

**Trends in Welfare State Decommodification in Eighteen Advanced Industrial
Democracies, 1972-2000**

by

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Introduction

This paper reports results of a multi-year effort to (re)consider the key features of welfare programs in eighteen OECD countries.¹ Many of the program characteristics we have examined feature prominently in one of the classic studies of comparative welfare states: Esping-Andersen's *Three Worlds of Welfare Capitalism* (1990). Central to the book's success is the development of two indices that are widely used in the literature. The first is an index of welfare state decommodification around 1980. The second is an index of welfare state stratification for the same general period. Despite their considerable influence in the field, no published studies have attempted to either replicate or extend these two indices that have been crucial to the book's central empirical contributions.²

Such an assessment seems overdue for several reasons. First, given the regularity with which the indices are invoked to characterize or describe features of welfare states, it is important to examine them more closely.³ This is all the more important in this case, because the sources of the data used to create them are not heretofore widely disseminated.⁴ If the results are not replicable or are inconsistent in the short run, it might call into question conclusions in work using such indices.⁵ (This is of course leaving aside the question of whether they have included the correct dimensions.)

¹ The data in this paper are drawn from the "Comparative Welfare State Entitlements Data Set, 1960-2000" currently being constructed by the authors. The data collection project is supported by a grant from the National Science Foundation (SES-0095367). More information about the data set can be obtained from the authors.

² A number of studies have suggested that *The Three Worlds* failed to adequately consider certain important components of social provision (for example, Orloff 1993; Sainsbury 1999; Room 2000). Subsequent work on some of these dimensions has tended to support many of the distinctions in the original work. Moreover, efforts to (re)assess the welfare state on their own terms have not been undertaken. There has also been a cottage industry in discovering how many "worlds" of welfare capitalism there are (Ferrara, 1996 Castles and Mitchell, 1993; Powell and Barrientos 2002).

³ Castles and Mitchell (1991) and Whiteford (1995) are exceptions.

⁴ Much of the data used in Esping-Andersen's book is based on data from the Social Citizenship Project at the Swedish Institute for Social Research.

⁵ The number of empirical studies citing or using Esping-Andersen's empirical measures is considerable. The computer search of the Social Science Citation Index counts over 1000 references and that is only since 1994, four years after the book's publication! A sampling of the papers in major sociology or political science journals that employ one of

A second reason for reassessing these empirical measures is that though they are intended to distinguish long-standing institutional features of countries, the measures are based on cross-sectional variation in a brief time period (circa 1980).⁶ Though these distinctions have been adopted in welfare state studies as characterizing stable patterns among and within industrial democracies, whether or not this amounts to misplaced faith is quite uncertain.⁷ If, for example, Esping-Andersen's results were compiled for circa 1970 or circa 1990 and produced completely different rank orderings of countries, adopting the variations in the 1980s to characterize the entire period would be faulty to say the least.⁸

Third, being of a cross-sectional nature, the distinctions provided in the book provide an inadequate basis for understanding the broader dynamics of the causes or consequences of welfare states regimes (at least not beyond a discussion of the "causes" of the situation observed in 1980, or the later consequences of that situation). A fuller understanding of what produced three programmatically distinctive worlds of welfare capitalism requires not only cross-sectional but ultimately cross-temporal variation. Has the programmatic nature of the 18 welfare states discussed in the book changed in any appreciable way before or since 1980? Why and with what consequence? Assuming that the measures themselves are valid proxies for what they purport to be, have distinctions among countries widened or narrowed?

At issue here is not only the veracity of past studies that rely on a single cross sectional measure to characterize long-term patterns of state policy, but essential evidence for contemporary theories of political economy, public policy, and welfare state

the two main indices (decommodification or stratification) in their empirical analysis is Messner and Rosenfeld (1997), Hicks and Kenworthy (1998, 2003); Huber, Ragin and Stephens (1993), O'Connor (1993), Rueda and Pontusson (2000), Fritzell (1991), Noell and Theiren (1995).

⁶ References in the books tables suggest that the data generally come from within a year or two (in either direction depending on the source) of 1980.

⁷ Some studies have concluded that other variables, like spending, have been more or less resistant to change. We believe ours is one of the first to systematically compare the structure of welfare systems over both a large number of countries (18) and long period of time (30 years).

⁸ One paper that explicitly takes this possibility into consideration is Western (1996).

change. For example, proponents of institutional path dependence strongly argue against programmatic convergence among welfare state regimes. Theories of political-economic institutional complementarity (e.g., varieties of capitalism, similarly imply that some changes in welfare regimes could undermine other aspects of the political economy.⁹ In both of these instances, cross-temporal change (or its absence), not cross-sectional difference, is critical evidence. Finally, debates about whether and to what degree the welfare state has been transformed have yet to have assembled a comprehensive cross national and cross-temporal data set on comparative welfare state programs.

Welfare State Decommodification

Esping-Andersen presents two separate indices of welfare state characteristics in developing and elaborating upon his typology. The first is an index of welfare state decommodification, which he argues is an essential normative goal of social policy, and requires, in addition to social spending data “analysis of the rules and standards that pertain to actual welfare programs.” (1990: 47). He goes on to elaborate that important components of a decommodifying welfare state are rules governing access and eligibility, income replacement levels, and the range of protection against social risks. The second index developed in the book concerns the way that the welfare state contributes to patterns of social stratification, both in and out of the market. In this paper, we report data for all of the components that comprise Esping-Andersen’s decommodification index for four different years: 1972, 1980, 1990, and 2000.¹⁰ We focus on decommodification because it is probably the most frequently used or referred to index in the literature, and the one we focused on first in the project. (A future paper will present a similar (re)analysis of welfare state stratification.)

⁹ A recent paper by Iversen and Soskice, for example, is implicitly based on the notion that the strict earnings related nature of many German social insurance programs and pay structure promotes sector-specific skill formation.

¹⁰ 1972 is used rather than 1970, because it is the first year for which we currently have reasonably reliable data on one of the most important component of the index: net income replacement rates. Our completed data set will contain values for all years from at least 1972 to 2002. Some of the data will extend back to 1960. These four years provide a manageable glimpse of the entire period.

Esping-Andersen's decommodification index is composed of five different characteristics in each of three core welfare state programs: unemployment benefits, sickness benefits, and state pensions.¹¹ Table 1 provides an overview of the characteristics considered for each program. We briefly discuss the justification and our scoring of these measures below, and provide tables for our scoring for each of the four periods considered here.

Table 1 here

Unemployment Benefits

Unemployment benefits constitute one of the most essential and controversial elements of decommodification. Unemployment risk (and associated income loss) is traditionally seen as a major reinforcing mechanism for labor's structural vulnerability in capitalist societies. Like sickness, many unemployment risks are exogenous, and, for most people at least, they are likely to disrupt life chances. This is obviously true in the immediate sense of lost livelihood. However, job loss in the absence of social protection can reduce the time horizon of workers, leading them to satisfy immediate needs at the expense of longer-term plans. Table 2 provides data scoring all dimensions of unemployment benefits used in the decommodification index.

Unemployment Replacement Rates

As with all three social insurance programs considered in the index, unemployment replacement rates are easily the most important component of the welfare state plays in terms of overall decommodification. In addition to the values reported in Table 2, Figure 1 shows the evolution of unemployment replacement rates since 1972.¹²

¹¹ These components (and the means of aggregating them, which we will present later) are all briefly referred to in the text of *The Three Worlds* (pp. 49-50) and in an appendix to Chapter 2. (p. 54).

¹² The OECD (2002) has begun to collect unemployment program and benefit information since 1995. Because they include housing benefits, their replacement rates

As the figure suggests, while the variation in replacement rates was high in 1972 and 1980, since then there has been considerable convergence between 1990 and 2000, and there is some evidence of clustering into two groups. The relative position of countries on the list has varied over the years.¹³ Only two countries, Australia and New Zealand are consistently low scorers over time. Particularly dramatic has been the decline in the relative and absolute position of the UK. Unemployment benefits have moved from being in the middle of the pack in 1972 to easily the most meager. Other countries placements seem to defy their “type.” A similar story can be told about Ireland, although it introduced earnings related benefits somewhat later. US replacement rates are consistently among the best, even considering the fact that they became taxable in 1986.

Table 2 about here

Figure 1 about here

At the other end of the distribution, the Netherlands, Sweden and to some extent Denmark have had consistently high replacement rates relative to the others. However, replacement rates in all three countries have declined in recent years, moving closer to many of the continental regimes. Other social democratic welfare states (Norway and Finland) do relatively poorly here compared with some of the continental countries (Switzerland and France), especially in recent years.

are sometimes higher than those reported here, though it is important to note that housing benefits are, in all cases, means-tested, and thus not guaranteed.

¹³ Our calculations use the lower ordinary unemployment benefit in Italy. Our interpretation of Esping-Andersen’s figures clearly suggests that he used the higher CIGS benefit, which has an 80% gross replacement rate. The more generous system available to only industrial wage earners in large companies and depends on the companies’ compliance with state policies on restructuring.

Unemployment Waiting Days

In most countries, the unemployed are required to be unemployed for a certain period of time before being entitled to draw benefits.¹⁴ Long waiting periods are in many cases explicitly intended to encourage immediate jobseeking. It follows that the shorter the period of time one has to wait, the lower the income loss and the greater the decommodification. Waiting periods do exhibit somewhat more stability across time within countries than do replacement rates. Australia, Finland, Japan, and the United States all have consistently had a waiting period of one calendar week (seven days) from the date of unemployment in all four periods examined. Denmark, France, Germany, Italy, and the Netherlands all had no waiting days in each period examined, and Norway had a three-day wait. In Ireland and the UK, flat rate benefits have been subject to only a three-day rate in all years, however, there was a considerably longer waiting period for the earnings related benefits. In the UK this was 12 days, in Ireland 13 days in 1980 and 18 in 1990. In New Zealand, reforms in the 1980s have extended the standard waiting period to 14 days for an earner with average earnings, though the wait may be shorter in other situations (children, past income, or other contingencies). The waiting period in Switzerland has increased from one day to two in 1982, and to five days in the mid 1990s. Waiting days decreased in Sweden from five to zero in 1988. In Austria they dropped from seven days in 1972 to zero in 1980. Finally Belgium dropped the one-day wait to zero in the 1970s.

Unemployment Qualifying Conditions

Most unemployment benefit systems in the eighteen countries examined here require some minimum period of insurance prior to qualifying for benefits. The longer the period required, the greater the barriers to access. Specifying a qualifying period for the entire population of the insured is complicated by several factors. First, there are sometimes separate conditions for insurance and contributions, because one is considered “covered” but not contributing to insurance while unemployed. Second, qualifying

¹⁴ Replacement rates are calculated as if there was no waiting period. This was done primarily because the waiting period is considered as a separate variable here.

period and duration of benefits are sometimes linked, typically with longer contribution histories giving rise to longer entitlement to benefits. This is a practice that became more popular recently, particularly in countries with persistently high unemployment. To be as consistent as possible, we have chosen the qualifying period that is required to receive the benefit level used in calculating the replacement rate or (if more limiting) that was consistent with coding for benefit duration.

Because Australia and New Zealand's have systems of flat rate means-tested and non-insurance benefits, there is no qualifying period or fixed duration of payments. These countries are the least restrictive on this dimension. Germany and Italy are consistently the most restrictive, both requiring 2 years of insurance in order to qualify for full benefits.¹⁵ In Germany from 1982 to 1997, three years of insurance was required to qualify for 52 weeks of benefits. Belgium is coded as having the next most restrictive system, requiring around 18 months of coverage for our notional worker to receive full benefits.¹⁶ Sweden, Canada and Denmark require a year of insurance to qualify for full benefits.

A plurality of countries require six months (26 weeks) of insurance to qualify for benefits. This has been true for all periods in Finland, Japan, the Netherlands, Switzerland and the United States. However, following the economic problems of the early 1990s, Finnish workers must now be insured for 43 weeks (approximately 10 months).

As for waiting days, in systems that combine a flat rate and earnings related benefit, qualifying conditions for the two types of benefits may vary. This is true in the UK, and the reduction in weeks of insurance from 50 in 1972 and 1980 to 10 in 1990 and 2000 is explained by the elimination of the earnings related benefit in the 1980s. In Finland, basic flat rate benefits were paid without qualifying period upon the introduction

¹⁵ In Germany, there is a shorter contribution period required for the first 6 months of benefit entitlement. This was 12 months to 1982 and has been 18 months since then. There are also provisions for longer duration for older workers.

¹⁶ Younger established workers (i.e., those who are not recently out of school) have been required to be insured for shorter periods. In 2000, those below age 36 were required to have only 1 year worth of insurance in the last 18 months to qualify.

of the earnings related scheme in 1984, whereas they had previously required six months of insurance.

Other than the aforementioned reductions in contribution periods, only Norway and Ireland have seen reductions in qualifying conditions since the 1980s. In Norway, qualifying conditions were relaxed considerably in the early 1970s (from 30 weeks to four). In Ireland, the qualifying period was reduced from 48 to 39 weeks. (Previously, Irish benefits required 39 weekly paid contributions *and* 48 paid or credited weeks; reforms stipulate only 39 paid or credited weeks.)

Since 1980, Austria increased the number of weeks required from 20 to 26. The large increase in France between 1980 and 1990 reflects a change in the system during the 1980s to link benefit duration to period of contributions. While 13 weeks is still the minimum, it qualifies for only 13 weeks of benefits (rather than 52), we have here used the qualifying condition for the maximum benefit length: 2 years of insurance (in last three years) for 195 weeks of benefits. We used the longer benefit as this is what our notional 40 year-old employee would experience.

Unemployment Benefit Duration

The duration of unemployment benefits refers to the maximum period in which full benefits are typically available, that is, ignoring discretionary extensions such as the one in the United States during economic recessions.¹⁷ As previously noted, the period of benefit entitlement often varies by factors such as previous contribution history, age, or other circumstances in a number of countries. We have coded for duration periods that are applicable to values reported for the other conditions discussed above.¹⁸

New Zealand and Australia are unique in that their means-tested benefits are payable in the flat rate amount as long as a person cannot find work. In 2000 Denmark

¹⁷ In all cases, benefits are contingent upon some type of demonstrated effort to find work, though there is considerable variation in what this means across countries and time. This condition has been an important focus of reforms in some countries. Because of the nature and vagueness of many of these conditions, we have not been able to collect data on them in this project.

¹⁸ In cases where the full benefit period is followed by a period of benefit at a fraction of the preceding benefit (e.g., Belgium, France), we report duration for only the “full benefit” period.

had the next longest duration: 5 years. This, however, was the latest in a gradual comedown from unlimited unemployment entitlement offered in the mid 1970s, when the then 2.5 year limit was suspended. Benefit durations were cut in Canada and the UK. In Canada it declined from 43 weeks in 1972 to 36 weeks in 2000. In the UK, the basic rate was payable for 52 weeks until 1995 when it was cut to 26 weeks under the Jobseekers Act. (Duration in the UK for 1972 and 1980 is coded 26 weeks because earnings-related benefits were only paid for that period of time.)

In about half of the countries the duration of benefits has remained relatively stable in these four periods. They are unchanged in Austria (30 weeks), Belgium (52 weeks), Germany (52 weeks), Italy (26 weeks), Japan (35 weeks) Netherlands (26 weeks), and the US (26 weeks).

Several countries expanded unemployment benefit duration in the period. Sweden increased benefits from 40 weeks to 60 weeks effective in 1974. Benefit limits were also expanded in Ireland from 52 weeks to 65 weeks between 1975 and 1976. Finland expanded the duration of its earnings related benefit considerably in late 1980s to up to 500 days without annual limits.¹⁹ France and Norway also both expanded benefit duration considerably over the course of the period. Norway expanded duration from 20 to 21 weeks in 1970, to 40 weeks in 1975 and to 80 weeks in 1989.

Unemployment Insurance Coverage²⁰

Perhaps as important a factor as income replacement in the goal of decommodifying wage labor is the universality of unemployment benefit coverage. Thus, insurance coverage rightly figures prominently in Esping-Andersen's framework. The portion of the labor force that is insured continues to vary widely, though overall it certainly appears as if we can characterize the period from the 1970s to the present as an

¹⁹ Previously, there was a 200 day limit in any calendar year, and higher limits were imposed on a multi-year period.

²⁰ The concept of coverage here should not be confused with recipience rates, i.e., either the portion of the unemployed drawing insurance benefits or the portion eligible to draw benefits who are actually drawing them.

era of universalization in unemployment insurance coverage.²¹ The mean and median level of coverage increases in each year examined here as more and more groups, particularly the self-employed, domestic, agricultural and part-time workers, were included into various unemployment systems where they had not been so previously. In 1972, only Norway, Canada, and the Netherlands (ironically each of a different welfare regime type) had coverage rates above 85%. All of the Nordic welfare states except Norway covered *less than 60%* of the labor force for unemployment. Moreover, program coverage in these countries was lower than that in all four of the “liberal” welfare states with non-income tested unemployment insurance (i.e., excluding New Zealand and Australia). By 1980, in only Japan and Italy was coverage less than 60%. And by 2000, only Austria, Italy, and Japan had coverage below 70%.

This massive expansion of the covered population was no doubt promoted by the exceptional growth in unemployment. It is instructive that two of the three countries with low coverage (Japan and Austria) have had very low levels of unemployment in the 1970s, 1980s and largely through the 1990s. The overall expansion of coverage has, perhaps unsurprisingly, helped to produce a major convergence over time across countries, and certainly makes the case that in this program (and we will also see in the others) remains large in scope. One intriguing question is who is *not* covered in the Nordic countries, which (except for Norway) continue to exhibit below average coverage rates.²²

There have been some cases of “slippage” in the coverage of unemployment insurance. In Canada, coverage has declined from 89% of the labor force in 1972 to 79% in 2000. Smaller declines have also been registered in Austria, Germany,

²¹ Because Australia and New Zealand have only means-tested programs for the unemployed, it is not meaningful to speak of a coverage rate as such. Controversy exists over whether in terms of coverage these programs should be considered to be very decommodifying. Castles (1994) argues that, because they fully cover all in need, rather than based on previous insurance provision and/or employment history, they are decommodifying, although Esping-Andersen suggests that the means-test makes the program largely irrelevant to typical workers, except after a long period of running down assets.

²² Three Nordic countries without full coverage have Ghent systems, so coverage remains voluntary (at least if one is not in a trade union).

Switzerland, and the UK since the 1980s. The precise reasons for this are not clear, but part of the explanation is likely an increase in those not subject to compulsory insurance.

Summary

In summary, there are three aggregate trends to report with respect to unemployment insurance programs. First, replacement rates expanded considerably in the 1970s, but have seen some retrenchment in many countries in the 1980s and 1990s. Second, the duration of benefits has either been stable, or expanded in the vast majority of cases. Third, there has been a considerable increase in the proportion of the workforce covered by unemployment insurance over this period. For the most part, this expansion in coverage has affected those in more marginal, irregular, and lower paying types of work. In that respect, one could argue that the amount of unemployment risk that has been brought into the social insurance system has expanded considerably, and has shown little signs of retrenchment as of a few years ago.

Sickness Insurance

Historically, sickness insurance served to compensate people for lost work income during illness. Today, sickness insurance programs have been extended to cover maternity or parental benefits (time off for childrearing or taking care of sick children) in a number of industrial countries. Alternative programs exist in many countries to deal with occupational accidents or other forms of disability insurance. And, of course, state involvement in the provision of medical care for the sick is universal (if highly varied in its specific content) among advanced democracies. The programs examined here deal with cash benefits for work absence due to personal illness.

Following the analysis in *The Three Worlds*, we use the same program criteria for sickness insurance as were used for unemployment insurance. Table 3 repeats for sickness insurance the information provided in Table 2 for unemployment insurance. There is no data for the United States in this section because it has no national sickness

insurance program.²³ A brief comparison of the two tables shows that there is sometimes considerable similarity between the two programs. In Australia, New Zealand and Canada, the replacement rates and qualifying conditions are virtually identical between the two programs in all years.²⁴

Table 3 here

Sickness Replacement Rates.

Sick pay replacement rates are typically higher than those for unemployment.²⁵ The exceptions are Japan and France, as well as Sweden in 1972. Marginal differences for a couple of other cases are too small to speak of, and may be due to measurement error.

As the data in Table 3 suggests, there has been a great deal of change from period to period in sickness replacement rates. This is perhaps better reflected in Figure 3, which plots country replacement rates over time. Several countries have moved from the bottom to the top of the ranking (e.g., Norway and Finland), while others have moved precipitously down (the Netherlands, UK, and Ireland).

Figure 3 here

There has been a steady erosion of the absolute and relative position of Sweden, the Netherlands, and Denmark. (In the latter two countries, replacement rates for

²³ In the United States, several states have sick pay programs, including California, but it is the absence of a federal program that leads Esping-Andersen to score the US a zero for this component of his decommodification index.

²⁴ In the 1980 and 1990 sickness benefits were 5 points more generous than unemployment benefits in New Zealand. However, since this discrepancy does not change the fact that New Zealand has a very low replacement rate in all years.

²⁵ There are a number of plausible explanations for this, though an in-depth investigation is beyond the scope of the paper. One reason is that employers are often obliged to continue to pay wages during the first days (sometimes weeks) of illness. Another reason is that it is a very popular program, which many workers will access in a given year (unlike unemployment insurance).

sickness are identical to those for unemployment.) Declines in replacement rates have also occurred since 1980 in the UK and Ireland, more or less tracking the end of their experiments with earnings-related benefit programs. (In Ireland, unemployment and sickness replacement rates have been identical in all four years examined, while those in the UK they were identical through the mid 1980s and very similar in recent years.)

Since 1980, sickness benefits have improved in some countries. The largest increase has occurred in Finland. Here rates went up very quickly in 1982, with legislated increases in the daily benefit ceiling. These were cut back rather severely since the severe economic crisis of the early 1990s, but remain higher than the 1970s. Benefits have also increased (more modestly) in Austria, Belgium, France, and Japan,

As was the case with unemployment insurance replacement rates, the overall pattern suggests that 1980 (and 1990) were periods of somewhat greater dispersion than either 1972 or 2000. It looks as if there has been some retrenchment among many of the countries that were most generous around 1980 (i.e., the Netherlands and the Nordic countries, save Norway), though this is balanced some upward convergence in Continental Europe. Changes in Ireland and the UK have lowered their replacement rates considerably, putting them on par with the benefits in the means-tested programs in Australia and New Zealand.

Though tempting, it is probably wrong to conclude that this clustering of countries around two levels of income replacement constitutes an emerging distinction between liberal welfare states and others for two reasons. First, Canada (unemployment and sickness) and the United States (unemployment) look more like European countries in terms of replacement rates. Second, 2000 is not necessarily an equilibrium position for any of these countries. Given the degree of change that has taken place in this 30-year period, one cannot have too much confidence in predicting relative replacement rates over the next decade or two.

Sickness Waiting Days

The number of waiting days for benefits for sickness insurance is typically equal to or longer than the period for unemployment insurance. It is the same in Australia, Canada, Denmark, Germany, New Zealand, and the UK. It was also the same in Finland

until reforms in the late 1990s raised the period to ten days. In Austria, France, Ireland, Italy, Japan, and Switzerland the waiting period has been three days in all four periods, and in Belgium it has been one day. In all of these countries, sickness waiting days have been higher than those for unemployment since during these periods. Norway moved from three days to none in 1972, and the Netherlands moved from two days to none in the 1996 reforms that made sick pay insurance compulsory but privately administered.

Finally, the waiting period for sick benefits has fluctuated between zero and one day in Sweden. High rates of absenteeism and allegations that the system is widely misused have caused some politicization of the issue.

Sickness Benefit Qualifying Period

Generally speaking, the qualification period—the amount of time one must pay contributions in order to receive full benefits is shorter than the same conditions for unemployment insurance. The exceptions are Australia, New Zealand, and the UK—where the qualifying period is the same.

Ireland (in 1972 and 2000) and France (in 1972 and 1980) appear as exceptions here, but due in part to our coding procedure. Based on the same qualifying conditions as unemployment, Ireland provides benefits for sickness equal to the unemployment benefit duration. However, from (at least) 1960 to 1984, the flat rate benefit is for an unlimited duration if contributions were paid for 3 years. (Unlimited flat rate benefits require 4 years of contributions from 1984.) In France, there is a shorter qualifying condition for a short-term benefit—200 hours (about 5 weeks) for up to 12 months of benefits. But there is also an entitlement for an extended benefit of 3 years for 12 months of insurance. We have coded for the qualifying period for the longer duration “extended” benefit.²⁶

As with waiting days, the qualifying period is generally consistent over time. There is no minimum contribution period for any of the years covered here in Australia, Austria, Finland, Germany, Italy, Japan, the Netherlands, New Zealand, or Sweden. There is a two-week qualifying period in Norway in all years.

²⁶ During the period of earnings related benefits in Ireland, 1973-1994, the earnings related portion is not of unlimited duration. So in those years (1980 and 1990), the duration of benefits for both sickness and unemployment programs is the same.

The qualifying period in Denmark has changed two times in the periods examined. There was a one-week (40 hours in last four weeks) requirement for employees in 1972. This was reduced to zero in 1973, and was subsequently raised to four weeks in 1997.

Besides Ireland and France (discussed above), three countries require a qualifying period that, while considerably shorter than that for unemployment benefits, is considerably longer than four weeks. Belgium required 26 weeks of coverage in all years, Canada 20 weeks, and Switzerland 13 weeks.

Duration of Sickness Benefits

The duration of sickness benefits varies considerably across countries. Moreover, there is no consistent pattern regarding the relative length of sickness and unemployment benefits. In Austria, Canada, and Japan, sick benefits are payable for a shorter duration than unemployment benefits (26 versus 30, 15 versus 36-45, and 26 versus 35, respectively). In Germany, the Netherlands, Sweden and Switzerland, maximum duration is longer (in some cases considerably) than for unemployment insurance. (Based on our coding, France would also fit in this category in most years.) And in Belgium, Italy, and the UK (along with the general-purpose programs in New Zealand and Australia), the maximum duration for both forms of insurance is the same. *Within* each of these three groupings, the length of coverage varies, though the greatest variation in the group with longer sickness benefits.

Of the remaining four countries—Denmark, Norway, Ireland, and Finland—we have already discussed Ireland’s complicated situation in the last section. Norway and Finland have consistently maintained 52-week limits on sickness benefits. (Recall that the duration of *unemployment* benefits that has grown, however.) In Denmark, reforms in 1973 made benefits payable for the length of the illness. It was subsequently reduced to 91 weeks in 1982, and to 52 weeks in 1990.

One factor that potentially would seem to complicate using the length of sickness benefits as an independent indicator of welfare state generosity is that in several countries with fixed time limits for benefits, those suffering long-term illness are (or can be) shifted to disability insurance schemes. However, since the benefits of disability schemes

generally entitle one to incomes much less than those for sickness insurance (or old age pensions), the benefits here are a substantially inferior portion of historic earnings. Thus, the sooner one is moved into one of these latter schemes, i.e., the shorter is the sick insurance duration, the worse the income replacement and less generous the regime.²⁷

Population Covered by Sickness Insurance

Measuring the portion of the active population covered by sick pay insurance is difficult for several reasons. While sick pay insurance is available only to those with work incomes (there are exceptions like Sweden and Finland where housewives or students are covered), sick pay insurance is administered by general sickness funds, which also provide medical insurance. Consequently, such funds have members (e.g., retirees or dependents who are not in the labor force) covered only for medical insurance, and official statistics often cover insurance coverage, not sick pay coverage *per se*. Further complicating the problem is the fact that some countries have a general fund and smaller sectoral funds, e.g., for government employees or the self-employed. There is some evidence in the data that these other schemes were not taken into account in Esping-Andersen's study (again we cannot be totally sure given the data available). Our method for resolving it is as follows.

In the Nordic countries, based on descriptions in various sources, the entire labor force is considered covered in 1972, when all four countries had extended coverage to at least all those with work income (including the self-employed).²⁸

In Ireland and Canada, and the UK from 1975 sickness coverage is equal to coverage for unemployment. Before 1975, we used specific program data to obtain the number of people insured for sickness, but not unemployment.

The portion of the labor force covered by sickness insurance is, for most countries, higher than we found for unemployment insurance. Sickness coverage is

²⁷ A more definitive answer to this objection would require a comparative analysis of the terms and intersection of "invalidity" and sickness insurance.

²⁸ The dates of the extension to full coverage are 1973 for Denmark, 1971 in Norway, and 1963 for Sweden 1955. In Norway and Sweden, there are minimum income requirements to claim sick pay, but these have been set very low since the 1970s. Prior to 1970, all four countries report the number insured for sick pay.

considerably higher than unemployment coverage rates in Austria, Belgium, Denmark, Finland, Italy, Japan, and Sweden, as well as in Switzerland until 1999 (when sickness benefits became something that insurance funds were not forced to provide). In all of the other countries, it is about the same. Coverage has fallen noticeably in several countries: Austria, Canada, Switzerland, and the UK.²⁹ All of these also had some evidence of decline in their unemployment insurance coverage.

Like unemployment insurance coverage, the average portion of the labor force covered by sickness insurance rose considerably in the 1970s in these countries, making such programs much closer to the ideal of universality. Figure 4 provides a picture of the evolution over time. If we exclude Australia and New Zealand, coverage rises from an average of .84 in 1972 to .87 in 1990.³⁰ Part of the explanation for slower growth compared with unemployment is undoubtedly the fact that coverage rates are already closer to 100%. The other main reason is that some countries still do not provide coverage for the self-employed or unemployed. In that period the coefficient of variation falls from a low .17 to an even lower .15. The Swiss change from mandatory insurance explains why both mean decreases and the coefficient of variation increases in 2000.

Figure 4 here

Summary

There are two major trends to report with respect to sickness benefit programs in these eighteen industrial countries. First, replacement rates have tended to increase on average over time from 1970, but leveled off after 1990. There is some evidence of clustering into two regions of high and low replacement. The results mirror those found for unemployment insurance, though the degree of clustering here is less pronounced, and the level of income replacement in the “high” groups is slightly higher. Excepting

²⁹ Switzerland is a special case, as its insurance reforms make sick pay no longer obligatory.

³⁰ As with unemployment, scores for Australia and New Zealand are not the measured rates of eligibility. These two countries were assigned a coverage score of .5 by Esping-Andersen, based on the fact that benefits are means tested.

Switzerland, coverage for sickness benefits has grown slightly since 1970 and convergence towards full coverage has increased.

Pensions

The final program covered in measuring decommodification is the retirement pension system. Esping-Andersen pays particular attention to pension systems in later parts of *The Three Worlds*, as it is the most vital of welfare state interventions into the economy. In every country examined, the majority of the retired population received most of their post-retirement age income from some type of welfare state insurance program.

To assess decommodification for this program, two types of pensions replacement rates are considered. First, “the minimum pension benefits for a standard production worker earning average wages” and second “the standard pension benefits for a normal [average production] worker [earning average wages].” Our interpretation of the minimum pension is that it is the minimum means-tested (or income tested) allowance payable to someone at retirement age if they have limited other income.³¹ We have taken the second “standard” pension to imply the replacement rate of someone earning the average wage in each year considered in qualifying for a full pension (retiring at the standard retirement age). We assume that retirement occurs at the “normal” retirement age for state pensions (e.g., at 65 in France, not 60).³²

The other three criteria in assessing pension system decommodification are the number of working years needed to qualify for the full pension, the portion of financing paid directly by the workers, and the portion of those over the official retirement age who are drawing a public pension of some form. Table 4 provides the basic data on these dimensions of pension programs.

Table 4 here

³¹ Many pension systems make provisions for a minimum pension amount for someone fully qualified, but with low earnings during the benefit determination period.

³² Some systems grant higher benefits if the pension is drawn later than the official retirement age. No such “deferment” advantages are considered.

Minimum pensions

Social pensions provide a minimum income guarantee for all pensioners who otherwise would have inadequate resources (either through work or alternative means of support the public income replacement system for such dependents is a quintessential example of decommodification through the state.) As with general social assistance more generally, the income conditions on such benefits may vary greatly across countries and time. We have assumed that the prospective pensioner has reached state retirement age, and has no other resources to speak of.

Figure 5 graphically displays the evolution of our estimates of these replacement rates. Minimum pensions have historically been quite low in Japan and Germany (where they are simply the social assistance income benefit). These pensions have tended to be the highest among the Nordic countries, the Netherlands and Austria, but since the 1980s, minimum benefits have also been generous in several erstwhile “liberal” welfare states (Canada and New Zealand!) as well as in France. While several “liberal” countries have pension systems towards the low end, many of the lowest replacement rates are in continental-style systems.

Figure 5 here

Overall, however, the average minimum pension has grown considerably since 1972, and even since 1980: it was about 27% of APW net income in 1972, 33% in 1980, and over 35% in 1990. The average fell only slightly, but remained over 35%, in 2000. Not only have minimum pension replacement rates increased, but they have also tended to catch up with those provided by the more generous Nordic countries. The coefficient of variation falls from .426 in 1972 to .304 in 1980 to .28 in 1990, to .267 in 2000. By 1990, only three countries had minimum pensions below the 18-country average in 1972.

Within-country trends generally underscore a pattern of upward convergence. After two decades of improvements, minimum pension replacement rates in 2000 in the Nordic countries are very close to their 1972 levels in Sweden and Denmark, and much lower in Finland. Only Norway saw some (modest) steady improvement over the period.

Pensions have improved most dramatically in France, rising from about 22% of APW to 43% in 2000. It also improved considerably in Belgium, Canada and New Zealand.

Standard Pension

The replacement rates for standard state pensions demonstrate a profound shift in the economic fortunes of retirees over the last thirty years. In 1972, the 18-country average replacement rate was about 41%. In 2000 it was 56%, 15 points higher. While the average rate has climbed in each year of the period examined, there has been some divergence between 1990 and 2000, though this should not downgrade the considerable convergence that took place between 1972 and 1990. The COV was .41 in 1972 and .30 in 1990. It was .30 in 2000. Austria, Italy and Belgium, have consistently had the most generous pension replacement rates. Based on our calculations, pensions in the Nordic countries have tended to be above average, but not very much so. In 2000, the least generous state pensions were in Australia, Ireland, New Zealand and Switzerland.³³ All four countries have had relatively low replacement rates in all periods.

In most cases, the replacement rates used in Esping-Andersen's (and our) calculations exclude pensions from long-standing compulsory sectoral pension funds, and other compulsory defined contribution schemes. Australia (since 1986), France (throughout the period), Netherlands (all years), and Switzerland (officially since 1982) all have such funds, which are complementary to public plans. All are defined-contribution plans which link benefits to earnings histories, and are not guaranteed by the state.³⁴

³³ In addition to the low replacement rate in New Zealand, from 1985 those with modest income in addition to the public scheme have their benefit taxed at 66%. This fell to 33% in 1999. The surtax was eliminated in 2000. Since we consider cases without other income in computing the replacement rate, these details do not affect our calculations.

³⁴ Recent reforms in Sweden and Italy move more towards a defined-contribution idea, but mostly remain state systems. Moreover, due to the long lead times of transition, retirees considered in our discussion are not affected by these aspects of the reforms. Sweden's reform however also includes a provision for 2% of income to go to a privately managed "premium" account.

As Figure 6 suggests, there has been a clear and steady trend in most countries, in particular those with state-run earnings-related schemes, towards more generous replacement rates from 1972 to 1990. This follows from the fact that since most pension systems began after 1945 and as late as the 1960s, those receiving pensions in the 1970s and 1980s (and into the 1990s in some cases) were not fully insured under the terms of the provisions, and received less than the intended target benefit rate. Unlike provisions for unemployment and sickness insurance, it is arguably the “maturation” process already embedded in old programs, and not necessarily the *increasing* willingness of government authorities to lavish benefits on retirees that explains the growth in replacement rates, and pension spending more generally.³⁵

Figure 6 here

In several countries, the trends in Figure 6 can certainly be attributed to the program “maturation” process. This is true in Austria (to 1985), Canada (to 1976), Denmark (to the present), Finland (to 2002), Japan (to 1985), Norway (to 1988), Sweden (to 1980), and the UK (to 1998).³⁶ In the other countries, the Netherlands, Belgium, Finland, Norway, and Sweden, and the United States, benefits systems granted some higher pension accrual rates to those already in the workforce, in effect providing more privileged terms for their benefits. For instance, in Sweden, entitlement for the first 20 years of the program up to 1980 was 3% per year of contributions. From 1980 to 1990, the annual accrual rate fell gradually to 2%, thereby gradually increasing the full-contribution period to thirty years. Norway made similar provisions, with those born before 1917 getting full earnings related percentage with 20 years of coverage, increasing

³⁵ One might argue that the programs were fiscally problematic from the beginning, or that governments failed to steer programs during this period. Nevertheless, it is seldom the case that in the terms of the basic pension system intent, replacement rates grew more generous after the early 1970s.

³⁶ For the UK, the same can be said of the earnings related pension that preceded SERPS, the graduated pension. Annual benefits for that pension based on a percentage of total contributions paid. These benefits were payable to those who contributed during that time.

annually to a maximum of 40 years. In the US, benefits for those retiring since the late 1970s have been based on covered earnings since 1950 (or age 21 if later).

Years of Contribution to Receive the Standard Pension

The number of years required to qualify for a standard pension is the third element of pension programs considered by Esping-Andersen in developing the decommodification index. Qualification periods cover the number of years in which one must pay contributions. A shorter period of qualification implies that benefits are independent of labor market performance, even in cases where benefit amounts are determined by earnings while in the labor market.³⁷

Since 1972, the actual qualifying conditions for receipt of what is measured as the standard pension have tended to either remain stable or increase. They have been stable primarily in the countries with an already “mature” earnings-related pension insurance for workers, and, where there are no contributions: in New Zealand and Australia. (Note that the flat-rate pension here is not income tested in the former, but is in the latter). Viewed graphically in Figure 7, qualifying conditions are perhaps the most extreme example of “commodifying convergence”—that is, benefits have become more closely tied to long-term earnings—among any of the programs examined. The average number of contribution years was 22 in 1972, and 35 in 2000, and the coefficient of variation fell from .70 in 1972 to .40 in 2000.

Figure 7 here

The reasons for these trends are relatively simple, and as with pension replacement rates, are best explained by system maturation. In several countries, those with long-standing earnings-related social insurance programs—Austria, Germany, France, Italy, UK—pension programs were already “mature”—that is, they had been

³⁷ Several other alternative measures of qualification could be considered here. The first is the minimum number of years to qualify for any (not the standard) pension. This would be analogous to the “vesting” period. A second alternative would include the wage basis on which benefits are calculated, for example, whether the calculation is made on the basis of the last few years of earnings or on the entire working life.

around through the entire working life of a retiring birth cohort—by the early 1970s. A number of other countries have lower qualifying periods for the “standard pension” in various years because they either a) granted special conditions on transitional workers to give them the statutory amount (or percentage), or b) limit the standard pension claimed to the number of years in insured employment.

The qualifying conditions for pensions in a several countries are notable exceptions. In New Zealand, there is only a residency requirement, and in Australia there is only a residency requirement and income-test. In Ireland, the conditions for receiving the pension have been changed several times over the last thirty years, with the most recent provisions allowing one to claim a retirement pension having paid full contributions only since 1979. Previously, the system was linked to contributions paid starting in 1960.

One important point to underscore in these qualifying data is that, in most of the cases in which qualifying periods have gone up, the program rules originally provided for such an evolution. In some cases the systems were designed to grant only partial benefits for partial coverage (e.g., the Canadian system), in others full benefits were granted basically immediately (e.g., the Belgian system), while other pension systems seemed to split the difference: granting accelerated but not full qualification conditions, and gradually lengthening them (e.g., all of the Nordic earnings related systems).³⁸

Funding Provisions for Pensions

The fourth criterion used in the decommodification index is the portion of funding of pension insurance that is borne by the eventual pension recipient. This is presumed to be decommodifying in that a lower burden on the employee “socializes” the pension

³⁸ For example, the standard pension in Sweden for a person retiring in January 1972 has an earnings related (nominal) replacement rate of 36% of past earnings, because someone fully covered could only be insured for 12 years (at the then prevailing 3% accrual rate). By 1980, that replacement rate was the full 60%, because a fully covered person would then be covered for 20 years at the 3% rate. After 1980 however, the accrual percentage was reduced year by year until it reached 2% (thus 30 years of contributions) in 1990.

funding provision.³⁹ To measure this aspect of pension programs, we look directly at the tax rates paid by the employee as a portion of the total payroll tax rate.⁴⁰

In a plurality of countries—Austria, Belgium, Canada, Germany, Japan, Switzerland, and the US—the contributions are roughly split 50/50 between employer and employee for all years covered. In Australia, Denmark, New Zealand, Norway, and Sweden (since the early 1970s at least), employees share is close to zero. In Australia, Denmark and New Zealand, this is because the cost is entirely or primarily financed by the general government. In Norway and Sweden, employers bear all (or a very large portion) of the cost. Finland also has a very low portion of pension insurance funded by employee social charges. Except for the Netherlands, which requires that the entire burden of the basic pension be paid by employee taxes, the other countries all have systems that impose a somewhat greater burden on the employer than the employees.

Generally speaking the country ratios have changed little appreciably over the years. The largest change has probably occurred in Ireland, where the employee's relative burden has decreased from .45 in 1972 to .33 in 2000. It is also notable that the burden in Sweden fell from .5 in 1972 to 0 in the 1970s, and it is now limited to half of the new premium pension contribution, and none of the (reformed) earnings-related system.

Take-up Rate

The final characteristic of pension system generosity used in the decommodification index is the portion of retirement age people receiving public pensions of some kind. Ideally, data on pension take-up rates would classify individuals

³⁹ There are obvious problems with this line of reasoning from an economic point of view. All else equal, the portion of the pension insurance not funded by the employee may well be lost in wages, if, as is usually the case, the employer pays. While this may have positive benefits for workers in situations in which they have little control over their wages (and also reinforces social solidarity when compared to a completely individualized account), the distinction may be less relevant where labor has more collective control over wages; that is, precisely those countries where workers are (or were) least likely to pay high social insurance premia for pensions.

⁴⁰ We use the tax rates provided in *Social Security Programs throughout the World*. In some case this understates employer contributions since those are made on total payroll, while have an (usually high) income ceiling for contribution purposes.

in direct receipt of different types of retirement pensions, for example, distinguishing between those receiving contributory and non-contributory (i.e., income-tested) pensions. Of course, even if one could distinguish between contributory and income-tested pensions in force, it is not obvious that income-tested portion of pensioners are somehow less “commodified” in terms of public provision for old age. Indeed, though they may be stigmatizing, they nevertheless serve the function of allowing for a minimal (if not decent) living standard for those permanently out of the labor market.

Based on our review, there is no indication that such a distinction could be made for many countries. Perhaps more importantly for replicating Esping-Andersen’s index, there is no indication that such a distinction, where it could be drawn, actually was made.⁴¹

Another problem encountered in our assessment of pension take-up rates is the exclusion of public pensioners in the calculation of total pensioners, which tends to depress apparent take-up rates in countries with separate systems for government employees. Thus, for example, pension take up in *The Three Worlds* for the United States in 1980 appears to be around 90%, or very close to the portion of the over 65 population receiving Old Age or Supplemental Security payments from the federal government. However, if one considers the 600,000 or so people receiving federal employee pensions and the 2-3 million (precise figures are not available) receiving state, local and municipal government pensions in that year, the coverage rate is probably universal.⁴²

⁴¹ For example, Ireland distinguishes between the number of contributory and non-contributory pensions in payment, of which more than half (132,000 of 224,000) were non-contributory. Taking only the contributory pensions into account (and adding widows pension paid to those above retirement age) produces a coverage rate of 40% in 1980. This would imply that the raw score for pension programs (see Part X below) in Ireland was about 17 or equal to Sweden’s raw score. Given the very low replacement rates, this cannot be the case. Combining contributory and non-contributory pensions and that for widows over retirement age produces a coverage rate of about .75, which corresponds to a raw pensions score of about 9 (8.93).

⁴² Government employees at all levels were generally not eligible for Social Security from those jobs until the late 1980s. We estimated the coverage by taking two-thirds of government pensioners (a very rough estimate) under the assumption that the other one-third would be receiving Social Security payments based on adequate employment in the private sector.

Figure 8 here

As we have seen for other dimensions of the pension system, public pensions have been increasingly universal. Figure 8 shows the evolution of take-up rates. The average increases from about 86% of those above retirement age in 1972 to about 97% in 2000.⁴³ In 1972 coverage was essentially universal (95%+) in six countries: Canada, Finland, New Zealand, Norway, Switzerland, and Sweden. By 1980, the number had only risen to nine, but by 1990, fourteen of the eighteen had full coverage. Of the four countries without full coverage, Australia has means-tested pensions, and those who are not covered by the means-tested system are presumably adequately covered by other (e.g., private) insurance. (The portion failing to meet the short residency requirements is likely small.) Data for the remaining two countries, Germany and Ireland, do not include civil service pensioners, and so probably underestimate the take-up rate. It is probable that the number of civil service pensioners above the standard retirement age would move both countries much closer to universal take-up.⁴⁴

Summary

Public pension systems to insure old age are probably the largest single government intervention in the economy in the twentieth century. In most of the countries here, they account for the bulk of government transfer spending. The rules governing pension insurance are certainly subject to short-term changes, but they are designed to redistribute income across a vast time scale (25-45 years or so). In presenting the characteristics of national pension systems over the last three decades, it is essential

⁴³ These averages exclude Australia because its coverage value for the index is not based on the portion of people actually receiving the pension. (See fn. 29). The actual number of age pensions paid is equal to around 65% of the population over 65.

⁴⁴ Based on Esping-Andersen's decommodification index, it is likely that these coverage figures used for both countries (i.e., Flora, 1986, volume 4) did not consider public sector pensions

to realize that, for almost all countries, many of their transitional features may not be fair characterizations of their “end states.”

Overall there are two trends in the provision of pensions. The first is the expansion of pension income replacement rates from the early 1970s to the 1980s and perhaps to the early 1990s. Since that time, there has been some stagnation in many cases, and retrenchment in a number of others. In terms of the funding provisions, most countries have maintained their employer/employee mix of funding. With regard to qualifying conditions and coverage, both have converged considerably. In the case of the former, this can be seen as a trend that increases the relationship between market performance and pension benefits, and so counteracts the rise in standard pensions at least. The trends in coverage point again to the universalization of pension programs.

Computing Decommodification

In Esping-Andersen’s *The Three Worlds of Welfare Capitalism*, the indices for welfare program decommodification in 1980 convert data like that just reviewed applying the following procedure:

1. Country data on each dimension—except the unemployment and sickness coverage rates and the pension take-up rates—are compared to the 18-country mean and standard deviation for that dimension. The standardization procedure dropped extreme outliers in several cases.
2. If the value for the country falls between -1 and 1 standard deviation of the sample mean, it receives score of 2. If it is more than one standard deviation from the mean, it is scored 1 or 3, depending on whether a lower score reflects greater or lesser decommodification. A higher replacement rate (all three programs) or benefit duration (unemployment and sickness programs) indicates greater decommodification. A higher qualifying period (all three programs), more waiting days (unemployment and sickness programs), and higher employee contribution ratios (pension program) indicates less decommodification.

3. The four scores for each program are then summed, with the replacement rate scores doubled (to reflect the singular importance of replacement rates over the other program dimensions). Thus, the country scores for the sickness and unemployment programs range from $5 = (1*2+1+1+1)$ to $15 = (3*2+3+3+3)$. The scores for the pension program range from 6 to 18, because there are two double-weighted replacement rates in the computation.
4. Each of the countries program scores from step 3 is weighted by the appropriate coverage/take-up rate. The chief exception here is that countries with means-tested only programs (i.e., all three programs in Australia, and sickness and unemployment benefits in New Zealand) are given a low coverage score (.5) to reflect the high level of conditionality of such benefits.⁴⁵ Since the US has no sickness cash benefit program, it receives a score of zero for that program.
5. To get the combined decommodification score, the three program decommodification scores in step four are summed.⁴⁶

The first step in our reassessment of the decommodification scores is to compute our results for 1980 to see how they match up. We do not expect a perfect fit and would argue that the scores we use are quite defensible, and in a few cases (e.g., take-up rates in the US and the unemployment replacement rate in Italy) more consistent with coding criteria laid out in the book.

Table 5 provides for each dimension of the index in Step 1 above, the summary statistics, and, where relevant, notes the outlying cases that we dropped in computing them. To give a real sense of how the scoring works, we give the following example. We code the net replacement rate for unemployment insurance in Denmark in 1980 as .81.8%. Based on the mean and standard deviation for “Unemployment Replacement

⁴⁵ This decision serves as the basis for Castles (1994) critique of Esping-Andersen’s treatment of the Antipodean countries.

⁴⁶ There are arguably important methodological objections to the general method of scoring the data. Why is the use of a standard deviation appropriate here? Assuming it is, why is it then not adequate to use standardized scores?

Rate” in Table 5 (which represents the mean and standard deviation in 1980 of all 18 countries), the Danish value is 1.02 standard deviations above the mean. It thus receives a score 3 for that dimension. Values for each country and dimension are scored in an analogous way, with exceptions as noted in the Table.⁴⁷

Table 5 here

Following the procedures outlined above, we obtained our decommodification scores. They are graphed against the scores provided on pages 50 and 52 of *The Three Worlds* in Figures 9-11.

Figures 9-11 here

The results suggest largely similar results for unemployment and sickness.⁴⁸ However, the results for pension programs are not particularly close, especially when one considers that we are probably relying on similar original data sources. Scores for several “liberal” welfare states are somewhat higher in our index, and scores for several “conservative” and “social democratic” welfare states are lower. Because the scoring system used makes each countries score dependent on coding of the other countries, explanations for differences in the two indices may not be linked simply to coding for a deviant country, but to coding of other countries.

Scores for Australia, Ireland and Canada are somewhat higher, while scores for the United States and New Zealand are considerably higher. The reasons for this are impossible to know with certainty, but there are several likely reasons. For the United States, the corrected take-up rate makes the US score higher than what appeared in *The Three Worlds*. Second we calculated the benefit using the Social Security Administration’s PIA calculator. This may have provided a higher benefit than the calculation used in *The Three Worlds*. Social Security benefits are also not taxed if they

⁴⁷ The procedure for the computations were automated and run in Stata. The dataset and program code is available from the authors.

⁴⁸ The correlations for unemployment, sickness and pensions respectively are .91, .98 (with or without the US), and .76, respectively.

are the only income. Third, benefits are calculated on the basis of wages from 1950, so a worker retiring in 1980 only needed 30 years to qualify for the full pension, not a full working life.

More puzzling are the results for New Zealand, which scores below the mean in the book, but well above the mean here. New Zealand requires no contribution or employment for entitlement, and the pension is funded completely from general taxes.⁴⁹ Coverage is close to universal. The most likely explanation for the difference is the replacement rate. New Zealand has a flat rate pension, and the minimum and standard pension replacement rates to be the same. Based on our calculations from the after-tax benefit, the replacement rate of 40%, is moderately generous by minimum pension standards, and safely above the lower cutoff for the standard pension scale (though on the low end.) It is plausible that if the original OECD data were used for the APW wage in 1980, a lower replacement rate would have been estimated. (The OECD's APWs used only male earnings in the computation for 1972-1978, 1980 and 1982.)⁵⁰

Our pension scores are well below Esping-Andersen's values for Denmark, Germany, and Sweden. For Sweden, the score is two points lower on our index (15 versus 17). The only viable explanation is the coding with respect to the standard replacement rate. It is scored 2 for both replacement rates in our calculation; a score of 3 would give it a 17. Since our estimate of Sweden's standard pension replacement rate is less than 5 points from the upper cut off (see Table 5), it is possible that the difference is the result of measurement error.⁵¹

For Germany, the problem may lie in the interpretation of the qualifying condition and replacement rate. One can draw a pension in Germany at age 65 with as little as 15 years of insurance. However, this is the minimum condition. In principle, it would entitle one to a gross replacement rate of 22.5% (15 years*1.5% accrual). However, the actual pension base is determined by a ratio of worker earnings to national earnings in the

⁴⁹ Changing the qualification period from 0 years to 10 does not change the result. Ten years is still short enough to be scored a 3.

⁵⁰ If true, this underscores how using discreet values, rather than a more continuous measure, can magnify the impact of relatively small measurement errors. The problem is further magnified by the fact that by multiplying the replacement rate score by two, a miscode has twice the effect on the overall score.

⁵¹ If so, this only underscores the problem with the decommodification scoring method.

period of coverage (taken here to be 1) multiplied by years of coverage and then multiplied by the general computation base (*Aktueller Rentenwert*). This results in a much lower replacement rate. For example, the actual gross replacement rate based on 15 years of coverage and the value of the computation base in 1980 would be about 16% (24% net). Full coverage for the 45-year working life we have assumed for all countries would result in a gross replacement rate of about 47% (69% net).

The three point lower score for Denmark in our ranking is most likely due to its score on one of the replacement rate dimensions and for qualifying conditions. The minimum pension replacement rate is just below the cutoff point (41.9 versus 42.9). With respect to qualifying conditions, it is possible that Denmark is scored a 3 in the book, since its universal pension (and full supplement) is paid with only a residency requirement. However, the flat rate earnings related (ATP) pension payable is based on all contributions to that fund since the start of the program in 1964. Thus we've coded the qualifying years as 16, which would change the country's score from a 3 to a 2.⁵²

Many of the differences just discussed indicate how the scoring system used here can magnify small discrepancies in the coding at the program level. Nonetheless, can we still say that, in the aggregate, a country's degree of decommodification in 1980 corresponds to the "type" of welfare state it is? To find out, we sum the three program scores and compare them in Table 6.⁵³

Table 6 here

Esping-Andersen's scores correspond to the general three worlds typology with two exceptions. Finland scores in the middle, which deviates from its typical characterization as a Social Democratic welfare state. Japan also deviates in that its level of commodification places it squarely in the "liberal" group. Among the social democratic welfare states, scores are very close. In our ranking, there are two additional

⁵² The ATP flat pension adds about 8% to the pension. This increases the net replacement rate by about 5 points. While this difference is not enough to change the score on the 1-3 scale, it seems consistent to count this supplement in the computation.

⁵³ The aggregate score for Japan in *The Three Worlds*, 27.1, misstates the score. As far as we can tell, analysis later in the book uses the correct figure that we have reported here.

countries whose decommodification scores are out of character with the Three Worlds typology. Ireland's score is considerably better, ranking in the middle of the pack rather than among the more commodifying welfare states. Italy's rank is much lower, placing it more in the "liberal" camp in terms of commodification. The other fourteen countries score more or less consistently with the typology.

Are these differences meaningful? Ultimately, of course, whether these differences have affected substantive results would require a reassessment of previous empirical studies. While this is somewhat an issue of judgment, it would seem significant that almost a quarter of the cases (four of eighteen) are not true to type. The significance of these differences in empirical work relying on the decommodification scores in the published tables in *The Three Worlds* is even larger, however. Because of the typographical error for Japan, the reported table implies that only one country (Finland) is not true to type. Moving from one discordant case in eighteen to four is a large change. Moreover, in our data the difference between the scores of Denmark and Sweden and the more decommodifying continental welfare states are not as distinctive. In fact, Denmark scores closer to Austria and Switzerland, than to Sweden. Moreover, Norway emerges as clearly the most decommodifying welfare state in 1980. Perhaps most intriguingly, based on our index, the United States does extremely well in the two categories for which it has national programs. If the US were to have a minimal, universal sickness insurance program, its score would rise by at least 5 points, putting it ahead of Germany in the overall index.

Decommodification over Time

Another important question for contemporary research on the development and evolution of the welfare state is whether the correspondence between decommodification and welfare state types is consistent over time. As noted in the introduction, the assumption typically made in the literature is that the differences in welfare state type and degree of program generosity are more or less constant. In other words, cross-sectional variation in 1980 can be taken as basically constant over time. The review of program characteristics measured over time in the first part of this paper suggests that such an assumption may be incorrect.

To assess this evolution, we estimate a cross-sectional time series of decommodification for all eighteen countries, using the program data presented in the first half of the paper. The scores are based on the same approach outlined in the last section. We use the same means and standard deviations that were used in scoring countries for 1980, making this year the baseline.⁵⁴ Figure 12 plots country decommodification scores for 1972, 1980, 1990 and 2000. The figure suggests several important findings about the welfare state.

First, from the vantage point of the early 1970s, it is hard to distinguish regime differences in welfare state decommodification that are consistent with a “three worlds” typology. At that time, Sweden and Norway and the Netherlands stand out as decommodifying welfare states for the period. However, the overall level of decommodification is limited. Their program characteristics in 1972 would hardly distinguish them from several of the conservative welfare states in 2000. One of the erstwhile social democratic regimes, Finland, lies somewhere close to the middle of the pack, behind conservative regimes like Belgium, Austria and France, and even behind Canada.

Figure 12 here

On the other end of the spectrum, it is hard to separate liberal from conservative regimes in terms of decommodification. Canada, classified as a liberal regime, scores above average in 1972. Moreover, several conservative regimes, Italy, Switzerland, and Japan, all have lower scores than the UK and New Zealand. Based on the typical three-fold classification, at least six of the countries (Denmark, Finland, Canada, Switzerland, Italy, and Japan) do not score true to type.

One implication of this result is that the distinctive differences in welfare state outcomes are more recent than has sometimes been assumed. *The Three Worlds* argues that distinctive state society relations going back to the first half of the 20th century (at least) explain key regime differences. (His more recent work, consistent with our results,

⁵⁴ Alternatively, one might use the mean and standard deviations for each program for all years as the basis for scoring countries on the 1-3 scale.

claims that the regime distinctions are more recent (Esping-Andersen 1999).) Of course, it is possible that looking further back in time would suggest that our data in 1972 are atypical, but this seems unlikely. Indeed, many aspects of what make the social democratic welfare state programs distinctive emerged in the 1960s.

What about the most recent year, 2000? How consistent is the three-fold typology of welfare states in predicting decommodification in the present? The results from Figure 12 imply that today, the “three worlds” typology works *even better* with respect to these measures of welfare state decommodification than it did in any previous period.

Among the best performers in this regard, the results are more “true to type” than they were for 1980 (by our or Esping-Andersen’s measure). Four of the top five performers are the Nordic social democratic regimes. Finland catches up to the other countries considerably in the 1980s and 1990s. One notable difference *among* the Nordic countries (which dates from the 1980s) is that Norway’s performs *much* better than the other three. (Given that its oil wealth relaxes a fiscal constraint that affects the other countries, this may not be surprising.) Another notable difference is that, excepting Norway’s unique situation, Denmark, not Sweden, might lay claim to the most decommodifying welfare state in the Western world.

At the other end of the scale, Italy’s development appears to place it more squarely in the middle of the pack, characteristic of a conservative regime. The score for Japan continue to be somewhat lower than we would expect from a “conservative” regime. Switzerland’s score falls considerably, largely as a result of the erosion of coverage for sickness insurance, making it too appear to be a rather commodifying regime for a historically conservative welfare state.⁵⁵

Conclusion

Given the seminal status of *The Three Worlds of Welfare Capitalism* in the comparative welfare state literature, it is perhaps surprising that the indices developed by

⁵⁵ Given the long-standing problems that scholars have had in placing Japan and Switzerland in a variety of their international rankings of political economic institutions, one is tempted to discount their “deviant” placement in evaluating the scale for the others.

Gøsta Esping-Andersen have not been re-examined to any great extent in the years since the book's publication. This lacuna is all the more considerable given the crucial role that the decommodification index, in particular, has had in shaping the dominant "Three Worlds" typology of welfare states that has come to dominate research in subsequent years.

Employing data from our new Comparative Welfare State Entitlements Data Set, in this paper we have attempted to fill this gap in the literature by examining trends in welfare state decommodification over a longer period covering almost three decades at the end of the twentieth century. Looking at trends in benefits since the early 1970s, we can see a general trend of expansion in benefit generosity from the 1970s, until benefits largely entered a period of stagnation or even decline in the 1980s and 1990s. In terms of trends in decommodification, the discussion above suggests that while the "Three Worlds" typology remained relevant at the end of the twentieth century, its origins are perhaps more recent than was commonly assumed. These findings not only have implications for, for example, institutional "path-dependent" theories about the development of welfare states, but they also demonstrate the clear advantages of using time-series rather than cross-sectional data when comparing the welfare states of advanced industrial democracies.

Appendix: Information on the Computation of Benefit Replacement Rates.

The replacement rates calculated for this paper relate exclusively to single individuals without spouse or children. This conforms to the household type used in *The Three Worlds*. In many cases, replacement rates for families are higher due to the existence of untaxed family benefits, and various (usually flat amount) tax breaks provided for spouses and children.

The procedure for calculating benefits requires information on the benefit amount, the average production worker wage, and the tax structure. The general formula used was:

Net Replacement rate= (benefit-income taxes-social charges)/(APW-taxes-employee social charges]

Benefit information was provided from a variety of sources, in most cases from national ministries or agencies in charge of the programs in question. Where such information was lacking, we relied on the Social Security Administration's *Social Security Programs throughout the World*, which has been published biannually from 1967 to 1999 and in 2002. For current EU members (plus Norway), information for 2000 was obtained from the MISSOC program information (currently for 2000-02).

APW wage and tax structure information was in some cases provided by national governments. For most countries, however, we relied on information from the OECD, which has been published in various degrees of detail from 1972. (Income taxes and social charges are not in all cases assessed on benefits.) The tax computations take into consideration "standard" deductions or credits only. Because the basis of wage estimates for the years 1972-1978, 1980 and 1982 were in most cases based on average male wages, we were forced to revise the OECD estimates for wages. (This lowered the absolute and net wage.) In so doing we tried to use the same sources relied on by the OECD in years 1979, 1981, and 1983.

For sickness and unemployment benefits, the benefit is the amount paid for the first six months of the benefit, annualized by multiplying by two. Annualization was necessary because tax data exists only on an annual basis. Since waiting periods are

considered as a separate variable, the benefit is calculated from the first day of unemployment or illness. We have included in the sickness benefit, any period in which the employer is legally responsible for paying benefits. As with pension benefits below, the amounts provided do not include other means-tested benefits that such as housing benefits, special payments for winter heating bill, or in-kind benefits (like the food stamp program in the United States.) If the benefit is based on a fixed level of payment (such as a flat rate benefit for unemployment), we generally used the benefit payable on April 1 of the year in question. Where the benefit is for a percentage of “past” wages, we used the current year’s APW as the base.

For the standard pension, we assumed that the worker earned the APW in each of the preceding 45 years, and claimed retirement on the first day of the year in question. This meant that only wages/contributions prior to the year of retirement were considered in calculating benefit amounts. Benefit amounts were determined based on specific pension program information that was generally taken from either *Social Security Programs* or national sources. Generally, countries use some modified wage history in determining the benefit amount. With the exact same wage history, two different rules may imply somewhat different replacement rates.

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Table 1: Dimensions of the Decommodification Index

Core Program	Program Characteristic	Definition
Unemployment Insurance	Replacement rate	After-tax benefit for single, fully insured 40-year old individual earning average production worker (APW) wage divided by after tax wage of fully employed APW
	Qualifying period	Weeks of insurance/employment required to qualify for benefit
	Waiting days	Number of days before benefits start
	Duration of benefit	Weeks benefit is payable for fully insured 40 year old in unemployment
	Coverage ratio	Percentage of the labor force covered for unemployment insurance
Sickness Benefit	Cash	
	Replacement rate	See definitions under unemployment insurance
	Qualifying period	
	Waiting days	
Duration of benefit		
	Coverage ratio	
Retirement Pensions	Minimum replacement rate	After tax income replacement rate for retiree with no other income or work history
	Standard replacement rate	After tax replacement rate for person with a history of APW earnings in each of a 45 year working life, taken at normal retirement age.)
	Qualifying period	Years of insurance or contributions needed to qualify for standard pension defined above
	Contribution ratio	Employee contribution to pension/(Employee+Employer Contribution), taken at time pension is granted
	Coverage/take-up rate	Portion of population over retirement age receiving a public pension (incl public employees)

Table 2: Unemployment Insurance Decommodification Data

	Year	Repl.	Qual	Wait	Duration	Coverage		Year	Repl.	Qual	Wait	Duration	Coverage
		rate	Weeks	Days					rate	Weeks	Days		
Australia	1972	23.6	0	7	no limit	0.5	Italy	1972	10	104	0	26	0.48
	1980	25.8	0	7	no limit	0.5		1980	4.1	104	0	26	0.46
	1990	30.1	0	7	no limit	0.5		1990	20	104	0	26	0.5
	2000	27.5	0	7	no limit	0.5		2000	41.7	104	0	26	0.5
Austria	1972	46.4	20	7	30	0.65	Japan	1972	66.3	26	7	35	0.43
	1980	58	20	0	30	0.69		1980	68.8	26	7	35	0.45
	1990	58	20	0	30	0.68		1990	66	26	7	35	0.49
	2000	56	26	0	30	0.66		2000	71	26	7	35	0.5
Belgium	1972	56	75	1	52	0.83	Nlds	1972	84.9	26	0	26	0.87
	1980	67.1	75	0	52	0.85		1980	86.2	26	0	26	0.88
	1990	64.2	75	0	52	0.84		1990	77.2	26	0	26	0.89
	2000	62.9	78	0	52	0.84		2000	73.4	26	0	26	0.88
Canada	1972	69.9	52	14	43	0.89	Norway	1972	51.4	30	3	21	1
	1980	56.6	52	14	43	0.8		1980	70.2	4	3	40	1
	1990	65.6	52	14	35	0.79		1990	67.5	4	3	80	1
	2000	62.8	52	14	36	0.79		2000	65.1	4	3	156	1
Denmark	1972	77.1	52	0	52	0.35	NZealand	1972	32.2	0	7	no limit	0.5
	1980	81.8	26	0	442	0.61		1980	30.6	0	7	no limit	0.5
	1990	67.9	52	0	442	0.71		1990	34.2	0	14	no limit	0.5
	2000	61.5	52	0	208	0.83		2000	26.3	0	14	no limit	0.5
Finland	1972	54.6	26	5	30	0.47	Sweden	1972	80.6	52	5	40	0.6
	1980	34.4	26	5	40	0.62		1980	78.7	52	5	60	0.72
	1990	62.7	26	5	100	0.67		1990	85.8	52	0	60	0.74
	2000	58.8	43	5	100	0.74		2000	66.6	52	0	60	0.85
France	1972	43.3	13	0	52	0.76	Switz	1972	30.6	26	1	18	0.16
	1980	68.3	13	0	52	0.75		1980	68.5	26	1	30	0.92
	1990	71.2	104	0	195	0.77		1990	72.1	26	2	50	0.88
	2000	70.1	104	0	117	0.8		2000	71.6	26	5	30	0.87
Germany	1972	62.5	104	0	52	0.72	UK	1972	51.1	50	12	26	0.74
	1980	68	104	0	52	0.75		1980	45.8	50	12	26	0.88
	1990	63	156	0	52	0.74		1990	19.9	10	3	52	0.8
	2000	60	104	0	52	0.7		2000	19	10	3	26	0.82
Ireland	1972	24	48	3	52	0.72	US	1972	65.7	26	7	26	0.7
	1980	60	48	13	65	0.85		1980	69	26	7	26	0.82
	1990	35.1	48	18	65	0.9		1990	58	26	7	26	0.86
	2000	27.7	39	3	65	0.97		2000	57.8	26	7	26	0.91

Table 3: Sickness Insurance Decommodification Data

		Repl. rate	Qual Weeks	Wait Days	Duration	Coverage			Repl. rate	Qual Weeks	Wait Days	Duration	Coverage
Australia	1972	23.3	0	7	no limit	0.5	Italy	1972	76.6	0	3	26	0.66
	1980	28.1	0	7	no limit	0.5		1980	68.5	0	3	26	0.66
	1990	30.1	0	7	no limit	0.5		1990	73.7	0	3	26	0.70
	2000	27.5	0	7	no limit	0.5		2000	76.1	0	3	26	0.70
Austria	1972	68.9	0	3	26	0.98	Japan	1972	50	0	3	26	0.56
	1980	76	0	3	26	1		1980	51.6	0	3	26	0.56
	1990	80	0	3	26	0.96		1990	56.6	0	3	26	0.59
	2000	82	0	3	26	0.95		2000	60.8	0	3	26	0.58
Belgium	1972	79.3	26	1	52	0.79	Nlds	1972	84.9	0	2	52	0.87
	1980	71.9	26	1	52	0.85		1980	86.2	0	2	52	0.88
	1990	80	26	1	52	0.96		1990	77.2	0	2	52	0.89
	2000	80.4	26	1	52	0.91		2000	73.4	0	0	52	0.88
Canada	1972	69.9	20	14	15	0.89	Norway	1972	51.4	2	3	52	1
	1980	56.6	20	14	15	0.8		1980	100	2	0	52	1
	1990	65.6	20	14	15	0.79		1990	100	2	0	52	1
	2000	62.8	20	14	15	0.79		2000	100	2	0	52	1
Denmark	1972	77.1	4	0	52	0.83	NZealand	1972	32.2	0	7	no limit	0.5
	1980	81.8	0	0	9999	1		1980	35.6	0	7	no limit	0.5
	1990	68	3	0	52	1		1990	38.6	0	14	no limit	0.5
	2000	61.4	3	0	52	1		2000	26.3	0	14	no limit	0.5
Finland	1972	67.8	0	7	52	1	Sweden	1972	69.9	0	0	no limit	1
	1980	40.8	0	7	52	1		1980	92.9	0	1	no limit	1
	1990	88.1	0	7	52	1		1990	82.4	0	0	no limit	1
	2000	75.5	0	9	52	1		2000	79.9	0	1	no limit	1
France	1972	50.9	52	3	156	0.73	Switz	1972	80	13	3	104	1
	1980	50.7	52	3	156	0.74		1980	83.2	13	3	104	1
	1990	58.5	52	3	156	0.77		1990	81.1	13	3	104	0.94
	2000	57	52	3	156	0.8		2000	80.4	13	3	104	0.24
Germany	1972	100	0	0	78	0.70	UK	1972	51.1	50	12	26	0.81
	1980	100	0	0	78	0.74		1980	45.8	50	12	26	0.88
	1990	100	0	0	78	0.73		1990	28.3	10	3	52	0.80
	2000	92.3	0	0	78	0.73		2000	22	10	3	26	0.82
Ireland	1972	24	156	3	no limit	0.72	US	no sickness program					
	1980	60	48	3	65	0.85							
	1990	35.1	48	3	65	0.90							
	2000	27.7	260	3	no limit	0.97							

Table 4: Pension Insurance Decommodification Data

	Year	Repl.	Repl.	Contrib	Qual	Coverage		Year	Repl.	Repl.	Contrib	Qual	Coverage
		Rate	Rate						Rate (Min)	Rate (Stand)			
Australia	1972	22.2	22.2	0	0	0.5	Italy	1972	12.6	69.4	0.33	40	0.6
	1980	28.3	28.3	0	0	0.5		1980	19.6	63	0.3	40	0.8
	1990	32.2	32.2	0	0	0.5		1990	26.9	71.6	0.28	40	1
	2000	30.9	30.9	0	0	0.5		2000	29.4	91.8	0.27	40	1
Austria	1972	41.4	88.9	0.5	45	0.78	Japan	1972	4.9	15.1	0.5	17	0.63
	1980	42.2	84.9	0.47	45	0.87		1980	19.1	52.5	0.5	25	0.94
	1990	40.5	87.1	0.45	45	1		1990	17.1	47.2	0.5	35	1
	2000	49	89.2	0.45	45	1		2000	22.7	47.9	0.5	40	1
Belgium	1972	16	68	0.43	26	0.9	Nlds	1972	43.6	42.9	1	15	0.79
	1980	27.6	68	0.41	34	1		1980	51.8	51.8	1	23	0.82
	1990	37.3	71	0.46	44	1		1990	48.1	47.2	1	33	1
	2000	37.7	74	0.46	45	1		2000	50.1	50.1	1	43	1
Canada	1972	28.3	27.9	0.5	10	0.98	Norway	1972	39.7	43.8	0	5	1
	1980	28.7	34.5	0.5	14	0.95		1980	42.5	54.6	0	13	1
	1990	41.7	43.5	0.5	24	0.95		1990	43.3	62.4	0	23	1
	2000	42	47	0.5	34	0.97		2000	43.9	57.8	0	40	1
Denmark	1972	45.5	50.8	0	8	0.89	NZealand	1972	32.5	29.8	0	0	1
	1980	41.9	45.2	0	16	0.9		1980	40.4	40.4	0	10	0.97
	1990	50.9	58.4	0	26	0.95		1990	41.2	41.2	0	0	0.99
	2000	45.7	52.9	0	36	1		2000	39.9	39.9	0	0	0.93
Finland	1972	37	35.5	0.15	40	0.98	Sweden	1972	36.5	50.9	0.5	20	1
	1980	42.5	54.2	0.12	40	0.98		1980	43.2	63.5	0	20	1
	1990	37.9	58.3	0.07	40	1		1990	42.8	65	0	30	1
	2000	31.4	66.7	0.16	40	1		2000	36.2	60	0.05	30	1
France	1972	23.4	48.3	0.34	30	0.85	Switz	1972	15.2	18	0.5	24	1
	1980	35.4	59.1	0.36	37.5	0.9		1980	24.7	32	0.5	32	1
	1990	45.3	59.8	0.48	37.5	0.95		1990	24.3	35	0.5	42	1
	2000	42.9	54.7	0.4	37.5	0.96		2000	25.1	35	0.5	44	1
Germany	1972	18.4	58.8	0.5	45	0.7	UK	1972	24.8	30.6	0.5	45	0.94
	1980	17.5	66	0.5	45	0.72		1980	31.2	33.6	0.33	45	0.97
	1990	17.8	66	0.5	45	0.85		1990	26.5	44.5	0.5	45	1
	2000	18.1	66.2	0.5	45	0.9		2000	27.8	53.4	0.45	45	1
Ireland	1972	22.5	26.7	0.45	11	0.63	US	1972	25.6	37.6	0.5	22	0.91
	1980	31.1	36.3	0.3	19	0.76		1980	26.4	53.5	0.5	30	0.97
	1990	36.1	41.7	0.31	14	0.72		1990	27.4	54.7	0.5	40	0.97
	2000	31.8	35.8	0.3	19	0.78		2000	26.7	55.3	0.5	44	0.99

Table 5: Summary Statistics for Decommodification Scoring**Unemployment**

	mean	sd	-1 SD	+1 SD	Notes
Net Replacement Rate	57.9	21.7	36.2	79.6	
Qualification weeks	37.7	31.2	6.5	68.9	
Waiting days	4.5	4.9	-0.4	9.4	only 0 days is coded 3
Duration weeks	39.8	12.5	27.3	52.3	Aus (no limit), NZ (no limit), and DEN (442 weeks) are dropped from computation, and coded 3

Sickness

	mean	sd	-1 SD	+1 SD	Notes
Net Replacement Rate	66.5	22.5	44	89	
Qualification weeks	12.4	19.6	-7.2	32	only 0 weeks is coded 3
Waiting days	4.1	4.1	0	8.2	0 weeks is coded 3
Duration weeks	56.2	39	17.2	95.2	Aus, Den, NZ, Swe not in computation and coded 3

Pensions

	mean	sd	-1 SD	+1 SD	Notes
Minimum Pension Net RR	33	9.9	23.1	42.9	
Standard Pension Net RR	51.2	15.1	36.1	66.3	
Qualifying Period (yrs)	27.1	13.6	13.5	40.7	
Contribution Ratio (Employee rate/(Employee rate +Employer rate))	0.322	0.267	0.055	0.589	

Table 5: Rank Order of Combined Decommodification Scores 1980

Esping-Andersen		Allan and Scruggs	
Aus	13	Aus	16.0
US	14.2	Ita	18.5
Nzl	17.1	US	19.0
Can	22	Jpn	20.1
Jpn	22.4	UK	22.8
Ire	23.3	Can	23.1
UK	23.4	Nzl	23.6
Ita	24.1	Ger	24.3
Ger	27.5	Ire	25.3
Fra	27.5	Fin	25.7
Fin	29.2	Fra	26.5
Switz	29.8	Aut	29.9
Aut	31.1	Switz	30.2
Bel	32.4	Nld	30.9
Nld	32.4	Bel	31.0
Dnk	38.1	Dnk	33.2
Nor	38.3	Swe	36.9
Swe	39.1	Nor	38.0

Figure 1 Evolution of UI Replacement Rates

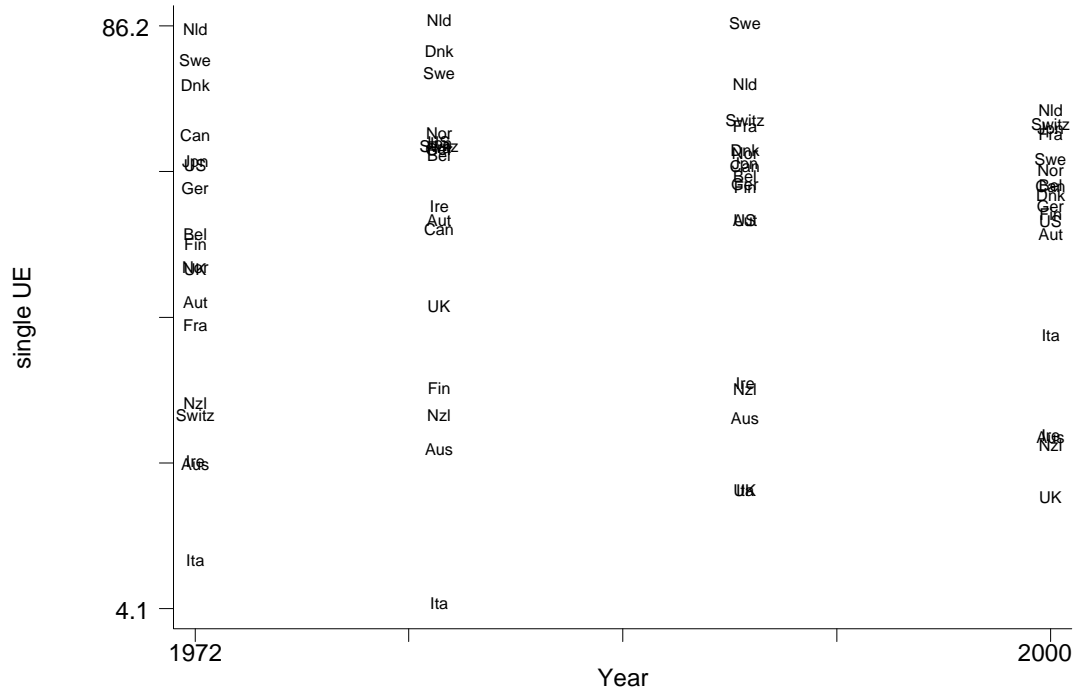


Figure 2: Evolution of UI coverage rates

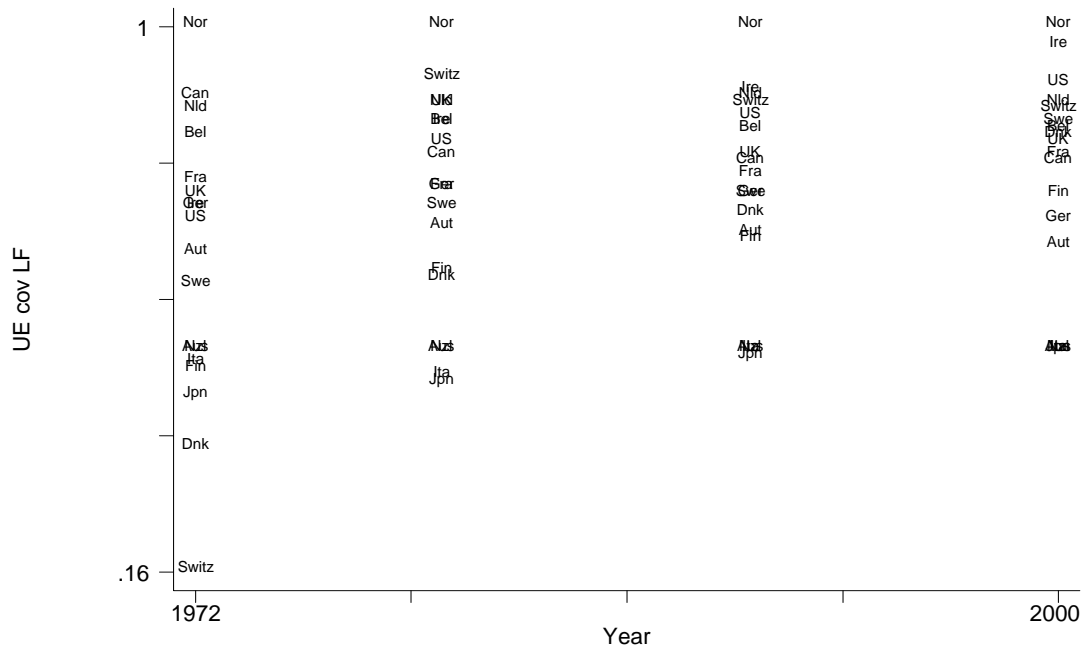


Figure 3: Evolution of Sickness Replacement Rates

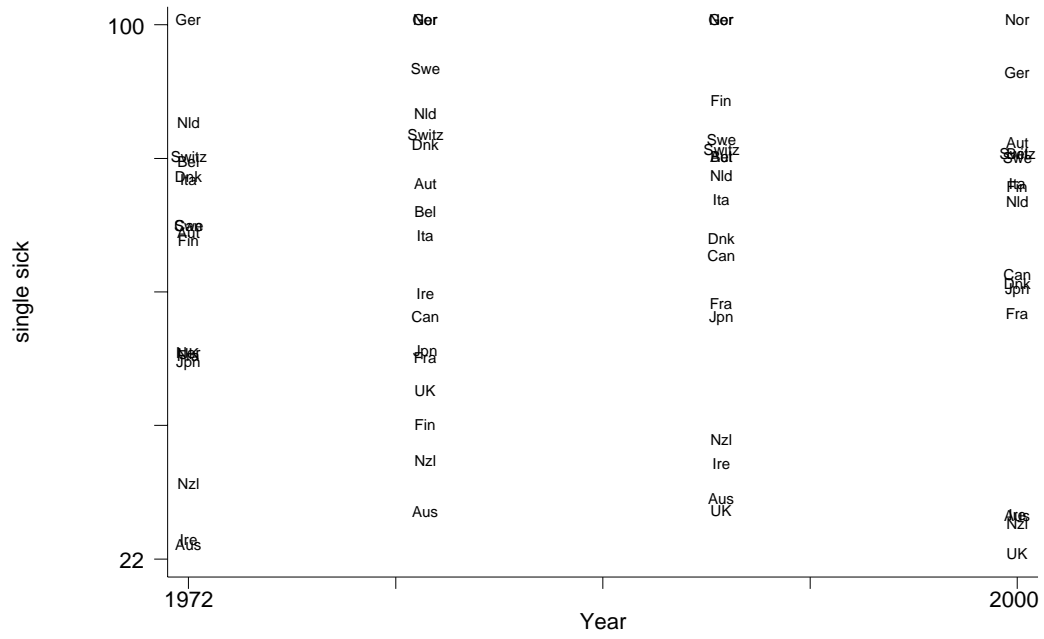


Figure 4: Evolution of Sickness Coverage Rates

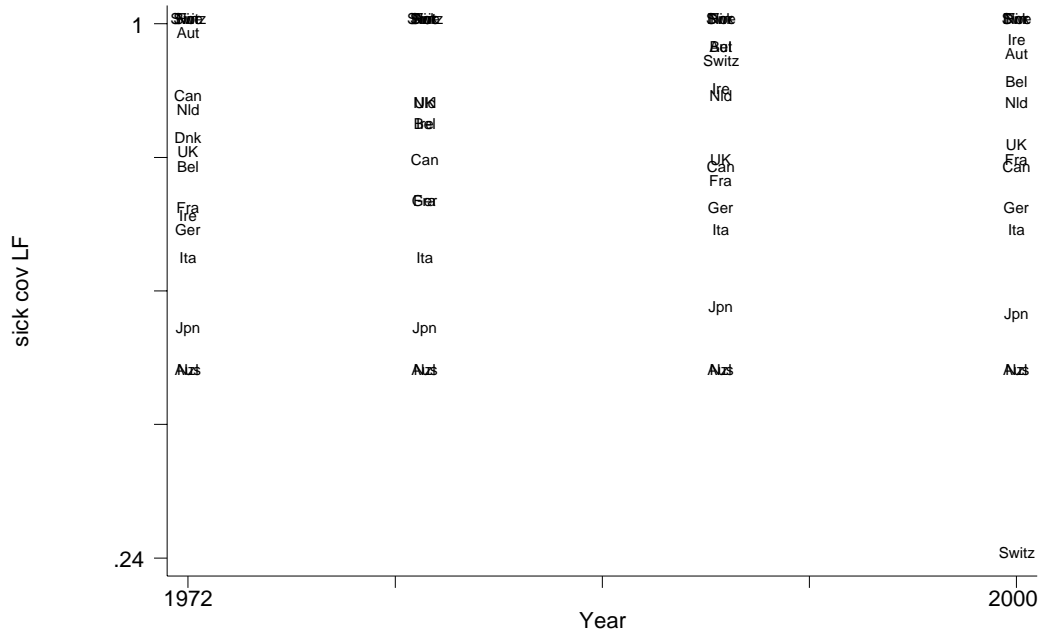


Figure 5: Evolution of Minimum Pension Replacement Rates

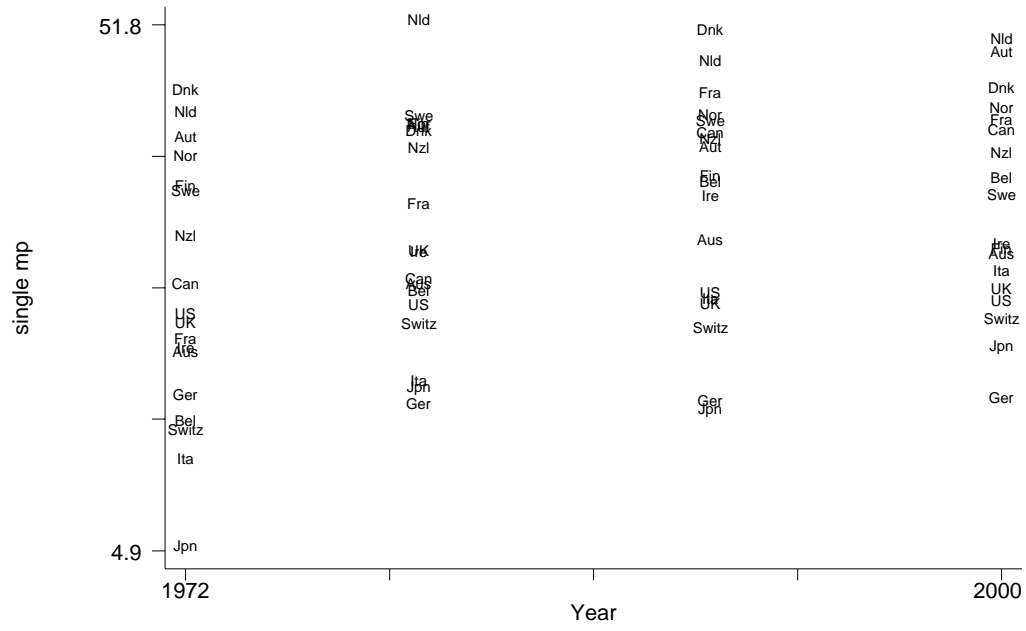


Figure 7: Evolution of Years of Contributions Required to receive the Standard Pension Benefit

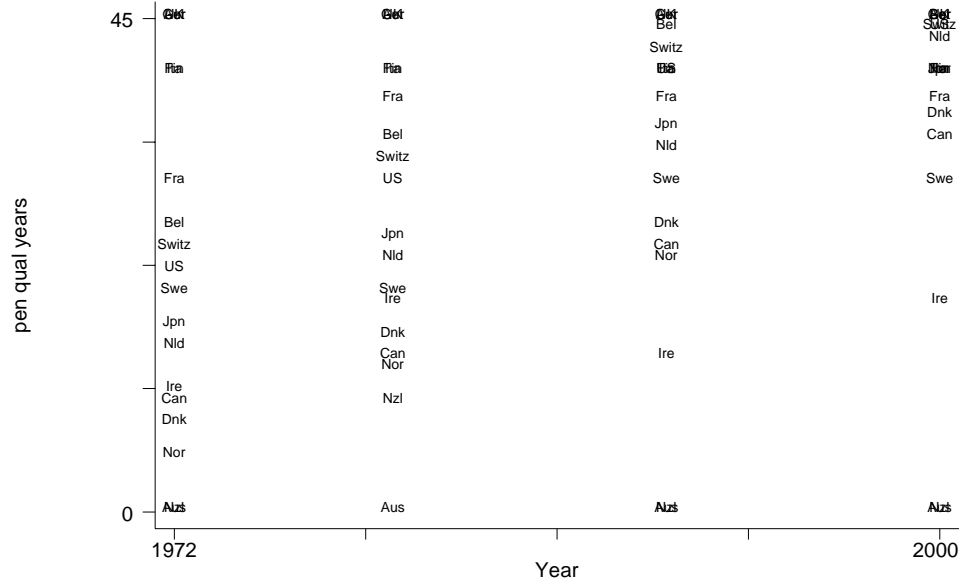


Figure 8: Evolution of Pension Coverage

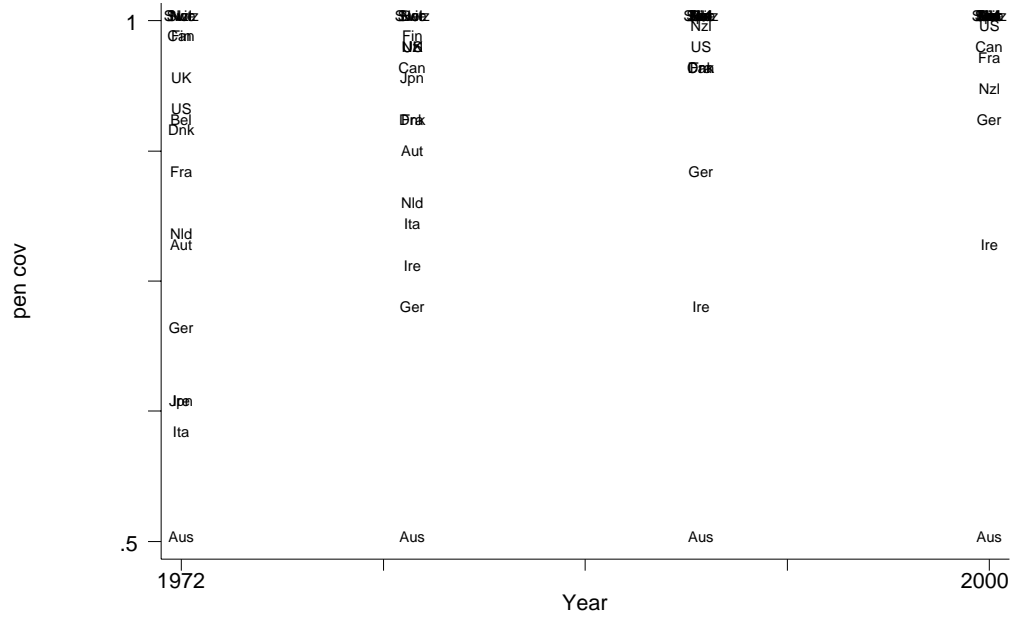


Figure 9: Unemployment Decommodification Indices

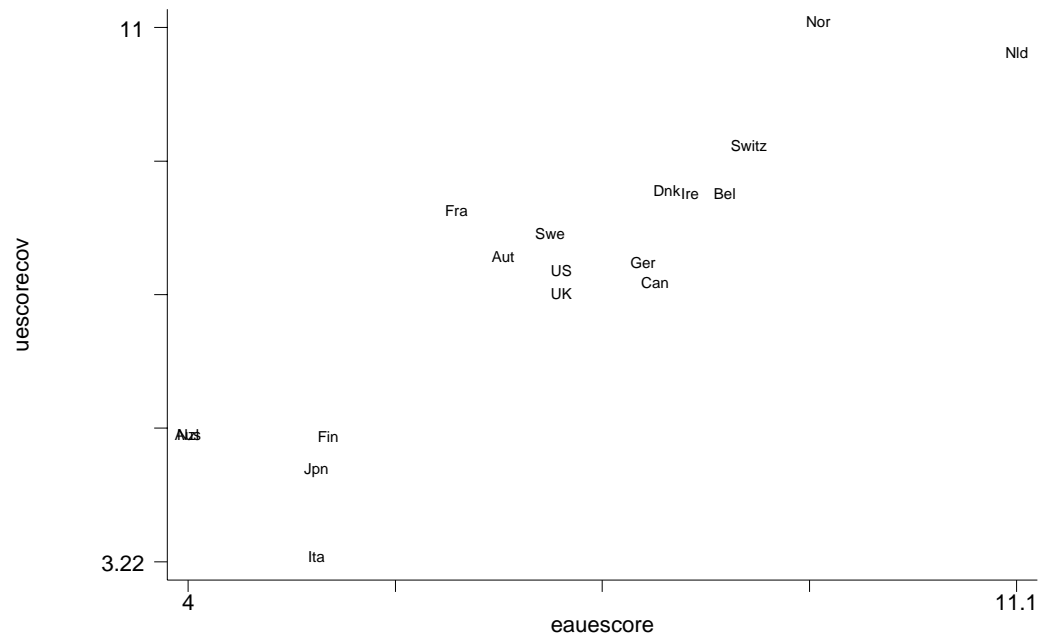


Figure 10: Sickness Decommodification Indices

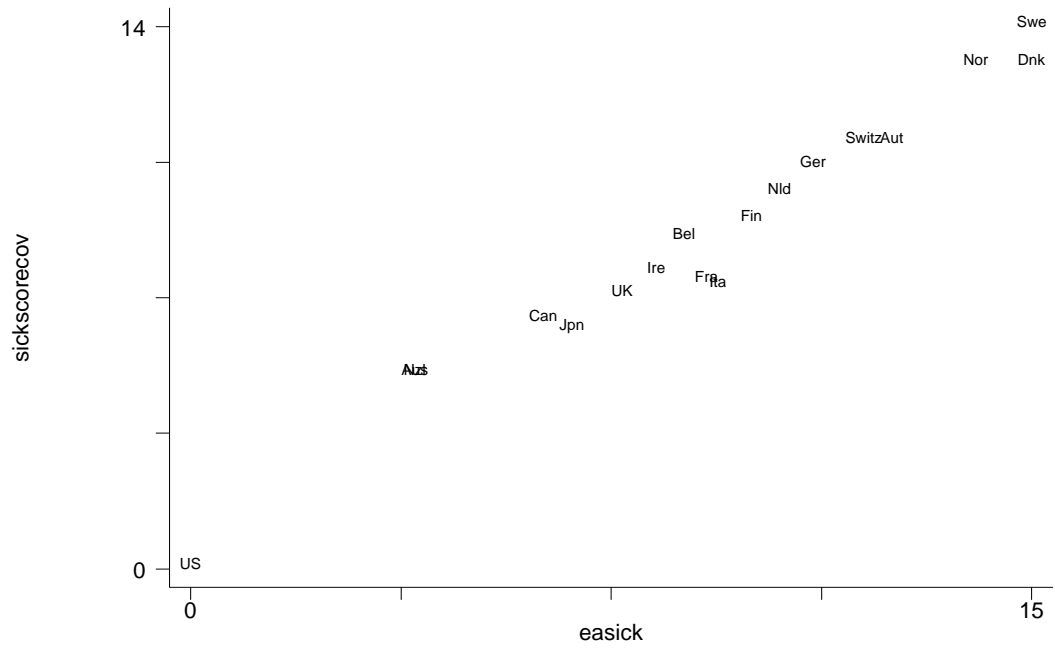


Figure 11: Pension Decommodification Indices

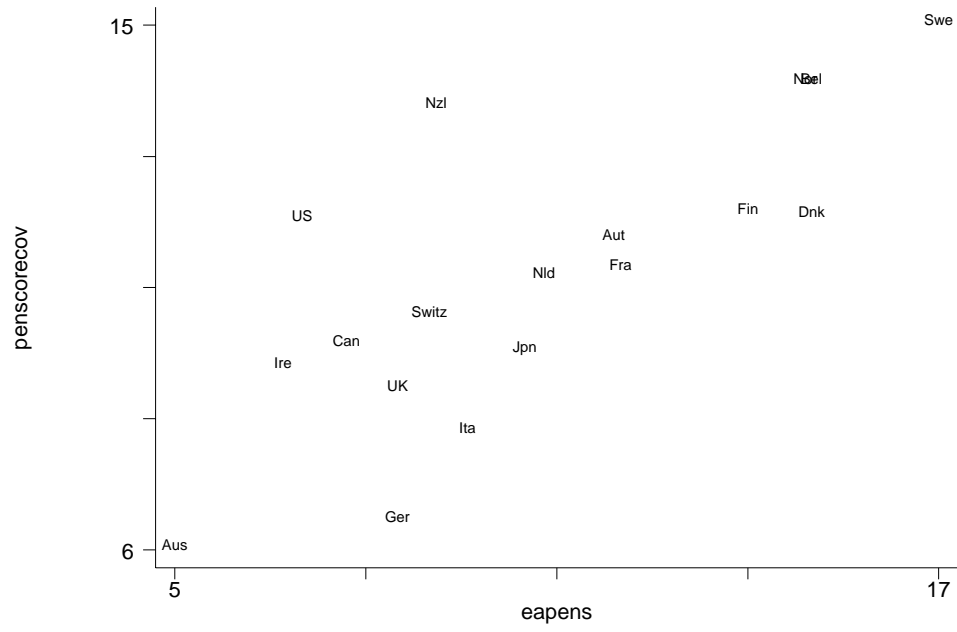


Figure 12: Evolution of Decommodification Indices

