit spreads between key interest rates directed exchanges rates variations, as noticed by Karl Otto Pöhl:

> "At the end of 1981/beginning of 1982, Germany was able to detach itself from the trend of American interest rates. Recently, however, the downward trend in German rates has been reversed; for example, the yield on 10-year government securities, which had fallen to a level of about 8.5%, has recently risen to 9.5%. This rise in long-term rates is only partly explained by domestic factors... for the most part, it is a response to rising US interest rates. The emergence of spreads of around 7% in the short term and 5% in the long term led to massive capital exports, amounting to more than DM 10 billion in the period March-May. The dollar exchange

[29] Bank of Italy, Report for the Year 1982, pp. 11-12.
[30] Committee of Governors of the central banks of the member states of the EEC, 162th meeting minutes, 12 January 1982.
[31] *Ibid*.
[32] Bank of France, Minutes of the General Council, 1982, Minutes of 27 May.

> rate was quite close to the exchange rate relationship recorded in August 1981, but the present situation is very different from that of last year. Whereas at that time it was the actual and anticipated development of fundamentals in Germany that caused the dollar to rise in Frankfurt, the present dollar rally is due in particular to the interest rate differential between the USA and Germany."[33]

The 1979 "Volcker shock" thus brought about a steep rise in interest rates worldwide, which led to the Mexican debt crisis of 1982 and to the early 1980s recession in the United States and large industrial countries. While monetarist-inspired policy came to a dead end, Volcker abandoned this "shock therapy" and came back to conventional interest rate management and fine tuning. In 1981-1982, the Federal Reserve started to decrease its key interest rates and the leading central bank was invariably followed by European central banks. As a notable example, we could state that in September 1982 Alain Prate, First Deputy Governor of the Bank of France, underlined that the reduction in the Fed discount rate (from 10.5 to 10%) was immediately followed by similar decreases in the key interest rates of the Bank of France (from 14.25 to 14%), the German Bundesbank (from 7.5 to 7%), the Bank of Italy (from 19 to 18%), as well as the English, Swiss and Dutch monetary authorities.[34] To sum up, the Federal Reserve was the leader and implemented its monetary policy freely while European central banks were the followers and led their policies with limited flexibility, taking into account the variations of U.S. interest rates. And a variation in U.S. short-term rates was often followed by similar variations in European interest rates.

Figures 1 and 2 show this concordance between the key interest rates of the Federal Reserve, the German Bundesbank and the Bank of France. It appears that U.S. monetary policy dictated, above all other considerations, the monetary policies of European central banks. French monetary policy was therefore deeply constrained by the "direct effect" of American monetary policy, especially since the

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[33] Committee of Governors of the central banks of the member states of the EEC, 168th meeting minutes, 13 July 1982.
[34] Bank of France, Minutes of the General Council, 1982, Minutes of 2 September.

election of the socialist candidate François Mitterrand to the French Presidency in May 1981, which was followed by capital outflows and strong pressures on the French franc.

Figure 1
Key interest rates of the Federal Reserve, the German Bundesbank and the Bank of France, 1979-1988

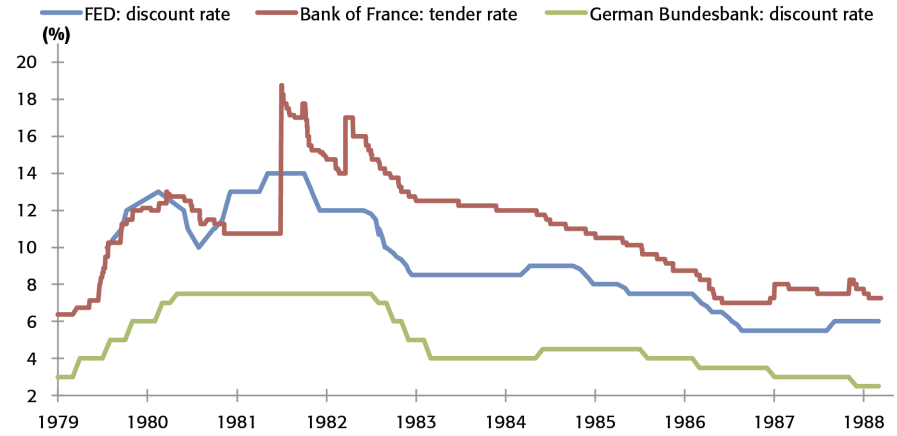
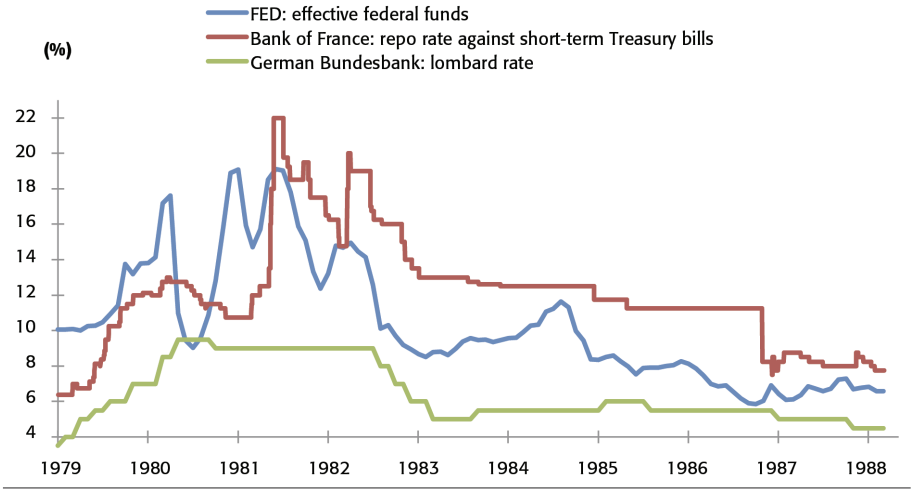


Figure 2
"Lombard" interest rates of the Federal Reserve, the German Bundesbank and the Bank of France, 1979-1988



The turning point was reached in 1981-82: after a period of worldwide increase in interest rates, the end of the so-called "Volcker shock" entailed an era of gradual decline. The direct influence of the U.S. monetary policy nevertheless keeps weighting on the French monetary policy as clearly stated by the Governor of the Bank of France Renaud de la Genière in the *CoG* in November 1983:

> "French domestic interest rates have remained relatively high – between 12% and 13% – for the short term since the beginning of 1983 and particularly after the realignment in March. In real terms, these rates have tended to rise along with the decline in the inflation rate to around 9-10%. Although nominal rates for long-term rates have declined from 17-18% in 1982 to 14.5-15% currently, they are still significantly higher. Unless foreign rates, particularly in the United States and Germany, reduce, French rates are unlikely to decrease."[35]

The French chairman clearly stated that French key interest rates depend primarily on U.S. and West Germany key interest rates, highlighting the direct effect of U.S. monetary policy. In May 1984, Governor Pöhl pointed out that the West German monetary policy also remained deeply constrained by the Fed's monetary policy:

> "The interest rate differentials between the US and Germany have widened considerably since the beginning of the year. For example, in the money markets, the rates are 11% for federal funds and 5.5% for securities advances, while in the capital markets, they are 13.6% and 8%, respectively. However, this widening has not yet had a major impact on the dollar/Deutsche mark relationship, and there has even been some strengthening of the latter. If the rise in US interest rates continues – as many observers fear it will – it will become increasingly difficult for Germany to maintain its current relatively low interest rate level."[36]

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[35] Committee of Governors of the central banks of the member states of the EEC, 180th meeting minutes, 8 November 1983.
[36] Committee of Governors of the central banks of the member states of the EEC, 186th meeting minutes, 15 May 1984.

Nonetheless, a new situation arose in the following months. While central banks progressively eased their monetary conditions, a new era of international cooperation began in September 1984. The very high level reached by the U.S. dollar called for joint operations by monetary authorities on foreign exchange rates. This new era has been summarized by the French Governor with the following words: "Markets may not have given up on playing the dollar again, but the new presence of central banks, which has been infrequent for many weeks, was noted. Not knowing either the tactics or the degree of their determinations, traders were led to take more conservative positions."[37] At that time, the external constraint for the Bank of France changed, with a less important "direct influence" exercised by American monetary policy, but a stronger "indirect influence" through the EMS.

3. The "indirect influence" of American monetary policy in the context of a global rise in the U.S. dollar (January 1981 – September 1985)

The 1979 "Volcker shock" led to a very steep rise in the U.S. dollar exchange rate against European currencies. A constraint of American origin was already noticeable during the last months of the Giscard presidency, just before the major turning point of May 1981, which marked the arrival in power of the Socialists and the accession of François Mitterrand as President of the French Republic. As early as January 1981, the minutes of the meetings of the General Council of the Banque de France showed the rapid rise of the dollar, which was linked to the radical U.S. monetary policy and had consequences for the evolution of the French economy.

Moreover, this restrictive U.S. monetary policy had a significant impact on developments within the EMS, both in currency rates and in the key interest rates of the central banks of the countries partici-

[37] Bank of France, Minutes of the General Council, 1984, Minutes of 27 September.

pating in the European Exchange Rate Mechanism. The European Monetary System was thus permanently disrupted by external elements, whether they be external shocks or elements of a more structural nature, or by internal elements such as macroeconomic imbalances between member countries of the European exchange rate mechanism. This analysis, based on the primary sources of the central banks, is thus in line with those of Aglietta (1987) and Kotlowski (2000) and in radical opposition to the ex-post testimony of Volcker (1992) who claimed that debt crises and exchange rate volatility problems lead to remarkable episodes of cooperation among international monetary authorities.

In December 1982, Governor La Genière observed the special relationship between the German mark and the U.S. dollar, and its consequences on the mark-franc exchange rate within the EMS: "When the mark rises against the dollar, it generally rises faster than the franc and this creates some tensions between the franc and the mark within the EMS."[38] The special relation between the German mark and the U.S. dollar can be explained by the fact that West Germany was the main economic power within the EMS in the 1980s and that the German mark was considered as a safe haven, especially when the U.S. dollar fell.

The effect of the variations of the dollar exchange rate were therefore indirect but strong, resulting in considerable drains on the French foreign exchange reserves held by the Bank of France and the Exchange Stabilization Fund (ESF). This "indirect influence" of the American monetary policy was highlighted in December 1982 by Leonhard Gleske, one of the heads of the German Bundesbank, during a meeting of the *CoG*:

> "When the Deutsche Bundesbank decided to cut its key interest rates by one percentage point, i.e. more than the markets expected, it effectively assumed that the dollar would strengthen in Frankfurt. On the contrary, the dollar weakened considerably and at

[38] Bank of France, Minutes of the General Council, 1982, Minutes of 9 December.

> times came close to the 2.40 Deutsche Mark rate. This paradoxical development has been attributed to the prospect of the Fed following the German interest rate cut, but this factor is only a partial explanation. The weakening of the dollar also appears to be due to actual and anticipated developments in the US current account and public finances, which have led investors to unwind their dollar investments and move more into other currencies, notably the Deutsche mark."[39]

This decrease in the U.S. dollar led to a rise in the German mark, which in turn entailed downward pressure on the French franc, as clearly noticed by Renaud de la Genière in front of his European colleagues:

> "The weakening of the dollar in November led to renewed downward pressure on the French franc, which had to be supported by substantial intervention with a time lag of a few days. In such a situation, psychological factors are particularly decisive for developments on the foreign exchange markets. Consequently, a deterioration in the position of the franc within the margin tends to cause an acceleration effect on capital movements and thus a worsening of the position of the French currency. However, the good cooperation with the Deutsche Bundesbank enabled the Bank of France to intervene frequently and for substantial amounts in Deutsche marks, which helped to stabilize the franc. The EMS is seen as a stabilizing factor in the international monetary and financial system, and although it is not sufficient to stabilize the system entirely, it contributes to attenuating its turmoil."[40]

La Genière re-emphasized this "indirect influence" of the U.S. monetary policy at the beginning of 1983, stating that the European Monetary System was experiencing some divergences linked to the decline of the U.S. currency:

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[39] Committee of Governors of the central banks of the member states of the EEC, 171th meeting minutes, 14 December 1982.
[40] *Ibid*.

> "These divergences have been exacerbated since mid-November by the decline of the dollar, which is certainly desirable in many respects in the medium term, but in the short term, it accentuates the tensions in the EMS. Thus, capital movements between the dollar and the Deutsche Mark tend to increase the volume of interventions that the Bank of France must make on the foreign exchange market."[41]

The report presented to the *CoG* for February 1983 highlighted the interventions carried out by the monetary authorities, most of which were performed by the Bank of France: "Gross intervention in community currencies amounted to $2.5 billion, an increase from the $1.9 billion in January. A significant portion of this amount consisted of intra marginal interventions by the Bank of France to support the French franc."[42]

Kotlowski (2000) stated that the "Volcker shock" has worsened the effect of the Second oil shock for almost all European countries.[43] But the end of the "Volcker shock" in the summer of 1982 did not break the strong rise of the American currency. For example, the dollar reached FF 4.50 at the beginning of 1981 and more than FF 10.50 at its historical peak in February 1985 (see Figure 3). Eichengreen (2008) pointed out the "dramatic appreciation" of the U.S. currency and the scant willingness of the U.S. monetary and fiscal authorities to correct this trend until 1985.

We can nevertheless underline that the periods of rises in the U.S. dollar exchange rate reduced the "indirect influence" of the U.S. monetary policy and therefore eased the tensions within the EMS, as noticed by the report presented to the Committee of central bank Governors of the member countries of the EEC for March 1984: "The

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[41] Committee of Governors of the central banks of the member states of the EEC, 172th meeting minutes, 11 January 1983.
[42] Committee of Governors of the central banks of the member states of the EEC, 174th meeting minutes, 8 March 1983. Annex: Brief report on the evolution of the foreign exchange markets of the countries whose central banks participate in the consultation, February 1983.
[43] With the noticeable exceptions of oil exporters United Kingdom and Norway.

end of the dollar's decline over the previous two months has eased tensions in the EMS. The relative positions of the participating currencies changed little, but the need for intervention was significantly reduced".[44]

Joint operations by central banks to limit the appreciation of the dollar began in September 1984. A "changing of the guard" took place at the beginning of 1985: in January E. Gerald Corrigan replaced Anthony M. Solomon as the President of Federal Reserve Bank of New York. Then in February of the same year, James A. Baker replaced Donald T. Regan as the Secretary of the Treasury. The "new team" gave up the "benign neglect" attitude that characterized the first Reagan Administration and showed a willingness to cooperate on the international stage to contain the strong appreciation of the U.S. dollar. This led to the signature of the New York agreement between the Ministers of Finance of the five major economic powers in September 1985.

Subsequently, the dollar started to decline thanks to international cooperation and to the joint operations of central banks. But the "indirect influence" of the U.S. monetary policy restrained French monetary policy even during the period of strong dollar appreciation. In fact, Figure 3 shows that if from 1979 until 1985 the dollar experienced a global appreciation, it also underwent occasional phases of decline. Periods of depreciation of the U.S. dollar have inevitably led to increases in the value of the German mark, which was a safe haven,[45] resulting in a relative depreciation of the French franc against the West German currency and occasional phases of tension within the European monetary system.

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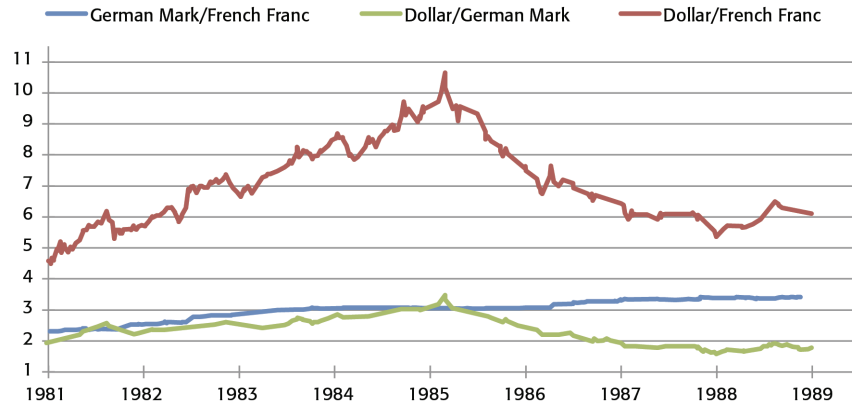
[44] Committee of Governors of the central banks of the member states of the EEC, 185th meeting minutes, 9 April 1984. Annex: Brief report on the evolution of the foreign exchange markets of the countries whose central banks participate in the consultation, March 1984.

[45] On the hegemony of the German mark within the EMS, see for instance Kindleberger (1984), Pogorel (1984), Giavazzi and Giovannini (1986; 1988), Avouyi-Dovi & Laffargue (1994), Fitoussi & Flandreau (1994). On the special relation between the dollar and the mark, see Ullmo (1987). On the relation between the dollar, the franc and the mark, see Cohen, Mélitz & Oudiz (1988).

FIGURE 3
Exchange rates of the U.S. dollar, the German mark and the French franc, 1981-1988



The strong relationship between the dollar and its safe haven, the German mark, has thus exerted a strong influence on the evolution of the franc-mark relationship and on French monetary policy, since on many occasions the Bank of France and the Exchange Stabilization Fund had been obliged to sell currencies held in reserve in order to buy back the franc and stabilize the exchange rate in the European exchange rate mechanism. This is the "indirect influence" of American monetary policy on French monetary policy.

The major turning point took place during 1985, when the dollar, after reaching a historic summit, began to fall following some concerted operations by the central banks. The decline in the U.S. currency was the result of international cooperation: as soon as September 1984, European and Japanese central banks implemented joint operations directed at stopping the rise of the dollar. La Genière underlined that with the new presence of central banks, and, not knowing either the tactics or the degree of determination of the latter, the operators were led to take more careful positions.[46] His suc-

[46] Bank of France, Minutes of the General Council, 1984, Minutes of 27 September.

cessor Michel Camdessus, Governor of the Bank of France from November 1984 to January 1987, spoke about the "changing of the guard"[47] that took place in the Department of Treasury and at the Fed of New York underlining that the new team did not share the attitude of 'benign neglect' of the previous one.

French Economist Edmond Malinvaud noticed: "The myth, now six months old, that the dollar can only go up has just collapsed brutally."[48] The March 1985 report of the *CoG* claims: "The Deutsche mark has strengthened significantly against the U.S. dollar. The rise in the exchange rate was mainly due to developments in the United States and was therefore not specifically related to the Deutsche mark."[49] Being more sensitive to public opinion and more inclined to manage a "soft landing" of the dollar on foreign exchange markets, U.S. monetary and government authorities were part of the Plaza Accord of September 1985. Volcker noted that:

> "The dollar had reached a peak in early 1985, and there was continuing debate both in the United States and overseas about market intervention. Treasury Secretary James Baker and Deputy Secretary Richard Darman were more inclined to intervene than previous Treasury officials had been, and the meeting at the Plaza was largely at their initiative."[50]

4. The "indirect influence" of American monetary policy in the context of a global decline in the U.S. dollar (September 1985 – December 1989)

The fall of the dollar during the late 1980s led to a rise in the German

[47] Bank of France, Minutes of the General Council, 1985, Minutes of 14 February.
[48] Bank of France, Minutes of the General Council, 1985, Minutes of 28 March.
[49] Committee of Governors of the central banks of the member states of the EEC, 195th meeting minutes, 15 April 1985. Annex: Brief report on the evolution of the foreign exchange markets of the countries whose central banks participate in the consultation, March 1985.
[50] Volcker, in Feldstein (1994, p. 150).

mark against the French franc, reinforcing the "indirect effect" of American monetary policy. Through the exchange rate of the U.S. dollar and its consequences on the franc-mark parity, U.S. monetary policy has thus indirectly hampered the actions of French monetary authorities, causing tensions in the European Monetary System and an additional drain of French exchange reserves. This effect was nevertheless reduced, thanks to the British pound, which from March to June 1985, played the role of a safe haven as noted by Jacques Waitzenegger, Deputy Governor of the Bank of France:

> "The tensions within the European Monetary System could have escalated if the declining value of the dollar had not been offset, to a significant extent, by the increasing attractiveness of the pound sterling. The yield of the British currency was particularly high at that time, with interest rates approximately 8 points higher than those of the German mark. Even if a major British bank's current 13.5 to 13 percent reduction in the prime rate became widespread in the near future, the pound would still remain a very appealing currency."[51]

This new economic phenomenon eased the tensions within the European exchange rate mechanism, as claimed by Jacques Waitzenegger:

> "It had often been said, and perhaps admitted by some, that a fall in the dollar should lead to pressure on the European Monetary System, particularly with regard to the French franc. However, during this period when the dollar fell sharply and relatively quickly, the franc held up well, since its position in the European Monetary System remained virtually unchanged."[52]

When the British pound stopped being the safe-haven currency, the "indirect effect" of US monetary policy comes into play again, as underlined by the Deputy Governor of the Bank of France, Philippe Lagayette. He highlighted the return of the traditional in-

[51] Bank of France, Minutes of the General Council, 1985, Minutes of 28 March.
[52] Bank of France, Minutes of the General Council, 1985, Minutes of 25 April.

direct effect of the dollar's movements, which is its impact on the German mark exchange rate, causing tensions in the EMS and putting constraints on the French monetary policy:

> "At the end of the period, despite the falling dollar, traders expected to see a stronger Deutsche mark, which traditionally occurs in such a scenario. However, this did not happen for six months, and the mark strengthened not only against the dollar but also against the pound sterling and the Swiss franc. The situation on the foreign exchange market was thus characterized by the coexistence of two elements that were unfavourable to the franc: firstly, the strengthening of the mark resulting from the weakness of the dollar, and secondly, the fact that some operators considered that the devaluation of the lira had not definitively resolved the problems of the EMS. In this context, interventions were necessary to support the franc."[53]

The global decline of the U.S. dollar that took place in 1985 was painful for the European Monetary System, especially for central banks with "weak currencies" such as the Bank of France. The report of the *CoG* for July and August 1985 states that "the U.S. dollar fell sharply in July," and within the Community's exchange rate mechanism, "after the realignment, while the dollar was losing ground, the Deutsche mark and the Dutch guilder appreciated, creating a certain amount of tension within the EMS and leading to major interventions by the French, Belgian, and Italian central banks."[54]

Following the Plaza agreement, signed on 22 September 1985, "the dollar fell sharply, both in anticipation of and in response to central bank interventions."[55] The central bank interventions on ex-

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[53] Bank of France, Minutes of the General Council, 1985, Minutes of 1 August.
[54] Committee of Governors of the central banks of the member states of the EEC, 199th meeting minutes, 10 September 1985. Annex: Brief report on the evolution of the foreign exchange markets of the countries whose central banks participate in the consultation, July and August 1985.
[55] Committee of Governors of the central banks of the member states of the EEC, 200th meeting minutes, 12 November 1985. Annex: Brief report on the evolution of the foreign exchange markets of the countries whose central banks participate in the consultation, September and October 1985.

change markets then became very important, aiming at implementing an orderly decrease of the U.S. dollar. These successful coordinated central bank interventions were implemented by the Federal Reserve, the Bank of Japan, the Bank of England, the German Bundesbank, and the Bank of France.[56] Unfortunately, these coordinated interventions did not last very long. As early as December 1985, Dutch central banker André Szász noted that "large sales of Deutsche marks by central banks have helped to depress the currency somewhat and strengthen the dollar. Such actions are not very consistent with the New York agreement of September 22."[57] The fragility of Plaza agreement has also been stressed by Danish and British central bankers.[58] The French franc was indeed under pressure during this period, as noted by Deputy Governor Waitzenegger. He emphasized the significant interventions made by the French monetary authorities to support the franc against the mark, and the likelihood that such operations would need to be repeated in the future:

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[56] Henning Dalgaard, co-chairman of the Committee's group of experts, stated that between September 22 and November 8, the amount of U.S. currency sold reached $12 billion, emphasizing "their rather unusual distribution among the central banks. Indeed, the Federal Reserve Bank and the Bank of Japan were the most active while the Deutsche Bundesbank intervened more moderately". *Ibid*.

[57] Committee of Governors of the central banks of the member states of the EEC, 201th meeting minutes, 10 December 1985. Anthony Loehnis stated in the Committee of Governors of the central banks of the member states of the EEC, in January 1987: "while the devaluation of the yen against European currencies since July 1986 has been relatively moderate compared to the long-term appreciation, it has nevertheless virtually nullified the effects of the Plaza Accord".

[58] In a meeting of the Committee of Governors of the central banks of the member states of the EEC, on 14 January 1986, Dalgaard, indicated that "there were great variations in the attitude of the various central banks; for example, the Federal Reserve and the Bank of Japan intervened extensively in the beginning and were then replaced in December by other central banks, in particular the Bank of Italy, the Central Bank of Ireland, the Bank of Canada and the Norges Bank". Anthony Loehnis of the Bank of England mentioned "the ambivalent role of the yen' and reported that the Deputies' meeting of Governors was an occasion for the condemnation of the attitude of the Japanese monetary authorities: 'It was reaffirmed that intervention in the foreign exchange market is only useful if it is in the direction of underlying market trends and is doomed to failure if it is done against those trends".

> "It can be said that the strengthening of the mark caused only a very small price shift because the Bank of France carried out fairly large sales interventions in this currency for three sessions. However, the situation changed in the following two days, with the mark's price in Paris hovering around 3.05 francs, and even slightly below, allowing the Bank of France to buy back some of the Deutsche marks it had previously sold. The situation seems to have stabilized for the time being, but the above developments clearly highlight the fragility of the foreign exchange markets and the need for massive interventions to maintain a relatively decent position in foreign exchange relations."[59]

In turn, Szász stressed a renewed and stronger interdependence of the central bank's key interest rates: "the significant appreciation of European currencies, which has already occurred against the dollar, has reduced expectations of further appreciation and... as a result the possibility of lowering domestic interest rates, at least in some countries, has become more dependent than in the past on a decline in U.S. interest rates."[60]

The indirect effect of U.S. monetary policy lasted into the beginning of 1986, as the EMS continued to be under pressure. The value of the Deutschmark continued to increase against the U.S. dollar, reaching around 2.20 Deutschmarks on 27 February, its highest level since November 1981. Within the EMS, the mark also continued to rise despite the efforts of partner central banks to sell Deutschmarks.[61] It was, however, reduced when the Japanese yen played the role of safe-haven instead of the German mark in mid-1986. The strength of the Japanese currency was then a reflection of the weakness of the US currency: "Despite its momentary weaken-

[59] Bank of France, Minutes of the General Council, 1985, Minutes of 5 December.
[60] Committee of Governors of the central banks of the member states of the EEC, 201th meeting minutes, 10 December 1985.
[61] Committee of Governors of the central banks of the member states of the EEC, 204th meeting minutes, 11 March 1986. Annex: Brief report on the evolution of the foreign exchange markets of the countries whose central banks participate in the consultation, February 1986.

ing due to the lack of dynamism of the Japanese economy, it continued to strengthen due to the fall in long-term interest rates in the United States, which in turn reflected the deterioration of Mexico's external debt situation and the weakness of U.S. economic indicators."[62]

However, this period did not last long, and in late October 1986, the U.S. and Japanese Finance Ministers reached an agreement aimed at stabilizing their respective currencies around the official exchange rate of 1 dollar for 164 yen. The indirect influence of U.S. monetary policy and its consequences on the EMS reappeared as usual. Concerning the German mark, "[a]gainst the dollar, it strengthened particularly in October, sometimes recording quotes below 2 Deutschmarks. The Deutsche Bundesbank countered this development with dollar purchases, partly in coordinated operations with other central banks."[63]

In turn, French Deputy Governor Philippe Lagayette noticed: "The franc was not directly affected by the publication of a foreign trade deficit for September 1986, nor by the publication of what can be considered as an unfavourable inflation result for the same month. However, it was affected by developments in the EMS due to the strength of the Deutschmark and it suffered some losses, particularly abroad."[64] At the end of 1986, the French franc was "affected by the general strength of the German mark."[65] In this context, the French monetary authorities are necessarily forced to intervene

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[62] Committee of Governors of the central banks of the member states of the EEC, 207th meeting minutes, 8 July 1986. Annex: Brief report on the evolution of the foreign exchange markets of the countries whose central banks participate in the consultation, June 1986.

[63] Committee of Governors of the central banks of the member states of the EEC, 209th meeting minutes, 11 November 1986. Annex: Brief report on the evolution of the foreign exchange markets of the countries whose central banks participate in the consultation, September and October 1986.

[64] Bank of France, Minutes of the General Council, 1986, Minutes of 23 October.

[65] Committee of Governors of the central banks of the member states of the EEC, 210th meeting minutes, 9 December 1986. Annex: Brief report on the evolution of the foreign exchange markets of the countries whose central banks participate in the consultation, November 1986.

in the foreign exchange markets by selling currencies to support the French franc, which is being sold off by non-resident market operators.

The indirect influence of U.S. monetary policy still weighed on the French monetary policy in 1987, whereas macroeconomic convergence deeply improved throughout the decade, as noticed by Henning Dalgaard:

> "During the period from early December to January 9th, 1987, i.e. just before the realignment, several EMS currencies were supported by very large interventions: $10 billion for the French franc, more than $3 billion for the Danish krone, $2.5 billion for the Italian lira, $2 billion for the Belgian franc, and about $0.5 billion for the Irish pound and guilder. Almost all of these interventions were made in Deutsche marks, whose sales amounted to roughly the equivalent of $19 billion... The situation was actually surprising. Indeed, convergence has never been so good and the last general realignment was relatively recent. In France, for example, the economy is doing well, the balance of payments is in surplus and inflation is low."[66]

The mechanisms entailing pressures on the French exchange rate in the European exchange rate mechanism are always the same throughout the decade, as clearly mentioned by Dalgaard:

> "Several reasons have been offered for the tensions... the steady decline of the dollar has resulted in a stronger Deutsche mark; however, this decline has been going on for two years and has never before caused such severe tensions. Another general reason was the rise in German interest rates in November and December; this seasonal movement was stronger than usual and gave new lustre to the Bundesbank's refusal to cut rates."[67]

We therefore notice that in the late 1980s the indirect effect of U.S. monetary policy still played an important role in shaping

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[66] Committee of Governors of the central banks of the member states of the EEC, 211th meeting minutes, 13 January 1987.
[67] *Ibid*.

French monetary policy despite the improved macroeconomic conditions in France. Less than two years after the Plaza agreement, the still chaotic situation in the currency exchange markets led to the signing of the Louvre agreement on February, 22 1987. This agreement involved renewed coordinated central bank interventions aimed at stabilizing the main currency exchange rates. Although tensions were sometimes limited when the Japanese yen and British pound played the role of safe-haven, such periods were only short-lived in 1987-1988.[68]

In June 1987, Jacques de Larosière, the new Governor of the Bank of France underlined: "Exchange rate stability imposes a constraint on the management of France's monetary policy. The margin between German and French interest rates appears to be just enough to protect the system. Therefore, for the time being[69] the monetary authorities have no latitude on this point. And in November 1987, he still claimed: "Given the pressures on the foreign exchange market, it is now necessary to react in a concerted manner and in a European spirit, to avoid American inaction translating into disorder in the EMS."[70] And Dalgaard still noticed:

> "The further decline of the dollar triggered expectations of a realignment within the EMS. From mid-October onwards, the Deutsche mark and the guilder began to appreciate against the other currencies in the system; this development became more intense at the end of October with widespread rumours of realign-

[68] For example, as noticed by the Director General of the Bank of Italy, Lamberto Dini: "The weakness of the dollar in recent weeks has resulted in upward pressure on some European currencies, particularly the Deutsche mark, which has put some strain on the cohesion of the EMS. As long as the appreciation pressures against the dollar were mainly centred on the yen, the interventions of the Deutsche Bundesbank were minimal, while other European central banks bought dollars and refrained from intervening in the Deutsche mark, in accordance with the Bundesbank's wish. More recently, when pressure on the Deutsche mark developed, some European central banks sold substantial amounts of dollars and Deutsche marks". Committee of Governors of the central banks of the member states of the EEC, 215th meeting minutes, 12 May 1987.
[69] Bank of France, Minutes of the General Council, 1987, Minutes of 4 June.
[70] Bank of France, Minutes of the General Council, 1987, Minutes of 5 November.

ments. Tensions appeared in all indicators, i.e., exchange rates approached limits. The tensions affected all the EMS currencies, but the French franc came under the most attack."[71]

This indirect effect of U.S. monetary policy finally ended in 1988. At the beginning of 1988, a new era began that had the following four characteristics pointed out by Waitzenegger: "A better coordination and continuity of interventions,"[72] with very frequent links being set up between the main monetary authorities, at the different markets closures, in order to be sure that the relay is taken; a new strategy implemented by the central banks, that no longer intervene only when the dollar is falling, but also buying U.S. currency when it is rising, in order to support it; the size of the amounts put on the market, totalling several billion dollars; the expansion of the number of central banks participating in concerted operations, which now includes most European monetary authorities.

Two months later, in March 1988, Dalgaard pointed out the "remarkable stability"[73] prevailing on the foreign exchange markets, emphasizing that the stability of the dollar, reinforced by the declarations of the American monetary authorities and the reduction of the U.S. trade deficit, is occurring in a context of a consequent decrease in support interventions on the foreign exchange markets.[74] We should emphasize here that French macroeconomic condition also mattered in the Bank of France's decision-making process: in addition to the direct and indirect effects of U.S. monetary policy,

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[71] Committee of Governors of the central banks of the member states of the EEC, 219th meeting minutes, 10 November 1987.

[72] Bank of France, Minutes of the General Council, 1988, Minutes of 14 January.

[73] Committee of Governors of the central banks of the member states of the EEC, 223th meeting minutes, 8 March 1988.

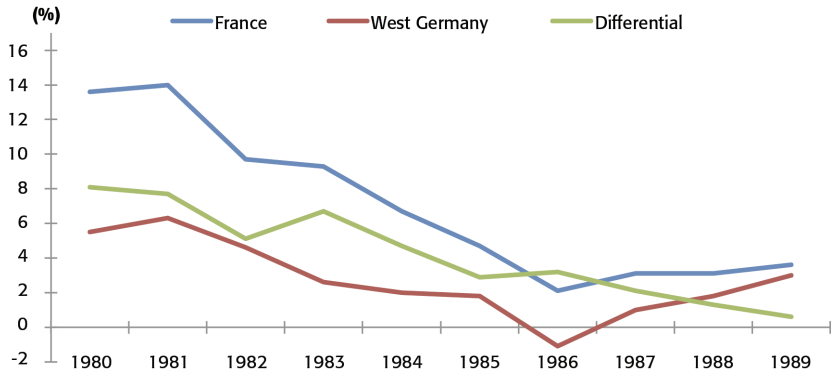
[74] Some tensions appeared in the following months, but remained limited, as noticed by Dalgaard: "Within the EMS, there were some movements in the relative positions of currencies and some interventions. Overall, the situation was calm... the French franc... was not under pressure. The authorities let the exchange rate slide but only slightly, there was no intervention and interest rates were not changed". Committee of Governors of the central banks of the member states of the EEC, 225th meeting minutes, 10 May 1988.

French macroeconomic imbalances also weighed on the French monetary policy, especially regarding West Germany.

5. The EMS internal macroeconomic divergences (January 1980 – December 1989)

The EMS major internal macroeconomic divergence throughout the 1980s was the inflation differential between France and West Germany. Indeed, France experienced current account deficits and a permanent difference in inflation rates, as shown by Figure 4.

Figure 4
Inflation differential between France and West Germany, 1980-1989



Source: Bank of France: Annual Reports.

The inflation differential between France and West Germany required the key interest rates of the Bank of France to be permanently superior to those of the German Bundesbank in order to make the difference of real interest rates as small as possible to attract capital to France and to curb French inflation. In May 1981, Governor La Genière stated:

> "This morning, we reached a 16% rate for the overnight money, which is almost balancing although interest rates and inflation spreads between France and Germany are widening… American

> rates are still higher than French rates but the comparison with Germany remains the main issue for the French monetary authorities because of the requirements resulting from our affiliation to the European Monetary System."[75]

In addition to the direct and indirect consequences of the American monetary policy, French monetary authorities had to take the German external constraint into account. The external constraint faced by the Bank of France in the 1980s was undoubtedly the result of variations in the Fed's monetary policy, and above all, of its membership in a European Monetary System dominated by West Germany. Several months later in 1981, La Genière pointed out that: "[t]he inflation rate differential between France and its main commercial partner within the European Monetary System is still very important. A fundamental element of stabilization is to be found in the moderation of monetary creation."[76] French macroeconomic imbalances in comparison with West Germany clearly weighed on the French monetary policy, as underlined by the French Governor in 1981.

The inflation differential between France and West Germany was a striking element of external constraint that weighed deeply on French monetary policy, especially at the beginning of the 1980s. In November 1983, the Governor of the Bank of France Renaud de la Genière justified the absence of a new decrease in key interest rates, pointing out that the macroeconomic fundamentals were still worrying, particularly the French current account balance and the inflation differential with West Germany:

> "A month ago, the franc was under pressure on the foreign exchange market, and although the situation has since recovered for temporary and cyclical reasons, leaving aside the recent downturn, there is no reason to justify a relaxation of the policy of rigor in terms of interest rates. The current account balance, while improving compared to the trend at the beginning of the year, is still

[75] Bank of France, Minutes of the General Council, 1981, Minutes of 14 May.
[76] Bank of France, Minutes of the General Council, 1981, Minutes of 12 November.

> in deficit, and for a medium-sized currency such as France's, the impact of the current account situation on the exchange rate is rapid and direct, as there are few shock absorbers, unlike for a reserve currency such as the United States. France's inflation rate, while it has fallen, remains too high compared to that of its trading partners, especially Germany. The gap with Germany is currently around 6 to 7 points. It is possible that the trend will change in the right direction, but we should not anticipate a more favourable trend. We must wait until this potential becomes a reality."[77]

Throughout the entire decade, French monetary authorities tried to decrease the inflation differential with West Germany. The Bank of France had to maintain its key interest rates higher than those of Germany to break this inflation differential, as shown by Figures 1, 2 and 4. This strategy worked and entailed a decrease in the French inflation rate throughout the decade, as pointed out by Governor La Genière in July 1984:

> "The good performance of the French currency is in fact partly due to fundamental factors such as the reduction in the inflation rate and the current account deficit. The annual inflation rate fell from 9.5% at the end of 1983 to 7.8% at the end of May 1984 and could be around 7% by the end of the year... The current account balance has improved significantly in recent months as a result of the recovery in the trade balance. A surplus of several billion francs was recorded in the second quarter of 1984, bringing the deficit for the first half of the year to less than 10 billion francs."[78]

When in November 1984, Renaud de la Genière was replaced by Michel Camdessus as Governor of the Bank of France, the latter claimed that the disinflation policy will be pursued. On December 11, 1984, in his first speech to the *CoG*, he stated:

> "France is not among the countries that have sufficiently reduced their internal and external imbalances to be able to adopt medium-

[77] Bank of France, Minutes of the General Council, 1983, Minutes of 10 November.
[78] Committee of Governors of the central banks of the member states of the EEC, 188th meeting minutes, 10 July 1984.

> term policies conducive to sustained economic growth. France is engaged in a gradual adjustment process that implies continuing efforts for a long time... The same policy of gradually reducing inflation and monetary expansion is being pursued."[79]

Notable progresses were registered year by year: in 1985 Governor Michel Camdessus claimed that it "seems that it is not such an excessive risk that to try now to translate, into the Bank's intervention rate in the money market, the deflation which was noticed during the last months."[80] But Camdessus also remarked that "the competitiveness of the French products with respect to German products… was negatively affected by the inflation differential between the two countries."[81] The disinflation policy implemented by French monetary authorities entailed a reduction of this inflation differential, which in turn permitted reductions in key interest rates of the Bank of France. This process has been explained by the French Governor to his European colleagues: "There is an internal monetary policy objective and, given the reactions of public opinion in France, it is important to be very careful in continuing to lower interest rates, so as not to discredit monetary policy. The decline in nominal rates will depend on disinflation, and there does not appear to be much room for manoeuvre for real rates."[82]

At the General Council meeting of 18 June 1986, the French Governor stated that the continued improvement in domestic macroeconomic conditions and the behaviour of the franc on the foreign exchange markets justified immediate further relaxation of domestic monetary conditions, without waiting for progress in international negotiations between the main monetary authorities:

> "The twelve-month inflation rate had fallen by 0.30 points in March 1986. The foreign exchange market was balanced, with no

[79] Committee of Governors of the central banks of the member states of the EEC, 191th meeting minutes, 11 December 1984.
[80] Bank of France, Minutes of the General Council, 1985, Minutes of 25 April.
[81] Bank of France, Minutes of the General Council, 1985, Minutes of 9 May.
[82] Committee of Governors of the central banks of the member states of the EEC, 205th meeting minutes, 13 May 1986.

> buying or selling of currencies, and the franc was at the top of the fluctuation band in the EMS. There was therefore no reason to delay a further reduction in the key rate. One might have been tempted to wait a while, thinking that this would give us more room for international negotiations on interest rate cuts. But...if a concerted interest rate cut is less unlikely than many people claim, it is likely that nothing serious can be done before the Japanese elections and that, even after 0.25 points cut, the French monetary authorities will still have sufficient arguments and even a little room to manoeuvre to participate in the movement. It was therefore decided to give the French economy the immediate benefit of the rate cut it could expect..."[83]

The improved situation of France regarding the inflation rate differential with West Germany was significant throughout the decade, which allowed for a gradual reduction in the French key interest rates. However, in the late 1980s the indirect influence of U.S. monetary policy sometimes hampered this gradual reduction. As pointed out by Robert Raymond, the co-chair of the Committee of Governors' expert panel, in May 1987, this influence continued to affect the French monetary policy:

> "In several respects, the implementation of the policies of the countries adhering to the exchange rate mechanism was disrupted by the tensions that arose in the prices and did not make it possible to avoid the January realignment. Conflicts between exchange rate stabilization and compliance with domestic objectives were sometimes acute. Interest rate policy was dominated by domestic considerations (e.g., Germany's monetary targets were exceeded, France's inflation fell sharply) until tensions in the foreign exchange market became unbearably intense."[84]

This conflict between internal and external objective – decreasing key interest rates while the inflation differential decreases and keep the French exchange rate at appropriate level in the European

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[83] Bank of France, Minutes of the General Council, 1986, Minutes of 18 June.
[84] Committee of Governors of the central banks of the member states of the EEC, 215th meeting minutes, 12 May 1987.

exchange rate mechanism – also appeared in French primary sources. In August 1987, Deputy Governor of the Bank of France Jacques Waitzenegger claimed:

> "We can obviously only welcome the decrease of this differential… The gap is currently 2.7 or 2.8 points and the last forecasts show that it will be close to 2 points towards the end of the year. Nevertheless, even at that level, it can cause a problem for the foreign exchange rates traders. The variations of exchange rates being strictly limited within the EMS, an inflation differential of 2 percent is still a source of concern…"[85]

Month by month and year by year, the Bank of France won its struggle against inflation and decreased its inflation differential with Germany, allowing French key interest rates to decrease. In February 1988, Jacques de Larosière, Governor of the Bank of France from January 1987 to January 1993, welcomed the "satisfactory" results of the French economy in terms of inflation, stating that "the inflation differential with Federal Germany has dropped to approximately 2 points."[86] Figure 4 clearly shows that French monetary authorities won their struggle against domestic inflation by the end of the 1980s, as well as the reduction of the inflation differential with West Germany. Finally, victory could be claimed in May 1988, when Jacques Waitzenegger was pleased with the performance of the French franc on the markets, in the absence of intervention by the French monetary authorities:

> "It is interesting to note that the franc is holding up well without the need for the Banque de France to intervene. In fact, since the beginning of the year, all days have shown a positive balance due solely to customer transactions, with the exception of one day in early March, when very little intervention was required. French foreign exchange reserves have thus increased in recent months."[87]

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[85] Bank of France, Minutes of the General Council, 1987, Minutes of 27 August.
[86] Bank of France, Minutes of the General Council, 1988, Minutes of 11 February.
[87] Bank of France, Minutes of the General Council, 1988, Minutes of 5 May.

This has also been praised by Belgian central banker Georges Janson, who claimed: "Within the EMS, the election period passed without major tensions; this good performance can be attributed not only to the flexibility of interest rates but also to favourable results in terms of convergence, particularly as regards relations between Germany and France."[88] Jean-Claude Trichet, Director of the French Treasury from 1987 to 1993, emphasized that the French franc reached a state of "homeostasis", characterizing an ecosystem that is resistant to change and maintains a state of equilibrium:

> "We can truly speak of an innovation in this area since the franc is holding up well, with domestic rates evolving in the same way as international rates, even though we are in the middle of an election period and with virtually no exchange controls, so that a huge mass of capital, of the order of 15 or 16 billion dollars, could cross borders. This seems to prove that market means alone can ensure the balance, homeostatic in a way, between the internal market and the external markets. What is happening at the moment in terms of exchange rates can be compared to what is happening in terms of prices. The good performance of the franc in the present conditions consolidates, so to speak, the liberation of the exchange rate in the same way that the bad price index of January consolidated, in a way, the freedom of prices since it was 'assumed' without being called into question."[89]

The French currency thus reached a situation of homeostatic equilibrium, a biological term that characterizes a situation of equilibrium that is maintained despite external constraints. While the external constraint had not totally disappeared, we can finally claim that its nature had changed and its intensity had been progressively reduced. The gradual reduction of macroeconomic imbalances has allowed the Bank of France to acquire additional degrees of freedom.

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[88] Committee of Governors of the central banks of the member states of the EEC, 225th meeting minutes, 10 May 1988.
[89] Bank of France, Minutes of the General Council, 1988, Minutes of 5 May.

Conclusion

We have explained why Western European monetary policies were deeply restrained throughout the 1980s and why Western European central banks had limited room for maneuver. We have showed that Western European monetary policies faced three elements of external constraint, namely: I) the "direct influence" of the American monetary policy; II) the "indirect influence" of the American monetary policy; III) the EMS internal macroeconomic imbalances, and primarily the inflation differential between France and West Germany. Throughout the 1980s, these three elements constrained Western European monetary policies, but their respective weights changed during this period.

Within the EMS, political and economic unrest occurred in May 1981, after the election of François Mitterrand to the French Presidency. The socialist government was unable to implement a Keynesian policy mix,[90] as the monetary policy of the Bank of France could not support the fiscal policy launched in 1981-82 because of the "direct influence" of U.S. monetary policy, which led to a rise in interest rates worldwide. The expansionary fiscal policy was therefore abandoned in order to restore internal (lowest inflation rate and fiscal deficit) and external (lowest trade deficit) equilibriums disrupted by the economic recession in the early 1980s, following the Second oil crisis in 1979.

Due to the inability of the government to implement a consistent Keynesian policy mix, the austerity measures organized progressively in 1982-83 by the socialist government restored the Bank of France's room for manoeuvre, month by month, when the inflation differential between France and West Germany became less pronounced and when the trade deficit became unsubstantial. The French macroeconomic imbalances regarding West Germany have

[90] The fiscal stimulus policy led by the Mauroy government in 1981 has been labelled "redistributive Keynesianism" by Hall (1986) and "passive Keynesianism" by Daley (1993).

therefore decreased throughout the 1980s. As a consequence, French monetary authorities were able to gradually reduce their key interest rates and to regain some room for manoeuvre.

In addition, the upward trend of the dollar in the first part of the 1980s was not linear, but the dollar experienced rapid periods of decline that led to a rise in the German mark in the EMS. The French monetary authorities had to buy their own currency to defend the exchange rate of the French franc, drawing on their foreign exchange reserves. This "indirect influence" of U.S. monetary policy also played a role during the second part of the 1980s, even if other currencies sometimes played the role of safe haven usually played by the German mark. An overview of the French monetary policy during the 1980s is provided in Figure 5, showing the evolution of elements of the external constraint and of the Bank of France's margins of manoeuvre.

We can finally claim that the success of the disinflation policy allowed the Bank of France to progressively ease its monetary conditions. This clean-up of the French economy has been obtained step by step, month after month, in a very progressive manner that has reinforced the independence of the Bank of France and the strength of the French monetary policy. Throughout the decade, the French monetary policy suffered three elements of external constraint that gradually decreased while the Bank of France gained room for manoeuvre. As noticed by Jacques de Larosière in May 1988: "The success of the disinflation policy, the flexibility within the fluctuation band, and the interest rate policy are the reasons for the satisfactory performance of the franc."[91] The recovery of the French economy was therefore combined with the end of tensions within the EMS.

[91] Bank of France, Minutes of the General Council, 1988, Minutes of 5 May.

Appendix

Figure 5
Overview of the external constraint weighing on the French monetary policy and evolution of the margins of manoeuvre of the Bank of France during the 1980s

	May 1981-March 1983	March 1983-September 1985	September 1985-May 1988
Direct effect	American "Benign neglect"; Volcker shock (1979-82); Global rise in the U.S. dollar	Gradual change in the attitude of American authorities; Historical turning point of the U.S. dollar exchange rate; "New presence" of central banks on exchange markets: concerted operations (1984-85)	Institutionalisation of central banks operations; Lack of coordination in the management of the "soft landing" of the U.S. dollar (1985-87); Increased cooperation after the Black Monday (October 1987)
Indirect effect	Rise in the German mark (November 1982 - January 1983)	Indirect effect moderated by the pound sterling (March-June 1985)	German mark at the top of the fluctuation band of the EMS; role of safe haven played by the Japanese & British currencies
Direct + indirect effects	Role of fluctuations of the U.S. dollar in the realignment operations of the European Monetary System	Favourable framework for the management of exchange rates	"Peripheral constraint": purchases of German mark by British & Spanish monetary authorities (1987-88)
Macroeconomic imbalances	Important macroeconomic imbalances	Gradual diminution of macroeconomic imbalances	Continuous diminution of macroeconomic imbalances
Conclusion	Low margins of manoeuvre for the French monetary policy; impossibility of implementing a consistent Keynesian policy mix	The Bank of France asserts itself on the international stage and its margins of manoeuvre increase	Success of French monetary authorities

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