

Kiel Institute for World Economics
Duesternbrooker Weg 120
24105 Kiel (Germany)

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**Old Europe's Social Model – A Reason of Low Growth? The Case of
Germany**

by

Horst Siebert

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Old Europe's Social Model – A Reason of Low Growth? The Case of Germany

Horst Siebert *

Abstract: This paper discusses the goal conflict between social protection and economic growth as well as employment. Taking the German economy as an example for the large continental economies of Old Europe, it analyzes twenty mechanisms that affect the fundamentals of the economy negatively and imply low growth and high unemployment. An empirical index is constructed. In the period 1960-2005, an increase in the social protection index goes together with a decline in the GDP growth rate by 2.6 percentage points.

Key words: Social protection / Economic growth/ Unemployment/ Mechanisms for a poor dynamics/ Old Europe / Erosion

JEL: H,J, K, 0; P

*Kiel Institute for World Economics
24100 Kiel, Germany
Telephone: +49/431/8814-567
Fax: +49/431/8814-568
E-mail: hsiebert@ifw.uni-kiel.de*

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The conflict between social protection and economic growth

1. The three large continental countries of old Europe - Germany, France and Italy – have had a low average annual GDP growth rate of 1.6 percent since 1995. It is half the US growth rate and 1 ½ percentage points less than in the UK. In the period 2000-2005, the growth rate of the three large continental countries is less than one third of that of the US. For Germany, Europe's largest economy, the growth rate for the period 1995-2005 is 1.4 per cent (Table 1). The rate in the same period is similarly low for Italy with 1.3 percent; it is higher for France with 2.2 percent. All three countries have high unemployment rates (standardized rates 2005: Germany 9.5, France 9.5, Italy 7.7 percent). The issue is whether Old Europe's social model is one of the underlying reasons for the low growth rate.

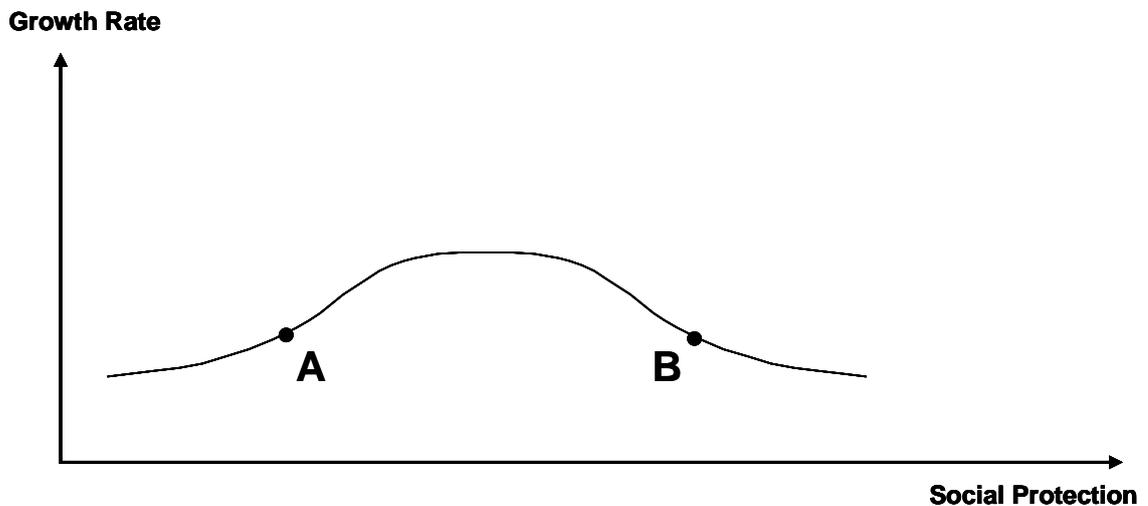
Table 1 Annual average GDP growth rates in the EU-25, 1991- 2005 ^a

	1991-1995	1995-2000	1991-2000	1991-2005	1995-2005	2000-2005
Continental						
3 large continentals ^b	1.3	2.2	1.8	1.5	1.6	1.0
of which Germany	1.5	2.0	1.8	1.4	1.4	0.7
4 small continentals ^c	2.3	3.4	2.9	2.3	2.3	1.3
2 Anglo-Saxon ^d	2.6	3.6	3.2	3.0	3.1	2.7
of which UK	2.4	3.2	2.9	2.7	2.8	2.4
3 Nordics ^e	1.8	3.5	2.6	2.4	2.7	2.0
3 Mediterraneans ^f	1.7	4.0	3.0	3.0	3.5	3.0
10 New members		4.5			4.1	3.6
Memorandum item						
USA	3.1	4.1	3.7	3.3	3.3	2.6

^a Real GDP growth rates with prices and exchange rates of 1995. Growth rates do not reflect exchange rate changes. – ^b Germany, France, Italy – ^c Austria and Benelux. – ^d UK and Ireland. – ^e Denmark, Finland and Sweden. – ^f Greece, Portugal and Spain.

2. The hypothesis to be discussed is that a goal conflict exists between social protection and economic growth (Figure 1). It can be argued that, for a low level of social protection, more social protection will increase the growth rate (Point A). At some point, however, the curve changes its property. For a high level of social protection, an increase in social protection will lower the growth rate (point B). There are some signs that the three major countries of “Old Europe” are on the falling branch of the bell-shaped curve.

Figure 1 Goal Relation between growth and social protection



3. Such a hypothesis is consistent with empirical observations on the relationship between growth and inequality for a multitude of countries of the world. According to the Kuznets curve (1955), the curve for the growth rate and inequality follows an *inverted u* over longer periods. Low-income countries tend to have high growth rates and high inequality. High-income countries have lower growth and more equality. The Kuznets curve represents an empirical regularity (Barro 2000). However, we do not have a “causal” relationship between

inequality and the growth rate. Adding the Gini coefficients to an equation between growth and other growth determinants suggests a zero overall relationship between (the unexplained part of) the growth rate and the Gini coefficient in a 146 number sample (Barro 2000, Figure 1). If a distinction between low-income¹ and high-income countries is made, the growth rate is in a positive relation to equality in low-income countries (except for a low per capita income below US\$ 2000 (1985 dollars), i.e. more inequality (a higher Gini coefficient) reduces the unexplained part of the growth rate. In high income countries, more equality is associated with lower growth (Ibid, Figure 2).

4. The topic here is not the relationship between distribution (or social equity) and growth but the link between social protection and growth. Both terms are not identical. Whereas distribution can be measured by the Gini coefficient, social protection does not only include income transfers for distributional purposes from public systems, for instance unemployment benefits, public pensions or social welfare payments. It also comprises legal entitlements such as lay-off constraints and legal stipulations in favor of collective wage contracts. Moreover, legal rules such as the rules for co-determination or the constitutional requirement of the similarity of living conditions in Germany's federal states form part of social protection. Market allocations are substituted by bureaucratic or other non-market allocation procedures. These forms of social protection do not directly show up in the government's budget and do not necessarily cause public transfers.

5. As with other empirical relationships such as the Philips curve or NAIRU, the curve on social protection and growth depends on institutional conditions. The institutional set-up defines the incentives for the decisions of households and firms. Since the institutional setting is not uniform in Europe, it is necessary to take into account the different institutional arrangements in Europe. I modify Sapir's typology (2005), which is not on growth and social

protection, but on efficiency and equity. Even though this typology may be questioned ², it reminds us that institutional conditions differ among European countries.

Table 2 : Taxonomy of European Countries ^a

GDP Growth Rates	Equity		
		High	Low
Low		Continental (Growth rate 1.6)	
High		Nordics (Growth rate 2.7)	Anglo-Saxons (Growth rate 3.1), Mediterraneans (Growth rate 3.5) New EU Members (Growth rate 4.1)

^a Definition of country groups, see Table 1. Average GDP growth rate 1995-2005.

Twenty mechanisms for lower growth

6. Let us look at the incentive structure for growth that is affected by social protection and let us discuss which mechanisms can be at the root of a negative interdependence between social protection and growth. I will use Germany as an example to study this question and I will distinguish different areas relevant for growth.

Labor

Economic growth depends most prominently on accumulated stocks driving the growth process (labor, physical and human capital, technological knowledge). A set of mechanisms of social protection relate to labor input as one of the determinants of economic growth. They play a role in leaving labor idle. If about ten percent of the labor force is unemployed, GDP is lower than with near-full employment. With growing unemployment, the growth rate declines. Leaving labor idle is likely to imply less flexibility of the economic system and thus more difficulty in adjusting to economic shocks. It also affects the expenditures of the social security system and the public budget.

First, employment protection as one form of social protection can be expected to reduce the firms' demand for labor in the long-run. Lay-off restraints establish a negative shadow price for labor in the firms' intertemporal maximization framework if economic slumps, sectoral shocks and firm-specific disturbances are included in the analysis.

Second, increasing social protection in the lower segment of the labor market in a variety of forms (increasing the duration of unemployment benefits – *Arbeitslosengeld* - in the mid 1980s, increasing the replacement ratios in the 1970s in both forms of unemployment benefits - *Arbeitslosengeld* and *Arbeitslosenhilfe* - , and improving social welfare benefits (measured as an increase in the number of recipients and expenditures) ³ implies a high reservation wage. These arrangements are false incentives for the labor market. The low segment of the labor market dries up.

Other proposals, motivated by social protection, also affect the labor market. An explicit minimum wage truncates the lower part of the demand for labor curve if it is binding, for instance in low-income regions or for young people. The minimum wage in France is

considered as one of the main factors explaining the high rate of 23 percent of youth unemployment (2005). The Hartz reforms in Germany have had mixed results. They have lowered the duration of unemployment benefits of type I and the level of the previous unemployment benefit of type II (*Arbeitslosenhilfe*). At the same time, they have improved the benefits for those who were classified as social welfare recipients previously and they have extended the group eligible for unemployment compensation of type II. Moreover, they have assigned social welfare to a national agency instead of the municipalities, thus violating the subsidiarity principle and they have established an administrative havoc by mixing the duties of local labor offices and municipalities. Wage subsidies to bridge the gap between a desired wage and a low level of labor productivity are likely to have negative effects in the lower segment of the labor market if one takes into consideration that politicians will not be prepared to lower the reservation wage for those who are unwilling to accept a job. In the end, wage subsidies will not improve the incentives to work.

Third, financing the social security systems through contributions based on the work contract has a similar effect for firms as a tax on labor (for the part that is financed by firms). Since the social security contributions have increased considerably since the 1970s⁴, the incentive for firms to shed labor has become stronger.

Fourth, a compressed wage structure can be interpreted as the result of an implicit minimum wage and redistribution. The net wage structure is compressed taking into account the rising contribution and tax burdens per individual. This leads to less effort and represents a lower incentive to build human capital.

Fifth, social protection can also be interpreted as the main reason for the institutional set-up of wage bargaining with the power given to the trade unions through a set of legal stipulations

(Sec. 3 of para 4 *Tarifvertragsgesetz* and Sec. 3 of para 77 *Betriebsverfassungsgesetz*). To protect the insiders discriminates the outsiders. The labor market has become less flexible and more labor has become idle.

Sixth, the trade union's drive for a 32- or 35- hour work week and for a pension at 60 may be interpreted as Continental Europe's choice for more leisure (Blanchard 2004). But it also can be understood as the unions' strategy to aggressively camouflage the effect of their wage policy and to put the burden of unemployment on a third party, the state and the taxpayer, by promoting unemployment schemes and early retirement programs.

These six factors (and some others) imply that incentives are present in the economic system for firms to reduce labor. There are vicious circles in these arrangements that are self-reinforcing and that can aggravate a negative development. They lead to less employment, for instance in jobs that pay into the social security system, then requiring to raise the contribution rates or tax financing for the social security systems. This, in turn, intensifies the wrong incentives.

Innovation

Seventh, physical capital and technological knowledge, besides labor important growth factors, are driven by investment and innovation. The incentives to accumulate these stocks (and others such as experience) are influenced by social protection. In the political arena and in public opinion, the social acceptability of rewards for taking risk is evaluated ex post when the risk has already materialized instead of being estimated ex ante when the risk is still unknown. This lowers the willingness to accept risk in a society.⁵ How entrepreneurs are esteemed by society also plays a crucial role for investment and innovation.

Human Capital

Eight, besides by distribution incentives and growth are influenced by entitlements. A crucial entitlement connected with social protection is the right to study at a university if a high school diploma has been obtained. This entitlement has been interpreted as a right granted by the constitution. If this approach (which loses importance now) is applied, the students slots cannot be allocated through a competitive process. It requires a bureaucratic process as the ZVS (Central Agency for the Allocation of Student Slots). This approach also goes together with an administrative steering of the universities through the ministerial bureaucracy of the federal states; it prevents a competitive process.

Social and Budget Policy

Ninth, Germany - as the two other large continental countries - spends a large part of its GDP for social absorption relative to the UK and the US. Social benefits paid by government for pensions, health and unemployment amounted to 19.2 percent of GDP in 2005 (OECD Economic Outlook 2005) instead of 11.9 percent in the US and 13.4 percent in the UK.⁶ Social absorption as a percentage of GDP has increased considerably in the last three and a half decades. Social insurance benefits (pensions, health, unemployment, excluding social welfare) have risen in Germany from 10.5 percent of GDP in 1960 and 12.3 percent in 1970 to 22.3 percent in 2003. In 2001, the last year for which data are available, the transfer recipients in Germany (30.8 million) outnumbered wage income taxpayers (25.7 million).⁷ In 1971, the ratio had been 11.2 million recipients vs. 20.6 million tax payers.⁸

The opportunity costs of the high level of social absorption become explicit in the contribution rates to social security and in high tax rates. The need to finance the social security systems through governmental transfers of 95 billion annually (2004), using up 25 percent of the central government's budget, implies a high elasticity coefficient of transfers

with respect to nominal GDP of 3.4 in the period 1998-2004. This then means that budget policy is at the mercy of social policy. In addition, institutional buffers between social policy and fiscal policy have all been demolished in order to be able to finance social security payments. Thus, Germany's fiscal policy stance is heavily determined by social policy. This is why fiscal policy has become nearly uncontrollable. Such a fiscal policy causes uncertainty for consumers and investors, and this uncertainty negatively affects aggregate demand and capital formation, two important sources of economic growth. Opportunity costs also consist in a declining share of public investment in GDP.⁹

Tenth, this uncertainty from the budget may, together with high debt, eventually affect the stability of the euro, taking into account the issues in the other two large continental countries. Then uncertainty arising from inflationary expectations would be an important factor negatively impinging on growth.

Steering mechanisms of the economy

Social protection and entitlements affect the governance of the economy, especially its implicit steering mechanism in many ways.

Eleventh, subsidies in the product markets are overwhelmingly motivated by social considerations, for instance protecting the small family farmers and securing a sufficient income for them. It is not relevant for my argument that de facto most of these subsidies end up with well-to-do farmers and with agribusiness. Securing jobs in such declining sectors as coal and shipbuilding also played a role in motivating other important subsidies. Opportunity costs¹⁰ consist in that subsidies need additional taxation causing a deadweight loss. Agricultural subsidies that are paid by the consumer reduce the real wage of workers.¹¹

Subsidies also distort the sector structure, often requiring a correction of sector over-expansion in the future (see East German construction sector).

Twelfth, subsidies prevent efficient solutions in the world economy, i.e. the exploitation of gains from trade. They distort comparative advantage and prevent market access of other countries whose positive development could have a stimulating feedback for growth in Europe. When taking into account the international dimension, a more systematic question is how equity, social protection and entitlements can be defined in a globalized world. Can we define equity solely in terms of the nation state? Or do we have to take into account a larger spatial dimension, i.e. the world economy?

Thirteenth, co-determination in the corporate governance of firms can be seen as an instrument of social protection. It gives workers and their unions a say in all major decisions of firms, redesigning the implicit contract between the factors of production and the allocation of benefits, costs and risks and thus redefining the nature of the firm. This institutional arrangement changes the incentive structure of decisions in firms and is favorable to marginal innovations in terms of products and technologies on a more or a less given technological trajectory, but is negative for technological leap-frogging.¹²

In the German system of codetermination, managers who tend to have a three-year contract need the support of the representatives of the employees in the supervisory council for the renewal of their contract. This includes the votes of trade unions. Therefore, they are not free in their management decisions. They are inclined to anticipate the demands of the trade unions in their decisions.

Fourteenth, social protection is the motivation for some of the product market regulations. Examples are legal stipulations for the closing hours of stores (now changing) and the price regulation of the housing market and of pharmaceuticals.¹³ The idea of entitlement plays a decisive role in Germany's law on anti-discrimination passed in the summer of 2006 by the Grand Coalition. It establishes new bureaucratic procedures for firms and the private sector by introducing non-discrimination criteria into the access of private goods by applying similar criteria as in the access to public sector jobs and to public merit goods. Being relevant mainly for the labor market and the housing market, it limits the property right of individuals (Picker 2006).

Fifteenth, social protection also plays a major role in Germany's organization of the state in fiscal federalism. The state is not organized as a competitive federalism but as a distributive federalism. The constitutional requirement of the similarity in living conditions¹⁴ in Article 72 has led to revenue and burden sharing in which each state (*Land*) can rely to some extent on funds coming from other states or the federal level. It goes hand in hand with the role of the Bundesrat in federal legislation. Whereas the constitutional changes introduced by the Grand Coalition in 2006 disentangle the roles of the Bundestag and the Bundesrat in law making, the reform of revenue sharing in fiscal federalism is still to be accomplished.

Sixteenth, social protection was at the root of the 1: 1 mentality in Germany's unification. The idea that equality of outcome is a guiding principle was at the heart of wage policy for Eastern Germany. There is no doubt that this orientation of wage policy and the ensuing discrepancy of unit labor costs of 140 percent between East and West led to high unemployment in the new Länder and choked off investment.

Political economy

Seventeenth, social protection may be considered as the political economy price to be paid to get a positive answer to the question whether market results are acceptable politically. However, reforms become more difficult with the expansion of entitlements when recipients of transfers become more numerous than tax payers and when the position of the pivotal voter shifts to the transfer recipients. If the non-acceptable result affects the fundamentals of the economy negatively, the solutions will not be sustainable in the long run. If people and politics do not adjust, there is erosion in the sense of Olson (1982) or stagnation in the paradigm of Alwin Hansen.¹⁵ To paraphrase a picture from Hicks¹⁶, economic processes are hammering in the basement.

Changing conditions for Europe's social model in the global economy

Eighteenth, it is important to recognize that Germany's steering mechanism has been severely changed since the 1960s. These changes have different facets, for instance integrating the environment into the social market economy and introducing more democracy into decision making. Whereas these aspects do not represent expressions of social protection, some of the changes can be summarized under the heading of distribution and social protection. Many of these changes in the 1970s were undertaken under the implicit assumption that the high productivity growth of a catching-up German economy of the 1950s and 1960s were continuing. All these factors can lead to an erosion process if we follow Mancur Olson's analysis (1982) or to stagnation in the paradigm of Alwin Hansen.¹⁷

Nineteenth, Germany's given institutional incentives and the changes in its institutional conditions have become more relevant with shifting conditions in a globalized world. The progress of developing countries in exporting manufactured exports¹⁸ makes the conflict

between growth and social protection harder, shifting the falling branch of the curve in Figure 1 downward. Empirical observations indicate that the German economy has become less robust and that shocks have a stronger and longer impact, for instance unemployment after a recession lasts much longer (Sachverständigenrat 2000, Diagram 40). This indicates that a higher speed in structural and institutional change is needed in order to exploit the gains from trade. This requirement would arise even if institutional conditions would not have been made more rigid due to increased social protection. All the more are speedy changes needed when systems have been made more rigid.

The exit option of capital is an additional and a new phenomenon in the international division of labor (Siebert 2006a). If capital leaves, labor productivity will be reduced (assuming static conditions) or it will develop less favorably (under dynamic conditions).

Changing conditions for Europe's social model in the future: ageing

Twentieth, the immanent ageing of the German population means that existing institutional arrangements, influenced by the idea of social protection, are put to an additional test: the test of sustainability. The governmental pay-as-you-go system emanates from the idea of social protection. Redistribution mixes with risk spreading in insurance coverage.

A simple test for these systems is: why should a governmental system provide an income in old age if people live five years longer? The more crucial test is: How high will the burden of social protection be for the economy in the future? One of the available measures is implicit debt, defined by the claims on the system. Implicit debt is now calculated at 240 percent of German GDP.¹⁹ Moreover, ageing will start processes such as the decline in the labor force (and consequently a negative growth rate under ceteris paribus conditions) that are not yet

included in the actual figures of implicit debt.²⁰ Aging will also shift the goal conflict curve in Figure 1 downward.

An empirical estimation

7. Economic growth depends on many other factors than social protection, most prominently on accumulated stocks driving the growth process (physical and human capital, labor supply, technological knowledge, spatial structure). Although social protection affects the incentives for the accumulation of these stocks, there are additional patterns or “economic laws” governing and influencing the accumulation of stocks, for instance technological innovation processes and cycles, processes of catching up and upswings in the business cycle. These factors are relevant for growth independently from social protection.²¹ Moreover, international institutional settings such as regional integrations and the WTO have their impact on growth. Furthermore, other growth factors like the preparedness to accept technological (or economic) risks play a role. Whereas the rewards for taking risk may be affected by concepts of social protection, techno phobia has other roots than social protection.

8. An interesting debate is to what extent we can find more intelligent incentives with which the same level of social protection (or a similar level) can be maintained. Such incentives would change the goal conflict. A related question is whether new institutional arrangements can reduce the brutality of the goal conflict by redefining entitlements, for instance through unemployment accounts as proposed by Snower et al.²²

9. All these factors may play a role. However, from the arguments presented above my conclusion is that we do have a goal conflict between social protection and economic growth

in a country like Germany. Empirically, the properties of the curve of goal conflict are not yet established. The curve may be a wide band; economies seem to be able to digest a wide variety of policy interventions. We have more information on specific aspects. Thus, unemployment can be seen as an empirically valid function of employment protection legislation. Labor participation decreases with more protective employment, collective relations and social security laws; unemployment increases with more protective employment (Botero et al 2004, p1378). Or employment is found to be a declining function of the total tax and contribution burden (Scharpf 2000, Figure 1).

10. Cross-country panel studies have traditionally been used to study the question at issue. For the European economies such studies with data for a given moment of time (or a given period) do not seem too promising, taking into account the different institutional conditions that become apparent in Table 2. The institutional heterogeneity of European countries and the difference in conditions for economic growth are simply too large.

11. The issue is whether changes in the institutional conditions of social protection show an impact on the GDP growth rate and whether this impact can be isolated from other growth determinants.

As a first step we need a social protection index over a longer period, say since 1960. In the case of Germany, this index can be a composite index including employment protection (lay-off constraints), rigidity of the labor market, the social budget in percent of GDP, government spending in percent of GDP and structural aspects of government spending such as the transfers from the public budget to the social security systems. The values for these sub-indices for 1970 (or 1960) are set equal to one.

The weights can be chosen as

- 0.5 for the labor market characteristics (employment protection, lay-off constraints, minimum wage, lower segment of the labor market and the rigidity of the labor market) and
- 0.5 for the social budget in percent of GDP. ²³

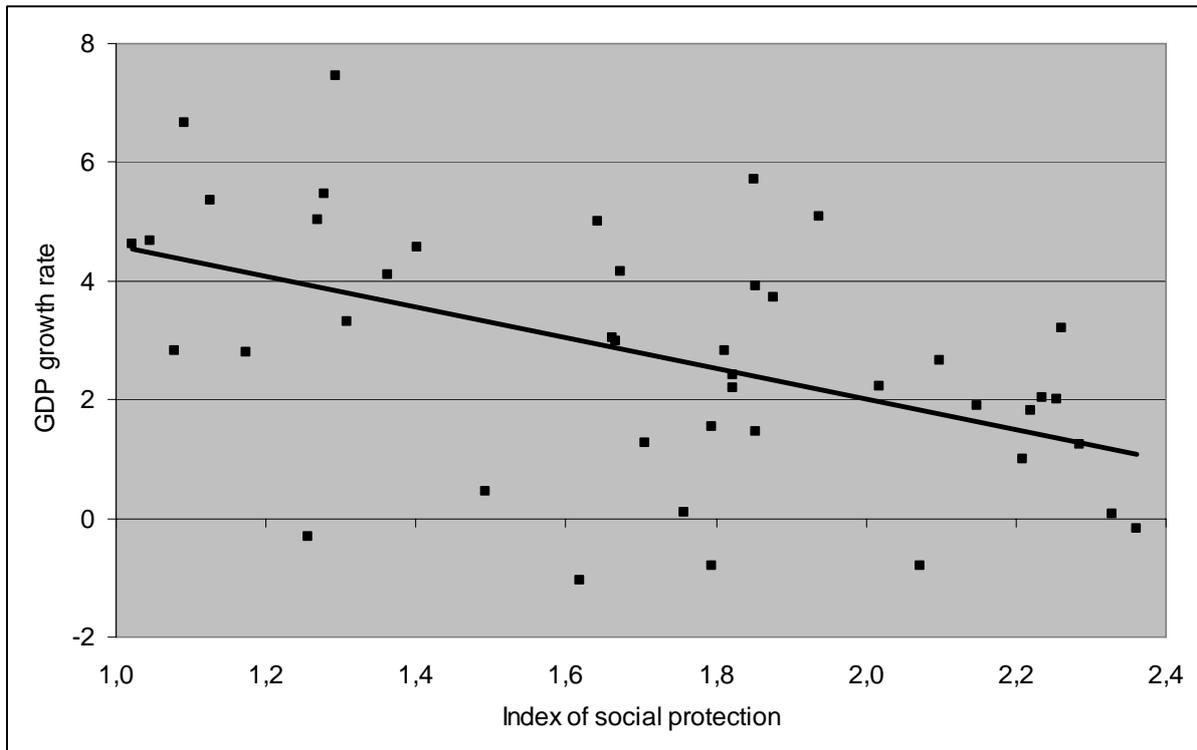
12. For Germany the labor market sub-index can be chosen by using the OECD Employment Protection Index which stood at 2.6 in the late 1990s for Germany (OECD 1999 Chapter 2). One can argue that in 1960, this index was not as low as in the US in the late 1990s, when it stood at 0.7. A value of 1.0 for Germany for 1960 seems plausible. For 2003, I apply the German value of the late 1990s, i.e. 2.6. Intermediate values for individual years are calculated in linear interpolation. For the social budget sub-index, the proportion of expenditures relative to GDP of 10.53 for 1960 is set equal to one; the proportion of 22.34 for 2003 represents an index of 2.12. This yields an aggregate index of 2.36 for 2003.

13. A simple regression with the result ²⁴

$$\text{GDP_Growth Rate}_t = 7.190 - 2.592 \cdot \text{Index}_t + \varepsilon_t$$

0.0000 0.0007

shows a significantly negative relationship between Germany's GDP growth rate (vertical axis in Figure 2) and the index of social protection (horizontal axis). In the period 1960-2003, an increase in the social protection index by one point goes together with a decline in the real GDP growth rate by 2.6 percentage points. Further research is needed to delineate this effect from other influences, such as the catching- process after the war, the oil crisis and German unification. ²⁵

Figure 2 Germany: GDP growth rate and index of social protection, 1960-2005

14. For policy purposes, we would need to calculate an index of adjustment needs. If we had a measure of the social protection index and if we knew the property of the goal conflict curve, we could indicate to what extent social protection has to be reduced in order to get higher employment and more growth. We could also look at adjustment needs in specific areas. For instance, employment protection could be reduced until outsider discrimination is abolished. The adjustment need of an aging population can be measured by the difference between the given and the permissible level of implicit debt in intergenerational accounts. Or it can be calculated for specific sectors of the social insurance system such as health insurance or pension insurance. The adjustment needs to the external challenge of globalization (including trade and locational competition) can be calculated by the productivity growth necessary to keep a certain number of social security jobs. As this discussion shows, we are rather vague when it comes to adjustment needs.

Conclusions

15. We have four observations: First, social protection has been extended considerably since the 1960s in Germany. Second, there are many mechanisms and institutional incentives that point to a higher unemployment rate and also to lower growth rates. It can be expected that the expansion of social protection has affected the fundamentals of the economy negatively. Third, the external change in the world economy puts additional pressure on the fundamentals of the economy, even with a given institutional arrangement. This pressure has become even stronger with the expansion of social protection. Fourth, aging is an additional factor that will aggravate the goal conflict.

As a conclusion, a negative relationship exists between the expansion of social protection on the one hand and employment and the growth rate on the other. Countries have to change their institutional set-up, if they want lower unemployment and higher growth and if they are unable to generate sizably higher productivity growth which would allow to have the given protection level. Unfortunately, it is the level of social protection that makes this option impossible.

References

- Adema, W. and Ladaique, M. (2005) Net Social Expenditure, 2005 Edition. More comprehensive measures of social support, OECD Social Employment and Migration Working Papers, No. 29. Paris: OECD.
- Barro, R.J. (2000). Inequality and Growth in a Panel of Countries, *Journal of Economic Growth*, 5 (1): 5-2.
- Blanchard, O. (2004). The economic future of Europe, *Journal of Economic Perspectives*, 18 (4) : pp. 3-26.
- Botero J.C. et al (2004). The Regulation of Labor, *The Quarterly Journal of Economics*, Vol. 119 (4):1339-1382.
- Brown J.G et al (2006). Unemployment Accounts and Employment Incentives. *Kiel Working Paper 1274*. Kiel Institute for World Economics.
- Bundesministerium für Gesundheit und Soziale Sicherung (2005a). Statistisches Taschenbuch 2005. Bonn.
- (2005b). Sozialbericht 2005. Berlin: Deutscher Bundestag, Drucksache 15/ 5955.
- European Commission (2006). The impact of ageing on public expenditure: projections for the EU25 Member States on pensions, health care, long-term care, education and unemployment transfers (2004-2050). Report prepared by the Economic Policy Committee

and the European Commission (DG ECFIN). *European Economy Special Report No. 1/2006*. Directorate General for Economic and Financial Affairs of the European Commission.

Higgins, B. H. (1959). *Economic Development: Principles, Problems and Policies*. London, UK: Constable.

Hirschman, A. O and Rothschild, M. (1973). The Changing Tolerance for Income Inequality in the Course of Economic Development, *Quarterly Journal of Economics*, 87 (4): 544-566.

Kuznets, S. (1955). Economic Growth and Income Inequality, *American Economic Review*, Vol. 45 (1):1-28.

OECD (1999). *Employment Outlook*. Paris: OECD.

OECD (2006), *Economic Outlook*. No. 79, June., Paris: OECD.

Olson, M. (1982). *The Rise and Decline of Nations. Economic Growth, Stagflation and Social Rigidities*. New Haven, CT: Yale University Press.

Picker, E. (2006). Eingriff in die Privatautonomie. Das Gleichbehandlungsgesetz hat dramatische Folgen. *Frankfurter Allgemeine Zeitung*, 28. Juni 2006, Seite 12.

Sachverständigenrat zur Begutachtung der gesamtwirtschaftlichen Entwicklung (2000).

Chancen auf einen höheren Wachstumspfad, Jahresgutachten 2000/2001. Stuttgart. Metzler-Poeschel.

Scharpf, F.W. (2000), The viability of advanced welfare states in the international economy: vulnerabilities and options, *Journal of European Public Policy* 7 (2): 190-228.

Sapir, A. (2005). Globalisation and ¹the Reform of European Social Models. *JMCS: Journal of Common Market Studies*, 44 (2): 369-390.

Siebert, H. (2005a) Corporatist versus Market Approaches to Governance. In: *Changes in Governance in Europe, Japan and the United States – Corporations, State, Markets and Intermediaries*, Ed. by K.J. Hopt et al., Oxford University Press, pages 281-301.

----- (2005b). *The German Economy. Beyond the Social Market*, Princeton University Press.

----- (2006a). *Jenseits des sozialen Marktes: Eine notwendige Neuorientierung der deutschen Politik*. 3rd ed. Munich, Germany: Deutsche Verlags-Anstalt.

----- (2006b). Locational Competition: A neglected Paradigm in the International Division of Labour. *World Economy*, 29 (2): 137-159.

Statistisches Bundesamt (2006). Lohn- und Einkommensteuerstatistik 2001. Wiesbaden.

Endnotes

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¹ For developing countries see Hirschman's "tunnel effect" (1973) according to which there is a high tolerance for growing inequalities in the early stages of development and growth. This tolerance erodes through time if the low income groups fail to benefit from the growth process.

² It can be argued that there is no single Scandinavian model since the approaches and conditions differ considerably in the Scandinavian countries. Moreover, it still has to be proven that a country like Sweden has a good performance in the very long run. First of all, it had a severe crisis in 1992. Second, an erosion process took place in the period 1970-1992. Third, it is still too early to tell whether the institutional changes undertaken in the 1990s will be sustainable. Finally, the Swedish model, for instance such high personal tax rates, may not work in other countries.

³ On details see Siebert (2005b), pp. 130-136.

⁴ From 26.5 (1970) to 41.7 percent in 2005, nearly by 60 percent.

⁵ Note that this argument looks at the acceptability of risk from a distributional aspect and not at risk averseness with respect to technological or environmental aspects.

⁶ 17.0 percent in France, 18.1 percent in Italy.

⁷ Due to limitation in availability of long tax payer data series and the only triennial ascertainment of this data, the following calculation was made based on the years 1971 and 2001: transfer recipients calculated as the sum of pensioners, recipients of unemployment benefits, participants in governmental employment creation schemes or public occupational retraining measures and the recipients of social welfare payments; the number of tax payers corresponds to the wage tax payers in the respective years; this number registers together tax assessed married couples as one tax payer and additionally does not contain the assessed income tax payers, mostly self-employed. However, the number of self-employed remained relatively stable over the considered period.

Sources: Bundesministerium für Gesundheit und Soziale Sicherung (2005a), Statistisches Bundesamt (2006).

⁸ On social expenditure data see Adema and Ladaique (2005).

⁹ Public investment in GDP declined from 4.8 percent (1970) to 1.4 percent (2004).

¹⁰ Subsidies in 2004 amounted to 6.6 percent of GDP according to the broad definition of the Kiel Institute of World Economics.

¹¹ As in the abolition of the Corn Laws, real wages could increase with the reduction of consumer-paid subsidies.

¹² See Siebert (2005a and 2005b, Chap.14).

¹³ Many product market regulations are motivated by other aspects than social protection. See for instance regulations for licensing new products.

¹⁴ The German words are „Herstellung gleichwertiger Lebensverhältnisse“.

¹⁵ On Hansen's stagnation thesis see Higgins (1959).

¹⁶ He applied it to autonomous investment.

¹⁷ On Hansen's stagnation thesis see Higgins (1959).

¹⁸ See the increase in their share in developed countries' imports from about 6 percent (1963) to about 45 percent in 2003, (Sapir 2005, Figure 2).

¹⁹ The rating agency Standard and Poor has announced that the actual implicit public debt, if it becomes explicit, will imply a considerable downgrading in the rating of euro members financial status.

²⁰ In the European Union of 15, the GDP growth rate will fall from 2.2 percent in the period 2004-2010 to 1.8 percent in 2011-2030 and to 1.3 in 2031-2500 according to a forecast of the EU Commission (Feb., 2006). See European Commission (2006).

²¹ The policy issue is whether additional productivity growth can be generated. If this were possible, the goal conflict between social protection and growth could be alleviated.

²² See Brown et al (2006).

²³ The 0.5 could be further broken down into: (0.3) social security expenditures in terms of GDP and structural aspects of government spending such as the transfers from the public budget to the social security systems (0.2).

²⁴ R^2 : 0.25. The numbers in small print indicate the p-values of the coefficients.

²⁵ The process of a declining growth rate has started well before German unification.