1 The Big Picture

1.1 Theories about Economic Effects

Economists approach the subject of the welfare state with the characteristic two-handed approach that so famously annoyed President Truman. On the one hand, social insurance against income shocks theoretically provides the same kinds of benefits as private insurance. And government might theoretically do it better. Consumption smoothing across states of the world might possibly be achieved better through government funding and provision when private insurance markets fail to solve the problems of asymmetric information and adverse selection, especially in health insurance. In addition, the very progressivity of tax-based social insurance may serve popular preferences for more equal aggregate outcomes. Government social insurance might also reap economies of scale more efficiently than competing private firms.

On the other hand, suspicions run deep about possible anti-growth incentive effects. People's incentives to engage in productive behavior might be reduced by taxing behavior and handing assistance to those who behave unproductively. Governments can also be susceptible to corruption, and to inefficiencies caused by the lack of competition and Parkinsonian empire-building.

This essay is organized around examining the negative possibilities, noting the positive achievements of the welfare state only *en passant*. It first reviews the evidence on the imagined anti-growth economic effects of the welfare state over the last hundred years, and then weighs which negative possibilities do or do not loom between now and mid-century. The evidence seems to say that the traditionally imagined economic flaws of the welfare state do not show up in practice, and pose no clear threat to the welfare state anytime soon. The welfare state has achieved great income stability, lower inequality, lower poverty rates, and longer life without significantly reducing GDP or employment. The true threats are demographic and political, not economic.

1.2 A Preview of Verdicts

Since World War II, about a dozen rich countries have channeled more than a fifth of national product into social transfers, and about a quarter of national product if we include public education as part of social spending.[1] Those

[1] This paper defines "social transfers" as taxpayer-funded government expenditures on health care, pensions, family assistance (Americans' "welfare"), unemployment compensation, active labor-market spending (retraining, etc.), and public housing subsidies. My definition of social transfers nearly matches the official OECD definition of "public social expenditure." The main difference between the two is that I would, whenever the data permit, exclude the pension benefits paid to public employees. These are part of a labor contract, comparable to private labor contracts, and

countries, in order of their social transfer share of GDP in the first decade of this century, are France, Sweden, Austria, Belgium, Denmark, Germany, Finland, Italy, Portugal, and Spain, with Norway, the Netherlands, and the United Kingdom near the margin. Contrasting their experience with that of other countries provides a historical test case for the effects of tax-based social spending. That historical case seems to have delivered these five clear verdicts:

(1) One imagined threat rejected by the historical facts is the widespread suspicion that the welfare-state package reduces the level and growth of GDP. Global history does not show any clear overall negative effect of larger tax-financed social transfers on national product. The widespread belief in large GDP costs of the high-budget welfare state is based on theory and inappropriate tests. The real world never ran the kinds of experiments that so many have chosen to imagine. The best available statistical tests underline a "free lunch puzzle": Europe's large tax-based social budgets have apparently not lowered GDP, as documented below.

(2) That "free lunch" has delivered several fundamental human gains reaped by large welfare states. The larger welfare states have achieved lower income inequality, lower gender inequality, lower poverty rates, and longer life, again without any clear loss in GDP. Nor do they suffer any other often-imagined side effects. The large welfare states, particularly in Northern Europe, have some of the world's cleanest and least corrupt governments, with lower budget deficits than the United States, Japan, and other rich countries. And, for what it is worth, their populations express greater happiness in international surveys of public opinion.

(3) What made that possible? The "free lunch puzzle" of the welfare state is easily understood when one examines how actual practice has evolved. Both sides of the Atlantic have made some mistakes when trying to draw an efficient border between governments and markets. The main mistakes on the American side relate to insufficient anti-poverty programs,

not redistributions from the rest of society. OECD allowed such a separation in its social expenditure series for 1960–1981, but not for its current series starting in 1980.

I define "social expenditures" as these social transfers plus public spending on education. This broader definition matches the definition used by Garfinkel, Rainwater, and Smeeding (2010).

My arbitrary definition of the "welfare state" is any democratic country for which social transfers, and the taxes implicitly paying for them, exceed 20 percent of GDP. Had I defined the welfare state as any country devoting more than 20 percent of GDP to social spending, including public education spending à la Garfinkel et al. (2010), it would have been easier to show (as they do) that the welfare state is not bad for economic growth. For rhetorical purposes, I prefer the more stringent test focusing on social *transfers*, which are more controversial, and less obviously productive, than public expenditures on education, which I separate from my discussion of the "welfare state."

inefficient health insurance, underinvestment in mothers' careers, and the under-taxation of addictive goods (tobacco, alcohol, and gasoline).

(4) The main longer-run institutional mistakes in Mediterranean Europe relate to excessive protection of vested interests against competition in product and labor markets, not the welfare state. As for the economic crisis starting 2007, which started in the United States, neither its timing nor its location relates to the welfare state as such. The main causes of crisis in the not-so-welfare-state Mediterranean and Ireland since 2007 have been the real estate bubble, under-regulation of finance, and Greece's flawed public budgeting.

(4) Other threats to the welfare state are more real, however. One can see two demographic-political clouds on the horizon in the twenty-first century, though neither reveals an economic flaw specific to the welfare state. The first cloud is the rise of anti-immigrant backlash. This could destroy future public support for universalist welfare-state programs, even though they seem to remain economically sound. Such a retreat from the welfare state is a threat mainly to Sweden and Germany, i.e. to those welfare states that continue admitting large permanent refugee inflows while refusing to discriminate against immigrants in providing social services.

(5) A second cloud, larger and more global, is that the rapid acceleration of population aging poses a serious problem for financing old age, either publicly or privately. Only a few countries have addressed this issue with major reforms so far.

The general mission drift in social policy, away from immigrants and toward the elderly, threatens to undermine social investment in children, especially in poor children. Even with the same share of social budgets in future GDP, progressivity and human-capital growth may erode.

The remainder of this paper summarizes the evidence regarding these five verdicts. We turn first to the traditionally, and wrongly, imagined threat related to the welfare state, and then to the two real threats.

2 An Imagined Threat: Isn't the Welfare State Bad for Growth?

If having generous social insurance programs reduces the level and growth of GDP, then sooner or later this negative effect should cause a decline of the welfare state. Such a fear underlies the many books and articles written in the late twentieth century about the "crisis" and "demise" of the welfare state – that is, about an event that has still not happened.

The defense of public social spending and the welfare state rests on quantitative tests that are abundant – and individually non-persuasive.

An economist would prefer a quasi-experimental structural identification using powerful instruments that pass strong tests of exogeneity. The path to this goal is blocked by the fact that each observation must be a whole polity, usually a national government, for each time period. In the absence of credibly randomized data sets of sufficient size, we must retreat to three kinds of contaminated evidence on this imagined threat: sheer survival of the welfare state; raw correlations between social spending and GDP, or GDP growth; and tests that pool international experience without firmly establishing structural determinants.

2.1 A Simple Survival Test

Perhaps the simplest clue about the relationship of tax-based social spending to economic growth lies in a straightforward survival test of the sort George Stigler favored in the field of industrial organization. The survival test has the attraction of avoiding the need to identify causal structure. In a complex multivariate world, one can simply view the resulting health outcome, say for a type of firm or a type of government, by seeing if that type survived. Any type that contained a major inherent flaw would go out of existence.

The survival results are easily summarized. Two hundred years ago, only a handful of national governments spent anything on social transfers, and no government spent as much as 3 percent of GDP on them. Today, at least 164 national governments have positive safety-net transfers, according to World Bank and IMF data. About seventeen rich OECD countries qualify as welfare states, by transferring at least 20 percent of GDP.

Nor has there been any retreat from high social budgets since around 1980, when Margaret Thatcher, Ronald Reagan, and others launched an all-out attack on the welfare state. From 1980 to the cyclical peak of 2007, only one country out of the twenty-three core OECD countries cut the share of GDP transferred to the poor, the sick, and the elderly. Even in that one case, the Netherlands, the drop from 23.3 percent of GDP in 1980 to 19.9 percent of GDP in the cyclical peak of 2007 was nearly canceled by 2013, when government transferred 22.9 percent of GDP. Social safety-net programs, and the welfare state that uses them so heavily, appear to be Darwinian survivors.

2.2 Correlating Social Budgets and GDP: The "Free-Lunch Puzzle"

Similarly, history shows no correlations pitting the welfare state against growth. For at least three centuries, many have insisted that taxed-based social spending cuts jobs and output. So strident is the opposition that one would

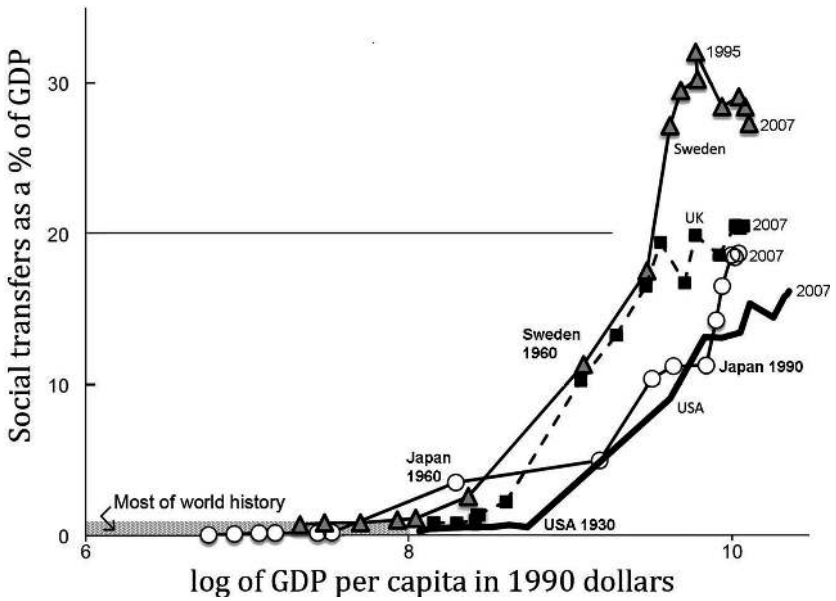

Figure 1 The welfare state is young and rich
The real GDP per capita series up to 2007 is from the Angus Maddison internet site: www.worldeconomics.com/Data/MadisonHistoricalGDP/Madison%20Historical%20GDP%20Data.efp. The social transfer shares of GDP on the vertical axis for 1880–1930 are from Lindert (1994), and those for 1960–2007 are from the OECD's SOCX series downloadable from OECD iLibrary.

expect it to have resulted from looking directly at some glaring evidence from history. If the negative effects of welfare-state programs were so clear, then perhaps even the raw data should have shown it on a huge IMAX screen.

No such glaring evidence has ever appeared. An obvious starting point would be to glance at the broad sweep of the history of national product, which should have been lower where tax-based social spending was higher. The glance, however, yields the big-screen evidence shown in Figure 1. Most of world history has languished in the lower left-hand corner, with poverty and no social help to the poor, the sick, or the elderly. This is the dreary world that Adam Smith called "barbarous."[2] In the two and a half centuries since Smith wrote, a few dozen countries have taken off into prosperity, as illustrated in Figure 1 by four countries that Smith would have called "civilized" – the United Kingdom, the United States, Sweden, and Japan. While prospering,

[2] "There are many expences necessary in a civilized country for which there is no occasion in one that is barbarous." Smith (1766), pp. 530–531.

Table 1 How social transfers as a share of GDP correlate with growth and prosperity in 19 OECD Countries, 1880–2000
The coefficient of correlation between the initial share of social transfers in GDP and

Time period	(a) the growth of GDP/capita	(b) the level of GDP/capita
1880–1890	0.10	–0.18
1890–1900	0.34	–0.05
1900–1910	–0.23	0.09
1910–1920	0.12	0.31
1920–1930	–0.24	0.49
1960–1970	–0.16	–0.24
1970–1980	0.34	–0.09
1980–1990	–0.07	0.09
1990–2000	–0.11	–0.04
2000–2010	0.12	–0.19
Simple average of these correlations	0.02	0.02

None of the correlations is statistically significant.
Social transfers/GDP for 1880–1930: Welfare, unemployment, pensions, health, and housing subsidies, as given in Lindert (1994, table 1).
Social transfers/GDP for 1960–1980: OECD old series (OECD 1985); 1980–present: OECD new series (OECD iLibrary).
Real GDP per capita: Penn World Table 7.1, downloaded 1 April 2013.
The 19 countries are Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece (1960s on), Ireland (1960s on), Italy, Japan, the Netherlands, New Zealand, Norway, Sweden, Switzerland, the United Kingdom, and the United States.

they also channeled a greater and greater share of their national product into taxes spent on social programs. Yet they continued to prosper. One who believes that the social programs destroy initiative and progress might claim reserve causation: perhaps it is the prosperity that bred the wasteful social spending. Yet if the social spending is nothing but a rich country's bad habit, like obesity or recreational drugs, why don't we see any easy evidence of its dragging down GDP per person?

One would rightly demand a closer look than this glance at the broad screen. Sticking to raw correlations for the moment, we may ask whether looking at all countries and over shorter periods of time shows a negative relationship between their growth experiences and their use of welfare state expenditures. Table 1 shows the results for as many decades (ten) and as many countries

(nineteen) as provide systematic long-term data. As reported there, history again provides no significantly negative relationship between the start-of-decade social spending share and either the growth or the level of GDP per person. If we had included the many poorer countries that failed to report social spending because they had little or none of it, there would be more chance of a positive correlation across history, as Figure 1 has already hinted. We cannot infer from all these correlations any positive causal influence of social spending on economic growth. Still, any claim of a negative historical relationship is even easier to doubt.

Within nations, as well as between them, we find no secure negative correlation between local governments' social transfers and either the level or growth of product per capita. For all the anecdotes about companies fleeing high-tax states for low-tax states, there is no net result showing any damage to the higher-taxing and higher-welfare localities. The only time that the anti-government Southern states in the United States rose toward the national average income per capita was in the period 1940–1973 when the South reaped disproportionate benefits from government military and aerospace spending. Such spending not only created jobs and income within the South, but it also raised Southern pay rates by attracting Southern workers to Northern and Pacific Coast cities. Since the rise of welfare payments and other social spending in the 1960s and 1970s, there has been no erosion in the relative incomes or realty values of such larger-transfer states as Connecticut and California. There is no outward evidence of massive tax flight, no "race to the bottom."

2.3 Not-so-Structural Econometrics with International Pools

One should, of course, go deeper, if possible, into statistical tests that really hold other things equal. We know well that both social transfers and national product have many separate, though overlapping, causal determinants. Surely social spending is not just the result of being a rich country, and a country's prosperity depends on many more things than just social spending and the incentives it may create.

Since around 1990, economists have poured great effort into developing truly randomized trials, like those now proliferating in medical science. These are statistically superior to testing from historical experience, since the randomly selected treatment group of observations is subject to influences clearly not experienced by the control group. Yet as warned above, the history of entire nations is not a randomized trial. It does not offer a treatment group of dozens of societies that were beset by welfare-state policies imposed on them by completely outside forces, forces not experienced by a large control group of otherwise similar societies. A few econometric studies have been lucky enough

to find "natural experiments," in which history imitates the random-trial laboratory. Yet for large complex forces like the welfare state, no such randomized historical experiment is available.

Lacking truly random trials, economists are forced to extract what causal insights they can from a messy panel of human experiences over time and space, a panel in which both the determinants of social spending and the determinants of GDP might be disentangled even though they overlap and are confounded by a host of other forces. Almost none of the econometric studies published since the 1980s has found a significant negative effect of the whole welfare-state package on GDP.[3] Even the few that announced negative effects, without making their data public, have failed to show negative effects large enough to imply the major economic damage imagined by some theorists, journalists, and politicians.

The lack of clearly negative effects of tax-based social transfers on the level and growth of GDP is all the more remarkable because the tests typically hobble the welfare state variables with two devices that should have shown a negative effect. The first is a handicap that this author has also adopted, in order to toughen the test: exclude public spending on education from the "welfare state" bundle. Public expenditures on education have such clearly positive effects that omitting them raises the odds of finding against the welfare state.[4] Second, all the tests on historical time–space panels hobble the welfare state with a reverse-causation bias. Safety net programs, such as family assistance or unemployment compensation, are designed so that they pay out more when GDP and jobs have slumped – and pay out less when the economy improves. Thus transfer spending will appear guilty of causing slumps, and cutting that spending will be credited with causing the recovery, unless one somehow perfectly identifies the macro-economic shocks causing any movement in GDP. The false guilt is analogous to blaming hospitals for causing deaths because so many people die there.[5] Given these two handicaps, it is all

[3] See Landau (1985), Korpi (1985), McCallum and Blais (1987), Castle and Dowrick (1990), Weede (1991), Easterly and Rebelo (1993), Hansson and Henrekson (1994), Persson and Tabellini (1994), Commander, Davoodi, and Lee (1997), Mendoza, Milesi-Ferretti, and Asea (1997), Fölster and Henrekson (1998), Agell, Lindh, and Ohlsson (1999), Kneller, Bleaney, and Gemmell (1999) and by Gemmell, Kneller, and Sanz (2011). For a comparison and summary of all of the late-twentieth-century studies, see Lindert (2004, chapters 10 and 18, especially table 18.1). For a new summary and more recent evidence, see Bakija et al. (2016, chapters 2 and 3).

[4] For a review of rates of economic return on education around the world, see Psacharapoulos and Patrinos (2004a, 2004b), and also the earlier studies cited there.

[5] This second bias shows up even in the set of econometric panel tests that seems the best candidate for an objective discovery of negative growth effects. Overlapping studies by Kneller, Bleaney, and Gemmell (1999) and by Gemmell, Kneller, and Sanz (2011). The authors did not put any weight on the negative result about social spending, but that negative implication from their study should be taken seriously. With their help, I have found that even their best-practice

the more remarkable that social transfers and other measures of the welfare state do not show clearly negative effects on jobs or growth.

While not paying any clear net cost in terms of GDP, the large welfare states seem to have achieved many other things with their social transfers.[6] Here is a quick list of social goals they have served at least as well as other rich countries on the average:

(1) They have consistently enjoyed a more equal distribution of incomes.[7]
(2) They have lower shares of their population in poverty, whether the poverty line is defined as a share of median income or as an absolute level of consumption per person.[8]
(3) The welfare states tend to have longer life expectancy than other OECD countries at similar income levels. How this might relate to public health care is reviewed in Section 3.
(4) The welfare states have some of the world's cleanest and least corrupt governments, despite what some might have predicted from the large amounts passing through government hands.[9]
(5) Welfare states do not run larger budget deficits. There is no correlation at all between the GDP shares of social transfers and the net budget deficit.[10]

econometric test has trouble identifying the shocks that we know were there, given our reading of recent history. For example, we know that at the start of the 1990s, Finland suffered a major macro-shock from the collapse of its main trading partner (the Soviet Union) and from mistakenly keeping the Finnish Mark pegged to the soaring German Mark. Yet these authors' tests have no way of picking up such idiosyncratic large macro-shocks that are neither time-fixed effects for all countries nor fixed country effects for all times. The result is a misleading correlation between Finland's huge safety net expenditures and the plummeting of Finland's GDP. I thank Richard Kneller for making their underlying data set available.

[6] Here is a rough quantification of the points listed in this section. Data from twenty-three countries circa 2007 show that the share of social transfers in GDP, our welfare-state indicator, has these correlations with social achievements: (a) a negative 0.56 with the share of households having less than 40 percent of median household income; (b) $^{+}$0.39 with life expectancy, (c) $^{+}$0.21 with Transparency International's clean government indicator, and (d) no overall correlation (0.01) with government budget surplus in 2007–2009. Correlations (a) through (c) were statistically significant at the 5 percent level. The sources are those cited elsewhere in this section.

[7] See Wang et al. (2012) on OECD countries' inequality in 2004, and Lindert (2017) on pre-fisc and post-fisc inequality in fifty-three countries circa 2013. For a readable and balanced summary of the definition of equality in terms of "vertical equity" and the case for progressivity in redistribution, see Slemrod and Bakija (2004), especially chapter 3.

[8] On the poverty shares relative to median incomes, see OECD, Growing Unequal (2008, p. 127). International comparisons of absolute poverty are found in studies by the Luxembourg Income Study; see Smeeding (2006), and Scruggs and Allan (2005).

[9] For Transparency International's index of clean government, called its "Corruption Perceptions Index," www.infoplease.com/world/statistics/2007-transparency-international-corruption-perceptions.html .

[10] On government budget surpluses as shares of GDP, 2007 and 2009, see IMF eLibrary.

(6) Finally, for what they are worth, international polls of public opinion find high average expressions of personal happiness in the high-spending welfare states.[11]

3 Some Reasons Why Growth Hasn't Suffered

What has made this possible? How could the large welfare states have avoided any of the imagined net cost in terms of GDP, while making progress on so many social concerns? A balanced tentative answer seems to be that the few ways in which large tax-based social transfer programs reduce GDP are balanced by ways in which they raise GDP. The heaviest weight on the negative side of the scales seems to be unemployment compensation. Even allowing for some statistical biases against such programs, the empirical literature seems to say that more generous unemployment compensation does indeed reduce jobs and output somewhat. This negative effect, however, is offset by several GDP-enhancing effects of the way in which the welfare state has worked in practice. We turn next to three such effects.

3.1 A More Efficient Tax and Transfer Mix

While a critic might choose to imagine a foolish hypothetical welfare state riddled with bureaucracy, initiative-discouraging taxes, and transfers that subsidize a lifetime of laziness, no such fiscal system has ever prevailed in a welfare state. On the contrary, real-world welfare states have features that make their tax-based social programs less bureaucratic, less expensive in administrative terms, and less in conflict with economic theory than many have imagined.

One such feature is that universalism is efficient on the expenditure side. Universalist expenditure programs, to which everybody is entitled, are cheaper to administer because there is less bureaucratic need to investigate who should be excluded from the benefits.[12]

In the case of health insurance and health care, for example, comparative studies have consistently found that administrative costs are a lower share of the health care delivery expenditures in the more public programs of Canada and Europe.[13] Universalist public insurance and public provision is less

[11] On international differences in expressions of happiness, see the World Values Survey; e.g. www.nationmaster.com/graph/lif_hap_net-lifestyle-happiness-net.

[12] For a general discussion of this point, see Lindert (2004, chapters 4, 10, and 12) and Pestieau (2006, pp. 81–83).

[13] See, for example, the studies by Reinhardt (2000), Woodlander, Campbell, and Himmelstein (2003), Kotlikoff and Hagist (2005), and Cutler and Ly (2011).