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# Changing Capital Markets: Implications for Monetary Policy—An Overview

*Hans Tietmeyer*

I would like to contribute some observations on the structural changes in the capital markets and their implications for monetary policy. My remarks deal with the situation in Germany but also touch on questions arising from European monetary integration. Before that, I would like to sum up briefly what I consider to be the essential trends in the financial markets and the monetary policy issues resulting from them. The numerous changes experienced by the financial markets in the past few years can be divided into three distinct trends.

First, the industrialized countries have largely (and in most cases completely) liberalized their international capital transactions. In addition, and this applies particularly to Europe, borders have been opened for financial services, and restrictions on establishment have been reduced. As a consequence, international finan-

cial interdependence has increased dramatically. It is an indicator of this trend that the volume of international bonds outstanding, measured in terms of the GNP of the industrialized countries, has multiplied in the past two decades. The rapid expansion in foreign exchange market transactions points in the same direction. Not least, international *net* capital flows have also risen sharply. Current account deficits and surpluses of a size that would have appeared unimaginable not too long ago have now become sustainable for longer periods of time.

The second major phenomenon among recent capital market trends is represented by the innovations in and the deregulation of financial activities. Even more than the liberalization of capital movements, the wave of deregulation has reflected a reorientation in terms of policy stance. Deregulation in the financial sector has been conceived as a counterpart of supply-side reforms in general economic policy.

As a result of innovations and deregulation, financial market structures have changed in many respects. For example, the banks' customers have been offered interest-bearing cash deposits. In addition, issuing facilities have replaced bank loans (securitization and disintermediation). Furthermore, bonds with special

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terms of issue, such as variable interest rates, have become widespread.

Above all we are experiencing a strong expansion of the markets for derivative financial instruments (such as futures, options, swaps, and synthetic bonds or shares). Technological advances in telecommunications and computers have played a part in this development. They have lowered information and transaction costs for financial products. The improved possibilities of hedging against interest and exchange rate risks, such as are offered by derivatives, have, in turn, given fresh impetus to the globalization of asset holdings.

The third new trend can be seen in the fact that the importance of institutional investors in national markets and international capital transactions has grown considerably. The report of the G-10 deputies on International Capital Movements and Foreign Exchange Markets, published in the spring of this year, sheds some light on this. According to the report, the total cross-border securities holdings of residents of the United States, Europe, and Japan in 1991 came to an estimated \$2.5 trillion. As stated in the report, institutional investors (such as pension funds, insurance companies, mutual funds, trust funds, and hedge funds) accounted for most of the rapid increase in these investments.

It is typical of these operators that they are generally subject to less stringent regulatory standards and supervision than banks. In addition, some of them seem to have a relatively strong tendency to incur open or insufficiently covered foreign exchange positions and to change them rapidly afterwards.

As a consequence of the far-reaching transformation process, the financial markets have doubtless become more efficient. Costs for borrowers have declined, earnings for investors have risen, and the markets have thus been given additional growth stimuli. However, the financial markets have also become more fragile. The stock market crash of 1987, the European exchange

market turbulences of 1992, and the European currency unrest since then have shown that under present conditions it does not take much to trigger off enormous shifts in capital, which may bring about serious disadvantages (in the form of uncertainties for investment and trade) for the countries directly concerned as well as for the world at large. Such undesirable consequences would be carried to an extreme, if disturbances in the financial sector and subsequent exchange rate effects ultimately led to protectionist trade measures. The tail would wag the dog.

Stability of the financial markets must therefore be a primary objective of general economic policy. However, there is a widely held consensus that deliberalization and re-regulation would be inappropriate reactions. Instead, we must persevere in combining economic freedom with appropriate supervisory provisions. Much has already been achieved here under the auspices of the Basle Committee, but more needs to be done. In this respect, disclosure requirements can be helpful in strengthening the internal control mechanisms in the markets. That said, the stability of the financial markets is crucially dependent on gearing monetary, fiscal, and wage policies in all countries strictly toward achieving the generally accepted objective of noninflationary economic growth.

It is also true, however, that the changes in the financial markets have generally made it more difficult for monetary policymakers to fulfill their stability mandate. Several factors are responsible for this.

In a number of countries, financial innovations and deregulation have distorted the intermediate targets used in the conduct of monetary policy and have altered the transmission mechanisms of monetary policy to the real economy. This concerns especially those countries which maintained a comprehensively regulated financial framework for an extended period of time and chose the Big-Bang style of deregulation.

In the countries concerned, the interest-

bearing portion of the banks' liabilities has increased sharply. In addition, near-money investment outside the banking system has risen quickly. Under these conditions, the reasons for holding liquid assets are no longer clearly definable. As a result, the demand for money in relation to interest rates and expenditure has become unstable in these cases, thus undermining the rationale for using monetary aggregates as monetary policy targets.

These difficulties have led in a number of countries to policies based on a broad range of indicators. It seems to be fair to say that these countries have lived in a period of monetary experimentation in recent years. The results, at least, have not been convincing so far. It has become general knowledge that in many countries innovations and deregulation have coincided with temporarily overly expansive monetary policies. The effects of misguided monetary policies have made themselves felt in the inflation and deflation of asset prices and the related cyclical problems.

The asset price cycles, in turn, have had additional distorting repercussions on the monetary aggregates. Owing to falling asset prices, banks in the United States, Japan, and some European countries accumulated substantial amounts of nonperforming loans. As a consequence, the banks concerned were obliged to restrain their lending activities (credit crunch); they had to adjust to their deteriorated capital positions and also to difficulties in attracting deposits. The subsequently reinforced disintermediation of lending has additionally impaired the reliability of the monetary aggregates as leading indicators of expenditure and inflation.

Another major change in the framework for the conduct of monetary policy is the increased potential for putting exchange rates under pressure. Countries which are exposed to capital inflows may therefore be confronted to a much greater degree than before with the problems of intervention-induced inflationary impulses. It

should be noted that in the seven months from June through December 1992, official net deutsche mark sales by European central banks amounted to no less than DM 284 billion, of which DM 188 billion were used to defend exchange rate mechanism (ERM) currencies (as stated in the already mentioned G-10 report). A substantial part of these interventions affected monetary conditions in Germany, especially when such operations involved the Bundesbank. In the course of 1993, the ERM central banks effected further substantial deutsche mark sales. In June/July 1993 alone, approximately DM 110 billion were sold in support of ERM currencies, with about DM 60 billion having to be provided by the Bundesbank for intramarginal and compulsory interventions, which had a corresponding impact on monetary conditions in Germany.

In particular, experience of exchange market pressure has shown that strengthening monetary policy is much more difficult in countries where large amounts of private and public debt are incurred at variable interest rates. It is true that a high indebtedness at floating rates increases the efficiency of monetary policy in terms of restraining the economy, because rising interest rates would affect not only new borrowing but debts outstanding as well. However, such efficiency gains conflict with the deployment of monetary policy for defending exchange rates, such as may become necessary, in particular if the country participates in a fixed exchange rate mechanism like the ERM. In other words, in an environment of variable interest rates, a restrictive monetary policy may have such an impact on the domestic economy that its application for defending exchange rates collides with cyclical policy requirements. According to a recent internal report of the European Community (EC) Committee of Governors, the United Kingdom appears to be the country most affected by this dilemma within the European Community.

It should also be emphasized that the expansion of the Euromarket and other offshore centers

poses problems for those countries which deploy the instrument of minimum reserves. Particularly in phases of structural changes, minimum reserves can exercise an important function as an automatic constraint on money creation. To achieve this, the minimum reserve ratios have to be sufficiently restrictive. However, the higher the minimum reserve ratios, the more the banks will be tempted to evade their obligations by shifting parts of their business activities to reserve-free subsidiaries abroad.

In some respects, German monetary policy has been less affected by the changes in the financial markets than other countries. Since the transition to money supply targeting in 1974, the financial infrastructure in Germany has not changed so profoundly as in many other countries. Liberalization of capital transactions and most of the deregulation of financial markets were carried out much earlier. The abolition of interest rate controls in 1967 was the major final step in this development. Since that time, German investors may resort to time deposits with money-market-related interest rates, and it has also become possible to meet borrowers' demands for interest rate flexibility.

There is yet another reason why the behavior of the monetary aggregates in Germany has been less affected by the general trend toward innovations and deregulation. The Bundesbank has always paid attention to preventing reforms of the financial markets from rocking the foundations of monetary policy.

For example, the Bundesbank did not overcome its reservations about the issue of floating-rate notes and of commercial paper until 1985. In addition, such innovative instruments have not been of major importance in Germany so far. Bonds with variable interest rates account for less than 10 percent of total domestic bonds in circulation. Much the same is true of commercial paper. Although the German commercial paper market has been expanding rapidly, the stock of such paper comes to only about 3 percent of the

short-term time deposits in the banking system. All this suggests that there has been no urgent demand for these innovations.

The Bundesbank has also been extremely cautious with regard to the efficiency of the minimum reserve instrument. In order to make it more difficult to evade the minimum reserve obligation, short-term bank bonds (with maturities of less than two years) are included in the reserve requirements. For the same reason, the Bundesbank has so far been opposed to the launching of money market funds.

All in all, it appears that the Bundesbank's concept of monetary policy is still appropriate. It is noteworthy in particular that German unification has not altered the demand-for-money relationship. The Bank for International Settlements (BIS) confirmed this appraisal in its most recent annual report. I quote from page 141: "It was widely accepted in the past that in contrast to money demand relationships in many other countries, the demand for M3 in Germany was stable. Recent investigations suggest that, perhaps surprisingly, this is still the case. . . . The high rate of growth of M3 in the 1990-92 period thus appears to be well explained by the strength of output in western Germany following unification and by persistent inflationary pressures, rather than a structural shift in the demand-for-money relationship."

I have to admit, however, that more recently special factors have somewhat overstated the expansion of our target aggregate. In the wake of meanwhile rather low long-term interest rates, the growth of M3 was slightly affected by a shift of financial assets from nonmonetary investment to savings and time deposits. Nevertheless, according to our analysis, the *longer-term* relationships between interest rates, M3, and total expenditure continue to be reasonably stable.

The stability of the demand-for-money relationship and the underlying minor importance of financial innovations in Germany are of course also attributable to the previously high purchasing-

power stability of the deutsche mark. Thus, a speedy restoration of price stability in Germany is not least in the interest of safeguarding our monetary policy strategy.

On the other hand, the possibility of sudden large-scale international capital flows actually poses a considerable risk to the success of German monetary policy. As already mentioned, the year 1992 has taught us some lessons in this respect. It is widely agreed that a strengthening of monetary cooperation and crisis management, important though it is, cannot be the major response for coping with such problems. What is desirable, and indeed necessary, is a joint effort by all countries concerned to implement required adjustment measures speedily and to establish the preconditions for long-term price stability. This is particularly crucial for countries which are interconnected through fixed exchange rates. Germany, as the anchor country of the ERM, of course bears a special responsibility in the fight for domestic stability, since otherwise, the stability of the whole system would be at stake. Consequently, the scope for monetary policy cooperation in stabilizing exchange rates finds its limits in the anchor country's domestic policy requirements.

International cooperation is of primary importance, though, wherever a "level playing field" is required. In the area of monetary policy, it remains to be seen if an internationally agreed "middle ground" with regard to minimum reserves can be found. At any rate, the Bundesbank for one has recently reduced its reserve requirements with this intention.

Monetary policy would also benefit if the stability of the international financial system were further strengthened by means of appropriate and coordinated supervisory measures (which, as mentioned before, should not replace market forces but, on the contrary, enhance their disciplinary role, for example, by improving transparency). Each step toward improved prudential standards counteracts the danger of sys-

temic solvency strains and thus protects central banks against political pressure to grant generous liquidity injections. Let me add, however, that such monetary policy risks are less serious in Germany than in some other countries. The German universal banking system has been well able so far to master solvency problems itself. In addition, there is an institutional separation in Germany between monetary policy on the one hand, and banking supervision on the other. This protects the Bundesbank from internal conflicts of aims between monetary policy requirements and potential solvency problems of the banks.

At present, the implications of the changes in the capital markets for monetary policy are also an important subject with regard to the process of European monetary integration. Under the Maastricht Treaty, the planned European System of Central Banks will be established when the third stage of economic and monetary union comes into force, and will then immediately assume full responsibility for monetary policy in the participating countries. At the beginning of 1994, when the second stage of European Monetary Union (EMU) comes into force, a special cooperation agency, the European Monetary Institute, will start its activities. The Institute will primarily have to deal with preparing the ground for a stability-oriented European monetary policy by harmonizing the statistics and the institutional structures (such as the payment systems) and by discussing the guidelines and the required instruments for conducting monetary policy in the envisaged monetary union.

The question of whether monetary aggregates could serve as intermediate targets at the European level as well will have to be examined thoroughly and objectively. The Bundesbank has already submitted a paper for that purpose. It is, of course, ultimately an empirical question how well the stability of the demand-for-money relationship, as a precondition of such an approach, will be ensured in the third stage. A definitive answer, therefore, cannot yet be given. Existing

studies on the stability of the demand-for-money relationship in Europe, however, have had quite satisfactory results. The outcome is in many cases even more favorable for the European Community as a whole than for individual countries. Within the envisaged monetary union, the stability of the demand-for-money relationship would probably even improve, because inflation-induced innovations, which play a major role in some EC countries, will increasingly recede into the background, if the European System of Central Banks complies with its stability mandate.

Although operational problems arising from a European money supply concept cannot be ruled out, it is not least the shortage of convincing alternatives which argues in favor of such an approach. In view of the size of the economic area concerned, a policy which, instead, sets exchange rate targets seems hardly a reasonable option for Europe. On the contrary, a basically floating exchange rate vis-à-vis third currencies appears to be more appropriate. A European policy of money supply targeting would thus be less exposed to disturbing external influences. In principle, such a policy would therefore appear to be even more appropriate for the European System of Central Banks than for today's national central banks.

An interest-rate orientation, as the underlying principle of European monetary policy, would also be very problematic. A policy of fixing interest rates would run the risk of having procyclical effects on economic development, owing to the time lags between interest rate changes and their effects on economic activity. The political risks involved would be even more serious. An interest rate orientation would increase the danger of central banks tending toward monetary policy pragmatism and becoming more responsive to political influences.

There are some other reasons still which argue in favor of a European strategy of money supply targeting. Although from the outset the European System of Central Banks will have a

clear mandate to defend the value of money, it will not be able to point to any successes of its own as regards monetary stability and policy credibility. A clearly defined strategy that can be verified, such as the money supply approach, would therefore help the European System of Central Banks to win confidence in the markets.

Money supply targets could also facilitate decisionmaking within the European System of Central Banks. They would make the relationship between interest rate policy and the final objectives of monetary policy more transparent. This aspect will be of particular importance in Europe, since the members of the decisionmaking body will be influenced by very different national backgrounds.

You have probably gathered from my remarks that, with regard to Europe, we consider the German monetary policy concept as exportable, so to speak. In this sense, let me also quote Wim Duisenberg, the president of the central bank of the Netherlands, who recently said: "It would . . . appear wise if the policy strategy of the European Central Bank were to be modeled closely upon current German monetary policy practice." This appraisal has all the more significance since Mr. Duisenberg is at present also the chairman of the EC's Committee of Governors.

After the recent turmoil in the European Monetary System (EMS) and the decision temporarily to widen the ERM margins from +2.25 percent and +6 percent to +15 percent (except for the Netherlands, which intends to continue to maintain the present margins of +2.25 percent vis-à-vis the deutsche mark), one may, of course, wonder whether the prospects mapped out by the Maastricht Treaty are still realistic. However, at the time of their decision on August 1, the EC member states expressly declared that they intend to abide by the commitments of the Maastricht Treaty, and now that all 12 member states have taken the requisite ratification decisions, the Treaty can be expected formally to enter into force this autumn, unless the German

Constitutional Court at the last moment prohibits the lodging of the German deed of ratification—a turn of events which I do not consider to be very likely. The other EMS regulations and the parity grid likewise basically remain in effect.

Even so, the conditions for monetary policy in Europe have undoubtedly changed as a result of the decision taken on August 1. For one thing, owing to the limited floating of exchange rates, the individual countries now have more room for maneuver on interest rate movements. Such increased flexibility is certainly a gain, since the inflationary risks in the individual countries currently differ. For instance, the Bundesbank, in pursuing its domestic anti-inflation policies in the next few months, will not need to pay as much attention as hitherto to the direct implications for interest rate policy in neighboring countries, although of course a major appreciation of the deutsche mark within Europe is undesirable in the light of German exporters' need to remain competitive. Conversely, the other central banks in the EMS can now carry out interest rate reductions which seem desirable in domestic terms without immediately being faced with intervention commitments and reserve losses.

However, at least in the present situation (complicated as it is by the consequences of German reunification), this gain in flexibility is accompanied by a substantial risk. For a number of countries, the temporary widening of margins involves a temptation prematurely to break off their domestic efforts to achieve price stabilization and, instead, to seek salvation in competitive depreciations. A development of this kind would not only jeopardize the progress made so far toward convergence in Europe, it might actually

endanger the longer-term viability of the single European market. So far, admittedly, this risk has not assumed concrete shape. The exchange rate changes of the last two and one-half weeks have been relatively small up to now.

The next few months will show whether the European countries take due advantage of the new latitude that they have temporarily gained. You may rest assured that the Bundesbank will abide by the anti-inflationary policy stance it has pursued hitherto. That does not rule out the possibility of further small steps of interest rate policy, provided that the trend in the money stock permits it, and that the inflation rate, as expected, declines slightly in the near future. But we in the Bundesbank regard an anticyclical monetary policy neither as acceptable in terms of anti-inflation policy nor as efficient in terms of business cycle policy. The German interest rate level is already exceptionally low anyway in real terms. Long-term interest rates, in particular, are distinctly below the multiyear average in nominal and real terms alike. That reflects a substantial measure of confidence in German anti-inflation policy, which the Bundesbank has no intention of endangering. After all, credibility is a central bank's most important asset.

I very much hope that our European partners, too, know that and take it to heart. The EMS can link up with its earlier successes in the fight against inflation only if all those concerned try harder to ensure the long-term credibility of their anti-inflation policies. The European Monetary Union, which is the longer-run objective, has a chance only if the European Monetary System returns to discipline and more convergent anti-inflation policies before long.