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No. 732

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FINANCING THE WELFARE STATE IN THE GLOBAL ECONOMY

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ABSTRACT: The paper reviews some problems in financing the welfare state in the global economy. It is shown that in the new environment, there are several factors which create upward pressure in public expenditures even though the public sector would not extend its activities to now areas. On the other hand, there will be increasing difficulties in taxation in the global economy. The main point is that increasing mobility affects not only (physical) capital but also labour and human capital. This implies increasing tax competition in all forms of taxation and this, in turn, forces the public sector to reconsider the scale of its activities.

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TIIVISTELMÄ: Artikkelissa tarkastellaan eräitä ongelmia, jotka liittyvät hyvinvointivaltion rahoittamiseen globalisoituvassa maailmassa. Voidaan osoittaa, että uudessa ympäristössä on useita tekijöitä, jotka aikaansaavat paineita julkisten menojen kasvulle, vaikka julkinen sektori ei laajentaisi toimintojensa piiriä. Toistaalta verotukseen liittyy kasvavia ongelmia globalisoituvassa maailmassa. Tärkein huomionarvoinen asia on se, että kasvava liikkuvuus ei kosketa vain (fyysistä) pääomaa vaan myös työvoimaa ja inhimillistä pääomaa. Tästä seuraa lisääntyvä verokilpailu kaikkien veromuotojen osalta ja tämä taas pakottaa julkisen sektorin uudelleenarvioimaan toimintojensa laajuutta.

1 Introduction

There seems to be wide agreement that financing the welfare state is already a problem and will become an even greater problem in the future. The seriousness of the problem obviously depends on the size of the welfare state. There is no exact magnitude for the welfare state, say, in terms of the share of GDP. There are countries which can be characterized as welfare states even though the size of the public sector is relatively small while we usually reserve the title for countries which have a very large public sector, as is the case in the Nordic countries.

In the same way, we can ask whether we expect the welfare state to stay as it is now, or whether we expect the size of the state to increase or decrease. We probably think that the welfare state will be about the same in the future as it is now, but that is not a very good forecast. As we will see later, there are several factors such as ageing and the continuously growing need for additional schooling which increase demand for additional resources in the public sector.

Hence, it is probably wise to start by looking briefly at the current situation. Although we should not think that the size of the public sector is the proper indicator of the ”size of the welfare state” we do not really have a good alternative. This is especially true when we consider the financing problems.[1] Here, we start by examining both the current cross-country differences and the historical developments in the size of the public sector.

After that we consider the financing problems. First we discuss some problems creating upward pressure on the size of the welfare state. Then we turn to the real financing problems such as tax competition and tax evasion. Finally, we try to draw some practical conclusions as to what to do with the welfare state.

2 The growth of the welfare state

Looking at the size of the public sector (measured in terms of total general government outlays in relation to GDP), Figure 1 shows that it is really hard to judge which countries are welfare states and which not. Even the Nordic countries show considerable variation in the size of the public sector, particularly if we take Iceland into consideration.

Rather than focus on differences in the size of the public sector it might be wise to concentrate on looking at the historical background of the growth of government because this background also explains some of the cross-country differences.

Looking at Figures 2 and 3 which show the growth of the public sector since 1870, it can be seen that both the first and second World Wars led to a marked increase in the size of government. By contrast, the Great Depression, for instance, does not show up in figures. But wars do not really explain the growth of the public sector. Most of the growth took place during the 1970s although growth has continued right up to the present time suggesting, that the growth of the welfare state is really a reflection of conscious policy choice.

Developments in the structure of public expenditure confirm that this interpretation could well be correct. The 1970s and 1980s witnessed a huge increase in government, transfers which now represent more than public consumption and

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[1] See eg Tanzi and Schuhnecht (1999) who strongly argue that the size of the public sector does not show up in a positive way in the performance of various social indicators. Thus, countries with a very large public sector are no better than countries with a medium-sized public sector. This is a particularly interesting point for further research.

interest expenses together. True, public consumption has also increased but it still represents about 20 per cent of GDP.

3 Pressures on government expenditure

Figures 1–3 clearly show that there is no obvious steady state in terms of the size of the public sector. Thus, it is more probable that the size changes than it stays constant. A change can result from conscious policy actions or it may simply reflect same structural changes in the economy.

Thinking about the future, there are several factors which will affect the need for public services (assuming that the provision of public/private services does not change). The following are perhaps the most important:

- The ageing of population
- Increased need for schooling and education
- Increased migration and regional/sectoral adjustments
- Slow growth of productivity, i.e. so-called Baumol's disease.[2]

The problem of ageing is already well recognized (see Figure 4 for an illustration of the magnitude of change[3]). Still the implications are not perhaps fully understood. Ageing entails substatial increases in public sector pension expenditure, health expenditure and, of course, direct expenditure for the care of old people. Improvements in medicine mean that new ways of curing sicknesses are discovered which furthermore adds to the pressure for improved nursing and health care.[4]

In a sense, ageing is also evident in early retirement which considerably reduces the average life-cycle working time. At the same time, increased schooling is postponing the start of employment further and further. Thus, we will soon face a situation where which people work only from 25 to 55 years of age compared with the traditional working period from 15 to 65. The figures for participation rates for 1960 and 1998 (see Figure 5) show dramatic the change has been in the case of the male population. Until now the reduced participation rate has been more than offset by the increase in the female participation rate.[5] From now on, this rate may also start declining, causing increased problems as regards to schooling and pension expenditure and decreased tax revenues.[6]

A problem which has so far been discussed very little is related to the change in the production and employment structure of the economy. Along with the growth of the "new economy" and the continuing increase in globalization, large regional and

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[2] Baumol's disease is a commonly used name for the phenomenon that is related to differences in productivity growth in public and private sectors. Assume, for instance, that productivity in government produced services stays constant but increases in the goods and service production of the private sector. If, however, wages increase in the same way in both sectors, this unbalanced productivity growth creates cost pressure in the public sector, which, of course, lead in the long run to higher taxation. Empirical analyses have shown that this kind of problem really exists (see eg Virén (1999)).

[3] On average, the share of old people (over 65 years of age) has increased from 10.0 per cent in 1960 to 14.6 per cent in 1998.

[4] To illustrate the magnitude of this problem we may note that, for instance, Franco and Munzi (1997) estimate that age-related public expenditure in the EU countries will increase by 5 per cent (of GDP) over the next 30 years, implying an increase of almost 0.2 per cent per annumm.

[5] Thus, the average OECD male (female) participation rate was 94.7 (41.2) in 1960 compared with 81.6 (63.9) on 1998.

[6] Notice that annual (weekly) working time has also decreased considerably. For instance, in Finland it has fallen by over 20 per cent since the beginning of the 1960s.

structural changes will take place. These changes will ultimately lead to increased demand for (active) employment measures (in the worst case simply increased unemployment compensation expenditure), increased housing and infrastructure expenditure, and stronger pressure for subsidies and other market intervention. The new economy is a good thing but who takes care of ”the old economy”?

4 Problems with financing (increasing?) expenditure

Turning now to the problems of financing the welfare state it is quite clear that the main problem is, of course, that the growth of the public sector leads to higher taxation, and at some point in time taxation simply becomes excessive. The increase in taxation is illustrated in Figure 7 (showing Finland, the rest of the EU and the USA). The Nordic countries really represent an extreme example while the USA represents the completely opposite. The EU as whole stands half-way between these extremes. It should also be noted that when the gross tax rates are close to 50 per cent (or over) some tax rates are ultimately much higher than 50 per cent and the marginal tax rates are even higher still.

When the need for tax revenues continues to increase all potential sources of tax revenues must be exploited. This can be seen from Figure 8 which shows the growth of different types of tax revenues in the OECD countries. In the large public sector countries, there are no longer any unexploited sources of tax revenues.

The only exception seems to be property taxation and to some extent corporate taxation. The problem, as we know only too well, is increased tax competition. Increased globalization has made capital even more mobile and it has become increasingly difficult to tax capital and wealth.[7] Globalization strengthens the bargaining power of capital vis a’ vis national governments (as well trade unions and employees). Because of huge cross-country differences in terms of living standards and budgetary pressures, the outcome is ultimately a lower (zero?) capital tax rate. Hence, tax rates have generally declined during the last two decades and the same tendency seems likely to continue. Obviously, governments will try to agree on some kind of tax harmonization (i.e. prevent tax competition) but it is hard to see that tax competition will be nullified in the future.

Because it is (more and more) difficult to tax capital, it becomes necessary to tax labour, as well as goods and services. Increased labour taxation also entails serious problems. Higher taxation leads to poverty traps, increased tax evasion and an increase in the size of the tax wedge. All of those problems are severe and to large extent new.

Figures 9 and 10 illustrate the poverty trap in the case of Finland (see NSFR (1999) for more evidence for all the Nordic countries).[8] The outcome of this is clear: income-related transfers and fees make effective marginal tax rates close to hundred per cent for a sizeable portion of young families.

The problem of the tax wedge is partly related to poverty traps. Increased income taxes and social security fees increase the difference between labour costs

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[7] Taxation of housing wealth might still be technically feasible but it is rather perverse considering the increased need for regional adjustment (migration).

[8] The computations illustrate developments in the disposable income of a household with two adults and two nursing-age children. Both parents are assumed to work while the children are in a municipal kindergarten. All conventional taxes and transfers as well as compulsory (nursing) fees are taken into account The intra household income distribution is assumed to be even. If male and female earnings were different, then a 100 per cent effective tax rate would be even more relevant.

and after-tax net income of employees. This in turn shows up in employment (and unemployment). Several studies have tried to estimate the empirical relevance of this problem. Although the results vary to some extent, the general feeling is that the large tax wedge is one of the main reason for the employment problem in the Nordic countries and in Europe as a whole.

Poverty traps and tax wedges are serious problems also because they tend to increase tax evasion. Tax evasion is a phenomenon which was earlier thought to exist only in the Mediterranean countries but recent studies (see eg NSFR (1998)) have suggested that the problem is highly relevant for the Nordic countries as well. Excessive high tax rates also directly increase tax evasion by increasing social acceptance of this illegal behaviour. On the other hand, the legal sanctions (punishments) are relatively mild and thus is it difficult to deter effectively the growth of the grey economy.

As for taxation of goods and services, it is worth noting that some excise taxes are already at a level which is intolerably high and which can only go down. This applies to such items as alcohol and cars. Recent months have shown that even in the case of gasoline, taxes cannot be increased in the same way as earlier.

The new economy and globalization may present new threats to commodity taxation. If Internet based firms succeed in achieving sizeable market share in terms of books, clothing, entertainment and so on, ”high tax countries” face increasing difficulties in collecting taxes. Higher commodity tax rates may even be counterproductive in generating lower rather than higher tax revenues. It could well be that the elements of a Laffer curve may materialize.[9]

5 Conclusions

Most welfare states have now reached such a size in terms of the public sector that further increases – even though they are simply a result of nondiscretionary factors like ageing – will create problems for financing. Tax competition reduces the possibility of taxing capital and wealth, and unemployment problems and tax evasion create similar obstacles for labour (income) taxation. Labour taxation will also be constrained in the future by tax competition. It will be easier for highly educated people to choose their working place (country) and avoid high income tax countries. A real relevant nightmare for many countries is the possibility that the welfare state will be financially ruined by free riders. Countries may spend a lot of money on schooling and training people only to find that the best trained people emigrate to foreign countries, earn their living and pay the (low) taxes there and, finally, return back in the old age to utilize the good welfare facilities of the home country. Whether or not this scenario materializes, the important thing is that tax competition in the future will be relevant not only to capital (income) taxation but to other sorts of taxation as well.

But what is the way out of these problems? In my view, the best way is to look carefully at what things the public sector must produce itself and how extensive the income redistributive schemes should be. It is clear that there is much room for private production in several areas, eg in higher education and health care. There is also more room for privatization of pensions and other transfers. Maybe the future welfare state could achieve the same results as the current welfare state by acting more as a regulator of activities and as a true lender of last resort.

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[9] See OECD (2000) for recent estimates of the growth of E-commerce in the OECD countries.

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Figures

Figure 1. **Size of the public sector in OECD countries 1999**

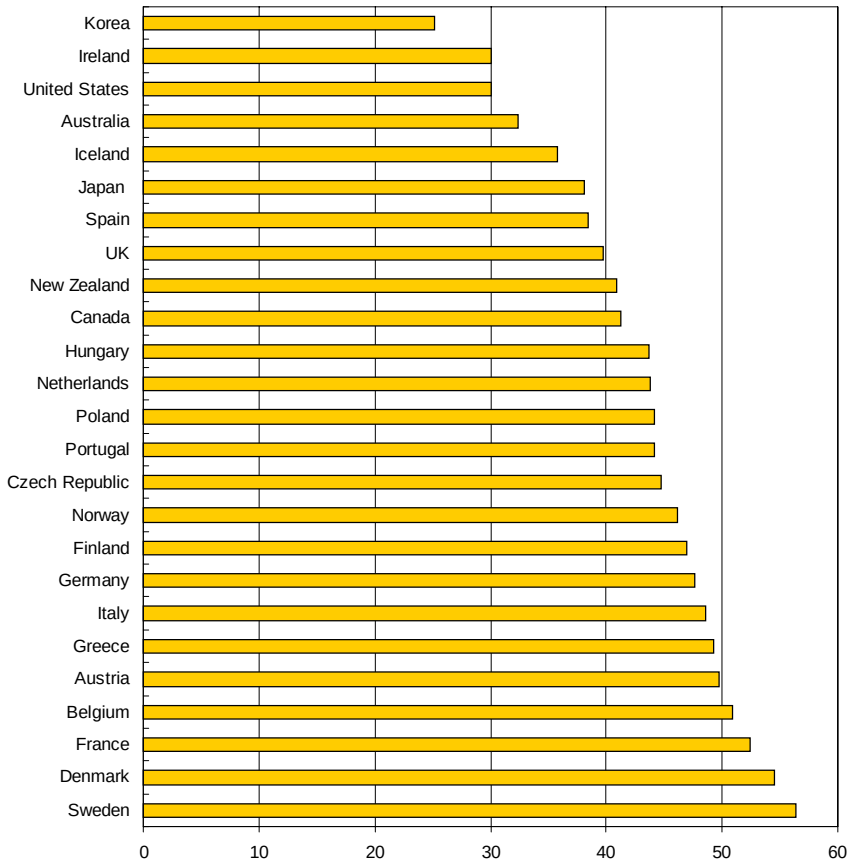


Figure 2. **Growth of the public sector in the OECD countries 1870–1994**

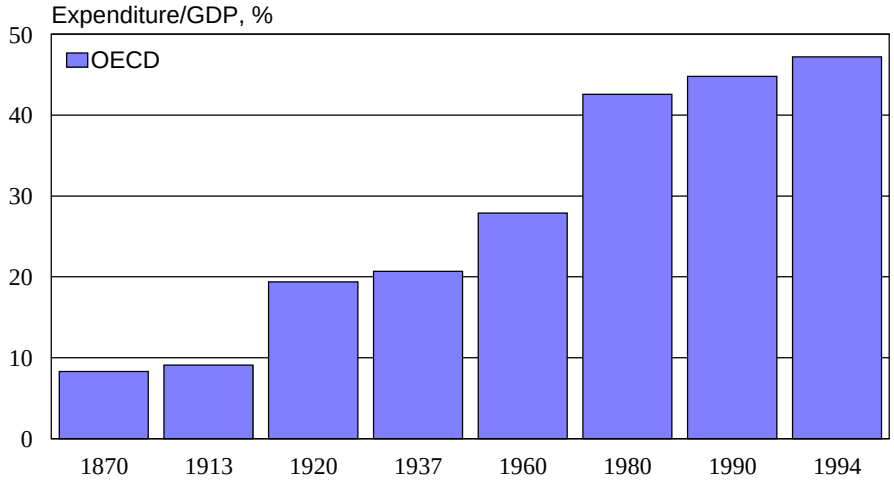


Figure 3. **Sources of public sector growth in the OECD countries, 1870–1994**

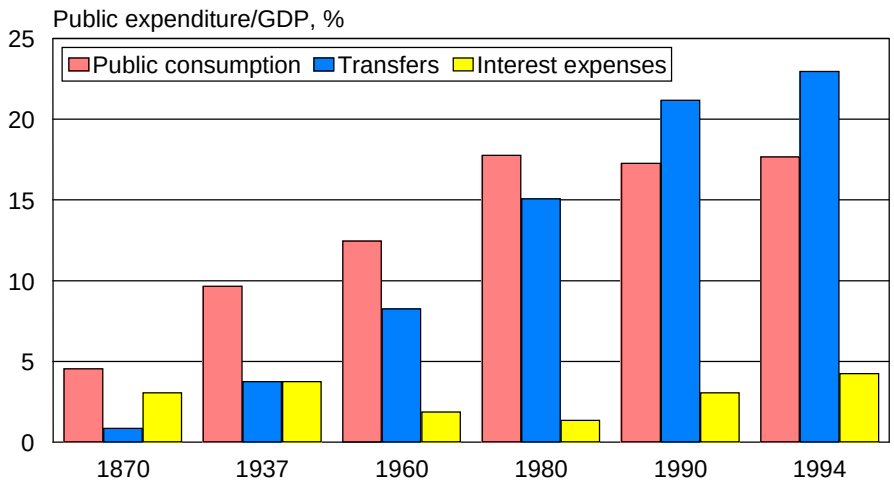


Figure 4. **Growth in the share of old people in the OECD countries 1960–1998**

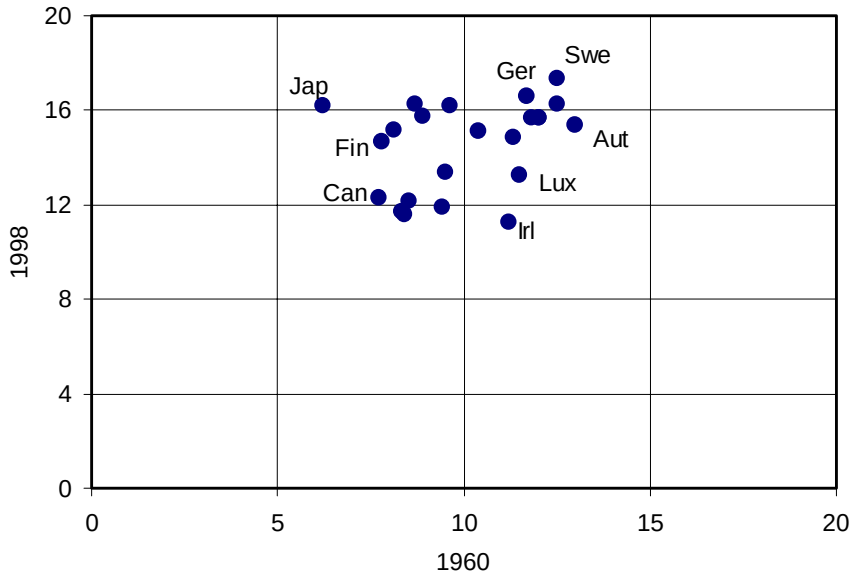


Figure 5. **Change in male and female participation rates 1960–1998**

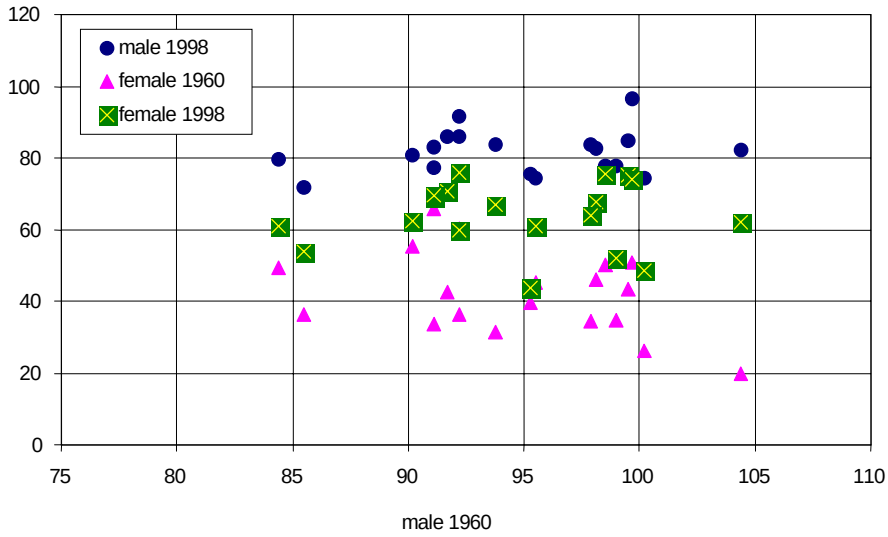


Figure 6. **Gross tax rate in Finland, EU and USA 1950–1999**

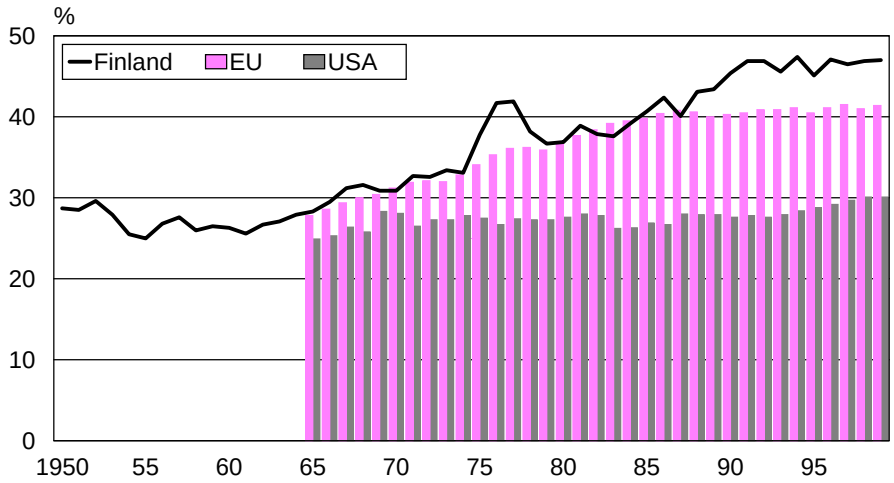


Figure 7. **Change in the structure of taxation in the OECD countries 1965–1997**

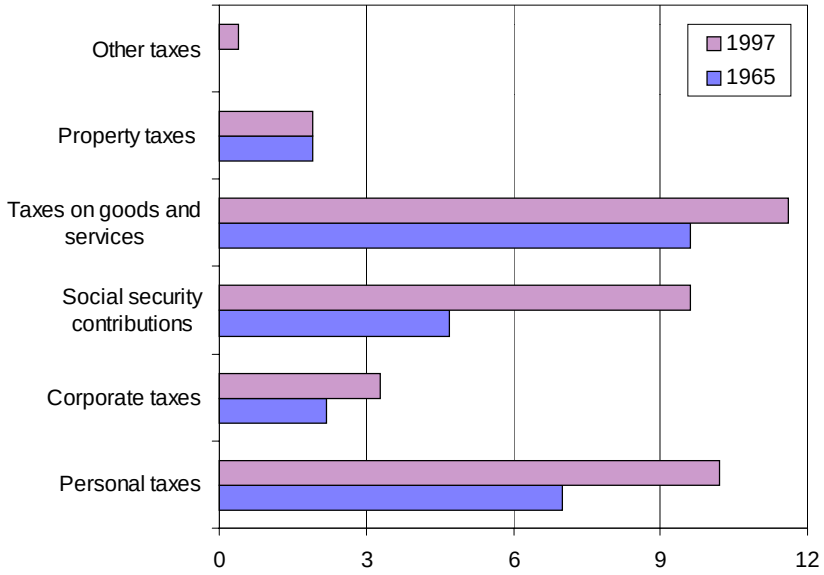
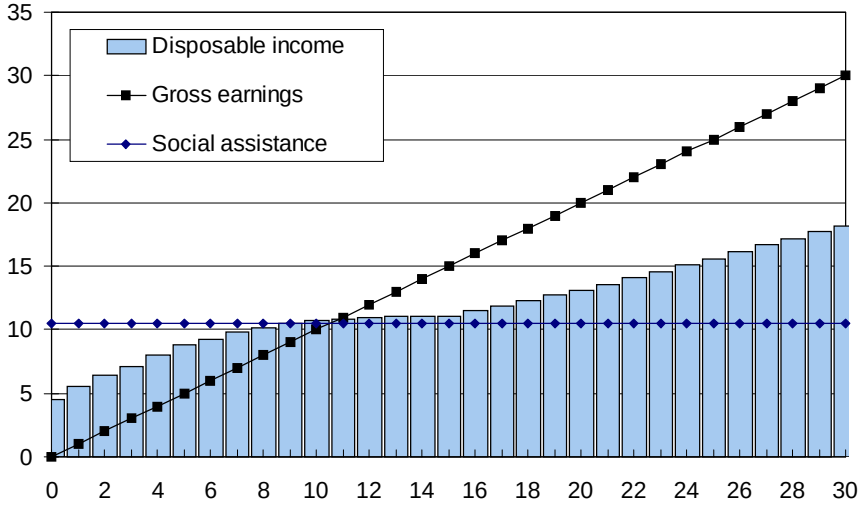


Figure 8. **An illustration of the poverty trap for Finland**



Appendix

Table 1. **Structure of taxation in the OECD countries*)**

	Taxes on personal income		Taxes on corporate income		Social security contr.**)		Taxes on goods and services		Taxes on property	
	1965	1997	1965	1997	1965	1997	1965	1997	1965	1997
Canada	5,9	14	3,9	3,8	1,4	5,7	10,5	9,0	3,7	3,7
USA	7,9	11,6	4,1	2,8	4,0	9,2	5,7	4,9	4,0	3,2
Australia	7,7	12,5	3,6	4,4	0	0	7,8	8,2	2,6	2,7
Japan	4,0	5,9	4,1	4,3	4,0	10,7	4,8	4,8	1,5	3,1
New Zealand	9,7	15,7	5,1	3,9	2,6	2,8	6,9	12,6	2,8	2,0
Austria	6,8	9,8	1,8	2,1	8,4	15,2	12,7	12,5	1,3	0,6
Belgium	6,4	14,3	1,9	3,4	9,8	14,6	11,6	12,3	1,2	1,3
Denmark	12,4	25,9	1,4	2,6	3,2	1,6	12,1	16,3	2,4	1,7
Finland	10,1	15,5	2,4	3,8	3,7	12,8	12,9	14,4	1,2	1,1
France	3,7	6,3	1,8	2,6	12	18,3	13,2	12,6	1,5	2,4
Germany	8,2	8,9	2,5	1,5	8,6	15,7	10,4	10,3	1,8	1,0
Greece	1,2	4,5	0,3	2,1	5,7	10,8	8,9	13,8	1,8	1,3
Iceland	5,1	10,6	0,5	0,9	2,1	3,2	16,4	15,3	1,0	2,6
Ireland	4,2	10,3	2,3	3,3	1,6	4,3	13,1	13,0	3,8	1,6
Italy	2,8	11,2	1,8	4,2	9,0	14,9	10,1	11,5	1,8	2,3
Luxemburg	6,9	9,5	3,1	8,6	8,9	11,8	6,9	12,6	1,7	3,6
Netherlands	9,1	6,5	2,6	4,4	10,1	17,1	9,4	11,7	1,4	1,9
Norway	11,7	11	1,1	5,2	3,5	9,9	12,2	15,8	0,9	1,1
Portugal	2,6	6,1	1,3	3,7	3,5	8,9	7,0	14,4	0,8	0,8
Spain	2,1	7,4	1,4	2,6	4,2	13,5	6,0	9,7	0,9	2,0
Sweden	17,1	18,2	2,1	3,2	4,2	15,2	10,9	11,6	0,6	2,0
Switzerland	6,1	10,6	1,4	2,0	4,4	12,5	6,0	6,2	1,7	2,6
Turkey	2,6	6,0	0,5	1,6	0,6	4,0	5,7	10,3	1,1	0,8
UK	10,1	8,8	1,3	4,3	5,0	6,5	10,1	12,4	4,4	3,8
Total OECD	7	10,2	2,2	3,3	4,7	9,6	9,6	11,6	1,9	1,9

*) Tax revenues/GDP, %. **) Including payroll taxes

Figure 9. **Growth of social transfers in Finland and OECD 1960–1997**

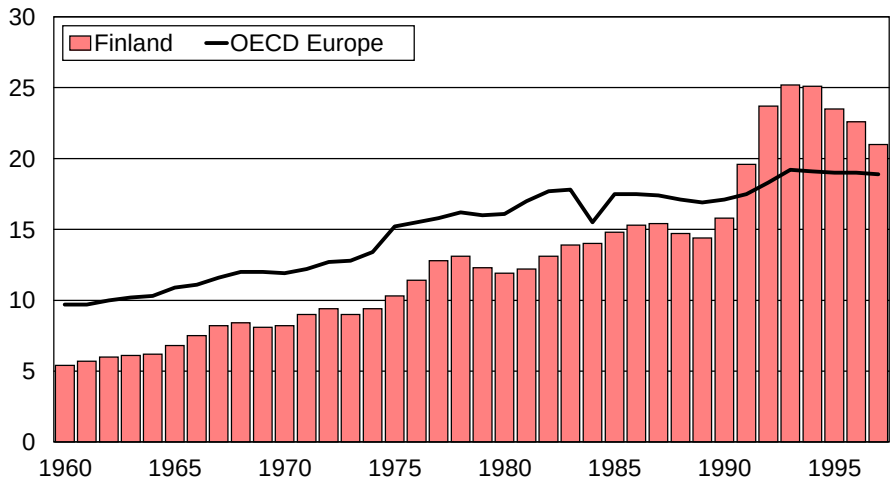


Figure 10. **Government debt/GDP in the OECD countries 1980–1999**

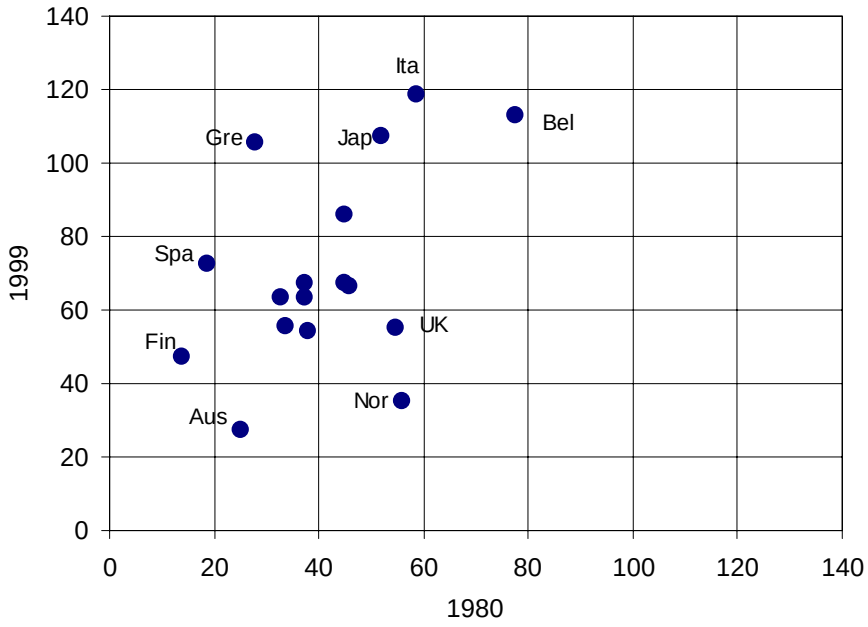


Figure 11. **Change in the gross tax rate in the OECD countries 1960–1999**

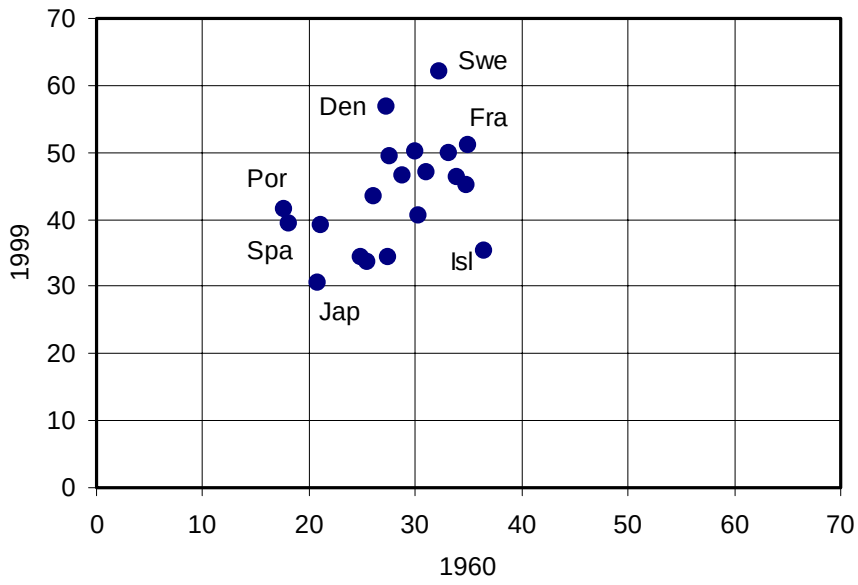


Figure 12. **Employment/working-age population in Finland in 1998, %**

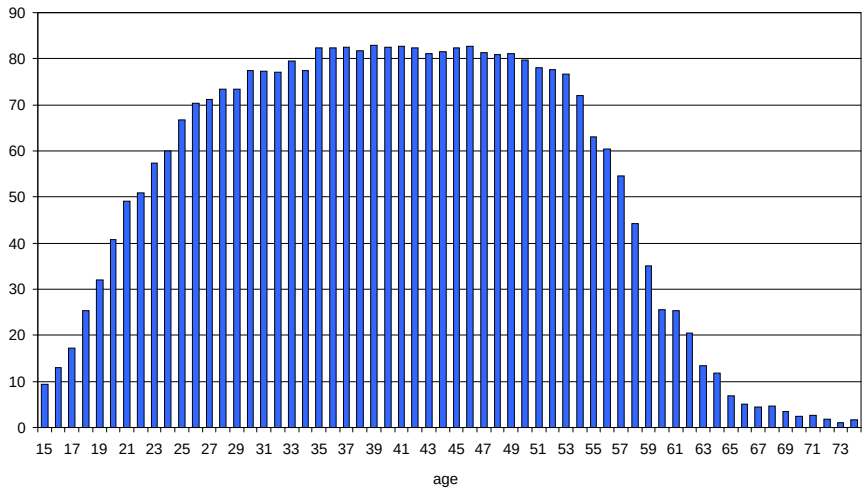


Figure 13. **Change in the male participation rate 1960–1998**

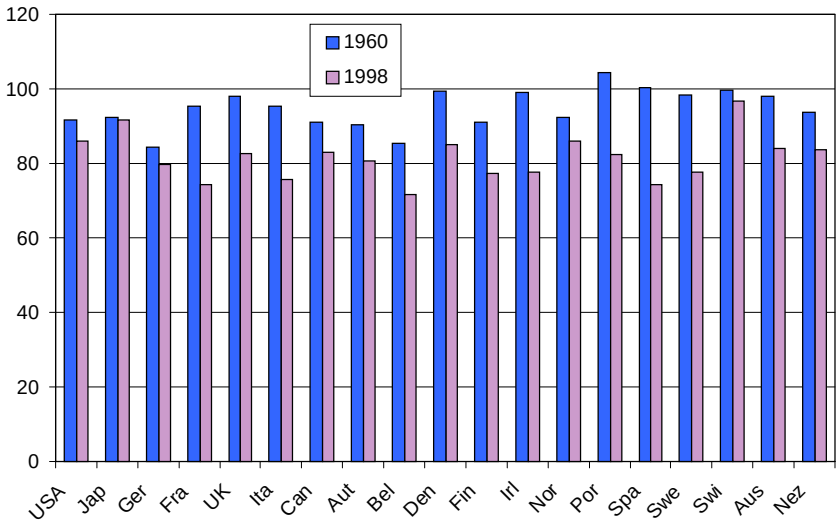


Figure 14. **Change in the female participation rate 1960-1998**

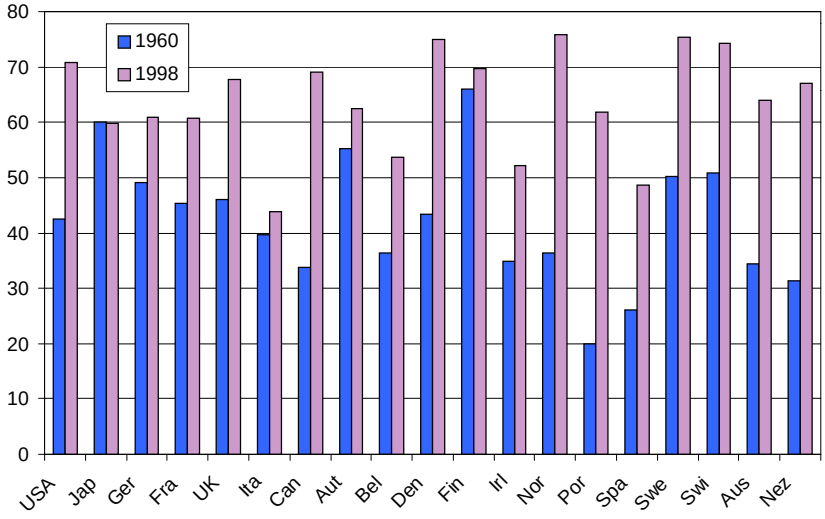
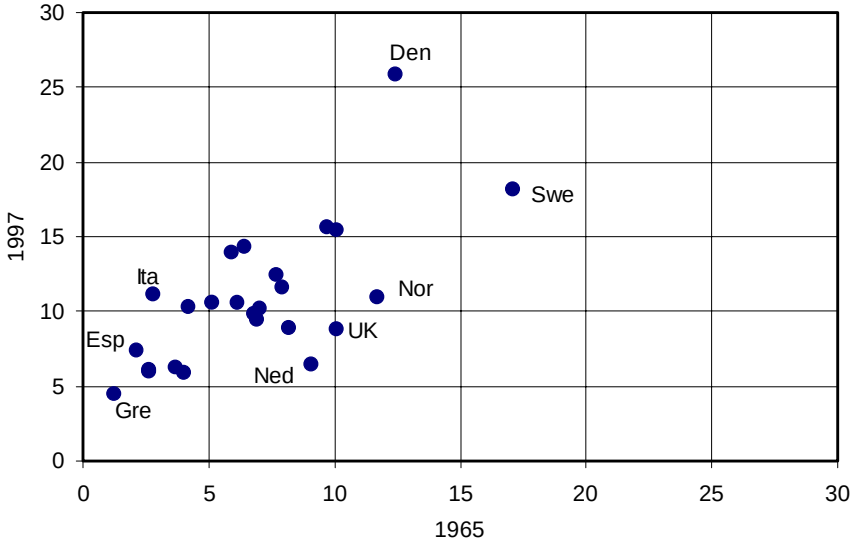
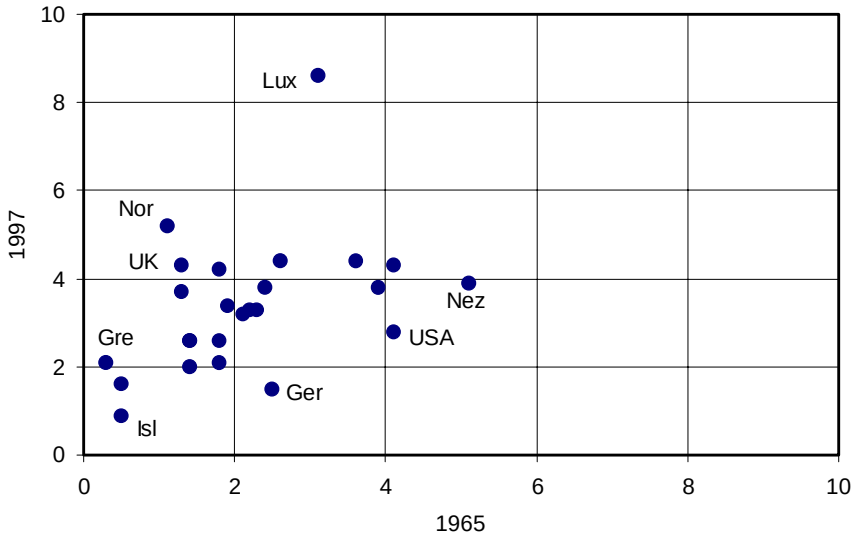


Figure 15. **Change in personal taxes* in the OECD countries 1965–1997**



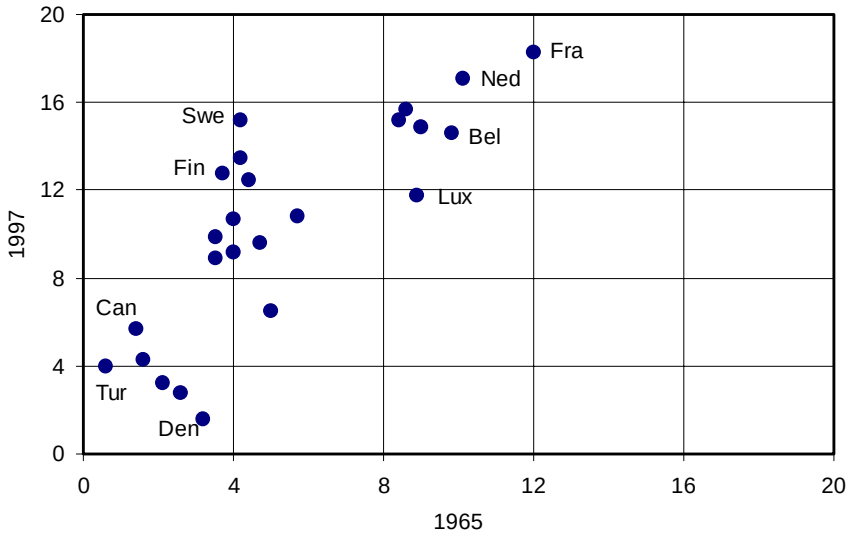
* Tax revenues/GDP, %

Figure 16. **Change in corporate taxation* in the OECD countries 1965-1997**



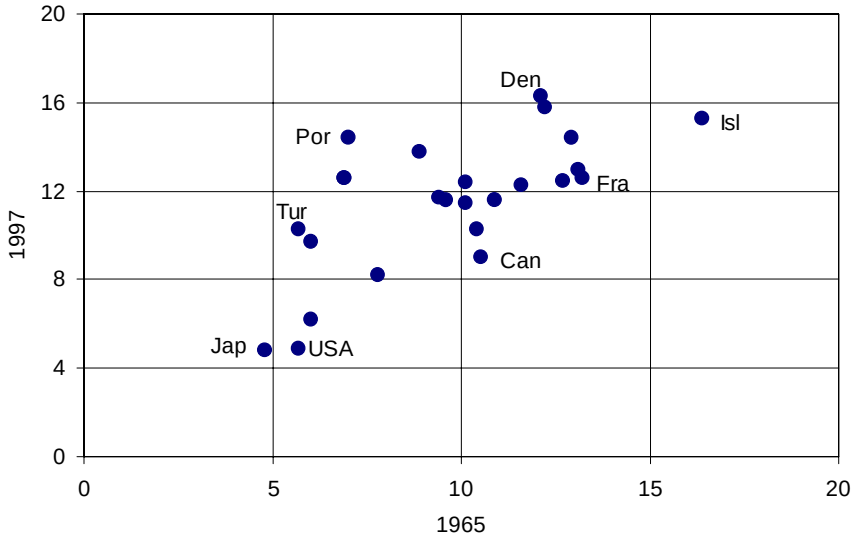
* Tax revenues/GDP, %

Figure 17. **Change in social security contributions* in the OECD countries 1965-1997**



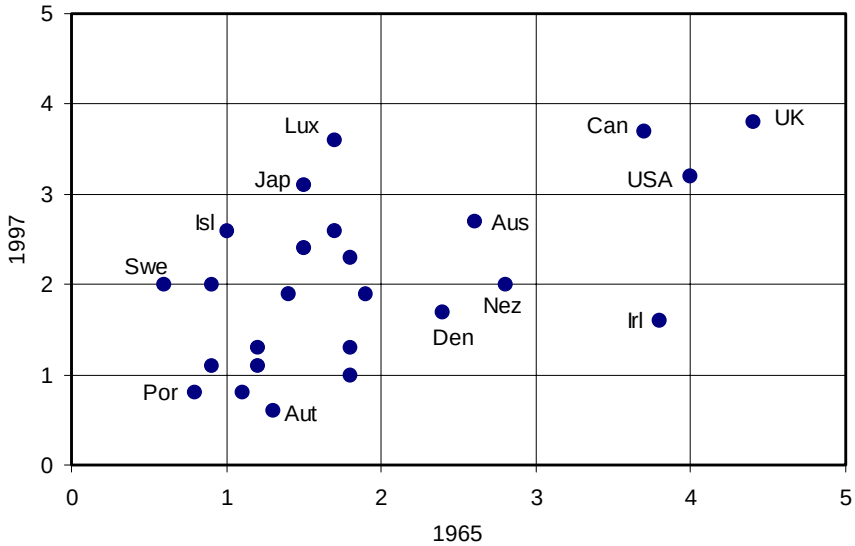
* Tax revenues/GDP, %

Figure 18. **Change in commodity taxation in the OECD countries 1965–1997**



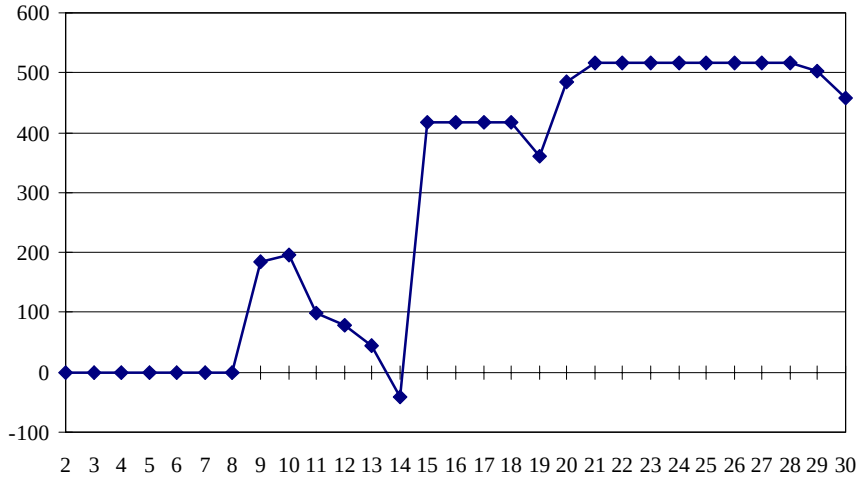
* Tax revenues/GDP, %

Figure 19. **Change in property taxation* in the OECD countries 1965–1997**



* Tax revenues/GDP, %

Figure 20. **The effective tax rate for households with small children**



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