

ECONOMIC PAPERS

COMMISSION OF THE EUROPEAN COMMUNITIES • DIRECTORATE-GENERAL FOR ECONOMIC AND FINANCIAL AFFAIRS



COUNTRY STUDIES

Number 1

Sept. 1990

COUNTRY STUDIES*

The Federal Republic of Germany

**Directorate-General
for Economic and Financial Affairs**

* Country studies are the result of internal analysis of the economic situation of the respective member country; they are made on the responsibility of the Directorate-General for Economic and Financial Affairs of the Commission of the European Communities.

Table of contents

| | |
|---|--|
| <p>PART I MACROECONOMIC PERFORMANCE AND ECONOMIC POLICY ISSUES1</p> <p>Chapter 1 Economic performance and policy issues in the mid-1980s1</p> <p>Chapter 2 Recent economic performance and short-term outlook2</p> <p>2.1 Determinants of growth2</p> <p>2.2 Investment and production potential . . .3</p> <p>2.3 Inflation and costs4</p> <p>2.4 The labour market5</p> <p>2.5 Saving and investment balances: a sectoral analysis6</p> <p>Chapter 3 The balance of payments7</p> <p>3.1 Determinants of the current account balance7</p> <p>3.2 Capital movements10</p> <p>3.3 Prospects and policy conclusions10</p> <p>Chapter 4 GEMSU: assessment and macroeconomic implications11</p> <p>4.1 Short term macroeconomic impact of the GEMSU on the FRG and European economy11</p> <p>4.2 Short-term implications for the GDR-economy12</p> | <p>4.3 Longer term considerations: The regional challenge within GEMSU13</p> <p>4.3.1 The challenge13</p> <p>4.3.2 The Staatsvertrag and regional development15</p> <p>Chapter 5 Fiscal policy16</p> <p>5.1 General strategy in the 1980s16</p> <p>5.2 Main developments over the 1980s . . .17</p> <p>5.3 Prospects18</p> <p>Chapter 6 Monetary policy19</p> <p>6.1 Main monetary developments over the late 1980s19</p> <p>6.1.1 Quantitative targets and monetary developments19</p> <p>6.1.2 Interest and exchange-rate developments20</p> <p>6.2 Policy Issues21</p> <p>PART II INSTITUTIONAL CHARACTERISTICS OF THE GERMAN ECONOMY: SOME EUROPEAN ASPECTS24</p> <p>Chapter 7 Regulations, subsidies and the need for a forward-looking supply-side policy24</p> <p>7.1 Economic justification for government intervention in the market process24</p> |
|---|--|

| | | |
|--|---|----|
| 7.2 | Government intervention on markets in goods and services | 25 |
| 7.2.1 | Intervention on specific commodity markets | 25 |
| 7.2.2 | Specific sectoral intervention on markets in services | 29 |
| 7.2.3 | Intervention spanning a number of sectors | 35 |
| 7.2.4 | Summary | 35 |
| 7.3 | Sectoral and regional subsidies: An assessment | 37 |
| 7.4 | The labour market - government and collective agreement regulation | 37 |
| 7.4.1 | Government regulation | 37 |
| 7.4.2 | Collectively agreed regulation | 39 |
| Chapter 8: | | |
| Budgetary coordination in an economic and monetary union: 20 years of experience in the Federal Republic of Germany | | |
| 8.1 | The FRG and narrow-band ERM countries: a comparison of economic performance | 41 |
| 8.2 | The framework of binding rules, budgetary coordination and revenue sharing | 42 |
| 8.2.1 | Financial balance and borrowing requirements | 42 |
| 8.2.2 | Budgetary coordination: purposes, rules and institutions | 43 |
| 8.2.3 | Revenue-sharing and other regional automatic stabilizers | 44 |
| 8.2.4 | Summary | 45 |
| 8.3 | Experience with budgetary rules in FRG | 45 |

| | | |
|-------|--|----|
| 8.3.1 | Borrowing requirements | 45 |
| 8.3.2 | Medium-term financial planning | 46 |
| 8.3.3 | Budgetary coordination | 47 |
| 8.3.4 | Revenue sharing and other regional automatic stabilizers | 48 |
| 8.3.5 | Summary | 48 |
| 8.4 | Executive summary: lessons for Europe | 50 |

**PART III:
THE GDR ECONOMY AND
IMPLICATIONS OF GEMSU**

**Chapter 9
Main characteristics and implications of
GEMSU**

| | | |
|-----|--|----|
| 9.1 | Main characteristics of the GDR economy | 52 |
| 9.2 | The population | 52 |
| 9.3 | Industry - a sectoral overview | 53 |
| 9.4 | Infrastructure and environmental characteristics | 55 |
| 9.5 | The trade pattern | 55 |

**Chapter 10
Implications of GEMSU for the GDR
economy: two scenarios**

| | | |
|--------|--|----|
| 10.1 | Introducing GEMSU: initial conditions and consequences | 56 |
| 10.1.1 | Consequences for the GDR economy | 56 |
| 10.1.2 | Consequences for public finance in the GDR | 56 |
| 10.2 | An independent catching-up process | 57 |
| 10.3 | Policies to avoid a less developed region of Germany | 58 |

Tables, Graphs and Figures

| | |
|--|---|
| <p>Table GT1: Change in demand components .2</p> <p>Graph GT2: Contribution to growth3</p> <p>Table GT3: Potential output in manufacturing industry3</p> <p>Graph GT4: Contribution to final demand inflation5</p> <p>Graph GT5: Employment performance in West Germany5</p> <p>Graph GT6: Unemployment performance in West Germany5</p> <p>Graph GT7: Saving and investment balance . .6</p> <p>Table GT8 : National saving in the entire Germany6</p> <p>Table GT9 : The five most important export markets of Germany . . .7</p> <p>Table GT10: The five most important import markets of Germany . . .8</p> <p>Table GT11: Merchandise trade balance 1980 - 19898</p> <p>Table GT12: Current account balance9</p> <p>Table GT13: Determinants of the Federal Republic's current account surplus9</p> <p>Table GT14: Capital movements9</p> <p>Table GT15: A breakdown of long-term capital movements10</p> <p>Graph GT16: Registered immigration 1989/9011</p> | <p>Graph GT17: Key variables of public finance17</p> <p>Table GT 18: General government revenues and expenditure17</p> <p>Graph GT19: Growth of M 3 (1960 - 1990) . 19</p> <p>Graph GT20: Steepness of yield curves (1960 - 1990)20</p> <p>Graph GT21: Nominal short-term interest rate differentials20</p> <p>Graph GT22: Nominal long-term interest rate differentials21</p> <p>Graph GT23: Real effective exchange rates (whole economy)21</p> <p>Figure GT24: Major barriers to market entry on commodity markets26</p> <p>Figure GT25: Major barriers to market entry on markets in services30</p> <p>Figure GT26: Major price control arrangements in the FRG36</p> <p>Table GT 27: Financial assistance and tax concessions by economic branch, 1980 and 198538</p> <p>Table GT28: Regional differentiation of hourly gross salaries in manufacturing 40</p> <p>Graph GT29: Growth discrepancies within FRG and ERM41</p> <p>Graph GT30: Inflation differentials within FRG and ERM (impl. GDP-deflator)42</p> |
|--|---|

COUNTRY STUDY

THE FEDERAL REPUBLIC OF GERMANY

This study attempts to analyse the substantial changes in the performance of the German economy in the 1980s and to assess the implications for Community partners and the process of European integration. The main economic policy challenges, particularly the implications of German Economic, Monetary and Social Union (GEMSU) are also discussed.

The first part of the study is an attempt to assess the new challenges facing Germany, following the considerable degree of success achieved by the economic policy response to problems in the early 1980s as discussed in Chapter 1. Chapter 2 provides an overview of recent economic developments, most notably the acceleration in growth and the strong recovery of investment. Short-term prospects, heavily influenced by GEMSU, and in particular the outlook for inflation are also assessed. An analysis of the factors underlying the large current account surplus and an assessment of how persistent it is likely to prove are given in Chapter 3. The implications of German economic, monetary and social union are discussed in Chapter 4. Finally, at the end of part I, the performance of fiscal and monetary policies is reviewed in Chapters 5 and 6.

Part two of the study copes with institutional issues, relevant to medium and long-term growth and employment prospects as well as for the process of European integration. Regulation, subsidies and supply-side conditions, which were generally regarded as an area of weakness in the mid-1980s, are reviewed in Chapter 7. The experience of 20 years of budgetary co-ordination is assessed in Chapter 8.

Part three of the study provides some basic information on the GDR-economy at the turn of the decade and at the beginning of the German unification process (Chapter 9). Finally, the implications of GEMSU for the GDR-economy are analysed (Chapter 10).

Part I

Macroeconomic performance and economic policy issues

Chapter 1

Economic performance and policy issues in the mid-1980s

In the mid-1980s, the economic and financial situation in the Federal Republic of Germany displayed many of the symptoms of what had become known as "Euroclerosis": slow growth of output, high unemployment, a weak investment record and a decelerating growth in productive potential despite continued falls in real unit labour costs. In addition, there had been little progress in reducing rigidities and stimulating markets. Despite the restoration of a sound budgetary position, the current account surplus seemed to reflect a lack of confidence on part of German investors and consumers in their own economic prospects. This performance - aided by the oil price falls of 1986 - temporarily reduced the inflation rate close to zero. Against this background, German monetary policy was often suspected of imposing a disinflationary bias on the economic performance of other EMS members.

In the past three years, the picture has changed dramatically. Output growth is vibrant, domestic demand has recovered considerably, investment is booming and unemployment has been falling. The current account surplus is even larger than it was in 1987 but now reflects a world-wide investment boom rather than low domestic

demand in Germany. Less encouraging, however, is the outlook for stability - overshadowed by the German-German monetary union. Furthermore, questions are being raised about Germany's anchor role in the EMS and the appropriateness of a very expansionary fiscal policy.

After the second oil-price shock, the German economy, along with most other economies, was confronted with important policy challenges. Inflation was fairly high, unemployment was rising, relative factor prices were distorted and the public sector deficit was becoming unsustainable. Throughout the mid-1980s, therefore, economic policies were aimed at budgetary consolidation and a reduction of the inflation rate. In the labour market, trade unions accepted a reduction of real unit labour costs allowing the profitability of capital to rise. In retrospect, economic policy may be seen to have been successful in many respects:

- the reduction of inflation rates - the most conspicuous achievement;
- the consolidation of the public finances - as indicated by the reduction of the deficit and the gradual decrease in the ratio of public expenditure to GDP;
- a reduction in the distortion in relative factor prices (wages, profits), allowing for a significant improvement in profitability;

- a particularly good external trade performance.

The substantial improvement in the overall supply-side performance of the economy was accompanied by events and measures further strengthening the conditions for a long-lasting upswing. The oil-price fall in 1986 boosted disposable income. Moreover, the entire enterprise sector underwent a successful structural adjustment, preparing the economy to cope with new challenges.

When the world trade boom began in 1987, (and in particular the boom in investment in industrialized countries), demand for German exports increased considerably and activity in Germany accelerated accordingly. Three years of monetary overshooting (in 1986-88), successive rounds of tax cuts and reductions in real interest rates worldwide helped further stimulate domestic demand and medium-term demand expectations. Positive expectations related to the single market have reinforced the favourable prospects and German economic, monetary, and social union (GEMSU) will provide a temporary but powerful impetus to demand in West Germany.

Budgetary consolidation and real wage moderation provided the essential foundations for the recovery, by restoring a margin of manoeuvre in the private - and particularly entrepreneurial - sector. This was a necessary condition for a long lasting growth acceleration. The consolidation effort was sufficient to permit reductions in tax rates. Indeed, the recent upswing has now entered its eighth consecutive year.

The interpretation of Germany's current account surplus has given rise to extensive debate. In the mid-1980's, for example, with unemployment high and capacity utilization and inflation low in Germany and its European partner countries, the surplus was often seen as indicative of insufficient demand growth in Germany and as a depressing influence on output and employment in its partner economies.

Since 1987, however, domestic demand in Germany has been growing at above trend rates. In these conditions, the surplus reflects not weak German demand but very strong foreign demand. Therefore, the German surplus can be seen as a "shock-absorber" for inflationary pressures in a number of other countries, to such an extent that rising capacity utilization has led to at least incipient inflationary pressures within Germany itself. Any direct policy action to reduce the surplus (i.e. a major fiscal loosening) would have had to be coupled with a tightening of monetary policy and a rise in the real-exchange rate if serious overheating in Germany were to be avoided. Such a combination would have been a switch towards a Reagan-Volcker policy mix. On the other hand, the absence of monetary tightening would have allowed for a significant increase in inflation in the EMS anchor country. Neither option would have been welcome to Germany's partners.

The factors underlying the German surplus, at least in the most recent period, seem to have been favourable for most other European countries. If the German surplus melts away under the impact of GEMSU world real interest rates may rise. This may hurt some countries via

temporary "crowding-out" of investment but will benefit savers throughout the world.

With the benefit of hindsight, the point can be made that without the German surplus (and the accompanying budgetary consolidation) the Federal Republic would not have been in a position to pursue a policy of economic unification. That policy will be an important element in underpinning German growth performance and in providing a classic and significant example of a market-orientated approach to the restoration of the East European economies to the international division of labour.

Chapter 2

Recent economic performance and short-term outlook

2.1 Determinants of growth

The West German economy is experiencing a revival with trends for 1990 and 1991 indicating an acceleration in the upswing. Growth rates are expected to reach 3 3/4% in both years. The main expansionary impulses are coming from the 1990 tax cuts of more than 1% of GDP and from the dynamics of German-German developments. Additional demand from East Germany will lead to a net contribution to West German growth of more than 1% each year. This will outweigh the appreciation of the Deutsche Mark, which has gained more than 6% (average nominal effective exchange rate in 1990 over 1989), the slowdown in world demand and the 200 basis points increase in interest rates since mid-1989. The appreciation and the slowdown of world demand will mainly affect the investment goods sector, which had, in any case, been facing severe capacity constraints. On the other hand, the expansionary impulse coming from the GDR will probably most affect the construction sector (which has faced even more constraints than the investment goods sector) and consumption goods sector (where constraints, except for some durables, are less apparent).

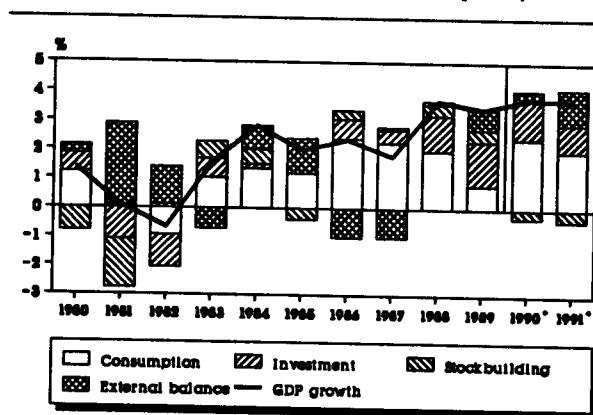
Table GT1: Change in demand components (1985 prices)

| | 1980- 1984 aver. | 1985- 1988 aver. | 1989 | 1990 | 1991 |
|-----------------------------------|------------------------|------------------------|------|------|------|
| Private consumption | 0.5 | 2.7 | 1.7 | 4.0 | 3.4 |
| Public consumption | 1.2 | 2.1 | -0.8 | 1.0 | 0.5 |
| GFCF | -0.7 | 2.9 | 7.2 | 6.4 | 4.3 |
| Change in stocks as % of GDP | 0.2 | 0.1 | 0.6 | -0.3 | -0.4 |
| Domestic demand (incl. stocks) | -0.1 | 2.6 | 2.4 | 3.9 | 3.1 |
| Exports | 4.6 | 3.1 | 9.4 | 9.3 | 12.0 |
| Imports | 1.1 | 4.1 | 7.7 | 9.3 | 9.4 |
| GDP | 1.1 | 2.4 | 3.4 | 3.7 | 3.7 |

Source: Commission services

FOR 1990 AND 1991 : Commission staff forecasts (May 1990)

Graph GT2: Contribution to growth (in 1985 prices)



* Commission Forecast (May 1990)

Source: Commission services

In the mid-80s, growth was supported by external factors (rising exports, which have grown by 6 to 10% a year since 1984, the significant positive terms-of-trade impact on domestic real incomes in 1986, and, more recently the rapidly rising investment demand abroad). However as medium-term demand expectations were favourable and the capacity utilization ratio was rising, the domestic investment performance improved also. Since 1987 domestic investment has been the most dynamic growth component (see 2.2). After slow growth in the early 1980's, real private consumption has been boosted by higher real incomes since 1986, induced not only by gains in the terms of trade but also by substantial tax cuts in 1986, 1988 and 1990. In 1989, however, growth in private consumption was surprisingly low, not least because of the contractionary effects of budgetary developments.

All in all, domestic demand growth has contributed around 3% a year to GDP growth since 1986, whereas it grew moderately between 1981 and 1985. The buoyancy in domestic demand has sucked in imports, which have grown at just below 6% a year since 1987.

Public expenditure, in general, has grown less rapidly than GDP. Since 1987, the public expenditure-GDP ratio has declined from 47% to the 44.5% forecast for this year. In contrast to the early 1980s, when investment expenditures were reduced, a relative reduction in public consumption is the main factor behind the decline of the public share in GDP since 1987. Although in accounting terms the public sector has not stimulated demand growth, the supply effects of reduced public interference in the economy together with a significant reduction in the deficit have gradually improved the overall climate for private economic activity, enabling the economy to respond to demand generated externally and by the domestic private sector.

2.2 Investment and production potential

Although profits were already recovering from their low point in the early 1980s, it is only since 1987 that the economic upswing has been fuelled by a dynamic investment performance in response to improved profitability, low interest rates and favourable external and domestic demand. Gross fixed investment is expected to reach 21.3% of GDP in 1990 compared to 19.4% in 1987. Even the construction sector, which suffered from a severe recession in the 1980s, has recovered in the light of low interest rates and favourable demand prospects.

The poor investment figures of the early 1980s hide a dynamic structural adjustment in favour of the services sector. Investment performed very well in the services' sector from the beginning of the economic upswing, while declining branches of manufacturing even disinvested in the light of gloomy demand prospects and excess production capacities. The capital stock of the services sector, which now represents about 25% of the total capital stock in the enterprise sector, grew by almost 7% per year in real terms during the 1980s.

In the manufacturing sector, a dynamic intra-sectoral adjustment affected both overall investment and capital stock figures during the early 1980s. In 1985, investment in manufactures recovered and became very dynamic thanks to a slowdown in disinvestment by declining industries and double digit growth rates for investment in sectors such as the chemical, mechanical and electro-mechanical engineering and the car producing branches.

Table GT3: Potential output in manufacturing industry

| | 1980-1984 aver. | 1985-1988 aver. | 1989 | 1990 | 1991 |
|--------------------------------------|--------------------|--------------------|------|------|------|
| Investment | -1.6 | 8.2 | 11.0 | 9.0 | 9.0 |
| Capital stock | 2.0 | 2.1 | 2.8 | 3.2 | 3.6 |
| Employment | -1.9 | 0.7 | 1.6 | 1.7 | 1.8 |
| Capital Productivity | -1.3 | -0.7 | -0.2 | 0.0 | 0.0 |
| Scrapping ratio (% of capital stock) | 3.6 | 3.8 | 3.8 | 3.8 | 3.8 |
| Potential output | 0.7 | 1.3 | 2.5 | 3.2 | 3.6 |
| Industrial production | -0.1 | 2.2 | 4.8 | 4.5 | 4.5 |
| Capacity utilization | 79.4 | 83.6 | 87.7 | 89.4 | 90.6 |

Source: Commission services

FOR 1990 AND 1991 : Commission staff forecasts (May 1990)

Due to investment growth of around 10% a year, the capital stock in the manufacturing sector has grown more rapidly, i.e. at around 3-3 1/2% a year since 1987. Together with an implied improvement of capital productivity through new investment and a more flexible use of the capital stock, potential output in the manufacturing sector is probably growing more rapidly than has been assumed in the past. Potential bottlenecks can also be avoided by reduced scrapping although this would probably lower average capital productivity. Survey-based evidence (see box) suggests that potential output

growth in the manufacturing sector has accelerated to around 3 1/2% per year compared to the stagnation of the mid-80s.

Therefore, although capacity utilization may reach historically high levels, inflationary pressures will be eased by a greater flexibility in the production process. In addition, stronger imports in context of continuing European economic integration may reduce supply bottlenecks.

whole economy; in manufacturing, however, wages per head increased at an annual rate of 4.1%. As unit labour costs have only edged up by 1.5% per year in the whole economy and by 2% in manufacturing, the West German economy cannot be said to have been characterised by a serious cost-push inflation over this period.

Real unit labour costs are forecast to decline for the tenth consecutive year in 1991; the gross operating surplus has increased by an annual rate of almost 7% since 1981 and

CAPACITY CONSTRAINTS IN GERMAN INDUSTRY

This box presents a set of key variables for manufacturing industry covering the period 1984-1989. Moreover, for 1990 and 1991 figures for the capital stock, potential output and the rate of capacity utilization are extrapolated on the basis of the May 1990 forecast of DG II.

Potential output is defined as the hypothetical level of industrial production at 100% capacity utilization. The derivation of this series is based on a log-linear regression of industrial production against the rate of capacity utilization, the capital stock and a time trend. The latter serves to capture the historical rate of change of (potential) capital productivity.

The capital stock figures are produced by Eurostat by a capital vintage model. Scrapping is exogenous assuming a fixed average life time of investment. The survey based rate of capacity utilization is collected by the IFO institute and covers manufacturing industry excluding food processing.

By linking potential output closely to the relationship between actual output and the rate of capacity utilization many theoretical, methodological and practical problems associated with the use of production functions are avoided. Nevertheless, the series of potential output growth generated by the above mentioned rela-

tionship compares well to the series produced by the DIW (see DIW, Wochenbericht 47/89) by production functions at disaggregated data.

After years of low investment, potential output in manufacturing barely rose in the mid-eighties. But, as production picked up somewhat in 1984 and 1985 the rate of capacity utilization increased and triggered an acceleration in investments. In 1986 and 1987, potential output grew slowly in line with industrial production, maintaining a constant rate of capacity utilization. However, as industrial production again rose sharply in 1988-89 outpacing potential output, capacity utilization showed another steep rise.

Responding to the jump in the rate of capacity utilization investment rose considerably in 1989 and is forecast to grow at healthy rates in both 1990 and 1991. Given a constant scrapping ratio of the capital stock of some 3.8%, this would lead to a growth rate of the capital stock of some 3.2% and 3.6% in the respective years. The same growth rates would also apply for potential output, assuming that capital productivity remains unchanged. Given the forecast rise in industrial production of some 4.5% in both years, capacity utilization should grow somewhat during the forecast period to average 90 1/2% in 1991 and 89 1/2% in 1990 against 88 in 1989.

All in all, the calculations indicate that potential output in German industry is likely to grow sufficiently fast to prevent an excessive build-up of inflationary pressure in the goods market.

2.3 Inflation and costs

In terms of consumer price inflation, the period since 1986 has been almost the mirror-image of the years from 1983 to 1986. In the earlier period, inflation dipped from 3.2% to a negative 0.5%. After 1986, it rose again to 3.1% in 1989. According to the latest Commission short-term forecasts (April/May 1990), it will remain at or close to 3% this year and next.

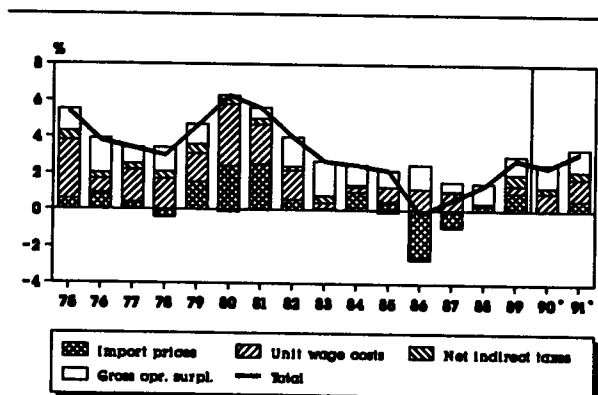
Within the Community, only the Netherlands has experienced a (marginally) lower inflation rate over the 1980's. Average inflation performance in the period since 1981 has been relatively satisfactory; the undershooting below the trend rate in 1986 was mainly the result of the oil price fall. Domestic cost developments have shown a smoother trend since 1981.

Prolonged wage moderation and stable and even declining import prices have been the main contributory factors to the impressive inflation record of the 1980s. The wage bill has risen at an annual rate of 3.6% since 1981: wages per head increased by an annual 3.2% for the

is expected to rise by about the same pace this year and in 1991. Rising profit margins can be interpreted as the counterpart to the desirable improvement in the real rate of return on investment, on the assumption that they do not reflect any severe lack of competition and/or entrepreneurial initiative. The improvement in the profitability of German enterprises has largely taken place in an environment of social consensus, ensuring the absence of inflationary risks during the process of income redistribution.

Nominal wage settlements indicate per capita increases of around 6-7% for those workers whose contracts are renewable this year. The effect on current wage costs is likely to be partly reduced by a reduction in wage drift. The re-establishment of sound profit ability in the enterprise sector suggests that temporary increases in unit labour costs could be absorbed without undue difficulty in the forthcoming period. Thereafter, renewed wage moderation can be expected. The huge inflow of labour from the GDR and other Eastern European countries could reduce labour market bottlenecks, and the integra-

Graph GT4: Contribution to final demand inflation



* Commission Forecast (May 1990)

Source: Commission services

tion of the labour markets of the FRG and the GDR will increase labour market flexibility. However, the current demand situation does not suggest any severe pressure on firms to absorb cost increases, rather than to pass them on in higher prices. The short-term outlook, therefore, is not without risks. At least, the rise in German long-term interest rates since February of this year, combined with a reduction of the risk premium on important EMS currencies ask for caution.

2.4 The labour market

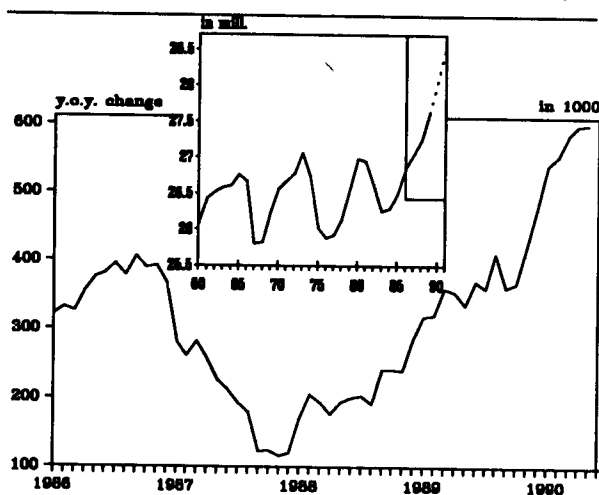
Since 1983, a resumption of steady growth in employment has been recorded after some decline at the beginning of the decade. However, unemployment has increasingly become a structural problem and has remained at an unacceptably high level for almost the whole decade.

Since 1983, almost 1 1/2 million new jobs have been created; between 1983 and 1989, employment rose on average by 0.9% per year. Job creation has become even more dynamic since late 1988 onwards and the current trend is expected to continue. At the end of 1991, there will be in excess of 2 million more jobs in the Federal Republic than at the beginning of the recent upswing in 1983.

A sectoral breakdown of employment-creation between 1983 and 1989 indicates growth in the manufacturing sector (+0.3 million) and in all services sectors (+1.5 million). Long series show that, since 1960, employment has risen by more than 50% or more than 5 1/2 million in the services sector while it has dropped by 25% or 4 million in the producing sectors and agriculture.

Despite the rise in employment since 1983, a clearly downward trend in unemployment has emerged only since mid-1988, with the fall partly attributable to changes in statistics. Unemployment in Germany is becoming increasingly structural. Almost 1/3 of registered unemployed (1.9 million) have been unemployed for more than 1 year, about 30% are more than 50 years old

Graph GT5: Employment performance in West Germany



..... Commission Forecast (May 1990)

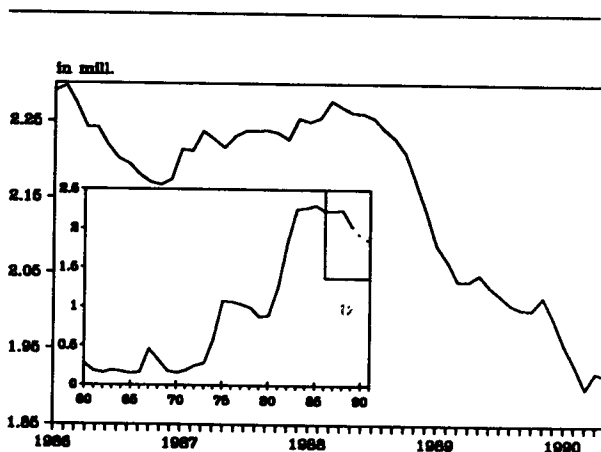
Source: Bundesanstalt fuer Arbeit

and about 25% have health problems. The integration of the GDR labour market may worsen the employment prospects of those currently unemployed in West Germany.

Persistently high unemployment in Germany can mainly be explained by demographic factors and a change in the behaviour of women. While employment has risen by 640,000 since 1980, the civil labour force has increased by 1.8 million. Until 1988, the integration of young people and women coming from the labour reserve ("Stille Reserve") into the labour market was particularly difficult. Now, there is some evidence of increasing skill mismatches in the labour market. For instance, the unemployment/vacancy ratio for skilled blue-collar workers fell from 14:1 in 1984 to 3:1 in September 1989. The overall unemployment/vacancy ratio dropped from around 24:1 in 1984 to around 6:1 in 1989.

A summary representation of these various factors is sometimes sought in the NAIRU. Recent estimates suggest that the NAIRU for the FRG is around the present

Graph GT6: Unemployment performance in West Germany



..... Commission Forecast (May 1990)

Source: Bundesanstalt fuer Arbeit

level of unemployment. Given that further falls in unemployment (using official definitions) can be expected over the next eighteen months, this might suggest an inflationary danger. However, the concept of the NAURU should be handled with particular care for several reasons. The NAIRU may have been driven up by persistent regional, professional and demographic inflexibility in the labour force. German economic unification may reduce these inflexibilities. From the supply side, greater flexibility in the production process together with the recent attempt to combine a reduction in the average number of working hours with greater individual flexibility could reduce the NAIRU further. However, progressive integration in the European economy reduces the national independence of trade unions, i.e. wage settlements should not be undertaken with a view to the domestic labour market conditions only. Finally, the tendency to agree multi-annual wage settlements reduces temporarily the validity of the NAIRU concept. Thus, while in immediate future the NAIRU may be above the likely level of unemployment, this is likely to be a temporary phenomenon.

2.5 Saving and investment balances: a sectoral analysis

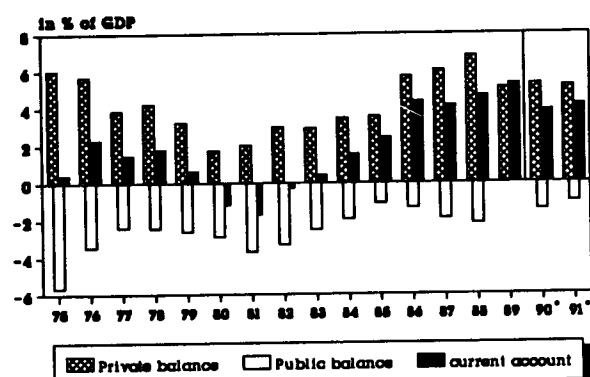
As a percentage of GDP, private households' savings have been fairly stable at about 6-7% of GDP since the mid-80s. While real private consumption rose more than GDP in 1986-87 savings did not decline as a percentage of nominal GDP, due to terms-of-trade gains, while in 1990. A similar situation emerged as in 1990 as the tax reductions led to increased disposable income. Private households' savings are now below the level of the 1970s and early-80s, probably reflecting a reduced inflation rate, more optimistic real income expectations and improving employment prospects.

The financial situation of the enterprise sector has improved substantially. While the financial deficit was 6.5% of GDP in 1980, it was only 0.6% in 1988. Until 1985, the consolidation of the balances of enterprises mirrored the declining share of investment in GDP and stemmed mainly from a slowdown in residential construction. A significant rise in savings prevented the financial balance from deteriorating in 1986-1988, despite a gradual increase in the share of investment in GDP. Indeed, in 1988, the self-financing ratio of the enterprise sector was 96.6%. Since then, rising investment together with a stabilisation in savings has led to a slight increase in the financial deficit of the enterprise sector to around 2% of GDP.

Public sector investment fell from more than 3% of GDP to 2.4% during the first phase of consolidation (1982-85). However, since mid-1985 the improvement in public savings has reflected the moderate nature of increases in public consumption.

With regard to current account developments, the national saving/investment behaviour suggests that the swing in the current account balance from a deficit of 2.1% of GDP in 1980 to a surplus of 4.3% of GDP in

Graph GT7: Saving and investment balance



* Commission Forecast (May 1990)

Source: Commission services

1986 is mainly the consequence of a consolidation of the enterprise balance sheet (swing 5.5% of GDP). The public sector contribution has been 1.6% of GDP, mainly originating from a restrictive policy aimed at consolidating the public budget deficit. Since 1988, strong domestic investment has triggered a balancing effect on the high current account surplus, while the renewed improvement in the balance of the public sector is mainly due to higher receipts rather than to a restrictive fiscal policy.

The dynamics of German economic unification will have important implications for the savings and investment balances of the combined German economy. It can be expected that the current account balance will be substantially reduced. Firstly, private households savings may be low in the GDR. Secondly, high investment needs, together with an initially low saving potential of GDR enterprises, will lead to a significant financial deficit in the GDR enterprise sector. Finally, the consolidated public sector balance of the FRG and the GDR will show a significant deficit.

Table GT8: National saving in the entire Germany

| | 1989 | 1990 | 1991 |
|--------------------|-------|---------|-------|
| FRG | | | |
| private sector | 93.6 | 118.5 | 133.5 |
| public sector (1) | 4.9 | -34.0 | -26.0 |
| current account | 98.5 | 84.5 | 107.5 |
| in % of GDP | 4.9 | 3.5 | 4.2 |
| GDR | | | |
| private sector (2) | 3.0 | -27.0 * | -46.0 |
| public sector (1) | 0.0 | -11.0 * | -18.0 |
| current account | 3.0 | -38.0 * | -64.0 |
| Germany | | | |
| private sector | 96.6 | 91.5 | 87.5 |
| public sector (1) | 4.9 | -45.0 | -44.0 |
| current account | 101.5 | 46.5 | 43.5 |
| in % of GDP | 4.1 | 1.8 | 1.6 |

(1) Including FRG transfers of DM 25 bn in 1990 and DM 40 bn in 1991;

(2) Assumption: no gross savings of the private sector, investment/GDP ratio as in 1989 (26%)

* second half of 1990 only

Chapter 3

The balance of payments

Current account developments in the Federal Republic of Germany have been looked at as an important macro-economic disequilibrium during the second half of the last decade. After a considerable deficit in 1980 (-1 1/2% of GDP) the current account balance moved into a surplus of 2 1/2% of GDP in 1985. In 1986, the surplus jumped to 85 bn DM (4.5% of GDP) and has been around this size in terms of GDP until 1989. In more recent years, the surplus can no longer be attributed to a weak domestic growth performance and German-German developments will change the current account position of the united German economy drastically.

3.1 Determinants of the current account balance

For the Federal Republic, more than for other countries, the balance of merchandise trade explains the dynamics of the current account. The German trade surplus increased from 73 bn DM (4% of GDP) in 1985 to 135 bn DM (6% of GDP) in 1989.

The overall export performance depends on the evolution of foreign markets and the change in market shares of German exporters. German export markets grew more rapidly than those of other countries during the mid-80s. From 1983-1988, German export markets for manufactured goods grew by 28% while French market growth was 5 percentage points lower. This points either to a favourable geographical structure of exports or a favourable commodity structure. In fact, both elements have played a part in the growth of export markets.

Although, the average gain in market shares has been relatively modest (+2.7 percentage points 1980-82; +0.2 percentage points 1983-85 and 2.1 percentage points 1986-88), a detailed regional analysis suggests different rates of penetration in the various markets.

Germany has always been capable of rapid response to strongly growing markets. Strong import demand in Northern America in the 1983/84 period, was accompanied by gains in market shares. Also, developments in market share in the UK confirm the important flexibility of German export supply. However, gains in market shares cannot always be sustained. For example, after having gained significant market shares in Canada, Ireland and also Spain, the more recent past has seen some losses in these markets. This, however, must be interpreted as some kind of normalization.

On a regional basis, trade is concentrated in European Community countries. The share of total merchandise exports to EC countries has been steadily growing to about 2/3 while the share of imports has been declining but remains at about 2/3 also. Regional disaggregation confirms that Germany is a flexible supplier of goods. Germany is normally gaining market shares if and when imports to partner countries are increasing rapidly. Moreover, it is evident that Germany is defending de-

Table GT9 : The five most important export markets of Germany

| A) Export by countries | | | |
|--------------------------|-------------------------|---------------------------------------|-----------------------|
| | market share in 1988 | market growth 85/88 in % change | market gains 85/88 |
| France | 12.6 | 7.2 | 2.2 |
| United Kingdom | 9.6 | 6.8 | 4.5 |
| Netherlands | 9.3 | 5.8 | 3.4 |
| Italy | 8.8 | 7.6 | 0.8 |
| USA | 7.6 | 1.1 | 3.3 |
| B) Export by commodities | | | |
| | market share in 1988 | market growth 85/88 in % change | market gains 85/88 |
| Chemicals | 17.6 | 4.9 | 2.5 |
| Agric. & ind. mach. | 17.3 | 4.2 | 5.7 |
| Motor vehicles | 14.3 | 1.1 | 6.9 |
| Electric appliances | 10.4 | 1.8 | 13.9 |
| Metals | 7.9 | 0.8 | 8.9 |

Source: VOLIMEX

clining markets more actively than its competitors. Germany's trade with the member countries which joined in the 1970's and 80's intensified significantly.

The sectoral analysis of German trade confirms the important position Germany has in the investment goods sector. Nevertheless, some weakness is evident in certain special sectors (office machines but also transport equipment) where Germany lost market shares. Germany's export structure is fairly specialized, particularly when it is compared to France. Import penetration has not grown proportionately and remains fairly low in some sectors i.e. industrial products.

A combination of both geographical and sectoral data analysis allows some conclusions to be drawn on German export developments. By focusing on five products for which Germany gained market shares during the period under review, one may observe:

- an almost constantly positive EC contribution to changes in German exports; this contribution became more important in the two sub-periods 1983-85 and 1986-88; for example, exports of chemical and metal products to the UK and the Netherlands were particularly significant in 1983-85;
- demand from other countries or zones is much more volatile; the automobile sector is a good example: in 1980-82, OPEC largely contributed to export growth in the automobile sector but later its contribution was very negative. During this period, demand the dollar-zone largely replaced this fall. EC demand was steady and even buoyant in 1986-87.

It seems that Germany is sufficiently specialized to respond to demand in the EC, which provides a solid base upon which to profit from more volatile opportunities in extra EC trade.

The volume of German imports grew by about 4.4% per year during the years 1981-1989, i.e. less than twice as fast as final demand growth (2.5%). The implied import elasticity (calculated as total not partial derivative) of

Table GT10: The five most important import markets of Germany

| A) Import by countries | | | |
|------------------------|-------------------------|---------------------------------------|-----------------------|
| | market share in 1988 | market growth 85/88 change in % | market gains 85/88 |
| France | 12.0 | 7.0 | -11.0 |
| Italy | 10.3 | 6.2 | -4.5 |
| Netherlands | 9.7 | 7.2 | -6.9 |
| Belgium | 8.2 | 7.2 | -11.6 |
| United Kingdom | 7.9 | 10.6 | 13.5 |

| B) Import by commodities | | | |
|--------------------------|-------------------------|---------------------------------------|--|
| | market share in 1988 | market growth 85/88 change in % | |
| Chemicals | 14.3 | 6.6 | |
| Metals | 11.6 | 3.7 | |
| Textiles, Clothing | 11.4 | 7.2 | |
| Electric appliances | 9.9 | 8.3 | |
| Food products | 8.2 | 5.0 | |

Source: VOLIMEX

about 1.8% is rather low. The low penetration of the German market by imports points to competitiveness problems, but attention must also be paid to supply and demand conditions. In particular, the gap between potential and actual production may have favoured exports more than imports.

German markets opened up somewhat to foreign importers in the 80's. The share of imports in domestic demand for industrial goods increased from 21.2% in 1979-83 to 24.1% in 1983-87 in Germany when it was unchanged in France and even decreased in Japan. However, the opening was much more pronounced in the UK and the penetration of the German industrial market is still below that in France or the UK. In addition, the ratio of exports to imports of industrial products in Germany, has tended to increase in recent years.

France suffered a 20.9% loss of market share in Germany between 1980 and 1988: -3.4% points in chemicals, -4.5% in motor vehicles and -4.8% in textile, leather and shoes. Belgium also lost market share but to a lesser extent.

In contrast, the UK improved its market share by 31.5% during the same period: +17.2% in transport equipment, +7.7% in chemicals and +4.9% in electrical equipment. For the two last categories, Germany also improved its market share on the UK market. Japan, whose share of German imports went up from 4.5% in 1980 to 5.5% in 1988, has also sharply improved its position.

One special characteristic of German trade is a relatively high degree of specialization. The export/import ratio shows that exports of equipment goods are twice as large as imports. In France and in the United Kingdom, this ratio is around 1. The German industrial machinery sector has an export/import ratio of more than 3. As regards agricultural and food industry products, Germany is relatively more open than France. Also, with regard to textiles, the export/import ratio is around 0.6, suggesting a fairly high market penetration.

Table GT11: Merchandise trade balance 1980 - 1989 (in bn DM)

| | 1980 | 1983 | 1985 | 1986 | 1987 | 1988 | 1989 |
|--------------------------------|-------|-------|-------|-------|-------|-------|-------|
| Balance, customs basis cif/fob | 9.0 | 42.1 | 73.3 | 112.6 | 117.7 | 128.0 | 134.7 |
| - Food & food products | -20.4 | -30.3 | -33.9 | -30.0 | -28.9 | -27.0 | -26.8 |
| - Energy & mining | -52.8 | -51.8 | -57.3 | -30.0 | -24.0 | -21.0 | -24.1 |
| - Manufactures | 82.2 | 124.2 | 164.5 | 172.6 | 170.6 | 176.0 | 185.6 |

Source: Federal Statistical Office, FS 7, R 1

The rise in the nominal trade balance of 125 bn DM during the 1980s mainly stems from lower net imports of energy products (-32bn DM) and higher net exports of manufactures (+50 bn DM).

Important movements have occurred in the balance of services, which normally works as a powerful balancing factor to the merchandise trade surplus. The rapid increase in net interest income together with a moderate expansion of expenditures on tourism can explain a large part of these current account movements.

In future, a moderate increase in net travel expenditures is likely, as real wages increase faster in the short term. Nevertheless, the opening of the GDR (and Eastern countries in general), could change travel behaviour significantly both in the short term and - to the extent that the infrastructure for tourism improves in the GDR -, also in the medium term. As regards the GDR, cultural similarities together with more than 40 years of isolation as a tourist country might be driving forces; in other Eastern countries, the price level might be considerably lower than in more traditional tourist regions of the EC.

For net investment income, the dynamics of a persistent current account surplus, the implied increase in net external financial wealth and interest rate income to residents is obvious. Between 1988 and 1989, net investment income exploded from a surplus of DM 8 bn to almost DM 19 bn. Several factors can explain this rapid increase in net factor income from abroad, which explains the significant discrepancy between GNP growth of 4.0% and GDP growth of 3.4% in 1989. Firstly, the current account surplus of DM 85 bn added to net financial wealth. Secondly, the DM remained fairly stable and higher nominal interest rates abroad led to higher interest rate receipts of German residents. Thirdly, significant net capital outflows led to a readjustment of the stock of wealth towards private households to the detriment of the external assets of the Bundesbank. This readjustment has reinforced the effect of the stable DM in the EMS as private households are less exposed in terms of dollar assets than the Bundesbank. Finally, net income from direct investment recovered in 1989, after foreigners had received large dividend payments in 1987 and 1988.

Table GT12 : Current account balance

| | 1980- 1984 aver. | 1985- 1988 aver. | 1989 | 1990 | 1991 |
|-------------------------------------|------------------------|------------------------|-------|-------|-------|
| Exports of goods | 404.3 | 544.5 | 615.6 | 677.4 | 775.8 |
| Imports of goods | 359.9 | 414.1 | 471.5 | 515.2 | 584.4 |
| Trade balance | 44.4 | 130.4 | 144.1 | 162.2 | 191.4 |
| Exports of services | 63.8 | 74.1 | 79.7 | 91.0 | 109.5 |
| Imports of services | 85.6 | 97.1 | 106.5 | 116.9 | 127.0 |
| Services balance | -21.8 | -23.0 | -26.8 | -25.9 | -17.5 |
| Net factor income from abroad | 39.4 | 67.3 | 82.9 | 80.8 | 88.8 |
| Net factor income to abroad | 33.6 | 52.3 | 59.5 | 63.9 | 70.0 |
| Factor income balance | 5.9 | 14.9 | 23.4 | 16.9 | 18.8 |
| Net private transfers | -11.7 | -12.1 | -12.3 | -13.3 | -14.2 |
| Net official transfers | -16.3 | -21.3 | -26.8 | -52.1 | -65.5 |
| Transfer balance | -28.0 | -33.4 | -39.1 | -65.4 | -79.7 |
| Current account balance in bn DM | 0.6 | 89.0 | 101.6 | 87.8 | 113.0 |
| Current account balance in % of GDP | 0.0 | 4.3 | 4.5 | 4.3 | 5.1 |

Source: Commission services
FOR 1990 AND 1991 : Commission staff forecasts (May 1990)

On the balance of unilateral transfers, the global deficit of net transfer payments was about 30 bn DM per annum on average in the last three years. Net transfers to EC exceeded those from EC by 8.2 billion DM in 1985 and increased to 12.5 billion DM in 1989. The contribution to developing countries was stable or declining in relative terms (0.2% of GDP in 1985 to 0.1% in 1989 according to balance of payments figures). A very sharp acceleration in unilateral transfers over the 1990/91 period rises due to GEMSU.

From a macroeconomic point of view, the most important determinants of the current surplus are different trends in macroeconomic growth rates, competitiveness and oil prices. All these factors have contributed to the development of the German current account surplus. An econometric analysis, carried out by Commission services, suggests that a considerable part of the surplus can be explained by long-run growth differences. As a result of a growth differential of about 1/2% between the Federal Republic and its major partner countries over the 1980s, imports have been some 8 bn DM lower. However, it is important to note that some of the Federal Republic's trading partners require higher growth rates during the catching up process and that such growth differentials are welcome from a European perspective.

Cyclical differences between the Federal Republic and its major trading partners played a significant role in particular years. Both in 1985 and 1989, cyclical growth differences were accountable for 15% of the total surplus. There is, however, a difference in both periods. In 1985, foreign demand in West Germany was more or less in line with trend growth, but German domestic demand was insufficient. In 1989, foreign demand increased considerably faster than the underlying trend. As domestic demand growth has also been above trend growth, domestic demand cannot be blamed for much of the surplus during the last two years.

Table GT13: Determinants of the Federal Republic's current account surplus (values in bn DM, absolute deviations)

| | 1985 | 1986 | 1987 | 1988 | 1989* | Total |
|--|------|-------|-------|-------|-------|--------|
| 1. Transitory | -7.7 | 1.4 | 5.0 | -1.0 | -13.1 | -15.3 |
| 2. Trend growth of domestic demand | -0.9 | -3.1 | -5.4 | -8.1 | -8.4 | -25.8 |
| 3. Real DM exchange rate | 0.0 | 0.0 | -1.2 | -7.4 | -16.4 | -24.9 |
| 4. Oil prices | -4.3 | -38.8 | -41.1 | -44.5 | -26.5 | -155.3 |
| Actual current account surplus | 48.3 | 85.0 | 81.2 | 85.3 | 76.0 | 375.8 |
| Current account surplus not due to factors 1-4 | 35.4 | 44.5 | 38.5 | 24.3 | 11.6 | |

* First three quarters

The Federal Republic's real exchange rate has fallen by some 1.2% per year during the 1980's, in particular since 1987. Although it is very difficult to say where the real exchange rate should stay, the loss of some 8% experienced in the period 1987-89 is supposed to account for a significant part of the current account surplus. The econometric analysis suggests that the real depreciation over the last 3 years accounts for about 20% of the overall surplus.

The dramatic fall in crude oil prices in the mid-80s has been the third important factor behind the widening of the current account surplus. Indeed, the drop in oil prices appears to be the most important single factor behind the current account surplus. Without the drop in oil prices, the surplus over the entire period under consideration would have been reduced by almost 50%.

The combination of a slowdown in world demand and the explosion of domestic demand relative to supply within the combined Germany may narrow the current account surplus to 1-2% of GDP; this would correspond to the position, to which the Federal Republic has historically aspired.

Table GT14 : Capital movements

| | 1980- 1983 aver. | 1984- 1986 aver. | 1987 | 1988 | 1989 |
|--|------------------------|------------------------|-------|--------|--------|
| Capital account | -4.0 | -58.7 | -39.0 | -127.2 | -128.3 |
| Long-term capital transactions | -1.8 | -0.9 | -23.2 | -86.9 | -22.8 |
| Short-term capital transactions | -2.2 | -57.8 | -15.8 | -40.3 | -105.5 |
| Unclassified transactions | -2.0 | 2.9 | -2.0 | 4.1 | 5.0 |
| Change in the Bundesbank's external assets | -7.7 | 16.3 | 41.2 | -34.8 | -19.1 |

Source: Deutsche Bundesbank, April 1990

3.2 Capital movements

Between 1986 and 1989, the cumulative capital outflows were equivalent to the total current account surplus: more than DM 350 bn. Net capital outflows peaked at 5.7% of GDP in 1988 (5.3% in 1989). Short-term capital outflows represented more than 2/3 of the total.

In 1986, Germany recorded an exceptional basic balance (current account plus long-term capital movements) surplus. Foreign long-term net investment reached DM 89.3 bn with a record net purchase of fixed-rate bonds amounting to DM 59.1 bn. The long-term capital balance moved back to "normal" in 1987 with a net export position of DM 23.2 bn (1.2% of GDP). In 1988, speculation about the introduction of a withholding tax (effective as from January 1st, 1989 until July 1st) generated important movements: large outflows of DM 72.9 bn in the form of securities transactions by residents (about 3 times higher than in the preceding 4 years) and a reduction in the net purchases of securities by non-residents. Withdrawal of the withholding-tax purposes produced an improvement in the balance of long-term capital movements.

Table GT15: A breakdown of long-term capital movements

| | 1980- 1983 aver. | 1984- 1986 aver. | 1987 | 1988 | 1989 |
|---|------------------------|------------------------|-------|-------|-------|
| Net German investment abroad | -30.0 | -59.9 | -62.6 | -97.9 | -92.3 |
| Direct investment | -7.5 | -17.1 | -16.4 | -19.8 | -25.3 |
| Securities | -8.9 | -25.9 | -24.9 | -72.9 | -49.8 |
| Lending | -11.0 | -14.0 | -18.6 | -2.4 | -13.9 |
| Private acquisit. of real estate | -1.3 | -1.0 | -1.0 | -1.2 | -1.2 |
| Other investment | -1.2 | -1.9 | -1.7 | -1.6 | -2.1 |
| Net foreign investment in the FRG | 28.2 | 59.0 | 39.4 | 11.0 | 69.5 |
| Direct investment | 2.0 | 2.6 | 3.4 | 2.4 | 11.2 |
| Securities | 4.6 | 48.5 | 33.2 | 7.7 | 45.8 |
| Lending | 21.8 | 8.0 | 2.9 | 1.1 | 12.6 |
| Private acquisit. of real estate | -0.2 | -0.1 | -0.2 | -0.2 | -0.1 |
| Other investment | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 |
| Balance on long-term capital transactions | -1.8 | -0.9 | -23.2 | -86.9 | -22.8 |
| Direct investment | -5.5 | -14.6 | -13.0 | -17.4 | -14.1 |
| Securities | -4.3 | 22.6 | 8.3 | -65.2 | -4.0 |
| Lending | 10.8 | -6.0 | -15.7 | -1.3 | -1.3 |
| Private acquisit. of real estate | -1.5 | -1.1 | -1.2 | -1.4 | -1.3 |
| Other investment | -1.2 | -1.9 | -1.6 | -1.6 | -2.1 |

Source: Deutsche Bundesbank, April 1990

Transactions in securities are the dominant feature on the capital account. They represented 75.6% of the long-term capital exports in 1988. This compares with 58% for the other big surplus-country, Japan.

In absolute terms, direct investment in foreign countries was more than three times higher in Japan than in Germany. Japanese direct investment into the EC exceeded

German direct investment. This has changed in 1989, when Germany increased its direct investment in the EC by 84% (to DM 12.8 bn) reflecting optimism at the prospects within an internal market. Nevertheless, direct investment in countries which are considered to be in a catching-up process is limited.

Net short term capital outflows fell dramatically in 1987, to DM 18.2 bn from DM 113.7 bn in 1986. Lending by German banks to foreign banks decreased from 63.9 to DM 12 bn and lending by enterprises and individuals to foreign banks went down from 35.3 to DM 10.5 bn. As from mid-1988, the real depreciation of the DM led to a recovery of net lending by German banks to foreign banks of DM -28 bn in 1988 and DM -77.8 bn in 1989. In 1989, the balance of short-term capital became the most important counterpart to the current account surplus (DM -93 bn, 4.7% of GDP).

The changes in the Bundesbank's net external assets depend upon the extent to which the current account surplus is compensated by capital flows. In this respect, movements in foreign reserves reflect the assessment of the markets as to the prospects of the currency. The reserves increased in 1987 (DM +41.2 bn at transaction rates) when the DM appreciated and decreased in 1988 and 1989 (DM -34.8 bn and DM -19.1 bn respectively) when the DM depreciated at least in real terms. In 1989, the fall in net reserves was mainly caused by an increase in the foreign liabilities of the Bundesbank, due to investments by foreign authorities in DM-assets.

3.3 Prospects and policy conclusions

The German current account surplus has been considered to be a major macroeconomic disequilibrium. The preceding analysis has shown that the underlying current account surplus has been declining over the last three years. Prospects are for a further decline, particularly if the large deficit of the GDR is included.

The relevance of current account imbalances to economic policy action will become less obvious if financial integration within the Community makes considerable progress and economic integration continues. Policy changes should then be directed at existing savings and investment balances in the various sectors. The successful consolidation of the public sector budget, although having contributed to the current account surplus, has been the necessary condition for the recent upswing in private investment. Nevertheless, the financial surplus of the private sector remains the important counterpart to the current account surplus. This reflects both a high savings rate of private households and a healthy financial position in the enterprise sector. An excess of private savings in the Federal Republic is desirable to the extent that it provides resources for the catching-up process in less developed Community and Eastern countries.

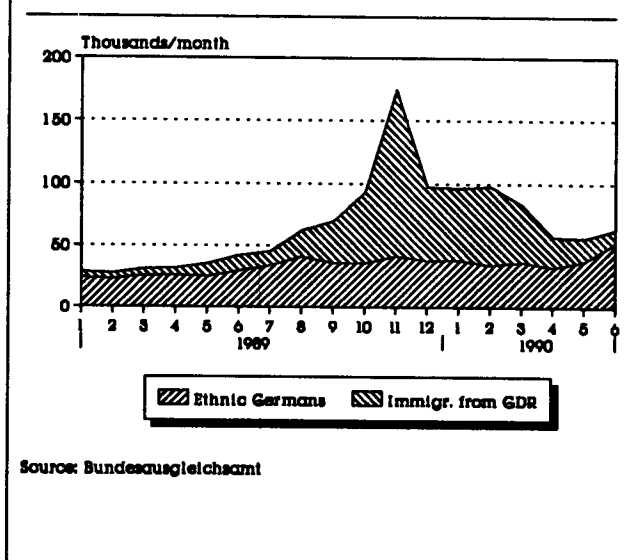
Chapter 4

GEMSU: assessment and macroeconomic implications

Since November 1989, the border between the FRG and the GDR has effectively been open. This has led to an enormous inflow of East German immigrants to the Federal Republic. In late February 1990 the Federal Government offered the GDR government a monetary union to stop this immigration wave by giving GDR residents favourable economic prospects in the GDR itself. As of 1 July 1990, a German economic, monetary and social union (GEMSU) has come into existence. This chapter considers some of the implications of these changes for the economies of the FRG and the GDR, for the GEMSU as a whole (especially in its macroeconomic aspects) and for Germany's partners within the Community.

- For the FRG and the GDR viewed separately, the question can be seen as primarily a regional challenge: how best to ensure a rapid upward-oriented development of the GDR economy, so as to avoid the social costs of massive migration from East to West, without relying predominantly on long-term transfers.
- For the GEMSU as a whole, events since last November constitute a positive supply shock. Experience in the United Kingdom and Spain suggests that in such circumstances, and with an increased availability of borrowing opportunities (notably for GDR residents), there will be an initial period in which demand, both for consumption goods and for investment goods, exceeds supply in Germany. To avoid an overheating and inflationary tensions either fiscal or monetary policy will have to become, *ceteris paribus*, contractionary.

Graph GT16 : Registered Immigration 1989/90



- For the European economy as a whole (including Eastern Europe) there are now improved prospects for a strongly growing central region with positive implications for all other European countries. In particular, an

integrated GDR economy may act as a bridge between Western and Eastern countries.

4.1 Short term macroeconomic impact of the GEMSU on the FRG and European economy

The economic unification of Germany will trigger a positive growth effect on the economy of the Federal Republic (about 1% of GDP). This is mainly the result of a shift of GDR internal demand towards imports from Western countries and a general loosening of fiscal policy in the entire German public sector. Given the high rate of capacity utilization in the economy of the Federal Republic and the opportunity for all EC countries to establish similar import links in the GDR, all Community countries will participate in the import pull of the GDR economy. Therefore, the overall German current account surplus may shrink considerably while the current account balances of the other EC countries will improve. This will contribute to more convergence in the external balances of Community countries.

The FRG labour market has been influenced by significant emigration from the GDR, and other Eastern European countries. Integration of these new workers into the labour force may lead to new kinds of working patterns. Despite the obvious difficulties of finding accommodation in the FRG, the shortage of qualified labour in the FRG will continue to attract people from the GDR. In these circumstances, short-term working contracts during seasonal or holiday periods would prove attractive to residents of the GDR. Cross-border contracts will also become attractive to GDR residents, as they can combine high salaries (in the FRG) with low rents in the GDR. In the long-term perspective, the impact on the labour market of the FRG can be characterized as positive, with the regional and sectoral mobility of labour improving considerably.

The overall macroeconomic impact of GEMSU on the FRG economy will be enhanced by capital mobility, a single currency and labour mobility, which will probably be larger than observable at the Community level in the foreseeable future. Therefore, it will be less and less recommendable to disentangle the economic interrelationships of the two German economies. In particular, macroeconomic performance within a German Monetary Union will have to be looked at in a whole German context. A number of likely features of macroeconomic policy in GEMSU are clear:

- there will be a very substantial loosening of overall fiscal policy within GEMSU. Given that the credibility of German fiscal policy in controlling future trends in the public finances is to be maintained, this fiscal loosening will have significant demand-expansionary effects.
- for GEMSU as a whole, there will be a period in which the pace of increase in demand outstrips that of supply. At a later stage, supply will accelerate.

- In short, the economy within GEMSU is likely to be subject to a long-lasting period of excess demand. The connected problems can be eased by measures to increase immediately foreign supplies. The market of the GDR should be open for all Community countries and measures should be taken to promote imports to the German economy so as to reduce the gap between demand and supply. Nevertheless, the likely pattern of supply and demand may pose challenges for monetary policy.

The macroeconomic impact of GEMSU on the rest of Europe will be significant and positive: the changing balance between demand and supply within the GEMSU will affect trade flows and savings in partner countries. The significant reduction of the current account surplus of the unified Germany will stimulate demand in the whole Community and will only be partly offset by higher interest rates. Thus, GDP in the whole Community could be increased by 1/2 percentage point during the first two years after GEMSU.

In the longer run, it can be expected that the positive effects which are expected from the single market will be reinforced. Moreover, to the extent that the other Eastern European economies will make progress in their moves to a market economy, the advantages of a progressive division of labour within Europe might accelerate further. Given the relatively large integration of the GDR economy into the Eastern economies, the GDR can act as a bridge between the Community and the Eastern European economies.

Nevertheless, fears exist as to whether rapid economic developments within the GEMSU might displace the catching-up process in other, relatively poor, Community countries, notably Spain, Portugal, Greece and Ireland by crowding out investment in those countries. However, investment in these countries is mainly undertaken because of an expected high real rate of return. In general, GEMSU will not change this and in view of the progressive integration of world financial markets, financial constraints should not be overemphasized.

Integration of the GDR in the European Communities will, furthermore, raise some questions as regards external trade and market access. In general, problems exist only for those products where East European countries are very competitive on world markets and where access to the Community market is restricted; access to the East German market has not been affected by quotas or tariffs. For other products, affected by tariffs or quantitative restrictions, it is doubtful whether there will be any demand for East German goods at all. Also, demand in East Germany for sub-EC standard products from East European countries will shrink considerably. Therefore, it is very likely that trade relations between the GDR and Eastern European countries will decline significantly in the short run, while the possibilities for EC countries to export to the GDR territory have become much bigger.

4.2 Short-term implications for the GDR-economy

The introduction of the DM to the GDR economy will trigger an important adjustment process. The pressure for adjustment may be larger than in other eastern countries moving from a planned economy to a market economy because the GDR economy must immediately compete in the world market. However, the impacts will be cushioned by important financial support from the Federal Republic. Nevertheless, it is important that the GDR rapidly transforms its economic structures and the behaviour of its economic agents into a market economic framework, enabling the catching-up process in the medium-term and minimizing the danger of long lasting economic instability. In any event, the short-term implications for the GDR economy will be significant.

GEMSU has important short-term macroeconomic consequences for development in the GDR. Providing GDR residents with hard currency has led to an important shift of domestic demand towards consumption of imports. Consumption is generated not only by additional transfers from West Germany and foreign investment, but also by the convertible currency income of GDR residents. Price competitiveness is only one factor attracting GDR residents to consume imported products. The inappropriate product-mix provided by GDR suppliers may prove even more important. The modernization of GDR industry requires Western technology, so that increased foreign investment will be reflected in imported investment goods. In addition, investment by viable GDR enterprises will further boost imports.

The external trade performance of the GDR is seriously affected by the introduction of the convertible Deutsche Mark. This is especially the case for trade with Eastern countries. As GDR demand shifts to Western products, special trade structures with COMECON countries will disappear. COMECON exports to the GDR will quickly begin to follow the pattern of trade with other Western countries. GDR exports to both Western and Eastern countries may diminish quite considerably. This is once again especially true for exports to Eastern countries in hard currency.

The effective fusion of the GDR and FRG labour markets and by extension, integration into the Community labour market will have a profound impact on wages in the GDR. The agreed conversion rate of 1:1 may have been consistent with prevailing levels of productivity. However, the price reform, newly-introduced indirect taxes and the introduction of a wage-bill tax and significant social security contributions have already led to strong upward pressure on wages. The need for wage differentiation, so as to provide greater incentives for certain sections of the labour force, will push average wages further upwards. To the extent that GDR workers will have the choice between working in the GDR or in the FRG, cross-border working contracts will have spillover effects on the GDR wage level. Lower rents in the GDR will not, in principle, exert a dampening effect on wages as both the advantages of high wages and low

rents can be combined. Productivity of new investment will be similar to western levels. Thus, wages will probably be higher than current GDR levels in order to attract the most qualified labour. Sooner or later, this will affect the general wage level. Moreover, to the extent that top and middle management comes from West Germany and receives West German wages, perhaps even with a supplement, wage differentials between the various sectors of the labour force may ultimately prove unacceptably wide. Finally, trade unions in both regions will naturally seek to promote wage parity between the FRG and the GDR.

However, two factors might reduce the mismatch of the wage level and labour productivity. Firstly, high unemployment will have a dampening effect on wages both in the GDR and, to the extent that the two labour markets are integrating, also in the FRG. Secondly, considerable room exists to increase labour productivity in the short-term. Reducing labour hoarding, improving the organization of the production process and a more flexible use of the capital stock are possibilities to increase productivity in the short-term.

Company investment will, in future, be undertaken in an integrated German or European context in anticipation of the single market. Although the effect on net investment will probably be positive, it is uncertain if new investment will shift from the FRG to the GDR or, alternatively, if production capacities will simply be enlarged in the FRG with a view to exploiting the GDR market. Therefore, if capital is to be attracted to the GDR, it will be important to create a positive investment climate in the GDR relative to the FRG.

Prospects for the public finances in the GDR are very uncertain as the entire structure of expenditure and revenue will be changed. Even if the abolition of major price subsidies together with the introduction of taxes on high cost consumer goods will lead to higher net revenues, the abolition of production levies together with the introduction of a new tax system will inevitably lead to a substantial public deficit, at least temporarily.

In summary, the main implications of GEMSU will, at first glance, be (1) a considerable slowdown of production in the short-term, (2) high unemployment, (3) huge budget deficits and (4) an extremely high current account deficit for the GDR region. From this reduced level of performance the catching-up process can set in, after some time.

Given these short-term problems, it is of great importance to create a positive climate for new investment as soon as possible. A regional development plan for the GDR should be developed aimed at fostering investment in the GDR, new business creation and greater labour

market flexibility. It is of crucial importance to strengthen the performance of the GDR territory as a place of production. Infrastructural investment is a major precondition for such a strategy but the whole frame of subsidies in the FRG basically works to the detriment of the GDR. Moreover, the possibility of temporary unfavourable developments on the territory of the GDR, necessitates a general review of regional policies. Most importantly, rigidities which prevail in the FRG should not be introduced into the GDR; they should rather be removed throughout Germany. Finally, the revival of private entrepreneurship and a rapid privatization of existing industries will be important preconditions to promote the efficient allocation of factors of production and thus a successful catching-up of the GDR economy.

4.3 Longer term considerations: The regional challenge within GEMSU

GEMSU is the attempt to integrate two completely different economies of which one has not enjoyed even a minimally integration in the world market. Distortions stemming from 40 years of centrally-planned economic and social structures cannot be neglected and a painful adjustment process is unavoidable. It is, however, also worthwhile to invest in this process as it can yield an enormous increase in the wealth of about 16 million people. The following Chapter deals with some issues related to such longer-term considerations.

4.3.1 The challenge

GEMSU is characterized by capital mobility and a single currency. This implies that real interest rates and the rate of return on capital must be equalized between East and West Germany. In turn, on conventional assumptions about technology, this would require an equalization of capital/labour ratios in the market sector between the two regions if labour were homogenous. This could be achieved by flows of capital or labour or both. In the case of labour, flows from the East would be predominantly into the FRG. In the case of capital, flows into the East could come from anywhere in the increasingly integrated world capital market.

If there were no social costs involved in labour flows, it would make little difference which of these two routes were followed. However, massive labour flows from East to West would add to congestion in the FRG, create strains on health and education services and possibly create social tensions. In the East, they would produce a "Mezzogiorno" problem, with the remaining population

largely consisting of the least mobile and least economically productive persons, including the elderly. This would create a long-term regional imbalance, social problems and, as in the West but for different reasons, create strains on health and education services.¹ In general, therefore, there is likely to be a public preference for capital flows to the East rather than labour flows to the West.

The difficulty is that in this special case labour flows can probably take place more quickly than the transfer of physical capital. The tendency for greater equalization of wage rates (for equivalent groups of workers) between the two regions may take place via labour flows to a greater extent than is publicly desirable if it is the outcome only of private choices. There may therefore be scope for public policy to influence private choices, either by lessening the incentives to migrate or by increasing the attractiveness of capital flows to the East.

In effect, measures to reduce private incentives to migrate would amount to maintaining a wage differential, at least as seen by the employer, between East and West. However, there are clearly political limits to such measures. So the major emphasis will have to involve providing incentives for capital flows to the GDR.

A second set of issues concerns wages and unemployment in the transition period. Even if wages did not rise above current productivity levels, an important part of GDR production would be rendered obsolete and unemployment would rise.

In the absence of very high labour mobility, unemployment would produce a wage adjustment and many of the unemployed would take low-productivity jobs in the informal sector. Wages would rise only gradually during the period, perhaps prolonged, in which low wage rates attracted investment in new vintages of capital. However, in the presence of a high degree of labour mobility, it would be unrealistic to attempt to keep wages even in line with current productivity. Moreover, enterprises will be under pressure to improve productivity; reducing labour hoarding is the natural source for increasing labour productivity. As substantial new employment possibilities will be created only in the medium term because they require new investment (industry) or training (services), the unemployment rate might increase sharply during a transition period and, if it is not to give rise to disruptively large migration, will probably have to be met by generous - at least initially - unemployment compensation.

A third issue concerns the industrial structure that is likely to develop in the GDR. It would clearly not be possible for all employment to be provided by affiliates of western companies. This is most clearly of the ser-

vices sector, whether consumer services or business services, and also of small-scale suppliers to larger industrial concerns. It will be essential to stimulate indigenous entrepreneurship in the GDR and the formation of new businesses.

Given the various challenges, it cannot be assumed that the FRG "Wirtschaftswunder" will automatically be replicated in the GDR. Rather, a regional development plan for the GEMSU - perhaps comparable to the "Berlinförderung" and the accompanying "Überleitungsgesetze" - will be required. It should probably contain the following features:

- generous incentives for investment in the GDR, possibly combined with restrictions on the incentives offered by the FRG Länder to investment in their own territory;
- incentives for new business creation, perhaps involving an income-support allowance to be paid to new, small scale entrepreneurs over an initial period;
- greater flexibility in working practices in the GDR than is currently the case in the FRG (so as to allow, for instance, individual workers to choose longer hours, the operation of additional shifts, a more flexible use of part-time work, fixed contracts and temporary work);
- substantial public sector infrastructure investment, notably in communications systems, in the GDR;
- the imposition of effective bankruptcy constraints in the GDR so as to encourage the more effective use of viable capital and the scrapping of unviable capital;
- the encouragement of training and work effort through a wage structure based on qualifications, aptitude and motivation;
- extension of Eastern European trade and services relations.

In summary, the risk that the GDR would remain insufficiently industrialised necessitates a general review of regional policies. Importantly, rigidities which prevail in the FRG should not be introduced into the GDR; they should rather be removed everywhere. This is another reason for the announcement of a supply-side package of the kind mentioned later (see chapter 7). An idea of the amount of resources needed to stimulate activity in the desired way can be taken from the prevailing Berlinförderung and accompanying measures.

1) In the West, the problem would be one of insufficient schools and hospitals, in the East, one of insufficient qualified personnel to man the existing physical infrastructure. In short, the factor proportions problem would be the reverse of that to be confronted in the market sector.

MAIN ELEMENTS OF GEMSU

1. Monetary union

The main elements of the monetary-union part of the Staatsvertrag concern the conversion rate, the treatment of enterprise debt and restrictions on public finances.

From 1 July 1990, the DM has become the only means of payment in the GDR. Sovereignty in the conduct of monetary policy has been taken over by the Bundesbank. The regulations applying to bank supervision in the FRG also apply in the GDR. Wages and pensions which prevailed at 1 May have been converted at a rate of 1:1. In general, debt and claims have been converted at a rate of 2:1. However, for residents of the GDR, the conversion rate for savings including cash money was 1:1 within the following limits: children (age group 0-14) DM 2000; adults (age group 15-60) DM 4000; elderly (age group over 60) DM 6000. Remaining money in circulation and savings - with some macroeconomically minor exceptions - have been converted at a rate of 2:1.

Non-residents have been allowed to exchange Mark at a rate of 3:1 into DM, however, only to the extent that these have been issued by GDR banks after 1 January.

As cash money has been converted at the same conditions as savings accounts, equalization activities first among families but also among the population in general have been observed. Therefore, the theoretical maximum amount of 64 bn Mark has almost been converted into DM at 1:1, leading to equalization claims (Ausgleichsforderungen) on the balance sheet of the GDR government of about 32 bn DM.

2. Public finance

Regulations affecting public finances in both the FRG and the GDR budgets concern (1) transfer payments from West to East, (2) budget and borrowing rules for the GDR budget, (3) GDR public debt after unification, (4) revenue and expenditure structure of the GDR budget.

Public transfers consist of those general transfers which shall balance the GDR budget and of those to support the old age pension scheme and unemployment insurance (Anschubfinanzierung). Total transfers were initially agreed to amount to DM 25 bn for the second half of 1990 and DM 38 bn for 1991.

As regards budget procedures, the GDR has been obliged to introduce the West German tax system. Strict borrowing requirements apply to different budgets excluding the social security budget. Approval by the West German Minister of Finance is required for a budget deficit.

Public debt which exists at the time of political unification will become public debt of the GDR-Länder. This will relieve the Federal budget of any additional debt burden associated with a unified Germany.

While on the revenue side the GDR has to introduce the West German tax system, on the expenditure side subsidies for private households, industrial products, public transport, energy used by private households and the dwelling sector are being reconsidered or abolished. As regards agriculture, CAP regulations will be introduced. Salaries for public servants will have to take account of the general economic and financial conditions in the GDR.

3. Economic union

The GDR introduced the basic rules governing market economies e.g. contract freedom between economic agents, abolition of administered prices, wage autonomy on both sides of industry, introduction of private property rights.

As regards trade, the conditions of German-German trade concerning goods of German origin are normalized and treated as inter-regional trade. There is no border and customs control for goods of German origin and exports to the other parts of Germany do not initiate special VAT procedures. Goods of non-German origin are treated as normal imports (exports).

The structural adjustment of enterprises can be supported by the GDR government by providing financial resources during a transition period. This support is, however, dependent upon the financial situation of the GDR budget and the consent of the FRG government has to be obtained.

4. Social union

Pension, health, accident and unemployment insurance are administered by self-governing bodies under the legal supervision of the state. They are mainly financed through contributions by employers and employees (normally 50% each). The GDR has introduced an unemployment insurance scheme comparable to the FRG's. A health insurance scheme is established. In the case of illness, wages are paid by employers according to the regulations in the FRG. Pensioners have to contribute to the health insurance system.

Pensions are fixed at a level that represents 70% of the average net wages in the GDR (after 45 years of paying contribution to the pension system). If the pension falls below the previous GDR pension, the amount of the previous pension will be paid in DM. Pensions are adjusted according to the development of net wages. Since, during a transitional phase, regular contributions to the pension and unemployment schemes do not fully cover expenditures, the FRG makes a temporary contribution (Anschubfinanzierung).

4.3.2 The Staatsvertrag and regional development

As yet, it remains unclear to what extent the desirable features outlined above will be realized. The measures adopted so far are contained in the Staatsvertrag. The Staatsvertrag deals with the conditions and procedures of introducing the DM in the GDR. It defines the accompanying measures the GDR has to take in order to implement the basic principles of a market economy. In effect,

the economic system of the FRG will have to be introduced with the possibility of some changes, particularly during the adjustment period. As regards economic policies, monetary sovereignty is passed over to the Bundesbank and the West German Minister of Finance will have a decisive influence on the conduct of fiscal policy in the GDR.

The Staatsvertrag does not specify the internal adjustment measures which will have to be taken by the GDR authorities. In particular, the issue of private property rights is not completely resolved. As regards the enterprise sector, a "Treuhandanstalt" will manage the required privatizations. Revenues from privatization will be used to cover the risks of new bank credits and unavoidable debt take-over which arise from bankruptcy. These revenues from privatization are also considered to contribute to the balancing of the GDR budget and to pay back the equalization claims stemming from asymmetric conversion of assets and liabilities ².

The question arises as to whether such a procedure might hinder a rapid revival of private entrepreneurship through distorting the budget constraint on enterprises:

- to the extent that privatization will take time and debt take-overs will be required immediately, additional equalization claims (or similar regulations) have to be established;
- there will be a risk that generous debt take-over possibilities by the "Treuhandanstalt" might reinforce bankruptcy as no own capital of private households and management is involved;
- non competitive enterprises might have an incentive to pay as much as possible before they become officially bankrupt and the "Treuhandanstalt" takes over the debt;
- if lending by banks is guaranteed by the "Treuhandanstalt", market forces in the process of efficient allocation of capital might be considerably reduced;
- these dangers would be considerably reduced either by a very rapid privatization process, which would increase both the risks and opportunities of private economic behaviour, or a systematic and quick assessment of the prospects of individual enterprises and the preparation of adjustment strategies by professional Western consultancies, perhaps paid by the Government.

A further risk is that the rigidities that currently characterize areas of the West German economy (in wage bargaining, in working hour and practices, in the control of new entry into certain areas of the labour market and other areas commented on in chapter 7) might be extended into the GDR.

Chapter 5 Fiscal policy

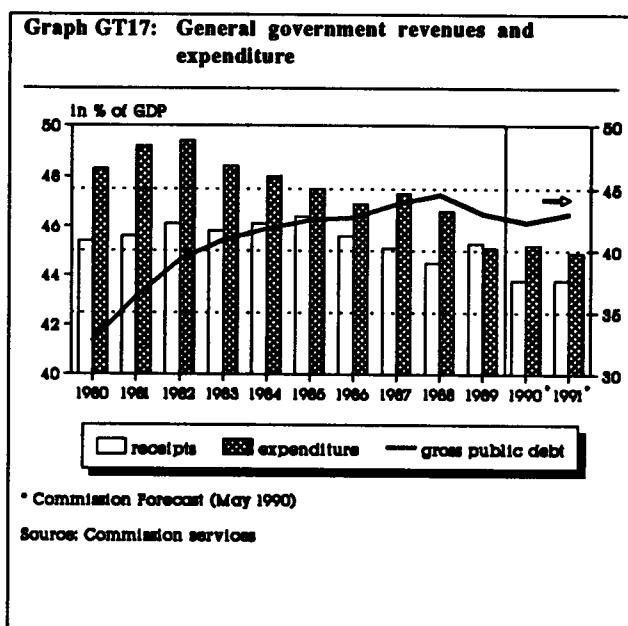
After the experience of the 1970's and the beginning of the 1980's, when activist fiscal policies with only poor economic results had led to a significant increase in public indebtedness, the Government's medium-term strategy has been directed towards improving economic performance; this is to be achieved by reducing the size of the public sector and the level of State intervention in the economy and by consolidating the public finances. This policy has helped to prepare the economy to successfully cope with the unexpected claims resulting from GEMSU. The following chapter analyses the stance of fiscal policy over the 1980s and tries to sketch the prospects for the early 1990s.

5.1 General strategy in the 1980s

In the framework of supply-side oriented policies, the Federal Government has followed a multifold strategy over the period 1982-1990:

- priority was given to the reduction of the deficit, with the aim of arresting the rise in the public debt, the debt/GDP ratio had more than doubled from 18% in 1970 to nearly 40% in 1982, and interest payments had become a significant burden.
- at the same time, the continuous rise in public expenditure as a % of GDP during the 1970's was seen to have contributed to excessive rigidity in the economy. Budgetary consolidation by expenditure restraint was intended to restore confidence and to create room for tax reductions;
- once the reduction of the deficits of central and local governments was successfully underway, steps were taken to reduce taxes and to improve the tax structure, in order to provide more incentives, to ensure greater allocational neutrality and to favour savings. As set out in 1984, the Government's fiscal aims have been (i) to reduce the progressivity of personal income taxation; (ii) to have a sustained reduction in the tax burden; and (iii) to abolish special tax exemptions while broadening the tax base. First measures were taken in 1986 and 1988, while a more fundamental reform of the income tax system was implemented in January 1990. A reform of company taxation in order to avoid any alleged disadvantages vis-à-vis foreign competitors has also been discussed;

2) The 1989 balance sheet - which, however, has to be interpreted with care - shows that the enterprise sector has been indebted by a gross debt of 260 bn Mark (net debt 200 bn Mark). Loans to the real estate sector amounted to 108 bn Mark. Enterprises might not be in a position to bear half of their debt i.e. bankruptcy will increase the need for debt take-over if the banking sector should be unduly burdened. All in all, the implied initial public debt take-over might amount to some 100 bn Mark i.e. around 7 % of the West German GDP implied by a 2:1 conversion of enterprise debt (the consequences for the conduct of monetary policy are dealt with in Chapter 6)



- a further aim was to improve the structure of expenditure, by increasing the share of investment and by lowering that of unproductive and distorting expenditure like subsidies and several other transfers. However, this policy has had only very limited success up to the present.
- it was planned to reduce public intervention in the market process by privatizing public enterprises. Although the Federal Government has had considerable success in this respect, the overall impact on economic activity has been rather limited as the Länder and local authorities have not yet adopted a similar privatization programme.

This strategy was followed since 1982, and implemented in an economic context which has been very favourable in the recent past. It has led to a rather satisfactory public finance situation by the end of 1989 - with a nearly balanced budget for the general government (on a national accounts basis) and a quite sustainable public debt ratio. This situation is particularly fortuitous in view of the unexpected "shock" in connection with political changes in Eastern Europe which have impacted on the budget as from 1990.

5.2 Main developments over the 1980s

The policy of budgetary consolidation had already led to a reduction in the deficit from a level equivalent to 3.7% of GDP in 1981 to 1.1% in 1985 (general government, national accounts definition). This had been achieved mainly through expenditure restraint - concentrated in the areas of transfers to households and public investment - , in accordance with the general conception of the medium-term strategy. However, in view of the poor domestic growth performance and the emergence of international imbalances, fiscal policy in the Federal Republic in the mid-1980s faced criticism as excessively contractionary.

From 1986 onwards, the Government began to introduce changes in the taxation system. Over the 1986-88 period, the general government deficit widened again to reach 2.1% of GDP. This was mainly due to a temporary drop in the transfers of profits from the Bundesbank to the Government (resulting from the impact of the USD depreciation). The two-step tax reform, introduced in 1986 and 1988, mainly compensated for fiscal drag; however tax revenues fell short of expectations as economic growth weakened. Expenditure continued to decrease as a % of GDP.

The debt/GDP ratio continued to rise and reached 44.5% of GDP in 1988. However, excluding the Bundesbank transfers - which is the relevant concept when trying to assess the stance and economic impact of budgetary policy - the budget balance remained practically unchanged during that period.

From the financial point of view 1989 was particularly favourable. At all levels of government, budgets were better than in 1988 and for general government, on the basis of national accounts definitions, a small surplus was even recorded (about 0.2% of GDP). This outcome resulted in a decrease in the debt/GDP ratio, which by the end of 1989, stood at about 43.0% of GDP.

Table GT18: Key variables of public finance (in % of GDP)

| | 1980-1984 aver. | 1985-1988 aver. | 1989 | 1990 | 1991 |
|-----------------------------------|--------------------|--------------------|-------------|-------------|-------------|
| Indirect taxes | 12.9 | 12.3 | 12.4 | 12.4 | 12.4 |
| Direct taxes | 12.2 | 12.3 | 12.6 | 11.5 | 11.8 |
| Social security contributions | 17.3 | 17.4 | 17.1 | 16.8 | 16.3 |
| Other current resources | 3.4 | 3.2 | 3.1 | 3.1 | 3.4 |
| TOTAL CURRENT RESOURCES | 45.8 | 45.1 | 45.3 | 43.8 | 43.8 |
| Current transfers | 21.3 | 20.5 | 20.2 | 20.3 | 20.4 |
| Of which: to enterprises | 2.2 | 2.4 | 2.2 | 2.1 | 2.0 |
| Of which: to the GDR | 0.0 | 0.0 | 0.0 | 1.0 | 1.5 |
| Public consumption | 20.2 | 19.5 | 18.7 | 18.2 | 17.8 |
| Of which: wages | 11.0 | 10.3 | 10.0 | 9.8 | 9.6 |
| Interest payments | 2.6 | 2.9 | 2.7 | 2.7 | 2.7 |
| TOTAL CURRENT EXPENDITURES | 44.2 | 42.8 | 41.6 | 41.8 | 41.6 |
| Net capital transfers | 1.6 | 1.2 | 1.1 | 1.0 | 0.9 |
| Investment | 2.9 | 2.4 | 2.4 | 2.4 | 2.4 |
| TOTAL EXPENDITURE | 48.7 | 46.4 | 45.1 | 45.2 | 44.9 |
| Lending (+) / borrowing (-) | -2.9 | -1.3 | 0.2 | -1.4 | -1.0 |
| Interests / current expenditure | 5.8 | 6.7 | 6.5 | 6.5 | 6.5 |
| Non-interest current expenditure | 41.6 | 40.0 | 38.9 | 39.1 | 38.9 |
| GROSS PUBLIC DEBT | 38.2 | 43.5 | 43.0 | 42.3 | 43.0 |

Source: Commission services

The 1989 outcome was not primarily connected with exceptional or temporary events. The major reasons for the favourable figures lie in

- the favourable trend is the Social Security Funds which, thanks to the consequences of the Health Re-

form Act and a favourable employment performance, recorded a surplus of 0,75% of GDP;

- consumer tax increases, implemented as from January 1st to counterbalance additional transfers to the EC budget;
- a strong rise in tax revenues reflecting a substantial increase in the tax base due to the strength of the economy: high levels of private consumption and housing construction, a rise in employment and in earnings of wage and salary earners, in particular.

However, 1989 was also an intermediate year between two steps of income tax reductions. In addition, the transferred Bundesbank profits were substantial. On the other hand, the favourable trend in the ratio of expenditure to GDP continued, despite a marked increase in the final quarter of the year. In connection with the opening of the frontiers with the GDR, growth in expenditures overshot the medium-term target of 3% p.a. set by the Financial Planning Council. It was, nevertheless, still lower than the GDP growth rate.

For 1990, the reduction in the State's share in the economy has been the primary target of fiscal policy. The implementation of the tax reform, which was already planned for several years, aimed at alleviating the tax burden on labour income and on corporate profits, but also on improving the structure of taxation, in particular by introducing linearity in the progressivity of rates. The net financial impact of the reform on the 1990 budget could represent a loss of revenue of around 1 percentage point of GDP.

To sum up, it is clear that budget consolidation has been very successful in the Federal Republic and, since 1986, has given room for substantial tax cuts since 1986, intended to improve incentives in the economy. However, on the expenditure side, apart from the reform in the health sector, no major improvement in composition has taken place; the share of investment could not be increased and the reductions in subsidies have been less than satisfactory. As regards the stance of fiscal policy in recent years, the expenditure restraining effect must be assessed with reference to the incentive effect of the tax reforms, and one should also take into account the improvement in expectations as regards the public sector financial position.

The consolidation of the 1980s was fortunate *ex post* in view of the need to finance the German unification, but the tax reform (which was welcomed *ex ante*) may turn out to be inappropriate at this time. In 1990, fiscal policy will probably have a significant stimulatory impact on economic activity, because of the tax cuts as well as the increased expenditures. The supplementary 1990 federal budgets, the creation of the "German unity fund" and the unavoidable additional needs of the GDR indicate a sharp rise in expenditures as compared to 1989. Due to high growth and employment performance, revenues should still increase considerably, although the net-effect of GEMSU will definitely be negative in 1990.

5.3 Prospects

The need for resources to stabilize and modernize the GDR-economy will dominate the future stance of fiscal policy. In the short-term, the integration of immigrants from Eastern Europe and from the GDR and assistance to improve the economic situation in the GDR are going to put upward pressure on public expenditure in different fields:

The central government's Finance Minister and the heads of regional states agreed to set up a fund (Fund "Deutsche Einheit") to help finance the GDR budget (see also chapter 4). A total amount of 115 bn DM financial aid has been announced and is to be spread over the next 4 years as follows:

| | 1990 | 1991 | 1992 | 1993 | 1994 |
|-------|------|------|------|------|------|
| bn DM | 22 | 35 | 28 | 20 | 10 |

20 bn DM will be provided by cuts under some headings of the central governments' budget, while the major part of 95 bn DM is to be raised on capital markets by issuing bonds. The particular instruments to be issued have not yet been decided, but all will be denominated in DM. The liabilities are shared 50:50 by Bonn and the Länder governments.

The fund is designed to balance the GDR budget, while the financial aid to help establish a western social security system is to be financed directly by the central government's budget.

At the Länder Government level, assistance programmes have already been approved by some Governments, and at the municipal level, the inflow of immigrants is expected to require additional social spending.

From the point of view of stabilization policies and in order not to threaten the objective of reducing State intervention in the economy, this new challenge should be addressed within the principles of the medium-term strategy. This implies that these expenditures should mainly be compensated by extensive cuts in other areas. Otherwise, significant tax increases may be unavoidable. A restructuring of the budget might involve the following appropriations, in particular:

- military expenditure should be cut substantially ("the peace dividend");
- subsidies, which are still very important (see Chapter 7) should also be reduced. A reform in that field would be very much in line with the general strategy, and could also be helpful in the context of the catching-up process in Eastern Europe, in those sectors where supply could come from the East (mining, ship-building, steel, basic materials);
- sectoral tax exemptions, which are widespread and which lead to revenue losses of more than DM 40 bn, should also be reexamined as regards their economic justification.
- regional subsidies and tax exemptions related to the division of Germany should be phased out as soon as

possible. The projected 7 year period for this phasing out appears to be much too long.

The regional nature of GEMSU implies that it is not sensible to treat the FRG and the GDR as separate economies: labour and capital markets are integrated; there is a single currency; the state budget of the GDR in effect becomes a regional budget. In this context, fiscal policy must be seen in the context of the GEMSU as a whole.

All in all, there will be a very substantial loosening of fiscal policy for the GEMSU as a whole. This is made feasible, from the point of view of credibility and debt dynamics, by the previous policy of budgetary consolidation in the FRG. However, as fiscal policy becomes expansionary for GEMSU, it does not seem appropriate to allow a further loosening as a result of a more dynamic growth performance and, consequently, higher revenues. All levels of government should adhere to their commitment expenditure confine increases (excluding GEMSU-related expenditures) to not more than 3 percent a year. To the extent that the credibility of the FRG Finance Ministry in controlling the future development of the public sector budget of the GEMSU as a whole is maintained high, this fiscal loosening will have conventional demand-expansionary effects.

Chapter 6 Monetary policy

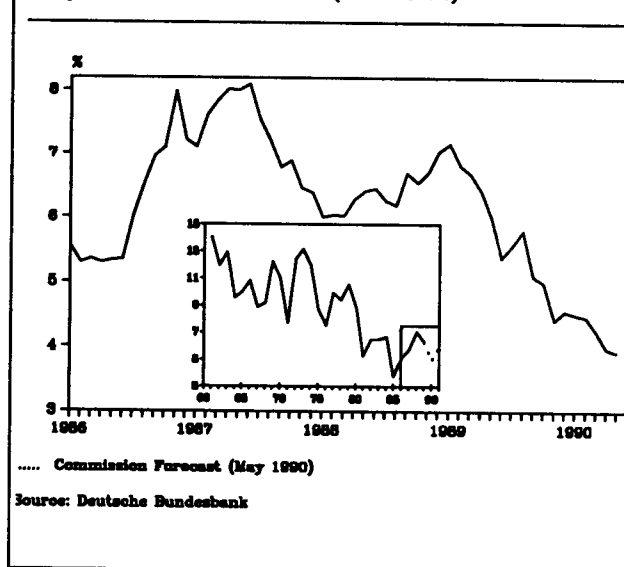
6.1 Main monetary developments over the late 1980s

Given the challenge of GEMSU, and in particular given likely critical budgetary developments, the task of ensuring macroeconomic stabilization that rightly falls to monetary policy promises not to be an easy one. Before investigating this problem, it is, however, worthwhile to have a look at monetary policy and the development of monetary aggregates over the late-1980s.

6.1.1 Quantitative targets and monetary developments

In 1986/87 monetary policy had been subordinated to some extent to the external constraint following the Plaza and Louvre accords. The Bundesbank failed to meet its money growth target in both years: in 1986 (for the first time since 1978), and in 1987 actual growth in central bank money exceeded its respective 3.5% to 5.5% and 3% to 6% corridors by more than 2 percentage points. The Bundesbank toleration of the target over-

Graph GT19: Growth of M3 (1960 - 1990)



shooting was helpful to contain the sharp appreciation of the DM against the US dollar and to reduce the tensions within the EMS. The fall in the oil price, the cheapening of imports due to the DM appreciation, relatively weak domestic demand, and moderate domestic cost increases made it easier for the Bank to accept the overshooting.

During the 1988 to 1989 period, the Bundesbank succeeded in gradually reducing monetary expansion. Perceptions of increased inflationary risks from the middle of 1988 induced the Bank to tighten its monetary policy stance. It was feared, that the monetary overhang represented an advanced accommodation of incipient inflationary pressures, which stemmed from a buoyant growth performance and cost increases arising partly from the weak performance of the DM on foreign exchange markets. The overshooting of the target in 1988 may be primarily explained by a chain of extraordinary developments: the hangover from expansionary measures after the stock market crash in October 1987 and distortions due to the announced introduction of a withholding tax; but also by the strong domestic business activity, especially in the second half of the year. The pace in expansion of the money stock slowed from February 1989 onwards³. From May 1989, M3 growth fluctuated around its 1989 target of "about 5%". This slowdown was mainly attributed to the further tightening of monetary policy and the abolition of the withholding tax. A contractionary influence was also exerted by the external counterpart, reflecting increased capital outflows. After a buoyant start in January 1990, when the money stock

3) This slowdown was indicated earlier (from February onwards) by the stock of M3 calculated from the figures reported for five bank-week returns rather than by the traditionally computed money stock M3 (from April onwards), which is based on the last two end-of-month levels. Since April 1989, the Bundesbank uses only the former to compare actual monetary growth with the monetary target

M3 expanded at the top of the "4% to 6%" target range for this year, money growth calmed down to 4% in May.

A further and increasingly important problem with the assessment of monetary expansion concerns the interpretation of M3. Since late 1988, the measurement of monetary expansion is somewhat distorted by the unusually strong growth of Euro-deposits in Deutsche Mark held by the domestic non-banking sector. When a similar distortion occurred at the beginning of 1986, the Bundesbank began to calculate an extended M3 money stock, including German non-banks' Euro-deposits and short-term bank bonds⁴.

It appears that extended M3 has been growing more rapidly than domestic M3. While the rates of expansion were about the same in 1987, growth of extended M3 outpaced the traditional M3 by more than 1/2 percentage point in 1988 and by some 3 percentage points in 1989. It is feared that, in particular Euro-deposits, could be a source of difficulties for monetary policy if they were to be repatriated. Even if Euro-deposits are not fully equated with domestic money balances, it can be concluded from the rapid growth of extended M3 that there is still ample liquidity in the economy, and monetary policy cannot be judged as being very tight.

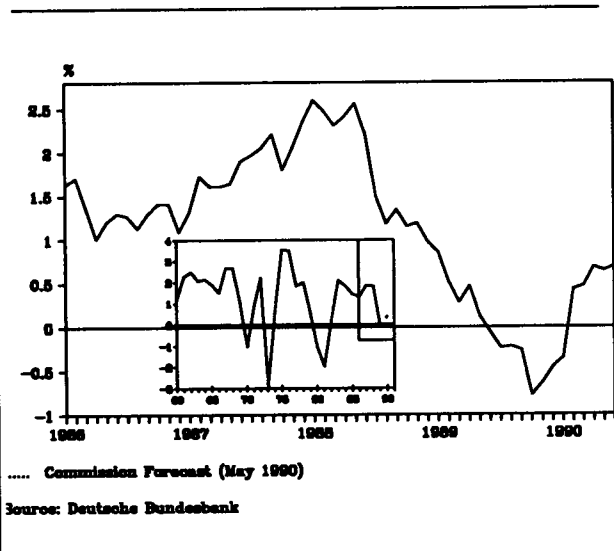
6.1.2 Interest and exchange-rate developments

Since late 1987, short and long-term interest rates have both increased; however, the amount and timing of the increases differed significantly. The key discount and Lombard rates were raised in eight steps from their historically low levels of 2.5% and 4.5%, respectively, at the end of 1987 to 6% and 8% in October 1989. The call rate showed a tendency to lead the hikes, it remained most of the time near the upper limit of the band and occasionally exceeded the Lombard rate. The three months rate started to rise from a level of 3.3% in February 1988 to 8.3% in the first quarter of this year.

The development of long-term rates seems to have been relatively independent from short-term rate movements during the past two years. Between the end of 1987 and the end of 1988, long-term rates remained roughly constant at a level of around 6.2%. They started to rise gradually to a level of 7.5% in the last quarter of 1989 and jumped to 8.5% in the first quarter of this year.

The yield curve had been positively sloped throughout 1988; this probably reflected the exceptionally low inflation rate in 1987/88 which was assessed by markets as being temporary, i.e. long-term nominal rates contained a higher "core" inflation rate expectation (it was widely believed that the trend inflation rate implicit targeted by the Bundesbank was about 1.5% to 2%). The short end of the yield curve moved up as a result of the increases in official interest rates, while long rates re-

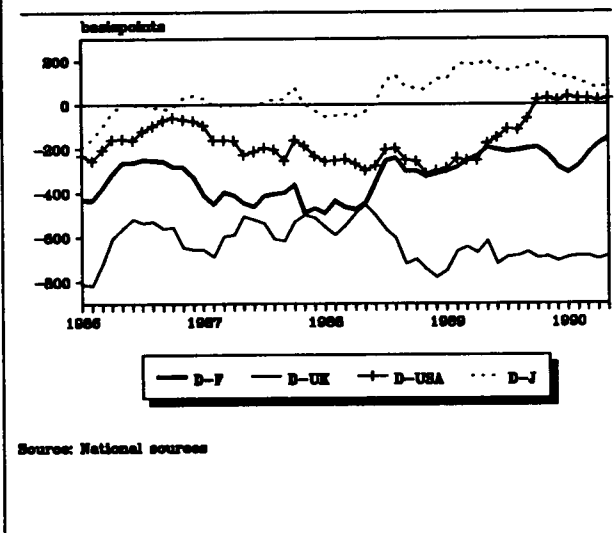
Graph GT20 : Steepness of yield curves (1960 - 1990)



mained roughly constant during 1988 indicating that markets were quite confident at that time that inflation would be successfully combated by the Bundesbank.

Since the second quarter of 1989, however, the whole yield curve has shifted up. An explanation for the upwards move of long-term rates in spite of the further monetary tightening might be that real long-term rates may have increased for factors other than monetary policy. Obviously, the gradual improvement of the supply-side conditions has finally changed the expected rate of return on capital, and, through arbitrage among real and financial assets, also affected the real rate of interest. The breakdown of the centrally planned economies in Eastern Europe (for Germany the GDR is certainly the

Graph GT21 : Nominal short-term interest rate differentials

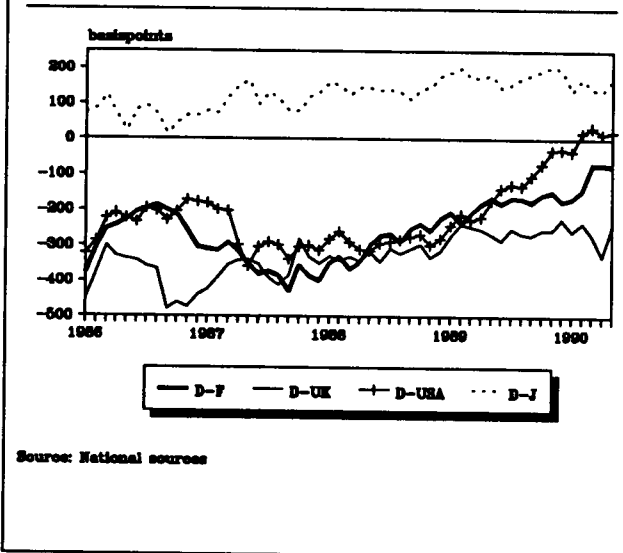


4) Since March 1990, the series are published in the Bundesbank Monthly Reports.

most important of these countries) might have boosted profitability prospects further.

According to this analysis, high long-term interest rates in Europe are now more bearable, with somewhat better-functioning labour markets, lower energy prices, and very strong entrepreneurial confidence, than in the early 1980s, when high rates were caused by an inappropriate policy mix and by the hangover from inflationary policies from the 1970s. The more difficult question is that of whether recent developments in Eastern Europe mean that real rates should appropriately be higher in Germany than elsewhere. In integrated capital markets, such a differential could only exist if there were medium-term expectations of a real depreciation.

Graph GT22 : Nominal long-term interest rate differentials

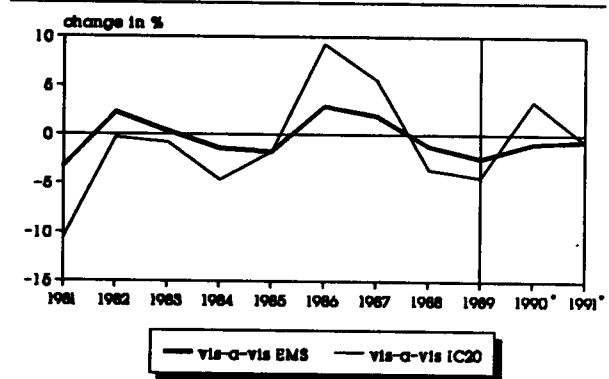


The short-term and long-term interest rate differentials between the Federal Republic and the other ERM countries have gradually narrowed during the past two years but in particular since February 1990. In April, France, Belgium, the Netherlands, and Denmark lowered their key intervention rates in a coordinated move. The move was coherent with market expectations that there will be no realignment in the short run. The same picture applies to long-term differentials. The key differential between French and German long-term rates came down from nearly 400 basis points at the end of 1987 to now less than 100 basis points, while the inflation differentials also narrowed from more than 2 to now less than 1 percentage point.

Exchange-rate movements are one important influence on the Bundesbank's stabilisation policy, notwithstanding the fact, that it enjoyed the privilege of having a relatively high degree of autonomy, due to its leadership role in the EMS. In particular, developments of the DM/\$ rate have been an important factor. Three recent phases in the movement of the DM can be distinguished:

- in 1989, the fall of the real external value of the DM, which deteriorated by some 9% from the beginning of 1987 to autumn last year, was a matter of concern. Imported inflation and overheating due to excessive

Graph GT23: Real effective exchange rates (whole economy)



* Commission Forecast (May 1990)

Source: Commission services

external demand were feared as leading to internal price instability. In Spring/Summer 1989, the Bundesbank made it clear that it would have welcomed a DM appreciation. This known preference had little impact on the markets, which at that time could see no justification for a DM appreciation.

- the increasing convergence of inflation rates within the ERM (narrow band) countries and in particular the weakness of the US-Dollar (the DM appreciated against the US currency by some 11% since the beginning of the year) have, however, relieved the external inflationary pressures. The DM's real external value has regained some ground; it improved by some 6% from September 1989 to January 1990 and made up for 2/3 of the loss during the past three years. More recently, a real-appreciation tendency seems to have emerged.

6.2 Policy Issues

The general policy strategy of the Bundesbank is frequently described in terms of the targeting of an aggregate (currently M3) with a medium-term stability orientation in mind. However, price stability is now most likely also a policy objective for each year. The announcement of an annual growth target has aimed at influencing expectations that monetary policy was geared to medium-term price stability.

In practice, the Bundesbank pursued its target in a pragmatic way. A target range (in 1989 an implicit range "around" 5%) was given, reflecting the fact that the link between monetary targets and final objectives is occasionally blurred. In addition, it tolerated deviations whenever a need (often due to the external constraint) for policy flexibility was felt. The aggregate orientation is likely to run into considerable problems in the period of transition of the centrally planned GDR economy to a properly functioning market economy. After a period

Steering Monetary Policy after 1 July

The German monetary union poses a three stage problem to monetary policy:

- What degree of monetary tightness is required ?
- How is the degree of tightness measured ?
- How is the desired degree of tightness implemented ?

After the 1st July, the Bundesbank's strategy has to take into account the additional uncertainties stemming from the still unknown behaviour of economic agents in the GDR. Mainly three risks emerge in the steering of monetary policy : firstly, GEMSU boosts demand in the wider DM area quicker than capacity can be extended. The degree of inflationary pressure will crucially depend on the saving behaviour of East German residents; i.e. to which extent the increase in their current purchasing power, expected increase in future real incomes and increased availability of borrowing opportunities, leads to an immediate surge in consumption. This shall, for the time being, not be considered. The credit demand of firms is also extremely difficult to predict, at least for the transition period. For the time being, there exists even the need to finance a part of the wage bill. This will continue as long as the production sites are built or rebuilt and the staff is in training. Finally, the likely impact of the reform of the structure of relative prices on the price level is still not foreseeable. One would expect that inter-state price differences for tradeables will vanish rapidly, but the same is not necessarily true for services, and some prices (rents for example) will continue to be administered for some time.

In these circumstances, the question of how to determine the appropriate tightness of monetary policy arises. Guidance by monetary aggregates requires a satisfactory answer to the following two questions. First : does the initial jump in money supply coincide with the need for means of payment or is there an initial monetary overhang, that needs to be drained out over time? Second : which is the appropriate rate of growth of M3 in the unified DM area?

The developments of the aggregates are hardly predictable with precision:

- The official estimate is for a 10% initial increase in M3 after GEMSU, which is currently assessed to be in line with the addition to nominal income. But the calcula-

tions were rather mechanical, assuming a constant velocity and potential. However, nothing definite can be said about future money demand in the GDR and potential in the GDR is actually declining. In addition, West Germans could possibly also change their behaviour in view of perceived risks involved in GEMSU. Hence, velocity in the wider area is not very likely to be equivalent to the current value for the Federal Republic and it may even be unstable during the period of transition to an integrated, market economy in the East.

- The financial situation both of enterprise and of the public sector produces an important credit expansion.
- Prospects for productive potential in the GDR is another source of uncertainty and one does not know at mesert where to locate it.
- The level of the unavoidable inflation rate has also to be decided on.

All these issues add to the usual uncertainties linked to the prediction of monetary aggregates, and would point in the direction of widening the range around any envisaged central path. Monetary aggregates are thus likely to lose weight, at least temporarily, in the assessment of the policy stance in favour of other indicators.

The main indicators that might be considered are:

- Interest rates on money and bond markets and the movements of the yield curve. These might become more important as a guide for monetary policy, despite the fact, that these indicators also have some shortcomings.
- Separate calculations of M3 for the Federal Republic, the GDR and the whole area, with the intention of using the conventional measure for the Federal Republic as an indicator in that region. It is, however, doubtful whether this proposal helps a lot. It is very unlikely that money balances, held in East Germany, are irrelevant for transaction purposes in the Federal Republic. The closer that firms and private households of both areas come together, the less helpful this proposal becomes.

To sum up, monetary aggregates will be less reliable as indicators of the policy stance in Germany, at least for the period of transition. The Bundesbank will possibly upgrade other available indicators, and in view of the increased uncertainty, judgemental factors become more important.

of distortions, aggregate targeting might, however, regain a firmer basis.

In mid-1988, monetary policy returned to the approach of pre-emptive inflation control, prompted by the perceived importance of staying ahead of actual inflationary pressures. The approach is, however, not without problems:

- it is difficult to assess the degree of inflationary pressures,
- financial markets may tend to misread short-term blips in certain indicators and might therefore overreact on expected policy moves, and
- the strategy is difficult to justify ex post: partly if inflation is prevented successfully, it may be difficult

to persuade the public that the danger existed in the first place. Additional problems are posed by GEMSU.

The policy mix in the GEMSU is to be assessed, in its macroeconomic implications, as the policy stance of an economic entity. Monetary policy, through influencing short-term interest rates, should act to ensure that the economic reconstruction in the GDR takes place within a nominal framework that safeguards price stability. Due to the limited tax base in the GDR and resistance against tax rate increases in the Federal Republic, fiscal policy is not very likely to restrain excess demand sufficiently and monetary policy will remain extremely challenged. However, the merits of this Reagan-Volker type of a policy mix are not universally accepted,

- high real yields should attract some capital from abroad, required by the development of the GDR but possibly at the expense of other regions, where some investment projects could be crowded out;
- high real rates may not be acceptable for all countries within the EMS, in particular where higher public indebtedness tends to become unsustainable;
- nominal exchange-rate stability could be negatively affected.

On the other hand, however:

- the movement towards a sustainable balance of payments position in Germany would be reinforced;
- to the extent that real rates in Europe will remain high, capital from non-European surplus countries, in particular Japan, can be attracted;
- there might be some room for the Bundesbank to move separately from its partner countries, without provoking tensions within the EMS, if risk premiums change;
- investment projects, with an insufficient expected profitability compared to current real rates, are only postponed. They may be reconsidered, once the most profitable projects are carried out;
- in the long run, monetary policy has little influence on real interest rates. High real rates tend to increase the supply of funds by intertemporal substitution of consumption, and to restrict the demand by crowding out less profitable investment projects.

All in all, the Bundesbank has been quite successful in its anti-inflation policy. German monetary union, however, represents a new challenge. The success of performance suggests that these challenges will be dealt with successfully.

Part II:

Institutional characteristics of the German economy: some European aspects

Chapter 7

Regulations, subsidies and the need for a forward-looking supply-side policy

Like all other national economies run along market-economy lines, the German economy has a network of government and private regulation that impairs competition and resource allocation. Such forms of regulation thus hamper growth and employment. For this reason, but also because the dynamic German-German developments might necessitate a rethink of the entire system of regulation, subsidization and tax rules, this chapter takes a critical look at government intervention, focusing in turn on the sectors of the economy that might lend themselves to deregulation and reform.

7.1 Economic justification for government intervention in the market process

In theory, the allocation tasks should be performed by the market in such a way that:

- the relevant factor and product markets are cleared (market clearing);
- yields are normalized and hence capacities tailored to requirements (yield normalization);
- the power of suppliers and that of customers are equalized (erosion of excessive power);
- an increase in efficiency is achieved through advances in processes and products.

The market will, therefore, have failed where the desired market developments referred to above do not take place spontaneously.

Competition theory demonstrates that a certain group of institutions, a competitive order, is necessary in order to preserve and foster competitive control mechanisms in the economy and, in particular, to avert the danger that these mechanisms will disintegrate of their own accord. For, in specific market situations, and in particular slowly expanding and largely satiated markets or markets where some participants are stronger than others, there is the risk of agreements and restrictive practices that act in restraint of competition to the detriment of third parties. Normally, however, the upshot of such practices is suboptimal allocative performances. This is true not only of commodity and service markets but also of factor markets such as the labour market. Since they constitute rigidities and obstacles to growth and employment that

are induced by the market process, such insider restrictive practices are to be seen as a form of "market failure".

Starting from the observation that, in matters of allocation, the decentralized market-economy decision-making process is generally superior to the central, bureaucratic process, special economic justification is needed for government intervention in the market-economy control process. In accordance with the market principle of subsidiarity, two conditions must be met: (i) the market process must have produced highly unsatisfactory results (market failure), and (ii) government intervention must be of such high quality that its results are far better than those produced by the market process.

Essentially, four situations can be derived from the theory of market failure and collective goods in which government intervention in respect of specific goods or situations might be justified outside the framework of the competitive order prescribed by the government:

- public goods, i.e. goods such as infrastructures where consumers who are unwilling to pay cannot be excluded from consuming the product or service in question through economic mechanisms ("free-rider" or "exclusion problem") and where additional consumers generate hardly any additional costs and should not, therefore, be excluded from consumption either;
- goods having externalities, i.e. goods which, because property rights are insufficient or lacking give rise to social costs (or, in the case of beneficial externalities, benefits) which are not taken into account in the market-based pricing mechanism; this category includes, for example, goods harmful to the environment such as power stations, chemical plants and cars;
- merit goods, i.e. goods in respect of which the customer does not possess sufficient information or, because future risks are underestimated, makes only inadequate provision in the present; education, protection at work, and pension and sickness insurance are some of the goods falling into this category;
- production processes with declining average costs as regards the entire demand on the relevant market (natural monopoly), such as the distribution of electricity or gas.

The stated aim of government regulation and intervention in the market process is to rectify such market shortcomings and the adverse effects these have on allocation, distribution and stabilization. However, those advocating such intervention frequently overlook the fact that government intervention may itself often lead

initially to complete destabilization or market sclerosis. The reason for this is the "government failure" referred to in the specialized literature and arising from shortcomings in the political and bureaucratic decision-making process. The "common agricultural policy" of the European Communities, which was set in place at European level by the national Ministers for Agriculture in the 1960s, is one example of completely misguided market intervention by government. And so, in view of the problems associated with "government failure", such malfunctions of the market process should be allowed to justify government intervention only where its effectiveness in remedying a material defect is guaranteed.

7.2 Government intervention on markets in goods and services

Government regulation, whether in the form of controls over market access, quantitative controls, price controls, official orders or prohibitions, is found in numerous sectors of the Federal German economy (see figures GT24 and GT26). However, if we look at the economic justification for the individual forms of regulation, doubt rapidly surfaces as to whether they are genuinely in response to a market failure within the meaning given above. If we then look at their design, further doubt arises as to their effectiveness, with the result that, when all is said and done, potential market failure is often simply replaced by actual failure on the part of the government.

7.2.1 Intervention on specific commodity markets

Macroeconomically significant regulation by government of commodity markets is to be found in the Federal Republic, especially in (i) agriculture and forestry, (ii) the power-generating industry and (iii) the coal and steel industry. Typically, these are also sectors that receive substantial public subsidies. They account for well over one quarter of all financial assistance and tax reliefs granted by government to specific sectors. Other forms of regulation such as barriers to market entry or price controls, which are thought less effective from a macroeconomic viewpoint, exist for a multitude of other products.

Agriculture and forestry

There is little, if any evidence of market failure in this sector. It can be assumed that market participants respond to price signals in a functional manner, i.e. when prices rise, demand falls and supply increases. It can also be assumed that, in principle, the price signals function correctly, i.e. where a product is in short supply, its price will rise if demand remains unchanged. Nor are there any discernible signs of exclusion problems to do with inadequate and unenforceable property rights. Given the intervening globalization of agricultural markets and the large number of competing products attempting to find favour with consumers, there is also a negligible risk of supply bottlenecks where consumers are concerned. There is no evidence either of distorted preferences providing justification for merit-induced intervention in

specific sectors designed to influence producer or consumer behaviour. Beneficial externalities of agricultural production are insignificant or could be internalized through appropriate compensatory payments. By and large, therefore, there is no need, from an allocation angle, for government intervention to assist agriculture. Even so, given the extremely high degree of factor immobility and the extensive irreversibility of the capital stock in this sector, adjustment subsidies granted for a limited period and on a declining scale might be justified on distributive grounds as a means of encouraging restructuring at times of persistent overcapacity and an associated decline in incomes.

In the light of this analysis, the multitude and diversity of market intervention by government in the form of marketing guarantees, price guarantees, import restrictions and other regulatory measures are surprising. Although responsibility for them has been delegated to the Community, they are, after all, national in origin. In the Federal Republic, measures to protect agriculture date back to the 1870s. The basis for much of the present intervention at national level is the 1955 Farming Law. This Law, the 1950 and 1951 Market-regulating Laws and the 1951 Customs Tariff were crucial in paving the way for the special position which agriculture occupies in the social market economy. Over the years, they have given rise to an array of concessions, especially in the tax field, and have provided the justification for direct transfers from the budget. In the Federal Republic at the moment, there is, alongside a panoply of EC intervention measures, a wide variety of national and regional intervention measures to assist agriculture. At the same time, a division of labour has, to some extent, taken place. Whereas the EC is primarily responsible for controlling access to the market and for quantitative and price controls, national intervention extends to a hotch-potch of additional financial aids and tax concessions. Thus, the Federal Government's Twelfth Report on Subsidies lists thirty-three national financial aids and sixteen tax concessions that are available for agriculture. Many of the new measures are designed to offset the effects on farmers in the Federal Republic of the cautious deregulation and dismantling of subsidies at EC level.

Economists and politicians alike have long been in agreement that government intervention in agriculture should be substantially pruned and reformed. Although it is difficult to determine the effects of regulation and intervention on agricultural markets since a comparison with unregulated agricultural markets does not seem possible, the following can be said about the impact of agricultural policy:

Without a policy on agricultural markets, structural adjustment in agriculture, would certainly have proceeded at a much faster pace, the reduction in employment would have taken place sooner and in a more favourable macroeconomic environment, producer prices would have aligned themselves on world market levels, and consumer prices for agricultural products would have been correspondingly lower.

Figure GT24: Major barriers to market entry on commodity markets (Situation at 31 December 1985)

| | Permit requirement | Personal qualifications | Product quality | License requirement | Expert supervision 1) | Restriction on establishments 2) | Export quotas | Product quotas | Regional monopoly | National monopoly | | |
|--|--------------------|-------------------------|-----------------|---------------------|-----------------------|----------------------------------|---------------|----------------|-------------------|-------------------|--|--|
| I. GOODS | | | | | | | | | | | | |
| Agriculture | | | | | | | | | | | | |
| Cereals, sugar, milk products, etc. | x | | | | | | | | | | Guaranteed outlets; reduction of surpluses | Act implementing the common organization of markets |
| Other production subject to market regulation | | | x | | | | | | | | Protection of sales & income | |
| Other agricultural products | | | x | | | | | | | | Quality & sales promotion, monitoring of markets | §1 Quality Categories Act |
| Forestry, fisheries, animal husbandry | | | | | | | | | | | | |
| Sea fisheries | | | | | | | | | x | | Protection of species | §2 Sea Fisheries Act |
| Other livestock breeding | x | x | | | | | | | | | Maintenance of quality; profitability | §6 Commercial Code; Livestock Breeding Act |
| Electricity generation & distribution | | | | | | | | | | | | |
| Gas extraction & distribution | x | | | x | | | | | x | | Prevention of water pollution; economic use | §1 Energy Industry Act |
| Water supply | x | | | x | | | | | x | | Prevention of water pollution; economic use | §2 & 21 Water Resources Act; Water Supply Act |
| Mining | | | | | | | | | | | | |
| | | | | x | | | | x | | | Public interest, economic use | §6 Federal Mining Act |
| Chemicals | | | | | | | | | | | | |
| Reactor fuels | | x | x | x | | | | | | | | §3 & 19 Atomic Energy Act |
| Explosives | x | x | | x | | | | | | | | §7 & 9 Explosives Act |
| Fertilizers | x | x | | | | | | | | | | §2 Fertilizers Act |
| Pesticides | x | x | | | | | | | | | Public health measures for animals & humans | §1 & 8 Agricultural Chemicals Act |
| Medicines | | | | x | | | | | | | Public health measures; monitoring of mkt | §21 Medicines Act; Operating Regulations for Pharmaceuticals Companies |
| Earths & stone quarrying | | | | | | | | | | | | |
| | x | | | | | | | | | | Public interest, economic use | §6 Federal Mining Act |
| Iron & steel industry | | | | | | | | | | | | |
| | | | | | | | | | x | | Adjustment of capacities | Commission Decision pursuant to Art. 58 ECSC |
| Metal goods | | | | | | | | | | | | |
| Arms | x | x | | x | | | | | | | Less danger of hostilities | §7 Foreign Trade Act; 7 & 8 Arms Act |
| Textiles & clothing industry | | | | | | | | | | | | |
| | | | | | | | | x | | | Adjustment of capacities | Bilateral agreements in the framework of World Textile Agreements |
| Food industry | | | | | | | | | | | | |
| Ground products | | | | | | | | | x | | Adjustment of capacities | §1 Flour-milling (Structure) Act; |
| Other products | | | | x | | | | | | | Public health measures; monitoring of mkt | Sundry food-law provisions |
| Drink manufacturing | | | | | | | | | | | | |
| Spirits | | | | | x | x | | | | | Health protection | §30 Spirits Monopoly Act |
| Other | | | | x | | | | | | | Health protection | Sundry food-law provisions |
| Tobacco products | | | | | | | | | | | | |
| | | | | x | | | | | | | Health protection | Tobacco Order |
| Construction | | | | | | | | | | | | |
| | x | x | | | | | | | | | | §35 Commercial Code |

Compiled on the basis of German Federal Law, loose-leaf edition, Baden-Baden (n.d.)

(1) By government institutions or trade associations (e.g. Federal Public Prosecutor's Office).

Source: RWI, Strukturberichterstattung 1987, Vol. 3.

Between 1970 and 1987, 950 000 jobs were lost in agriculture and forestry, a decline of 42%. Other industries including textiles and clothing, leather and leather goods, and building also had to contend with similarly exacting adjustment constraints. Over the same period, they witnessed the loss of some 1.3 million jobs, a decline of 45%, but were unable to "benefit" from the same intensity and diversity of market intervention. Nevertheless, they chiefly comprise healthy, competitive firms and the structural adjustment process appears to have been successfully completed, whereas agriculture is more dependent than ever on the drip-feed of subsidies.

The attempt to achieve distributive goals through specific allocative market intervention has resulted in pronounced losses in efficiency and hence in an unnecessary misallocation of budget resources. This comes to light in a common survey conducted by the West German research institut taking part in the structural-reporting exercise (see table GT27). It transpires that, in 1985, subsidies paid out of all public budgets (including the EC budget) to assist agriculture and forestry totalled DM 21 billion, equivalent to well over 1% of GDP or 65% of the sector's gross value added. This works out at just under DM 1 300 a month for each person employed in the sector. According to this survey, however, only a good one third of these resources, i.e. DM 8.3 billion (DM 500 a month per person employed), went to farmers themselves. A large share of these resources benefited other industries, such as the food, drink and tobacco industry and the wholesale trade, or was accounted for by storage and denaturing costs.

Initial, successful attempts to dismantle the inefficient and perverse arrangements for intervening in the market allocation process have been made only at Community level, with little support coming from the Federal Republic. However, the reform measures taken fall way short of what is needed. Further attempts at reform should be guided by the following considerations:

- agricultural markets are, in theory, indistinguishable from other functioning commodity markets and do not, therefore, need any specific forms of intervention that interfere with the allocation process;
- a policy of income stabilization should focus on incomes and income levels and not on the sector in question or on other aggregates that do not correlate to actual income.

For all the national financial aids and tax concessions identified in the Federal Government's Twelfth Report on Subsidies, and there were nearly fifty of them, a deadline should be set for their abolition and it should be ascertained whether they are economically justified.

A thorough reform of agricultural policy, e.g. restricting it to income-dependent income support and dispensing with measures having a bearing on price formation and with import and production restrictions, could lead both to a reduction in consumer prices and to a lightening of the tax burden. At the same time, the factors of production would be channelled into more efficient uses, and this would favourably influence growth, employment and the economy's absorptive capacity.

Mining and steel production

The framework for regulation and market intervention in the coal and steel industries is set by the Treaty establishing the European Coal and Steel Community (ECSC Treaty). The Law prohibiting restraints of competition (GWB), together with its ban on restrictive practices and price agreements, does not apply in so far as the ECSC Treaty contains special provisions (Section 101 GWB). Whereas Member States made over to the EC comprehensive powers relating to the steel industry, the national authorities may themselves intervene in the coalmining industry subject to approval from the EC Commission.

Since the first marketing crisis in the German coalmining industry in 1957, an extensive range of national measures to assist the marketing of German coal has been introduced. Alongside stringent import restrictions on coal from non-EC countries, it includes in particular subsidies and price discrimination against competing sources of energy through the introduction of specific excise duties on heating oil (1960) and natural gas (1989).

In 1964, the then High Authority, contrary to the provisions of the ECSC Treaty, authorized the Federal Government to grant subsidies to coalmining. The subsidies are designed in particular to boost the use of German coal in the production of electricity, to encourage the steel industry to use more coking coal, to rationalize coal production and to adapt capacities to marketing potential. Currently, over 80% of total coal sales in the Federal Republic is accounted for by power stations and by the steel industry. Since the mid-1960s, a number of so-called electricity-from-coal laws ("Verstromungsgesetze") have been enacted to encourage the construction and operation of coal-fired power stations and, since 1977, the power-generating industry has committed itself to purchasing a fixed quantity of German coal ("Jahrhundertvertrag"). Under this agreement, power-station operators have been promised subsidies financed out of the "Kohlepfennig"⁵ to offset the extra costs involved. The agreement runs until 1995.

5) The "Kohlepfennig" is a levy (in percentage terms) charged on the amount invoiced to all customers of the electricity industry. The proceeds are used to finance the extra costs of using German coal in power stations. In 1990, the levy was equal to 8.5% of the price of electricity and yielded more than DM 5 billion.

Under the agreement concluded back in 1960 between the German coalmining industry and the steel industry ("Hüttenvertrag"), the latter undertakes to purchase fixed amounts of German coking coal. For it to appear as though the steel industry were obtaining supplies of coking coal on the world market, the coal mines receive subsidies from the Federal and the Länder budgets enabling them to align their selling prices to the steel industry on the lower world market price. This agreement runs until the year 2000.

It is difficult to find any economic justification for the intervention policy in support of the German coal industry, which has now been in operation for thirty years. Traditional market-failure criteria (public goods, externalities, merit goods, natural monopoly) do not apply even though they are cited as justification. The argument that the security of energy supplies should be guaranteed from domestic supplies by means of government intervention simply goes to show that German coal is a merit good like inoculations or elementary schooling. According to that argument, no proper assessment has been made of the utility of German coal because of distorted preferences on the part of the market participants, and in particular the power-generating industry. However, in view of the globalization and interlinking of markets, it is doubtful whether the preferences of potential consumers are actually distorted. What is more, the price to be paid for ensuring security of energy supplies from domestic coal appears excessive. Taking the average for the 1980s, domestic coal has cost almost 70% more than imported coal.

Nor is the second argument deployed by policymakers as justification for intervention in the coalmining industry convincing. According to this argument, the importance in terms of regional policy of coal mining for coalmining districts stands in the way of too rapid a reduction in capacity. But in no way has there been too rapid a reduction in capacity, as the trimming of capacity has now been going on for more than thirty years and no end is in sight under the current policy of intervention. Over the last thirty years, capacity has only been halved.

At the very most, measures to underpin and accompany a rapid capacity-dismantling process that were to be phased out by a particular date would be justified. Such measures would, at any rate, ensure that, in spite of poor competitiveness and overcapacity, extra productive capacity would not be created by exploiting new coal deposits as part of the shift of mining northwards, since this would perpetuate the existing forms of intervention. At the moment, the Federal Government and the Länder each year grant subsidies worth some DM 10 billion, equivalent to 0.5% of GDP, 150% of gross value added in coal mining and DM 4 400 a month per person employed in the industry.

In the case of the steel industry, the EC Commission makes extensive use of the opportunities for intervention at Community level provided for in the ECSC Treaty. These include import quotas ("reference quantities"), production quotas, compulsory restrictive practices and the like. The combination of production quotas, sub-

sidies and external protection means that excess capacities are not dismantled as a matter of priority in those areas where production is unprofitable, and firms that are particularly efficient have little, if any scope for expanding their market shares since it is the loss-making firms that receive subsidies. In 1985, subsidies were equivalent to 0.1% of GDP, 4% of gross value added in the industry and DM 870 a month per person employed in the industry. At the turn of the decade, subsidization for this sector phased out, thanks to an unexpected worldwide boost of demand.

Power-generating industry

Although, compared with agricultural markets, government regulation of the power-generating industry is a much more recent development, the role of the government in this industry is significantly more far-reaching. The government not only restricts market access and fixes prices and other conditions but it is also a major producer in its own right. In the electricity industry, partly as a result of the protection afforded by long-term guarantees for regional monopoly positions, production processes in which fixed costs loom large have been introduced. Concentration on a small number of large generating plants has direct effects on the structure of the distribution network, which itself is ultimately determined by the predominance of fixed costs. Ancillary conditions in the form of minimum technical size or realizable size-related advantages (economies of scale) and interlinkage-related advantages (economies of scope) have, in fact, given rise to the problem of natural monopoly and the associated problem of price setting and competition in much of the industry, and especially in power distribution. In addition, there are major potential negative externalities in power generation. All these factors focus attention on what the role of government intervention should be in both power generation and power distribution.

At the turn of the century, the municipalities in Germany had, under the banner of "municipal socialism", begun to involve themselves increasingly in the operation of what had, until then, been privately owned power-generating companies. Today, more than two thirds of all such companies are still run by public authorities. The key provisions governing regulation of the power-generating industry are:

- the 1935 Law to promote the power-generating industry (EnWiG);
- the legislation on energy prices, together with the Federal schedule of electricity and gas prices (BTO);
- the General Supply Conditions (AVB) for electricity, gas and district heating;
- the Law prohibiting restraints of competition (GWB);
- the regulation on large combustion plants.

These provisions constitute the legal basis for the barriers to market entry in the power-generating industry, price regulation, investment controls and various requirements to which producers are subject as regards supplies to consumers and environmental protection.

Pursuant to Section 4 of the Law to promote the power-generating industry, the construction, renovation, extension and closure of power-generating plants are subject to a notification requirement and may be prohibited "on grounds of the common good". As a result, once established on the market, electricity producers are, in practice, shielded from any new competitors. What is more, Sections 103 and 103a of the Law prohibiting restraints of competition exempt the power industry from the ban on restrictive practices, clearing the way for the licensing, demarcation and interconnected-supply contracts that are so prevalent in the industry. These long-term contracts between power companies and the public authorities or between power companies themselves provide permanent protection for established producers (since 1979 only for another twenty years or so) against potential competitors on their supply territories (territorial monopoly).

The price which the - mostly municipal - monopolists who are protected in this way have to pay is that they are subject to the supervisory arrangements for preventing abuse of their positions and to specific supervision in respect of energy matters by the competent Land Economics Minister, that they must seek approval for their prices and that they are obliged to enter into contracts, i.e. power companies must supply all customers as long as this does not expose them to any unfair hardship.

The main problem facing any plans to deregulate the power-generating industry is the difficulty in ascertaining the consequences this might have, since present production structures are based on the existing regulatory arrangements and on the protection these afford. Deregulation should be guided by the following:

- power generation and power distribution are two distinct activities which, where possible, should be managed by separate bodies, thereby sharpening competition, e.g. by way of transmission rights;
- power generation is not an inherently public-sector task since property rights are economically enforceable vis-à-vis consumers - an exclusion problem does not arise; even in a competitively organized market it can be assumed that, in practice, price-setting and investment behaviour will be functional;
- existing large-scale production structures, which carry the risk of market monopolization, have received assistance only since the present regulatory arrangements for this sector came into effect;
- arguments emphasizing the peculiar characteristics of energy as a good - e.g. "capital intensity", "non-storability", "transmission-dependence and network-dependence" and "peak-demand problems" - are also characteristic of other sectors of the economy not subject to such intensive regulation.

Other manufacturing industries

In the other manufacturing industries, there is no branch that does not in some way receive subsidies. Table GT27 shows that specific tax reliefs and subsidies for this sector amounted to over DM 15 billion in 1985. In absolute terms, they went chiefly to mechanical engineering (DM 2.6 billion), electrical engineering (DM 2.1 billion), the food, drink and tobacco industry (DM 1.5 billion), the chemical industry (DM 1.2 billion) and the motor vehicle industry (DM 1.1 billion). As a proportion of gross value added in the branch concerned, shipbuilding (25% of gross value added or DM 940 a month per person employed) and the aircraft and aerospace industry (12% or DM 880 a month per person employed) benefited most from the Government's policy on subsidies.

Government regulation in the form of barriers to market entry, import quotas or price regulations is not widespread in manufacturing, apart from a few macroeconomically insignificant restrictions. The textile and clothing industry is, however, an exception since, when the first vigorous steps were taken to liberalize foreign trade in industry in the 1950s, numerous import restrictions were kept in place here. For example, the EC has concluded almost thirty "voluntary restraint agreements" designed to curb imports while the trade in textiles worldwide is hampered by the Multi-fibre Arrangement. And yet, not least because of the continuing pressure of supply from other countries, the German textile and clothing industry has shrunk drastically, with over half of the workforce losing their jobs since 1970.

7.2.2 Specific sectoral intervention on markets in services

There is scarcely a service which is not affected in the Federal Republic in some form or other by government regulation relating to the branch in question (see figures GT25 and GT26). This is primarily intervention designed to protect suppliers established in the market from additional competition and to help them achieve adequate income levels.

Retail trade

The retail trade plays a prominent role in all economic systems because it shows citizens directly whether or not they are living in a properly functioning economic system.

In the Federal Republic there are three forms of regulation relating to the retail trade:

- Market access was restricted by the inclusion, in 1968, of a third paragraph in Article 11 of the Regulation on the use of land for building purposes. This requires a municipality to designate special areas for the siting of shopping centres and supermarkets, which are to be located outside central areas. The location of large business concerns within central areas is scarcely

Figure GT25: Major barriers to market entry on markets in services (Situation at 31 December 1985)

| 2. SERVICES | Permit requirement | Personal qualification | Product quality | Licensing requirements | Expert supervision 1) | Restriction on establishment 2) | Import quotas | Prohibit quotas | Regional monopoly | National monopoly | | |
|---|--------------------|------------------------|-----------------|------------------------|-----------------------|---------------------------------|---------------|-----------------|-------------------|-------------------|---|---|
| Wholesaling | | | | | | | | | | | | |
| Import of live animals | | | | | | | x | | | | Control of epidemics | Import Ban Order |
| Retailing | | | | | | | | | | | | |
| Pharmacists | x | x | x | | | | | | | | Safety of medicines | §1f. Federal Pharmacists Order Pharmacy Act; Retailing Act |
| Food, etc. | x | x | | | | | | ca | | | | |
| Railways | | | | | x | x | | | | | Deutsche Bundesbahn pre-eminent | §4 (2) General Railways Act |
| Shipping | | | | | | | | | | | | |
| Cabotage | x | x | | | | | o | | | | Legal protection of flags; Intern'al law | §2 Cabotage Act §6 Commercial Code |
| Other | x | x | | | | | | | | | | |
| Other transport (comm.) | | | | | | | | | | | | |
| Regular passenger service | | x | x | | | | | | | | Uniform trpt. coverage territorially | §§2 & 8 Passenger Trpt. Act; Community |
| Taxis | | x | x | x | | | | | | | Public trpt. interests, costs, demand | §§2 & 13(4) Passenger Trpt. Act |
| Long-distance road haulage | | x | x | | | | | | | | Need for public trpt.; trpt. safety | §§ 8(1) & 10 Road Haulage Act |
| Local carriage goods (general) | x | x | | | | | | | | | Safeguarding regulation of long-dist. trpt | §80 Road Haulage Act |
| Local carriage goods (regular) | x | x | | | | | | | | | Need for public trp | §90f. Road Haulage Act |
| Clearance & forwarding | | x | | | | | | | | | Safeguarding regulation of road haulage | §34 Road Haulage Act |
| Air transport, general | | | x | | x | xb | | | | | Public safety | §20ff. Air Transport Act |
| Air transport, regular | | | x | | x | xb | | | | | Public safety | §21ff. Air Transport Act |
| Communications | | | | | | | | | x | | State communications monopoly | §2 Posts Act; § 1 Telecommunications Act |
| Credit institutions | x | x | | x | | | o | | | | Protection of deposits | §§10 & 32 Banking Act; various special Acts |
| Insurance companies | x | x | | x | | | o | | | | Protection of liquidity | §§2 & 5 Insurance Supervision Act |
| Restaurants | x | x | x | | | | | | | | Public safety & order; prevention of harassment | §2 Restaurants Act |
| Culture, Science & Entertainment | | | | | | | | | | | | |
| Priv. Educ. & Trng. Establishments | x | | | | | | | | | | Quality protection | §6 Commercial Code |
| Radio & television | | | x | x | | | | | | | Transport safety (best poss. instruction) | §2 Telecommunications Installations Act |
| Driving instructors | x | x | | | | | | | | | Consumer protection; monitoring of markets | §1 Driving Instructors Act |
| Betting & lottery establishments | x | x | | | | | | | | | Consumer protection; monitoring of markets | §1 Betting & Lottery Act |
| Bookmakers | x | x | | | | | | | | | Consumer protection; monitoring of markets | §2 Betting & Lottery Act |
| Casinos, gaming machine operators | x | x | | | | | | | | | Consumer protection; monitoring of markets | §33h Commercial Code |
| Private show companies | x | x | | | | | | | | | Consumer protection; monitoring of markets | §33 Commercial Code; Gambling Machines Order |
| Public Health | | | | | | | | | o | | | |
| Doctors | x | x | x | | | | | | | | Public health measures; monitoring of mkts | §2 Federal Order concerning Doctors |
| Dentists | x | x | x | | | | | | | | Public health measures; monitoring of mkts | §1 Dental Practice Act |
| Veterinary surgeons | x | x | x | | | | | | | | Public health measures; monitoring of mkts | Federal Order concerning Veterinary Doctors |
| Non-medical practitioners | x | | | | | | | | | | Public health measures; monitoring of mkts | §1 Non-medical Practitioners Act |
| Midwives, nurses | x | x | | | | | | | | | Public health measures; monitoring of mkts | §1 Midwives Act, etc. |
| Private nursing homes | x | | x | x | | | | | | | Public health measures; monitoring of mkts | §6 Commercial Code |
| Other services | | | | | | | | | o | | | |
| Estate agents, builders & building managers | x | | | | | | | | | | Liquidity protection; monitoring of market | §34c Commercial Code; §1 Estate Agents & Builders Order |
| Tax advisers | x | | x | x | | | | | | | Protect. of legal rights; monitoring of mkt | §§32ff. & 73ff. Taxation Consultancy Act |
| Accountants | x | | x | x | | | | | | | Protect. of legal rights; monitoring of mkt | §§1, 16, 67f Accountancy Order |
| Lawyers | x | | x | x | | | | | | | Protect. of legal rights; monitoring of mkt | §§4ff & 60f Federal Order concerning Lawyers |
| Notaries | x | | x | x | | | | | x | | Protect. of legal rights; monitoring of mkt | §§1 & 4 Federal Order concerning Notaries |
| Surveyors | x | | x | | | | | | | | Quality protection; monitoring of market | §36 Commercial Code Act |
| Sweeps | | | x | | | | | | | x | Fire protection | §2 Chimney Sweeps Act |
| Pawnbrokers | x | | | | | | | | | | Protection of the economically weak | §34f Commercial Code; §1 Pawnbrokers Order |
| Outplacement consultants | x | x | | | | | | | | | Employer protection | §1f Outplacement Act |
| Craft industry | x | x | | | | | | | | | Quality protection; monitoring of market | §§1 & 7 Craft Industry Order |

Compiled on the basis of German Federal Law, loose-leaf edition, Baden-Baden (n.d.).
 (1) By government institutions or trade associations (e.g. Federal Public Prosecutor's Office).
 (2) For non-residents.
 (3) Restriction of services transactions by non-residents recorded for information by point (o)
 Source: RWI, Strukturberichterstattung 1987, Vol.3.

possible now under Article 11(3) of that Regulation. As a result of these restrictions on market access, competition and thus efficiency in the retail trade are reduced and, at the same time, insiders are unjustifiably protected.

- Price competition is restricted through the 1932 Gifts Order, the 1933 Rebates Law and the 1935 Decree on special events. Under these laws, it is prohibited (1) to offer, alongside a principal item (or service), a further item or service without a specific charge being made for it, (2) to grant a rebate of more than 3% of the selling price and (3) to organize a special event without sound reason for doing so. Besides protecting small and medium-sized firms from financially powerful competitors and preventing cut throat competition, these rules are also designed to protect consumers. It is clear that those responsible for the legislation were - and still are - convinced that the final consumer - unlike the business customer - cannot provide himself with sufficient information, is more easily influenced and misled by advertising and cannot ascertain the ultimate price/product relationship. However, just as much doubt must be cast on this attitude as on the assumption that the retail trade - unlike, for example, the wholesale trade - is characterized by special market-failure conditions which require specific branch regulation by government.
- Shop-opening hours are regulated by the 1956 Law on the closing time of shops, as last amended in 1989. Since 1956, the maximum opening hours permitted by law has been 64.5 hours a week (68.5 hours where Saturday is a full working day). Social policy reasons (protection of employees) were given first of all to justify the highly rigid regulation of shop-opening hours; competition and consumer policy aspects too were then cited later on. There is no economic justification for the Law regulating shop-closing times. On the contrary, it inhibits flexibility and thus the capacity, particularly of smaller retail establishments, to compete.

The regulation affecting the retail trade can by no means be justified by a pattern or combination of market-failure circumstances peculiar to this branch of the economy. This interference in firms' marketing-policy mix of conditions (price-setting, range of goods, location and presence) must instead be seen as the result of sectional interests and insider-protection motives underlying legislation and thus as a form of "government failure". Attempts at deregulation should accordingly be governed by the need to ensure that the framework established by the general system for regulating competition is also adequate for the retail trade.

Communications sector

Until recently the communications sector in the Federal Republic was characterized by a national monopoly of the Federal Postal Administration over both the operation of the network and the equipment market. The Federal Postal Administration was the only network

operator, and equipment had to be authorized by the Administration and - on the telecommunications market - was offered for sale or rent only by the Administration. Since the 1989 postal reform, which led to a three-way division of the Federal Postal Administration, the national monopoly has been restricted to the operation of the telecommunications network and to the telephone service. In the postal field in the real sense (i.e. the letter, parcel, postal newspaper, post office bank and post office savings bank services), the monopoly is limited to the letter service (Article 2 of the Law on postal matters).

There is no longer any economic justification for regulation in the communications sector. Public production or provision cannot be justified, since the services provided by the Federal Postal Administration are not those with exclusion problems. The widest possible privatization of the postal services would therefore be quite justified and could even be required according to the free market subsidiarity principle. In the case of the letter service, for example, regional letter delivery licences, valid for a given period, could be put out to tender; licensees would have to undertake to effect letter deliveries to all customers (contractual obligation). There is also no evidence of appreciable externalities which might trigger government intervention. A national network monopoly that might previously still have been justified on grounds of falling average costs in the relevant field of demand (natural monopoly) is also increasingly being deprived of its justification through continuing technical progress (e.g. satellite technology). Although the 1989 postal administration structural reform represents some degree of progress compared with the past (particularly on the equipment market, where new prospects are being opened up by competition), it must therefore be considered to be insufficient.

Transport markets

Like the communications markets, transport markets are key markets in national economies based on division of labour. It is therefore all the more regrettable that these markets are characterized by closely meshed anti-competitive controls and high subsidies. Apart from occasional transport by coach, all subsections of the transport market in the Federal Republic are affected by market entry restrictions and price controls.

These market-entry and price controls were originally introduced in Germany to protect the nationalized railways against emerging competition from freight and passenger transport by road. But what is important here too - just as, perhaps, in the case of the retail trade - is not only that the original intention badly miscarried but also that the consolidation of the controls has protected old-established suppliers ("grandfathers' rights") at the expense of potential competitors. Overall, therefore, the controls have contributed to inefficient transport market structures which should be corrected as soon as possible.

The regulation encountered today on transport markets differs only negligibly from that of the 1930s:

- On the railways the State-run German Federal Railways has a secure legal monopoly over its railway system.
- Road haulage is - for whatever reason - divided up into local, regional and long-distance transport. In the case of local transport, there are no market-entry restrictions, although authorization has to be sought for prices charged. In the case of regional and long-distance transport, market-entry restrictions (concessions) exist and authorization has also to be sought for prices charged. Unregulated works transport is a special case which is characterized by the fact that no return loads may be carried for third parties.
- In the case of passenger transport by road, licences must be sought for buses operating over specific routes and for taxis (concessions), and prices are controlled by the government.
- Air transport is regulated very strictly, with the result that domestic air transport is reserved almost exclusively for the State-owned Lufthansa.

The high level of government regulation and public production on transport markets cannot be justified on the basis of economic theory.

- A separation of the operators of the route network and the transport services should - as in the case of all other carriers - be carried out on the railways. A State takeover of the railway network and its infrastructure (including the associated liabilities) would at the same time open the way to the privatization of the Federal Railways.
- As there is no exclusion problem in the case of transport services (passenger and goods transport) - those benefiting can readily be identified and asked to pay a contribution - the provision of such services is not a fundamentally public task. Consequently, there can also be no justification for public production; the privatization of what are currently publicly owned suppliers of services (Federal Railways, Lufthansa, public passenger transport) should therefore be examined immediately. The costs of meeting any existing public need (e.g. area service) could then be covered by tax-financed compensatory payments.
- Externalities associated with transport markets (e.g. environmental pollution) cannot - and indeed should not - be internalized by the existing controls.
- While the argument of falling average costs in the area of relevant demand (natural monopoly) may perhaps be valid for the physical route systems of the various carriers, it cannot be valid for the transport services to be supplied. Otherwise the fierce competition between the various suppliers, the organization of forwarding business based on small and medium-sized firms and the advent of individual transport would not be justified.
- The spectre of cut-throat competition, i.e. excessive competition on transport markets, must be consigned to the realm of fables. Unfortunately it has become one

of the major arguments for defending existing market-entry barriers (concessions). And yet neither is there on transport markets - compared with other, also capital-intensive branches - a combination of low market-entry costs, high market-exit costs and price inelasticity of demand, nor are the restriction of market entry and the granting of "grandfathers' rights" the appropriate means of making a market "contestable". It can be assumed that the market participants react functionally to price signals, that price signals are generally correctly set and that disfunctional investment behaviour can be excluded. The sharp changes observable in the past in the shares of individual carriers on the railways, in shipping, in the forwarding sector and in works transport are evidence of the truth of this thesis.

Deregulation measures on all the different transport markets should not be deferred. Prevailing government market-entry restrictions and price and capacity controls are the result of government failure: old-established suppliers and their "regulation returns" are being protected at the expense of potential competitors and consumers. Deregulation efforts should be prompted by the fact that these markets - despite frequently repeated assertions to the contrary - are not characterized by market failure and the transport markets generally could therefore manage in an ideal case completely without market-entry restrictions and government price and capacity controls.

In addition to the unjustified regulation, the transport sector is also highly subsidized. In 1985, subsidies to the railways alone amounted to more than DM 13 billion; other transport branches, in particular public passenger transport, were also subsidized to the tune of almost DM 6 billion. The transport sector thus received just as many subsidies as the agricultural sector (see above) or the housing sector (see below). They amounted in 1985 to 1% of GDP, to 30% of gross value added and to DM 1 700 per month per employee.

Financial services

In the Federal Republic of Germany, the characteristic feature of the financial services is the dominant role of the banking system. The external funding of enterprises mainly consists of loans from the banks. The banks have strong relationships with enterprises and exercise real control over capital within the productive system. This is mirrored by the limited role of the market: market capitalization is low and hostile takeover bids unknown. The sector as a whole is not subject to a high degree of regulation. Some activities may even seem under-regulated by comparison with international standards, in particular if Frankfurt's ambitions as a financial centre were to be realized.

The banks, typified by the "universal banks", play the leading role in providing finance.

In 1989, bank loans accounted for 54% of the debts of enterprises (compared with 30% in France, for example). Some banks have majority control of the capital of large

enterprises (e.g. Deutsche Bank's control of Daimler Benz). However, minority holdings are more frequent and the bank's role at general meetings is mainly exercised through voting proxies on the shares they hold on deposit for the small shareholders who are their customers (exercise of the "Depotstimmrecht").

Whereas compartmentalization exists in many countries, in Germany most credit institutions are engaged in the entire range of financial activities. The few institutions which specialize in a certain type of activity, such as factoring, are subsidiaries of large banks. Institutions of the universal type account for some 80% of total business volume. The savings banks, institutions governed by public law, hold around 50% of the universal banks' market, compared with some 20% held by the cooperative sector and 30% by the private sector, which includes the "big three" (Deutsche Bank AG, Dresdner Bank AG and Commerzbank AG).

The role of the financial market is limited. First, only the banks have access to the money market. The capital market is therefore segmented. In addition, there are barely 2000 public limited liability companies and only 600 or so are quoted on the stock market. Of the 500 leading European enterprises in terms of market capitalization i.e. in relation to the total amount of shares quoted on the stock market, the market capital of German enterprises is only 34% of that of British enterprises. The graph below comparing the six leading German and British firms (excluding oil companies), clearly illustrates the relatively low level of capitalization in the Federal Republic.

At the end of 1989, equities represented only 24% of the debts of enterprises (compared with 59% in France, for example), and 29% of their claims (compared with 65%). In the financial assets of households, equities represented 6.6% and bonds 15.7% (compared with 43.7% and 4.8% respectively in France).

The German financing system has its own coherence and is based on solidly established collective preferences: the desire of enterprises to retain control over their capital and the scale of self-financing, the preference of savers for fixed income stocks, etc. It is also relatively difficult to make a judgment in terms of economic effectiveness between the capital markets systems (United States, United Kingdom) and the systems in which banking intermediation is dominant (Japan, FRG). In the case of Germany, it is however, possible to indicate the institutional factors which tend to discourage enterprises from raising capital directly from the general public. First, the dispersion of stock exchanges: eight stock exchanges operate on the Federal Republic territory. Second, the relatively limited role of institutional investors because of the virtual absence of pension funds (the "pay as you go" pension system being generally used). Lastly, the high level of corporation tax which encourages self-financing or borrowing from the banks rather than the payment of dividends.

Within a financing system where banking intermediation is predominant, the essential criterion is that of competition between the institutions. There is no absolute indicator in this area. Nevertheless, on the one hand, the cost of banking services reveals no significant distortions between the FRG and the other countries (see Cecchini report). On the other, there is great freedom of access to the German banking market and the number of foreign institutions in particular has substantially increased in recent years.

A number of rigidities, nevertheless, remains, i.e. the discrimination with regard to non-residents and the fact that certain products do not exist for institutional reasons:

- non-residents are not allowed to purchase certain categories of bonds ("Bundesschatzbriefe", "Finanzierungsschätze");
- also, they are not allowed to issue DM-denominated bonds with a maturity of less than two years;
- only a bank domiciled in the FRG is permitted to be the lead manager in a syndicate for the issue of DM bonds;
- the secondary market in certificates of deposit and commercial paper is virtually non-existent because of the stock exchange turnover tax based on the amount of the transaction ("Börseumsatzsteuer") but also because of the absence of rating and because this type of security has an uncertain legal status;
- there is no futures financial instrument on the German market which enables those involved in business activity to cover their interest rate risks. Paradoxically, the long term interest rate which serves as a reference for the German market is traded on the London futures market (LIFFE) where the volume is some 50 000 contracts a day.

On the other hand, Frankfurt's desire to become a major financial centre is giving rise to reservations: these are related to the fact that the securities market is entirely self-regulated. In the FRG there is no supervisory body of a judicial nature, similar to the SEC or the COB. Insider dealing is not punished by law. Yet the role of the universal banks tends to give rise to potential conflicts of interest between different activities (loans, syndication, "off balance sheet" operations, trading). The building of firewalls between the various types of activity could prove necessary. This is recognized by the professionals.

Similarly, the prudential rules will have to be reformulated in order to comply with Community Directives. The Second Directive of 15 December 1989 coordinating provisions on the taking-up and pursuit of the business of credit institutions in particular sets strict limits for banks' holdings in enterprises. The Directive of 18 December 1989 fixes the solvency ratio for credit institutions at 8%.

Measures to encourage competition have already been taken. Controls on interest rates were lifted as early as 1967 and all barriers to the movement of capital were removed at the beginning of the 1980s. With effect from 1 January 1991 the stock exchange turnover tax ("Börsenumsatzsteuer") paid as a percentage of the amount of the stock exchange transaction will be abolished. With effect from 1 January 1992, capital duty ("Gesellschaftssteuer") paid on the first acquisition of shares in companies and other contributions to companies, and the bills of exchange tax ("Wechselsteuer") will be abolished.

On 1 January 1990, a financial futures market ("Terminbörse") opened in Frankfurt. So far it has only traded in German equity options. From September 1990, a German long rate futures market is due to open (of the "Bund" futures type).

In January 1990, the Cartels Law ("Gesetz gegen Wettbewerbsbeschränkungen") was amended for the fifth time to include abuses of dominant position ("Missbrauchsprinzip") in the banking and insurance sectors which until then had not been covered by the Law.

Progress is still necessary in order to eliminate the remaining rigidities in financial services: in general terms these are discrimination with regard to non-residents and the level of corporation tax, but also more specific measures such as the need to introduce longer trading hours or to reduce the minimum face value of shares (now DM 50). The freedom to provide services with effect from 1993 should greatly help to remove many of the obstacles to competition in the financial sector. At the same time, the updating of the prudential rules should favour Frankfurt's competitive position.

Housing

Adequate housing is a basic need of every individual. It is therefore not surprising that there are many instances in the Federal Republic of government interference in freedom of contract between landlords and tenants. The 1899 Civil Code, which is the central and comprehensive instrument for regulating relations under civil law, has from the very outset had a special section on tenant protection.

Relations between landlords and tenants are currently governed primarily by these Civil Code rules in conjunction with the provisions of the second Law governing termination of the occupation of accommodation ("Wohnraumkündigungsgesetz"). From a macroeconomic viewpoint, the provisions governing termination of the occupation of accommodation and the restrictions regarding maximum allowable rents are of interest, since it is these which affect landlords' rights, devalue them and have an appreciable influence on the level of yield obtainable in the accommodation letting sector. Further government action reducing landlords' rate of return can be identified on the cost side: a large number of extremely exacting and standardized building provisions not only severely restrict individual building but also tax

residential construction considerably. For example, the Town Planning Law stipulates that for each new housing unit either evidence of a parking place for a private car has to be provided or a substantial compensatory levy has to be paid to the municipal authorities. On the other hand, there are also government measures which can lead to an increase - in some cases a very marked increase - in the rate of return from the letting of accommodation. Prime examples of this are the payment of housing allowances to low-income tenants and special depreciation arrangements under tax law for promoting the creation of private property.

The economic justification for such massive subsidization is highly questionable. Property ownership is neither a public nor a merit good (who would not gladly own property?); nor are externalities internalized through the existing subsidies and other forms of intervention. Furthermore, the considerable negative effects of existing property ownership on the mobility of the factor labour should not be underestimated.

The regulation aimed at protecting tenants can be seen as reflecting the politicians' fear of a disruption of the superiority erosion process on the rented housing market. In fact the tenant - in contrast to the landlord - incurs high removal costs when his contract is terminated. Furthermore, while the accommodation serves to meet a basic need of the tenant, it merely represents an (additional) source of income for the landlord.

Intervention in the housing sector, whether in the form of direct subsidies, low-interest loans or tax concessions or in the form of indirect assistance (e.g. boosting the purchasing power of tenants with the help of the housing allowance), must be viewed very critically, however, since it distorts prices and thus factor allocation considerably. In 1985, it amounted to almost DM 24 billion or a quarter of the housing sector's gross value added.

First of all, the reduction in the cost of building brought about by tax concessions has not just prompted the "marginal" owners to build. Its prime effect has instead been to bring in all those who ever wanted to build or to tempt potential owners into more expensive building. The promotion of luxurious properties at times of excess demand for inexpensive accommodation is well known. At the same time, the introduction of the housing allowance for low-income tenants has ensured that the yield obtained by landlords on the accommodation-letting market did not have to be adjusted downwards. The promotion of residential building has therefore primarily bolstered yields in the rented housing market and has helped to boost house prices and rents: whereas between 1962 and 1989 the cost-of-living index for all private households rose by an average of 3.5% a year, the corresponding index for rented accommodation rose by 4.7% a year on average. The implicit deflator for investment in residential building showed a similar trend, with a rise of 4.9% a year over the same period, while the corresponding deflator for investment in non-subsidized building rose by 3.6% a year. The negative impact on factor mobility and the taxation of labour and capital should also not be underestimated.

7.2.3 Intervention spanning a number of sectors

In addition to the specific sectoral regulation and subsidies so far described, there are many instances in the Federal Republic of broader intervention on goods and services markets spanning a number of sectors. This paragraph deals briefly with (1) the degree of legislation governing environmental protection and the approval procedure, and (2) market-entry and other restrictions affecting small-scale crafts and the professions.

Environmental protection and the approval procedure

The scarcer environmental assets become and the more populated a region is, the more negative external effects of economic activity can be expected. Taking GDP per km² or industrial gross value added per km² as rough and simplified indicators of environmental scarcity or of potential negative external effects, it is clear that, under identical legal conditions, negative external effects are considerably more likely to occur in the Federal Republic of Germany than in, for example, France, the United Kingdom or the United States. There is a similar result when the number of inhabitants per km² is compared for different countries.

According to that, there should also be considerably more stringent environmental legislation and a more elaborate approval procedure in the Federal Republic than in countries with lesser population densities.

Of course, stricter environmental legislation and more stringent approval procedures indicate a locational disadvantage for a region or country. However, it is not the legislation itself which constitutes the locational disadvantage but the fact that the high level of industrialization and urbanization impose additional costs on production which are not incurred to the same extent in less industrialized or less thickly populated countries.

Nevertheless, the environmental legislation and also the approval procedures should be thoroughly reviewed to establish whether they really represent the most effective means of achieving desired aims or of preventing external effects.

Crafts Code and the professions

In the case of professional and craft activities there are many controls in the form of objective and subjective market-entry restrictions which are frequently combined with rules governing supplier behaviour in the form of restrictions on price competition and advertising. In some instances these controls are a relic of medieval and economically unjustified professional and guild interests and are primarily designed to protect old-estab-

lished suppliers against competition from their own profession or guild or from new competitors. A clear-out of existing controls would certainly bring to light considerable potential for deregulation. Many controls cannot be justified on economic grounds. Systematic deregulation would lead, through increased competition, to price reductions and so increase demand for services and employment in these areas.

7.2.4 Summary

From a macroeconomic point of view, market entry and competition-reducing regulations are important for (1) agricultural products, (2) coal and steel, (3) energy, (4) transport, (5) financial markets, (6) telecommunication services and, last but not least, concerning services related to (7) professions, legal advisers and craftsmen. Such regulations not only allow insiders to receive a quite substantial "regulation-yield", they also work as impediments to innovation, growth and thus employment. As the relative size of the service sector in all modern economies is now increasing, the prevailing rigidities are obstacles to the full for exploitation of growth and employment possibilities.

In economic terms, the argument for regulation depends on the assumption that a free market for the respective sector or service would lead to market failures. However, severe and sector-specific market failures on regulated markets are not evident and the effectiveness of chosen regulations is not obvious. Even in cases of natural monopolies, i.e. the cases of networks for electricity, gas or telecommunication services, or externalities, e.g. in energy production, the chosen regulations seem to be inappropriate to alleviate the negative consequences of such constraints. The economic case for these regulations remains to be proved; in the absence of such proof they should consider the outcome of rent-seeking activities resulting in a reduction of competition and leading to a protection of insiders. Very often, these regulations protect public suppliers against private competition; energy, transport and telecommunication services might serve as examples. As competition is reduced, regulations are to the disadvantage of consumers. Therefore, the abolition of existing sector-specific regulations or at least less intensive intervention in the market process are recommended. This applies particularly to market-entry and price regulations and to production and import quotas.

Furthermore, the economic justification is not clear in terms of the public goods argument for public production in the mining, energy production and distribution sectors, for the three public enterprises Bundesbahn, Lufthansa, and the Bundespost and for all local public transportation as the respective goods or services. The

Figure GT26: Major price control arrangements in the FRG (Situation at 31 December 1985)

| | Form | Criterion or basis | Act or Order |
|--|---|--|---|
| Agricultural products | Target, guide or basic prices, intervention prices, levies | Price stabilization Protection of agricultural incomes | Act implementing the common organization of markets (MOG) |
| Agricultural alcohol | Price at which monopoly administration purchases | Protection of agricultural raw materials | Spirits Monopoly Act |
| Electricity for normal-rate consumers | Maximum prices subject to official approval | Economically acceptable to producers and consumers; cost guideline (§1) | Federal Electricity Tariff Order |
| Power-station coal | "Appropriate price" (Schwantag formula) | Protection of coal consumption in power stations; cost guideline §3(7) | Third Electricity-from-coal Act |
| Iron and steel | Minimum and guide prices for the most important products (since 1977) | Necessary restrictions and legitimate interests of companies | Commission Decision pursuant to Art. 61 ECSC |
| Medicinal products | Price spread at the wholesale and retail stages (§1) | Maintenance and supply at attractive price; economic protection of pharmacists | Pharmaceuticals Price Order |
| Rail passenger transport | Fixed prices subject to authorization (§16 BbG) | "Common clause"(1) (Optimum transport service, fair market return, prevention of unfair competition) | Rail Transport Order (EVO) Federal Railways Act (BbG) |
| Carriage of goods by rail | Fixed or max./min. rates subject to authorization, special agents (§16 BbG) | "Common clause" | Rail Transport Order (EVO) Federal Railways Act (BbG) |
| Inland navigation | Fixed or max./min. prices subject to authorization (§21(2)) | "Common clause" | Commercial Inland Navigation Act |
| Port forwarding agents | Minimum prices subject to authorization | Maintenance of efficient port forwarding sector | Federal Journal (Bundesanzeiger) Nr. 72, 12 April 1952 |
| Regular passenger services (Road, train) | Fixed prices subject to authorization (§39,41 & 45) | "Common clause" | Passenger Transport Act |
| Taxis | Fixed prices subject to authorization (§31) | "Common clause" | Passenger Transport Act |
| Long-distance road haulage (commercial) | Max./min. prices subject to authorization (§20a) | "Common clause" | Road Haulage Act |
| Local road haulage (commercial) | Maximum prices subject to authorization (§84) | "Common clause" | Road Haulage Act |
| Clearance and forwarding | Link to transport rates (§21) | Closely related to transport rates | Road Haulage Act |
| Air services | Fixed prices subject to authorization (§21(2)) | Protection of public interests (§21(1)), Prevention of "grey" markets | Air Transport Act |
| Posts and telecommunications | Fixed fees (§9) | Protection of a public-law postal system | Posts Act |
| Private insurances | Supervision of business plans (§§ 11 & 81) | Maintenance of interests of insured and of injured, protection of insurance business | Insurance Supervision Act |
| Subsidized housing | Cost-covering rent (§72) | Promotion of housing construction, protection of rate-payers | Second Housing Act; Tied Housing Act |
| Doctors' and dentists' services | Fixed fees within max./min. rates (§11 BAO) | Legitimate interest of doctors and charge payers | Doctors' and Dentists' Fees Order |
| Hospitals | Nursing rates subject to authorization (pursuant to Hospital financing Act) | Protection of operating effectiveness (Prime cost-covering) | Federal Order concerning Nursing Rates |
| Architects' and engineers' Services | Fixed fees within max./min. prices (§1) | Legitimate interests of engineers and charge payers (§1) | Regulation of Architects' and Engineers' Services Act |
| Tax consultancy | Fixed fees (§64) | Appropriate amount (time spent, value) | Tax Consultancy Act; Tax Consult. Fees Order |
| Accountancy | Fixed fees (§55) | - | Accountancy Order |
| Lawyers | Fixed fees (§1ff.) | Maintenance of adequate legal protection for appropriate fees | Federal Order concerning Lawyers' Fees |
| Notaries | Fixed fees (§17) | Duties partly public | Federal Order concerning Notaries |
| Bailiffs | Fee charging (for the benefit of the Landeskassen) | Public duties | Bailiffs' Costs Act |
| Motor insurance assessors | Fixed fees (§18) | Reimbursement of expenditure | Motor Insurance Assessors Act |
| Sweeps | Fixed fees (§24) | Reimbursement of expenditure (§25) | Sweeps Act; Fees Order |
| Pawnbrokers | Fixed fees and interest charges (§10) | Consumer protection | Pawnbrokers Order |
| Public contracts | Market prices or prime costs | Fiscal interests | Public Contract Pricing Orders |

Compiled on the basis of German Federal Law, loose-leaf edition, Baden-Baden (n.d.) and Federal Journal (Bundesanzeiger) No.118, 3 July 1970.

(1) Identical grounds were inserted in the General Railways Act (§8), the Road Haulage Act (§7) and the Inland Waterways Transport Act (§33) by the Transport Amending Acts of 8 January 1961.

Source: RWI, Strukturberichterstattung 1987, Vol. 3

arguments for privatization should therefore be considered. In case of public interest, i.e. externalities arising from provision of certain services, private sector supply of these services should be encouraged by appropriate public transfers.

As regards some sectors, regulations exist on the European level e.g. agricultural products, coal and steel. In the transportation and the financial markets, rules will soon also be established at the European level. This should provide an opportunity to make the regulatory régime in these sectors more market-friendly. In addition, the new economic order of the GDR provides the opportunity to establish economic competition in many regulated fields in the GDR and to reduce prevailing rigidities in the FRG.

7.3 Sectoral and regional subsidies: An assessment

The subsidy report of the Federal Government distinguishes between survival aids ("Erhaltungshilfen"), adjustment aids ("Anpassungshilfen"), productivity and growth aids ("Produktivitäts- und Wachstumshilfen") and other subsidies. The report mentions about 220 different individual measures implemented at national level, of which about 100 are financial-aid measures and about 120 tax-reducing measures.

According to a recently published study by the five leading economic research institutes, subsidies to all sectors together amount to DM 118 bn or 6.4 % of GDP in 1985⁶. Despite some reductions (EC-related subsidies were reduced and the 1990-income-tax reform has cut some more subsidies) no significant reduction of the subsidies/GDP ratio is evident.

However, doubts arise as regards the economic justification of several existing subsidies. In particular the stabilization function of regional and sectoral subsidies will work in an efficient way only if they are time limited and degressive. Otherwise, no incentive is given to invest in a painful but worthwhile regional and sectoral structural adjustment process. Otherwise subsidies work as impediments to growth and employment in healthy sectors by imposing an additional tax burden.

Most of the prevailing sectoral and regional subsidization can hardly be justified for allocative or distributive reasons. As in the case of regulation, there is a general presumption that subsidies are harmful to welfare unless there is weighty evidence to the contrary. Such evidence seems to be lacking, and there is a strong argument for

reducing the scope and scale of subsidization in the West German economy. The argument for reduction or even abolition now appears to be overwhelming in the case of regional subsidies. Of these, about 95 % of the total cost concerns measures arising from the division of the two Germany's. The political justification for such measures is disappearing; moreover, their continuation would, as argued in more detail in chapter 4 threaten appropriate regional development within the GEMSU as a whole.

Genuine regional subsidies are difficult to identify, as sectoral subsidies have often also a very important regional impact, e.g. coal, steel and shipbuilding subsidies. Nevertheless, the subsidy report of the Federal Government enumerates about 10 regional state-aids and another 10 regional tax-reduction measures. They are, however, mainly (95 % of all money involved) measures related to German-German problems, i.e. Zonenrandförderung and Berlinförderung. In 1988 their net effect on the public budget amounted to at least DM 13 bn or 0.6 % of GDP.

7.4 The labour market - government and collective agreement regulation

A feature of the labour market in the Federal Republic is autonomy of wage-rate negotiations, i.e. employers and workers or their respective representative bodies (employers' associations and trade unions) negotiate pay and all working conditions without government involvement. Nevertheless, there are many government regulations; however, they mainly lay down the rules to be observed. These rules cover all areas of conflict of interest between (potential) contracting parties, ranging from recruitment procedure to termination of employment. However, they primarily outline a framework of minimum conditions which must then be filled out by the parties to collective agreements.

7.4.1 Government regulation

In fact many of the minimum conditions laid down by central government no longer play any appreciable part, since the parties to collective agreements have already agreed on much more far-reaching rules. Examples of this are the provisions relating to minimum statutory leave and normal weekly working hours. According to Article 3 of the Federal Leave Law, the minimum leave guaranteed by law amounts to 18 working days in a calendar year (= 3 weeks), whereas for 99% of workers covered by collective agreements annual leave amounts

6) These institutes employ a definition of "subsidies" which is broader than that used in national accounts-statistics or in the subsidy report of the Federal Government, i.e. their definition comprises all public current and capital transfers and special tax reductions to the enterprise sector, all lending payments to the enterprise sector and all transfers to private households which have sector-specific effect in the enterprise sector. As a means of comparison, the subsidy report of the Federal Republic showed subsidies of DM 72 bn (3.9 % of GDP) while subsidies in terms of national accounts amounted to DM 38 bn (2.1 % of GDP).

| | by intended recipient | | Actual subsidies and subsidy-type transfers | | | |
|--|-----------------------|-----------------|---|---------------|-----------------|----------------------|
| | 1980 DM | 1985 million | Percentage change | 1980 DM | 1985 million | Percentage change |
| Agriculture, forestry and fishing | 17 510 | 21 035 | + 20,1 | 5 850 | 8 267 | + 41,3 |
| Electricity, district heating | 992 | 2 066 | +108,3 | 3 028 | 3 956 | + 30,6 |
| Gas supplies | 282 | 412 | + 46,1 | 282 | 412 | + 46,1 |
| Water supplies | 158 | 199 | + 25,9 | 158 | 199 | + 25,9 |
| Coalmining | 6 089 | 5 014 | - 17,7 | 3 528 | 2 456 | - 30,4 |
| Other mining | 166 | 246 | + 48,2 | 166 | 246 | + 48,2 |
| Chemical industry | 1 017 | 1 203 | + 18,3 | 1 018 | 1 206 | + 18,5 |
| Mineral oil processing | 187 | 207 | + 10,7 | 187 | 207 | + 10,7 |
| Plastic products manufacture | 190 | 299 | + 57,4 | 189 | 298 | + 57,7 |
| Rubber processing | 57 | 95 | + 66,7 | 57 | 95 | + 66,7 |
| Non-metallic mineral products | 278 | 466 | + 67,6 | 278 | 466 | + 67,6 |
| Fine ceramics | 43 | 66 | + 53,5 | 43 | 66 | + 53,5 |
| Glass industry | 60 | 85 | + 41,7 | 60 | 85 | + 41,7 |
| Iron-producing industry | 668 | 2 436 | +264,7 | 993 | 2 909 | + 93,0 |
| Non-ferrous metal production | 154 | 240 | + 55,8 | 154 | 240 | + 55,8 |
| Foundries | 77 | 116 | + 50,6 | 77 | 116 | + 50,6 |
| Drawing, cold rolling and cold folding of steel | 167 | 287 | + 71,9 | 166 | 287 | + 72,9 |
| Steel and light metal construction | 191 | 266 | + 39,3 | 191 | 266 | + 39,3 |
| Mechanical engineering | 1 457 | 2 578 | + 76,9 | 1 454 | 2 575 | + 77,1 |
| Office machinery, data-processing equipment | 137 | 175 | + 27,7 | 137 | 175 | + 27,7 |
| Road vehicle manufacture | 595 | 1 136 | + 90,9 | 594 | 1 135 | + 91,1 |
| Shipbuilding | 688 | 518 | - 24,7 | 504 | 293 | - 41,9 |
| Aircraft and aerospace industry | 588 | 598 | + 1,7 | 588 | 598 | + 1,7 |
| Electrical engineering | 1 606 | 2 105 | + 31,1 | 1 605 | 2 105 | + 31,2 |
| Instrument engineering | 179 | 272 | + 52,0 | 178 | 271 | + 52,2 |
| Iron, sheet metal and metal products | 250 | 391 | + 56,4 | 247 | 389 | + 57,5 |
| Musical instruments, toys, etc. | 44 | 83 | + 88,6 | 44 | 83 | + 88,6 |
| Woodworking | 65 | 102 | + 56,9 | 65 | 102 | + 56,9 |
| Wood processing | 309 | 501 | + 62,1 | 307 | 500 | + 62,9 |
| Pulp, paper and board | 61 | 111 | + 82,0 | 61 | 111 | + 82,0 |
| Paper and board processing | 155 | 193 | + 24,5 | 155 | 193 | + 24,5 |
| Printing and publishing | 217 | 339 | + 56,2 | 215 | 337 | + 56,7 |
| Leather goods industry | 51 | 94 | + 84,3 | 51 | 94 | + 84,3 |
| Textile industry | 261 | 432 | + 65,5 | 261 | 432 | + 65,5 |
| Clothing industry | 236 | 347 | + 47,0 | 235 | 347 | + 47,7 |
| Food, drink and tobacco industry | 972 | 1 452 | + 49,4 | 2 600 | 3 503 | + 34,7 |
| Manufacture of beverages | 236 | 390 | + 65,3 | 236 | 421 | + 78,4 |
| Manufacture of tobacco products | 258 | 317 | + 22,9 | 254 | 412 | + 62,2 |
| Building industry proper | 1 947 | 2 335 | + 19,9 | 1 946 | 2 335 | + 20,0 |
| Finishing trade | 604 | 986 | + 63,2 | 603 | 986 | + 63,5 |
| Wholesale trade, commercial intermediaries | 824 | 1 184 | + 43,7 | 6 580 | 7 298 | + 10,9 |
| Retail trade | 1 231 | 1 669 | + 35,6 | 1 440 | 1 663 | + 15,5 |
| Railways | 12 475 | 13 603 | + 9,0 | 12 475 | 13 603 | + 9,0 |
| Shipping | 865 | 769 | - 11,1 | 1 049 | 994 | - 5,2 |
| Federal Postal Administration | 1 320 | 2 211 | - 67,5 | 1 320 | 2 211 | + 67,5 |
| Other transport | 4 373 | 4 727 | + 8,1 | 4 587 | 5 082 | + 10,8 |
| Credit institutions | 658 | 164 | - 75,1 | 7 109 | 5 012 | - 29,5 |
| Insurance companies | 3 831 | 3 248 | - 15,2 | 3 834 | 3 253 | - 15,2 |
| Renting of accommodation | 19 503 | 23 663 | + 21,3 | 11 313 | 16 466 | + 45,5 |
| Hotel and allied trades | 653 | 747 | + 14,4 | 612 | 725 | + 16,6 |
| Education, science | 1 965 | 2 560 | + 30,3 | 1 965 | 2 560 | + 30,3 |
| Medical and veterinary services | 5 600 | 7 647 | + 36,6 | 5 600 | 7 647 | + 36,6 |
| Other services | 2 970 | 3 725 | + 25,4 | 3 107 | 3 772 | + 21,4 |
| Not yet categorized | 1 849 | 2 013 | + 8,9 | 1 747 | 1 915 | + 9,6 |
| Total | 97 520 | 118 106 | + 21,1 | 91 579 | 111 227 | + 21,5 |
| Total excluding renting of accommodation | 78 017 | 94 444 | + 21,1 | 80 266 | 94 762 | + 18,1 |
| Private households, private nonprofit-making organizations | | | | 2 138 | 2 753 | + 28,7 |
| Central government | | | | 3 803 | 4 126 | + 8,5 |
| Overall total | 97 520 | 118 106 | + 21,1 | 97 520 | 118 106 | + 21,1 |

Sources: Federal Statistical Office, Federal Government's subsidy reports and financial reports, institutes' subsidy survey

to four weeks or more; two thirds of all employees are already entitled to six weeks of annual leave. And while "normal" weekly working hours still amount to 48 hours, 1990 has seen the conclusion of the first collective agreements on the introduction of a 35-hour week.

Nevertheless, the impact of government regulation on the labour market and on the economy as a whole should not be underestimated. From a macroeconomic viewpoint, the favourable treatment principle and the dismissals protection legislation are of particular significance.

- According to the favourable treatment principle (Article 4 of the Collective Agreements Law), departures from collective agreements are generally permitted only if they favour the employee. As a result of this, however, collectively agreed wages, for example, take on the character of minimum wages (i.e. the nominal wage rates cannot be adjusted downwards), and the recruitment of workers with a marginal product of labour lower than their remuneration under collective wage agreements is prevented. The favourable treatment principle thus encourages the replacement of labour by capital and prevents a rapid adjustment of wages when there is a sharp economic downturn.
- The dismissals protection legislation and the legislation governing the duration of work contracts deprive employers of some of the possibilities open to them to react flexibly to fluctuations in demand. While this can lead to a smoothing-out of employment, since demand for labour reacts to cyclical fluctuations only with a considerable time-lag, the real question is whether this smoothing-out does not take place at a lower level than would be possible without this regulation. Furthermore, the dismissals protection legislation mainly favours those already in employment and constitutes an additional recruitment barrier to those seeking work. This applies particularly to subgroups that enjoy extensive protection against dismissal. The involvement of the employees' council - both dismissals and new recruitment are dependent on the agreement of the employees' council - also reduces the owner's capacity to react quickly and flexibly to changing market conditions.
- Statutory ancillary labour costs (notably employers' social security contributions, payments for Sundays and public holidays and continued payment of wages for a limited period of time in the event of sickness) have direct consequences on relative factor prices and costs and thus on the economy's competitiveness.

They are linked to the level of the direct wage actually agreed (remuneration for hours actually worked) and range, according to economic sector, from 31% (wholesale trade) to 36% (industry) of the direct wage. However, they are in some cases considerably lower than the additional collectively agreed and business ancillary labour costs, which in 1987 ranged from 37% (wholesale trade) to 66% (banking) of the direct wage.

Thus at times when there is a surplus supply of labour, the balancing of supply and demand on the labour market is made more difficult by the favourable treatment principle and the dismissals protection legislation. At times when labour is in short supply, the provisions governing working hours in particular can inhibit the balancing of supply and demand.

7.4.2 Collectively agreed regulation

More than 80% of all employers in the Federal Republic belong to a recognized employers' association and are thus bound by collective agreements. A good 40% of employees belong to trade unions. As a result of the high percentage of employers belonging to representative associations, some 90% of their contractual relationships with their wage- and salary-earners are subject to arrangements laid down by collective agreements. For this reason alone, the relevant Minister's designation of collective agreements as generally binding - an instrument sometimes regarded as an obstacle to more employment has relatively little effect ⁷.

In looking for possible rigidities in the Federal German labour market, attention can be concentrated on an examination of the following questions:

- whether relative labour costs (including ancillary costs) are too high and too inflexible to permit downward adjustment and, for that reason, have the effect, firstly, of substituting capital for labour and, secondly, of undermining German industry's capacity to compete;
- whether there is insufficient regional and sectoral differentiation of wages and salaries and whether, for that reason, there are not the necessary mobility incentives to ensure successful structural change;
- whether the skills of workers and the unemployed match the types of skills required;

7) Through a government declaration of this kind, the scope of a collective agreement can be extended to cover workers and employers not bound by such agreements. The Federal Minister for Labour and the Social System may designate a collective agreement as being generally binding at the request of one of the two parties to the agreement and always with the agreement of a collective agreement committee made up of three representatives from both the employers' and the trade union organizations (having equal voting rights) where the employers bound by the collective agreement employ at least 50% of the workers covered by that agreement and where the designation of the collective agreement as being generally binding is necessary in the public interest. Text of Footnote

- whether other collective agreements (e.g. on working hours, worker participation in management, etc.) undermine the rigour of the labour market.

As in all other countries, the nominal wage rates negotiated in the Federal Republic between the parties to collective agreements are too inflexible to permit downward adjustment. As the Federal Republic is, however, at the same time a country with a relatively low inflation rate, the scope for any reduction in real wages is virtually non-existent. Compared with other countries, therefore, real wages in the Federal Republic have proved to be relatively inflexible; falling real wages have not been a means of enlivening the labour market in the past and are scarcely likely to be so in the future.

In the Federal Republic, almost all collective agreements are negotiated at regional and specific economic branch levels. This has led in the past to a surprisingly wide range of working conditions and remuneration. In 1988, for example, average gross hourly earnings in manufacturing industry (for male employees and taking the average for all categories) were 12.8% higher in Hamburg than in Bavaria; in 1980, this difference was 17.0%. The

reason for the narrowing of the regional labour cost differential may lie in the fact that the southern regions suffering - possibly because of excessively unattractive wage rates - from a relative scarcity of labour recorded higher wage rises in the 1980s than in their northern counterparts, which were worse affected by the slowdown in economic growth. A further reason may be that more and more of those branches paying above-average wages set up operations in the southern regions.

If the regional labour-cost differential is also broken down by individual branches, it is clear that the 1988 differential was widest in the clothing industry and narrowest in the capital goods industry as a whole. The regional labour-cost differential narrowed sharply between 1980 and 1988 in the consumer goods industry, whereas it widened by 5% over the same period in the clothing industry. If, furthermore, the regional and sectoral labour-cost differentials are combined, this rough breakdown shows an astonishing discrepancy of 60% between average gross hourly earnings in the clothing industry in the Saarland (DM 14.15 per hour) and those in the mechanical engineering industry in Hamburg (DM 22.52 per hour).

Table GT28: Regional differentiation of hourly gross salaries in manufacturing
- for male manual workers, in DM/hour -

| | 1980 | | | 1988 | | |
|---|---------------------|---------------------|------------|------------------------|----------------------|------------|
| | Minimum | Maximum | Difference | Minimum | Maximum | Difference |
| Basic materials and intermediate goods industry | 13.60 (Bayern) | 5.99 (Hamburg) | 17.6% | 18.39 (Bayern) | 21.34 (Hamburg) | 16.0% |
| Chemical products industry | 12.66 (Bremen) | 15.93 (Rh-Pfalz) | 25.8% | 16.68 (Bremen) | 21.96 (Rh.-Pfalz) | 31.7% |
| Investment goods industry | 13.85 (Bayern) | 15.27 (Hamburg) | 10.3% | 19.17 (Schl.-Holst) | 21.47 (Hamburg) | 12.0% |
| - o.w. mechanical engineering | 13.93 (Bremen) | 16.03 (Hamburg) | 15.1% | 19.26 (Niedersach.) | 22.52 (Hamburg) | 16.9% |
| Consumer goods industry | 12.77 (Bayern) | 17.09 (Hamburg) | 33.8% | 17.09 (Bayern) | 20.62 (Hamburg) | 20.7% |
| Textiles and clothing industry | 10.39 (Bremen) | 13.60 (Hessen) | 30.9% | 14.15 (Saarland) | 19.10 (Hamburg) | 35.0% |
| Food and beverage industry | 12.70 (Rh-Pfalz) | 14.36 (Hamburg) | 13.1% | 17.23 (Schl.-Holst) | 19.38 (Bremen) | 12.5% |
| Manufacturing (average) | 13.50 (Bayern) | 15.79 (Hamburg) | 17.0% | 18.73 (Bayern) | 21.13 (Hamburg) | 12.8% |

Source: Federal Ministry of Economics, Monthly Bulletin, Supplement 11/1989

Although too much should not be made of these findings, the conclusion should perhaps be drawn that any rigidities in the labour market are not due to too narrow a regional and/or sectoral differentiation in wages.

Chapter 8: Budgetary coordination in an economic and monetary union: 20 years of experi- ence in the Federal Republic of Germany

The Federal Republic of Germany is the most federalist state in the European Community. As a result of the Constitution, not only the Bundestag and the Federal Government, but 11 Länder parliaments and more than 8.000 municipal councils decide upon budgetary and fiscal measures. This has repercussions on all levels of economic policy making. The need for binding budgetary rules, e.g. for borrowing limits, budgetary cooperation, revenue sharing and taxation, is obvious.

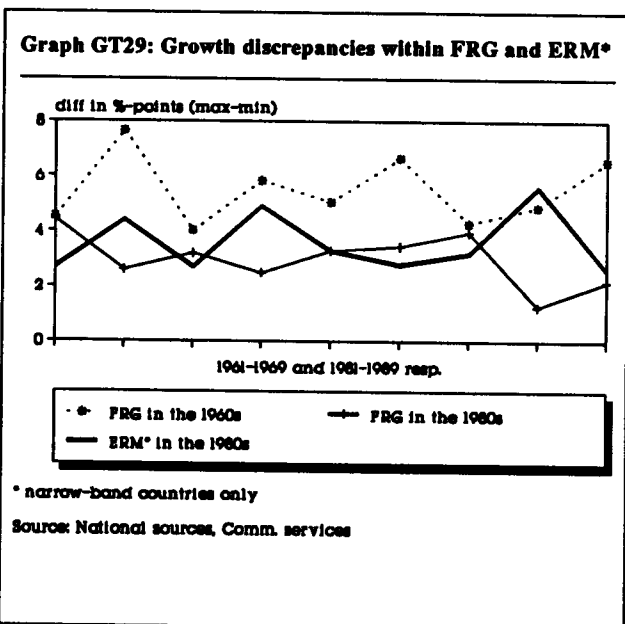
The Delors report on economic and monetary union in the EC proposes new procedures for budgetary coordination, with precise guidelines for the financing structure and quantitative limits on public deficits. In addition, greater coordination of budgetary policy among the member countries is required. After more than 20 years' experience of institutionalized budgetary coordination among the different levels of Government, the Federal Republic provides a good example of budgetary policy coordination in an Economic and Monetary Union. Therefore, looking in more detail at the FRG experience of fiscal policy cooperation at the regional level could provide some information on the needs for fiscal policy cooperation at the European level during a period of monetary integration. This might be of special interest to the narrow-band ERM-countries, as differences in economic performances between individual Länder are, in most respects, even more pronounced than differences between narrow-band ERM-countries.

In addition, the experience of largely decentralized fiscal policy cooperation within a monetary union (as represented by centralized monetary policy decisions of the Bundesbank), could provide some insight into the need

for and the feasibility of rules and adjustment mechanisms for regional imbalances or shocks and structurally balancing measures. Some light could also be thrown on the practical problems involved.

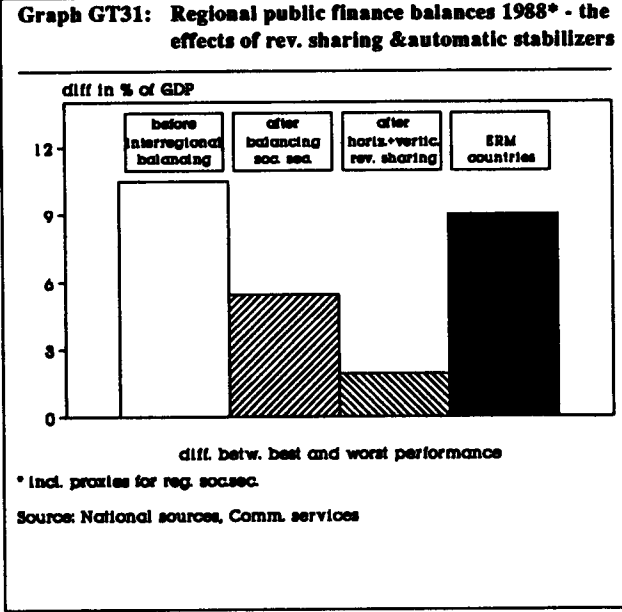
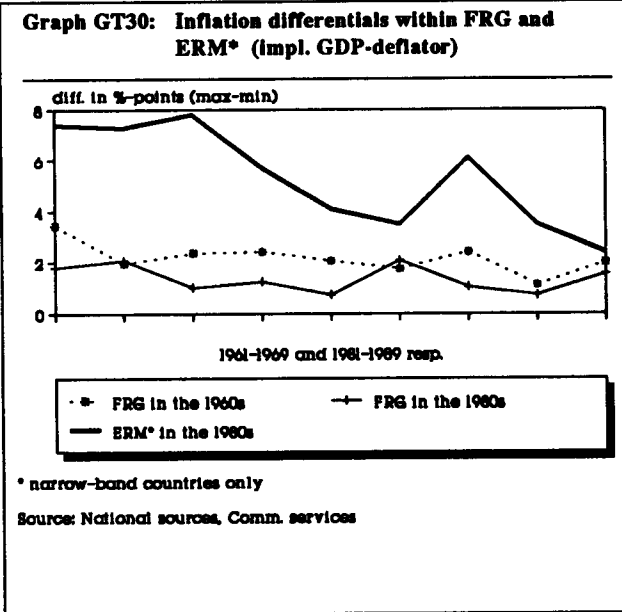
8.1 The FRG and narrow-band ERM countries: a comparison of economic performance

A comparison of the regional economic performance within the FRG and the narrow-band ERM countries reveals some striking features. Growth discrepancies within Germany were even more pronounced than within the narrow-band ERM zone. This holds also for per capita income: while in 1988 real per capita GDP in Denmark was 32% higher than in the Netherlands, real per capita income in Hamburg was more than 100% higher than in Lower Saxony⁸.



Unemployment rates within Germany also differ to a larger extent than among narrow-band ERM-countries. While the maximum differential among the ERM-countries was 8.2 percentage points in 1988, (L: 2.2%; B: 10.4%; SOEC def.) it was 10.3 percentage points within Germany (Baden-Württemberg: 5%, Bremen: 15.3%, nat. def.). Inflation differentials within Germany have been significantly lower than differentials among ERM

8) It has to be borne in mind, however, that the lower the aggregation level is, the more pronounced differences will be. Aggregation whipes out regional differences. Real per capita income differentials in West Germany, excluding the three Stadtstaaten Hamburg, Bremen und Berlin reached only some 30%. Furthermore, within the last three decades, no decline in the differences of per capita income was recorded within Germany, whereas differences among ERM countries declined significantly.



countries. This holds, however, not any longer thanks to the fact that inflation differentials at the European level converged significantly downwards in the course of the 1980s. They do not any longer differ much from those recorded within Germany.

As regards the public sector, comparisons are quite difficult as, for example, the functions of the Länder Governments and their budgets differ significantly from general government's functions as a whole. Some basic financial data show that the Federal Government's budget accounts only for 33% of General Government expenditure and 44% of the spending of the three levels of government (Federal level, Länder level, local level).

Furthermore, revenue-sharing and automatic stabilizers working through social security budgets have a significant impact on the individual financial balances of regions in the Federal Republic; in consequence these are less volatile in response to economic shocks. This is shown in graph , where discrepancies among regional public finance balances within the FRG before and after revenue-sharing and equalizing fiscal community (Finanzverbund) are compared with ERM-countries' general government fiscal balance discrepancies ⁹.

Whereas before balancing regional social security budget discrepancies within Germany were significantly more pronounced than among ERM-countries, after balancing social security and additional horizontal and vertical revenue-sharing, they were significantly less important: while regional public finance balances differ by more than 10 percentage points of GDP before bal-

ancing regional social security budgets and before horizontal and vertical revenues sharing, they differ by only 2.5% after these equilibration procedures took place.

8.2 The framework of binding rules, budgetary coordination and revenue sharing

8.2.1 Financial balance and borrowing requirements

For all levels of government, there exists the general rule that the deficit in any budgetary year must not exceed investment expenditures. Further restrictions are imposed on the size, conditions and timing of borrowing requirements of different levels of government. These can be enacted by the Federal Government to avoid macroeconomic disequilibria (Article 109.4 GG). Restrictions require the approval of the Bundesrat, i.e. the representatives of the Länder. Exemptions to exceed the borrowing limit are only allowed for the Federal Government and the Länder in situations of macro-economic imbalances (Article 115.1 GG). Therefore, borrowing limits have become to a lesser extent objective-related (borrowing to finance investment) and more situation-related (borrowing to reduce or avoid a macro-economic imbalance).

While it is quite obvious how "borrowing" is defined, the concepts "macroeconomic imbalance" and "investment expenditures" are more difficult to operationalize. However, a general rule has been, to calculate "investment expenditures" by adding to investment expenditures (national accounts definitions: gross fixed capital forma-

9) The chosen regional public finance balances cover the respective Länder budget including the local level and hospitals, the budget of the respective regional labour office body (Landesarbeitsamtsbezirk) and the respective regional workers' pension funds (contributions = revenues; domestic pensions = expenditures). Although it should be borne in mind that this proxy of regional public finances including social security is only a rough approximation of a general government budget and includes still some statistical problems, it gives a quite illustrative message which will not change if one applies more sophisticated definitions for regional general government.

tion) some other investment-related expenditures, e.g. subsidies to public enterprises (e.g. Federal Railway) and also subsidies to the private sector which aim at fostering private investment.

Despite the requirement in the constitutions, however, there are no clear cut and operational Federal and Länder laws which define, e.g. the item "investment expenditures". The Federal Constitutional Court complained about the absence of such rules in 1989.

Until recently, another point of uncertainty in this respect has been whether limit-exceeding borrowing requirements shall only materialize to reduce macroeconomic imbalances (objective-related) or whether they are also allowed to materialize when macroeconomic disturbances threaten to occur (situation-related). In this context, the Federal Constitutional Court published the following general rules concerning the Federal borrowing requirement:

- PSBR is only allowed to exceed investment expenditures if there is (the risk of) a severe macroeconomic disequilibrium.
- Exceeding borrowing requirements must be justified by the need to reduce the (risk of severe) macroeconomic imbalances.
- The limit of Article 115 is a maximum limit and a simultaneous application of Article 109 GG (public bodies have to make allowance for the needs of the macroeconomic equilibrium) might require smaller budget deficits in periods of favourable economic performance or a risk of overheating.

As a whole, the 1989 decision of the Federal Constitutional Court can be interpreted as a reanimation of the objective-related borrowing requirement rule, at least at the Federal level. Furthermore, this decision presses for a Federal law operationalizing the terms "investment expenditures" and "macroeconomic imbalances". At present, such a law is under discussion.

As far as the monetary financing of the public deficit is concerned, the Bundesbank is not obliged to finance the deficit. The Federal Government, however, has access to the seigniorage of the Bundesbank if it emerges as a profit in the annual balance sheet ¹⁰.

8.2.2 Budgetary coordination: purposes, rules and institutions

Legal regulations ¹¹ fostering and strengthening coordination and cooperation of the different public bodies can be split into those rules aiming at an efficient allocation of production factors and optimal distribution policy and those aiming at an efficient stabilization policy.

The fiscal constitution lays down the competences of the different levels of Government and the procedures to be followed if a federal law has impacts on revenues or expenditures of other budgets. In general, such federal laws need the approval of the Bundesrat. Furthermore, this part of the constitution describes the rules for taxation and the system of tax revenue allocation and sharing. Specific taxes refer to the Federal State (11% of all tax revenues) and the Länder (5% of all tax revenues) and some taxes are raised by local authorities (2% of all tax revenues). However, the major part of taxation (more than 80% of all tax revenues) consists out of common taxes (income tax, corporate tax and VAT); they are shared between the levels of Government according to special keys.

To fulfil the allocation function of the different levels of government, a system of horizontal and vertical revenue-sharing tries to equilibrate the fiscal needs and fiscal strength of all bodies. This is to foster the convergence of living standards throughout the country. The financial constitution guarantees that all bodies have access to the financial resources they need to fulfil their allocation function.

Responsibility for (re)distribution policy is shared between the Federal Government and the Länder Governments (Article 74 GG). While compulsory unemployment and pension schemes are organized at the national level, statutory health insurance schemes are organized at a local level. All respective framework laws, however, are federal laws, adopted by both the Bundestag and the Bundesrat. Thus, social security agencies have no room for regional differentiation. Individuals who cannot rely on benefits under a social-security scheme (i.e. unemployment, health and old age or handicapped pension scheme) have access to benefits from the local budget at a minimum subsistence level (Sozialhilfe). This minimum level is defined by the Länder parliament concerned. These local expenditures are, however, ultimately charged to the Länder budget, as there is horizontal and vertical revenue sharing within each Land.

10) The emergence of profits, however, is subject to very restrictive conditions. Thus foreign exchange has to be valued to the lowest value principle.

11) Cooperation between the Federal Government and the Länder Governments and among the Länder Governments themselves, is regulated by several articles laid down in the Grundgesetz, namely in Article 50 GG ("The Länder participate in the legislation and the administration of the Federal Government through the Bundesrat"), Article 70ff GG (Jurisdiction in the Federal Republic), Article 91a and b GG (common responsibilities) and Article 104a GG - 115 GG (fiscal constitution).

While rules on cooperation of allocation and distribution policy were implemented in the legal framework of the Federal Republic at its foundation in 1949, legal rules on cooperation in the field of stabilization policy were only implemented in 1967 following the experience of the 1966/67 recession. On the basis of the Keynesian paradigm, the 15th amendment of the Grundgesetz obliges Central Governments (Federal and Länder Governments) to pursue the target of macroeconomic equilibrium (Article 109.2 GG).

Two Federal laws, the "Stability-and-Growth" law (Stabilitäts- und Wachstumsgesetz) of 1967 and the "Budget-Basic-Rules" law (Haushaltsgrundsätze-gesetz) of 1969, which had also to be adopted by the Bundesrat require the Central Governments

- to run a budgetary policy which is consistent with macroeconomic equilibrium,
- to plan revenues and expenditures in a medium term also consistent with macroeconomic needs,
- to implement a comparable and homogeneous system of budgetary procedures,
- to guarantee the coordination and compatibility of measures implemented by the various territorial authorities.

Furthermore, the Grundgesetz and the Stability-and-Growth law allow for additional specific restrictions on budgetary policy at all levels of government in periods of severe macroeconomic disequilibrium. These restrictions can be introduced by the Federal Government in such periods (see e.g. Article 109.4 GG).

To support the coordination and compatibility of the budgetary measures taken at various levels of territorial government, two councils were set up: the "Conjunctural Council of the public bodies" (Konjunkturrat der Öffentlichen Hand) and the "Financial Planning Council" (Finanzplanungsrat). While the "Conjunctural Council" primarily discusses the broad lines of budgetary and stabilization policy, the "Financial Planning Council" deals with the operationalization and implementation of these broad guidelines. In view of the budgetary autonomy of the territorial authorities, neither council has executive power and they are only advisory bodies. They can only influence by convincing. However, as the members of these advisory bodies are representatives of the different Governments their advice and recommendations are politically more binding than the advice of external bodies, e.g. the Council of Economic Advisers (Sachverständigenrat). Nevertheless, their advice has first to be implemented into Federal and Länder laws before becoming legally binding.

Members of the "Conjunctural Council" are the Federal Minister for Economic Affairs (chairman), the Federal Minister for Financial Affairs, one representative from each Land, four representatives from the local authorities' bodies and - as an observer - a representative of the Bundesbank. The Minister for Financial Affairs supervises one permanent committee of the "Conjunctural Council", the "Board for borrowing affairs of the

public bodies" (Ausschuß für Kreditfragen der Öffentlichen Hand), which coordinates the timing and the size of borrowing demands on the capital market by the various levels of Government.

Members of the "Financial Planning Council" are the Federal Minister for Financial Affairs (chairman), the Federal Minister for Economic Affairs, the Minister of Finance from each Land, four representatives from the local authorities' bodies and - again as an observer - a representative of the Bundesbank. An important subcommittee of the Financial Planning Council is the "Working Group for Tax Forecasting" (Arbeitskreis Steuerschätzung). Members of this working group, chaired by a representative of the Ministry of Finance, are representatives of all the above mentioned bodies plus representatives from the Statistical Office, the Council of Economic Advisers and the Economic Research Institutes.

8.2.3 Revenue-sharing and other regional automatic stabilizers

The requirement in the Grundgesetz for uniform living conditions throughout the Federal Republic's territory led to a set of legal taxation and revenue-sharing rules, affecting the fiscal stance of the different sections of general government's budget. Consequently, there exists no room for regional differentiation in tax rates with the exception of the local trade tax (Gewerbesteuer), which equals 7% of total tax receipts. Since 1949, a complicated network of horizontal and vertical revenue-sharing systems and tax-allocation rules has been implemented. The last major revision of these legal rules took place in 1969.

Recent horizontal revenue-sharing among different Länder is laid down in Article 107 GG and the Länder-revenue-sharing law (Länderfinanzausgleichsgesetz) of 1969 and its several amendments. According to these laws there is a two-step procedure for horizontal revenue sharing:

- the first step affects the original allocation of tax receipts. While revenues from income and corporate taxation are allocated broadly in line with revenues collected on the territory of the individual Länder, the distribution of VAT-revenues is determined by the number of inhabitants of each individual Land. Furthermore, up to 25% of total VAT-revenue share of the Länder is reserved for supplementing the tax-revenues of those Länder, whose total tax revenues per head (excluding VAT) are below the average (Ergänzungssanteil).
- In a second step, revenue-weak Länder get additional revenues from other Länder if their individual tax-power indicator (Steuerkraftmeßzahl) is smaller than 95% of the average tax-power indicator for all Länder (Ausgleichsmeßzahl). The tax-power indicator corrects actual tax-revenues of an individual Land for demographic and agglomerative factors and for other special burdens of an individual Land.

Consequently, every individual Land's tax-revenues reach at least 95% of the average tax-power indicator. Furthermore, in the course of a vertical revenue sharing system, the Federal Government is allowed to redistribute up to 2% of its own VAT-revenues for grants-in-aid (Ergänzungszuweisungen) to those Länder whose revenues are still considered to be insufficient to meet their public expenditure obligations. Whether the financing of common responsibilities, introduced into the Grundgesetz in 1969 can be interpreted as a part of the vertical revenue sharing system is uncertain. It should perhaps be interpreted as a system of internalizing externalities since common responsibilities are defined as Länder functions although they have an important impact on living conditions and growth prospects in the entire country.

Laws concerning compulsory social security systems, e.g. unemployment insurance and pension schemes are Federal laws. Benefits and contributions of individual participants are - with the exception of the locally organized compulsory health-insurance system - similar throughout the Federal Republic. Regional subbodies of e.g. the "Federal Body for Labour" (Bundesanstalt für Arbeit) or the "Association of Pension-insurance Companies" (Verband der Rentenversicherungsträger) is permitted no regional differentiation. Deficits of regional subbodies are automatically balanced by the federal body or - in cases where this is not possible - by the Federal Government's budget. Consequently, automatic stabilizers begin to work when regions are affected differently by a slowdown of economic activity, wage developments and demographic trends.

8.2.4 Summary

The Grundgesetz, the constitutions of the Länder, the Stability-and-Growth law of 1967, the Budgetary-Basic-Rules law and the Revenue-sharing law of 1969 provide the legal framework for the budgetary policy of different levels of Government.

As a result of the legal rules governing budgetary policy, all levels of government have sovereignty over their budget but must take account of the need to maintain macroeconomic equilibrium.

As long as additional borrowing requirements are not necessary to avoid macroeconomic disequilibrium, the borrowing requirement of the budget authorities must not exceed their investment expenditures. Access to the seigniorage of the Bundesbank is guaranteed to the Federal Government. In cases of severe macroeconomic imbalances, the Federal Government is allowed to implement further budget rules, i.e. force the central governments (the Federal and the Länder level) to sterilize a part of their tax revenues (Konjunkturausgleichsrücklage) and to set absolute maximum limits on the borrowing requirement for all levels of Government (Schuldendeckel). However, a legal definition of macroeconomic disequilibrium and investment expenditures has not yet emerged. Sanctions in case of non compliance with these legal rules are not foreseen.

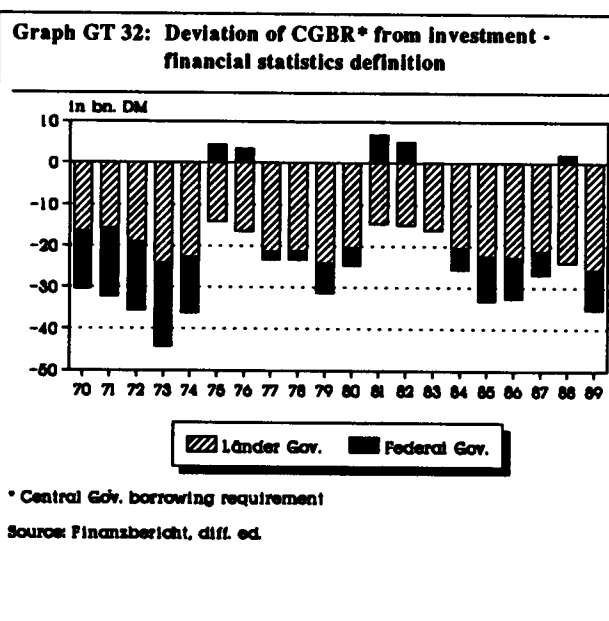
Furthermore, budgetary and accounting procedures have to follow some basic guidelines and a medium-term financial plan is compulsory at all levels of government. To support the coordination and accounting of fiscal policy at all levels of governments, two advisory councils were implemented: the "Conjunctural Council of the public bodies" (Konjunkturrat der Öffentlichen Hand) and the "Financial Planning Council" (Finanzplanungsrat).

In consequence of the requirement of the Grundgesetz for uniform living conditions throughout the Federal Republic, a detailed set of legal rules has been established in order to provide both regional territorial bodies and regional social security bodies with adequate financial resources. These rules form the basis of a system of horizontal and vertical revenue sharing and of regional automatic stabilizers.

8.3 Experience with budgetary rules in FRG

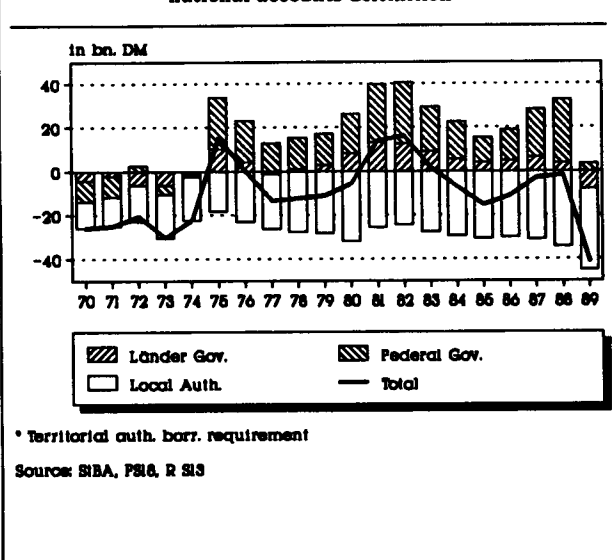
8.3.1 Borrowing requirements

In comparing borrowing requirements with the wide financial definition of investment expenditures (i.e. including investment-related expenditures) the Federal Government's borrowing requirement only exceeded investment-related expenditures in 1976/77, 1982/83 and 1988. Graph indicates, however, that the borrowing requirements of the Federal Government and of the Länder Governments as a whole have generally exceeded investment expenditures (national accounts definition) since the mid-1970s. This holds particularly for the Federal Government here the deficit exceeded investment expenditures by up to 2% of GDP in 1975. Municipalities' borrowing requirements as a whole never exceeded investment expenditures; however, this performance must be seen in the context of the structure of local expenditures. While this level of government accounts for only 14% of general government's total expenditures, its investment expenditures count for 64% of total public expenditure (nat. acc. def.).



The definition of the investment term is the crucial point as regards the question whether a budget rule limiting borrowing requirement to investment succeeds in keeping public debt under control.

Graph GT 33: Deviation of TABR* from investment national accounts definition



Between 1973 and 1989 Central Government's debt rose from DM 101 bn or 11% of GDP to DM 801 bn or 35.8% of GDP. Assuming first that the national accounts definition of investment was the borrowing limit and Central Government's budgets had exactly met this limit every year, Central Government's debt would have reached only DM 464 bn in 1989 or 20 3/4% of GDP. Assuming that, however, the wide definition of investment was the borrowing limit and that the Federal Government and the Länder as a whole had exactly met this limit in each year, Central Government's debt would have risen to DM 1202 bn or 53 3/4% of GDP.

In other words, in the case of the Federal Republic, the narrow (national accounts) limit results almost in a stabilization of the public debt/GDP ratio (+0.5% a year) while the wider limit allows for a significant growth of the public debt/GDP ratio by about 21/4% a year.

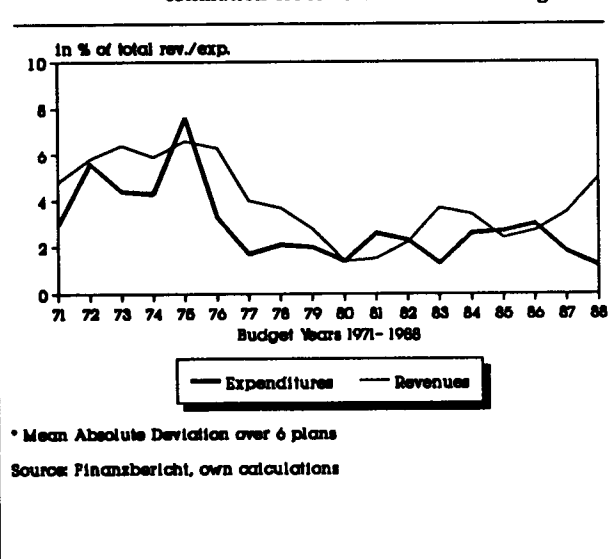
Amendments to the Budgetary-Basic-Rules law of 1969 and to the Federal-Budgetary-Law, at present under discussion, will lead to an operational definition of the term "investment expenditures". However, it will be the wide definition.

8.3.2 Medium-term financial planning

All levels of Government engage in medium-term financial planning on a 5-year basis: the year where the budget is already under execution, the following year where there normally exists a first draft of the budget and three further years. Most experience of planning is at the Federal level, so the Federal budget will serve as an example.

However, it is important to recognize that it is difficult to plan and to control the deficit in any specific budgetary-year. In those years where the Federal Govern-

Graph GT34: Medium-term financial planning estimation error* for the Federal budget



ment's borrowing requirement exceeded even the expanded investment definition, i.e. the years 1975/76, 1981/82 and 1988, the financial plans covering these budgetary years showed significantly higher deviations of estimated borrowing requirements from the actual outturn than for all other years. According to the financial plans of 1974, 1980, 1981 and 1987, borrowing requirements of the respective following budget year were planned not to exceed the limit. Only the budget deficit of 1976 was definitely planned, and according to the financial plan of 1975, was intended to be even higher.

In reviewing the medium-term financial plans presented for the Federal budget, the following tentative assessments can be made:

- It has been easier to project expenditures than to project revenues. The Mean Absolute Deviation (M.A.D.) for the five plans for each budget between 1970 and 1988 was less than 3% for total expenditures but 4% for total revenues.

Table GT35: Medium-term financial planning - estimation errors 1970-1988

| | Expenditures | | Revenues | | Borrowing | |
|---------|--------------------------|--------|----------|--------|------------|--------|
| | (in % of actual outturn) | | | | (in bn DM) | |
| | M.D. | M.A.D. | M.D. | M.A.D. | M.D. | M.A.D. |
| t-4 | -2.3 | 5.3 | 2.1 | 6.7 | -7.9 | 8.9 |
| t-3 | -1.4 | 3.9 | 1.3 | 5.1 | -4.7 | 6.7 |
| t-2 | -0.7 | 2.5 | 0.8 | 4.0 | -2.6 | 5.9 |
| t-1 | 0.1 | 1.6 | 0.9 | 2.8 | -0.6 | 5.2 |
| t | 0.7 | 1.3 | 0.4 | 1.5 | 1.3 | 3.0 |
| Average | -0.7 | 2.9 | 1.1 | 4.0 | -2.9 | 5.9 |

M.D. = Mean Deviation

M.A.D. = Mean Absolute Deviation

Source: Finanzberichte, own calculations

- Expenditures have normally been underestimated while revenues have normally been overestimated. The Mean Deviation (M.D.), which takes account of the sign of a deviation was -0.7% for expenditures¹² and reached 1.1% for revenues¹³
 - Estimation results for each individual budget year improve in the course of the financial plan. While in the year t-4 M.A.D. reached more than 5% for expenditures and almost 7% for revenues, it declined to less than 1.5% for the year in course. Surprisingly, a shift from underestimating expenditures to overestimating them has been recorded as the execution of the budget approaches 1).
 - Projections for the borrowing requirement are only derived from revenue and expenditure estimations although they are in a way framed by political guidelines. As a result, they can generally deviate much more from the actual outturn than estimations for revenues and expenditures. Moreover, as revenues have been over-estimated and expenditures underestimated, projections for the borrowing requirement have been biased significantly downwards.
 - 5. Estimation results of the Financial Planning Council improved as experience increased and external and internal shocks became less pronounced. While M.A.D. in the early 1970s peaked at 10%, the highest M.A.D.-peak since the plan for 1974/78 was that of the plan for 1981/85, with 4.3% for revenues.
- cial Report of 1975, allowing a comparison the medium-term plans for different categories of revenues, expenditures and other strategic items of the different budgets. Medium-term projections at all levels of Government follow this scheme.
- Since 1977, the Council agrees every year upon a common set of hypotheses concerning short-term economic prospects and upon medium-term revenue and expenditure prospects for the different levels of Government. As these projections are fed into the budgetary procedure of the different cabinets, these projections must be published before the drafting of the budgets for the forthcoming year, i.e. in May/June. In October/November, just before the budgetary process is finalized, an update of these projections is published.
 - However, as the budgetary procedures of the different Governments are not totally synchronized, the feeding in of these projections into the decision-making process cannot be guaranteed. The projections are based on an economic forecast presented by the Ministry of Economic Affairs and a financial projection presented by the Ministry of Finance. The latter projection relies heavily on the results of the "Working Group on Tax Estimation" as far as revenues are concerned. The Financial Planning Council discusses these projections and adopts a final version, to be published in the Financial report of the Ministry of Finance.
 - For several years, the Council has been able to agree upon quantitative and qualitative guidelines for the expenditures and borrowing requirements of the different levels of Government. Until 1980, these guidelines aimed at bringing expenditure increases in line with macroeconomic needs. From 1981 onwards the goal of budgetary consolidation has been more prominent. Since 1983, the reduction of the public sector/GDP ratio, fiscal consolidation and an improving of the structure of public expenditures have been the objectives underlying the fiscal recommendations of the Council.
 - On four occasions (1969, 1970, 1971 and 1973) the Council has recommended the sterilization of tax revenues by depositing them interest-free on an account with the Bundesbank (Konjunkturausgleichsrücklage); thus, the overheating of the economy was reduced. The bodies concerned, i.e. the Federal and the Länder Governments acted in line with these recommendations on three of the four occasions in accordance with a special law based on Article 109.4 and Art. 15 of the Stability-and-Growth law.

8.3.3 Budgetary coordination

Budgetary coordination at the three levels of Government takes place mainly in the Financial Planning Council. According to the statutes of the council, its recommendations and comments will only be published if they are unanimously adopted. This rule takes account of the Council's advisory character: if it is not possible to convince the individual members of the Council, it will not be possible to convince the different Governments.

The successes of the "Financial Planning Council" include:

- The recommendation of compulsory medium-term financial planning for the local level as well as the Federal level led to a corresponding legal rule in the "Local Authorities Budgetary Law" (Gemeindehaushaltsrecht) of 1975.
- In the early 1970s, the Council agreed upon a common scheme for financial planning at all levels of Governments. This scheme was first published in the Finan-

12) The trend of M.D. exhibited, however, a structural break as from the budget for 1983 : While for all budgets before 1983 expenditures were significantly underestimated they were over-estimated as from that year. Obviously, the Financial Planning Council has not yet adjusted its estimation methods to the cautious expenditure policy of the new Government.

13) This German experience differs somewhat from the UK experience: in the UK both expenditures and revenues of General government were significantly underestimated (M.D. equalled -1.5% and -2.2% respectively).

- On four occasions also (1971, 1972, 1973 and 1974) the Council recommended absolute maximum limits to the borrowing requirements of the Federal and individual Länder Governments. Twice (1971 and 1973), these recommendations were followed by corresponding special laws. In 1972, the limits could already be met without legal action, the special law planned for 1974 was withdrawn in the light of the first oil-price shock.

The ability of the Financial Planning Council to adopt unanimously recommendations for the budgets of the three levels of Government, does not mean automatically that these recommendations were followed in practice:

- Initially, quantitative guidelines for expenditure growth were met only by chance. Significant deviations were recorded especially in the 1970s. The guideline for 1970 was to limit expenditure increases to 7%; 12% was the actual outturn, mainly as a result of an unexpected increase of the wage bill (guideline: +7.5%, real outturn: +15.8%). In the course of the late 1970s and 1980s, however, Central Governments' tried to meet the expenditure guidelines. The Federal Government was quite successful in doing so.
- Qualitative guidelines for expenditures included recommendations to control the wage-bill increase, to check subsidies and to finance new expenditure intensive programmes by cutting expenditures on other programmes. As these recommendations have been worded quite vaguely, the extent of their actual implementation is hard to verify.
- According to Article 51.2 of the "Haushaltsgrundsatzgesetz", the Financial Planning Council was asked to establish a list of priority of what are the most important public expenditure programmes, taking account of the need to maintain macroeconomic equilibrium. The Council never succeeded and decided in 1981 that this task would be more properly assigned to the Parliament.

Despite such failures, the work of the Financial Planning Council can be assessed as a good support for budgetary coordination, especially, if one considers its advisory character.

8.3.4 Revenue sharing and other regional automatic stabilizers

Vertical revenue sharing in its narrow definition (i.e. not including grants-in-aid for common responsibilities) between the Federal Government and the Länder was limited to 1.5% of VAT-revenues of the Federal Government, in 1989 this limit was increased to 2%. These "Ergänzungszuweisungen" increased from DM 0.5 bn in 1970 to DM 2.4 bn in 1988, i.e. 1% of total revenues at the Länder level. Horizontal revenue sharing among the Länder, designed to lift individual Länder tax-power index to 95% of the average tax-power index rose from DM 1.2 bn in 1970 to DM 3.4 bn in 1988, i.e. 1.5% of all revenues of the Länder budgets.

Although vertical and horizontal revenue sharing is not very important, if compared to total revenues of the aggregated Länder level, it is essential for certain Länder (e.g. about 17% of all revenues or 2% of GDP for the Saarland in 1988). This revenue sharing makes regional budgets less liable to cyclical revenue shortfalls.

Automatic stabilizers working through the social security system are more important for regional public finances. Stabilizers working through the unemployment-insurance scheme amounted to more than DM 10 bn in 1988, as the Federal level equilibrated the deficits of the regional subbodies. In the case of Saarland, this means that an additional DM 0.8 bn or 2.6% of GDP was transferred to this region which suffers from high unemployment.

8.3.5 Summary

An assessment of how effective the limits drawn by different laws have been in controlling the borrowing requirements in the 1970s and 1980s is quite difficult as the limits and exemption-rules have not been adequately defined. In the past, the borrowing requirement of the Federal Government and some individual Länder exceeded the wide investment-expenditure definition (GFCF plus investment-related subsidies) only in some years. However, both, the Federal Government and the Länder Governments as a whole have had higher borrowing requirements than their outlays for investment expenditures as defined by the national accounts since the mid-1970s.

A borrowing limit, however, which allows borrowing requirements to be as high as investment expenditures in the financial definition, i.e. gross fixed capital formation plus investment related transfers to other public budgets or to the private sector, is not at all sufficient to keep public debt on a sustainable path. In the FRG, the public debt/GDP ratio has increased in particular during the 1970s and early 1980s and a further increase by almost 20% of GDP would still have been in accordance with this wider defined borrowing limit.

Before criticizing the political process, one must consider the difficulties in meeting borrowing plans when it is equally difficult to estimate the real outturn of expenditures and revenues. . Even estimations of the budget already under execution has shown a Mean Absolute Deviation of 1.5% for both expenditures and revenues. Twenty years of medium-term budgetary planning in Germany indicates that it is more difficult to estimate revenues than to estimate expenditures and that there is a systematic bias in underestimating borrowing requirements.

The Financial Planning Council plays a key role in coordinating the budgetary policy of the different levels of Government. Although it is only an advisory body it has been quite successful in influencing the budgetary policy in the Federal Republic. In designing a common budgetary scheme for all levels of Government and in making unanimously recommendations, it has become more in-

Figure GT36
Fiscal policy in a monetary union:
Federal Republic of Germany and European Communities
 - A stylized comparison-

FRG

EC

1. Regional economic performance

growth rates differ
 severe differences in unemployment rates-
 inflation rate differentials, but converging
 per-capita income differentials

growth rates differ
 severe differences in unemployment rates
 severe inflation rate differentials, but converging
 per-capita income differentials

2. Structure of public sector

Federal budget: 15% of GDP
 Federal soc. sec.: 12% of GDP
 significant automatic stabilizers
 significant revenue sharing
 identical taxes and tax rates
 identical soc. sec. schemes

EC-budget: 1% of GDP
 EC-level: none
 no automatic stabilizers
 no significant revenue sharing
 different tax systems and tax rates
 different soc. sec. schemes

3. Convergence of budget deficits

before revenue sharing: no convergence
 excluding automatic stabilizers: no convergence
 after revenue sharing and including automatic
 stabilizers: relatively high convergence

no convergence

4. Coordination

common taxation in all regions-
 vertical coordination through advisory body
 horizontal coordination through revenue
 sharing
 common scheme for medium term
 planning
 coordination of fiscal planning
 maximum limit for borrowing requirements on
 all levels, exemptions are allowed
 binding rules for maximum limits not made clear

different taxation in all countries
 no vertical coordination
 no horizontal coordination, independent fiscal policy
 through member states
 no common scheme for medium fiscal planning
 no coordination of fiscal planning
 maximum limit for borrowing requirements exists for
 several budgets, exemptions are allowed
 binding rules for maximum limits not made clear

5. Implications

Central budget responsible for stability-oriented
 policy mix with monetary policy
 Central budget responsible for redistribution policy
 Central budget has strong effects on the overall
 conduct of fiscal policy
 revenue sharing and automatic stabilizers allow
 for a smoothing of regional budgetary imbalances
 despite regional economic shocks
 binding rules not restrictive enough to keep
 public debt on a healthy path

the budgets of the large countries mainly responsible
 for the stability-oriented policy mix of the EMU
 national budgets responsible for redistribution policy
 larger countries' budgets have strong effects on the
 overall conduct of fiscal policy in EMU
 the lack of revenue sharing and automatic stabilizers
 leads to a vulnerability of small countries' budgets to
 regional economic shocks
 binding rules not restrictive enough to keep public debt
 on a healthy path

fluent in the course of the 1970s. The Federal Government has tried to meet the quantitative guidelines for expenditure increases, and several recommendations became legally binding as corresponding laws were adopted by the Parliaments, e.g. the sterilization of tax revenues, the absolute maximum limits on borrowing requirements in the early 1970s and the introduction of compulsory medium-term financial planning for local authorities. In its attempt to synchronize budgetary procedures, the Council provides the Cabinets (every May/June and every October/November) with updated forecasts concerning the economic environment and fiscal baseline scenarios.

Revenue sharing and regional automatic stabilizers working through the social security system, have proved to be a very important support to the requirement of the Grundgesetz that living conditions be equated throughout the whole Federal Republic. Although the total amount of money involved in horizontal revenue sharing is quite small (0.3% of GDP), these transfers play an important role for the financial balance of individual Länder. Assuming that there were no revenue sharing and automatic stabilizers, regional public financial balances would differ by more than 10 percentage points, i.e. more than among ERM-countries and not by only 2.5 percentage points of GDP as is shown in the Länder budget. However, the price all levels of Government has to pay for this, is to cede their sovereignty over tax and social security rules: taxation and social security contributions and allowances are identical throughout the Federal Republic.

8.4 Executive summary: lessons for Europe

The Federal Republic of Germany is the most federalist state of the European Community. In particular, fiscal policy is to a relatively large extent organized at a sub-national and regional level. By the end of the 1980s, economic indicators such as inflation, growth and unemployment are as different within Germany as among ERM countries. Therefore, the FRG as a model of fiscal policy coordination might provide information about the instruments and necessary degree of fiscal policy coordination in a monetary union and the problem likely to be encountered.

However, it has to be borne in mind, that the structure of the public sector within Germany is very different from the structure in the other ERM-countries. The Federal level in Germany (incl. social security), equals 34% of GNP while the EC-budget equals only about 1% of GDP in Europe. Furthermore, the Federal budget in the Federal Republic works as an automatic stabilizer both on the expenditure side as e.g. centrally financed unemployment benefits are distributed in favour of the regions with high unemployment but also as regards revenues e.g. economically strong regions contribute relatively more than poorer regions to overall revenues. Such equilibrating mechanisms do not exist at the EC level (see box).

As a result of significant revenue sharing and the operation of other regional automatic stabilizers, discrepancies in regional budgetary imbalances are much less pronounced within Germany than within the narrow-band ERM-zone. Although horizontal revenue sharing among the Länder is not very important at the aggregated level, it is quite pronounced for individual Länder. So, revenue sharing makes regional budgets less liable to cyclical and sectoral revenue shortfalls. This is even more true for the different regional budgets of social security schemes which are balanced at the federal level.

The following conclusions can be drawn for European integration:

- A single monetary policy and cooperative fiscal policy, including revenue sharing and important regional automatic stabilizers, can moderate negative repercussions of different economic performances for individual regions. They are, however, not sufficient to lead to a convergence of regional growth, unemployment rates, inflation and per-capita-income discrepancies.
- A convergence of public financial balances can only be achieved by significant revenue sharing and an implementation of automatic stabilizers working at the regional level e.g. an European Social Security System. Significant revenue sharing and other regional stabilizers are, however, not likely to be established as long as important differences exist among national systems of taxation and social security.
- Fiscal policy coordination among sovereign Governments can be supported by an advisory body which consists of representatives of these Governments. Such a body would have to convince all governments. In this context, it might be helpful for its decisions to be bound on unanimity.
- Binding targets give the necessary framework for budgetary coordination. They are, however, very difficult to achieve when they are very detailed, giving precise quantitative constraints, as outturn normally differs significantly from ex-ante plans. The quality of medium-term expenditure and revenue estimates can be improved in the course of the planning period and estimation errors can be reduced as the respective budget year approaches. However, experience in the FRG showed that estimation errors could hardly be pushed below a 1.5% for revenues and expenditures, even at a time when the budget was already under execution.
- Quantitative and qualitative binding targets, e.g. for budgetary deficits not exceeding investment expenditures ask for clear definitions of the targets themselves. They encounter difficulties since the definition of e.g. investment expenditures is not clear and exemptions also ill-defined for by-passing the rule are allowed. Nevertheless, they are a very useful guide as to the appropriateness of the fiscal performance.
- To define, as it is done in the Federal Republic, investment expenditure as gross fixed capital investment plus investment related transfers to other budgets or to

the private sector is not at all restrictive enough to avoid an unsustainable public debt/GDP performance. In the case of the Federal Republic, it would have allowed for an annual increase of the public debt/GDP ratio of more than 2.25% over the 1970s and 1980s.

General conclusion: the Federal Republic of Germany can serve as an example of relatively successful budgetary cooperation and of what can be achieved in an economic and monetary union with a coordinated budge-

tary policy. It gives examples of rules, conditions and problems for budgetary policy coordination and it shows that budgetary coordination and strong revenue sharing have been the major instruments to foster convergence of living conditions throughout the FRG. However, the German system has numerous specific features which may not be realized at the European level. Therefore, the EC might have to find different ways and means of fiscal policy coordination.

Part III: The GDR economy and implications of GEMSU

Chapter 9 Main characteristics and implications of GEMSU

9.1 Main characteristics of the GDR economy

In the past, several models have been developed to transform a capitalist economy into a planned economy: however, such a model does not exist for the reverse procedure. In consequence, neither economic theory nor politicians are coping with the rapid progress in Eastern Europe towards a market economy. The intra-German development is even more particular. The monetary union with the GDR is on condition that the framework of a market-oriented economy is implemented. The basic political objective has been to stop the massive immigration wave which has been observed after the opening up of the inner German border by promoting economic prosperity in the GDR and not by administrative measures implemented by the Federal Republic. The German Economic, Monetary and Social Union (GEMSU) is seen as a firm signal and commitment that differences in living standards will shrink in the foreseeable future, thus creating positive expectations as to the economic prospects in the GDR.

The conditions for monetary union relate to the need to implement the basic conditions of a market economy. They mainly concern:

- contract freedom between economic agents;
- abolition of administered prices;
- wage autonomy on both sides of industry (independent trade unions and entrepreneur organizations);
- reform of private property rights;
- implementation of a tax and social security system which is similar to the West German system.

However, the offer also contains accompanying measures supporting the transition period. This, in particular, concerns financial support for the public budget (German Unity Fund) and for the newly created social security system, mainly unemployment insurance and pension scheme (Anschubfinanzierung). In addition, financial support is promised to improve the GDR-infrastructure and to provide financial and technological support to reduce heavy environmental pollution in the GDR, which is a common interest.

As regards the implications of GEMSU, a variety of opinions have been put forward. The following chapters 9 and 10 put relatively more weight on the development

of the GDR economy. Chapter 9 provides an overview of the structure and performance of the GDR economy. It starts with an analysis of demographic prospects and an assessment as to the general level of living standards. The analysis of the present structure of the GDR-economy provides some basic information on the need for structural changes.

Chapter 10 is devoted to a discussion of the consequences of economic unification in the GDR economy. Two scenarios for the economic development of the GDR economy are developed. Firstly, the scenario of an independent catching-up process will be put forward which - admittedly in a stylized way - compares the potential for development in the GDR with the West German Wirtschaftswunder in the 1950s and early 60s. It will be shown that such a scenario depends upon important conditions which are not necessarily fulfilled in the GDR. The second scenario starts from the notion that economic integration, mainly because of strong labour mobility, will accelerate to a very large extent after GEMSU. Consequently, an independent development (catching-up) of the GDR would hardly be possible, i.e. the GDR-issue will have to be discussed more under regional-policy aspects rather than as a general macro-economic challenge. Although important differences are obvious, the Italian example with the stylized picture of an underdeveloped South despite massive public aid, may be mentioned in this context.

9.2 The population

At the end of 1988, 16.6 million people lived in the GDR. Since then 600.000 have emigrated to the FRG. Although the average density of population is fairly low, its concentration is high. More than 50% of the population lives in East Berlin and in the centres of the South (Halle, Leipzig, Dresden and Karl-Marx-Stadt). It is important to note that some of these centres are near to the border of the Federal Republic.

The age pyramid is more favourable than in the Federal Republic. The proportion of the population below 18 years of age is larger (24%) than in the Federal Republic (19%), while all other age groups are somewhat lower particularly the age group above 60 years (18% GDR, 23% FRG). Nevertheless, the GDR is also confronted by a growing number of elderly compared to the working age groups. This problem is aggravated by emigration concentrated in the younger age groups.

Labour force participation is extremely high according to international standards (almost 90% of the population is working compared to just over 60% in the FRG)

mainly due to a much higher participation rate of women. Total employment amounts to almost 9 million (55% of the population) compared with 26 million (41% of population) in the Federal Republic.

The level of professional qualifications is relatively high. Three quarters of the labour force have finished their professional education. However, to the extent that education has been ideologically influenced, in particular in the academic professions - economists, lawyers, general administration - shortcomings have to be expected. Engineers should, in general, be in a position to meet the new challenges. At the level of skilled workers, important adaptation to new Western technology will be necessary. Moreover, a crucial condition for a successful integration of the GDR economy into the Western market economy will be the regeneration of the spirit of entrepreneurship and market oriented management methods in the GDR.

The standard of living in the GDR is undoubtedly the highest in Eastern Europe, but comparison with Western countries is hardly possible. Nevertheless, despite a high degree of uncertainty, per capita income is probably higher in the GDR than in Ireland, Greece and Portugal and somewhat below that of Spain. Real per capita income seems to be about 1/2 that of the FRG. Therefore, the immigration problem is less related to general poverty in the GDR than to proximity to a high income area with marked cultural similarities. The supply of food, basic household equipment and cars is relatively high. Problems exist with the quality of consumer durables and housing. Moreover, bad working conditions, infrastructure and environmental problems considerably reduce living standards in the GDR.

9.3 Industry - a sectoral overview

The development of the GDR economy has been dominated by autarchic policy of minimising dependence on inputs from Western countries, partly motivated by a permanent shortage of foreign currency. Therefore, the GDR does not show a high degree of specialization. The target of self-reliance has even led to some noticeable excesses: companies were not only encouraged to produce their own investment goods, but the large conglomerates (Kombinate) were also obliged to make their own repairs and to produce at least a certain amount of consumer goods (5% of total production) irrespective of their main production line. In addition, compared to western industrialized countries, the sectoral structure of the GDR economy has changed relatively little over the past few decades. Industry is by far the most important sector, while in Community countries services in general play the most important role. In fact, the present sectoral employment structure of the GDR closely resembles that of the FRG in the late 1960's.

Labour productivity in the GDR is generally considered to be somewhat below 40% of the FRG level, depending, however, on the specific sector under consideration. Three main factors are responsible for this productivity gap: organization (bureaucratic central planning), moti-

vation (lack of incentives) and technology (outdated capital stock). The latter factor has been particularly aggravated during the eighties as the share of investment in national income fell considerably. (In the producing sectors, for example, this share is said to have been only about 10% in 1988 compared to 16% in 1970). Moreover, the integration into the static COMECON trade relations, together with only a marginal integration into the world economy, contributed to the obvious inefficiency of the GDR economy.

A short sectoral analysis shows that an assessment of the catching-up possibilities varies from fairly positive to almost non-existent.

Energy

Energy production is mainly based upon the only mineral resources available to the GDR: lignite. With 310 million tonnes (25% of world production), the GDR is by far the world's largest producer of lignite. 85% of electricity generation is lignite-based. Lignite is also the basis for household heating. Consequently, over 2/3 of primary energy inputs consist of brown coal. Nuclear energy currently provides about 10% of electricity. However, security standards are considered to be below acceptable levels.

Energy consumption per head of population in the GDR is very high relative to international standards (15% above the level of the FRG). High energy input in industry, low efficiency of power stations and a general lack of realistic energy prices and of insulation of housing are the major reasons for this.

Steel

Because of disadvantages in transportation and mineral resources, the GDR has had no genuine basis for steel production. Nevertheless, the GDR developed its own steel production capacity after the war, mainly based on scrap iron as input. Production costs are fairly high because the Siemens Martin technique is prevailing; this technique was completely abandoned in 1982 in the FRG. High quality steel cannot be produced. In the steel industry, labour productivity is well below 50% of the FRG level.

Chemicals

The GDR-chemical industry is largely based upon coal-using plants built before the 2nd world war. The synthetic material industry is far behind Western standards. Production in this strongly growing sector is only 10% of FRG production, even leaving aside quality considerations. As regards fertilizers - generally a low profit area - the GDR is an important net supplier on the world market. Modernization of existing enterprises which is necessary to enable them to compete on the world market, involves severe environmental problems.

Machinery and car industry

Statistics on this sector, the most important sector after chemicals, are hardly comparable with Western countries mainly because quality aspects are very important. Almost 1 million persons are employed in this sector. Production in the machinery-tool industry is relatively less important compared to the FRG. However, this industry seems to be or could become competitive on the world market. The machinery sector suffers very much from the unavailability of electronic control mechanisms (COCOM-list) which are becoming increasingly important in the production of machinery (industrial robots). Nevertheless, GDR exports in this sector amount to 30% of all COMECON-exports to Western countries. Despite the key position, which the car industry has in Western countries, it is of minor importance in the GDR industry. A symptom of the very low efficiency of the GDR-car industry is that motor lorries can barely be exported to Eastern countries. Heavy lorries are not produced in the GDR also because transportation relies much more on railways, which make up for 75% of all transportation (FRG: 22%).

Electronics

Investment in micro-electronics has been extraordinarily large in order to build up a monopolistic position in Eastern countries. Competition with Western countries will probably render these industries (Robotron) obsolete. It should be borne in mind that in this area even Community industries have competitiveness difficulties on the world market. As regards the growing production of software, developments are much more favourable because of highly skilled programmers. In the traditional industries of precision mechanics and optics, the GDR-industry is relatively well prepared for international competition.

Construction

The construction sector is mainly orientated towards large-scale housing constructions. It employs 6.6% of the labour force. Although the technique of prefabricated housing construction is quite advanced, it is highly doubtful whether large blocks of flats will meet future demand in this area. Instead, modernization of the existing stock of housing and building of small housing units will require much more craftsmen. Therefore, although demand will certainly grow, a restructuring is required within the construction sector. As regards underground building, investment in new equipment is necessary in order to achieve both a high standard of production and high productivity.

Textiles

The production of textiles (6% of total GDR production) is mainly devoted to standardised mass-products. This leads to strong competition with developing countries on third markets. Shortage of capital prevents these enter-

prises from introducing automatic and flexible production lines. Most of the capital stock still stems from the pre-war period.

Food industry

The main problem for the food industry (15% of total GDR production) is a lack of variety and low quality. High quality products are not available in consequence of previous self-sufficiency objectives and to avoid imports. Productivity is particularly low in this sector.

Agriculture

Agriculture contributes about 10% to GDP (employment 10.8%). About 95% of the agricultural sector is socialized. The ratio of agricultural acreage to population is twice as large as in the Federal Republic. Nevertheless, labour productivity (per employed) is below 50% of the FRG level. Productivity of land is therefore much higher i.e. about 75% of the FRG level.

Private economy

Before recent economic reforms, only 458.000 people (5.3% of total working population) were employed in the private sector. This sector produces 3.6% of net national product. This figure, however, does not include all activities as services are not included. The private economy is concentrated in the traded handicraft sector, i.e. repairing, trade and construction.

Banking

The GDR has adopted the two-stage banking system. Nevertheless, some kind of specialization will exist, mainly because of past experiences and historically established relations. For example:

- the Kreditbank AG (formerly part of the Staatsbank) will provide industry and the construction sector with credit (genuine universal bank).
- the Genossenschaftsbank will mainly provide agriculture with credit.
- the Sparkassen will collect local savings and provide public authorities with credit.
- the Aussenhandelsbank will specialize in international transactions.

Within the banking sector, the Kreditbank holds most of the credits to industry. Therefore, it will have to be financed by the Sparkassen since at present these institutions hold about 80% of all savings deposits. Without some guarantee on the loans to the industrial sector, the Kreditbank would in fact be bankrupt since many enterprises, once privatized, will not be able to service their debt in DM.

A major problem for the Sparkassen is that 95% of its personnel are without even secondary education since

their only task has been to collect savings deposits. The Sparkassen will therefore initially not be equipped to provide loans on a commercial basis. Although each Sparkasse in the GDR is supposed to have a counterpart in the FRG, they receive little effective assistance.

A further problem concerning the overall commercial banking system is that the capital base will be very narrow; at present the own capital ratio for Sparkassen seems to be about 1% of total assets. Given that the Kreditbank will take over most of the loans and that the Sparkassen hold most of the savings deposits, it is not clear how important the specialized institutions will be and how their balance sheet will be structured.

9.4 Infrastructure and environmental characteristics

A major impediment to private investment in the GDR could be substantial infrastructural and environmental problems. The railway is the most important means of transport. Although the network is only half as intensive as in the Federal Republic, the railway achieves about the same transportation performance. About 1/3 of all railway transport is devoted to the carriage of lignite. The reason for the preferential treatment of the railway was not based on environmental or economic efficiency concerns, but on the need to save crude oil. There is a great need to repair and modernize the existing railway network.

In terms of coverage, the road network is fairly good relative to European standards; however, quality is much below the FRG-standard. Thus, transport is very slow not least because of the many railway crossings. In future, bottlenecks will increase because of more intensive private traffic. Increased tourism from the West and probably more cars per inhabitant in the GDR, are reasons for this. Public transport within cities is provided mainly by tramways. With the exception of East Berlin, communication systems are very bad. The telephone system is overburdened despite the very low number of connections.

Modernization of the system will probably mean a complete rebuilding of the communication system. This, however, is also an opportunity to establish the most advanced technology in this area. Private capital might increase the efficiency of a new system.

In the other areas of vital public infrastructure, investment needs are substantial also. This is particularly the case for sewerage facilities as only 50% of households are connected to purification plants. Environmental problems are important too. Although the GDR is only half the size of the FRG (25% of population) the sulphur-dioxide emission is more than twice as large. Rivers are polluted to a very large extent and the availability of potable water is a problem. Forests have suffered severe damage i.e. the Waldsterben is very advanced particularly in the South.

Although it is difficult to estimate the amount of investment needed to remedy these unsatisfactory conditions and to modernize the infrastructure, there can be no doubt that substantial effort is needed. The German entrepreneurs association has estimated that an overall investment of more than 600 bn DM is required.

9.5 The trade pattern

The GDR is poorly integrated into the international economy for a country of its size; this reflects previous objectives of self-sufficiency. Although it is hardly possible to obtain reliable statistical information, estimates suggest that the GDR's export share is in the order of 25% of GDP. This would indicate a comparatively small participation in the international division of labour for a country of its size (the Netherlands, for example, with a population of approximately the same size has an export share of 55-60% of GDP). At present, about 2/3 of the GDR trade is with other CMEA countries, notably with the Soviet Union (around 37% of the total trade). The CMEA division of labour, however, has been characterized largely by extra economic considerations. As trade with developing countries plays a minor role, most of the remainder is with western industrialized countries (of which 1/3 is with the FRG).

As far as the product profile of GDR trade is concerned, it is useful to distinguish between different destinations. GDR exports to other CMEA countries (especially the USSR) largely consist of machinery and equipment (2/3 of exports), while imports contain a high share of energy products and raw materials. This complementary trade pattern offers relatively small welfare gains (typically related to substitutable trade); normally such a trade pattern is to be found in relationships between (highly industrialized) core countries and (much less industrialized) peripheral zones. Exports to western industrialized countries show a very underdeveloped pattern with a certain emphasis on simple consumer goods. Investment goods are exported to western countries to a considerably lesser extent.

An analysis of GDR trade flows with the Community reveals that the GDR is a net exporter of energy- and labour-intensive products (the production of which also causes a high level of pollution) while it is a net importer of products with a high raw materials, R&D and technology content. In the light of the fact that the GDR has little fossil fuel deposits except lignite and taking into account the alleged high quality of GDR employees, it is unlikely that this trade pattern corresponds to East Germany's comparative advantage.

Overall, it is noticeable that the GDR's trade is still dominated by inter-industry trade (i.e. imports and exports belong to a different product group) while the Community countries are characterized by a high degree of intra-industry trade.

Chapter 10

Implications of GEMSU for the GDR economy: two scenarios

10.1 Introducing GEMSU: initial conditions and consequences

10.1.1 Consequences for the GDR economy

A monetary union between the FRG and the GDR will inevitably have severe implications for the GDR economy in the short term. Although the economic goal may be clear to both sides, the process of unification is fraught with difficulties. In the long run, there is the prospect of economic prosperity in central Europe acting as a bridgehead between the EC and the emerging Eastern European democracies.

After GEMSU, the GDR economy is immediately confronted by competition from market economies. However, the GDR economy was not competitive on the world market. Exports to hard currency countries only amounted to 4% of GDP. Moreover, in order to earn 1 DM from exports, around 4 East-Mark had to be invested. Therefore, one cannot expect that with prevailing economic structures the GDR-economy will be able to increase its exports in the short term particularly as real wages are probably above prevailing levels of productivity. Exports to Eastern countries will suffer to the extent that trading partners would have to pay in hard currency. Therefore, such exports would have to be subsidized considerably or will be replaced by exports from other Eastern or Western countries.

Much bigger problems for the GDR economy arising from monetary union stem from the considerable replacement of domestic output - both consumption and investment - by imported goods. This effect is triggered by the immediate and complete convertibility of money balances in the GDR after GEMSU. Providing GDR residents with hard currency has led to an important shift towards imported goods. After full monetary union, not only transfers and foreign investment but also hard currency income of GDR residents contribute to higher imports. This is obvious from the fact that the GDR economy is not competitive; in this context, competitiveness does not primarily mean price competitiveness but more particularly the mix of production. Most GDR-products, e.g. GDR-cars, have been bought only because they could be purchased with East-Mark or non-convertible currencies. Consequently, domestic demand for such goods is substituted to a large extent by imported goods.

The problem is even more obvious in regard to investments. Modernization of the GDR capital stock requires western technology. Consequently, increased investment will be reflected in imported investment goods.

All in all, demand for GDR production is falling dramatically after the introduction of GEMSU; this is independent from the question of price competitiveness and

thus from the conversion rate. Probably, GEMSU could make production equal to 1/4 of GDP obsolete; this in turn leads to substantial unemployment in the short term. This rise in unemployment can only be partly avoided by paying subsidies to firms as demand for GDR production is largely price inelastic. Nevertheless, subsidies are still necessary for industries which are able to survive in the medium term so as to balance productivity and labour costs in the short term.

Unemployment in the GDR will - at least over the adjustment period - increase further because enterprises are under severe pressure to increase productivity. In addition to improving the organization of the production process, reducing labour hoarding is the natural source for increasing labour productivity. Substantial new employment possibilities will be created only in the medium term because they require new investment (industry) or training (services).

10.1.2 Consequences for public finance in the GDR

Prospects for the public sector balance of the GDR are very uncertain as the whole structure of expenditures and revenues has been changed. On the one hand, major price subsidies are abolished, on the other hand production levies paid by enterprises are abolished also. Although the budget deficit will depend upon the development of the economy, a massive deficit seems to be unavoidable. Several factors are responsible:

- an insufficient tax base
- time-lags because of the necessary tax reform
- expenditures to promote investment
- imbalances in the social security account
- new expenditures (infrastructure, environmental protection)
- interest payments on public debt.

A priority task will be to aim at low wage costs of enterprises. In order to achieve a level of purchasing power which avoids emigration, the level of net wages cannot be considerably lower than gross wages, i.e. wages cannot be taxed significantly. In addition, the West German tax system applied to the low GDR wage level suggests that revenues are considerably below the corresponding West German wage tax (somewhat below 10% of GDP). Most enterprises do not record profits. During the transition period, it can be expected that many of them might record losses which will have consequences as regards taxation of profits in future (Verlustvortrag). Even if this period is short, enterprises would build up internal reserves in order to strengthen their own capital base. In order to foster investment, retained profits might be taxed to a lesser extent than distributed profits. Finally, introducing the West German tax system of assessed income tax and corporate tax involves considerable time lags (about 2 years) in the payment of taxes on profits.

Indirect tax revenues can be achieved earlier although the introduction of a sophisticated value added tax system is difficult. As the structure of consumption is biased towards basic needs, which are taxed at the lower rate, revenues will be lower. This effect could be reduced by introducing higher taxes on special products, e; g; cars.

As regards the expenditure side, no substantial cuts can be expected except in the provision of price subsidies. The net impact is, however, substantially reduced by the abolition of high taxes for special consumer goods. Although the number of civil servants will decline considerably, the adjustment of the wage structure leads to a substantial increase in the public sector wage bill. Therefore, overall wage expenditures will not decline to the same extent as it is suggested by declining public employment.

As regards the newly created social security system, the threat of big deficits is reduced as both contributions and benefits will be linked to income. This concerns the pension and unemployment scheme. The main danger results from a substantial discrepancy between contributors and beneficiaries. Therefore, high unemployment leads to a high deficit. In addition, a low wage level leads to the need to increase very low pensions by special payments. A special risk is involved in the health security system. While contributions are linked to income, the expenditures would be linked to the "Gebührenordnung", which is not related to wages. Therefore, higher income for specialists in the health system might be inconsistent with low wages. All in all, it has to be expected that high social security contributions burden the wage cost level of enterprises and disposable income of employees further. The necessary self-financing of social security in the GDR might trigger additional problems.

New expenditures result from the fact that the public debt and deficits have to be serviced at market interest rates. Therefore, a high initial public debt level will reduce the room for manoeuvre of fiscal policy in the GDR further. Moreover, public expenditure on infrastructure investment and in the provision of incentives for private investment might increase.

All in all, the public sector in the GDR will show a considerable deficit. The estimate of the five German research institutes of 15% of GDP could prove to be on the low side.

Privatisation could reduce the gap between expenditure and revenues. However, large-scale privatisation would overburden domestic GDR savings at least in the short term. Therefore, large-scale privatisation would only be possible by selling public assets to "foreigners". If no market prices were realised this would trigger negative wealth-distribution effects.

10.2 An independent catching-up process

Prospects for economic development in the GDR are uncertain. While in the short term a drastic fall in production because of changing demand and unprofitable

production seems to be inevitable, - production figures of August dropped already by more than 40% if compared with the output a year ago - several analysts are more optimistic about the medium term prospects. They believe in a rapid catching-up process for the GDR economy, which might be comparable to the development of the West-German economy in the 1950s and early 1960s. However, such a development would depend upon important conditions which have still to be created. Compared to the German "Wirtschaftswunder", three fundamental differences can be identified: the wage level, the exchange rate and the proximity of the FRG.

The most important condition for an independent catching-up process are high expected profits in catching-up regions. Fundamental conditions for this are a low level of wages and a favourable tax scheme. Wages have not only to be in line with the lower prevailing level of productivity - this might have been on average the case after the 1:1 conversion -, they have also to be low enough to lead to a high rate of return on new investment. Moreover, it is not only the prevailing wage level which has to be low. The expected wage level during the life time of new investment should also be favourable.

Several reasons lead, however, to the conclusion that the GDR economy is confronted by an upward pressure on wages which will hinder the GDR economy from catching-up independently.

- First, the price reform together with newly-introduced indirect taxes will push up many prices, leading to compensating wage pressure effects despite the fact that many prices will also be reduced.
- Second, the necessary increase in wage differentiation will increase average wages.
- Third, cross-border working contracts will have spillover effects on the GDR wage level.
- Fourth, new investment in the GDR will have a much higher productivity and respective enterprises can afford comparably high wages. This will sooner or later affect the wage level in general.
- Fifth, to the extent that top and middle management will come from West Germany, the wage pyramid might prove unacceptably "colonial" with West German employees receiving West German salaries maybe even with a supplement.
- Finally, newly established trade unions will aim at a rapid wage equalization in the two parts of the economy; for West German unions a low wage area of the GDR would endanger employment possibilities in the FRG while GDR unions have to aim at rapid wage increases.

All in all, it is very unlikely that wages and wage expectations can be brought to a level which will lead to the required high real rate of return on investment.

A second fundamental difference between the experience of the West German "Wirtschaftswunder" and the GDR concerns the exchange rate. While in the Federal

Republic the exchange rate has been undervalued, related to the performance of the GDR economy, GEMSU at a 1:1 conversion rate leads to a real overvaluation of the Eastern currency which had to earn 4 Eastmark to yield 1 Deutsche Mark. Even bigger problems, however, relate to the immediate full convertibility of the currency. In the Federal Republic, restrictions in the area of capital movements have been maintained until 1958 and even then most other European countries were far from having achieved convertibility.

Therefore, providing the GDR residents with hard currency leads to an important shift towards imported goods. These imports are cheaper because of an overvalued currency - and better - because the GDR economy does not itself provide the product mix to resist import penetration. An obvious example is the car industry. The variable cost of producing such cars are significantly above the price which is accepted by potential consumers. Therefore, existing GDR industries are confronted by a significant fall in demand which aggravates the catching-up process.

The third fundamental difference from the "Wirtschaftswunder"-model concerns the integration of the GDR into Germany. Workers have the choice between staying in the GDR or looking for a job in the high wage area of the Federal Republic. This is a fundamental difference as compared to the 1950s where in the Federal Republic there has not been the possibility of large scale emigration. Due to the high level of income imbalance, qualified workers enter the West German labour market. For the Federal Republic, this can be compared to a positive labour market shock. However, for the GDR, the outflow of qualified workers impedes domestic and foreign investment.

Finally, it has to be kept in mind that the East German population is concentrated near the inner German border. The labour market in Berlin is an example of extreme wage differentials at a very localized level. It is hardly imaginable that such large wage discrepancies can prevail for a long time.

10.3 Policies to avoid a less developed region of Germany

The regional approach to the future development of the GDR economy starts from the notion that the integrating forces of monetary union will affect factors of production even faster than they will affect goods and services, which might remain directed to Eastern Europe for some time. Factor mobility might be so high that it will not permit the distinction between two independent economies.

After German monetary unification, it becomes increasingly meaningless to look at the economic "regional" variables independently; consolidated consumption, investment and trade figures are the variables which matter. Private consumption is shifted significantly from the GDR towards goods produced in Western countries. Therefore, the purchasing power and savings behaviour

of GDR residents will have strong effects on consumer demand in the FRG.

Investment behaviour of enterprises is undertaken in a whole German context. Although the effect on net investment will probably be positive, new investment might be shifted from the territory of the FRG to the GDR. It is, however, also possible that FRG enterprises will serve the GDR-market from West-Germany. As regards the current account, the overall German surplus is the relevant variable, e.g. for the determination of the DM.

In addition to the labour market the capital market becomes immediately integrated. The common interest rate level is determined by the consolidated savings and investment balances of all sectors, including the public sector in both economies and by the policy of the Bundesbank. Therefore, even if the public sector deficit of the FRG remains in a fairly healthy position, the massive deficit in the GDR public sector affects the German interest rate level, inflation and exchange rate expectations. Therefore, the policy mix has to be assessed against the background of the consolidated public sector.

The strong and fairly rapid integration of the GDR economy into the West German economy has the effect of equalising factor costs of production in both parts of the newly integrated economy. Moreover, in addition to the obvious obstacles to investment in the GDR (infrastructure, environmental problems), the GDR economy has - as long as East-European markets do not recover - to be looked at as a peripheral region of the Community economy. Rapid integration reinforces centripetal tendencies in wage differences and accentuated market size differences between the centre and the periphery. Such forces are particularly driven by economies of scale which could be gained by increasing production in the centre and costs of transportation from the periphery to the centre.

In other words, to avoid a "Mezzogiornalization" of East Germany, all efforts have to be focused on attracting private capital to this region (and maintaining a skilled labour force there). However, in comparing the GDR with Southern Italy, some striking difference can be recorded. Firstly, the GDR is the former core region of Germany and is still a very industrialized country, i.e. infrastructure and labour force are - although not yet enough - designed to serve the needs of private capital. Secondly, West and East Berlin are very important centres to all modern economic activities: 1/5 of total GDR population lives in this region. Therefore, Berlin will probably soon become an area of prosperity. Thirdly, as soon as the other Eastern European economies and markets recover, the GDR may benefit from its historic and regional links to these countries.

Nevertheless, an economic recovery programme aimed at modernizing the GDR economy must compensate for negative conditions the GDR as a place of production. The following elements could be envisaged:

- Wage costs for existing industry could be reduced temporarily by favourable social security regulations

in order to enable these enterprises to modernize their production.

- Less rigid labour-market regulations, including the possibility of a more flexible use of the capital stock would improve profit expectations of enterprises and might justify increasing salaries of workers.
- Less rigid regulations on working hours (longer weekly working hours) would also be consistent with the wish of employees to increase salary at low hourly rates of pay.
- A flexible use of the capital stock would also reduce the necessity to fire employees i.e. productivity would grow by increasing production.
- A generous but temporary and degressive taxation and depreciation scheme of retained and reinvested profits seems appropriate in order to foster private investment.
- Incentives for new business creation.
- Technical progress can be accelerated by appropriate infrastructural investment particularly in communication systems.

- Trade relations with Eastern countries should be extended systematically. This should reduce the peripheral forces of a one-sided Western integration.
- In the Federal Republic, special incentives for investment and subsidies should be reduced significantly in order not to privilege investment in the FRG. This relates to subsidies paid by the Federal Government but also to subsidies for new investment paid by the Länder.
- The whole system of regional subsidies, which are mainly the result of the division of Germany has to be fundamentally revised as quickly as possible.

It is now above all crucial that investment activities in the GDR take place as soon as possible in order to create an environment of positive expectations. Such an environment combined with a fairly high income level, could stem the wave of emigration which is the second precondition for a healthy development of the GDR. Public aid has to be substantial. The catching-up of the GDR needs strong support from economic policy.

Economic Papers

The following papers have been issued. Copies may be obtained by applying to the address mentioned on the inside front cover.

- No. 1 EEC-DG II inflationary expectations. Survey based inflationary expectations for the EEC countries, by F. Papadia and V. Basano (May 1981).
- No. 3 A review of the informal economy in the European Community, by Adrian Smith (July 1981).
- No. 4 Problems of interdependence in a multipolar world, by Tommaso Padoa-Schioppa (August 1981).
- No. 5 European Dimensions in the Adjustment Problems, by Michael Emerson (August 1981).
- No. 6 The bilateral trade linkages of the Eurolink Model : An analysis of foreign trade and competitiveness, by P. Ranuzzi (January 1982).
- No. 7 United Kingdom, Medium term economic trends and problems, by D. Adams, S. Gillespie, M. Green and H. Wortmann (February 1982).
- No. 8 Où en est la théorie macroéconomique, par E. Malinvaud (juin 1982).
- No. 9 Marginal Employment Subsidies : An Effective Policy to Generate Employment, by Carl Chiarella and Alfred Steinherr (November 1982).
- No. 10 The Great Depression : A Repeat in the 1980s ?, by Alfred Steinherr (November 1982).
- No. 11 Evolution et problèmes structurels de l'économie néerlandaise, par D.C. Breedveld, C. Depoortere, A. Finetti, Dr. J.M.G. Pieters et C. Vanbelle (mars 1983).
- No. 12 Macroeconomic prospects and policies for the European Community, by Giorgio Basevi, Olivier Blanchard, Willem Buiter, Rudiger Dornbusch, and Richard Layard (April 1983).
- No. 13 The supply of output equations in the EC-countries and the use of the survey-based inflationary expectations, by Paul De Grauwe and Mustapha Nabli (May 1983).
- No. 14 Structural trends of financial systems and capital accumulation : France, Germany, Italy, by G. Nardozzi (May 1983).
- No. 15 Monetary assets and inflation induced distortions of the national accounts - conceptual issues and correction of sectoral income flows in 5 EEC countries, by Alex Cukierman and Jorgen Mortensen (May 1983).
- No. 16 Federal Republic of Germany. Medium-term economic trends and problems, by F. Allgayer, S. Gillespie, M. Green and H. Wortmann (June 1983).
- No. 17 The employment miracle in the US and stagnation employment in the EC, by M. Wegner (July 1983).
- No. 18 Productive Performance in West German Manufacturing Industry 1970-1980; A Farrell Frontier Characterisation, by D. Todd (August 1983).
- No. 19 Central-Bank Policy and the Financing of Government Budget Deficits : A Cross-Country Comparison, by G. Demopoulos, G. Katsimbris and S. Miller (September 1983).
- No. 20 Monetary assets and inflation induced distortions of the national accounts. The case of Belgium, by Ken Lennan (October 1983).
- No. 21 Actifs financiers et distortions des flux sectoriels dues à l'inflation : le cas de la France, par J.-P. Baché (octobre 1983).
- No. 22 Approche pragmatique pour une politique de plein emploi : les subventions à la création d'emplois, par A. Steinherr et B. Van Haepere (octobre 1983).
- No. 23 Income Distribution and Employment in the European Communities 1960-1982, by A. Steinherr (December 1983).
- No. 24 U.S. Deficits, the dollar and Europe, by O. Blanchard and R. Dornbusch (December 1983).
- No. 25 Monetary Assets and inflation induced distortions of the national accounts. The case of the Federal Republic of Germany, by H. Wittelsberger (January 1984).

- No. 26 Actifs financiers et distorsions des flux sectoriels dues à l'inflation : le cas de l'Italie, par A. Reati (janvier 1984).
- No. 27 Evolution et problèmes structurels de l'économie italienne, par Q. Ciardelli, F. Colasanti et X. Lannes (janvier 1984).
- No. 28 International Co-operation in Macro-economic Policies, by J.E. Meade (February 1984).
- No. 29 The Growth of Public Expenditure in the EEC Countries 1960-1981 : Some Reflections, by Douglas Todd (December 1983).
- No. 30 The integration of EEC qualitative consumer survey results in econometric modelling : an application to the consumption function, by Peter Praet (February 1984).
- No. 31 Report of the CEPS Macroeconomic Policy Group. EUROPE : The case for unsustainable growth, by R. Layard, G. Basevi, O. Blanchard, W. Buitert and R. Dornbusch (April 1984).
- No. 32 Total Factor Productivity Growth and the Productivity Slowdown in the West German Industrial Sector, 1970-1981, by Douglas Todd (April 1984).
- No. 33 An analytical Formulation and Evaluation of the Existing Structure of Legal Reserve Requirements of the Greek Economy : An Uncommon Case, by G. Demopoulos (June 1984).
- No. 34 Factor Productivity Growth in Four EEC Countries, 1960-1981, by Douglas Todd (October 1984).
- No. 35 Rate of profit, business cycles and capital accumulation in U.K. industry, 1959-1981, by Angelo Reati (November 1984).
- No. 36 Report of the CEPS Macroeconomic Policy Group. Employment and Growth in Europe : A Two-Handed Approach by P. Blanchard, R. Dornbusch, J. Drèze, H. Giersch, R. Layard and M. Monti (June 1985).
- No. 37 Schemas for the construction of an "auxiliary econometric model" for the social security system, by A. Coppini and G. Laina (June 1985).
- No. 38 Seasonal and Cyclical Variations in Relationship among Expectations, Plans and Realizations in Business Test Surveys , by H. König and M. Nerlove (July 1985).
- No. 39 Analysis of the stabilisation mechanisms of macroeconomic models : a comparison of the Eurolink models by A. Bucher and V. Rossi (July 1985).
- No. 40 Rate of profit, business cycles and capital accumulation in West German industry, 1960-1981, by A. Reati (July 1985).
- No. 41 Inflation induced redistributions via monetary assets in five European countries : 1974-1982, by A. Cukierman, K. Lennan and F. Papadia (September 1985).
- No. 42 Work Sharing : Why ? How ? How not ..., by Jacques H. Drèze (December 1985).
- No. 43 Toward Understanding Major Fluctuations of the Dollar by P. Armington (January 1986).
- No. 44 Predictive value of firms' manpower expectations and policy implications, by G. Nerb (March 1986).
- No. 45 Le taux de profit et ses composantes dans l'industrie française de 1959 à 1981, par Angelo Reati (Mars 1986).
- No. 46 Forecasting aggregate demand components with opinions surveys in the four main EC-Countries - Experience with the BUSY model , by M. Biart and P. Praet (May 1986).
- No. 47 Report of CEPS Macroeconomic Policy Group : Reducing Unemployment in Europe : The Role of Capital Formation, by F. Modigliani, M. Monti, J. Drèze, H. Giersch and R. Layard (July 1986).
- No. 48 Evolution et problèmes structurels de l'économie française, par X. Lannes, B. Philippe et P. Lenain (août 1986).
- No. 49 Long run implications of the increase in taxation and public debt for employment and economic growth in Europe by G. Tullio (August 1986).
- No. 50 Consumers Expectations and Aggregate Personal Savings by Daniel Weiserbs and Peter Simmons (November 1986).
- No. 51 Do after tax interest affect private consumption and savings ? Empirical evidence for 8 industrial countries : 1970-1983 by G. Tullio and Fr. Contesso (December 1986).
- No. 52 Validity and limits of applied exchange rate models : a brief survey of some recent contributions by G. Tullio (December 1986).

- No. 53 Monetary and Exchange Rate Policies for International Financial Stability : a Proposal by Ronald I. McKinnon (November 1986). No. 54 Internal and External Liberalisation for Faster Growth by Herbert Giersch (February 1987).
- No. 55 Regulation or Deregulation of the Labour Market : Policy Regimes for the Recruitment and Dismissal of Employees in the Industrialised Countries by Michael Emerson (June 1987).
- No. 56 Causes of the development of the private ECU and the behaviour of its interest rates : October 1982 - September 1985 by G. Tullio and Fr. Contesso (July 1987).
- No. 57 Capital/Labour substitution and its impact on employment by Fabienne Ilzkovitz (September 1987).
- No. 58 The Determinants of the German Official Discount Rate and of Liquidity Ratios during the classical gold standard : 1876-1913 by Andrea Sommariva and Giuseppe Tullio (September 1987).
- No. 59 Profitability, real interest rates and fiscal crowding out in the OECD area 1960-1985 (An examination of the crowding out hypothesis within a portfolio model) by Jorgen Mortensen (October 1987).
- No. 60 The two-handed growth strategy for Europe : Autonomy through flexible cooperation by J. Drèze, Ch. Wyplosz, Ch. Bean, Fr. Giavazzi and H. Giersch (October 1987).
- No. 61 Collusive Behaviour, R & D, and European Policy by Alexis Jacquemin (November 1987).
- No. 62 Inflation adjusted government budget deficits and their impact on the business cycle : empirical evidence for 8 industrial countries by G. Tullio (November 1987).
- No. 63 Monetary Policy Coordination Within the EMS : Is There a Rule ? by M. Russo and G. Tullio (April 1988).
- No. 64 Le Découplage de la Finance et de l'Economie - Contribution à l'Evaluation des Enjeux Européens dans la Révolution du Système Financier International par J.-Y. Haberer (Mai 1988).
- No. 65 The completion of the internal market : results of macroeconomic model simulations by M. Catinat, E. Donni and A. Italianer (September 1988).
- No. 66 Europe after the crash : economic policy in an era of adjustment by Charles Bean (September 1988).
- No. 67 A Survey of the Economies of Scale by Cliff Pratten (October 1988).
- No. 68 Economies of Scale and Intra-Community trade by Joachim Schwalbach (October 1988).
- No. 69 Economies of Scale and the Integration of the European Economy : the Case of Italy by Rodolfo Helg and Pippo Ranci (October 1988).
- No. 70 The Costs of Non-Europe - An assessment based on a formal Model of Imperfect Competition and Economies of Scale by A. Smith and A. Venables (October 1988).
- No. 71 Competition and Innovation by P.A. Geroski (October 1988).
- No. 72 Commerce Intra-Branche - Performances des firmes et analyse des échanges commerciaux dans la Communauté européenne par le Centre d'Etudes Prospectives et d'Informations Internationales de Paris (octobre 1988).
- No. 73 Partial Equilibrium Calculations of the Impact of Internal Market Barriers in the European Community by Richard Cawley and Michael Davenport (October 1988).
- No. 74 The exchange-rate question in Europe by Francesco Giavazzi (January 1989).
- No. 75 The QUEST model (Version 1988) by Peter Bekx, Anne Bucher, Alexander Italianer, Matthias Mors (March 1989).
- No. 76 Europe's Prospects for the 1990s by Herbert Giersch (May 1989)
- No. 77 1992, Hype or Hope : A review by Alexander Italianer (February 1990)
- No. 78 European labour markets : a long run view (CEPS Macroeconomic Policy Group 1989 Annual Report) by J.-P. Danthine, Ch. Bean, P. Bernholz and E. Malinvaud (February 1990)
- No. 79 Country Studies - The United Kingdom by Tassos Belessiotis and Ralph Wilkinson (July 1990)
- No. 80 See "Country Studies" No. 1
- No. 81 Country Studies - The Netherlands by Filip Keereman, Françoise Moreau and Cyriel Vanbelle (July 1990)
- No. 82 Country Studies - Belgium by Johan Baras, Filip Keereman and Françoise Moreau (July 1990)

No. 83 Completion of the internal market : An application of Public Choice Theory by Manfred Teutemann (August 1990)

No. 84 Monetary and Fiscal Rules for Public Debt Sustainability by Marco Buti (September 1990)

Country Studies

No. 1 The Federal Republic of Germany (September 1990).

