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Germany's Social Market Economy: How Sustainable is the Welfare State?

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Germany's Social Market Economy has been quite successful in the last fifty years, but it lately ran into heavy seas.

Let me spell out quickly the constituting elements of the social market economy. It is a concept that relies on markets and competition but at the same time attempts to correct the market results to some extent and tries to reconcile efficiency and equity in the original Erhard interpretation. [An underlying idea is that the benefits of economic progress should be widely distributed and go to all or at least to the wide majority of people and that necessary economic adjustments should be eased by social considerations, i.e. equity considerations, and the appropriate institutional safeguards.] Here are the main ingredients:

- Germany is an open economy. International competition reigns. The product markets are less regulated than the labor market. Privatization of public firms has taken place (telecommunication), the network industries are deregulated.

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- The system provides social security in health, nurtured care, old-age and unemployment insurance as well as social security benefits. About one third of GDP is allocated to the “social budget”.

- The government share in nearly half of GDP (48.6 per cent).

- Germany is a federal state with two parliamentary chambers, one representing the Länder (*Bundesrat)*. Many laws require the agreement of both chambers.

- The labor market is most affected by government intervention. This relates to wage formation that is allocated to the social partners. It also relates to other labor laws.

- In corporate governance, co-determination of employees and trade unions in the boards and in workers councils plays a major role.

- Historically, banks instead of equity markets are a major player in corporate governance, i.e. in controlling firms. Part of the banks are government- owned.

This concept has run into some difficulties.

After the unification boom of the early nineties with real GDP growth rates of 5.7 and 5.0 percent in 1990 and 1991 respectively, Germany has had a weak growth performance with a relative low growth rate of GDP of 1.5 percent in the period 1995-2003. Since 1994, the German growth rate has been lower than the EU average in each year, and since 1998 Germany and Italy are the tail-light of the European Union in terms of growth. In the period 1995-2003, Germany’s growth rate is 1 ½ percentage points lower than that of the United States (Table 1).

Table 1 - GDP Growth Rates

	1970-1989	1980-1989	1990-2003	1990-1995	1995-2003[a]
Germany [b]	2.5	1.9	2.0	2.7	1.5
France	3.0	2.2	1.9	1.3	2.3
Italy	3.1	2.4	1.5	1.4	1.8
European community-12[c]	2.9	2.2	2.2	2.4	2.1
United Kingdom	2.4	2.4	2.1	1.6	2.6
United States	3.1	3.0	2.8	2.3	3.1

[a] 2003 Forecast - [b] 1969-1990 Western Germany. – [c] EU 15 exluding United Kingdom, Denmark and Sweden.

Source: OECD Economic Outlook; for Germany in 1991: Deutsche Bundesbank

This picture does not change in substance if additional factors are taken into consideration. It still holds if we look at the GDP growth rate per head of population, although population growth was somewhat higher in the countries of the Euro area used for comparison.[1] Consequently the growth differential is somewhat lower if population growth is taken into consideration. The difference is also lower with respect to the Euro area if countries with a high convergence rate (Greece, Ireland, Portugal and Spain) are excluded from consideration. Statistical methods (with respect to the hedonic approach) to measure real output also partly contribute to the growth differential with respect to the US, but they explain only part of the difference with the United States, and not with respect to European countries. Thus, weakness of economic growth is one of the characteristics of today's Germany.

The second problem is high unemployment, 10.4 per cent or 4.45 million out of the labor force are out work; in addition 1.7 million are in labor market schemes. Total unemployment is at 13.4 percent.[2]

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[1] See Table 49 in Annual Report 2002/2003 of the German Council of Economic Advisers (2002).

[2] Table 46, op.cit.

The third issue is that the social security systems can no longer be financed. This will become even more difficult with an ageing population.

The three issues, low growth performance, high unemployment and the financing limits of social security, are interrelated. This is a knot of problems or a vicious circle. Unemployment is a reason for low growth, and weak economic dynamics partly explains the high unemployment. The financing problems of social security is linked to low growth, but at the same time financing social security is a reason for high unemployment and low growth. Let us look at the potential reasons for these weaknesses.

I. German unification

German unification was, of course, a stroke of luck in a historical dimension, but it represented a major change in the economic conditions of Germany. In Eastern Germany, it meant a major change in the lives of people. The state- owned firms had to be privatized. Production had to be oriented towards the markets of the West. A new capital stock in the business sector, in infrastructure and in housing had to be build up.

The transformation of Eastern Germany did not go as well as initially expected. Hopes that the German *Wirtschaftswunder* of the early fifties could be replicated did not materialize. First, investment in Eastern Germany was not a bottleneck problem as in West Germany after 1945 where the repair of a single bridge over the river Rhine represented a huge productivity boost. In Eastern Germany, the whole capital stock had to be redone. Second, exchanging the East German mark 1:1 to the West German Mark formed the wrong expectations with a devastating impact on wage negotiations. Wages were quickly out of line with productivity, unit labor costs were at about 130 percent of the West Germany. Third, German monetary union implied an appreciation of the Eastern German mark by some 400 percent, too much for any firm, especially those inefficient ones used to central planning.

Eastern Germany excluding Berlin now is at percent 61 per cent of the West German GDP[3] per capita of the population (2001). It started out at 33 percent in 1991. In a historic dimension this is quite an achievement. In a policy oriented approach, however, it does not make sense to exclude Berlin from the East German region since it lies in the middle of Eastern Germany. If it is included, the East German region now is at 62.7 per cent of the West German level (2002)[4]. Taking into account that other German Länder such as Rheinland-Pfalz, Niedersachsen and Schleswig-Holstein reach 80-85 percent of the West German level, Eastern Gemany has reached a remarkable level of GDP per capita.

The manufacturing sector in Eastern Germany exhibits sizable annual growth rates in its net output, for instance 7 percent in real terms in the period 1998-2000, albeit starting from a low level. In branches where new plants were built as in car production, in the IT sector, in communication and in areospace high growth rates can be observed since 1991. In machine building, in the construction of railroad cars, in ship building, in leather and textiles, the rates have been negative (Ragnitz et al. 2001). These are partly branches with a strong structural change in West Germany as well.

Since 1997, the growth rate of Eastern Germany is below the German rate[5]. This means that the convergence process has stopped and that we have divergence. This is partly due to a decline in the construction industry as a correction to an over-expansion in that sector due to public subsidies early on. [6]

German unification required and still requires annual public transfers from the West to the East of 3 - 4 percent of German GDP. This is Ireland in reverse. Transfers were only partly financed by higher taxes. A larger part was financed through credits

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[3] Also excluding Berlin

[4] Labor productivity is at 71.5 per cent.

[5] It may be a bit higher in 2003.

[6] As an aside, examples for a successful regional restructuring and for a successful quick convergence processes are rare. Ireland is an example, Pittsburgh may be another one. I hesitate to mention the coastal regions of mainland China. An important prerequisite for regional growth is that initiative and an optimistic mood prevail. This definitely holds for the majority of people in Eastern Germany, but the PDS, the follower of the previous communist SED, alludes to people´s feeling of being deprived and still collects up to 20 per cent of the votes.

leading to a doubling of government debt from 0.46 trillion € (1989) or 42 percent of GDP to 1.2 trillion € in 2002 (61.1 percent of GDP). Moreover, transfers were organized within the social security system. The share of contributions to social security increased from 15.0 percent in GDP in 1990 (West Germany) to 17.5 per cent in 2001;[7] it is not clear, however, to what extent this increase can be traced to the transfers within the system exclusively or whether it reflects a general expansion of the welfare state.

It is quite apparent that these transfers have had their impact. They have affected Germany´s fiscal policy stance negatively. The manoeuvring space for tax reductions is severely reduced by the interest load for new debt. Thus, even after the 2001-tax reform the tax rates for German firms are still high relative to the other EU countries. The higher contributions within the social systems meant that the tax on labor has been raised, with a negative impact on employment in Germany as a whole. Controlling the increase in the contributions by using the receipts of the eco-tax to finance the old-age pensions means that distortions and negative effects arise somewhere else since the eco-tax has a negative impact on productivity.

In addition, there was a real appreciation of the deutsche mark as a consequence of unification affecting Germany´s competitive position in the world market[8]. This follows for instance from a model with tradeables and non-tradeables; transfers to East Germany increase absorption and imply a rise in the price of non- tradeables relative to non-tradeables.[9] The appreciation also follows from the fact that the internal demand for exportables increased.

There is no doubt, that German unification has been — in economic terms — a shock to the German economy. West Germany is partly inhibited by financing the transfers. But it would be misleading to assume that this is the only reason for the poor growth performance. German unification came in an environment in which long-run trends

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7 German Council of Economic Advisers, Annual Report 2002/03, Table 34*

8 According to the DGII model of the European Commission German Unification accounts for one third of the growth differential.

9 Eastern Germany itself has experienced a “Dutch-Disease” phenomenon. Due to transfers, the relative price for non - tradeables expanded reducing the attractiveness of tradeables (industry).

were going on leading to unresolved severe structural problems. West Germany cannot unfold enough economic dynamics for a strong carry over to east Germany. Let us look at these issues in some detail.

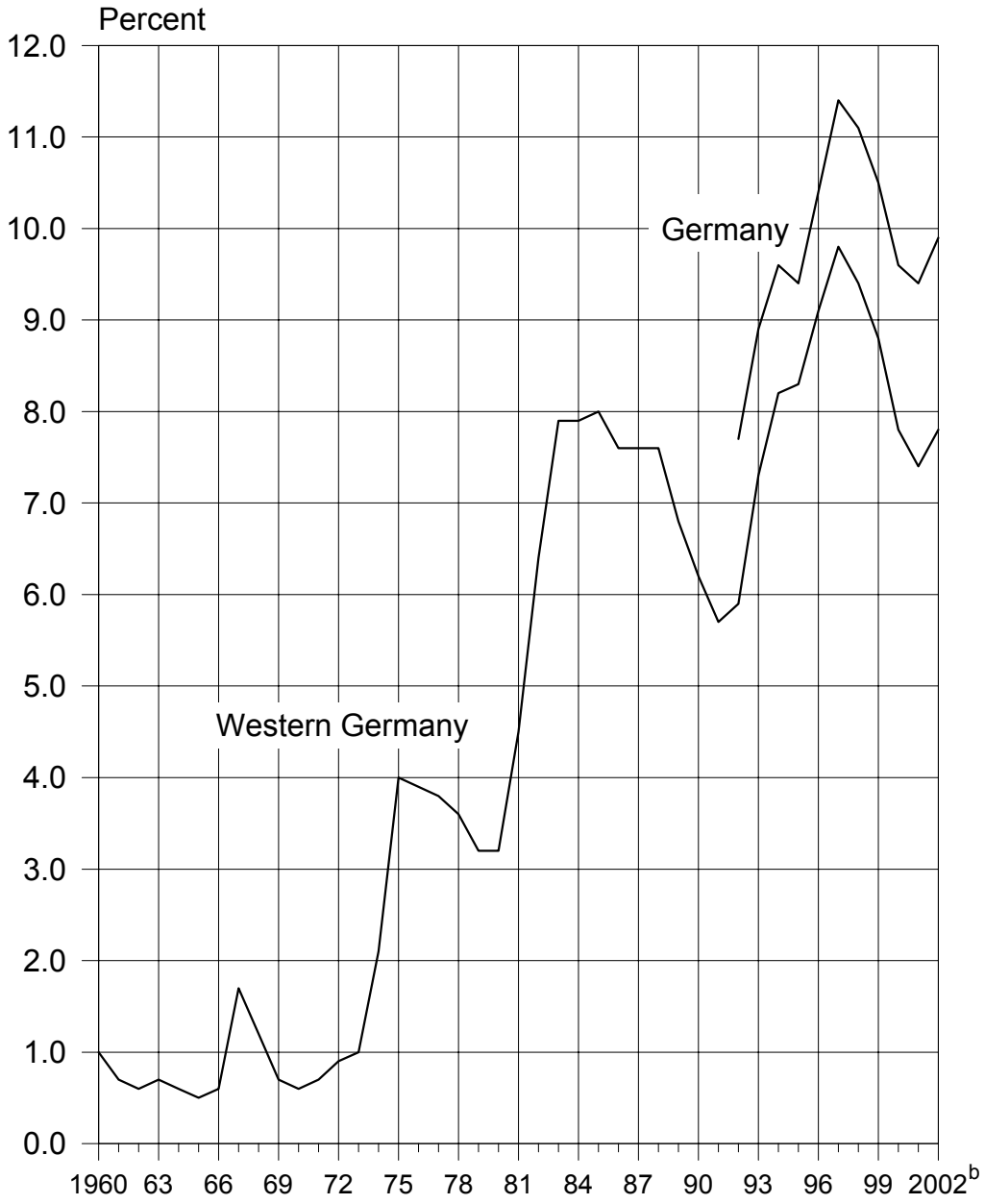
II. High unemployment

The poor growth performance is partly linked to high unemployment with 4,45 million officially unemployed and 1.7 million in labor market schemes of different sorts in 2003. After all, an important economic resource, labor and human capital, is wasted.

Stepwise increase of unemployment

Unemployment has ratcheted upward in the last thirty years from 0.7 percent in 1970 to a maximum value of 11.4 percent in 1997 (10.4 in 2003). In each recession, roughly one million were added to the unemployed in Western Germany, and the high unemployment was not reduced during the boom years in a noteworthy way so that the next recession started from a higher level of unemployment. With unification, the structural unemployment problems in Eastern Germany were added.

Figure 1: Unemployment Rate in Germany



[a]Unemployed in percent of all civilian employees. — [b]Forecast of the Kiel Institute for World Economics.

The stepwise ratcheting upward of unemployment signals that the institutional design for labor is malfunctioning. There are three major aspects: One is the institutional

design for wage formation, the other is the role of the reservation wage; finally, the demand for labor is systematically weakened. [10]

The institutional design for wage formation

Wage formation is not left to the markets but determined by the social partners. The approach is to start wage negotiations for a specific sector in a specific region, and then to apply the negotiated wages to the other regions of the same sector. Usually, the sector-wide wage contracts are mimicked in the other sectors of the economy. As a result, wage differentiation is low relative to the UK and the US where the spread has increased in the last twenty years.

Trade unions have not accepted what the German Council of Economic Advisers has proposed as an orientation for union wage policy: In a situation of high unemployment, wages should not be raised according to the observed trend in the growth of labor productivity but should remain below that trend in order to bring the unemployed into employment. To put it differently, the expected increase in labor productivity should not be calculated by dividing output by those employed but by also including the 6.3 million who are in official and hidden unemployment in the numerator of the productivity measure.

Let us look in more detail at some of the legal stipulations. Negotiated wages apply to all firms that are member of the employer's association and to all workers who are member of the trade unions. De facto, unionized firms do not differentiate wages according to union membership of workers or non-membership. Moreover, they set the standard for the non-unionized firms as well.[11] Thus, negotiated wages represent the norms for the economy, even for the unemployed. Consequently, trade unions who account for 18 percent of the active work force only and who are losing members have a decisive influence on wages.

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[10] As aside, before I mention my critical points, the social partners have succeeded in introducing more time flexibility into the union contracts thus exploiting an important source of productivity growth in the firms. This, incidentally, has been obtained mostly in a decentralized way by agreements in the firms.

[11] For instance, the unemployment offices mediate jobs for the unemployed according to the local customary wage that is influenced by the negotiated wage.

The institutional set-up for labor and the role of trade unions may be difficult to understand in the Anglo-Saxon world where wages are mainly determined by market forces. The clue to grasp the German set-up is to know that the negotiated collective wage contract is legally protected by a number of provisions. These mechanisms prevent market forces from bringing about an equilibrium with less unemployment. They protect the insiders in their job, but they effectively discriminate the outsiders, the unemployed. They define a wage cartel giving trade unions and employers´ associations the right to set the wage but not making them institutionally responsible for the volumes that will result in the labor market, i.e., employment and unemployment.

One basic legal principle, the *Günstigkeitsprinzip*, (the principle of the most favorable condition, § 4 Sec 3 *Tarifvertragsgesetz*) stipulates that the individual worker can as a union member deviate from the negotiated union wage contract if this is favorable for him. “Favorable”, however, is interpreted in a narrow sense by the labor courts, as a wage higher than in the union contract or as less working time. The risk of becoming unemployed or the security of the job can not legally be part of the consideration of whether to deviate from the union contract is favorable; this has been explicitly decided by the highest labor court (*Bundesarbeitsgericht)* in 1999. According to this decision, wages and working time on the one hand and the security of a job are not allowed to be compared whereas any freshman of economics knows that the three variables wage level, working time and the security of a job are strongly interrelated in economic reality; moreover, all three variables can be expected to be argument variables in the utility function of workers. To stipulate that the risk of losing the job should be taken into consideration or that the individual worker should have the right to decide for himself whether he wants to deviate from the union contract meets the strong opposition of the trade unions who fear to lose organizational power.

Another legal provision stipulates that firms can not deviate from the union contract unless this is permitted in the contract itself (§ 77,

Sec 3 *Betriebsverfassungsgesetz*).[12] Thus, even if the workers of a firm agree overwhelmingly to work longer hours per week or to accept a lower wage in order to make their jobs safer, this is *verboten.* This implies that efficient labor contracts are legally not feasible. This stipulation even applies to those firms that are not member of the employers' association. Admittedly, firms and workers have disregarded this stipulation to some extent. But legal battles in the courts have sustained the law that prevents efficient labor contracts. Again, trade unions oppose a change in this stipulation for the fear of losing power.

Lay-off constraints

Another aspect is that lay-off restraints and the court battles that end up in high, but uncertain severance pay represent an exit constraint that is anticipated by the firms; it weakens the demand for labor. This exit constraint for those employed represents an entry barrier for the unemployed. The restraint is especially binding when in times of a crisis wages and working time are sticky downward for the individual firm.[13]

The role of the reservation wage

A social market economy protects the individual when he is out work, either because he is unemployed or because he is unable to work in case of illness or for other reasons. Germany has developed the following schemes:

Unemployment benefits of type I (*Arbeitslosengeld*) is at 67 of the previous net income (unemployed with at least one child).[14] The duration of benefits varies with age and goes up to 32 months.

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[12] This provision even applies to firms which are not members of the employers' association. It thus *de facto* violates the negative "freedom of coalition" guaranteed by the Constitution, i.e. that no one should be forced into union membership.

[13] Downward flexibility in working time with a reduction of pay can reduce the impact of lay-off constraints.

[14] 60 percent for singles. Benefits are adjusted according to wage increases, they require a minimum time of contributions paid.

Unemployment benefits of type II (*Arbeitslosenhilfe*) amounts to 57 percent of the net wage.[15] It is paid when unemployment benefits of type I expire. This type of benefit is paid indefinitely. It is linked to the previous working income and requires neediness.

Welfare benefits (*Sozialhilfe*) represent payments to allow a life in dignity. They are defined by minimum requirements for living and are means-tested. The means test is different from the unemployment benefit of type II. For a worker, married with one child, they make up around 70 percent of the lowest net wage in industry and approach 100 percent for low-paid professions such as jobs in the restaurant branch.

Sickness pay is provided at 100 percent of the previous gross wage for the first six weeks and 80 percent thereafter.[16]

This set of government-provided incomes defines the reservation wage that an unemployed requires from his next job; it influences search intensity and the willingness to accept a job. The higher the income provided by government when people are not working, the higher the reservation wage. Empirical analysis of the unemployed in Germany shows that the reservation wage is at 1.2 of the wage when previously employed (Christensen 2002). This is unusually high for someone who wants to find a job, and it is high in comparison to other countries. Empirical analysis also shows that the reservation wage is not reduced with the duration of unemployment. This means that search intensity is lower and that the willingness to accept a job is reduced. The labor market dries up from the supply side.

At the same time, the described arrangements imply that neither workers nor their unions will accept a wage rate below the reservation wage. Thus, welfare benefits of the German type define a floor to the wage structure. Whereas the reservation wage is a variable specific to each individual, the wage floor is an institutional variable; it represents a *de facto* minimum wage. There is an implicit minimum wage without a minimum wage being formally defined. This means that wage differentiation is

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[15] With one child, 53 percent in other cases.

[16] It cannot surpass the net wage income. For the same illness it is limited to 78 weeks in a three year period.

prevented. The lower part of the demand curve for labor is truncated. There is no effective labor demand below the minimum wage. Such an economy loses the lower segment of the labor market. Unemployment is the consequence. Moreover, a minimum wage has an impact on the labor market equilibrium because it determines wage bargaining behavior of unions.[17] Finally, since the minimum wage implies higher outlays of the social security system which *de facto* have to be financed by taxes on labor income it compresses the wage structure.

Contributions to social security weakening the demand for labor.

In addition to these institutional incentives, the demand for labor is systematically weakened for the following reason. The social security system is financed by contributions from labor income, paid by firms and by workers on a half and half basis. This implies a wedge between the gross and the net wage. Taking the tax on work income and the contributions to the social security system together, the marginal tax plus contribution rate for the average earner amounts to 58 per cent of gross income if he is married and 67 percent for the single worker with an average income[18]. From the 58 percent of gross labor income for the married average wage earner, 34 percentage points represent contributions to social security. A similar percentage point applies to the single average earner.[19] This wedge represents a sizable efficiency loss including high unemployment.

A more detailed analysis shows the specific impact on labor demand and labor supply. For the labor demand side, the gross wage must be supported by labor productivity. When the gross wage tends to be higher than labor productivity, firms will attempt to bring the gross wage in line with productivity. They can do this by a set of adjustments: lay off workers so that those employed have a high enough productivity to cover the net wage and the social wage, substitute capital for labor, look for labor-saving new technologies and shift production abroad. When all these adjustments have taken place in a general equilibrium, unemployment results. Thus,

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[17] See German Council of Economic Advisers, 2002, Box 9.

[18] German Council, op. cit. p. 376 mimeo

[19] In the German system there is an income limit for mandatory health insurance beyond which the individual can choose to be privately insured.

the worker bears the burden of adjustment. In this interpretation, financing social security acts like a tax on labor reducing the effective demand for labor.

Whereas the reservation wage affects the labor supply and the wage rate in the lower segment of the labor market negatively, mandatory contributions increase the costs of firms which shifts the labor demand curve of the economy downward or to the left. For the supply side, the wedge affects work effort, the attractiveness to accumulate human capital and consequently labor supply. The supply curve is shifted to the left, also. The combined effect of the two leftward shifts is a reduced level of employment.[20]

To sum up, looking at this institutional arrangement, it seems that Germans cannot imagine that wages can be determined by the market as is the case in other countries.

III. The social security systems under strain

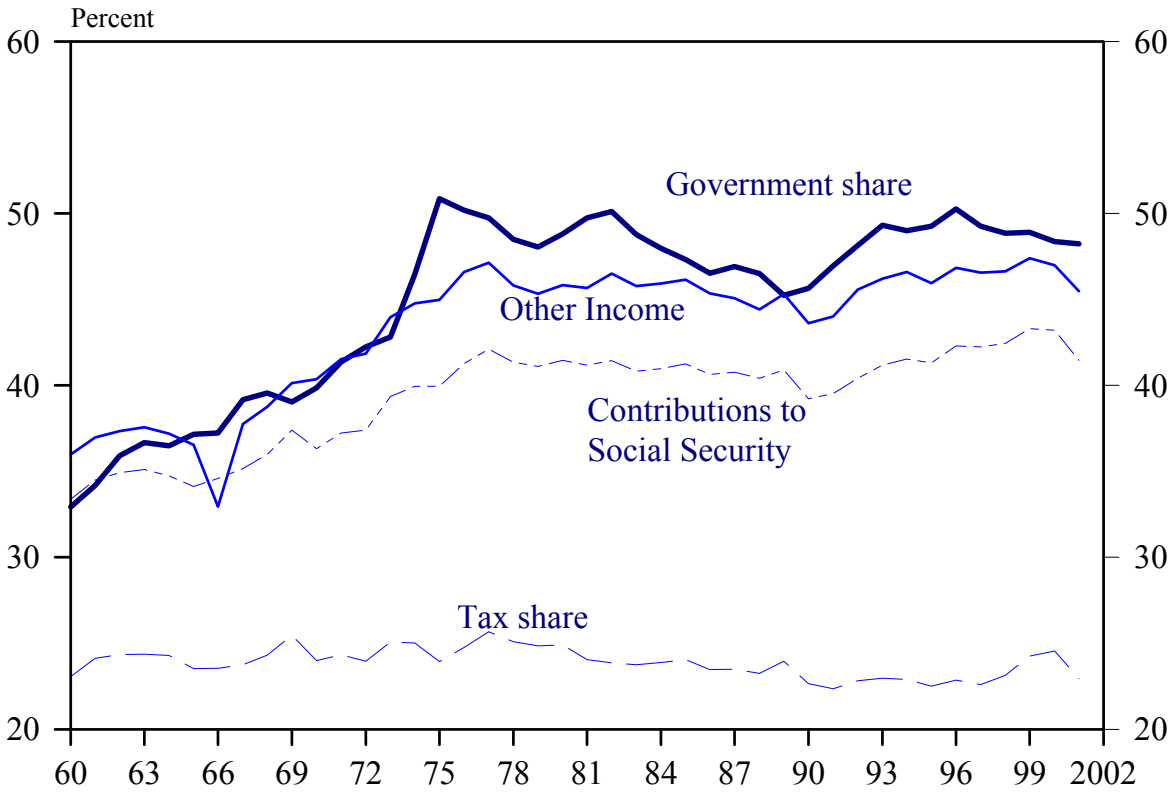
Germany is characterized by a gracious social system which consists of the old age pension system, nutured care, health insurance, unemployment insurance with two types of unemployment benefits and social welfare. One third of GDP is spent for the " social budget". Whereas part of the social budget is financed from tax revenue, the bulk of the expenditures is financed by contributions paid half and half by employees and employers. The financing of the system is thus linked to the labor contract.

Expansion of the welfare state. There has been a major expansion of the welfare state in the 70s. The share of government in GDP rose from 39.1 percent in 1970 to 50.3 percent in 1996; it is now at 48.6 per cent (2002). The share of the contributions has risen from 11.1 percent to 17.5 percent (2001), the share of government spending for social security to 22.3 per cent (2002), the difference is financed by transfers from the government budget (4 percentage points) and a deficit of the

[20] The impact on the market wage rate can go either way.

social security system (0.1 percentage point)[21]. Whereas in 1970, the difference between the expenditure of social security in GDP (12.6) and the contribution share (11.1) was 1.5 percentage points, it increased to 4.1 percentage points in 2001. The expansion of the welfare system took place in the 1970s, surprisingly in time when the high real growth rates of GDP in the 1950s and the 1960s of 7 and 5 percent no longer could be obtained.

Figure 2 – Government Share in GDP[a]



[a]In current prices, until 1990:West Germany.

Source: German Council of Economic Advisors

Wrong incentive effects. From the high marginal tax and contribution rate on income from labor a large portion is due to the contribution rate for the social security system.

[21] Council 2002 Table 34*.

Besides having similar effects as a tax on labor, such high marginal rates represent wrong incentives for work effort and human capital accumulation of the work force. The negative impact on human capital accumulation is especially relevant in an information society where human knowledge is the dominant source of economic growth. The existing arrangement thus hurts the growth dynamics and it may well be a reason for the loss of dynamics. Besides, it is an invitation to move to the underground economy or to officially take residence in low-tax places such as London which is relevant for the modern services sectors (banking). In any case, here is a line of attack for economic policy that wants to overcome obstacles of economic growth.

In addition, the benefits define a reservation wage that influences search behavior of the unemployed, the supply of labor and the functioning of the labor market in the lower segment.

The limits of financing. Besides the incidence on unemployment, the social welfare system now has visibly reached its financing limits. After the German election of 2002, the government came out with some stopgap measures such as reducing the reserve of the pay-as-you go pension system which amounted to 0.8 months to 0.5 months (in 2001 it was already reduced from one month). For the health insurees of the public system, a cap on contributions was administered. The contributions to the old-age pension system have to raised from 19.1 of gross wage to 19.5[22] These ad hoc measures indicate that the social security system has reached its financing limits.

The Political Economy of an Aging Society. All these issues will become even more pressing in an ageing society. Germany will be severely affected by the ageing of its population, more so than France, the UK and the US. The average age (median of the population) will increase from 39.8 years (1999) to 48.6 years in 2050 assuming an annual net immigration of 200 000 persons. This will have severe repercussions for growth (labor supply will shrink), for the capital stock (which will have oversize),

[22] Other measures include extending the contribution base for the pay-as-you-go system and limiting the exit option from the mandatory public health insurance to private insurance.

the welfare state and the political economy (Siebert 2001). Moreover, the social security system will not be sustainable.

Solutions. So far, administrative attempts to control the cost increase of the social security system, for instance in health care, failed. By such measures, the cost increase was halted for a year or two, but then the increase resumed. It can be expected that administrative measures cannot control the cost increases. A solution consists in distinguishing large and small risks for the individual. Large risks are those that cannot be borne by the individual, an example is having no income in the case of a longer illness or disability. These risks have to be taken over by society. Small risks, like having no income in the first days of unemployment or illness, however, can be borne by each member of society, for instance by precautionary savings. In my judgment, this distinction must be at the heart of reforming the welfare state. It must be applied to all areas of social security. For instance, it should be applied to medical care as well. In old-age pensions, a governmental pay-as-you-go system can only cover part of the pensions. The other part has to be covered by the savings of individuals. Redistribution that now is part of the different branches of social security has to be shifted to the tax-transfer mechanism; more equivalence has to searched in the social security systems. The distinction between large and small risks has to be delineated for the different branches of the social welfare system. By such a distinction, the mandatory contributions to the welfare system can be reduced. The negative impact on the demand for labor can be meliorated. Moreover, the now apparent impossibility of financing the systems can be overcome.

IV. Structural issues of the economic base

The main questions discussed in Germany are to what social security systems can be financed today and whether they are sustainable in the future and to what extent the institutional arrangements including the labor market institutions set the wrong incentives such that a high unemployment rate is the unavoidable implication given the institutional set-up.

Whereas these questions relate to the added-on superstructure of the economy, another issue is to what extent the economic foundation is fit to support the superstructure. A first aspect is that the superstructure itself affects the economic basis negatively in that the set incentives represent distortions and lead to efficiency losses, to a loss of economic dynamics and to high unemployment. A second aspect is that the economic basis itself is eroding so that it no longer can support the superstructure. The superstructure has been developed in a situation of high growth rates and a high productivity increase (like the 1970s in Germany) which now no longer prevail today.[23] A third aspect is that there are external shocks to the economy that are more difficult to digest. All three aspects play a role in the German case.

IV-1: The structural issues of the enterprise sector

When we look at economic indicators, we cannot clearly state that there is a definite erosion of the economic basis. But nevertheless, there are issues to be looked at.

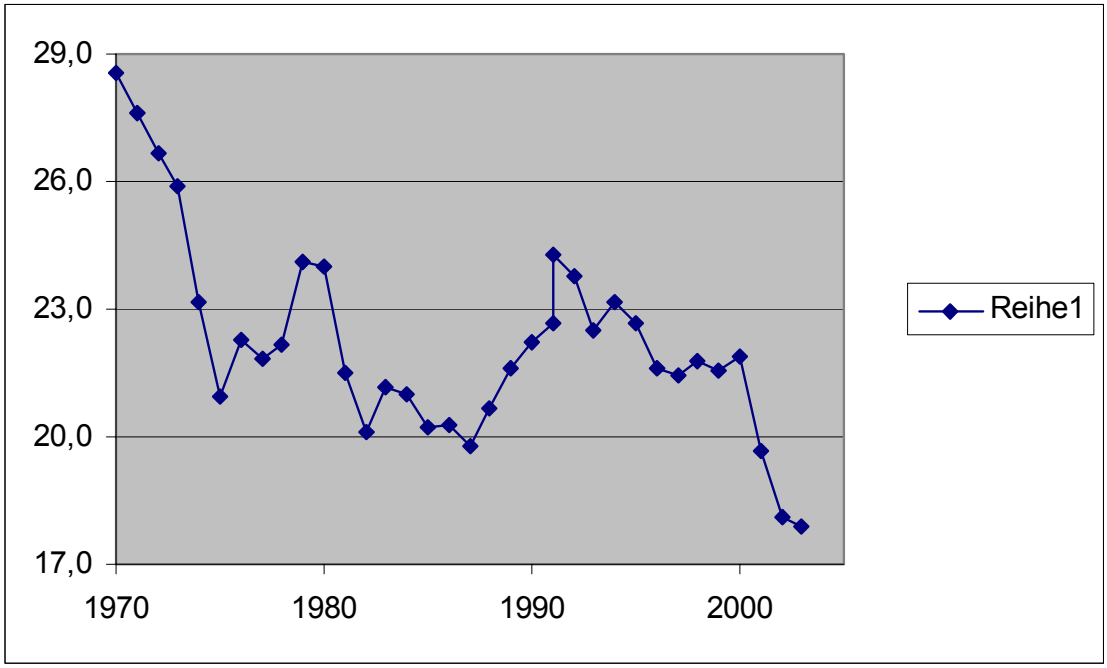
A decline in the investment share.

Since 1995, the share of investment in GDP has fallen from 23 per cent to 18 in 2002 per cent. In a longer run perspective of the last four decades, the investment ratio fell from 26.5 per cent in the 1960s to 19.4 in 2000-2003.[24] Clearly, there is a trend of a declining investment ratio.

[23] The increase in labor productivity per hour was 4 per cent in the 1970s, it as 1½ percent in the period 1995-2002.

[24] 24 in the 1970s, 21 in the 1980s and 22.5 in the 1990s.

Figure 3: Share of Investment in GDP



This trend is consistent with the convergence hypothesis. According to this approach, a country catching up exhibits high growth rates when its capital stock is still small and the marginal productivity of capital is high. With more capital being accumulated, the marginal productivity of capital and the growth rate fall. The country moves down the marginal productivity of capital curve. This means lower growth.

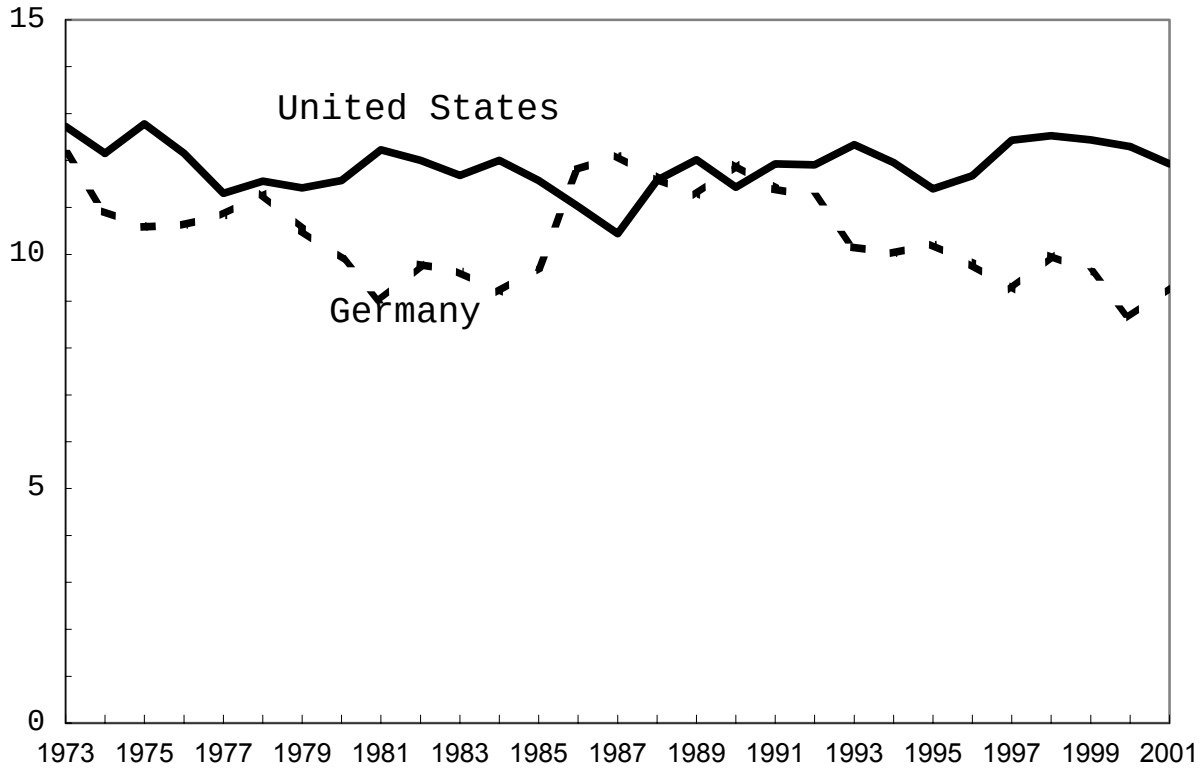
A loss of world market share.

Germany continues to be the world's second largest exporter behind the United States. But Germany's world market has declined since 1990 by 2.6 percentage points from 11.9 to 9.3 percent (2001); this is below the long-run average of 10.6 percent for the period 1975-1989 (Figure 4). In contrast, the US succeeded to hold on to its world market share. Germany´s share of industrial goods exports of all OECD countries is receding also relative to the France and the UK, especially in the early nineties.

The above results hinge on calculating German exports in dollar terms. This implies that a high valued US-dollar will artificially reduce German exports by sheer

conversion, although it will stimulate exports in real terms. This happened in the first part of the 1980s and also in 1990s.

Figure 4: World Market Shares



Source: IMF, International Financial Statistics CD-ROM, October 2002

If we measure the share of exports in constant export prices and in a constant US-dollar (by dividing Germany's nominal exports in US-dollars by a given exchange rate of a base year and dividing nominal exports in US-dollars of other countries by national dollar-based export prices of a base year[25]), the loss of market share in the 1980s disappears. But the decline in world market share in the first part of the 1990s remains. Apparently, Germany has indeed lost world market share after unification. This is consistent with a reduction in the export share in GDP from (33 ….xxx) in

[25] See Bundesbank (2002), p. 42

, where is Germany's exports in dollar terms, is the price of Germany's exports in a base year in dollar terms and likewise for the other countries.

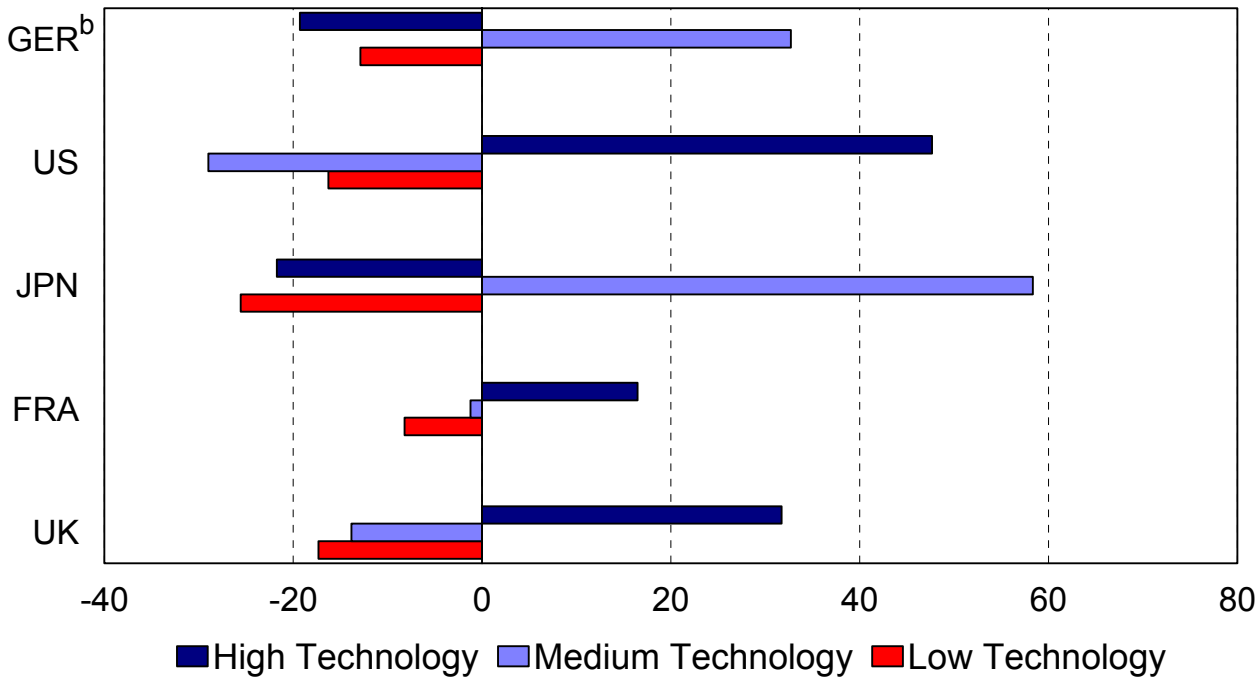
1989 to (25xxx) in (1995). West German firms were keen to sell their products to new East German markets at their door step instead of shipping them to the global market. Internal demand for German exportables increased so that there was a real appreciation of the deutsche mark in the first part of the nineties as a consequence of German unification which hurt exports.

With respect to product structure, manufacturing[26] with 23 percent of employment produces 89 percent of Germany‘s exports. Four sectors of manufacturing account for 59 percent of total exports, machine building goods (18.9 percent), cars (17.7 percent), chemical products (12.2 percent) and electro-technical products (10.3 percent).

Machine building and car production still have a high comparative advantage. But in the last two decades, the electro-technical industry, the production of telecommunication instruments and the optical industry have lost their comparative advantage (Table A-2). The pharmaceutical sector seems to be eroding as well so that Germany no longer can claim to be the pharmacy of the world economy. BASF has sold its pharmaceutical branch to Abbot Laboratories; Hoechst has ended up in the new firm Aventis. The traditional chemical sector does not seem able to participate in the technological race for the pharmaceutical products of tomorrow. The new innovative IT and biotechnical products have to be imported.

[26] Data for the year xxxx

Figure 5: Competitiveness according to technology-intensity[a] 2001



[a]RCA- Coefficients according to technology-intensity. — [b]2000.

Germany is heavily specialized on medium-technology where the level of technology is defined in terms of R&D expenditure relative to the product price. Especially, medium sized firms of the *"Mittelstand"* have been successful with sophisticated and human-capital intensive medium technology in niches of the world market, especially in machine building. By the same token, Germany exhibits a comparative disadvantage in high-tech products relative to the US, France and the UK. With respect to the technology intensity of exports, Germany has a similar pattern of specialization as Japan.

Export prices of commercial products have only increased with 0,7 percent per year in the 90s (it was 2 percent in the 80s). Export unit values, the relation of prices of German commodity exports to world commodity exports (both in US dollar fell by 20 percent in the nineties (IMF 2002). This indicates a narrow manoeuvring space for product prices and for shifting costs.

Technology.

Germany is strong in innovation in traditional technological areas in its main industrial export sectors machine building, automobiles, chemical products and electro-technical products (Siebert und Stolpe 2002). Outside Germany`s traditional areas, the innovative capacity is less pronounced. This may due to product market regulation (for instance with respect to the licencing of new pharmaceutical products), a less developed venture capital market and lacking labor market flexibility. The institutional set-up is not conducive to innovation: The university system is less and less competitive and does not seem to generate enough new technological knowledge. Co-determination may be more conducive to improve a given technology than to leap frog to a new one.[27]

Employment in industry.

Germany´s industry, nearly equivalent to the export sector, has lost 2.5 million jobs since 1991; actual employment is at 7.8 million. West German industry has lost 1.75 million jobs [28] (in plants with 20 employees and more). This is a sizable loss relative to the 5.6 million employees actually in that sector.[29]

In the 1990s, industry has not contributed positively to the German growth rate (Sachverständigenrat 2002[30]); its contribution to the growth rate was negative. This is a surprising result. These data indicate that there is a sizable structural change; jobs are not competitive.

FDI

Larger German firms now have half of the employees abroad. Even the smaller and medium-sized firms of the *Mittelstand* have subsidiaries abroad. It is amazing that outbound foreign direct investment of industry is relatively strong. In 1995- 2000, FDI

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[27] Anecdotal evidence has it that a new telephone for a German firm was engineered in China and a dialysis instrument in Madras, India.

[28] Structural break in the data.

[29] Employment in Germany in that category is at 6.2 million.

[30] Table 19.

of German industry made up 39.1 peer cent of annual gross investment of industry (Table A-3).

IV-2: Structural issues of the state

Government and the universities.

The university system is a public system with some private universities now arising at the fringe of the system. The basic allocation approach is one of administrative planning at the *Länder* level with some federal restraints. Germany has not dared to deregulate that system and to use competition as the guiding principle for the university system. Universities and the research institutes operate according to the labor market regulations and the rules of codetermination. This is a severe impediment to an innovative environment that is desperately needed in an economy with a low growth performance. Yet, politics is not prepared to open the system for competition.

The role of government expenditure in the market economy.

Besides the social security systems, the large share of government expenditure in GDP of 48.6 per cent is a central problem. A related issue is a low and reclining share of public investment in GDP.

Here the task is to rethink the role of government in the market economy. Germany has been slow to privatise public firms such as telecommunication and the postal service in the past, and it would have been even slower without pressure from the European Union.

The role of parliament.

With respect to organized groups, a constitutional question is to what extent parliament loses power to organized interest groups. This also holds for external committees.

The voting system.

The role of interest groups is linked to Germany´s voting system. Whereas Germany´s voting system prevents the major disadvantages of plurality voting as they occurred in the Weimar republic and thus does not have internal instability, its actual voting system implies that governments usually are formed by coalitions. This means that the government often does not have a clear mandate for institutional innovations (as in 2002). The vacuum is partly filled by interest groups.

Distributive federalism

German federalism shows strong elements of equity, for instance by requiring similar conditions with respect to public infrastructure in the regions of the country. This is often interpreted as similar living conditions in each of the federal states. German federalism is not a *competitive federalism* where states compete for mobile factors of production and where locational competition points out the best solutions; it is a distributional federalism where tax revenue of each federal state is brought to nearly 100 per cent of the average in a transfer-scheme between the states. Burden-sharing between the Länder, a key concept, does not set the right incentives for states to develop their own tax base and business base.

Subsidies.

Transfers to firms, i.e., subsidies, are a case in point. According to a survey of the Kiel Institute (Boss and Rosenschon, 2000) using a wide delineation subsidies account for 156 bill € per year, that is 7,5 percent of GDP or 35 percent of total tax revenues.

The consensus approach and "coporatism".

An important aspect of the German system related to the social market economy is the consensus approach in which the agreement of many groups of society is sought when important policy measures are taken. This is typical for the round tables and committees used by Chancellor Schroeder such as the "Alliance for work" and committees like the "Hartz- committee", but it is also typical for the two layers of decisions-making in the firms, that is codetermination in the board of larger firms as well as the workers councils in the firms.

An important implication of this approach is that the status quo plays a central role. Major changes are not accepted when important groups of society are negatively affected by such changes. For instance, the trade unions have so far blocked major changes in the rule system for the labor market. The Riester reform of pay-as-you go system was only possible after they agreed in December 2000 on the pension formula. In a way, the consensus approach is an application of the Pareto criterion according to which an increase in welfare presupposes that at least one wins and no one loses with the difference that in politics a relative loss is considered as a loss as well. This implies that a standstill often is the outcome, that economic dynamics is lost. Decisions tend to be blocked if you look for consensus and distribution only.[31],[32]

A serious shortcoming is that such an approach does not make use of the decentralized allocation through markets in which changes occur more or less automatically and where market participants are expected to adjust to new economic conditions. Round tables do not have an automatic and decentralized way to find new technical solutions. Such a system does not make use of the problem solving capacity of decentralized markets.

Consensus under conditions of expansion.

The consensus approach probably was appropriate for an environment of high growth rates of 7.5 as in the 50s and 5 percent in the 60s of the last century when the German economy was catching up to the Unites States and when welfare gains could be spread widely. In a situation, when the growth rate is around 2½ percent or even 1½ percent as in the last eight years, restraints become more binding and goal

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[31] The Schröder government has introduced three major laws that go in the direction of modernization: The tax reform, the limited switch to partial private funding of old-age insurance and the immigration law. The tax reform has found resistance in the Mittelstand, the immigration has not been passed and its future is uncertain. The pension formula introduced by the Kohl government and containing a demographic factor was undone. Some other reforms of the previous government, some oft them tiny, have been undone as well, for instance in health insurance and the lay-off law. The labor market has not been deregulated, on the contrary, the labor market has been additionally regulated. Industrial relations have also been additionally regulated. The welfare state has not been modernized, especially with respect to health insurance. The pension reform may prove not to be viable; the pension formula does not take demographics into consideration. Burden-sharing between the federal states has not been modernized in the sense of a competitive federalism.

[32] This will be a major issue for a constitution-like arrangement for the European Union. If equity and distribution dominate, a blockage is the likely outcome (Siebert 2002).

conflicts more biting. This raises the question whether the institutional set-up for decision-making is part of the German problem of low growth performance. In that sense, Germany may face a similar problem as Japan whose institutional system was appropriate for an expanding economy, but no longer seems appropriate to solve structural issues.[33]

Decision making within firms

With respect to sectorial policy, Germany has solved its structural adjustment mainly in the existing firms, not by new firms. Such an approach may be good in marginal improvements, but it may be deficient in leapfrogging to new approaches and new products. One issue here is the role of corporate governance and the capital market where banks dominate in the controlling the boards of firms and where thus the incumbent firms have an advantage compared to the new firms.

Other institutional arrangements are relevant as well in this context. For instance with respect to the workers councils the question can be raised to what extent this decision process is appropriate for an economy that marginally improves the existing production technology and modernizes established products. But such an approach may be inappropriate in an environment where a new technology has to be applied and where new products have to be developed.[34]

Adhocery.

The consensus approach leads to interventionism, to adhocery and to a short-run orientation and to inconsistency in economic policy. “In the long run, there is just another short run” as Abba Lerner once said. More fundamental restraints are likely to be put on the back burner, for instance long-run impacts of economic policy measures, issues of sustainability and intergenerational budget constraints. In such an approach, the politician does not lead. As Churchill answered when asked what makes the difference between a politician and a statesman: „A politician always thinks of the next election, a statesman considers the next generation“.

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[33] The relative over-representation of agricultural voting districts to the city districts finds its analogon in the consensus approach in Germany.

[34] On the necessary changes compare Siebert (2001a and 2001c).

Social market economy.

The issue for Germany is to what extent the application of this concept of "social market economy" has meanwhile had a negative impact on economic dynamics in the long run so that the economic basis for social programs becomes weaker. The concept has been relevant for all areas of economic policy, wherever equity ideas are involved. This holds for product market regulations which protects the existing producers and the jobs they provide. For instance, Germany has been rather slow in privatising the telephone service. Without a push from the EU, it even would have been slower. For a long time, the monopoly of the traditional postal service including telecommunications was protected even if innovation and new jobs in new areas of communication were prohibited. The concept also holds for the labor market institutions, where insiders are protected, but market access for the outsiders is restricted. It holds for the social welfare system, for taxation policy, and even for not allowing competition as a basic element of organizing the university system. It also has been used to justify subsides; they cover up some of the adjustment problems.

Conclusion: Renaissance of the market economy

The picture of Germany that I have painted may help you to understand Germany´s role in the international community.

I am concerned by the question to what extent a country like Germany becomes immobile with respect to institutional modernization. Is this the fate of a mature economy that can no longer solve the major economic policy issues? Have structures become so rigid that institutional adjustment can no longer take place. Has the political process lost its problem-solving capacity? And must it rely more and more on decisions of the Constitutional Court to unblock deadlocks? Can Germany be compared to Japan as another mature economy? Are these the newly declining countries of the world economy?

These questions are especially relevant in a situation where other countries have undertaken major changes in their institutional arrangement. This holds for the

Netherlands since 1982, for Ireland, for the UK and even for the US in the eighties. In such an environment, the relative position of a country remaining immobile is affected.

My portrait of a Germany with a loss of economic dynamics, high unemployment, and an over-extended welfare state does not mean that existing German firms are not efficient. They are, but they have maintained their competitiveness by shedding labor, by creating jobs abroad. What is needed are more new firms and more firms in new areas. Note that firms may be competitive whereas a location, “Standort Deutschland”, may not. Whereas the existing firms are efficient, the institutional frame of reference defined by the political system seems wanting. It is not sufficiently geared towards innovation and modernization.

To conclude, Germany faces quite a few severe economic policy challenges. It needs a Renaissance of the Market Economy. From my heart I am optimist, and of course I hope that Germany will find solutions for all problems. Maybe the optimistic answer is that the Germans as a people are resilient, that in terms of economics they are good when they have their backs against the wall. To bring this strength forward, Germany needs a renaissance of the market economy. To close with an optimistic tone, let me quote what Calvin Coolidge once said: “If you see ten troubles coming down the road, you can be sure that nine will run into the ditch before they reach you.”

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Appendix

Table A-1 : Real GDP Growth Rate per Head of Population

	1970-1989	1980-1989	1990-2001	1990-1995	1995-2001
Germany	2.3	1.7	0.4	-0.6	1.5
France	2.4	1.7	1.5	0.9	2.0
Italy	2.7	2.2	1.6	1.5	1.8
EU12	2.5	1.9	1.7	1.8	1.6
UK	2.2	2.2	2.0	1.8	1.6
	2.1	2.2	2.0	1.9	1.7

Source: OECD

Table A-2: Trends in Germany' s comparative advantage[a]

		1970	1999
54	Medicinal and pharmaceutical products	48.9	34.9
72	Machinery specialized for particular industries	89.3	97.9
74	General industrial machinery and equipment, and parts	59.8	56.2
76	Telecommunication and sound recording equipment	25.5	–14.7
77	Electrical machinery, apparatus and appliances	8.5	–1.6
78	Electrical machinery, apparatus and appliances	76.0	48.7
88	Photographic apparatus, optical goods, watches	8.7	–17.0

[a] RCA-Coefficients, Revealed Comparative Advantage.

Source: Siebert und Stolpe 2000, Table 2.

Table A-3: Foreign Direct Investment of German Industry in Percent of Gross Investment[1)]

	Outbound	Inbound
1991 - 1995	11,5	-0,5
1995 - 2000	39,1	7,5
1996 - 2000	42,8	8,6
[1]For data see Siebert (2002d).		