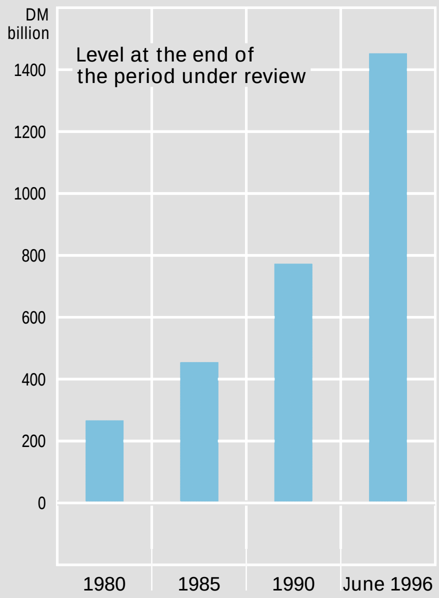
The role of the Deutsche Mark as an international investment and reserve currency

The Deutsche Mark has long been the second most important investment and reserve currency after the US dollar. During the nineties, too, it has participated in the sustained trend towards internationalisation and diversification of assets and has continued to strengthen its role in the international financial markets. Overall, non-residents' financial Deutsche Mark assets came to over DM 1,400 billion in the middle of 1996 and were therefore nearly twice as high as at the beginning of the nineties. At the same time, there have been considerable structural shifts between the various forms of investment. Whereas Deutsche Mark securities were particularly favoured by international investors, Deutsche Mark-denominated Euro-deposits lost some of their attractiveness. There have also been substantial changes in the official Deutsche Mark reserves held by foreign central banks as part of their monetary reserves. This article deals with the recent trends in non-residents' Deutsche Mark assets and their composition in detail; it links up with earlier publications of the Deutsche Bundesbank on this subject.[1]

1 See Deutsche Bundesbank, Non-residents' Deutsche Mark assets and liabilities at the end of 1990, Monthly Report, May 1991, page 23 ff.

Non-residents' Deutsche Mark assets, total *



* Where recorded in the statistics, adjusted for double-counting.

Deutsche Bundesbank

Non-residents' Deutsche Mark assets: definition

Approach

In this article non-residents' Deutsche Mark assets mean financial assets held by non-resident investors in Deutsche Mark. Claims arising from foreign direct investment in Germany and from foreign suppliers' trade credits to their German customers are, by contrast, disregarded as these are not so much the result of portfolio decisions; they are actually claims based primarily on real economic considerations. Foreign portfolio investment in Deutsche Mark paper can be made on the German securities markets, at domestic credit institutions and in foreign financial centres. For statistical reasons, a distinction is made in the following sections between Deutsche Mark assets vis-à-vis domestic sectors and Deutsche Mark assets vis-à-vis foreign borrowers or banks.

Problems ...

There are many links between the various markets for Deutsche Mark assets, mainly as a result of the cross-market and cross-border activities of financial intermediaries. For example, credit institutions domiciled abroad accept Deutsche Mark deposits and subsequently pass them on to banks in Germany. The result of this intermediation is that some of the investable funds are channelled through a multiplicity of credit chains on their way from the savers to the ultimate borrowers. Consequently, total assets may be inflated substantially. It is therefore desirable to avoid the resulting double-counting wherever possible. For that reason, it is appropriate, in principle, to take only the Deutsche Mark assets held by foreign non-banks as a basis. The Deutsche Mark assets of foreign banks which, as intermediaries, limit their foreign exchange risks for prudential reasons, are therefore disregarded. However, this division cannot be strictly made in every case, because a breakdown by the investor groups "Foreign banks" and "Foreign non-banks" is not always possible, especially in the case of foreign portfolio holdings.

... as a result of double-counting ...

... and residents' Deutsche Mark assets abroad

A special problem in this context is posed by the largely tax-motivated Deutsche Mark investment by German residents in the international financial markets which is rechannelled from there into the German financial system on a considerable scale. To this extent, the inflows of funds from abroad are augmented by domestic savings and are therefore not so much an expression of the prefer-

Non-residents' Deutsche Mark assets: statistical sources

The most important source of information on non-residents' Deutsche Mark assets in Germany is the external asset and liability position compiled by the Deutsche Bundesbank (Balance of payments statistics, Statistical Supplement to the Monthly Report 3, Tables II.7). The asset and liability position gives a comprehensive account of the external assets and liabilities of the domestic sectors, by instrument and currency, at half-yearly intervals. The most recent "balance sheet day" was June 30, 1996; in the aggregated presentation of non-residents' Deutsche Mark assets, all other data have been reconciled with that date.

The Bundesbank's capital market statistics (Capital market statistics, Statistical Supplement to the Monthly Report 2, Tables III) contain data on non-resident issuers' Deutsche Mark-denominated securities outstanding. The securities of this type held by non-residents are calculated as a residual after deduction of the paper acquired by residents. The OECD's capital market statistics (OECD Financial Statistics) can be used for comparisons with other major issue currencies.

In its Euro-market statistics the BIS reports on the Deutsche Mark assets held at foreign banks. The BIS publishes quarterly detailed data on the bank liabilities of major industrial countries, by country, currency, and major sector, as well as more aggregated data for some offshore banking centres (BIS: International banking and financial market developments). The figures shown there in dollars were converted into Deutsche Mark at current market rates.

The data on the Deutsche Mark assets of monetary authorities are provided by the IMF. However, these data permit only a rough allocation of monetary reserves to groups of countries and not an analysis of the investment instruments preferred by central banks, but they cover the period up to the end of 1996.

In the case of all data provided by international organisations, it has to be borne in mind that the national currencies have been converted into US dollars and that the time series (may) therefore reflect exchange rate changes over time. In the case of non-residents' Deutsche Mark assets, this qualification is irrelevant for the reporting day comparison since the original figures were denominated in Deutsche Mark; however, it may have influenced the comparatively small shifts in the market shares in individual currencies.

Deutsche Bundesbank

ences of foreign investors for the Deutsche Mark as a reflection of saving processes in Germany. From a conceptual point of view, such assets should therefore be disregarded when analysing the Deutsche Mark assets of non-residents. In practice, however, this is only partly possible. Particularly in connection with the introduction of the withholding tax on interest income in 1993, the resulting "inaccuracies" seem to have been fairly important, but it is not possible to state their significance with any degree of reliability.

The Deutsche Mark as a reserve currency

A special form of non-residents' Deutsche Mark assets is the foreign exchange reserves held by national monetary authorities. In many cases these cannot be distinguished from other forms of Deutsche Mark assets held by non-residents, but, owing to their autonomous nature, they represent a special category.

Overview of the contents

The following section therefore focuses on non-residents' Deutsche Mark assets in Germany. In the section after that, the foreign Deutsche Mark assets vis-à-vis borrowers outside the domestic financial system are analysed – i. e. the Deutsche Mark bonds of foreign issuers held by non-residents and the Deutsche Mark deposits held by non-residents in the international banking centres (Euro-Deutsche Mark deposits). After the elimination of double-counting, the aggregate of these represent the total Deutsche Mark assets held by non-residents. The Deutsche Mark assets of foreign monetary authorities are particularly important here. The conclusions are drawn at the end of this article.

Non-residents' Deutsche Mark assets in Germany

Structure

At the end of June 1996 investors from abroad held assets vis-à-vis borrowers in Germany to the amount of DM 2,283 billion; just over three-quarters of these were denominated in Deutsche Mark. Non-residents' financial Deutsche Mark assets, which are of interest here, accounted for DM 1,417 billion.[2]

Doubling of the Deutsche Mark assets in Germany

Since 1990 the financial Deutsche Mark assets held by non-residents in Germany have thus more than doubled; compared with the dynamic rate of growth during the eighties, the pace of expansion has actually increased even further. However, there has also been a radical change in Germany's external situation since that period. Whereas during the eighties Germany recorded large current account surpluses, external deficits have determined the picture since 1991. In addition, the tax-related shifts of domestic savings abroad and the rechannelling of the funds by the beneficiary institutional investors abroad resulted in an upward distortion of the statistical data at the beginning of the nineties.

Despite the resulting statistical inaccuracies, the dynamism of the trend in non-residents' Deutsche Mark assets in the German market remains remarkable. Whereas non-residents' Deutsche Mark investment in Germany approximately doubled, as mentioned above,

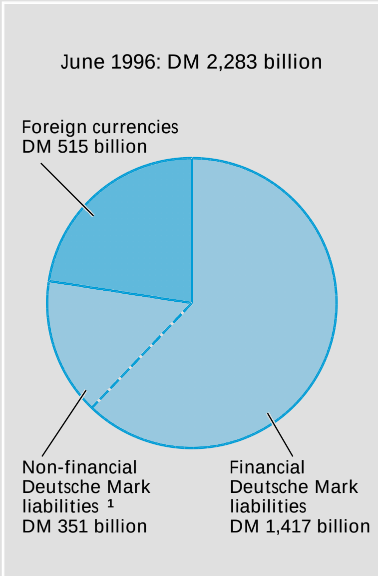
2 At the end of June 1996 the non-financial Deutsche Mark assets – essentially foreign direct investment in Germany and trade credits – totalled roughly DM 350 billion.

the gross lending volume in the Euro-market, for instance, rose by only about one-quarter, and domestic financial assets increased by "only" roughly one-half between the end of 1990 and the end of 1995. These marked differences undoubtedly show that investors from abroad apparently have a great preference for Deutsche Mark paper.

Public bonds in special demand

The sharp increase in foreign Deutsche Mark assets vis-à-vis domestic borrowers must also be seen in the context of the huge rise in the government's financing needs following German unification. In the circumstances, Federal bonds and five-year special Federal bonds attracted sizeable foreign funds; the main reasons for this were the soundness and creditworthiness of the borrowers, the high returns on and liquidity of the paper offered and not least the confidence in the stability of the currency. In the period under review (end-1990 to June 1996) the amount of government bonds held in foreign portfolios trebled to DM 515 billion. On the other hand, borrowers' note loans, which had played an important role as an investment instrument for non-residents until the coupon tax was abolished in 1984, continued to lose ground in relative terms. Overall, at the end of June 1996 investors from abroad held Deutsche Mark assets vis-à-vis domestic public authorities to the amount of DM 573 billion; compared with 1990, this was equivalent to an increase of roughly 160 %. Owing to this disproportionately strong growth, the public sector's Deutsche Mark indebtedness to non-residents is now greater than that of any other domestic borrower; about 28 % of its total debt was raised from non-residents. At

Structure of German external liabilities



1 Direct investment, trade credits, liabilities between non-banks, etc.

Deutsche Bundesbank

the end of June 1996 as much as 47 % of the securitised debt was held by non-residents.

Non-residents' assets in the banking sector

The rate at which domestic credit institutions increased their Deutsche Mark-denominated liabilities abroad was hardly less dynamic. In the past few years, for example, investors from abroad have increasingly purchased domestic bank bonds, which, in turn, have been largely issued to finance loans to the public sector. Between 1992 and 1993 this was doubtless connected with the above-mentioned tax-related "roundabout transactions". However, the securities issues of domestic credit institutions have recently gained in international importance for other reasons as well – for example, as a result of the global marketing strategy for "public" *Pfandbriefe* (the former communal bonds).

Furthermore, bank bonds offer a slightly higher return than Federal bonds, although the interest rate differences have recently dwindled for the same maturities. At the end of June 1996 foreign investors held Deutsche Mark-denominated bonds of German banks worth DM 143 billion; that was nearly six times as much as at the end of 1990.

German banks received sizeable financial resources in the other areas of borrowing and deposit business, too. A large part of these, however, is likewise indirectly connected with the issue of securities. Particularly the funds which are raised by German institutions abroad and which are recorded under long-term financial credits are often the equivalents of securities issued by foreign financing subsidiaries of German banks in the international financial markets; these funds are regularly passed on as long-term loans to the parent institutions in Germany. In the upshot, the stock of long-term (unsecuritised) bank liabilities to non-residents has approximately doubled since 1990.

The likewise very sharp increase in German credit institutions' short-term external liabilities denominated in Deutsche Mark, by contrast, essentially reflects the balances accruing in other payments between residents and non-residents. In addition, repatriations of funds from the Euro-market to the domestic banking system are likely to have played a part. All in all, at DM 550 billion, almost 40 % of non-residents' total Deutsche Mark assets vis-à-vis residents was accounted for by credit institutions; this share was slightly smaller than that of the public sector.

Non-residents' assets vis-à-vis enterprises and individuals

Both in terms of the share in total Deutsche Mark-denominated assets held by non-residents in Germany (almost one-fifth) and in terms of the pace of growth (by approximately one-half), the Deutsche Mark-denominated external assets vis-à-vis domestic enterprises and individuals (DM 260 billion) were lower than the comparable figures for the two sectors already mentioned. One of the reasons for this is that two items which are important for corporate financing, namely direct investment and trade credits, do not count as financial Deutsche Mark-denominated external assets in the definition used in this article.

What is even more important, however, is that the financing structure of German enterprises does not exactly facilitate capital imports. For example, stock market capitalisation of the German equities market is fairly small compared with other countries.[3] Moreover, the issues of bonds by enterprises, if any, often take place abroad. In the definition of foreign financial Deutsche Mark-denominated assets chosen here, equities played the most important role (DM 170 billion) for the corporate sector. The relatively strong growth in non-residents' shareholdings (+ 64 %), however, was predominantly the result of price increases which amounted to 38 % between the end of 1990 and the end of June 1996.

Decline in the Bundesbank's external liabilities

The Deutsche Bundesbank's external liabilities moved against the general trend. At the end

3 See also Deutsche Bundesbank, Shares as financing and investment instruments, Monthly Report, January 1997, page 27 ff.

of June 1996 foreign central banks and international institutions held balances to the amount of DM 17 billion at the Bundesbank; that was only one-third of the amount recorded in 1990.[4] However, this reflects only the reserve operations of individual central banks, and these are not representative of the entire Deutsche Mark reserve holdings of foreign monetary authorities. By far the major part of total Deutsche Mark-denominated monetary reserves is held outside the Bundesbank. Only in the period from March 1993 to March 1995, when the Bundesbank entered the market with its own Treasury discount paper *(Bulis),* did investment at the Bundesbank play a somewhat greater role. At the peak, non-residents (presumably including central banks, in particular) held an estimated DM 20 billion of such paper, which to that extent was recorded under the Bundesbank's external liabilities in that period.

Foreign Deutsche Mark assets vis-à-vis debtors abroad

Foreign Deutsche Mark bonds held by non-residents

The trend towards the securitisation of credit operations particularly favoured the development of the market for foreign Deutsche Mark bonds; for years foreign issuers have made considerable use of these in order to obtain funds. Often these issuers are subsidiaries of domestic enterprises and credit institutions. In mid-1996 foreign Deutsche Mark

4 The Deutsche Mark notes circulating abroad are not included in these figures. A rather "conservative" estimate is given under "Other assets". Other estimates arrived at much higher figures. See Seitz, F., The Circulation of Deutsche Mark Abroad, Economic Research Group of the Deutsche Bundesbank, Discussion paper 1/95, May 1995.

Non-residents' Deutsche Mark assets in Germany *

DM billion; end-of-year or end-of-month level

Item	1990	1993	June 1996
Deutsche Bundesbank	52.2	39.5	16.9
Credit institutions 1			
Bonds 2	25.6	120.6	142.6
Credits 3	187.9	268.7	407.2
of which: short-term	84.5	130.3	202.6
Sub-total	213.5	389.3	549.8
Enterprises and individuals			
Securities	126.7	178.7	208.0
Equities 4	103.9	140.7	170.2
Investment fund certificates	8.0	12.2	15.0
Bonds 2	14.7	25.9	22.9
Credits	50.8	60.6	52.2
Sub-total	177.5	239.3	260.2
Public authorities			
Bonds 2	174.9	447.9	515.1
Credits 5	44.2	45.8	58.1
of which Borrowers' note loans	44.1	44.6	53.6
Sub-total	219.1	493.7	573.2
Other assets	10.5	11.9	16.3
Grand total	672.7	1,173.8	1,416.5
of which: securities	327.2	747.3	865.8

* Excluding direct investment, other capital interests, credit operations between enterprises and individuals and real property. Including investment in domestic Deutsche Mark securities made by residents via foreign financial centres. — 1 Including building and loan associations. — 2 Including money market instruments. — 3 Book credits, borrowers' note loans, bank balances, assets acquired through assignment, etc. — 4 Including investment in German bank shares. — 5 Excluding clearing account balances.

Deutsche Bundesbank

bonds to the nominal value of DM 439 billion were outstanding; the amount outstanding was thus nearly twice as high as at the end of 1990. About two-thirds of these bonds was held by non-residents; this is equivalent to an increase of 130 % since 1990.

Larger market share of the Deutsche Mark as an issue currency

The Deutsche Mark was therefore able to enhance its position as one of the leading investment currencies in the international capital markets. At the end of June 1996 Deutsche Mark paper accounted for just over 11% of the nominal value of bonds outstanding in the Euro-market, compared with 10 % at the end of 1990. Larger market shares in this area were recorded only by the dollar (37 %) and the yen (17 %); the significance of the yen in the Euro-bond market has been rising for some time in connection with the regulatory barriers impeding access to the Japanese financial system.

Foreign Deutsche Mark money market paper as a new instrument

Apart from foreign Deutsche Mark bonds, Deutsche Mark money market paper has been floated by foreign issuers for some years; this is virtually exclusively Deutsche Mark commercial paper of foreign non-banks. With an amount outstanding of DM 11½ billion (June 1996), however, this market segment is still relatively small, and the paper is apparently held almost exclusively by residents.

Moderate expansion in the Euro-money market

Non-residents hold large amounts of Deutsche Mark balances in the Euro-money market in addition to their Deutsche Mark assets in Germany and Deutsche Mark-denominated foreign bonds; at the end of June 1996 the banks in countries reporting to the BIS banking statistics[5] (excluding Germany) showed Deutsche Mark liabilities of DM 850 billion to non-German creditors. That was around 30 % more than at the end of 1990.

Reasons

The growth in non-residents' Deutsche Mark Euro-deposits therefore slowed down considerably, not only compared with the eighties; it also remained distinctly below the demand for other Deutsche Mark-denominated forms of investment. Besides the general trend towards securitisation, the progressive lowering of the minimum reserve ratios in Germany and shifts to longer-term forms of investment in response to the interest rate reversal in the Deutsche Mark area in the autumn of 1992 are likely to have been of importance. Probably as a result of the changed management of foreign exchange reserves, the net level of statistically recorded Deutsche Mark deposits of monetary authorities with Euro-banks, which at the beginning of the eighties had sometimes come to almost 20 % of total Deutsche Mark Euro-deposits, has not risen much since 1990 either.

Finally, the credit chains between banks, which are particularly pronounced in the Euro-market, seem to have shortened somewhat. Several variables suggest at any rate that the relative importance of interbank positions decreased both in the market as a

5 Austria, Belgium, Denmark, Finland, France, Germany, Ireland, Italy, Luxembourg, Netherlands, Norway, Spain, Switzerland, United Kingdom, Canada, Japan, United States and some offshore banking centres. A comprehensive breakdown of the bank positions by currency is available only for the European countries, Canada and Japan, however; the BIS closes some of the reporting gaps by means of estimates.

whole and in the Deutsche Mark segment of the Euro-market; on balance, this may have curbed market growth.[6] This might be partly due to a stronger market presence of internationally operating enterprises both as lenders and borrowers, which facilitates the business of internationally operating banks with counterparts from the non-bank sector.

Special trend at the foreign offices of German banks

Of the banks reporting to the BIS international banking statistics, particularly the foreign offices of domestic credit institutions were able to record remarkable gains in market shares, contrary to the general trend. At DM 266 billion, nearly one-third of total foreign Deutsche Mark balances was accounted for by the branches and subsidiaries of German banks abroad; their number continued to increase considerably in the nineties as a result of the internationalisation strategy of the German financial sector.

Larger share of the Deutsche Mark also in the Euro-money market

Despite the fact that the expansion of the Deutsche Mark-denominated deposits with all Euro-banks decelerated somewhat compared with the eighties, the German currency has held its position in the Euro-money market. The overall growth in traditional international banking business has, admittedly, slowed down after its previous rapid rise and shifted in favour of the securities markets. However, with a share of just over 15 % (1990: 13 ½ %) in the recorded assets and liabilities of Euro-banks, the Deutsche Mark continues to rank second after the dollar (44 %) and is still ahead of the yen (8 %).

Non-residents' Deutsche Mark assets at foreign banks and in the form of Deutsche Mark securities of foreign issuers

DM billion; end-of-year or end-of-month level

Item	1990	1993	June 1996
Bank deposits			
Deutsche Mark liabilities of banks outside Germany			
To non-residents (excluding Germany)	485.6	473.4	533.7
Banks	348.6	352.0	385.5
Monetary authorities	65.0	37.3	66.2
Non-banks	72.0	84.1	82.0
To residents of the reporting countries	170.3	257.0	316.6
Banks	113.7	172.1	186.7
Non-banks	56.6	84.9	129.8
Total liabilities to non-German depositors	655.9	730.4	850.3
of which Deutsche Mark liabilities of foreign offices of domestic credit institutions to non-residents	89.5	158.9	265.6
Securities			
Foreign Deutsche Mark bonds held by non-residents	134.7	207.4	308.4

Deutsche Bundesbank

Non-residents' total Deutsche Mark assets

Elimination of double-counting

As outlined at the beginning of this article, the problem of double-counting arises when the individual Deutsche Mark positions of foreign investors are aggregated. Since only the funds provided by the "last" foreign Deutsche Mark creditor are to be recorded, the aforementioned interbank positions in the Euro-market must first be excluded since they are based on Deutsche Mark deposits by non-banks which have already been

6 The BIS data on net international bank lending in the Euro-money market show a decline in the share of interbank assets outstanding from 53 % (1990) to 48 % (end of June 1996). In the Deutsche Mark segment of the Euro-market, the share of interbank deposits fell by 3 percentage points.

recorded.[7] The same applies to the Deutsche Mark assets of the banks (reporting to the BIS statistics) vis-à-vis debtors in Germany since these are included, in principle, in the data on foreign investment in Germany. Actually, the double-counting which results from the fact that the equivalents of foreign Deutsche Mark bonds placed by the foreign financing subsidiaries of German banks and enterprises with non-resident investors are partly included in the Deutsche Mark loans granted by non-residents to German credit institutions and enterprises ought to be eliminated, too, but this is not possible owing to the lack of suitable data.

Strong growth in non-residents' Deutsche Mark assets ...

After allowing for the double-counting, non-residents' total Deutsche Mark assets come to DM 1,439 billion; the stock of Deutsche Mark assets in the portfolios of non-resident investors has therefore nearly doubled since 1990. The rising Deutsche Mark exposure of internationally orientated investors in that period points to the high degree of confidence in the German currency which could be maintained even in a period in which the German economy was subject to particularly heavy pressure, *inter alia,* on account of the financial consequences of unification and structural problems. However, this result is also remarkable in view of the severe disturbances to which the international financial markets have been exposed in the past few years, for instance, as a result of the crises in the EMS and the sharp fluctuations in the dollar rate. Stable underlying conditions in Germany and the Bundesbank's consistent anti-inflation policy – particularly after the "unification shock" – meant that the return and risk profile of Deutsche Mark assets, which has long made them attractive in competition with other currencies, could be preserved.

... a reflection of the high degree of confidence in the German currency

Non-residents' net position

These conclusions are not affected even if the likewise substantial Deutsche Mark liabilities of non-resident investors are taken into consideration. These were estimated at just over DM 800 billion at the end of June 1996. Hence, non-residents' net position in Deutsche Mark is clearly positive and, moreover, it has increased significantly since 1990. Ultimately, the net calculation also proves that non-resident investors have a high preference for assets denominated in the German currency.

Effects on the Deutsche Mark exchange rate ...

What influence this could have had on the exchange rate of the Deutsche Mark is unclear, however. There is not necessarily a direct link between non-residents' Deutsche Mark assets and the exchange rate trend of the Deutsche Mark in that non-residents' financial Deutsche Mark assets represent only part of the total (stock) demand for Deutsche Mark paper; the investment behaviour of residents would also have to be taken into account in any case.

7 Interbank positions in this context are all Deutsche Mark deposits by non-residents which are definitely not attributable to the non-bank sector. This approach differs from that adopted in earlier Bundesbank publications, according to which a flat-rate share of 50 % to 60 % had been allotted to interbank positions – in line with the orders of magnitude ascertained by the BIS for the market as a whole. The previous approach would not take due account of the specific changes in the Deutsche Mark segment of the Euro-market, however, which in the period under review was characterised by a sharp growth in domestic non-banks' deposits and a decline in interbank positions.

... and foreign exchange risk uncertain

Even the net position does not reveal whether or not the Deutsche Mark exposure involves a foreign exchange risk for non-residents overall. The forward and derivatives markets, which have registered a vigorous upswing in the past few years, offer many hedging opportunities. It is not known, however, to what extent these are used by Deutsche Mark holders. Statements on the exchange rate exposure of various portfolios can only be made on an individual basis and if the respective hedging strategy is known.

Deutsche Mark assets of monetary authorities

Special position of monetary reserves

The Deutsche Mark assets of non-residents contain the Deutsche Mark-denominated monetary reserves of foreign monetary authorities (which, in most cases, cannot be distinguished from other items). Owing to their special functions, these Deutsche Mark assets are significant in their own right. Central banks hold foreign exchange reserves with a view to achieving their monetary policy objectives, and, as a rule, their investment behaviour is guided by criteria which differ from those of private investors. This special position alone justifies a separate analysis of the trend in monetary reserves.

Only moderate rise in Deutsche Mark reserves

Against the background of rapid growth in global monetary reserves, there have been significant structural changes in the past few years which have not left the relative positions of the individual reserve currencies unaffected. From the end of 1990 to the end of 1996 the reported worldwide foreign exchange reserves grew by 80 % to US$ 1,449 billion overall. The Deutsche Mark accounted for 14½ % of these, or DM 328 billion, at the end of 1996. Despite an increase of nearly DM 100 billion, the share of Deutsche Mark-denominated balances of foreign central banks fell by about 4½ percentage points compared with 1990, almost exclusively in 1991 and 1992. The main reason for this was the massive intervention in the EMS prior to and during the currency turbulence of 1992-3; until 1990, especially the European partner central banks had built up Deutsche Mark reserves on a major scale.

In addition, there were shifts in the regional distribution of foreign exchange reserves at the expense of the Deutsche Mark. For instance, the share of the developing coun-

Non-residents' Deutsche Mark assets, total *

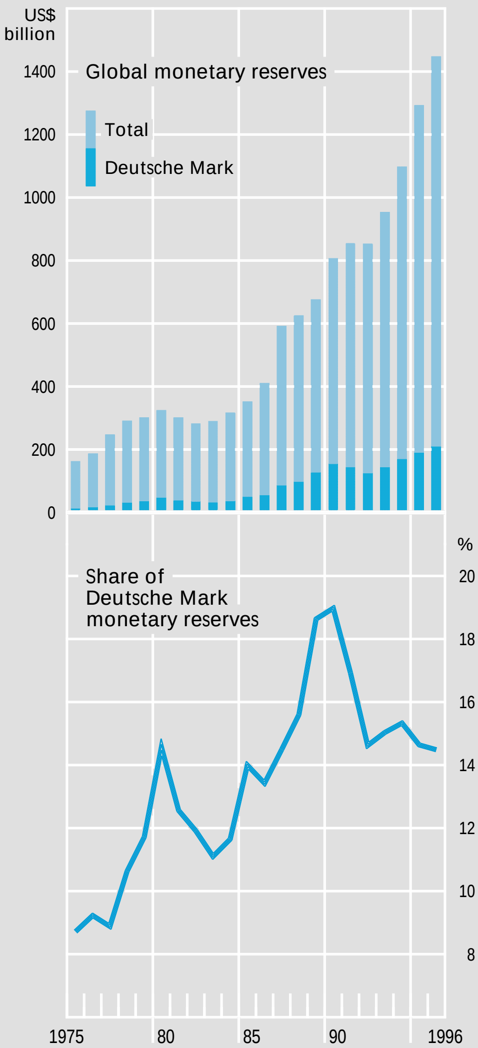
DM billion; end-of-year or end-of-month level

Item	1990	1993	June 1996
Deutsche Mark assets in Germany 1	673	1,174	1,417
at Euro-banks 2	656	730	850
in the form of foreign Deutsche Mark bonds	135	207	308
less double-counting 3	– 692	– 942	– 1,136
Total	771	1,170	1,439

* Where recorded in the statistics; partly estimated. — 1 Deutsche Mark assets vis-à-vis banks (including the Bundesbank) and non-banks in Germany, excluding direct investment, other capital interests, credit operations between enterprises and individuals and real property. — 2 Deutsche Mark liabilities to non-residents of banks in countries reporting to the BIS (excluding Germany). — 3 Interbank positions in the Euro-Deutsche Mark market and Deutsche Mark assets of Euro-banks vis-à-vis Germany.

Deutsche Bundesbank

Trend in monetary reserves



Deutsche Bundesbank

tries' reserve holdings in global monetary reserves overall increased further; despite the growing diversification into different currencies, the reserves of the developing countries still contain a comparatively small amount of Deutsche Mark. At the end of 1996 developing countries (including the oil-exporting countries) accounted for over 50 % of global foreign exchange reserves, compared with about 37 % at the end of 1990. Furthermore, the strong expansion of Japan's foreign exchange reserves during the appreciation of the yen is likely to have benefited the dollar and to have depressed the Deutsche Mark share, particularly in the past few years.

"Normalisation" of the Deutsche Mark share in monetary reserves

When assessing the recent trend in the Deutsche Mark share in global foreign exchange reserves, it has to be remembered that this share was subject to short and medium-term fluctuations in the past, too, quite apart from all the trend shifts in the currency structure; these fluctuations reflect changes in the regional distribution of reserves, exchange rate movements and – partly as a result – the portfolio decisions by the holders. Nevertheless, there has hardly been any change in the Deutsche Mark share if considered over extended periods; at 14 ½ %, it is virtually at the level of 1980 and, hence, corresponds to its average share in the period from 1980 to 1996. In this light, the recent decline, which, incidentally, occurred from a decidedly high level, is to be interpreted as a "normalisation" rather than a reversal in the trend.

Changed portfolio management apparent at central banks, too

Despite all the differences in the function of monetary reserves, on the one hand, and private portfolio investment, on the other, there are also certain parallels between the portfolio decisions of private investors and those of central banks. The above-mentioned tendency towards securitisation, for example, is also found indirectly in the investment instruments preferred by the central banks for their foreign exchange reserves. Whereas at the end of 1990 more than one-half of the Deutsche Mark reserves of foreign monetary authorities was recorded as deposits at the Bundesbank and domestic credit institutions or in the Euro-market, this share has since declined to barely one-third of total Deutsche Mark reserves. Most of the rest is likely to have been invested in securities – predominantly probably in issues of the Federal Government. In the second half of 1996 two new instruments, the *Bubills* (maturity of six months) and the two-year Treasury notes, were added to the Federal bonds and five-year special Federal bonds previously acquired by the central banks. Owing to their maturity profile, these two new instruments are probably particularly attractive to monetary authorities.

Conclusions and outlook

Summary

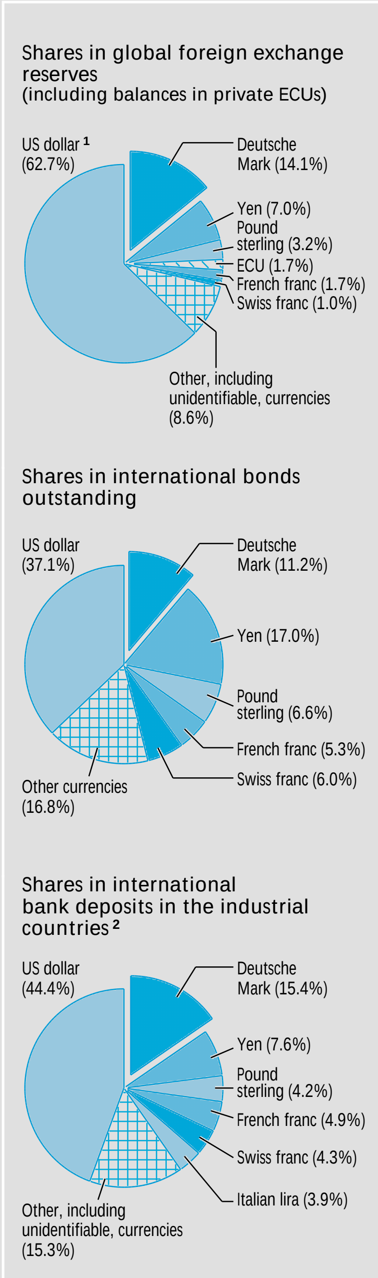
The available information shows that in the nineties, too, internationally operating investors had a high level of confidence in the Deutsche Mark. Neither the financial burdens resulting from reunification nor the turbulence in the financial markets have induced non-residents to move away from Deutsche Mark-denominated assets. On the contrary: despite several shifts in some segments, the Deutsche Mark has – all in all – apparently been able to strengthen its position as the second most important international investment and reserve currency.

Influence of European monetary union

However, the entry into stage three of European monetary union planned for 1999 necessitates a glance ahead. For the financial markets the introduction of the euro means a break which will not leave the rank order of

International significance of the currencies *

Position: end-June 1996



* Including ECU. — 1 Including the dollar reserves contributed to the EMI. — 2 Cross-border bank deposits and foreign currency-denominated domestic deposits of the banks in the industrial countries reporting to the BIS; foreign currency position of US banks not broken down.
Sources: IMF, BIS.

Deutsche Bundesbank

international investment currencies unaffected. It is assumed in some quarters that "euro-sceptical" investors will avoid the Deutsche Mark long before entry into stage three (some people think that they are doing so already) and shift their portfolios into other currencies – for example, into the dollar, the pound sterling and the Swiss franc.

Besides the fact that the available data on the currency structure of international assets (even when interpreted with caution) argue against the supposition of "a flight out of the Deutsche Mark", the exchange rate trend does not point to any basically different conclusion either. Although the value of the dollar and the pound sterling has increased perceptibly in the past few months, this rise is to be seen in conjunction with the weakness of these currencies in 1995 and the currently favourable cyclical conditions in these two countries; these conditions are also reflected in the positive interest rate differentials compared with Germany. By contrast, after a period of pronounced strength, the Swiss franc latterly lost some of its earlier exchange rate gains. On balance, the current interest rate and exchange rate structures do not argue against the continuing attractiveness of the Deutsche Mark as an international investment currency.

A challenge to the euro

The outstanding international role of the Deutsche Mark is undoubtedly a considerable challenge to the planned single European currency – the euro. In order to ensure the smooth changeover from the Deutsche Mark to the euro for this reason, too, it will be particularly important that the euro enjoys the same respect in the international financial markets from the outset which the Deutsche Mark has acquired over the past few decades. This necessitates above all strict compliance with the convergence criteria of the Maastricht Treaty, which must be met without compromising anti-inflation policy or allowing any doubts to arise about the stability-oriented stance of future European monetary policy.