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ADVANCED WELFARE STATES IN THE INTERNATIONAL ECONOMY[1]

Vulnerabilities and Options

Fritz W. Scharpf
Max Planck Institute for the Study of Societies, Cologne

1 The Rise of the Capitalist Welfare State

The capitalist welfare state achieved its full development within the nearly closed national economies of the early postwar decades. After the rampant protectionism following the Great Depression, and after the complete breakdown of world markets in World War II, the restoration of international competition in the markets for industrial goods was a slow process, while agriculture and services remained largely protected, and capital markets tightly controlled in most countries. Behind these protective barriers, economically advanced democracies were finally free to exploit the economic efficiency of dynamic capitalism without having to accept its unequal distributional consequences, and they learned to control the recurrent crises that had been associated with unfettered international capitalism before World War I and, again, in the inter-war period.

Under the Bretton-Woods system of fixed but adjustable exchange rates and with controlled capital transfers, governments could manipulate interest rates to stimulate or dampen domestic demand and investment, and they could manipulate the exchange rate to maintain or restore competitiveness in export markets. In fact, most of them learned to control macroeconomic fluctuations through Keynesian demand management, and to achieve and maintain relatively high and steady economic growth and full employment.

At the same time, continuing national control over external trade and capital transfers gave governments and unions great freedom to influence the conditions of production. Since regulations of production processes, conditions of employment,

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[1] This paper reflects the findings of a conference project, directed jointly by Vivien A. Schmidt (Boston University) and myself, comparing the adjustment of twelve advanced welfare states to economic internationalization after the 1970s. The country reports, special studies and comparative analyses produced by the project will be published by Oxford University Press in the Summer of 2000.

working conditions, working time, wages, and non-wage labor costs could be applied to all competitors in the national market, their costs could be passed on to captive consumers without endangering the profitability of capitalist production. Even more important, boundary control combined with the power to impose nationwide rules allowed redistribution of primary incomes through cross-subsidization in the private sector as well as secondary redistribution though public services and transfers financed through progressive taxation.

Since consumers, capital owners and tax payers had only very limited exit options, "solidaristic" wage policy was able compress wage differentials between low-skill and high-skill groups with little regard for actual differences in labor productivity. Energy policy was able to maintain a large role for high-cost domestic coal in electricity generation; agricultural policy could keep inefficient farms in business; national-health systems did offer medical care free of charge to everybody; and social assistance, unemployment and disability benefits and pensions provided generous non-wage incomes for those in need. As a consequence, advanced welfare states until the early seventies were not only able to assure their constituents high rates of economic growth and full employment, but also high levels of social security and significantly reduced social inequality.

2 Challenges and Responses of the 1970s and early 1980s

All this began to change at the end of the "golden age" which for most countries came about with the breakdown of Bretton-Woods and the OPEC oil-price crisis in the early 1970s. The first created an environment of floating exchange rates and accelerated the growth of "off-shore" capital markets that were not under the control of any of the major central banks. The second confronted oil-dependent industrial economies with the double challenge of "stagflation" — i.e., the simultaneous impact of cost-push inflation, caused by the four-fold increase within a few months of the price of crude oil, and of demand-gap unemployment, caused by the diversion of purchasing power to OPEC countries that could not immediately "recycle" their new wealth into additional demand for industrial products.

In the 1970s, as I have shown elsewhere, the only way to avoid both, the rise of mass unemployment and runaway inflation, was through a form of "Keynesian concertation" where the government would prevent job losses through demand reflation while the unions would reduce inflationary cost pressures through wage restraint (Scharpf 1991). On the government side, the success of that strategy de-

pended on a close coordination between fiscal and monetary policy. In the face of strong inflationary pressures, however, that coordination did require either convergent (Keynesian) beliefs of policy makers in both areas, or a clear dominance of the government over the central bank. On the union side, a necessary (but by no means sufficient) precondition was a degree of organizational concentration and centralization that allowed the adoption of strategies accepting short-term sacrifices in the interest of longer-term benefits.

The closest approximation to Keynesian concertation was achieved in Austria. In Germany and Switzerland, by contrast, governments were unable to play their role effectively because monetary policy was determined by an independent central bank that was unconditionally committed to the defense of price stability — in which case the bank's tight-money policy could neutralize any expansionary fiscal impulses. The same was true, regardless of the institutional independence of the central bank, in countries like Denmark, the Netherlands or Belgium, where the government had opted for a hard currency policy that tied its exchange rate to the Deutschmark. Under these conditions, major job losses were unavoidable. They could be softened, however, if real wages were quickly adjusted downwards, which was true in Germany and Switzerland but not in the other hard-currency countries.

In countries where the central bank was willing to accommodate the rise of oil prices, governments were generally able to avoid major job losses in the 1970s through deficit spending. But then inflation would escalate unless it was counteracted by effective wage restraint. In the absence of unemployment, however, and at a time when their real-wage position was eroding, that was more than most unions could have delivered even under favorable institutional conditions. Instead, they generally tried to defend the real wages of their members by pushing for wage settlements that anticipated (and thus generated) further price increases — which was particularly damaging in countries where public-sector salaries, pensions and welfare benefits were automatically adjusted to the rise of private-sector wages. As a result, the rate of inflation rose to very high, often two-digit levels. Moreover, the attempt to stabilize employment through demand reflation had left most governments with very high budget deficits at the end of the 1970s.

By hindsight, therefore, governments and central banks in most countries came to define loose money policies and fiscal irresponsibility as the critical policy failures of the 1970s. This greatly increased the willingness of policy makers to switch to "monetarist" beliefs and hard-currency policy responses when the second oil crisis seemed to replay the challenges of the seventies — with the result that un-

employment rates now also rose steeply in most of the soft-money countries that had been able to avoid major job losses in the 1970s.[2] Most important, however, was the fact that now the monetary policy of the United States was no longer ready to accommodate oil-price inflation. As a consequence, real dollar interest rates, which had been close to zero or even negative through most of the 1970s, rose steeply to very high positive levels — forcing all other countries to follow suit if they wanted to avoid massive capital outflows. This had major distributional consequences. Since minimal profits expected from real investments have to be significantly above the interest-income from risk-free government bonds, the dramatic rise of real interest rates meant that the share of capital incomes in the national product had to rise at the expense of government and labor shares if investment and business employment were to be maintained. The only question was whether the change in distribution was realized through reduced wage claims and tax "reforms" favoring capital incomes, or whether it was realized through job losses in the private sector.

On the whole, therefore, the success or failure of countries during the crises of the 1970s depended primarily on their capabilities for macro-economic management — i.e., on the ability to coordinate fiscal and monetary policy choices and, above all, on the capacity and willingness of unions to practice effective wage restraint in the face of, first, oil-induced inflation and then of rising real-interest rates. In countries where the central bank adopted non-accommodating policies, unions were induced to practice wage restraint under the pressure of job losses (which were partly recovered when the quick fall of inflation allowed a loosening of monetary restraint). By contrast, in countries where the government succeeded in maintaining full employment through monetary and fiscal reflation, the "voluntary" and sustained wage restraint that would have been necessary to control inflation could be practiced only by strong unions with highly concentrated organizational structures and centralized decisions.[3]

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[2] One exception was Sweden, where the incoming Social Democratic government chose to stimulate export demand through a massive devaluation in 1982 (while embarking on a policy of fiscal consolidation), and where the export-sector unions were finally willing and able to practice wage restraint that did maintain the competitive advantage through most of the decade. By contrast, France, which had tried Keynesian reflation when the Socialists came to power in 1981, failed to contain inflationary pressures and escalating deficits, and was forced into a late and painful monetarist turnaround in 1983.

[3] In Britain, it is true, the exceptional moral pressure of the "Social Contract" of 1975 succeeded in eliminating wage inflation for more than two years. Eventually, however, the incentive structure of an organizationally fragmented union movement with highly decentralized wage-setting processes reasserted itself with a vengeance in the strike wave of the

In the early 1980s, however, avoiding inflationary wage increases was no longer enough. Now, private-sector employment could only be stabilized if the share of labor in the social product was being reduced. In countries with highly decentralized wage-setting systems (as they existed in the United Kingdom and, after the early 1980s, in France), market pressures alone might be sufficient for achieving this effect.[4] Organizationally strong unions in countries with more centralized wage-setting systems, by contrast, were now required to recognize and accept the need for a sustained shift from wages to profits. In countries like the Netherlands, that found themselves in a very deep crisis at the beginning of the 1980s, the purposeful switch to a self-abnegating union strategy was easier to achieve than in countries like Austria, Sweden, Germany or Australia, which had been better able to cope with the challenges of the 1970s. Nevertheless, the transition to higher profits was somehow achieved in the corporatist countries as well. Thus, in the second half of the 1980s private-sector employment was again increasing in all countries with either weak unions and decentralized wage setting (Britain and, to a lesser extent, Switzerland), or "statist" practices of wage determination (Belgium, France), or "corporatist" industrial relations systems (Sweden, Denmark, Austria, Germany, Australia). Stagnant or falling business employment occurred only in countries in which unions were still strong, but where either wage-setting was highly decentralized (New Zealand) or where centralized unions in confrontational industrial-relations systems were not willing to assume responsibility for employment outcomes (Italy).

3 *Challenges of the 1990s*

After the mid 1980s, oil prices had declined again, and while real interests rates remained high, they had come down from the extreme levels reached in the first half of the decade. In most countries, employment was increasing, and budget deficits could be reduced. At the same time, however, the internationalization of markets for goods, services and capital was again reaching levels that equaled, and then exceeded, the degree of international integration that had existed in the decades before World War I.

"winter of discontent" of 1978 that allowed Margaret Thatcher to win by a landslide a few months later.

[4] It should be noted, however, that even with significantly higher unemployment, real-wage increases in the mid 1980s were higher in Thatcherite Britain than in Germany — mainly because decentralized wage setting did allow bargainers to exploit the above-average ability to pay of profitable firms, while workers in less successful firms were still able to fight for adherence to "comparability" norms.

Capital exchange controls, which had still protected the domestic financial markets of most countries in the early seventies, had practically disappeared by the early 1990s.[5] Moreover, successive rounds of GATT and WTO negotiations had progressively lowered the boundaries protecting national markets for goods, services and investments. This was even more true among the member states of the European Union, where the Single-Market program had also eliminated the non-tariff barriers that still impeded the full integration of product markets and the free choice among investment locations, and where the completion of the internal market was followed by the commitment to create a Monetary Union that would not only remove monetary and exchange rate policy from the control of national governments, but would also impose severe constraints on the conduct of national fiscal policy. In addition, the Single-Market program had introduced market competition in a wide range of services and utilities — among them telecommunications, postal services, rail, air and road transport, or electricity supply — which before had been provided either by the state itself or by state-controlled monopolies and cartels.

As a consequence of these cumulative changes in the international economic environment, national governments and national labor unions again lost the political control over capitalist economies that had been achieved in the "Great Transformation" of the post-war decades. The internationalization of capital markets reduced the effectiveness and increased the budgetary costs of Keynesian full employment policies in the 1980s, and it eliminated the capacity of governments and unions to squeeze the return on capital investment below international levels. At the same time, the internationalization of markets for goods and services means that firms are no longer able to pass above-average costs of production onto captive national consumers. But that also implies that the power of governments and unions to regulate the conditions of production and to tax factors of production must now be exercised with greater concern for undesirable side effects.

In the fully internationalized economy, in other words, the choices of national governments and unions are constrained by the exit options of investors, consumers, and tax payers. Capital owners may cut job-creating investments if expected profits are reduced below international benchmarks, consumers will switch to other sources if domestic products are priced out of the market, and mobile tax bases

[5] According to an indicator of capital-exchange liberalization constructed by Dennis Quinn on the basis of IMF data (where a score of 14 marks total liberalization), in 1970 eleven of 20 OECD countries had scores below 10, and only one country (Germany) had a score of 14. By 1993, only one country (Greece) still scored below 10, and nine countries now had a score of 14.

may be removed from the grasp of high-tax regimes. But that surely is not the end of the democratic welfare state.

The fact that governments and unions can no longer promise free lunches does not rule out policy choices at the national level that make a great difference for the life chances of their constituents. Even if not all of the solutions of the postwar welfare state are still viable in the international economy, countries differ greatly in the extent to which they have been able to defend their earlier achievements of full employment, social security, and equality, or even to reach more ambitious goals than before. Success may have been the result of the accidental "goodness of fit" between the economic requirements and a country's pre-existing social institutions and policy legacies. Alternatively, the more successful countries may have discovered ways of adjusting to a competitive international environment that provide a more favorable trade-off between economic and social aspirations, or they simply may have chosen different priorities among given tradeoffs between, say, unemployment and wage inequality.

But what are the conditions that determine a country's success or failure? For the earlier decade, I have argued that what mattered was the capacity for macro-economic coordination (including the control of wage pressures). In the 1990s, this capacity was still important for supporting the exchange rate, for achieving the Maastricht criteria on fiscal deficits, and for preventing above-average price increases that would undermine international competitiveness. But now macro-economic coordination is no longer sufficient for assuring the viability of national employment and social systems. Instead, it is the very structure of a country's welfare-state and industrial-relations institutions and policies whose viability under conditions of international capitalism is now in question. But before it is possible to discuss the greater or lesser vulnerability of different countries, it is necessary to specify more precisely the nature of the new international pressures, and their impact on two problem areas, employment in the private sector of the economy, and welfare state revenue.

3.1 Private Sector Employment

Under conditions of intense market competition, business employment has become more cost-sensitive than before. In the internationally exposed sectors, that is a direct effect of foreign competition. But the effects are also felt in the sheltered branches that supply domestic goods and services to internationally exposed pro-

ducers, or that are capital-intensive — as is true in the media, in retail trade or in hotels — and hence under pressure to achieve the going rate of return on investments. As a consequence, regulatory and tax policies of governments and collective-bargaining strategies of unions may now have different and more negative impacts on employment than was true under conditions of more protected national markets.

Most important, at the paradigmatic level, is the fact that governments and unions are now less able to achieve social-security and egalitarian goals directly, through regulations and collective-bargaining agreements aiming at a "decommodification" of the employment relationship. The reason is straightforward: Under the pressures of international *competition in product markets*, national firms have become price takers. Hence above-average increases of the unit-cost of production can no longer be passed on to captive national consumers, and among the member states of the Monetary Union they also cannot be neutralized by devaluation of the currency. Moreover, price competition will affect each product separately — it is not national *averages* but product-specific price increases that will determine production and employment in the branches that are directly exposed to international competition.[6] At the same time, *competition in capital markets* puts pressure on firms to introduce management methods that monitor the profitability of each product line separately, in order to eliminate the cross subsidization of loss makers.

Both of these changes create constraints for egalitarian strategies of wage bargaining and minimum-wage legislation that raise the cost of certain jobs above their productivity. Under conditions of protected national markets and of cross-subsidization, what mattered were *average* wage increases which needed to be in line with *average* productivity increases to allow firms to achieve acceptable rates of profit on their *total* production. Thus, unions could raise the wages of less productive workers if their gains were compensated by corresponding sacrifices of highly productive workers. Under present conditions, however, "solidaristic wage policy" and minimum-wage legislation have lost the capacity to achieve a more egalitarian distribution of primary incomes, either across branches or across skill groups, without eliminating those jobs whose costs exceed the value of their marketable product.

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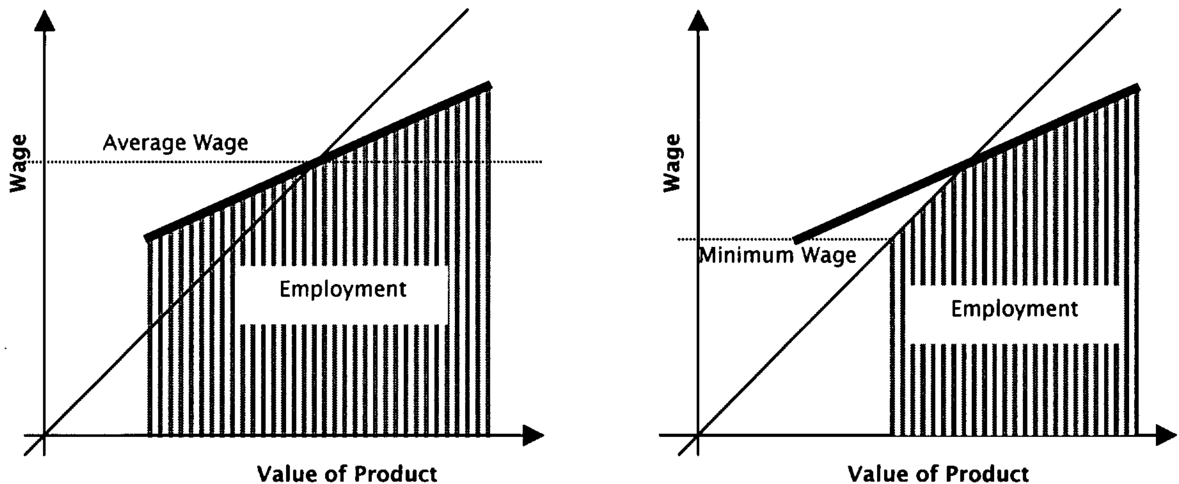
[6] That is why the disappearance of the "special relationship" between the German Bundesbank and the German metal workers' union under the EMU regime will not have the destabilizing effects feared by Soskice and Iverson (199*). Under the EMU, each national branch union is in direct competition against unions responsible for the same branch in other EMU countries — which will punish above-average wage increases regardless of the general stance of EMU-wide monetary policy.



Solidaristic Wage Policy: With and Without Cross Subsidization

At the same time, the international product markets served by advanced industrial economies have changed in two respects: One the one hand, competition from newly-industrializing and Central and Eastern European countries forces high-cost countries to automate mass production or to specialize in innovative, "upmarket" industrial products of high technical or esthetic quality, and in highly productive services. In either case, demands on the qualification of workers will increase, and the demand for unskilled workers will shrink.[7] On the other hand, competition among advanced industrial countries has also become more intense, contributing to the greater diversity and greater volatility of the increasingly specialized markets for "diversified quality production". As a result, not only uniform wages, but also government regulations and collective bargaining agreements assuring uniform working conditions and stable employment relations are now creating greater obstacles to employment than was true under the more homogeneous and stable conditions of protected markets and "Fordist" mass production.

The second policy area that is now more strongly constrained by employment considerations is taxation. In international comparison, it is true, total-employment ratios (expressed as a share of the population between the ages of 15 and 64) do

[7] Given these conditions, the dispute about the major cause of the deteriorating position of low-skilled workers (technical change or competition from low-wage countries) seems quite pointless: If low-wage competition does not displace production in high-wage countries, it will speed up productivity-increasing technical change.

not seem to vary systematically with the total burden of taxes and social security contributions expressed as a share of GDP (Figure 1). The reason is that high-tax countries like Denmark and Sweden also have high levels of public-sector employment (Figure 3). For private-sector employment ratios, however, there is a strong negative relationship with the overall tax burden (Figure 2). The negative impact of taxation is even stronger when only the consumer-oriented private services in ISIC 6 (wholesale and retail trade, hotels and restaurants) are being considered (Figure 4).

Conversely, manufacturing employment (ISIC 3) and employment in transport and communications services (ISIC 7) and in financial and business services (ISIC 8) seem to be hardly affected by the size of the tax burden at all. Even more interesting is the fact that the negative impact of the tax burden on business employment in general, and consumer-oriented private services in particular, seems to be high for consumption taxes and social security contributions, but practically nonexistent for income and corporation taxes (Table 1).

The interpretation of these patterns is straightforward: Employment in manufacturing, but also in transport, communication or financial services is little affected by the overall tax load, since high productivity allows the burden to be shifted either to consumers or (more likely in competitive markets) to workers whose relatively high take-home pay is reduced accordingly. By contrast, the market wages of less productive services could be near the level of social-assistance benefits that define the lowest reservation wage in advanced welfare states. Hence the cost of taxes and social security contributions levied on such jobs must be borne entirely by the employer — with the consequence that such services may be priced out of the market.

The same argument explains the variation in the impact of different types of taxation. Social contributions are usually raised as a proportional tax on total wages, with a cap at medium wage levels. Thus, they fall heavily on low-wage jobs, while the burden on highly productive and highly paid jobs is smaller. Similarly, consumption taxes reduce demand for all products, but they fall most heavily on services whose low productivity makes them vulnerable to automation on the one hand, and to self-service on the other. By contrast, personal income taxes are not collected on wages below a basic-income exemption, and since their rates are generally progressive, taxes on the income elements that exceed the exemption begin at low rates. Thus, their burden on the cost of low-wage jobs tends to be minimal. Hence, high income taxes may have some effect on the ability of firms to attract high-wage professionals from low-tax countries, but their negative impact on business employment is much weaker than is true of consumption taxes and social contributions.

3.2 Welfare-State Revenue

The second major constraint affects government revenue. In the average OECD country, the share of taxes and social security contributions in GDP has risen until the mid 1980s, but stagnated thereafter (Table 2). Remarkably, however, differences between countries have remained about as high as before. In Sweden, it is true, taxes have come down from a temporary peak of 55.6 % of GDP in 1990 to 52% in 1996, and Italy has greatly increased its tax revenue from 34.2% in 1985 to 43.2% in 1996. But otherwise, annual figures seem to fluctuate cyclically at about the level reached in the mid 1980s — with Australia and Switzerland having tax shares a little above 30 percent of GDP, the United Kingdom and New Zealand around or above 35 percent, Germany somewhat below, and Austria, Belgium, France and the Netherlands significantly above 40 percent, and Denmark and Sweden above 50 percent. In other words, the stagnation of tax revenues seems to have affected high-tax countries and low-tax countries more or less equally. That suggests that, regardless of overall tax levels, advanced welfare states are now finding themselves in a situation in which significant increases of public-sector revenue have become difficult to achieve, while even countries that tried very hard (like the United Kingdom) have been frustrated in the attempt to achieve significant and sustained reductions of the overall burden of taxes and social contributions.

In order to understand this pattern, we must thus consider the upward as well as the downward pressures on public-sector revenue. The upward pressures that had increased tax burdens everywhere in the 1970s and early 1980s have of course not abated: Unemployment, poverty, pensions and health care for an aging population, rising demands on education and business-oriented infrastructure — all would under earlier circumstances have justified further increases of taxation. As for the downward pressures, the usual suspect is tax competition for revenue from internationally mobile tax bases — in particular from corporate profits and capital interest — on the one hand, and for internationally mobile investments and production on the other hand.[8] As a result, most countries have significantly cut top rates of taxes on capital incomes since the mid 1980s. However, as is frequently pointed out in the literature (Garrett, Swank, Quinn), one nevertheless cannot observe a general "race to the bottom" of *effective* rates of capital taxation. Instead, most countries that cut

[8] Competition for revenue and competition for investments will often, but not invariably, imply similar tax-cutting strategies. The differences are explicated by Ganghof (1999).

their top rates have tried to defend their revenue position by simultaneously broadening the tax base. Even though the economic logic of that solution seems somewhat doubtful,[9] countries seem to have been pushed toward it by the disadvantages associated with the alternative courses of action among which they would have had to choose if revenue from mobile sources were significantly reduced. These alternatives include (1) a shifting of burdens to taxes on less mobile bases, (2) a sustained increase of public-sector deficits, or (3) sustained reductions of public-sector expenditures (Genschel 1999).

Among the less mobile tax bases, the ones with the largest revenue potential are taxes on consumption, social security contributions, and taxes on income from labor. All these tax bases are relatively immune to international tax competition.[10] However, as I have pointed out immediately above, significant increases of either consumption taxes or social security contributions would have strongly negative employment effects. If these are understood, governments must try to resist the temptation of shifting the tax burden from mobile capital to the less mobile bases of consumption taxes and social-security contributions.

Negative effects on employment would be smaller, it is true, if in compensation for reduced rates on capital incomes the taxation of incomes from work were increased further. But here political resistance is likely to be very strong in a period in which taxation in general, and the progressive income tax in particular, have become the preferred target of the dominant neo-liberal ideology. At the same time, the option of sustained increases of public-sector deficits is foreclosed to members of the European Monetary Union, and its attractiveness for countries with floating currencies is reduced by the operation of international capital markets that would exact high interest rates from governments whose fiscal policy is considered "unsound".

Economically, therefore, countries are under competitive pressure to cut taxes on capital, and under the pressure of high unemployment they ought to cut taxes on labor inputs and on the consumption of services. Moreover, under the constraint of international financial markets, they ought to reduce, rather than increase

[9] Presumably, rational investors would consider effective, rather than nominal tax rates. Moreover, the elimination of exemptions could reduce the relative attractiveness of real as compared to portfolio investments (Sinn 19**; Ganghof 1999).

[10] For consumption taxes in the form of the value-added tax, that is true as long as it is raised according to the "country-of-destination" principle, by which exports are exempted and imports taxed at the domestic rate. Even though that does constitute a (bureaucratic) burden international trade, the European Commission seems to have abandoned its former efforts to switch to the country-of-origin principle for VAT.

public sector deficits. In order to comply with these economic imperatives, countries could raise personal income taxes and/or to cut public expenditure . But these options, while economically innocuous, have proven to be politically unpalatable in most cases. As a consequence, even countries like the United Kingdom and New Zealand, that have experienced a sea-change of politico-economic ideology, have not been very successful in reducing either the level of total social expenditures or the total tax burden (Table 2).

In short, fiscal constraints have generally become tighter after the mid 1980s, and there is no obvious way in which they could be relaxed through strategies that are feasible at the national level.[11] Moreover, these constraints seem to operate at all levels of taxation, and there is no reason to think that low-tax countries should be under less pressure than high-tax countries.

4 *Patterns of Vulnerability and Robustness*

What matters instead are the patterns of employment, revenue and industrial relations which have affected and are affecting the vulnerability or robustness of countries to the changing challenges of the international economic environment. While these patterns are country-specific, there are sufficient similarities among subgroups of countries to justify the reference to "Scandinavian", "Continental" and "Anglo-Saxon" employment and revenue patterns. It will become clear, however, that these groupings are not similarly useful for describing industrial relations systems.

4.1 Employment

With regard to *total employment* (Table 3), Scandinavian welfare states have traditionally achieved very high levels that are exceeded only by Switzerland. The Anglo-Saxon countries, with the exception of New Zealand, have also relatively high levels of total employment, whereas Continental welfare states are generally providing fewer jobs than countries in the other two groups. These differences are in fact very large: Germany, for instance, would have 9.67 million more jobs if it could equal the employment ratio of Switzerland, and drawing even with Denmark would still increase German employment by 6.5 million.

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[11] I leave out a discussion of the obstacles to international or European tax harmonization, and of the chances that they might be overcome.

Turning to structural differences, it is obvious that the Scandinavian welfare states are far ahead of all others in *public sector employment*. Remarkably, however, there is no significant difference in this regard between Anglo-Saxon and Continental countries. With the exception of Austria and France, they all have less than half of the Scandinavian ratio of government employment.[12] The exceptional status of the Scandinavian countries reflects the rapid expansion of social services in the 1960s and 1970s which was not matched elsewhere. With regard to *business employment*, by contrast, the Anglo-Saxon countries and Switzerland are clearly ahead of the other groups. Remarkably, however, the Scandinavian countries are doing rather better in this regard than most of the Continental welfare states.

Within a still narrower perspective, it seems that the three groups do not differ significantly with regard to *manufacturing employment* where the highest employment ratios are achieved by Germany, Switzerland, Austria and Denmark, whereas the low outliers are Australia, the Netherlands[13] and Belgium. Differences seem to be more systematic in case of the consumer-oriented *private services* in ISIC 6 (wholesale and retail trade, restaurants and hotels), where the Anglo-Saxon countries and Switzerland are ahead of all others, except for Austria.

In sum, therefore, the employment performance of Continental countries could be characterized by saying that they have no more public-sector jobs than the Anglo-Saxon countries, and no more private-sector jobs than the Scandinavians — with the implication that their overall employment ratios are also considerably lower than is true in the other two groups of countries. In the private sector, moreover, Germany (which among the Continental group has an above-average rate of business employment) seems to do well in the industrial sector, rather than in the private services.

4.2 Revenue

Turning now to taxation (Table 4), it is again clear that the Scandinavian countries have by far the highest total share of taxes and social security contributions in GDP, that the tax burden is lowest in Anglo-Saxon countries, and intermedi-

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[12] For the Netherlands, OECD figures for government and business employment represent full-time equivalents, while all other data include full-time and part-time jobs.
[13] Here the Dutch figures are comparable to the others.

ate in the Continental welfare states. But in light of the discussion above, what seems to matter more for employment are different structures of taxation.

In this regard, there seems to be only one very clear pattern: The Continental welfare states are collecting very large shares of GDP in the form of social insurance contributions from workers and their employers. With the exception of Sweden, all other countries rely to a much lesser extent on payroll taxes as a source of welfare-state revenue, and New Zealand, Australia and Denmark are even extremely low in this category.

By contrast, there is no clear-cut group pattern with regard to taxes on the consumption of goods and services — which are by now collected in the form of value-added taxes (VAT) in most countries. Denmark is very high at more than 16 percent of GDP, and Switzerland and Australia are low at little over 6 percent and a bit less than 9 percent of GDP, respectively, whereas in all other countries the revenue from consumption taxes varies between eleven and thirteen percent of GDP.

On personal and corporate income taxes, finally, there is again an interesting pattern. Denmark is far ahead, at almost 30 percent of GDP, followed at some distance not only by Sweden (20.5 %), but also by New Zealand (19.1 %) and by Belgium (17.5 percent) and Australia (16.8 percent). The rest of the Continental welfare states are on the whole collecting smaller shares of GDP from income taxes than is true of either the Scandinavian or the Anglo-Saxon countries.

On the whole, therefore, the Continental countries seem to have intermediate tax burdens but a less employment-friendly tax structure than the other two groups of countries, with a high share of payroll taxes and an average share of consumption taxes (both of which have negative effects on private-service employment), while personal and corporate income taxes (which seem to be relatively innocuous in their impact on employment) play a comparatively minor role in the tax structures of Continental welfare states. The Anglo-Saxon countries, by contrast, combine a low overall tax burden with a more employment-friendly tax structure that emphasizes personal and corporate income taxes and de-emphasizes social-insurance contributions. Among the Scandinavian countries, which continue to impose by far the highest overall tax burden, Denmark benefits from a tax structure that is similarly favorable to private service employment, whereas in Sweden social-insurance contributions approach continental levels. In Switzerland, finally, the negative employment effects of moderately high social insurance contributions are mitigated by the fact that their main components (basic pension insurance and health insurance) are levied on all individuals and all sources of income, rather than only on wage earners

and income from work. Moreover, service employment in Switzerland benefits from very low levels of consumption taxes.

4.3 Industrial Relations

In our context, industrial relations and wage setting have functional importance in three respects: First, they affect aggregate wage increases which are one of the critical elements in a country's macro-economic constellation; second, they determine wages which are the most important elements of production costs, and hence of the competitiveness of products and of the profitability of production; and finally, industrial relations affect primary-income distribution, job security and worker rights which have a most important impact on the distribution of life chances in a society. In each of these functions, moreover, industrial relations and wage setting have a strong impact on the employment performance of advanced welfare states.

At the most abstract level, the institutions governing industrial relations and wage setting can be characterized as being either "corporatist", or "statist" or "liberal". In *corporatist* systems, wages and working conditions are primarily determined through encompassing collective-bargaining agreements concluded by "cooperative", organizationally concentrated and relatively centralized unions and employers' associations. In *statist* systems, legislation is not merely determining the ground rules of collective bargaining among more conflictual parties, but the government has (and routinely uses) the power to preempt or correct bargaining outcomes, or — in the case of Australia and New Zealand — state arbitration courts may even have the primary responsibility for the determination of wages and working conditions. In *liberal* systems, finally, collective bargaining is fragmented and decentralized, and it may even be replaced by wage negotiations between individual workers and their employers.

However, in comparison to the employment and revenue patterns discussed above, the identification of characteristic strengths and vulnerabilities of national industrial relations systems is complicated in two ways: First, over the last decades, some countries have changed their membership in the groups used here: At the beginning of the 1970s, Australia, New Zealand, France and Italy could be described as variants of statist systems. By the 1990s, however, France and New Zealand have become liberal systems, whereas Australia and Italy have now more in common with corporatist systems. Conversely, at the beginning of the 1970s not only Sweden,

Denmark, Austria, Germany, the Netherlands and Belgium, but also Switzerland and even Britain had all or at least many of the characteristics of corporatist industrial relations. By the 1990s, however, Britain had been transformed into the clearest example of a liberal system, and Switzerland was also moving in that direction, while in Belgium statist practices had come to predominate after the early 1980s.

Second, and even more important in the present context: the "goodness of fit" between these three types of industrial-relations systems and the challenges of the international economic environment has changed at least twice over the last three decades.

In the stagflation period of the 1970s, what would have mattered most was an institutional capacity to instrumentalize wage setting as an element of macroeconomic policy. If governments were able and willing to defend full employment through fiscal and monetary reflation, inflation could only be reduced through wage moderation. In theory, this should have been impossible in liberal systems but feasible in statist systems. As it turned out, however, governments in France and Italy did not dare to use their formal powers to prevent unions from securing wage increases that protected and even improved their real-wage position in the face of oil-price inflation. Similarly, state arbitration courts in Australia and New Zealand were quite unable to enforce their awards when unions were striking for "second round" wage increases. In fact, only in corporatist systems did the macro-economic concertation of wage policy have any chance at all in the 1970s. It succeeded under conditions of full employment in Austria and to a lesser extent in Sweden; and it succeeded under the pressure of job losses in Switzerland and Germany as well, while Danish, Dutch and Belgian unions would have been able, but were not willing, to practice voluntary wage restraint in order to fight inflation.

In the 1980s, however, most governments (with the exception of Sweden) had given up the attempt to defend full employment through macro-economic reflation. Confronted with rising mass unemployment, now the unions in almost all corporatist countries were able to practice a considerable degree of wage restraint. The one exception was Belgium, where state intervention was effective in achieving the same purpose. Australia was also able to develop corporatist institutions, whereas Britain and France now became transformed into liberal systems which, at least initially, had considerable difficulty in achieving wage moderation under market pressure. In Italy and New Zealand, statist practices remained ineffective.

In the 1990s, finally, the pressures of international competition in the product as well as the capital markets have created conditions in which employment levels

are positively associated with industrial relations systems that allow for an increase in productivity-oriented wage differentials and for flexibility in working conditions and employment relations. These requirements are most easily met by liberal industrial-relations systems in which weak unions are no longer able to mobilize organized resistance against market-led wage differentiation and flexible employment conditions. Among this liberal group, one must now include New Zealand and to a lesser extent Switzerland, whereas Italy has moved closer to the corporatist camp in the 1990s.

By now, however, the comparative advantage of corporatist wage coordination have been greatly reduced. While a capacity for *general* wage moderation was still important for a country's ability to meet the Maastricht criteria of membership in the European Monetary Union, unions and governments that have the power to impose uniform wage increases and uniform regulations of working conditions and employment relationships are now confronting a dilemma. If they fail to meet demands for greater decentralization, differentiation and flexibility, they will not be able to realize the potential of private-sector employment in the highly competitive and volatile economic environment at the end of the 1990s. But if they should fully embrace the imperatives of decentralization, differentiation and flexibilization, they are in danger of destroying not only the organizational but also the normative bases of their capacity for solidaristic collective action.

As it is, Denmark and the Netherlands seem to have been most successful in walking the tightrope of "controlled decentralization", and a similar balance may be struck in Italy and in Australia, where coordination has never reached its maximal perfection. In Switzerland, decentralization seems to have gone even further, so that unions have lost most of their capacity to shape employment relations. In Sweden, Austria, Germany and Belgium, by contrast, earlier patterns of centralized or coordinated settlements are still vigorously defended by governments and unions, even though employers have opted out of central-level corporatist concertation in Sweden while firms are opting out from employers' associations in Germany.

5 Characteristic Challenges and Options

At the end of the 1990s, advanced welfare states are confronted with an international economic environment that is less benign and more challenging than was true two or three decades ago. At the same time, however, there are great differences in the robustness or vulnerability of countries to these challenges — and

hence in the institutional and policy adjustments which they had to adopt, or still need to adopt, in order to achieve a new equilibrium of normative aspirations and effective performance in their employment and social-policy systems. In spite of a growing differentiation, it seems useful to discuss these differences by reference to Esping-Andersen's "Three Worlds of Welfare Capitalism" (1990).

5.1 Scandinavian Welfare States

In our project, the "social democratic" welfare regime is represented by Sweden and Denmark. These countries are characterized by high levels of taxation and a heavy reliance on general taxation for the financing of their very expensive welfare states. Denmark in particular relies almost entirely on taxes and hardly at all on social insurance contributions. At the same time, social transfers are relatively generous, providing for both, basic income support above the poverty line and relatively high rates of status-maintaining income replacement through unemployment benefits and occupational pensions. Moreover, unions are strong, and collective bargaining was successful in achieving a very high degree of "solidaristic" wage equalization between sectors, regions, and skill groups.

The most distinctive characteristic of Scandinavian welfare states is the high level of publicly provided social services. Thus in 1985, government employment amounted to 26.2 percent of the working-age population in Sweden, and 22.2 percent in Denmark, as compared to 9.6 percent in Germany and 7.5 percent in the Netherlands. By 1997, it is true, the government employment ratio in Sweden had fallen to 21.9 percent, but Denmark had maintained its position at 22.7 percent, while Germany and the Netherlands were now at 9.3 and 6.8 percent, respectively. In Britain, the public sector employment ratio had fallen to 9.5 percent by 1997, in Australia it was at 10 percent, and in New Zealand at 8.7 percent. In other words, public social services made a much greater contribution to overall employment in the Scandinavian welfare states than was true either on the Continent or in the Anglo-Saxon countries.

Remarkably, however, private-sector employment is not as much depressed by the very high tax burden as one might expect. This is in part explained by a relatively employment-friendly tax structure which relies heavily on personal income taxes. Denmark, in particular, benefits from the fact that it does not finance its very expensive welfare state through social-insurance contributions that would otherwise price less productive private services out of the market. Nevertheless, the existence

of generous welfare benefits combined with the effect solidaristic wage policies have so far prevented the emergence of a low-wage labor market in the private sector. Instead, the achievement of extremely high overall employment ratios was due to the expansion of public services.

Until the mid 1980s, the expansion of welfare transfers and services had depended on very high and still rising tax revenues and, in certain periods, heavy public-sector borrowing. By the second half of the 1980s, however, the rise of tax revenues as a share of GDP had come to an end, partly as a result of the internationalization of capital markets and the pressures of tax competition, and partly as a result of political tax resistance. At the same time, Denmark kept public deficits well below the 3-percent line defined by the Maastricht criteria, whereas Sweden was forced into excessive borrowing by the economic crisis of the early 1990s — which after the mid 1990s was brought under control by drastic measures of fiscal consolidation. As a consequence, public-service employment could no longer expand and was even significantly reduced in Sweden. Hence unemployment in Sweden has risen from very low to average European levels, whereas Denmark was more successful in maintaining employment in the private as well as in the public sector.

At the end of the 1990s, therefore, Scandinavian welfare states are confronted with two major challenges: They must maintain the financial viability of very expensive welfare states, and they must increase private-sector employment in spite of very high levels of taxation and of socially defined minimum wages.

On the fiscal side, both countries have reduced the share of social expenditures in GDP after a peak in the early 1990s, but Sweden has done so to a greater extent — going from 37.4 percent of GDP in 1993 to 33.4 percent in 1995, whereas Denmark reduced total social expenditures only from 33 percent in 1994 to 31.9 percent in 1996. This difference seems to explain the fact that the public sector employment ratio in Denmark remained stable at about 22 percent throughout the decade, whereas in Sweden it fell from 26.1 percent in 1989 to 21.9 percent in 1997. Since both countries have about maintained their levels of total taxation during the same period, the difference may be explained in part by the fact that Denmark has come to finance an increasing share of social services for families and for the elderly through means-tested co-payments, whereas Sweden so far has maintained its near-exclusive reliance on tax revenues for financing universal social services without regard to income differences.

With regard to the employment ratio in the private-sector employment, Sweden has also done less well, going from 56.5 percent in 1990 to 49.6 percent in

1996, whereas private sector employment in Denmark remained more or less stable at 52 percent. A large part of the difference is explained by the a deep recession following the Swedish real-estate boom of the late 1980s which caused a loss of five percentage points in manufacturing employment and of 2 percentage points in construction. What is perhaps more remarkable is that Sweden also is losing jobs in private consumer services (ISIC 6) where the employment ratio fell from 11.9 percent in 1989 to 10.6 percent in 1996, whereas in Denmark it increased from 10.7 percent in 1989 to 12.1 percent in 1996. This difference may be partly explained by the dampening effect of social insurance contributions on private-sector services in Sweden.

At the same time, however, private-sector employment in Denmark benefits from two other deviations from the Swedish model. For one, there is very little job security. Employment can be terminated at low cost and with short notice — which is considered socially acceptable since workers with average wages are assured of exceptionally generous unemployment benefits replacing up to 90 percent of their income from work for a maximum of five years. In recent years, however, these benefits have been coupled with an obligation of recipients to participate in retraining and other "activation" measures, and to accept suitable job offers. As a consequence, unions and workers will not resist layoffs when demand falls, and firms are willing to hire even if a perceived increase in demand seems insecure. Sweden, by contrast, has maintained the rules regarding employment protection that are generally characteristic of countries with highly developed welfare states and powerful unions. In addition, the Danish system of collective bargaining has never attempted to achieve the degree of centralization that was the pride of the Swedish model, and after the dramatic failure of the 1970s it has moved to a two-tier system which leaves considerable space for settlements at the level of individual branches and regions. Remarkably, however, Denmark is still among the countries with the lowest wage dispersion in the OECD world.

In short, Scandinavian welfare states are still doing well on overall employment, and they are doing very well on social security and social equality. The main problems which they confront are, first, difficulties in financing very expensive welfare states under conditions of high capital mobility and rising political tax resistance and, second, a need to expand private-sector employment to compensate for the stagnation or decline of employment opportunities in the public sector. It seems that Denmark is much better placed than Sweden in coping with both problems — because of its more employment-friendly tax system, because of its greater use of

co-payments in the financing of public services, because of its more decentralized wage-setting institutions, and because of its more flexible regulations of condition of employment.

5.2 Anglo-Saxon Welfare States

In our project, Anglo-Saxon welfare states are represented by Australia, New Zealand and the United Kingdom. All three countries have moderate or low levels c taxation, with a low reliance on social-insurance contributions for the financing of welfare states which emphasize basic income support through tax-financed and ur versal but relatively low and flat-rate unemployment benefits and pensions. As a consequence, retirement incomes depend to a large extent on private pension fun and life insurance. While social services do not reach Scandinavian levels, the publi health care systems of Anglo-Saxon welfare states tend to be more labor intensive than Continental health insurance systems. As a consequence, public-sector employment ratios are not quite as low as one would infer from the low levels of taxa tion. These, however, are low enough to leave sufficient room for levels of private-sector employment that are significantly higher than is true in the Scandinavian an Continental welfare states.

Industrial-relations systems differ greatly among Anglo-Saxon countries, eve though unions used to be quite strong, but organizationally fragmented and highl decentralized in all three countries. In Britain, the principle of "free collective bargaining" was considered sacrosanct, even though temporary and generally ineffective statutory wage freezes were repeatedly imposed by both Labour and Conserva tive governments in an attempt to stem the rising tide of inflation in the 1960s an 1970s. Moreover, the only serious attempt at "corporatist" wage concertation durir the Social Contract period of 1975-78 ended in a "winter of discontent" that allowe Margaret Thatcher to win by a landslide in 1979. Thereafter, British unions lost rap idly in power as a consequence of both, rising unemployment, a severe cut of unemployment benefits, and the industrial-relations legislation of the Thatcher government. Employment conditions were deregulated and collective bargaining — to the extent that it still exists in the private sector — became even more decentraliz and even less coordinated than before.

In Australia and New Zealand, the extreme fragmentation and decentralization of union organization was originally compensated by arbitration courts of the state which were empowered to set wages at high minimum levels and with a view to ensuring distributive justice among workers in different branches and skill

groups. But since unions in profitable firms could still strike for higher wages, the result were massive inflationary pressures in the 1970s. In Australia, this problem was tackled in the 1980s through a greater organizational concentration of unions and a centralization of decisions that allowed a degree of concerted wage moderation that was sufficient to bring inflation under control. At the same time, the arbitration system was modified to allow a greater degree of productivity-oriented wage differentiation among branches of the economy. In New Zealand, by contrast, attempts at corporatist concertation failed and wage inflation continued until, in the early 1990s, the "National" (conservative) government abolished not only the arbitration system but collective bargaining as well. Wages and working conditions are now determined by agreement between firms and individual workers.

In effect, New Zealand and Britain have moved to extremely deregulated labor markets and decentralized wage setting. They have thus no problem with wage differentiation and employment flexibility. There is also no more organized resistance to the rapid introduction of process and product innovations. But neither is there much investment in the skills and in the practices of trustful cooperation between management and labor that are important for high-quality industrial production. Thus, employment is rising in low-skill services, and it is also rising in high-tech branches and in financial services where success depends on rapid innovation and deregulated markets. In Australia, the same tendencies are manifest at more moderate levels.

On the whole, therefore, the Anglo-Saxon countries have been able to achieve high rates of private-sector service employment, at both high and low skill levels. At the same time, their overall tax burdens are relatively low, and their welfare states are relatively lean. In comparative perspective, therefore, neither employment nor the financing of the welfare state appear to be acute problems in Britain, New Zealand or even in Australia. What is a problem, however, is increasing social inequality and the poverty of workers in low wage service jobs and their families. A partial solution to these problems is provided by forms of social assistance modeled on the negative income tax in Australia, and by in-work social benefits modeled on the Earned Income Tax Credit in the United States. Both solutions allow low-skilled workers to accept low-wage service jobs without becoming victims of extreme poverty. In order to reduce the increasing inequality of life chances, however, they would still need to be complemented by strategies that provide opportunities for training and upward mobility even for those who start by taking low-skilled and low-wage jobs.

5.3 Continental Welfare States

Continental welfare states are transfer intensive, rather than service intensive. While total social spending is generally quite high, public expenditures on services for the elderly and families with children are on average at less than one fourth of the Scandinavian level. In fact, public-sector employment is generally as low as it is in the Anglo-Saxon welfare states (Table 3). That is in part explained by the fact that health care, while paid for through compulsory social insurance contributions, is largely provided on a fee-for-service basis by private doctors and private or not-for-profit hospitals. That would lead one to expect that, compared to either the Scandinavian or the Anglo-Saxon countries, Continental welfare states ought to have higher levels of non-public employment, relative to given levels of taxation. But that is not so. On the contrary, business employment is also below expectations in almost all Continental countries (Table 3, Figure 2).

One explanation for this relatively poor employment performance is provided by the fact that Continental welfare states have traditionally relied more on social insurance contributions from workers and employers than on general taxation to pay for social expenditures. These have the effect of increasing non-wage labor costs generally and they are particularly damaging in their effect on the less productive private services. At the same time, raising revenue in the form of social-insurance contributions is likely to create legal entitlements or property rights in the expected benefits that are more resistant against cutbacks or against means-testing than is true of tax-financed benefits. Thus, job losses — which at the same time increase the expenditures and reduce the revenue of insurance funds — will typically create a need to raise the level of contributions. In other words, Continental welfare states are vulnerable to a vicious cycle in which job losses tend to raise the cost of labor which then will further reduce employment opportunities in private-sector services.

In addition, several of the factors that constrain private service employment in the Scandinavian countries are also present in Continental welfare states. On the one hand, relatively generous social assistance for the poor and income-maintaining benefits for the unemployed have the effect of raising the reservation wages of job seekers in the private sector. In some countries, the effect is reinforced by relatively high minimum wages that are being set either by legislation or by collective bargaining agreements. At the same time, employment is highly regulated, dismissals

are expensive, and firms hesitate to start hiring in the face of uncertain demand in their product markets.

While these conditions are generally shared among Continental countries, they differ greatly with regard to their industrial relations systems. Austria, Germany, and the Netherlands have relatively strong unions and highly coordinated patterns of wage bargaining which normally permit the effective adjustment of *average* wage increases to given macro-economic conditions. At the same time, these countries have strongly institutionalized forms of vocational training and of worker participation at the firm level which facilitate high-quality production and cooperative adjustment and innovation. The downside, under present conditions, seems to be a tendency to over-regulate employment relationships, to over-protect existing jobs, and to over-standardize wages and working conditions. These dangers are most manifest in Germany, where wage compression has actually increased in the last decades, while Dutch and Austrian industrial relations seem to have allowed more differentiation and flexibility.

In Belgium and France, the state traditionally had a much larger role in trying to control the inflationary pressures arising from highly conflictive industrial relations. In Belgium, the state managed to impose overall wage moderation on organizationally strong and militant unions — but only at the price of a disproportionate increase of lower wages. In France, by contrast, private-sector unions were significantly weakened in the 1980s. Hence the state ceased to intervene in collective bargaining, and allowed private-sector wage negotiations to be decentralized to the level of individual firms. Nevertheless, the state still legislates on working conditions and working hours, and it also continued to raise statutory minimum wages. In Italy, finally, the state was never strong enough to exercise its formal controls over the wage-setting process. In the 1990s, however, Italian industrial relations have become transformed in ways that come much closer to the "corporatist" model.

In spite of these significant differences among Continental welfare states, however, they all have comparatively low total employment ratios — with public-sector employment below Scandinavian welfare states, and business employment below the Anglo Saxon welfare states — and (with the exception of Austria and the Netherlands) they are particularly weak in the less productive private services (Table 3). They also have relatively high rates of unemployment.

Since it is unlikely that, under present fiscal constraints, they will be able to achieve significant increases of public-sector employment, solutions to the Continental employment problem must be found in the private sector. And while indus-

trial employment continues to be important, competitive pressures there will continue to require rapid increases in labor productivity. Thus, significant increases of industrial employment are not to be expected. Employment gains are more likely in highly productive information, communication, financial and business services, but even if they are facilitated by the deregulation of product markets, they will provide jobs only for highly qualified workers. Thus if the employment deficit of Continental welfare states is to be overcome, major gains will also have to occur in the less productive consumer-oriented, household-oriented and personal services.

In order to realize such gains, however, several preconditions must be met: On the demand side, Continental countries need to reduce the excessive burden of non-wage labor costs that so far prevents the development of a low-wage market for private services. On the supply side, they will have to restructure the transition from social assistance and other welfare benefits into regular employment to eliminate the prohibitive taxation of earned incomes. Moreover, some deregulation of product markets and of employment relations may be necessary if private services are to expand in areas which presently are not included in the formal economy.

Yet if all these conditions were met, Continental countries would then find themselves confronted with some of the problems associated with the Anglo-Saxon model. To avoid these, in-work benefits would have to prevent the emergence of a class of "working poor", and training opportunities would be needed to prevent the entry into low-wage jobs from becoming a dead end. Compared to their present employment performance, however, these are problems that Continental countries ought to welcome.

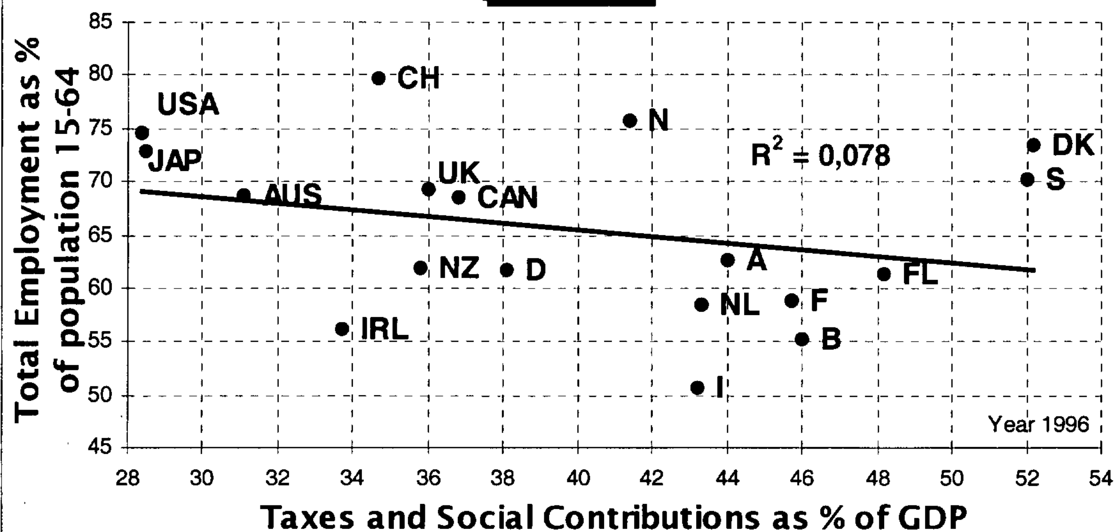

Figure 1
Total Employment as % of population 15-64
Taxes and Social Contributions as % of GDP
USA
JAP
AUS
CH
UK
CAN
NZ
D
IRL
N
R² = 0,078
A
NL
F
B
I
FL
DK
S
Year 1996
85
80
75
70
65
60
55
50
45
28
30
32
34
36
38
40
42
44
46
48
50
52
54
Source: OECD Statistical Compendium (Economic Outlook) 1998; Revenue Statistics 1998; own calculations

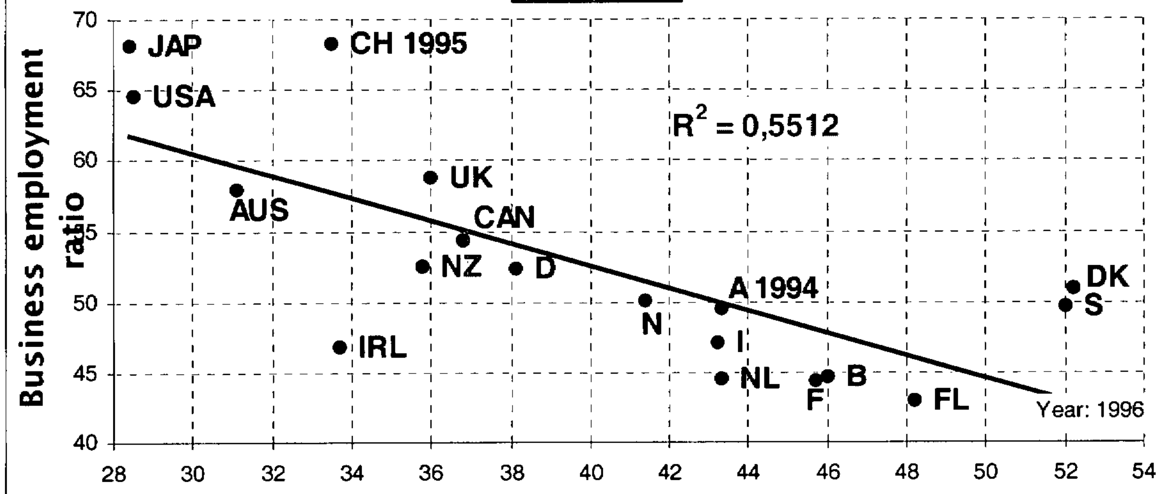

Figure 2
JAP
CH 1995
USA
$R^2 = 0,5512$
UK
AUS
CAN
NZ
D
A 1994
DK
S
N
I
IRL
NL
B
F
FL
Year: 1996
70
65
60
55
50
45
40
28
30
32
34
36
38
40
42
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50
52
54
Business employment ratio
Taxes and social contributions as a share of GDP
Source: OECD 1998 Statistical Compendium (Business Sector Data Base); 1998 Revenue Statistics; own calculations

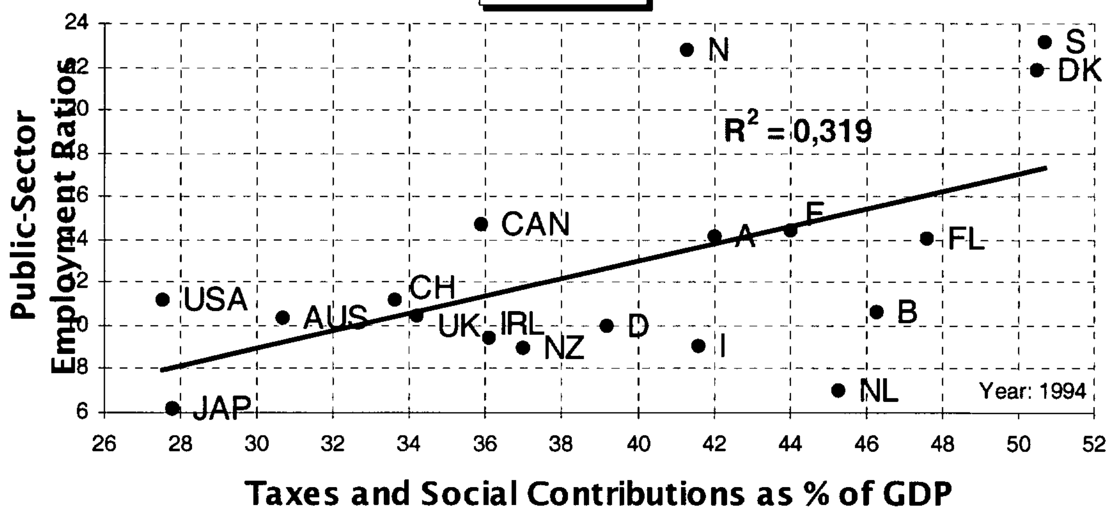
Figure 3
Public-Sector Employment Ratios
24
22
20
18
16
14
12
10
8
6
26
28
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32
34
36
38
40
42
44
46
48
50
52
N
S
DK
R^2 = 0,319
CAN
A
F
FL
USA
CH
AUS
UK
IRL
D
NZ
I
B
NL
JAP
Year: 1994
Taxes and Social Contributions as % of GDP
Source: OECD 1998 Statistical Compendium (Economic Outlook+ Business Sector Data Base); Revenue Statistics 1998; own calculations

Employment as % of Pop. 15-64	Total Taxation as % of GDP	Social Security Contributions	Consumption Taxes	Personal & Corporate Income Taxes
Total Employment	0.078 (-)			
Government Employment	0.319 (+)			
Business Employment	0.551 (-)	0.170 (-)	0,615 (-)	0.041 (-)
Private Services (ISIC6)	0.610 (-)	0.362 (-)	0.377 (-)	0.004 (-)
Industry (ISIC3)	0.001 (-)	0.063 (-)	0.022 (-)	0.013 (-)

Table 1: Sectoral Employment Ratios and Different Taxes

(R-Squares, OECD 18, 1994-1996)

	1970	1980	1985	1990	1996
AUS	25.6	30.1	31.4	30.9	31.1
NZ	n.a.	33.8	33.7	35.8	33.7
UK	36.8	35.5	35.3	36.4	35.9
CH	23.8	30.8	32.0	31.5	34.6
A	35.7	41.2	43.0	40.9	43.1
B	35.7	44.3	47.2	44.3	45.9
D	32.9	38.2	38.2	36.7	38.0
F	35.0	41.7	44.4	43.7	45.4
I	26.1	30.3	34.2	39.1	43.2
NL	36.7	45.2	44.4	44.6	43.3
DK	40.4	45.5	48.2	47.5	50.9
S	40.0	48.8	50.0	55.6	52.0
OECD18	31.8	36.6	38.4	39.3	39.8

Table 2: Taxes and Social Security Contributions as % of GDP

(1970-1996; Source OECD Revenue Statistics)

	Total Employment as % of Pop. 15-64	Government Employment as % of Pop. 15-64	Business Employment as % of Pop. 15-64	Industrial Employment as % of Pop. 15-64	Employment in ISIC 6 as % of Pop. 15-64
AUS	68.7	10.3	58.1	9.8	17.2
NZ	61.8	8.8	53.0	12.0	14.7
UK	69.3	9.6	59.1	13.2	13.7
CH	79.1	11.0	68.3	15.7	15.2
A	62.6	14.2	49.5	14.5	14.4
B	55.3	10.3	44.7	10.4	10.1
D	61.7	9.5	52.3	16.4	11.0
F	58.8	14.5	44.3	11.3	9.9
I	56.0	8.9	47.1	12.1	10.9
NL	58.4	6.8	44.8	10.2	13.4
DK	73.4	22.2	51.1	14.4	12.1
S	72.2	22.4	49.6	13.5	10.6

Table 3: Employment as % of the Population 15 - 64

(1996 Source OECD)

	Total Social Spending as % of GDP	Total Taxation as % of GDP	Social Security Contrib. as % of GDP	Taxes on Goods and Services as % of GDP	Personal & Corporate Income Tax as % of GDP
AUS	15.7	30.5	2.1	8.9	16.8
NZ	18.8	36.5	0.4	12.6	19.1
UK	22.1	35.5	6.2	12.7	13.1
CH	25.5	33.7	12.4	6.2	12.5
A	27.1	41.5	18.1	11.7	10.4
B	28.8	46.3	15.2	12.0	17.5
D	29.6	39.2	15.5	10.9	10.8
F	30.1	44.5	20.4	12.2	7.8
I	23.7	41.2	13.2	11.3	14.8
NL	28.0	44.0	18.3	12.0	11.6
DK	32.6	50.2	1.8	16.7	29.7
S	33.4	49.7	15.5	12.0	20.5

Table 4: Social Spending and Taxes as % of GDP

(1995; Source OECD)