

WHAT HAS HAPPENED TO THE INEFFICIENT WELFARE STATE?"

Peter H. Lindert

University of California - Davis

19 September 2006

ABSTRACT

The welfare state is not an endangered species among the industrialized OECD countries. There is no race to the bottom, nor is there even an inexorable policy trade-off between efficiency and equity. OECD experience since 1980 does not show any negative effect of larger tax-financed transfers on national product.

This “free lunch puzzle” of the welfare state is easily understood when one examines how actual practice has evolved. In trying to draw the efficiency border between governments and markets, mistakes were made on both sides of the Atlantic. The main institutional mistakes in Western Europe relate to excessive protection of vested interests against competition in product and labor markets, not the welfare state. The main mistakes on the American side relate to health insurance, underinvestment in mothers’ careers, and the under-taxation of addictive goods (tobacco, alcohol, and gasoline). Both sides correctly developed similar tax-based approaches to primary and secondary education.

One might fear that this century will break down the efficiency of the welfare state through the effects of population aging on pensions. Experience from the 1980s and 1990s suggests how government budgets will adjust to population aging in this century. Pay-as-you-go programs for the elderly are as sustainable, with parametric adjustments, as defined-contribution plans. Historically they have proved as durable as “reformed” or “privatized” systems in the experience of Britain, Chile, and the United States.

“Unfortunately, this thinking about a ‘European model’ is fuzzy and ends up facilitating political compromises with privileged insiders. Europe does not have to adopt the American model; it certainly can have something distinct from it, say *a system of efficient competitive markets coupled with extensive but efficient redistributive programs and social protection*. Northern European countries are moving in this direction, but the major European countries [France, Germany, Italy, and Spain] are far from it.”

-- Alberto Alesina, Harvard University¹

Every nation, like every individual, makes mistakes. Some are more costly than others. The most costly mistakes are accidents of history that cannot be erased easily because they create powerful interests that oppose reform. We economists find it useful to classify economic policy mistakes into two types: government failures and market failures. This paper tries to summarize how OECD countries made both kinds of policy mistakes, landing on the wrong side of the division between public and private institutions since the mid-twentieth century. Summarizing such a vast topic briefly requires a rapid fly-over, so fasten your seat belts.

I shall argue that in the rich OECD democracies of the twentieth and twenty-first centuries that government failures and market failures have been evenly balanced. Looking at the core OECD countries as a whole, the total GDP costs of excessive government are not clearly different from those of insufficient government. While different OECD countries have different policy mistakes, there is no correlation between size of government and efficiency within this group of countries.

This balancing act between government failures and market failures is rare in the larger sweep of global history. Before World War II, government failures dominated most of human history. Rulers and governments were elitist and rapacious -- yet took only a small share of GDP, and made few social investments. No defects in the competitive private marketplace could match the costs of such bad governance. Similarly, in the twentieth and twenty-first centuries, the populations of developing countries have suffered more poverty from bad governance than from any defects in private markets. Their governments have again taken a smaller share of GDP than in the rich OECD countries because they have invested so little in civilian society. Only rarely have these government failures involved huge government taxes and transfers, as in the now fading communist dictatorships.

Within the small privileged corner of global history occupied by today's rich OECD democracies, those countries that have chosen a particular kind of big government, the welfare state, have suffered no net cost in terms of GDP. Rather the main kind of policy mistake on the "government failure" side of the line has taken the form of anti-competitive protections for powerful insiders, as the quotation from Alberto Alesina implies. The same is true on the "market failure" side of the line: the most costly mistakes are those that have served powerful insiders. No longer is it true that mistakes are correlated with the share of the economy controlled by government, at least not in OECD democracies. To summarize this great traverse of twentieth-century economic history, I turn first turn to a policy "mistake" that is commonly alleged -- and not true.

I. What is Not Wrong with the Welfare State -- The "Free Lunch Puzzle"

The mainstream North American view sees a trade-off between growth and equality. On this view, Europe's welfare states have equalized incomes at a cost in terms of national product, relative to the alternative of keeping taxes and transfers as low as in the United States or Japan. I read history differently. The experiences of the rich countries seem to show that

Europe's welfare states have equalized incomes and improved life expectancy at zero cost in terms of national product.

The road to these conclusions needs to start by clarifying what I mean, and what I do not mean, by social transfers and the welfare state. "Social transfers" consist of these kinds of tax-based government spending:

- Basic assistance to poor families, alias "poor relief" (before 1930), "family assistance," "welfare" (in America), or "supplemental income;"
- Public aid to unemployed workers (unemployment compensation and help in securing new jobs);
- Public pensions, but excluding those for government and military employees;²
- Public health expenditures; and
- Housing subsidies.³

I shall define a "welfare state" as a country in which such social transfers take up 20 percent or more of GDP, as shown in Table 1.

A. Little Retreat since 1980

As an economic species, the welfare state has shown strong survival instincts in the countries where it emerged in the twentieth century. Within the expanding OECD, the number of welfare states is stable or expanding. Since 1980, these exits, entries and borderline cases have stood out:

- Ireland definitely left the ranks of welfare states on the 20-percent yardstick.
- Switzerland took Ireland's place in the late 1990s, silently becoming a welfare state with major increases in pensions and public health.⁴
- Others are approaching the 20-percent borderline from above and from below. The Netherlands dropped down to the border, with major cuts in its disability and other programs after 1995. Japan is approaching welfare state status, now transferring over 17 percent of national product.
- In Eastern Europe, at least the Czech Republic, Hungary, and Poland are preserving their welfare states, both through the depression of the 1990s and through the subsequent recovery.
- Six other OECD countries continue to hover near the 20-percent borderline -- Australia, Canada, New Zealand, Portugal, Spain, and Britain.

B. The "Free Lunch Puzzle"

The welfare state's survival over the last quarter century has puzzled many observers. Don't tax-based social transfers dampen the incentive to be productive, dragging down the growth of the economy? This fear rests on some familiar and plausible suspicions about taxes and transfers. We often suspect that tax and transfers cut the productivity of both the taxed and the subsidized, since both sides face higher marginal tax rates of exerting themselves productively. Many have also suspected that welfare states tend to run bigger government budget deficits.

Yet experience from the late nineteenth century to the early twenty-first fails to support these common suspicions. So say the numbers, both when you look at them in the raw and when you statistically measure the different forces that determine economic growth. There is no international correlation at all between the share of social spending in the economy and either the level or the growth of GDP. Of course, places differ in other ways than just in their views of taxes and welfare, so we need an econometric analysis that gives many forces their due. Several economists have performed such tests, and most have found no robust or significant negative effect of higher social transfers on GDP per person.⁵ The effect could just as easily be positive, say the majority of tests, with a zero effect near the center of the confidence interval.

Imagined Blunders versus Real-World Policies. One key to the free-lunch puzzle is that real-world policies seldom commit the gross blunders that economic conservatives so often imagine. The usual tales about the high incentive costs of the welfare state are based on a compelling economic logic. The logic might have been borne out in the real world if governments had blundered by simply taxing capital and entrepreneurship and effort heavily, while offering young adults the chance to avoid a lifetime of work with a near-wage benefit. Yet the overriding fact about such blunders is that *they never happened*. Within the range of true historical experience, there is no clear net GDP cost of higher social transfers. The econometric evidence suggests -- though it cannot yet quantify -- major roles for the following institutional and historical facts.

The Welfare-State Tax Mix Looks Better. A second key to the puzzle is that the high-budget welfare states actually favor types of taxation that mainstream economists think are better for economic growth.⁶ To see how their choice of taxes departs from some common beliefs about the sloppy and bloated welfare state, consider the kinds of taxes shown in Exam Question #1. Many think of the welfare state as a place where big government soaks the rich, taxing corporations, capital, and top property incomes so heavily that many of them try to take their money out of the country. Not so. The correct answer in Exam Question #1 is answer (a), that the welfare states do not tax corporations or capital or top property incomes more heavily than low-social-budget countries like the United States or Japan. One might have been misled on this point back in the 1970s or 1980s when reading news that the top income tax rates were very high in, say, Sweden. Yet even back then corporations and the richest seldom paid the top statutory rates, thanks to a host of deductions and loopholes. And since the early 1990s Sweden and other European countries have simplified their tax systems so as to levy lower top tax rates.

Exam Question #1

Which of the following tax rates is **not** higher in big-government welfare states than in a small-government country like the United States?

- (a) tax rate on corporations, capital, and top property incomes
- (b) tax rate of labor income
- (c) tax rate on general consumption (like sales tax)
- (d) sin taxes (on tobacco, alcohol, gasoline)

If the high-budget welfare states don't tax corporations, capital, and top property incomes any more heavily than does the United States, what other taxes do they levy to pay for those bigger social budgets? For one thing, they do levy higher taxes on the human earnings of everybody from janitors up through doctors and lawyers, labeled as "labor income" in answer (b). This kind of tax could by itself have negative effects on economic growth. Yet North American economists, when polled on the subject of taxation, feel that taxing labor income is definitely better for economic growth, because labor supply is less sensitive to taxation than is capital supply. One should also note that the heavy taxes on labor bring the tax burden to rest on the same income groups that vote in favor of the welfare state. To a large extent, workers themselves pay for the safety nets designed to protect the least fortunate among them.

Welfare-state governments also levy heavier taxes on general consumption, the kind of levy mentioned in answer (c). Such taxes, in the efficient form of a European "value added tax" (VAT), are favorites among economic conservatives. They have the pro-growth virtue of not double-taxing savings. It is striking that this kind of taxation takes a bigger tax bite in the welfare states of Europe than in the United States, where conservatives have traditionally called for it.⁷

Finally, it is the welfare states, especially those in the Nordic countries, that have the heaviest "sin taxes." Again, they have chosen taxes that mainstream economists would defend. Such addictive products as alcohol, tobacco, and gasoline, bring negative externalities to society, in the form of bad health and bad air. How does relying on these kinds of taxes harm economic growth and well-being? Yet these are the kinds of taxes that are kept lower in the United States.

To find the further keys to unlock the free-lunch puzzle, we must go beyond just the level of transfers and the tax mix, and return to our larger task of identifying the government failures and market failures within today's rich OECD.

II. Efficient Markets and Efficient Government: Where Are the Boundaries?

Conventional economic theory reminds us that there are two classic ways in which policies and institutions can bring economic misery: Government failure and market failure. Over the whole sweep of economic history until the mid-twentieth century, the greater damage to peoples' living standards has come from government failure. Small ruling elites have protected themselves from competition, and reaped non-competitive rents and taxes from the general populace. The main force holding people back has simply been bad governance.

Yet in the second half of the twentieth century governments became more responsive to public will and public criticism in the OECD countries. These democracies are cleaner, with less redistribution toward powerful elites. The news on government quality is especially good for northern Europeans, a population that lives largely in

welfare states. Table 2 delivers this good news, based on Transparency International's annual survey of perceptions about corruption.

In this better-governed postwar world, there is more reason to turn to the other kind of institutional failure, which many economists call market failure, to emphasize ways in which private markets don't work and need fixing. Market failures have multiple sources. The broadest and most common consists of externalities or spillovers, in which people's incentives fail to reflect the true social marginal costs and benefits, as with pollution and advances in knowledge. Markets also fail to align private and social costs when one party has market power (monopoly, monopsony). A third source of market failure is asymmetric information, when one side of the possible exchange hides information that the other side needs when evaluating risks and offers.

We cannot consider all the types of government failure or market failure here, nor can we document where they have occurred in the last half century. Let us instead focus on a few policies and institutions that have drawn prolonged debate, starting with those that put bigger and more comprehensive government in the most favorable light, since these will help explain how some policies related to the welfare state have avoided any costs in terms of GDP.

A. Where Bigger Government Has Worked Better

On several fronts, adopting universal and progressive social transfers have helped to insure against some of the bad effects of decentralized markets. Here the mistakes tended to cluster in the United States and other OECD countries with lower taxes and spending.

Health Insurance and Health Care. Parts of the health sector suffer from all the classic sources of market failure. Externalities abound: My contagious disease threatens you, your foolishly risking your life ties up resources in the emergency room, and so forth. In a private market, the doctor-patient relationship embodies monopoly power, asymmetric information, and moral hazard. The tense relationship of private health insurers to care providers is also riddled with justifiable mutual mistrust. Private markets attempting to provide selective and voluntary health insurance to individuals often go into a "death spiral" of rising premiums and increasingly poor risks, as those individuals who know they are probably healthy drop out of the insurance plan.

To be sure, competition and price incentives will always have an important role to play in health care. Even the most universal public health care systems must constantly experiment with charging patients for part of their care, and must allow patients to pay for private surgery if they are willing to do so instead of waiting in the public-health queues. There is also evidence that competition among hospitals, and perhaps other providers, does improve their efficiency.⁸

Yet relying heavily on private markets creates problems in the health sector, as shown by the experience of the rich OECD country that has the least universal coverage and the least government control over prices and insurance premiums. As Laurence Kotlikoff and Christian Hagist have recently summarized:

“Although healthcare spending is growing at unsustainable rates in most, if not all, OECD countries, the U.S. appears least able to control its benefit growth due to the nature of its fee-for-service healthcare payment system. Consequently, the U.S. may well be in the worst long-term fiscal shape of any OECD country even though it is now and will remain very young compared to the majority of its fellow OECD members.”⁹

The strongest pro-growth dimension of social transfers occurs in public health care coverage, the social sector where reliance on ordinary market mechanisms breaks down most frequently.¹⁰ The best international OECD evidence on this front comes from the regrettable experience of a single outlier nation, the United States.

Americans die younger than people in countries that have a greater share of their health expenses paid for by taxes. We rank 19th out of 20 rich OECD countries in life expectancy, just ahead of Portugal. Not all of this is due to our health care system. Americans have worse health habits and slightly more pollution exposure. Our health habits are world famous -- especially bacon double cheeseburgers, fries, Krispie Kremes, double lattes, soft drinks, and a high homicide rate. Yet when you weigh all the separate effects statistically, the health care system looks guilty of causing a significant part of our early death.

The best attempt to quantify these sources is an OECD panel study summarized in Table 3. Using the new OECD standardized measures of premature mortality and a pooled cross-section approach, Zeynep Or finds that a greater public-expenditure share, for given total expenditures, significantly reduces mortality, especially among men, among OECD countries since 1980.¹¹ Table 3 reports some of the cross-sectional part of the results. In the mortality-change perspective, where minus signs are good, some familiar factors lower mortality down toward the world-best Japanese standard. Those factors include higher income, white-collar occupations, cleaner air, abstention from bad consumption habits, and greater total spending on health care. On balance, though, a more public approach to the same health care expenditures also helps significantly. It explains a small but significant part of America's greater mortality.

The more private American system also costs more, without saving lives, as figure 1 dramatizes. Part of the extra expense of American health care is a justifiable purchase of higher-quality care, a tendency that the rest of the world will soon emulate. Part of it, though, consists of higher bureaucratic costs. Contrary to the usual rhetoric assuming that bureaucracy means government bureaucracy, the private health insurance sector in the United States imposes greater administrative costs trying to keep people from being insured and compensated than other countries spend administratively on providing public care to all. The World Health Organization has ranked the United States 37th in the quality of health care delivery. Obviously, we have the best cutting-edge medical care in the world, but few can afford it. Little wonder that in recent surveys of opinions about health care, Americans were more dissatisfied about their health care than were people in most other surveyed countries.

The locus of the American health care problem is not the public sector as such. Rather it centers on this country's peculiar combination of unregulated markets, strong supplier lobbies, and the lobbying power of the elderly. Two historical traps have hobbled American health care. The first trap came in the 1940s and 1950s, when health insurance was chained to employment. As Milton Friedman and others emphasized, one culprit was the regime of wage controls in World War II. Unable to compete by offering higher wage rates in tight labor markets, employers competed with new health insurance packages. By 1954, tax legislation and support decisions by the courts finished the welding of this link of health insurance to jobs.¹² The second trap was sprung by the passage of Medicare in 1965. Medicare used tax revenues taking an increasing share of GDP to bid for health services in a context of uncontrolled prices, so that greater effective demand on behalf of seniors made health care less and less affordable for those under 65.

Only time will tell whether the United States can escape the trap of its overworked health care system. Canadian history suggests that in a federal system, the reforms would have to come from below. Over half a century ago, Saskatchewan and other provinces took the lead in universal health insurance, long before the federal government stepped in. Perhaps innovative states could lead the United States toward the healthy heresy of extending "socialized medicine" to the under-65 population.

Redistribution to the poor and the unemployed. Raising the productivity and well-being of the poor is another activity that the public sector provides relatively efficiently. While many private citizens wish to lift the poor, the private market for charitable giving tends to suffer from free-rider problems ("I do care, but why should I bother to give, when my individual contribution is unimportant? Let Bill Gates put up the money.") History reveals that private charity was never great in the absence of government tax-based aid to the poor. On the contrary, the rich give more to the poor now that government does the same, though the government welfare programs deliver more to the poor.¹³

It is natural to fear that the welfare state, in addition to taxing those who work, also discourages work by transfer recipients. Giving generous unemployment compensation seems like the most obvious example of a policy that cuts jobs and output by subsidizing non-work. It turns out that this fear is qualitatively correct, but the effects on GDP are small enough to be outweighed by the favorable effect of other welfare state transfers on GDP.

More generous unemployment compensation does indeed cut the share of adults who work. A rich econometric literature has made this point, and our latest tests agree.¹⁴ But by how much does it cut GDP? The solid findings on the work losses from raising the level of unemployment benefits miss the mark here, for at least two reasons. For a start, they usually focus on the simple "replacement ratio," the ratio of a standard unemployment benefit to the average wage rate. Users of this key parameter of unemployment compensation miss these facts: Only a fraction of the unemployed qualify for such standard benefits, only a further fraction of those who qualify actually claim the benefits, and these in turn draw benefits only for a fraction of a year. When we multiply

the replacement ratio by the fractions covered and paid, the effective rate of unemployment compensation actually moves in a lower and narrow fractional range. Between 1975 and 1998 the well-known replacement ratio for core OECD countries averaged 34 percent of an average wage, with a standard deviation of 15 percent. Yet the more relevant measure of the effective rate of unemployment compensation averaged only 13 percent of the wage, with a standard deviation of 8 percent.¹⁵ So instead of imagining the job effects of two-deviation jumps in the replacement ratio from, say, 30 percent to 60 percent of an average wage, we should be measuring the effects of a jump from 13 percent to 29 percent.

A second difficulty with the usual thought experiments is that they stop with estimating effects on jobs, with no extension to GDP effects. Yet we know that any labor-supply restriction cuts output less than it cuts employment, while raising labor productivity. That would happen even if labor were of uniform quality. Add to this the fact that unemployment compensation typically looks attractive only to persons with below-average earning potential, leading to a further rise in output per worker. All things considered, unemployment compensation has only a small effect on GDP.

While many observers over-estimate the percentage effects of classic unemployment compensation on GDP, they also overlook the way in which basic family assistance, alias welfare, is often designed to avoid discouraging work. The unemployed are given retraining and job search help, and are pressured to take it. To illustrate how a higher-budget welfare state has actually given some people *more* incentive to take a job, consider the case of jobless single mothers. The realities of recent history on this front are illustrated by Exam Questions #2.

Exam Question #2

In which case was a poor single mother given the **least** incentive to get a job?

- (a) U.S.A. under Reagan
- (b) U.S.A. under Clinton
- (c) Britain under Tony Blair today
- (d) Sweden's welfare state today

What has given poor single mothers the least incentive to work has been a policy environment that takes away their welfare and other public benefits as soon as they get a job. What would make a country actually do that, and face such women with a huge marginal tax rate? It is the desire to keep welfare expenditures very low, so that no one person above the poverty line gets any aid. Such penny-pinching, known as strict means testing, was practiced by the conservative Thatcher-Reagan revival of the early 1980s. Hence (a) is the correct answer to Exam Question #2.¹⁶

Later on, bipartisan reforms in the Clinton years improved work incentives at the bottom of the U.S. income spectrum. The first improvement came when the Earned Income Tax Credit (EITC) was made more generous in 1993. That, and accompanying

adjustments of state-level benefits, gave jobless single mothers a stronger incentive to take that first low-paying job and get started on an employment history. Then the 1996 welfare reform added a tough-love dimension by setting term limits on welfare. The combination of the two has decreased welfare caseloads without raising poverty, even after the recession of 2001-2002. Meanwhile, Britain under Tony Blair made a similar reform to the EITC, undoing the strict means testing of the Thatcher era. And a welfare state like Sweden never had such a heavy tax on getting a first job, because family benefits were retained when one got a job, and the tax rate on extra earnings remained moderate.

Investing in Mothers' Careers. The welfare states also gain jobs and productivity through public policies that invest in career continuity and skills accumulation for mothers. This matters a lot, now that such a large share of women's adulthood is career-oriented. Welfare states provide paid parental leaves and public day care with qualified providers. While it is not easy to estimate the gains in productivity from micro-data, there is at least one aggregate sign of strong gains: Women in such countries have market wage rates that are much closer to wage rates than for men in the United States or Japan or Switzerland.¹⁷

The benefits of real-world government interventions on these welfare-state fronts, combined with the better tax mix of the high-budget welfare states, may help to explain why the statistical evidence has not turned up any negative effect of social transfers on GDP.

B. Where No Rich Country Has Made Huge Mistakes

Next, there are policy fronts on which neither side of the Atlantic, or of the international ideological divide, has made a big mistake within the OECD community. Perhaps the best example is primary and secondary education. All OECD countries realized a century ago that primary and secondary education would not advance fast enough unless they were supported predominantly by taxes. Perhaps the most interesting illustration of this consensus in favor of tax-based schools comes from early American history. For all its aversion to taxes and government, the United States was a leader in setting up local taxes for universal local schooling. Indeed, many American localities had begun to base schools on local property taxes even in the colonial era. Today the tax-based approach remains universal among rich democracies, with no clear differences in the support for primary and secondary education.¹⁸

A second case in which the choice between public and private approaches seems to matter little is in the now controversial realm of pension policy. As I will argue in Part III below, all systems face similar difficulties regarding pensions in an aging world, whether the pensions are individual, or job-related, or public.

C. Where Markets Worked Better

Most of the economy consists of markets that do not fail, government failures seem worse in practice, and the free-market side of the debate was correct all along. While the American approach is at its worst in the health care sector, Western European growth and well-being have been dragged down by other policy failures. The common denominator in Europe's shortcomings is protectionist restrictions on competition.

Government operation and regulation of industry. Postwar Europe has gone through a cycle of nationalization and privatization of "core" or "commanding heights" industries such as public utilities, transport, coal, and steel. Several decades later the nationalization experiments appear to have brought no clear gains in productivity or performance, and one may question whether the experiment was worth the large political and social costs of first fighting over nationalization and then fighting over privatization.¹⁹ Such doubts are one of the reasons why most OECD countries have moved away from even regulation of the core public utilities since about 1990, as shown in Figure 2. This is not to say that the optimal government regulation of industry is zero, and all countries seem to recognize the need for government surveillance (e.g. in banking). Yet the fruits of heavy government control of utilities and manufacturing are hard to see.

Protection against Imports. A huge amount of international evidence mustered by scholars and by international agencies makes it clear that protecting domestic industries against competition from imports reduces GDP. That evidence comes mainly from outside the OECD, for the simple reason that rich OECD countries have all shared the same movement toward lower import barriers in the postwar era. Nonetheless, import barriers look costly in the global evidence, just as they do in orthodox economic theory.

Higher education. European anti-competitiveness shows up in higher education, the social sector that is most removed from the poor, the sick, and the elderly. Higher education calls for a mixture of market competition and limited public subsidy. Here the United States and Canada have chosen a better institutional mix than Western Europe or Japan. North American government subsidies for higher education seem to approximate the (hard to measure) amount appropriate to the fact that higher education does bring some "external" benefits, some favorable spillovers to the general population through the advancement of knowledge. Yet we have avoided making the government pay for all of higher education, or even half of it. We force public universities to compete with each other and with private universities for research grants, for faculty talent, and for student talent. Individual faculty members have to compete by teaching well, since America attaches more importance to student evaluations of faculty than does any other country. By contrast, top universities in Western Europe and Japan have not been allowed, or forced, to compete sufficiently with each other and with American universities.

Employee Protection Laws. Of Europe's anti-competitive institutions, perhaps the costliest in the long run are the many restrictions on labor-market flexibility. Here let us focus on employee protection laws (EPLs), which greatly raise the cost of dismissing employees. The conventional fear that EPLs cost jobs has not been shared by all authors in the recent debates. Some have rightly pointed out that the hypothesized job losses

from EPL strictness do not show up in all equations.²⁰ Yet the balance of statistical work still indicts EPLs.²¹

Even if they do not raise unemployment very much, they redistribute it in a way that seems to cut labor productivity in the long run. EPLs create insiders and outsiders. While the insiders whose jobs are protected might enjoy more productivity-enhancing training at work, human investments in the job-market for outsiders is delayed for years. Table 4 underlines the effects on outsiders by showing the relative unemployment rates for two groups of outsiders, namely youth (15-24) and women. Where EPLs defend the insiders most strictly, a Southern European tendency here represented by Greece and Italy, unemployment runs relatively high among youths and women. Where it is low to the North, as shown here for Ireland and Denmark, youths and women are more fully employed.

In theory the favorable effects for insiders and the unfavorable effects on outsiders might happen to balance out, at least in the first few years after EPLs are tightened. Yet over a generation or two the share of the workforce's adult history that was lost to the career delays of outsiders goes on rising, at the expense of productivity.²²

These protections of privilege are unrelated, however, to the safety nets and egalit  of the welfare states. The free-lunch puzzle still acquits egalitarian safety-net transfers from any guilt in lowering GDP, and instead indicts those institutions that protect insiders against competition.

III. Aging Gracefully in the Twenty-First Century

If the welfare state seems innocent of dragging down growth in the twentieth century, might it nonetheless fail in the twenty-first? Daily media coverage emphasizes that a rapidly aging population may find it harder and harder to keep budgets in balance and to sustain economic growth. Will the welfare state be one of the casualties in this aging world? For most countries, the budgetary tensions have centered on public pensions, and to a lesser extent on health care budgets.

A. Three Familiar Sources of Pension Trouble

Aging Too Fast. The trend toward improved senior longevity and lower fertility is pressuring high-income countries to recalibrate their pension programs. Actuarial changes are being forced not only on public pensions and health systems, but on private job-based plans as well. If aging were the only problem, then we could rank different countries' dangers just by looking at the UN projections for population aging out to, say, the middle of this century. As of 2050 the countries with the highest population shares over age 65 will probably be Italy and Japan. North America, Australia, and New Zealand face less difficulty here, thanks to their accepting immigrants and their generally higher fertility. Most developing countries also face less demographic threat over this half-century. The exceptions tend to be East Asian: China, Taiwan, and Singapore are all

aging so rapidly that by mid-century they will face pension problems as severe as those faced by most OECD countries today.

Asking for Trouble with Early Retirement Policy. A second source of pension trouble is avoidable, but widespread in Southern and Western Europe. Stuck with their own laws against firing workers, several European countries have tried to buy out seniors by subsidizing early retirement of workers in the 50-64 age range. The implicit tax on staying at work peaked at the start of the 1990s. Italy is in particularly deep trouble here, yet Italian politics has thus far produced only timid and partial roll-backs of the subsidies to early retirement.

Asking for Trouble with Overall Government Deficits. The budget pressures that can crush social programs need not relate to aging or to retirement policy alone. They can come from any source. Whatever raises the overall government deficit and national debt relative to annual GDP can force a country to cut back on any kind of spending, including pensions and other social transfers. Even if pensions were ostensibly protected in a special lock-box fund, a desperate government could always raid the lock box. The OECD country subject to the most pressure from its overall budget deficit is Japan, where the deficit were about 6-8 percent of GDP for over a decade. The United States occupied second place in the deficit/GDP ranks between 2002 and 2005, thanks to its mixture of spending jumps and tax cuts. There is no international correlation between deficits and welfare-state social transfers, however.

B. Basic Perspectives on OECD Pension Solutions

PAYGO is Sustainable. When the population gets older, something has to give. Annual pension benefits simply cannot continue to keep up with annual incomes of the employed. Wage-indexed pensions appear unsustainable, and need to be shifted to price indexation.

Most public pension systems are now on a pay-as-you-go (PAYGO) basis. In the aggregate, the current generation of workers pays for the retirement of the currently elderly, and not for its own retirement. Given that PAYGO is the prevailing current system, many have slipped into thinking that PAYGO is doomed and must be replaced with a funded or defined-contribution system.

This is incorrect, however. No pension whatsoever is immune to the need to adjust to longevity. Suppose that the only pillar of your retirement were your individual savings. If you work and save for Q years, and draw on savings for an estimated R years of retirement, you must set your annual savings and retirement benefits so that the accumulated value of your savings just covers your retirement needs. For any given rate of return you get on your savings, you cannot enjoy more retirement (raise the ratio R/Q) without cutting your retirement consumption relative to your earlier wage. The same holds if you add a second private pillar and convince your employer to share your retirement costs, presumably by accepting a lower rate of straight pay. You and your employer are still subject to the same actuarial logic as you would be by yourself. Nor is

the third pillar any different: A public system, like a private pension plan, must adjust the relative retirement benefit to the ratio of years spent in the two phases of adult life.

But just as aging is a problem in any pension system, so too there is some parametric adjustment in any system that can fix the problem. Making the pension system sustainable is no more difficult under a PAYGO public system than under any other. There are two ways to avoid raising the tax rate and still balance the pension budget, even though we live longer:

- (1) Slow down the rise of retired/working ratio, by raising retirement age (or fertility or immigration), and
- (2) Make benefits rise more slowly than the average income of the employed.

Yet real benefits need not be cut, as long as income grows. Suppose that over a half-century the elderly share doubles, as it threatens to do for Italy and Japan. If real incomes continue to double every half-century or faster, as in the past, the country could leave its real benefits *and* its retirement age *and* its tax rate the same forever. Real benefits per retiree could even go on rising as long as the aging is less severe than in Italy or Japan, or the full-benefit retirement age is raised, or both.

Has Anybody Made the Necessary Cuts? Clearly, if the share of elderly in the population goes on rising, the share of pensions in overall budgets cannot remain the same unless there is a drop in the pension support ratio, defined as

Pension support ratio = (Pension benefits per person over 65) / (GDP per person 15-64).

Who has made the necessary cuts? Figure 3 shows that some countries (Ireland, New Zealand, the Netherlands, and to a lesser extent the Nordic countries) have been making such cuts in their PAYGO public pensions since the 1980s or early 1990s. Yet the OECD community on the average has not made the necessary cuts yet, and the official OECD data imply that Swiss support for the elderly (and those on disability payments) has been getting more generous (true?). Such a postponement of the inevitable decline in relative support for the elderly risks disturbing public budgets and possibly even GDP.

Yet PAYGO pensions can be kept in equilibrium. In fact, several countries of Northern Europe did much of the necessary adjusting in the 1980s and 1990s. It is instructive to see which adjustments their political systems tended to make. By drawing on the underlying econometric estimates of what determines social budgets, we can forecast the likely non-linear effects of population aging on taxes and transfers.²³ Figure 4 gives the revealed policy response to aging, holding other things equal. When the over-65 share of the population rose from 14 percent to 18 percent (a rise of 29 percent), there was no change in the shares of pensions or other social transfers in GDP. The cost to taxpayers of all social transfers, including pensions, therefore rose hardly at all (a statistically insignificant 0.5 percent of GDP). Essentially the full burden of the adjustment fell on the elderly themselves, in relative terms. The crude pension support ratio, measured as the ratio of (pensions per elderly) to (GDP per capita), dropped 18 percent, other things equal. It did not show up as a real drop on pension benefits because GDP per capita was growing. Some countries achieved this by encouraging later

retirement, other by indexing pensions to something that grew more slowly than the growth of earnings. In principle, this kind of adjustment in tax-based pensions could continue forever. In the 1980s and 1990s it was part of a larger set of social transfers that did not bring any loss of GDP to those high-budget countries of Northern Europe.

How Do Funded and Private Systems Really Differ from PAYGO? Even though the long-run equilibrium requirements for different private and public pension systems are analogous, there is still the widespread belief that switching from PAYGO to a funded (defined contribution) system or a more private system would bring benefits, and that these benefits somehow relate to the aging problem. While the proposals are complex and varied, a core feature is that individual earners take their paycheck contributions out of the public PAYGO system. Despite the “privatization” label, government compulsion is involved: Even those whose set-asides are voluntary are compelled to keep their extra private savings locked away until retirement.

Compelling households to save more allegedly serves four goals: (1) bringing government deficits under control, (2) promoting national saving, (3) improving the rate of return on investments in retirement, and (4) building in a political pre-commitment to a fixed set of rules. Yet it is not clear that any of these four goals is well served by what are often called “reforms” of the public pension system.

Government budget deficits will be raised, not lowered, for a generation or longer. Honoring the implicit pension promises to those currently in middle age or older means that pension budgets cannot be cut for at least a quarter century. The general taxpayers must offset each dollar that is withdrawn from the public pension system and shifted to personal private accounts. The extra burden on general taxpayers is as immediate as the exit of savings into personal private accounts. Chile’s experience dramatized this new burden on the general taxpayers.

Eventually, if the system stays in place beyond the decades in which the government compensates the earlier cohorts, continued compulsory savings would indeed raise the national savings rate. But that is at least a quarter century off, and we still await clear evidence that the nations in question are under-saving. A simpler way to address the savings issue is to switch from the current income tax systems that double-tax saving.

In the American debate, at least, one hears that switching from social security contributions to private (forced) savings gives investors a better rate of return, by letting them choose something other than the government bonds that social security implicitly or explicitly buys. This is questionable. Private financial markets already equilibrate between bonds and other assets, so that differences in rates of return tend to reflect differences in perceptions of risk. Inducing some investors to shift out of bonds and into, say, stocks raises the rate of return on bonds and lowers the rate of return on stocks. If any rate-of-return gap had actually existed, the rate of return could not go up as much as that gap would imply. Even the existence of a gap in favor of holding stocks, as implied by the literature on “the equity premium,” is in doubt, both for the past and especially for the future. That past equity premium was based on measurements that may not have

adjusted correctly for risk or for survivor bias in the stock indices. Believing that there will be an equity premium in the future implies that investors will be persistently and systematically mistaken about stocks versus bonds -- a strange support for the belief that they will make the right choices when investing their privatized retirement funds.

Furthermore, making it profitable or compulsory to shift from government bonds to other assets means a greater government debt service burden, simply because this portfolio shift and the greater government deficit will raise interest rates on those bonds.

There is no reason to believe that starting a defined-contribution plan has any more permanence than a PAYGO set of benefits. Most countries with PAYGO pensions today had defined-contribution plans earlier, but overthrew them. Consider three famous examples. The original Bismarck social security innovations of the 1880s started as defined-contribution plans, but began shifting within a few years to more PAYGO, and more burdens on general taxpayers. The US Social Security Act of 1935 set up a funded system, not PAYGO. The system was defined-contribution at the aggregate cohort level, though it gave low earners a better rate of return than high earners. Yet political forces gradually abandoned the funded system in favor of PAYGO, under pressure from the powerful elderly lobby (Miron and Weil 1998). Finally, Margaret Thatcher's famous privatization of Britain's public pensions still exists, but with important modifications drifting back toward progressive redistribution and PAYGO. While the Blair government has retained much of the defined-contribution features of the Thatcher era, it has raised minimum income guarantees for pensioners significantly, at the expense of the general taxpayers.²⁴ The political tendency is clear: Democracy finds it at least as easy to switch out of funded defined-contribution systems toward PAYGO as vice versa. All pension "reforms" reflect temporary and reversible shifts in political mood.

In the process of switching to defined contribution and privatized plans two kinds of elderly poor fall behind -- those whose lower lifetime earnings yield less pension support under the less progressive reform designs, and those whose retirement investments turned out worse. Furthermore, the financial service sector gets a windfall gain if government has compelled households to buy its services. Of all the effects of such compulsory private savings, this is perhaps the clearest.

IV. Conclusion: What Happened to the Trans-Atlantic Trade-Off Between Equity and Efficiency?

This paper's claims that the welfare state is not the problem, and will not be the problem even in an older society, may seem at odds with two common assertions about a trade-off between how Americans and Europeans have accepted, or must accept, a trade-off between equity and efficiency. One common assertion is correct: In practice, the American political balance has accepted more inequality, more poverty, and lower wages as a price to be paid for higher GDP.²⁵ That is how political tastes have differed across the Atlantic, and nothing in this paper overturns such a conclusion.

Yet the evidence in this paper helps us reject a second, more common, assertion. Many assert that policymakers *must* trade away some equality to get more efficiency. As we have seen, however, there has been no net GDP cost to the welfare state. Furthermore, both America and Western Europe have passed up opportunities to promote either GDP or equality without reducing the other. America is deficient in health care for the young and poor, in developing mothers' human capital, and in taxing addictive health hazards. Europe is deficient in letting outsiders compete in labor and product markets. In terms of economic jargon, all countries are somewhere within, and not on, the social possibility frontier sketched in Figure 5.

Even without the evidence in this paper, the second assertion should have flunked a simple political reality check. That is, what we know about the political process rejects the assertion that policymakers *must* trade away some equality to get more efficiency. Ask yourself: What countries do you know that have exhausted all opportunities to promote both growth and equality? Even the European welfare states, which have pressed relatively hard to equalize incomes, still sacrifice both efficiency and equity by protecting agricultural landholders at the expense of food purchasers and general taxpayers. As argued here, they also protect senior high-paid workers at the expense of younger job entrants. Similarly, the United States protects agricultural landholders while raising the cost of food, and we have seen that it subsidizes civilian medical care only for those residents who have already survived to the age of 65, at the expense of public care for the young and the poor. There is no necessary trade-off, just homework that has not been finished on either side of the Atlantic.

Social Transfers* in OECD Countries As a Percent of Gross Domestic Product, 2001	
Denmark	29.2
Sweden	28.9
France	28.5
Germany	27.4
Belgium	27.2
Switzerland	26.4
Austria	26.0
Finland	24.8
Italy	24.4
Greece	24.3
Norway	23.9
median	23.9
Netherlands	21.8
United Kingdom	21.8
Portugal	21.1
Spain	19.6
New Zealand	18.5
Australia	18.0
Canada	17.8
Japan	16.1
United States	14.8
Ireland	13.8
<p>* Social transfers include: means-tested assistance for the poor; unemployment compensation and help in securing new jobs; social insurance for retirement, disability and survivors insurance; public spending for health care; and housing subsidies. Source: OECD <i>Social Expenditures Database</i> 1980-2001.</p>	

Table 2. Clean Government Score for 2003 from Transparency International

	Corruption Perception Index (CPI) Score, 2003
14 welfare states	
<u>(incl. 1/2 Portugal, 1/2 Spain)</u>	<u>8.3</u>
Finland	9.7
Iceland	9.6
Denmark	9.5
Sweden	9.3
Netherlands	8.9
Norway	8.8
Switzerland	8.8
United Kingdom	8.7
Austria	8.0
Germany	7.7
Belgium	7.6
France	6.9
Italy	5.3
Spain	6.9
Portugal	6.6
7 lower-spending core OECD countries	
<u>(incl. 1/2 Portugal, 1/2 Spain)</u>	<u>8.0</u>
New Zealand	9.5
Australia	8.8
Canada	8.7
Ireland	7.5
USA	7.5
Japan	7.0
All 133 countries surveyed	<u>4.2</u>

Source: Transparency International

Table 3. Health Care Systems and other Determinants of Life Saving,
Selected Countries versus Japan in 1992

Explaining premature years of life lost (PYLL) per 100,000 persons living in 1992 relative to Japan, both sexes (Negative = better life-saving relative to Japan).

	<u>France</u>	<u>Swed</u>	<u>Switz</u>	<u>UK</u>	<u>US</u>	<u>OECD average</u>
Actual excess mortality (PYLL) relative to Japan	34.7	6.0	24.3	28.2	61.3	31.1
Amount of excess PYLL due to differences in:						
Income and occupations	-5.9	-9.9	-1.8	-4.5	-18.7	4.9
Pollution	6.3	10.4	5.4	9.9	14.5	8.5
Four bad consumption habits	25.9	6.7	17.4	15.0	12.7	13.5
Total health spending per capita	0.3	5.2	2.6	5.7	0.9	5.3
Public share of all health spending	-0.9	-3.1	0.3	-2.8	8.5	-0.6
Not explained by any of these	8.9	-3.3	0.3	4.8	43.6	-0.5

Sources and notes to Table 3:

All estimates are from Or (2000/1), which displays results for 21 countries, 1970-1992.

PYLL = Premature years of life lost before age 70, per 100,000 of population. An infant death counts as a loss of 70 years, and a death at age 65 counts as 5 years lost. Thus the United States excess of 61.3 relative to Japan in 1992 is equivalent to 6.13 excess US deaths at age 60 per 100,000 of population where the corresponding Japanese would have survived to age 70.

Alternatively, the 61.3 figure is equivalent to almost one (61.3/70) extra infant death per year per 100,000 of population.

Income and occupations = the sum of two products of (regression coefficients * the differentials or changes) in two independent variables. The two are real GDP per capita in 1990 international dollars and the share of white collar workers in the total labor force.

Pollution = the contribution to PYLL from NOx emissions per capita, in kilograms per year.

Four bad consumption habits = the contributions to premature mortality made by (1) liters of alcoholic beverages per person over 15;

(2) consumption expenditure on tobacco per person over 15, US\$ at 1990 price levels and PPPs for tobacco consumption; (3) butter consumption per capita, in kg per year; and (4) sugar consumption per capita, in kg per year.

Total health expenditures per capita is measured in US\$ at 1990 price levels and PPPs for medical consumption.

Public share of total expenditures = the share of public expenditure in total health expenditure.

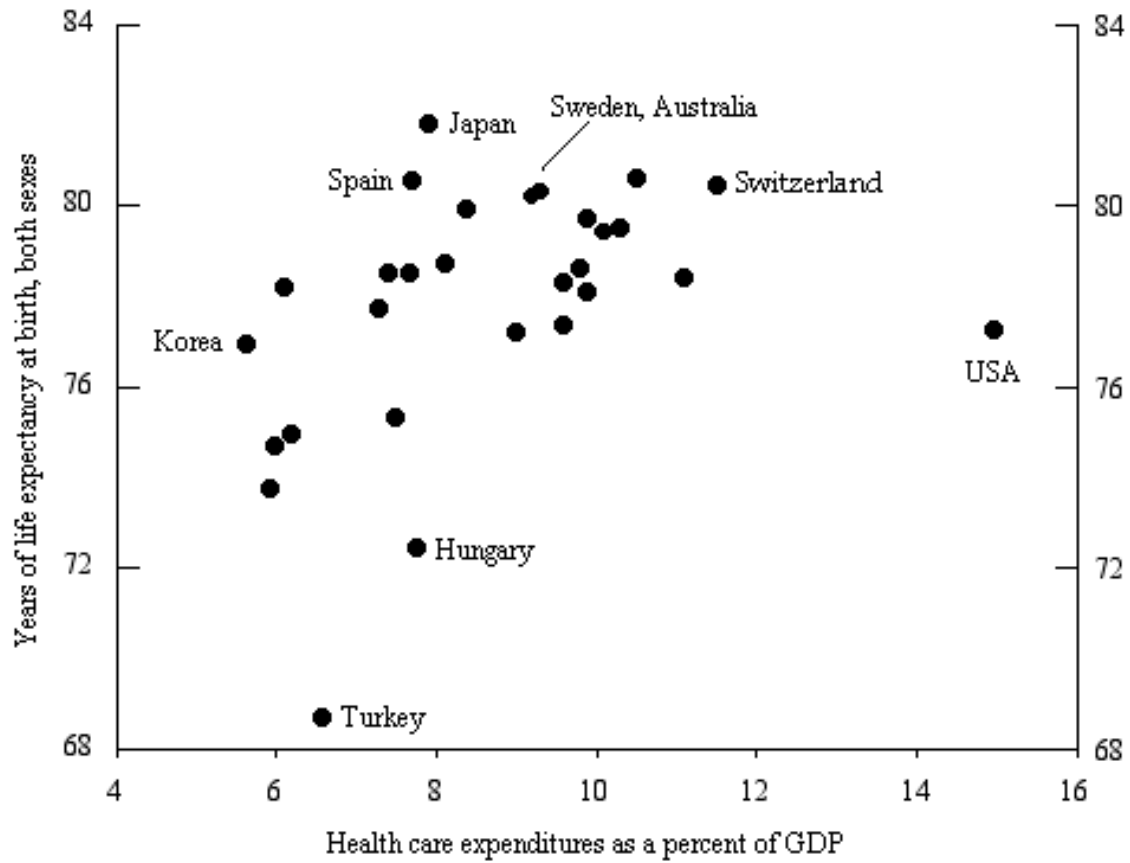
Not explained by these = the sum of the residual, or prediction error, plus (for Panel (A.)), the fixed effect for that country.

**Table 4. Employee Protection Laws (EPL) Redistribute Unemployment
Toward Outsiders: Four Countries in 2002**

	EPL	<u>Ratios of unemployment rates</u>	
	<u>strictness</u>	Youth 15-24 <u>/men 25-64</u>	Women 25-64 <u>/men 25-64</u>
Greece	3.8	4.2	2.4
Italy	3.3	3.8	1.8
<i>versus</i>			
Ireland	1.3	1.7	0.8
Denmark	1.6	1.6	1.2

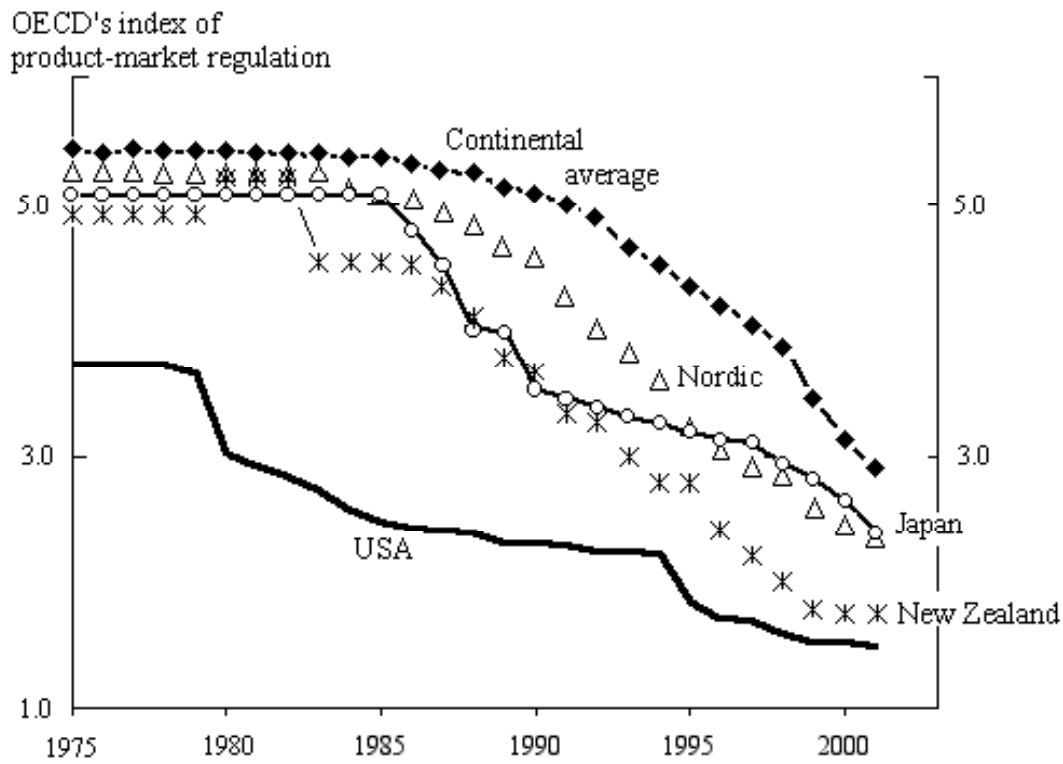
Source: OECD, standardized unemployment rates.

Figure 1. Health Expenditures and Length of Life, for 30 OECD Countries in 2003

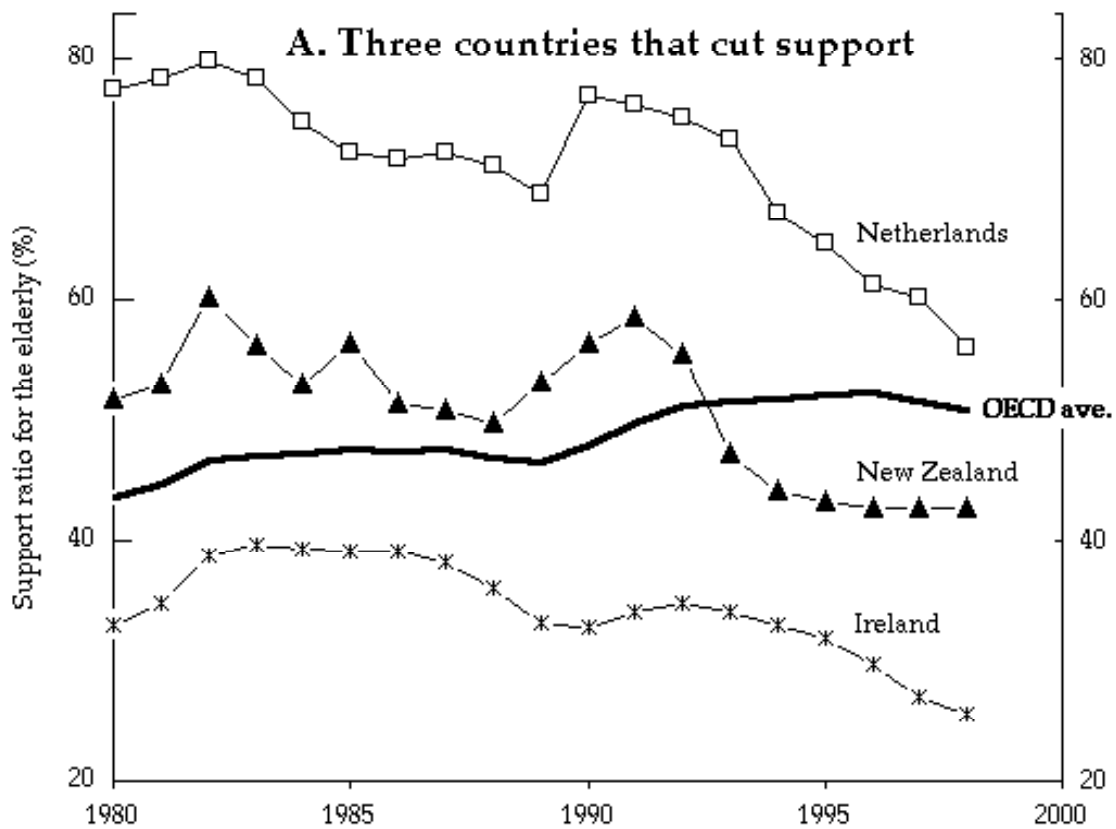


Source: "OECD in Figures," OECD Observer 2005, Supplement 1, p. 84.

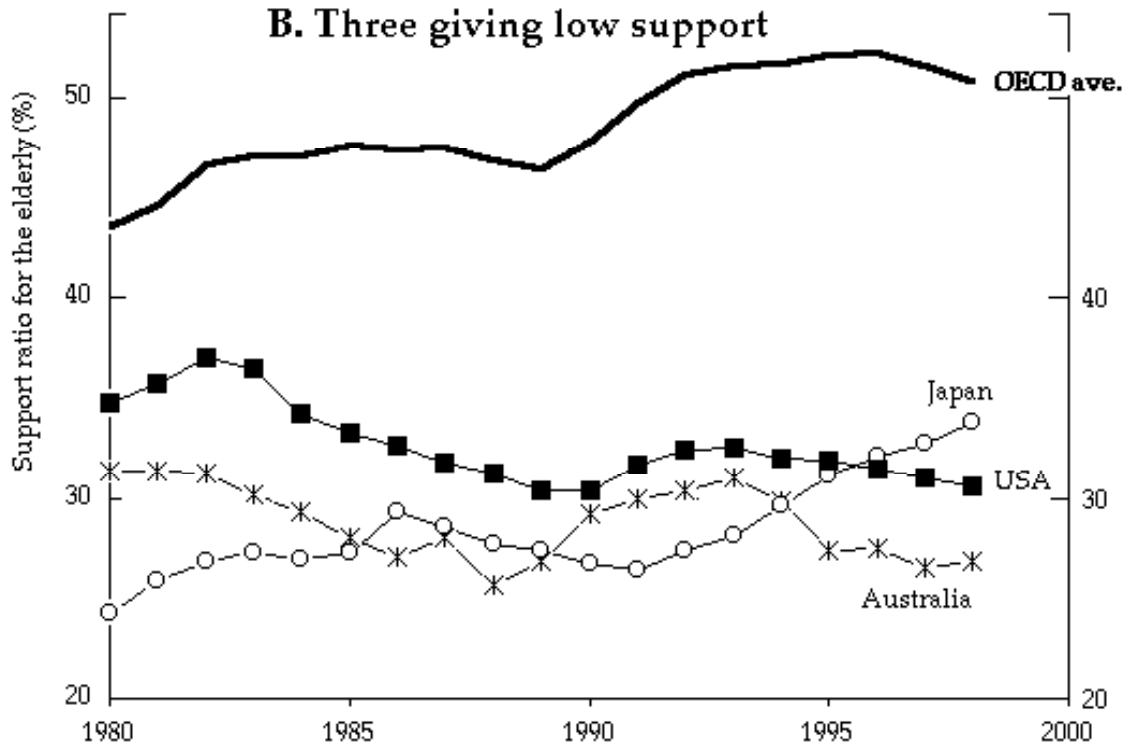
Figure 2. The Restrictiveness of Product-Market Regulations, 1975 - 2001

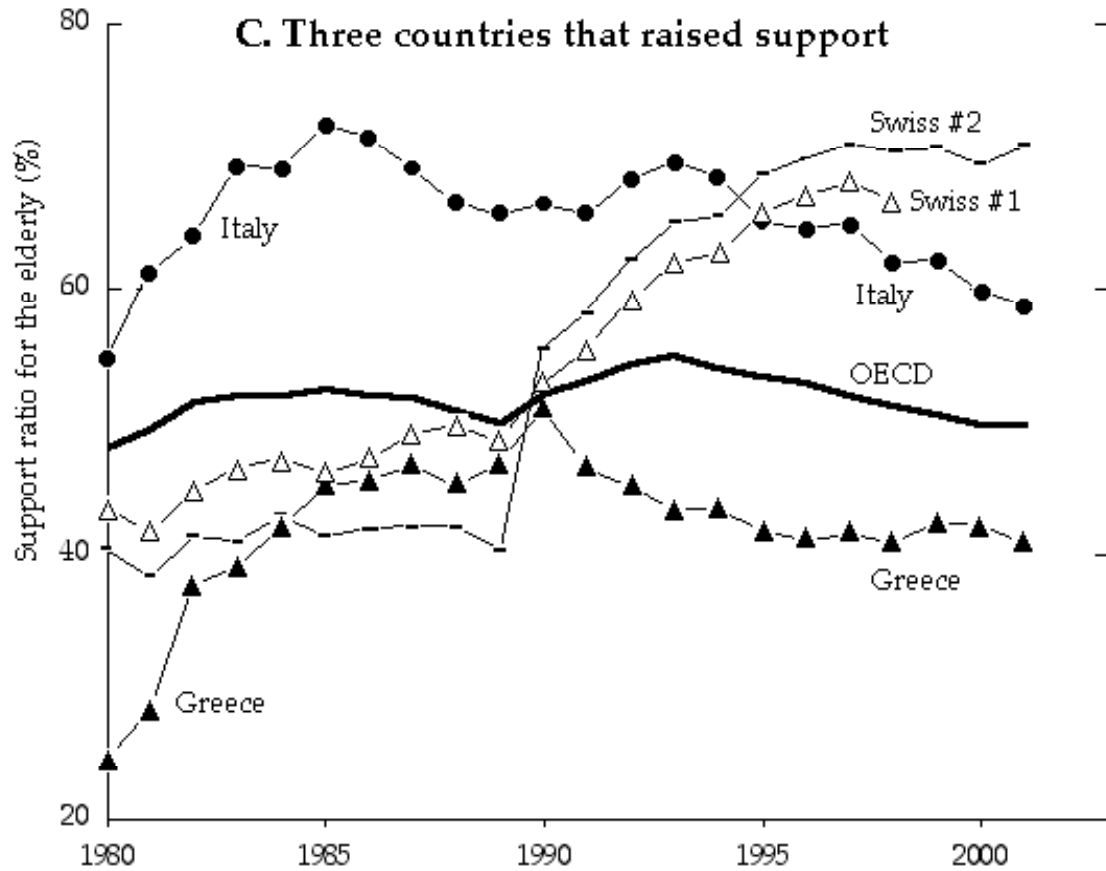


**Figure 3. Support Ratios for the Elderly
in Selected Countries since 1980**



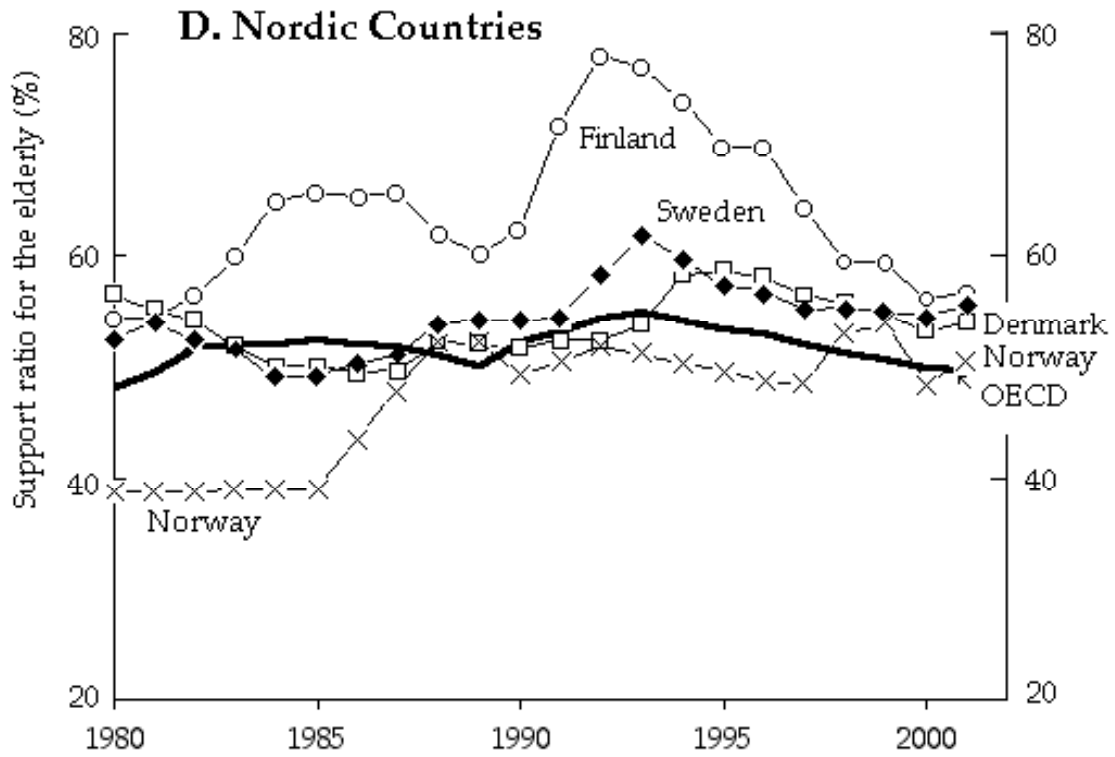
Support ratio for the elderly = (benefits/person over 65) / (GDP/person over 16).
Source = same as for Table 1.





Support ratio for the elderly = $\frac{\text{public pension and disability benefits / persons over 65}}{\text{divided by (GDP / persons 15-64)}}$

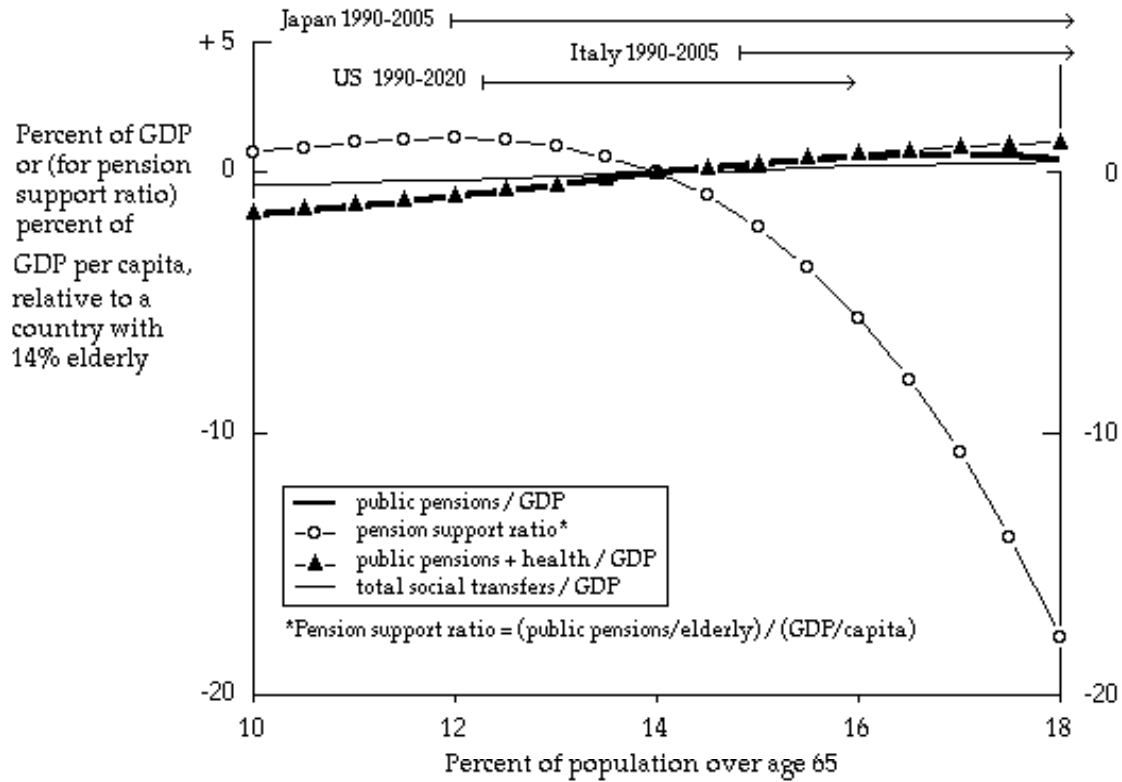
Sources = OECD Social Expenditures file, UN age distributions
(Both Swiss series are from this source.)



Support ratio for the elderly = (public pension and disability benefits / persons over 65) divided by (GDP / persons 15-64)

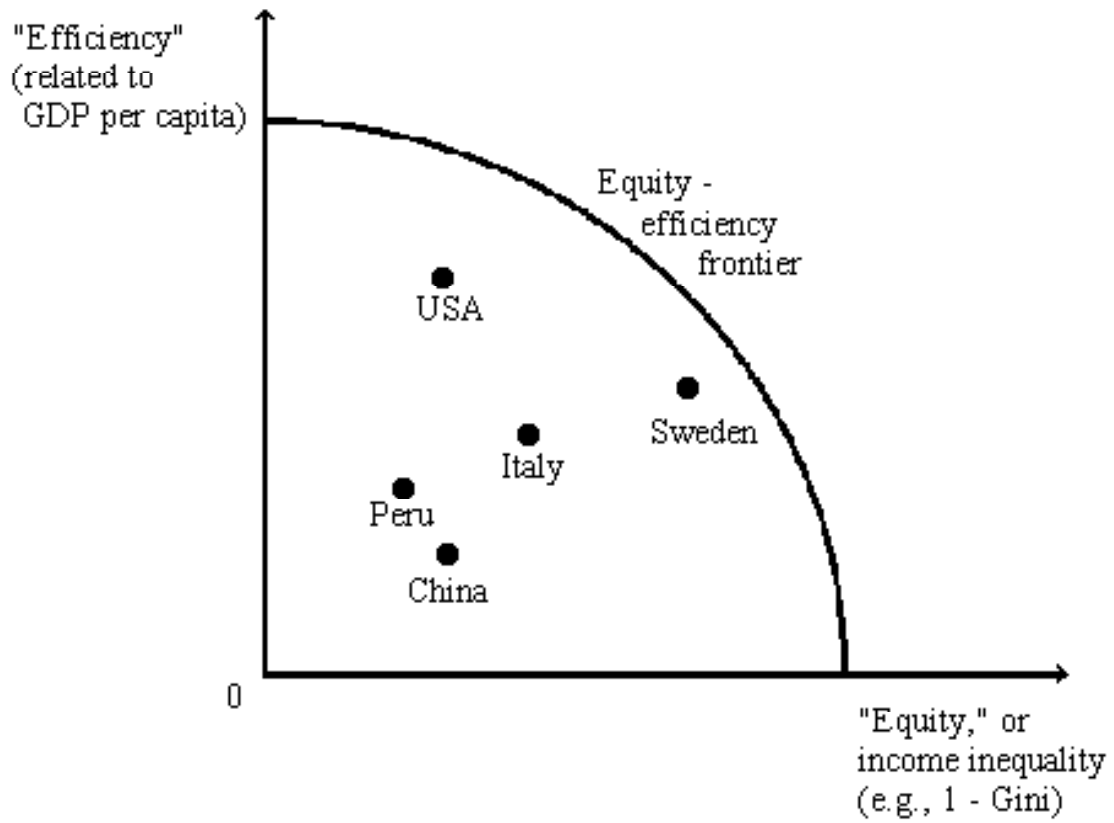
Sources = OECD Social Expenditures file, UN age distributions

Figure 4. How Population Aging Affected Pensions and other Social Transfers in the OECD, 1978 - 1995



(Source: Lindert 2004, Volume 2, Appendix Table E3, equations without full fixed effects.)

Figure 5. Nobody is on the Equity - Efficiency Frontier



REFERENCES CITED

- Agell, Jonas, T. Lindh, and H. Ohlsson. 1999. "Growth and the Public Sector: A Reply." *European Journal of Political Economy* 15: 359-366.
- Alesina, Alberto. 2006. "Europe." *NBER Reporter* Summer: 8-10.
- Alesina, Alberto and Edward Glaeser. 2004. *Fighting Poverty in the US and Europe: A World of Difference*. Oxford: Oxford University Press.
- Allard, Gayle. 2003. "Jobs and Labor Market Institutions in the OECD." Doctoral dissertation, University of California - Davis.
- Allard, Gayle J., and Peter H. Lindert. 2006. "Euro-Productivity and Euro-Jobs since 1960: Which Institutions Really Matter?" NBER Working Paper 12460 (September).
- Atkinson, A.B. 1999. *The Economic Consequences of Rolling Back the Welfare State*. Cambridge: MIT Press.
- Baker, Dean, Andrew Glyn, David Howell, and John Schmitt. 2005. "Labor Market Institutions and Unemployment: A Critical Assessment of the Cross-Country Evidence." In David Howell (ed.), *Fighting Unemployment*. Oxford: Oxford University Press, pp. 72-118.
- Barro, Robert J. 1997. *Determinants of Economic Growth: A Cross-Country Empirical Study*. Cambridge: MIT Press.
- Barro, Robert J. and Jong-Wha Lee. 1993. "Winners and Losers in Economic Growth." *Proceedings of the World Bank Annual Conference on Development Economics*. Washington, World Bank, pp. 267-314.
- Blanchard, Olivier. 2004. "The Economic Future of Europe." *Journal of Economic Perspectives* 18, 4 (Fall): 3-26.
- Blanchard, Olivier and Pedro Portugal. 2001. "What Lies Behind an Unemployment Rate: Comparing Portuguese and U.S. Labor Markets." *American Economic Review* 91, 1 (March): 187-207.
- Blanchard, Olivier and Justin Wolfers. 2000. "The Role of Shocks and Institutions in the Rise of European Unemployment: The Aggregate Evidence," *Economic Journal* 110, 462 (March): C1-C33.
- Blank, Rebecca M. 2000. "Fighting Poverty: Lessons from Recent U.S. History." *Journal of Economic Perspectives* 14, 2 (Spring): 3-19.
- Blank, Rebecca M. 2002. "U.S. Welfare Reform: What's Relevant for Europe?" CESifo Working Paper No. 753 (July). As of December 2002, available either at http://ssrn.com/abstract_id=338502 or at www.CESifo.de.
- Blundell, Richard and Paul Johnson. 1999. "Pensions and Retirement in the United Kingdom." In Jonathan Gruber and David Wise (eds.), *Social Security Programs and Retirement around the World*. Chicago: University of Chicago Press: 403-436.
- Disney, Richard, Carl Emmerson, and Sarah Smith. 2004. "Pension Reform and Economic Performance in Britain in the 1980s and 1990s." In David Card, Richard Blundell, and Richard B. Freeman (eds.),

- Seeking a Premier Economy: The Economic Effects of British Economic Reforms, 1980-2000*, 233-273.
- Fölster, S. and M. Henrekson. 1999. "Growth and the Public Sector: A Critique of the Critics." *European Journal of Political Economy* 15 (June): 3337-358.
- Freeman, Richard B. 2005. "Labour Market Institutions without Blinders: The Debate over Flexibility and Labour Market Performance." NBER Working Paper 11286 (April).
- Gaynor, Martin S. 2006. "What Do We Know About Competition and Quality in Health Care Markets?" NBER Working Paper No. W12301 (August).
- Hannah, Leslie. 1994. "The Economic Consequences of State Ownership of Industry, 1945-1990." In Roderick Floud and D.N. McCloskey (eds.), *The Economic History of Britain Since 1700*. Cambridge: Cambridge University Press, pp. 168-194.
- Kato, Junko. 2003. *Regressive Taxation and the Welfare State: Path Dependence and Policy Diffusion*. Cambridge: Cambridge University Press.
- Kotlikoff, Laurence J. and Christian Hagist. 2005. "Who's going Broke? Comparing Healthcare Costs in Ten OECD Countries." NBER Working Paper 11833 (December).
- Kneller, Richard, Michael Bleaney, and Norman Gemmell. 1999. "Fiscal Policy and Growth: Evidence from OECD Countries." *Journal of Public Economics* 74, 2 (November): 171-190.
- Lindert, Peter H. 2004. *Growing Public: Social Spending and Economic Growth since the Eighteenth Century*. Two volumes. Cambridge: Cambridge University Press.
- Meyer, B.D. 1995. "Lessons from the US Unemployment Insurance Experiments." *Journal of Economic Literature* 33, 1 (March): 91-131.
- Miron, Jeffrey A. and David N. Weil. 1998. "The Genesis and Evolution of Social Security." In Michael D. Bordo, Claudia Goldin, and Eugene N. White (eds.), *The Defining Moment: The Great Depression in the American Economy in the Twentieth Century*. Chicago: University of Chicago Press for the NBER, 297-322.
- Or, Zeynep. 2000. "Determinants of Health Outcomes in Industrialised Countries: A Pooled, Cross-Country, Time-Series Analysis." *OECD Economic Studies* 30, 1: 53-77.
- Slemrod, Joel. 1995. "What Do Cross-Country Studies Teach about Government Involvement, Prosperity, and Economic Growth?" *Brookings Papers in Economic Activity* 2, 373-431.
- Timmons, Jeffrey F. 2005. "Left, Right, and Center: Partisanship, Taxes, and the Welfare State." ITAM, Mexico DF, February 16.
- Thomasson, Melissa. 2002. "From Sickness to Health: The Twentieth Century Development of U.S. Health Insurance." *Explorations in Economic History* 39, 3 (July): 233-253.
- Thomasson, Melissa. 2003. "The Importance of Group Coverage: How Tax Policy Shaped U.S. Health Insurance." *American Economic Review* 93, 4 (September): 1373-1384.
- Wilensky, Harold. 2002. *Rich Democracies: Political Economy, Public Policy, and Performance*. Berkeley: University of California Press.

ENDNOTES

¹ Alesina 2006, p. 9. *Italic emphasis added.*

² It is desirable to exclude the contributory amounts paid by one's self or one's employer. They are not a controversial redistribution of resources, but rather just part of one's employment contract. It is not easy, however, to remove all employer and employee contributions from the expenditure data. As a smaller step toward isolating non-contributory payments, I have tried to exclude government-employee, and military, pensions from the OECD measures used here.

³ The underlying data sets do not permit us to add "tax expenditures" (tax reductions) to the social transfers.

⁴ It is not clear why OECD data show such a strong rise in Swiss pensions and health expenditures, as a percent of GDP, since the early 1990s. The elderly share of the population has not risen much, and is low by OECD standards. One might have suspected a role for relatively sluggish growth of the GDP denominator, but Switzerland's growth has been relatively poor since 1975, well before the rise in the shares of pensions and health care in GDP.

⁵ The literature is rich, even when we focus just on studies explaining the determinants of GDP per capita, and set aside the determinants of employment. Much of the literature is surveyed in Slemrod 1995, Atkinson 1999, and Lindert 2004, vol. 2, Chapters 18 and 19.

Perhaps the most plausibly specified set of econometric tests finding a significant and sizeable cost of larger government is Fölster and Henrekson (1999, with a rebuttal by Agell, Jonas, T. Lindh, and H. Ohlsson. 1999). Its relevance to the issue of social transfers is limited, however, by its focus on the effects of total taxes. These taxes go to finance all government consumption and investment, not just social transfers.

⁶ Wilensky 2002, Kato 2003, Lindert 2004, Timmons 2005.

⁷ Note that the case in favor of taxing consumption rather than income or earnings is not documented here with any empirical evidence. Rather it is attributed to economic orthodox thinking. Some studies do seem to find that taxing consumption is less distortionary, and better for growth (e.g. Kneller, Bleaney, and Gemmell 1999). While this seems plausible, current econometric work by Gayle Allard and myself, which allows for predicted non-linearities not incorporated by the Kneller-Bleaney-Gemmell analysis, does not find this result to be robust.

⁸ See, for example, Gaynor 2006.

⁹ Kotlikoff and Hagist 2005.

¹⁰ On the possibly positive effect of health on productivity, see Nordhaus 2002.

¹¹ Zeynep Or 2000.

¹² Thomasson 2002, 2003.

¹³ Lindert 2004, Chapter 3.

¹⁴ For an overview of the rich earlier literature, see Meyer 1995, Nickell 1997, and Blanchard and Wolfers 2000. For the new tests, see Allard 2003; Lindert 2004, Vol. 2, Ch. 19; and Allard and Lindert, in progress.

¹⁵ The effective rate of unemployment compensation here means Gayle Allard's "net reservation wage" (Allard 2003, with updates on her web site at ie.edu).

¹⁶ In fairness to Reagan, the correct answer should have been "The U.S. under Johnson and Reagan." At times, Lyndon Johnson's Great Society programs also had the defect of pulling back benefits sharply with the start of labor earnings. This feature was partly removed by reforms under Nixon, Ford, and Carter. Then the Reagan administration brought back the high marginal tax rates, by limiting the public tolerance to any welfare mother with significant earnings.

¹⁷ Lindert 2004, Chs. 10, 11.

¹⁸ Lindert 2004, Chapters 5 and 6.

¹⁹ For a convenient summary of British experience, see Hannah 1994.

²⁰ Baker *et al.* 2005, Freeman 2005.

²¹ . OECD 1994, Blanchard and Portugal 2003; Lindert 2004, Ch. 19 and Appendix E; Allard and Lindert 2006.

²² Allard and Lindert 2006.

²³ Lindert 2004, Chs. 7, 8 and appendices.

²⁴ Blundell and Johnson 1999; Disney, Emmerson, and Smith 2004.

²⁵ See, for example, Alesina and Glaeser 2004.