

## **AICGS/German-American Dialogue Working Paper Series**

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Working Paper Series  
**GERMANY'S SOCIAL  
MARKET ECONOMY:  
HOW SUSTAINABLE IS  
THE WELFARE STATE?**  
Horst Siebert

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## INTRODUCTION

Germany's Social Market Economy has been quite successful in the last fifty years, but lately it has sailed into heavy seas. Before I begin my analysis, let me spell out quickly the elements that constitute the social market economy. It is a concept that relies on markets and competition but at the same time attempts to correct the market effects and tries to reconcile efficiency and equity in the original Erhard interpretation of the model. An underlying concept is that the benefits of economic progress should be widely distributed to everyone, or at least to a large majority of people, and that necessary economic adjustments should be eased by social considerations, i.e. equity considerations and 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 (telecommunications), and the network industries have been deregulated.
- The system provides social security in health care, nurtured care, old age and unemployment insurance, and in social security benefits. About one third of GDP is allocated to the "social budget."
- The government share is nearly half of GDP (48.6 percent).
- Germany is a federal state with two parliamentary chambers, one representing the federal states, or *Länder* (*Bundesrat*). Many laws require the agreement of both chambers.
- The labor market is most affected by government intervention. This relates to the 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 the major players in corporate governance, i.e. in controlling firms. A portion of the banks is government owned.

This concept has run into some difficulties. After the unification boom of the early 1990s, 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 relatively low GDP growth rate of 1.5 percent in the period 1995- 2003. Every year since 1994, the German growth rate has been lower than the EU average, and since 1998 Germany and Italy have been the tailight of the European Union in terms of growth. In comparison to the United States, the following table shows that in the period 1995-2003, Germany's growth rate was 1.5 percentage points lower.

**Table 1 - GDP Growth Rates**

	1970-1989	1980-1989	1990-2003	1990-1995	1995-2003 <sup>a</sup>
Germany <sup>b</sup>	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 <sup>c</sup>	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

<sup>a</sup> 2003 Forecast - <sup>b</sup> 1969-1990 Western Germany. - <sup>c</sup> EU 15 excluding United Kingdom, Denmark and Sweden.

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

This picture does not change substantially, even when additional factors are taken into consideration. It still holds if we look at the GDP growth rate per capita, although population growth was somewhat higher in the countries of the Euro area used in the comparison.<sup>1</sup> Consequently, the growth differential is somewhat lower if population growth is taken into account. 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) measuring real output also partly contribute to the growth differential with respect to the United States, but they explain only part of the difference with the United States and explain nothing with respect to the European countries. Thus, the weakness of economic growth is one of the characteristics of Germany today.

The second problem is high unemployment: 10.4 percent or 4.45 million Germans are out of work; in addition, 1.7 million are enrolled in labor market schemes. Total unemployment is 13.4 percent.<sup>2</sup>

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

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

<sup>1</sup> See Table 49 in Annual Report 2002/2003 of the German Council of Economic Advisers (2002).

<sup>2</sup> Table 46, op.cit.

## I. UNIFICATION

Historically, German unification was, of course, a stroke of luck, and it represented a major change in the economic conditions in Germany. In eastern Germany, it meant a major change in the lives of people. State-owned firms had to be privatized, and production had to be oriented towards the markets in the West. A new capital stock in the business sector, in infrastructure, and housing had to be built up.

The transformation of eastern Germany did not go as well as initially expected. Hopes that the German *Wirtschaftswunder* of the early 1950s 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 reconstructed. Second, exchanging the East German mark 1:1 to the West German mark created the wrong expectations, with a devastating impact on wage negotiations. Wages were quickly out of line with productivity, and unit labor costs were at about 130 percent of those in West Germany.

Third, German monetary union implied an appreciation of the East 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 percent of the western German GDP<sup>3</sup> per capita of the population (2001). It started out at 33 percent in 1991. In its historic dimension, this is quite an achievement. In a policy-oriented approach, however, it does not make sense to exclude Berlin from the eastern German region since it lies in the middle of eastern Germany. If it is included, the eastern German region now is at 62.7 percent of the western German level (2002).<sup>4</sup> Considering that other German *Länder* such as Rheinland-Pfalz, Niedersachsen and Schleswig-Holstein reach 80-85 percent of the western German level, eastern Germany 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, such as in car production, the IT sector, communications, and aerospace, high growth rates can be observed since 1991. In machine building, the construction of railroad cars, shipbuilding, and in leather and textiles, the rates have been negative (Ragnitz et. al. 2001). These are, in part, branches with a strong structural change in western Germany as well.

Since 1997 the growth rate of eastern Germany is below the German rate.<sup>5</sup> This means that the convergence process has stopped and that we now 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.<sup>6</sup>

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

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<sup>3</sup> Also excluding Berlin

<sup>4</sup> Labor productivity is at 71.5 percent.

<sup>5</sup> It may be a bit higher in 2003.

<sup>6</sup> 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 (Party for Democratic Socialism), the successor of the previous communist SED (Socialist Unity Party), alludes to some people's feeling of being deprived and still collects up to 20 percent of the votes.

financed by higher taxes. A larger part was financed through credits, leading to a doubling of government debt from € 0.46trillion (1989) or 42 percent of GDP to € 1.2trillion 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 of GDP in 1990 (western Germany) to 17.5 percent in 2001;<sup>7</sup> it is not clear, however, to what extent this increase can be traced exclusively to transfers within the system or whether it reflects a general expansion of the welfare state.

It is quite apparent that these transfers have had their impact. They have negatively affected Germany's fiscal policy stance. The maneuvering 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 other EU countries. The higher contributions within the social systems meant that the tax on labor has been increased, 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 *Deutschmark* as a consequence of unification affecting Germany's competitive position in the world market.<sup>8</sup> This follows, for instance, from a model with tradeables and non-tradeables; transfers to eastern Germany<sup>9</sup> increase absorption and imply a rise in the price of non-tradeables relative to tradeables. 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. Western Germany is partly inhibited by the need to finance the transfers, but it would be misleading to assume that this is the only reason for the poor growth performance. German unification arose in an environment in which long-run trends were leading to unresolved, severe structural problems. Western Germany cannot create enough economic dynamic for a strong carry over to eastern 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. Thus an important economic resource, labor and human capital, is wasted.

### Stepwise increase in 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 percent in 2003). In each recession, roughly one million Germans were added to the pool of unemployed workers in western Germany, and the high unemployment rate was not reduced significantly during the boom years, so that

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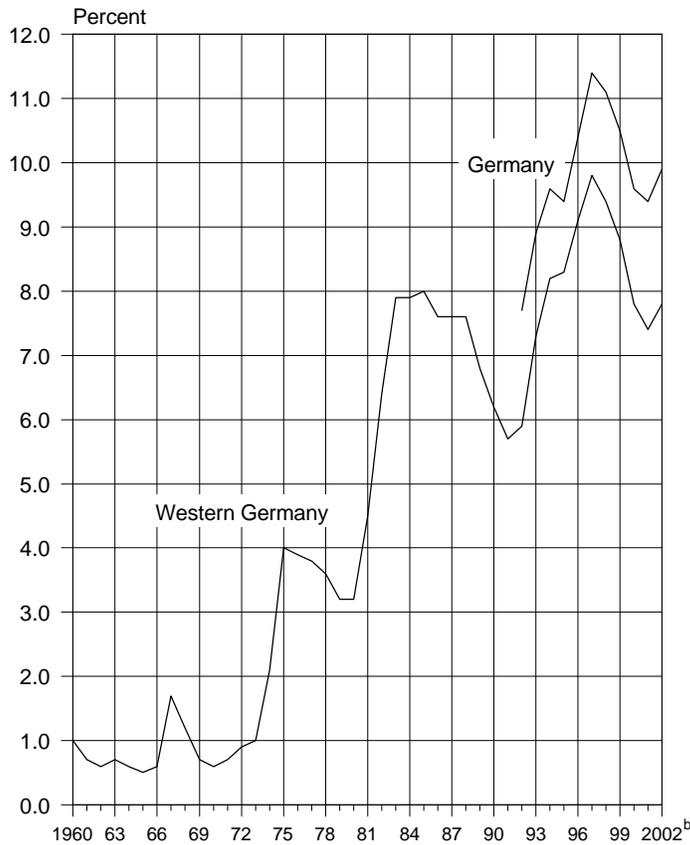
<sup>7</sup> German Council of Economic Advisers, Annual Report 2002/03, Table 34\*

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

<sup>9</sup> 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).

the next recession started from a higher level of unemployment. With unification, the structural unemployment problems in eastern Germany were added to the mix.

**Figure 1: The Unemployment Rate in Germany**



<sup>a</sup>Unemployed in percent of all civilian employees. — <sup>b</sup>Forecast of the Kiel Institute for World Economics.

The stepwise ratcheting up of unemployment signals that the institutional design for labor is malfunctioning. There are three major aspects: the institutional design for wage formation; the role of the reservation wage; and the systematic weakening of the demand for labor.<sup>10</sup>

### **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 United States 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 period of high unemployment, wages should not be raised according to the observed trend in the growth of labor productivity but

<sup>10</sup> As an 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.

should remain below that trend in order to hire back the previously unemployed workers. 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 a member of the employer's association and to all workers who are a member of the trade unions. De facto, unionized firms do not differentiate wages according to union membership or non-membership of workers. Moreover, they set the standard for the non-unionized firms as well.<sup>11</sup> Negotiated wages thus represent the norms for the economy, even for the unemployed. Consequently, trade unions who account for only 18 percent of the active work force and who are losing members have a decisive influence on wages.

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 the German set-up is to understand 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 jobs of the insiders, 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 as a union member, the individual worker can deviate from the negotiated union wage contract if this is favorable for him. The term "favorable," however, is narrowly interpreted by the labor courts to mean a wage higher than in the union contract or as less working time. The risk of becoming unemployed or the security of the job cannot legally be part of the consideration of whether to deviate from the union contract; this has been explicitly outlined in a 1999 decision of the highest labor court (*Bundesarbeitsgericht*). According to this decision, wages and working time on the one hand and the security of a job on the other are not allowed to be compared. Any freshman of economics knows that in (economic) reality the three variables—wage level, working time and the security of a job—are strongly interrelated; 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 produces strong opposition from the trade unions who fear losing organizational power.

Another legal provision stipulates that firms cannot deviate from the union contract unless this is permitted in the contract itself (§ 77, Sec 3 *Betriebsverfassungsgesetz*).<sup>12</sup> 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 applies even to those firms that are not a member of the employers' association. Admittedly, to some extent firms and workers have disregarded this stipulation, 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 fear of losing power.

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<sup>11</sup> For instance, the unemployment offices mediate jobs for the unemployed according to the local customary wage that is influenced by the negotiated wage.

<sup>12</sup> This provision even applies to firms that are not members of the employers' association. Thus it *de facto* violates the negative "freedom of coalition" guaranteed by the Constitution, i.e., that no one should be forced into union membership.

### **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 crisis wages and working time are “sticky” in a downward sense for the individual firm.<sup>13</sup>

### **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 because of illness or for other reasons. Germany has developed the following schemes:

- *Type I unemployment benefits (Arbeitslosengeld)* is at 67 percent of the previous net income (unemployed with at least one child).<sup>14</sup> The duration of benefits varies with age and goes up to 32 months.
- *Type II unemployment benefits (Arbeitslosenhilfe)* amounts to 57 percent of the net wage.<sup>15</sup> It is paid when unemployment benefits under Type I expire. This type of benefit is paid indefinitely and is linked to the previous working income and requires a needs assessment.
- *Welfare benefits (Sozialhilfe)* represent payments to allow persons to live a dignified life. 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.
- *Sick pay* is provided at 100 percent of the previous gross wage for the first six weeks and 80 percent thereafter.<sup>16</sup>

This set of government-provided incomes defines the reservation wage that an unemployed worker requires from his next job; it influences the intensity of the job search 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 the floor of 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*

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<sup>13</sup> Downward flexibility in working time with a reduction of pay can reduce the impact of lay-off constraints.

<sup>14</sup> Sixty percent for singles. Benefits are adjusted according to wage increases; they require a minimum time of contributions paid.

<sup>15</sup> With one child; 53 percent in other cases.

<sup>16</sup> It cannot surpass the net wage income. For the same illness, it is limited to 78 weeks in a three-year period.

minimum wage. There is an implicit minimum wage without a minimum wage being formally defined, which means that wage differentiation is prevented. The lower part of the demand curve for labor is truncated, and there is no effective labor demand below the minimum wage. Such an economy loses the lower segment of the labor market, with unemployment as the consequence. Moreover, a minimum wage has an impact on the labor market equilibrium because it determines wage bargaining behavior of unions.<sup>17</sup> Finally, since the minimum wage implies higher outlays of the social security system that *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 percent of gross income of a married worker and 67 percent for the single worker with an average income.<sup>18</sup> 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.<sup>19</sup> 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, 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 negatively affects the labor supply and the wage rate in the lower segment of the labor market, mandatory contributions increase the costs of firms, which shifts the labor demand curve of the economy downward or to the left. On the supply side, the wedge affects work effort, the appeal of accumulating human capital, and, consequently, labor supply. The supply curve is also shifted to the left. The combined effect of the two leftward shifts is a reduced level of employment.<sup>20</sup>

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.

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<sup>17</sup> See German Council of Economic Advisers, 2002, Box 9.

<sup>18</sup> German Council, op. cit. p. 376 mimeo.

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

<sup>20</sup> The impact on the market wage rate can go either way.

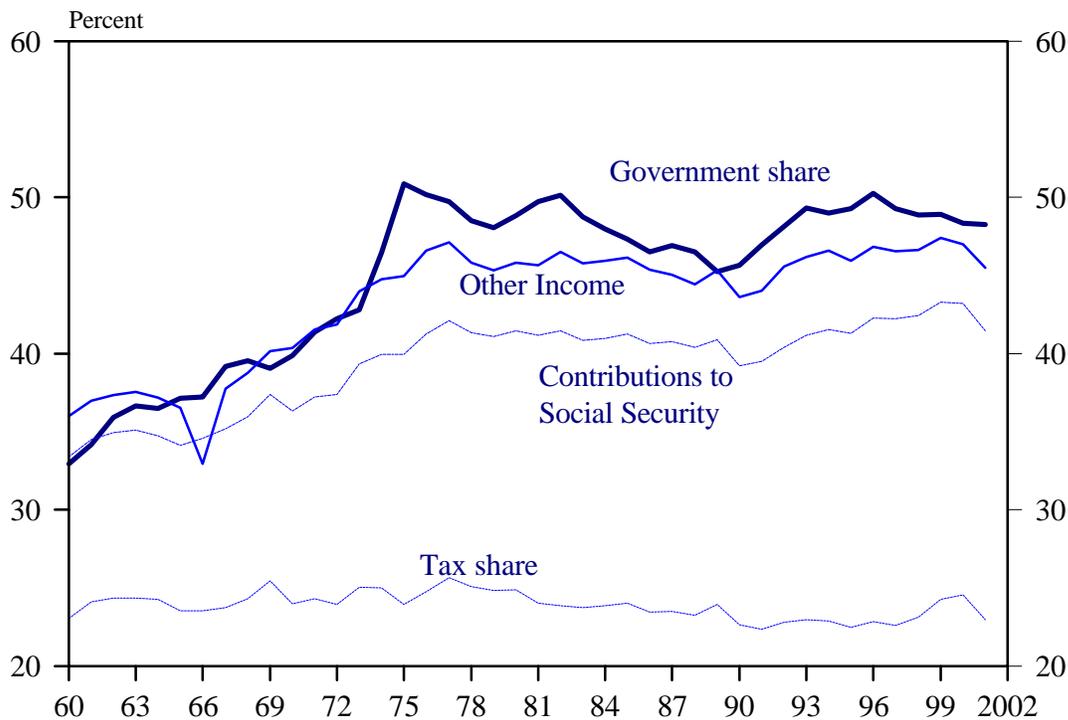
### III. THE SOCIAL SECURITY SYSTEMS UNDER STRAIN

Germany is characterized by a generous social system that consists of the old age pension system, nurtured care, health insurance, unemployment insurance with two types of unemployment benefits, and social welfare. One third of GDP is spent on the “social budget.” Whereas part of the social budget is financed from tax revenue, the bulk of the expenditures are financed by contributions by employees and employers, each paying half of the total. The financing of the system is thus linked to the labor contract.

#### Expansion of the welfare state

The 1970s witnessed a major expansion of the welfare state. The share of the cost of government in GDP rose from 39.1 percent in 1970 to 50.3 percent in 1996; it is now at 48.6 percent (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 percent (2002). The difference is financed by transfers from the government budget (4 percentage points ) and a deficit of the social security system (0.1 percentage point).<sup>21</sup> 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, by 2001 it had increased to 4.1 percentage points. Surprisingly the expansion of the welfare system took place in the 1970s at a time when the high real growth rates of GDP of the 1950s and the 1960s (of 7 and 5 percent, respectively) no longer could be attained.

**Figure 2 – Government Share in GDP<sup>a</sup>**



<sup>a</sup>In current prices, until 1990: West Germany.

Source: German Council of Economic Advisors

<sup>21</sup> Council 2002 Table 34\*.

### **Wrong incentive effects**

A large portion of the high marginal tax and contribution rate on income from labor is due to the contribution rate for the social security system.

Besides having similar effects as a tax on labor, such high marginal rates represent the wrong kind of 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 may very well be a reason for the loss of dynamics. Besides, it is an invitation to move to an underground economy or to officially take residence in low-tax places such as London, which is relevant for the modern services sectors (e.g. banking). In any case, here is a line of attack for an economic policy that wants to overcome obstacles to economic growth.

In addition, the benefits define a reservation wage that influences the job 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 high levels of unemployment, it is clear that the social welfare system has visibly reached its financing limits. After the German election of 2002, the government came out with stopgap measures such as reducing the reserve of the pay-as-you go pension system, which amounted to a reduction from 0.8 months to 0.5 months (in 2001 it was already reduced from one month). Health insurees in the public system witnessed the imposition of a cap on contributions. Contributions to the old age pension system have to be raised from 19.1 of gross wage to 19.5<sup>22</sup>. 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 aging society. Germany will be severely affected by the aging of its population, more so than France, the UK, and the United States. 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 people. This will have severe repercussions for growth (the labor supply will shrink), for the capital stock (which will be oversized), and for 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, such as in health care, have 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 of distinguishing large and small risks for the individual. Large risks are those that cannot be borne by the individual; an example is an individual having no income because of a longer illness or disability. These risks have to be taken over by society. Small risks, such as having no income in the first days of unemployment or illness, however, can be borne by each member of society—for example, via precautionary savings. In my judgment, this distinction must be at the heart of reforming the welfare state and must be applied to all areas of social security, such as medical care. In

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<sup>22</sup> 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.

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 in the social security systems has to be created. The distinction between large and small risks has to be delineated for the different branches of the social welfare system. By applying such a distinction, the mandatory contributions to the welfare system can be reduced and the negative impact on the demand for labor 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 which social security systems can be financed today, whether they are sustainable in the future, and to what extent the institutional arrangements, including 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 enough to support the superstructure. One 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 period of high growth rates and a high productivity increase (like the 1970s in Germany), which no longer can prevail today.<sup>23</sup> 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.

##### **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. Nevertheless, there are issues to be examined.

##### *A decline in the investment share*

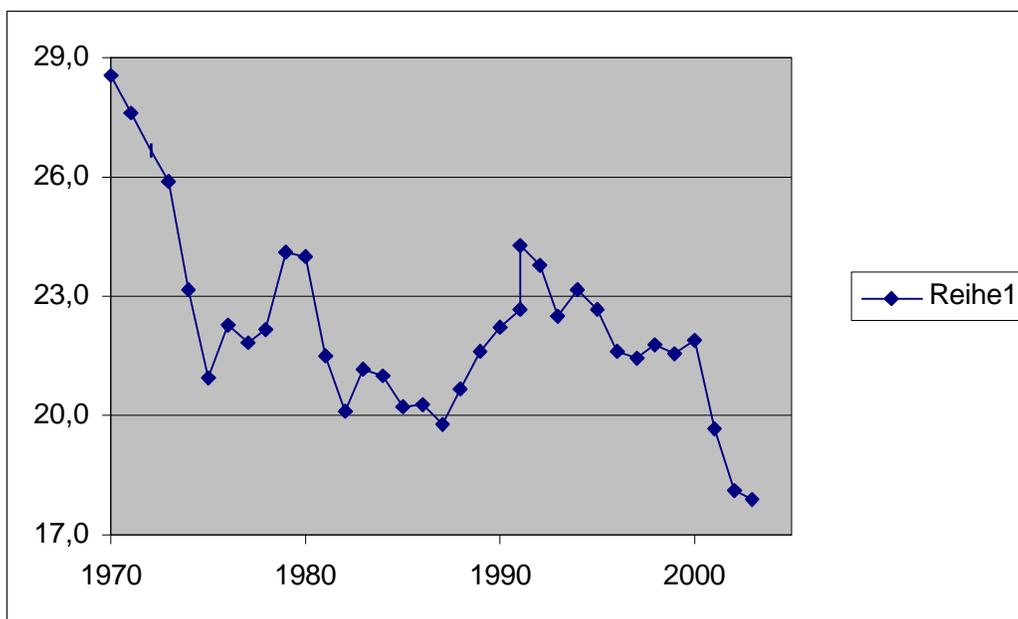
Since 1995, the share of investment in GDP has fallen from 23 percent to 18 percent in 2002. Taking a long-term perspective over the last four decades, the investment ratio fell from 26.5 percent in the 1960s to 19.4 percent in 2000-2003.<sup>24</sup> Clearly, there is a declining investment ratio trend.

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<sup>23</sup> The increase in labor productivity per hour was 4 percent in the 1970s; it was 1.5 percent in the period 1995-2002.

<sup>24</sup> 24 percent in the 1970s, 21 percent in the 1980s and 22.5 percent in the 1990s.

**Figure 3: Share of Investment in GDP**



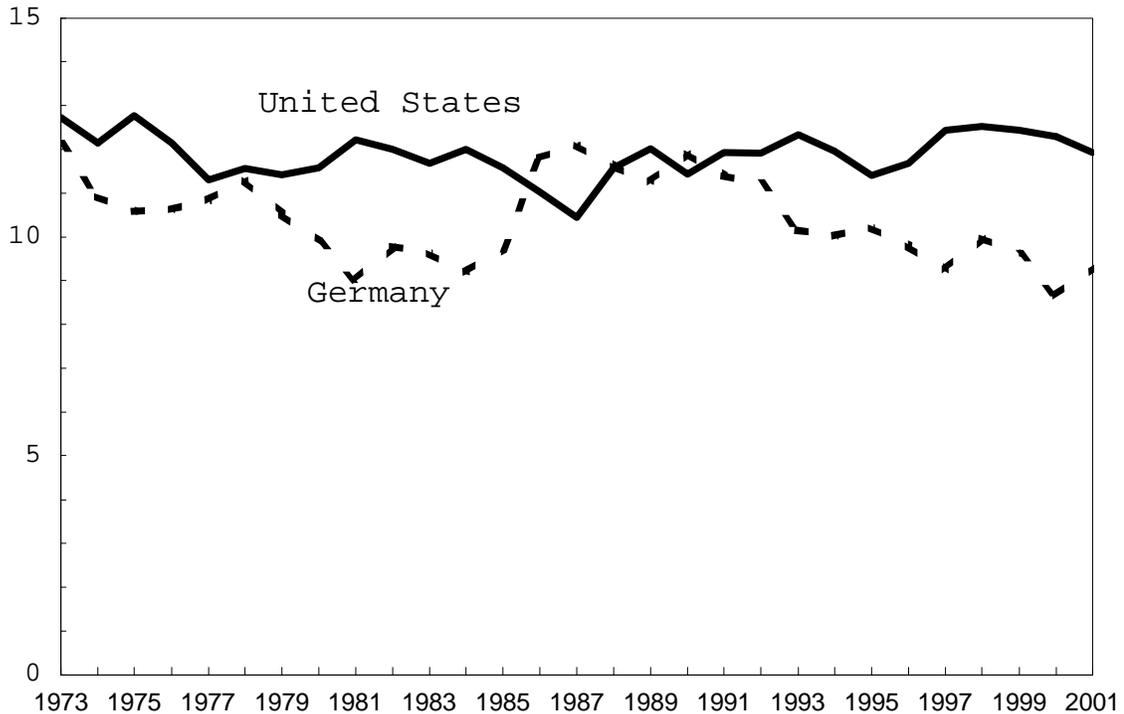
This trend is consistent with the convergence hypothesis. According to this approach, a country catching up exhibits high growth rates when its capital stock is still small and the marginal productivity of capital is high. With more capital being accumulated, the marginal productivity of capital and 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 share has declined by 2.6 percentage points since 1990, 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 United States succeeded in holding on to its world market share. Germany's share of industrial goods exports of all OECD countries also is receding relative to the France and the UK, especially in the early 1990s.

The above results hinge on calculating German exports in dollar terms. This implies that a high valued U.S. 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 in the 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 U.S. dollar (by dividing Germany's nominal exports in U.S. dollars by a given exchange rate of a base year and dividing nominal exports in U.S. dollars of other countries by national dollar-based export prices of a base year),<sup>25</sup> 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 percent (in 1989) to 25 percent (in 1995). West German firms were keen to sell their products to new eastern German markets at their doorstep instead of shipping them out into the global market. Internal demand for German exportables increased so that there was a real appreciation of the *Deutschmark* in the first part of the 1990s as a consequence of German unification, which hurt exports.

With respect to product structure, manufacturing produces 89 percent of Germany's exports, using 23 percent of employed workers. 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).

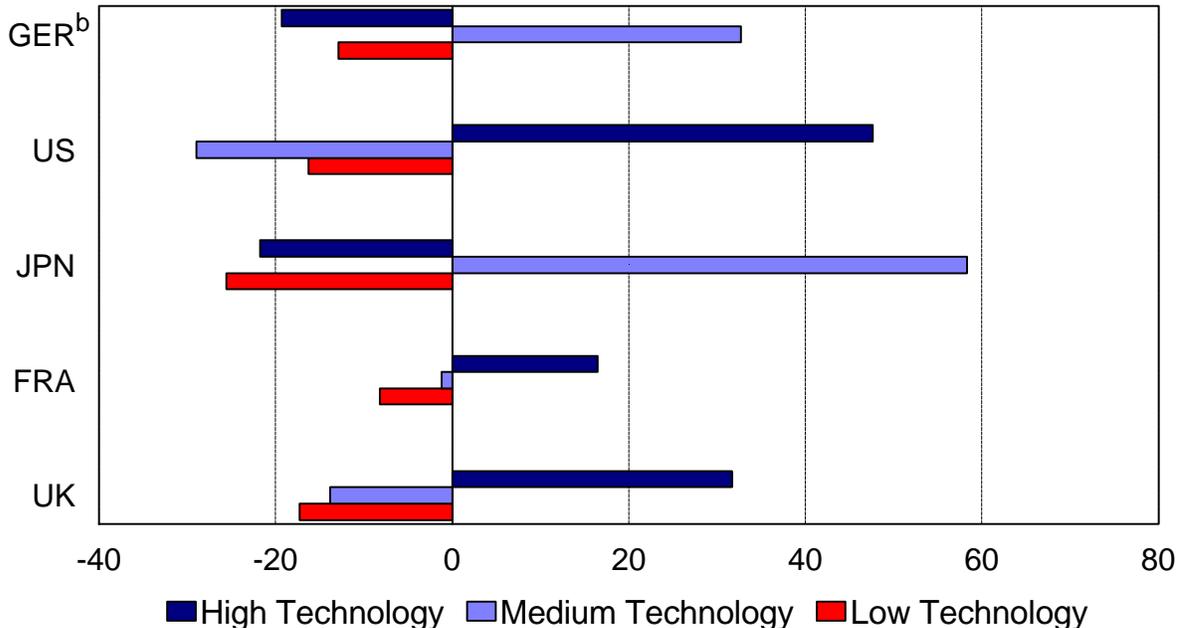
Machine building and car production still have a high comparative advantage. But in the last two decades, the electro-technical industry, the production of telecommunication instruments and the optical industry have lost their comparative advantage (Table A-2). The pharmaceutical sector seems to be eroding as well, so that Germany no longer can claim to be

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<sup>25</sup> See Bundesbank (2002), p. 42, where Germany's exports are in dollar terms, the price of Germany's exports in a base year are in dollar terms (and likewise for the other countries).

the pharmacy of the world economy. BASF has sold its pharmaceutical branch to Abbot Laboratories; Hoechst has landed 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.

**Figure 5: Competitiveness according to technology-intensity<sup>a</sup> 2001**



<sup>a</sup>RCA- Coefficients according to technology-intensity. — <sup>b</sup>2000.

Germany is heavily specialized in medium technology, where the level of technology is defined in terms of R&D expenditure relative to the product price. Medium sized firms of the “Mittelstand” have been particularly successful with sophisticated and human-capital intensive medium technology in niches in the world market, especially in machine building. By the same token, Germany exhibits a comparative disadvantage in high-tech products relative to the United States, France, and the UK. With respect to the technology intensity of exports, Germany’s pattern of specialization is similar to that of Japan.

Export prices of commercial products have increased by 0.7 percent per year in the 1990s (it was 2 percent in the 1980s). Export unit values and the relation of prices of German commodity exports to world commodity exports (both in U.S. dollars) fell by 20 percent in the 1990s (IMF 2002). This indicates a narrow maneuvering space for product prices and for shifting costs.

### Technology

In terms of innovation, Germany is strong in the 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 be due to product market regulation (for example, with respect to the licensing of new pharmaceutical products), a less developed venture capital market and the absence of 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 improving a given technology than to leap frog to a new one.<sup>26</sup>

### **Employment in industry**

In numbers nearly equivalent to the export sector, Germany's industrial sector has lost 2.5 million jobs since 1991; actual employment is at 7.8 million. Western German industry has lost 1.75 million jobs (in plants with 20 employees and more).<sup>27</sup> This is a sizable loss relative to the 5.6 million employees actually in that sector.<sup>28</sup> In the 1990s, industry has not contributed positively to the German growth rate (Sachverständigenrat 2002);<sup>29</sup> its contribution to the growth rate was negative, which was a surprising result. These data indicate that there is a sizable structural change; jobs are not competitive.

### **FDI**

Half of the larger German firms' employees now live outside of Germany. 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 of German industry made up 39.1 percent of annual gross investment of industry (Table A-3).

### **Structural issues of the state**

#### *Government and the universities*

The university system is a public system with some private universities now emerging on the fringes 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 research institutes operate according to the labor market regulations and the rules of codetermination. This is a severe impediment to building an innovative environment so 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, a central problem is the large share of government expenditure of GDP (48.6 percent). A related issue is a low and declining share of public investment in GDP. Here the task is to rethink the role of government in the market economy. In the past, Germany has been slow to privatize public firms, such as telecommunications and the postal service, and it would have been even slower without pressure from the European Union.

#### *The role of parliament*

With respect to organized groups, including commissions outside government, a constitutional question is to what extent parliament loses power to interest groups.

#### *The electoral system*

The role of interest groups is linked to Germany's electoral system. Whereas Germany's current electoral system does not experience the negative effects of plurality voting seen

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<sup>26</sup> Anecdotal evidence has it that a new telephone for a German firm was engineered in China and a dialysis instrument in Madras, India.

<sup>27</sup> Structural break in the data.

<sup>28</sup> Employment in Germany in that category is at 6.2 million.

<sup>29</sup> Table 19.

during the Weimar republic and is thus more internally stable, the actual voting system usually results in governments being 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 that each region of the country provide similar conditions with respect to public infrastructure. This is often interpreted to mean 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 the tax revenue of each federal state is brought to nearly 100 percent 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 using a wide delineation subsidies account for €156 billion per year, which is 7.5 percent of GDP or 35 percent of total tax revenues. (Boss and Rosenschon, 2000)

#### *The consensus approach and “corporatism”*

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 roundtables and commissions used by Chancellor Schröder, such as the “Alliance for Work” and the “Hartz Commission,” but it is also typical for the two layers of decision-making in the firms—i.e. co-determination 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, so far the trade unions have blocked major changes in the rules system for the labor market. The Riester reform of a 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. The difference is that in politics a relative loss is considered as a loss as well. This implies that a standstill often is the outcome, and that economic dynamics is lost. Decisions tend to be blocked if you look only for consensus and distribution.<sup>30</sup>

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. Roundtables do not

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<sup>30</sup> The Schröder government has introduced three major laws that move 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 law has not been passed, and its future is uncertain. The pension formula introduced by the Kohl government that contained a demographic factor was undone. Some other reforms of the previous government, some of them quite small, have been undone as well, such as in health insurance and the lay-off law. The labor market has not been deregulated; on the contrary, the labor market has been further regulated. Industrial relations also have been further 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. Finally, 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).

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 as seen in the 1950s (7.5 percent) and in the 1960s (5 percent), when the German economy was catching up to the United States and when welfare gains could be distributed widely. In a situation in which the growth rate is around 2.5 percent or even 1.5 percent, as in the last eight years, restraints become more binding and goal conflicts more biting. This raises the question of whether the institutional set-up for decision-making is part of the German problem of low growth performance. In that sense, Germany may face problems similar to those of Japan, whose institutional system was appropriate for an expanding economy but which no longer seems capable of solving structural issues.<sup>31</sup>

### **Decision-making within firms**

With respect to sectoral policy, Germany has solved its structural adjustment mainly through existing firms, not through new firms. Such an approach may be good in terms of 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 controlling corporate boards and where the incumbent firms have an advantage relative to the new firms.

Other institutional arrangements are relevant as well in this context. For instance, with respect to the workers' councils the question raised is 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.<sup>32</sup>

### **Ad hoc behavior**

The consensus approach leads to interventionism, to a tendency towards ad hoc behavior and short-run thinking, and to inconsistencies 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, such as 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."

### **The social market economy**

The issue for Germany is to what extent the application of this concept of "social market economy" has 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 protect the existing producers and the jobs they provide. For instance, Germany has been rather slow in privatizing the telephone service. Without a push from the

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<sup>31</sup> The relative over-representation of agricultural voting districts to the city districts finds its analogue in the consensus approach in Germany.

<sup>32</sup> On the necessary changes compare Siebert (2001a and 2001c).

EU, it would have been even 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 preventing competition as a basic element in organizing the university system. It also has been used to justify subsidies; 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. What I am concerned with is the question of the extent to which a country like Germany becomes immobile with respect to institutional modernization. There are other questions as well: 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, or 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 United States in the 1980s. In such an environment, the relative position of a country remaining immobile is affected.

My portrait of a Germany with little economic dynamic, 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 and 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. While 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 many severe economic policy challenges. It needs a Renaissance of the market economy. In my heart I am an optimist, and of course I hope that Germany will find solutions for all its problems. Perhaps the optimistic answer is that the Germans as a people are resilient, that in terms of economics they perform well when they have their backs against the wall. To bring this strength forward, Germany needs a reinvigorated market economy. To close on a more positive 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<sup>a</sup>**

		1970	1999
5	Medicinal and pharmaceutical products	48.9	34.9
4			
7	Machinery specialized for particular industries	89.3	97.9
2			
7	General industrial machinery and equipment, and parts	59.8	56.2
4			
7	Telecommunication and sound recording equipment	25.5	–
6			14.7
7	Electrical machinery, apparatus and appliances	8.5	–1.6
7			
7	Electrical machinery, apparatus and appliances	76.0	48.7
8			
8	Photographic apparatus, optical goods, watches	8.7	–
8			17.0

<sup>a</sup> 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<sup>1)</sup>**

	Outbound	Inbound
1991 – 1995	11,5	-0,5
1995 – 2000	39,1	7,5
1996 – 2000	42,8	8,6

<sup>1)</sup>For data see Siebert (2002d).