Many believe the following three statements to be true. The welfare state undermines productivity and economic growth. The United States has an unusually small welfare state. And, the United States is and always has been a welfare state laggard. This paper--based on our book entitled Wealth and Welfare States: Is America Laggard or Leader?--shows that all three propositions are false. All rich nations, including the United States, have large welfare states because the socialized programs that comprise the welfare state—public education and health and social insurance--enhance the productivity of capitalism. In public education, the most productive part of the welfare state, for most of the 19th and 20th centuries, the United States was the world leader, but is no longer.

Though few would argue that public education is not part of the welfare state, most previous cross national analyses of welfare states have omitted education. Including education has profound consequences, undergirding the case for the productivity of welfare state programs and the explanation for why all rich nations have large welfare states, as well as identifying US welfare state leadership.

In the first section of the paper, we discuss the definition and boundaries of the welfare state and the sources for our data. The second section shows that welfare states enrich rather than impoverish nations. The third shows that the contemporary American welfare state is not unusually small. The fourth shows that while the US lagged in the provision of public relief and social insurance, throughout most of its history, the US was a leader in the provision of mass public education. The fifth concludes with a brief summary of our analysis of the future of the American welfare state.

The idea that the United States has always been a laggard in welfare state development is not only widespread and misleading, it is pernicious. Those who mistakenly believe that the United States has always been slow to develop social welfare programs are prone to dismiss the current lag in early education and child care with the argument that lagging may be a good thing. After all, if despite always being behind, the United States is the richest nation on earth, why worry about it? But if one of the main reasons why the United States is the world’s richest nation is that it has been a world leader in developing mass public education—and if it has now relinquished that lead—this is surely a cause for worry.

I. Definitions

All wealthy nations, including the United States, are welfare states—that is, they are primarily capitalist states with large, selective doses of socialism. What have been socialized are institutions that reduce economic insecurity. By its nature, capitalism produces too much economic insecurity. A hallmark objective of welfare state institutions is, therefore, to reduce economic insecurity. Education, health, insurance, and public assistance all reduce economic insecurity. Education and health increase human capital, making citizens more capable of dealing with the economic insecurity produced by nature and by the market. Social and health insurance and public assistance also make citizens more secure by reducing the economic costs of insecurity directly.

Unlike the transfer of resources in the typical capitalist market economy—an explicit trade: “I’ll pay you this for that”—social welfare transfers in the form of education, health, social
insurance, and cash and in kind public assistance flow to citizens as a matter of law or entitlement and are paid for by other members of the community by law or requirement. Social welfare transfers are publicly provided or subsidized goods that provide predominantly private benefits. For example, though the public at large benefits from the education of all children, the children who get the schooling and their families reap the largest benefits.

Our work builds on a vast scientific literature in economics, sociology, political science, history, and social work, but departs in a few fundamental respects from that of the large majority of welfare state scholars. Most important, our measures encompass a broader set of social welfare transfers, including education, employer-provided benefits and all in-kind benefits.

Including public education as a welfare state program is—or, should be—the least controversial departure from conventional practice but is by far the most consequential. There are two reasons why including education should not be controversial. First, even though most scholars doing cross national comparative work omit education empirically, the conceptual definitions of welfare states put forth by the leading scholars in the field include education. For example, in the influential book on the welfare state, The Three Worlds of Welfare Capitalism (1990), Gosta Esping-Anderson first defines the welfare state as: “state responsibility for securing some basic modicum of welfare for its citizens.” He goes on to say, “What then constitutes salient dimensions of welfare state stratification? …… The education system is an obvious and much studied instance…..At this point, we confine our attention to the welfare state’s traditional, and still dominant activity, income maintenance.” In Poverty in Europe and the United States: A World of Difference (2004), Alberto Alesina and Edward Glaeser, two of the most influential welfare state scholars in economics, define welfare state programs as “the redistributive side of government policies” but include only cash transfers and health transfers in their analysis.

Second, although education is generally missing from most empirical analyses of the welfare state, an increasingly large minority of welfare state scholars do include education in their inquires. British scholars of the welfare state have a long tradition of including education in their analyses (Richard Titmus, 1958; John Glennister, 1992; John Hills, 2004). The authoritative collection of classic readings in the welfare state designed for graduate students in economics, Economic Theory and the Welfare State (2001) edited by Nicholas Barr and overseen by the leading economists in the world, has a large section on education, consistent with its operational definition of the welfare state: “For the purposes of these volumes the term “welfare state” is used for the state’s activities in three broad areas: income transfers, health and health care, and education.” Finally, welfare state scholars who include education have already taught us a great deal. Here we refer only to three scholars upon whose work we build. Our greatest debt is to Professor Robert Lampman, first director of the Institute for Research on Poverty at the University of Wisconsin. In Social Welfare Spending: Accounting for Changes from 1950 to 1978 (1984), Lampman constructed the definition of social welfare transfers that underlies our own definition. He also conducted the first benefit cost analysis of welfare state transfers of which we are aware and found that: 1) benefits are at least as great as costs and 2) most of the measured benefits come from education. Arnold Heidenheimer and John Layson (1982) present convincing evidence that the historical development of the US and German welfare states differed in that Germany led the way in Old Age Pensions and the US led the way in the development of mass secondary education. Peter Lindert, an economist and historian, in perhaps the finest recent book on welfare state development in rich nations, Growing Public (2004), extends the work on the benefits and costs of welfare state institutions, showing that these
change over time, and enriches (and in some cases creates) the comparative histories of public assistance, education, and social insurance in rich nations, documenting that welfare state leadership has changed over time.

Including education has huge consequences. It sets the stage for and undergirds the case that the welfare state as a whole is productive. It also refutes the widespread belief that the United States has been a welfare state laggard.

Besides education, our analysis of welfare state spending departs from most previous analyses by including, employer-provided health insurance and pension benefits, and tax expenditures. We also include social welfare spending by all levels of government. Tax expenditures (savings in income tax payments) and tax-subsidized employer-provided expenditures are alternative, less progressive, means of achieving some of the social goals of direct government spending---among them, providing health insurance, housing, and income security in old age. As such, including them gives a more accurate description of the size of welfare states.

Most economists treat tax expenditures as economically equivalent to explicit budget expenditures and would therefore agree that, at a minimum, the tax-subsidized portion of employer-provided health insurance (between one-fifth and one-quarter of the total) should be included as welfare state expenditures (Adema and Ladaique, 2005). Although a case can be made for counting only the tax-subsidized portion on the grounds that state funding differs from funding stimulated and regulated by the state, some economists and political scientists—whose practice and rationale we follow—argue for including the entire amount of employer expenditures on the grounds that these benefits are publicly subsidized and regulated; that employer-provided health insurance involves socialization of the risk of ill health and redistribution from the healthy to the sick, at the firm rather than the national level; and, that failing to include these benefits underestimates the share of the population with insurance and mis-characterizes the U.S. welfare state by obscuring and minimizing how much it spends on subsidized health insurance. More-over, in the Divided Welfare State (2002), Jacob Hacker shows the development of employer-provided health insurance was a substitute for and forestalled the development of a national health insurance system. Finally, the decentralization of insurance payers that results from employer-provided benefits as opposed to a single national insurer is the most important factor in accounting for the extraordinarily high cost of the U.S. health care system (Garfinkel, Rainwater, and Smeeding, chapter 8, 2010).

By the same logic, at a minimum, the tax-subsidized portion of employer-provided pensions should also be included as a welfare state transfer. The case for including all of employers’ spending for pensions, however, is weaker than the case for including all of their spending for health insurance. Health insurance, by its nature, redistributes from the healthy to the sick. Employer-provided pensions may involve no interpersonal redistribution (other than the tax subsidy) if for example, the pension is a defined-contribution plan that involves private accounts and no spousal or survivor benefits. Unfortunately we cannot distinguish between pensions that do and do not involve interpersonal transfers. For simplicity we calculate the size of welfare states in two ways---by counting both all and no employer-provided benefits as social welfare transfers.

Social welfare transfers, as noted above, are publicly provided or subsidized goods that provide predominantly private benefits. Because academic analysts of the welfare state have focused on education, health, housing, social insurance, and public assistance, government agencies in both the United States and other countries publish data on social welfare
expenditures in these domains, and international governmental agencies such as the Organization for Economic Co-operation and Development (OECD) publish cross-national data that use these categories. We follow this tradition.

Some vital parts of modern welfare states, however, do not involve transfers that so clearly provide predominantly private benefits. The most important of these is public health. Public health involves both vast public expenditures on clean water and sanitation that are not counted as part of the welfare state and a vast body of regulations that protect from disease. Sanitation, clean water, inoculations and other aspects of public health clearly provide large private as well as large public benefits. But whether private benefits are bigger than public benefits is not clear to us and, to our knowledge, has not been seriously studied. What is clear is that expenditures on sanitation and clean water are not counted as social welfare expenditures, while public health doctors and facilities, inoculations, and other aspects of the public health system are counted. We do not attempt to estimate the full costs of all public health programs, but discuss the importance of public health to productivity and economic growth in section 2. Here, we note that if all public health expenditures were counted as part of welfare state program expenditures, welfare states in rich nations would very likely look even more alike than depicted in section 3. We also suggest that estimating the costs and benefits of public health sanitation investments would be a useful contribution to the welfare state literature.

Other government regulations, such as minimum wages, rent controls, and child support enforcement are also important ingredients of modern welfare states that deserve more analysis. For many achieving full employment through the use of Keynesian macro-economic policies is also an essential welfare state objective. But, regulation and macro-economic policy are beyond the scope of our book and this paper.

II. Welfare States Enrich, not Impoverish Nations

Three sets of facts suggest welfare state programs enrich rather than impoverish nations. First, all modern rich nations have large welfare states. Second, economic growth rates of currently rich nations are larger than they were in the pre-welfare state past. A remarkable number of people seem unaware of this second fact due to historical myopia. Third, there is very strong evidence that public education and public health have led to enormous gains in productivity and economic well-being. The evidence on the effects of social insurance and other cash benefits on growth in GDP is weaker, but suggests small positive effects in the early development of social insurance and at worst small negative effects currently. Two huge positives combined even with a small negative adds up to a very big positive.

1. All rich nations have large welfare states

Figure 1 displays the relationship between a country’s income and the size of its welfare state. The most common measure of the size of a welfare state is a country’s total social welfare transfers as a share of its total annual income, or its gross domestic product (GDP). The size of welfare states is displayed from the bottom to top of the diagram; income per person is displayed from left to right. Both variables are logged. Each of the 162 dots in the figure represents a country and describes both the size of its welfare state and its average income per person. The poorest countries cluster in the bottom left hand corner of the diagram, while the richest countries cluster in the top right hand corner. Clearly, the richer the country, the greater the share of their income that citizens devote to welfare state transfers. The same pattern holds within the United States and within Europe. The higher the income of states or countries, the greater the share of income that they devote to welfare state transfers.
The black dots represent the 14 rich countries analyzed in *Wealth and Welfare States*. All of these rich nations have large welfare states. If the welfare state is a drag on nations, as the critics would have us believe, how could it be that all these rich nations have large welfare states?

One alternative explanation to the productivity of the welfare state is that welfare state programs are a luxury good that we buy more of as we get wealthier—a special case of Wagner’s law about social spending. Causation surely does run from wealth to welfare state. But, if the conservative opponents of the welfare state are correct, large welfare state programs will eventually bring a nation down. So the currently rich nations should not remain rich for long. Indeed, the currently rich nations have only had large welfare states for the last 30 years, which is a relatively short period of time.

### 2. Growth rates in rich nations are higher now than in the pre-welfare state past

A longer historical perspective reinforces our conclusion that the effects of the welfare state on economic growth have been positive. Table 1 presents growth rates in per capital GDP for the 14 rich nations examined in *Wealth and Welfare States* for two recent time periods—1960 to 1975 and 1975 to 2006 and for one long period before the growth of the welfare state—1870 to 1913. Except for Ireland and the UK, growth rates are higher in all countries, and much higher in most, from 1960 to 1975 than they are from 1975 to 2006. The Swedish growth rates drops from 3.11 to 1.67, or, by nearly a half! This sharp drop in growth rates fueled the belief that the welfare state was strangling capitalism. That Norway, whose social welfare spending is only a bit lower than Sweden’s, had higher growth rates from 1975 to 2006 than the US provides some evidence to the contrary. That Sweden’s growth rate from 1994 to 2006 (not shown in table) was back up to 2.5% provides further evidence to the contrary.

The longer historical perspective provided by the data in column three provide evidence that the growth rates in the 1960 to 1975 period were unusually high. This earlier period comes after the American Civil War and the Franco-Prussian War and before WWI. Although not shown in the table, economic growth before this period and afterwards—during the WWI, Great Depression, and WWII—was dramatically lower. A country by country comparison of columns one, two and three indicates that economic growth rates in the 1960-1975 period were unusually high. While growth was substantially higher in most countries between 1960 and 1975, as compared to post 1975 period, in all countries except the US, growth rates were dramatically higher in the 1960-75 period than they were in 1870 to 1913.

Even more important, most of the currently rich nations have higher growth rates in the large welfare state 1975-2006 era than they did in the pre large welfare state 1870-1913 era. Look first at the United Kingdom, the first nation to industrialize. It is useful to begin with the industrial leader because countries that industrialize later are able to grow faster as they catch up by copying the successful technologies of the leader(s). The annual growth rate of the UK during the Victorian era was a paltry .65 percent, compared to a robust 2 percent per year in the large welfare state era. In Germany, the second leading European nation, growth is also higher in the large welfare state era, though the difference is not nearly as great. In only three countries—Canada, the US, and Sweden are annual growth rates higher in the earlier than the later period. The largest difference is for the US—nearly one half percentage point. But, the initial US figure is unusually high for two reasons: catching up from incorporating foreign technology and recovering from the Civil War. If we divide the period into two sub-periods, growth is 2.95% from 1870 to 1890 and only 2.25% from 1890 to 1913, or only slightly higher than the 2.04 growth rate from 1975 to 2006. Thus results are sensitive to the particular years chosen for...
comparison. But the big picture is clear. Incomes in most of the currently rich nations are now growing faster, not slower than they have in the past. Of course, many other things besides social welfare spending have changed during the past 150 years. But, as we have seen, welfare state spending is now very large relative to the total production of goods and services in all advanced industrialized nations. If such spending had large adverse effects, it is doubtful that growth rates would have been so large in the last 30 years. The crude historical relationship suggests, at a minimum, no great ill effects and, more likely, a positive effect.

The burden of proof clearly lies on the side of those who claim that welfare state programs are strangling productivity and growth. If they are right, they need to explain why all rich nations have large welfare states and why growth rates have grown in most rich nations as their welfare states have grown larger.

3. Productivity effects of particular welfare state domains

**Education**

Markets produce too little education, health care, and insurance because the benefits of education, health, and economic security spill over beyond the individual child and the child’s family to other members of society. Economists refer to this spillover as an externality. Consider education. Each of us has an interest not only in our own children’s education, but also in the education of other children as well. Poorly educated children are more likely to be unhealthy, dependent on public assistance, and criminal when they become adults. Education reduces these social costs of ignorance. More educated children are also more likely as adults to be more informed citizens and more generally capable of a higher level of social and economic interaction. Finally, particularly important for nations like the United States, whose population includes such a diversity of nationalities, religions, and races, public education transmits a common set of social values to children—helping to make them American children. Sociologists call this “increasing social cohesion.” In making decisions about how much to invest in their own child’s education, parents acting individually do not take account of these public benefits. Thus reliance on the market leads to underinvestment in education. Collective action is required to reach the optimum level of education. Of course, government financing or provision of education, or both, does not guarantee the optimal level of education. Governments are no more perfect than markets are. With respect to education, however, we know that the market fails to invest enough. Government at least has a fighting chance to get it right.

The empirical evidence is overwhelming that public education promotes productivity and growth. Economists agree that improvements in education account for a good deal of economic growth (Denison, 1962; Mankiw et al 1992; Barro 2001; Lucas, 1988). Indeed, today the controversy in economics is over whether education is a great public investment or an unbelievably great public investment.

**Public Health**

The theoretical case for public health measures such as sanitation, inoculation, even isolation, and most generally, the prevention of infectious disease is identical in principle to the externality, or spillover, argument for education. As with education, the benefits of public health programs are not limited to the individual but extend society-wide. And as with ignorance, the disadvantages of poor sanitation extend far beyond the individual. Our neighbors’ failure to be sanitary imposes costs not just on them but on us. If each of us were to pay only for our own sanitation, we would have too little. If each of us were to weigh the individual benefits and costs of purchasing an inoculation, we would get too few inoculations and too much disease.
Scientific evidence also indicates that the public health measures described above have large social benefits and, like public education, promotes productivity and growth. The huge gains in life expectancy between 1890 and 1930—e.g., 14 years in the United Kingdom and 16 years in the United States—are due primarily to public health investments in the late 19th and early 20th century. (Samuel Preston 1975, 1980, 1996; Robert W. Fogel, 2004, and Cutler, Deaton, and Lleras-Muney, 2006). The gains in health and life expectancy attributable to public health have led in turn to large gains in productivity and economic growth, though unlike the case for education, economists have not estimated economic rates of return for massive public health investments.

Social Insurance

Before discussing the evidence for whether social insurance promotes or retards economic growth, it is worth noting that social insurance enriches us even if it has no effect on economic productivity and growth. Unfortunately, quantitative research on the economic worth of reducing insecurity is in its infancy. Still, economists across the political spectrum agree that social insurance reduces economic uncertainty, thereby improving individual utility and economic well-being. Most American economists now agree that there is a role for government in assuring that the aged have sufficient income in retirement and that government can achieve this end more efficiently than private markets and the family alone. (Becker and Murphy, 1988; Buchanan, 1968; Aaron 1982; Musgrave and Musgrave, 1984; Blinder, 1988; Steuerle and Bakija, 1994; Feldstein, 1987 and 2005). Only a few ideologues reject any government role. Conservatives like James Buchanan and Martin Feldstein want the government to require people to save for their retirement. In other words, they favor welfare state programs that don’t redistribute income.

Standard economic analysis suggests three reasons why welfare state programs might reduce the productivity of capitalism. The first and most important source of inefficiency is the taxation required to finance welfare state services. Taxes distort and blunt incentives. Benefits may also distort and blunt incentives. Because public assistance benefits are sharply reduced as earnings increase, they reduce the incentive to work. Government-guaranteed retirement pensions may decrease private saving for retirement. Finally, collecting taxes and distributing benefits entails administrative costs.

On the other hand, pensions for the aged, the disabled, and survivors promote social and political stability. The Conservative German Chancellor Otto von Bismarck pioneered social insurance to undercut the rapidly increasing appeal of the German Socialist Party—a revolutionary party at the time—and thereby promote social stability. Social and political stability promote productivity and growth. Furthermore, by reducing economic insecurity, social insurance and safety nets make people more willing to take economic risks. While unemployment insurance prolongs unemployment at the individual level (Feldstein, 1976), it may be that an unemployed worker who can take the risk of remaining jobless a little longer will in the end find a job that is a better match for his or her skills, thus increasing productivity. Thus economic theory does not offer a firm prediction of the effects on productivity and growth of increasing or decreasing social insurance or, more generally, of the size of the welfare state.

What is the evidence? Anthony Atkinson (1999) concludes “The results of econometric studies of the relationship between social transfer spending and growth rates are mixed: some find that high spending on social transfers leads to lower growth, others find the reverse. The largest of the estimated effects—in either direction—do not, however, seem believable.” In the most recent study, Lindert examines three periods of growth in the OECD welfare states—1880-
1930, 1962-81, and 1978-95—and finds a statistically significant positive effect of cash transfers on economic growth during the first two but none during the third. These findings suggest that early expansions in social insurance increased growth and that the most recent expansions have not harmed it.

III. The American Welfare State is not unusually small

As noted above, the most common measure of the size of a welfare state is a country’s total social welfare transfers as a share of total income. Most measures of social welfare transfers, including those presented in Figure 1 in the previous section, exclude employer provided benefits. In the international context of all nations, the size of the US welfare state does not stick out. All rich nations have large welfare states.

If the comparison is limited to rich nations, the US welfare state appears unusually small only if employer provided benefits are not counted. When employer provided benefits are counted, the US does not appear unusually small. We show this in Figure 2 which depicts the overall size of welfare states as measured by social welfare transfers as a share of GDP in fourteen rich nations.

The fourteen nations are grouped into 5 predominantly English speaking nations (Australia, Canada, Ireland, the United Kingdom, and the United States), six continental European nations (Belgium, France, Germany, the Netherlands, Italy and Spain), and three Scandinavian or Nordic nations (Finland, Norway, and Sweden) (Esping-Anderson 1990; Kamerman and Kahn (1978) and Wilensky and Lebeaux, 1965.)

The first bars, which do not include employer provided benefits, indicate each of the countries spends a substantial fraction of its GDP on social welfare—from 17 to 38 percent. As a share of total government spending, social benefits are at the very least 55 percent of government outlays (in the United States) and at the most 90 percent (in Sweden) (Osberg, Smeeding, & Schwabish, 2004). Not counting employer-provided benefits, the English-speaking nations spend the least—Ireland and the United States, the very least. The European nations spend substantially more, and the Scandinavian nations spend the most. These patterns are consistent with findings of other comparative studies (Kamerman and Kahn 1978; Smeeding, O’Higgins, and Rainwater 1990; Esping-Andersen 1990; Smeeding 2004).

The second bar, which includes employer-provided benefits, indicates that within the English-speaking group, the United States spends nearly as much as the United Kingdom does and more than Canada and Australia do. Including employer-provided health insurance and pensions and tax expenditures increases the estimated size of the U.S. welfare state by nearly 50 percent! More generally, including employer-provided benefits and tax expenditures substantially narrows cross-national differences in the size of welfare states because the English-speaking nations rely more on them than do most of the continental West European and Scandinavian countries.

More-over, when the size of a welfare state is measured by the total amount of social welfare transfers per person, the U.S. welfare state is not—as it is often described—unusually small but, in reality, quite large. Although welfare state spending relative to GDP is a good indicator of the degree to which countries differ in the share of their incomes devoted to the welfare state, such differences are not a good indication of the absolute amounts of social welfare transfers per person in each country. The US is the richest large nation. Sweden’s GDP per capita, for example, is only 79 percent of that of the U.S. Though Sweden devotes more than 41 percent of GDP to welfare state expenditures, compared with the U.S. share of 32 percent, GDP
per capita. Consequently, in absolute terms, the United States spends a lot more than 32/41 of what Sweden spends on a per capita basis. Figure 3 presents our estimates of per capita social welfare transfers in the same 14 rich nations with and without including employer provided benefits. For those who believe that the absolute size of the U.S. welfare state is small, the data in figure 3 are shocking and constitute a wake-up call. Real per capita social welfare spending in the United States is larger than that in almost all other countries! Even if employer-provided benefits and tax expenditures are excluded, the United States is still the third biggest spender on a per capita basis.

IV. Laggard in public relief and social insurance, but a leader in the provision of mass public education

Cash relief is the first, public education the second, and social insurance the last welfare state program to develop historically. In this part of the paper we go back to 1800 and show that though the US lagged in providing cash relief and social insurance, but led in providing mass education.

Relief for the Poor

The oldest welfare state program is poor relief. As feudalism gave way to capitalism in Western Europe, the state supplanted the feudal lord and the church in bearing responsibility for aiding the poor. Capitalism and public poor relief developed together, first in Great Britain and the Netherlands. Providing public aid to the poor was a big, hotly contested step, and even though the principle of public responsibility became increasingly less controversial, the nature of the aid to be provided continues to this day to be a subject of great debate. Because the US came into being as colonies of Great Britain, it provided public relief for the poor throughout its history.

Figure 4 depicts the share of national income (percent of GDP) spent on public relief (what is known colloquially in the US as welfare) by 10 currently rich nations—Ireland, the UK, and the US; Belgium, France, Germany and Netherlands; and Denmark, Norway, and Sweden—from 1800 to the present. Despite some huge gaps in the data, this picture clearly depicts several important facts. In all countries, the share of national income spent on public relief (measured from bottom to top in the figure) has grown over time. The biggest increases in spending occurred during the last forty years of the 20th century. But still the USA is the laggard in terms of cash and near cash benefits—including food stamps and the Earned Income Tax Credit (Rainwater and Smeeding, 2004). All countries have also experienced big fluctuations in spending over time, some of which are driven primarily by unemployment. When unemployment goes up, so does public spending on relief. But GDP goes down. The combination of an increase in spending and a decrease in GDP leads to spikes in the percent of GDP devoted to public relief, as exemplified by the Swedish spike in 1990.

Finally, note that the UK stands out as being the early leader in providing public relief for the poor and is above average in spending until at least 1970. Clearly, the US did not inherit its special aversion to cash relief benefits from the mother country. Indeed Smeeding and Waldfogel (2010) show that Britain’s ten year war on child poverty has largely been a success, with well targeted cash and in kind subsidies cutting British poverty in half from 1999-2009.
Public Education

Public education began in some Prussian counties, in the northern US states, and in Canada in the first half of the nineteenth century. By the end of the century it had become near universal at the elementary level in leading countries. Figure 5 uses data compiled by Lindert to display the growth in public school enrollment rates in our 14 nations for three different years during the course of the nineteenth century—1830, 1870, and 1900. Enrollment rates are measured by the number of children enrolled in public elementary schools as a percentage of the population ages 5-14. For each country and each year, enrollment rates are displayed by bars. The longer is the bar, the greater is the enrollment rate.

Although data for a few years are missing, several clear patterns emerge from Figure 5. First, over time, enrollment rates went up in all countries. Although well under half of all students were enrolled in elementary school in most countries in 1830, by the end of the century, well over half were in school in most countries, and in the leading countries the share was close to 90%.

Second, leadership changed over time. In 1830, though US enrollment rates were among the highest, Germany’s rates were even higher. But enrollment in Germany grew very little. By 1870, the US and Canada were the leaders and they maintained that leadership throughout the rest of the century.

Third, in education, there is no hint of the Esping-Anderson three worlds of welfare capitalism. The commitment to public education varied enormously within the English-speaking countries, with the UK and Ireland being education laggards and the US, Canada, and Australia being leaders. On the continent, Germany stood out as a clear leader. By the end of the nineteenth century, Norway and Sweden were in the middle of the pack and Finland was at the bottom.

At the beginning of the twentieth century, most American children attended primary schools, but few attended secondary or high schools and only a minuscule share attended college. This pattern changed dramatically during the first half of the twentieth century as the US leadership in mass education widened. Figure 6 depicts the growth in enrollment rates in secondary education between 1900 and 1930. The enrollment rate—the ratio of the number of secondary students to the number of children age 5-14 in each country—is not ideal for our purposes, but it still accurately reflects underlying differences. What is striking is that the US rate is nearly double that of the next closest country, Germany, and three to six times higher than most of the other countries. Similarly, the proportion of children graduating from colleges and universities was much higher in the US than other nations.

The wide American lead in secondary and college education persisted past mid-century, at least until 1970, but by century’s end was much reduced. The length of the bars in Figure 7 depicts the share of adults age 25-34 in each country who have attained the equivalent of US high school and college degrees (in panels A and B) for two years—1970 and 2000. As shown in panel A, in 1970 the US, at 83%, had a clear lead in the share of adults who had completed high school. Only Germany, at 76%, was close. In most countries, less than half of adults had the equivalent of a high school degree. By 2000, the picture had changed dramatically. Except for the US and Germany, which already had high rates, the share in all other countries increased substantially. The three Scandinavian countries and Canada had caught up to or surpassed the US. The other countries were not far behind.

Panel B, which depicts the share of each country’s population that has attained at least the equivalent of a US college degree (upper tertiary education), tells much the same story. In 1970,
the US together with Canada had a clear lead. By 2000, most of the other countries had caught up or nearly so, and Canada and Ireland were notably ahead. In short, since the 1970's, the US has been losing its big lead in educational attainment.

Finally, Figure 8 depicts how the US fell increasingly behind in early childhood education between 1975 and 2002. The data is not perfectly comparable across the two years—age three to five for 1975 versus age four for 2002, but the picture tells a clear story. In 1975, the US is in the middle of the pack. By 2002 early childhood education is quite common and the US is clearly behind.

In sum, the US went from being one of the world leaders in mass education at the beginning of the 20th century to being, by mid-century, far and away, the world leader. During the last quarter of the 20th century, however, the other rich nations substantially closed or eliminated the gap in high school and college enrollment and attainment and surged ahead in early childhood education.

Social Insurance
Social insurance came into being in the late nineteenth century in Germany and gradually spread through the rest of the rich world throughout the twentieth century. The US lagged the European nations both in terms of when it enacted these programs and in how much it spends on them. Work injury compensation is the oldest program; national health insurance and paid family leave are the newest. Health insurance came into being for the most part after World War II. Child or family allowances are also of relatively recent origin—for the most part a near mid-twentieth century phenomenon. Leadership differs depending on the program in question. Germany led in work injury compensation, Denmark in old age insurance, France in unemployment insurance, Belgium in family allowances, Spain and Netherlands in health insurance, and Spain and Sweden in paid family leave. The US stands out as a laggard here. It was the last nation to adopt worker’s compensation, which is, even now, a state rather than a national program in the US. Not until 1935 did the US enact old age and unemployment insurance. The US still lacks universal health insurance, work sickness insurance, family allowances, and paid family leave programs.

Summary and Conclusion
Myths about welfare states abound. In this paper, we rebut three central, related myths. The socialist programs that comprise the welfare state do not undermine productivity and economic growth. Rather, they complement capitalism and enrich nations. The American welfare state is not unusually small. But, it is peculiar in its reliance upon the combination of employer provided benefits and programs for the poor—as opposed to universal programs, which in health care has led to the largest, most expensive health insurance system in the world. Finally, the United States rather than always being a laggard in welfare state development was a leader for most of its history in the provision of mass public education.

Myths may influence policy. The US now lags other rich nations in the provision of early childhood education and other cash benefits that enhance child security and development. Should Americans worry about this? Should other nations, rich and poor, follow the US? If it were true that welfare state programs reduced economic growth and the US was always a welfare state laggard, Americans should not worry and other countries would be wise to imitate us. Alas, the evidence suggests Americans should worry as other nations have wisely imitated and gone beyond us in education.
Aside from employer provided health insurance, pensions, and other benefits, we also do not deal directly with the ‘third sector’—voluntary non-profit institutions and charities. One common perception is that state provision of the social welfare transfers in the US is less than in Europe because there is greater voluntary provision funded by a higher level of charitable giving. There is some truth to this because much of the 3rd sector consists of employer provided benefits and voluntary organizations such as hospitals that are funded by government or employer provided benefits. (See Amy Blackman, Kenndard T. Wing, and Thomas Pollack. 2008. The Non-Profit Sector in Brief, National Center for Charitable Statistics, Urban Institute). As we show in chapter 3, counting employer provided health insurance and pensions does narrow the gap between the US and other rich nations in welfare state transfers as a percent of national income. But, employer provided benefits hardly constitute “charitable giving.” Charitable contributions to churches and other non-profit institutions such as the United Way appear to play a much larger role in the US than other rich nations, but the amounts transferred are quite compared to the rest of the welfare state. While a comparative/historical study of the 3rd sector would be useful, it is beyond the scope of this volume.

Social welfare expenditures are the sum of social security, health, and education spending. Expenditure data is taken from IMF Government Finance Statistics Yearbooks (1998-2006). The IMF provides social security, health, and education expenditures in local currency. Each expenditure is then divided by that country’s GDP for the year of expenditure and the quotients are summed. This is the total social welfare expenditures as a percent of GDP for each country. GDP and per-capita GDP are taken from the World Bank World Development Indicators. All data are presented as natural logarithms.

Internationally, spending increases a little less than one percent for each one percent increase in income. Amongst the 50 American states, for every one percent increase in state income, welfare state spending increases by at least one percent, with some studies suggesting that state spending goes up by more than one percent. In general, public spending on health care seems to more responsive to increases in income than other types of social welfare spending, particularly cash assistance (Chernick, 1998).

The alert and questioning reader will note that there are three countries that are very rich but have decidedly smaller welfare states than all the other rich nations. The exceptional nations--Hong Kong, Singapore, and the United Arab Emerates--have not been included in previous research on welfare states in rich nations and we make no attempt to analyze or explain their exceptionalism. We trust that future scholars will deal with this.

In Canada, which industrialized more slowly than the US and had no civil war, the growth in the second sub period was higher than the first—2.4 compared to 1.75.

Amy Finkelstein and colleagues have done the pioneering research in this area. Finkelstein and McKnight (2005) find that the economic gains are quite large for health insurance for the aged, but Brown and Finkelstein (2007) find they are quite small for old age insurance.

In “Transfers, the Social Safety Net, and Economic Growth,” Xavier Sala-I-Martin (1997) develops a theoretical economic model in which transfers quell social and political discontent and thereby increase growth. He also reports that in most empirical studies of economic growth, transfers have a positive effect. Alesina, Ozler, Roubini, and Swagel (1996) find that political instability substantially retards economic growth. The empirical evidence on the effects of transfers on growth is discussed in the next subsection.
See Lindert (2004) for a discussion of the historical differences. More contemporary debates are also discussed in Lindert and in section 2.

In a few instances, enrollments were available for only the sum of public plus private enrollments. By the end of the century, private enrollments were a small portion of the total in all rich nations.

It would be preferable to have the % of children of secondary school age—say 14-18—who were enrolled in secondary schools, but these data are not available. Unless there were drastic changes in cohort sizes, however, using the 5-14 year old group will accurately reflect differences in secondary enrollments across countries over time.

To measure educational outcomes we use the share of the population that has completed secondary and tertiary education—roughly the equivalent of US high school and college degrees and is enrolled in pre-school education programs. We use OECD data that is designed to make completion rates comparable in terms of attainment across nations.

Of course, as we have noted repeatedly, saying the US lacks a universal health insurance program does not mean that most Americans lack health insurance. As we have seen, the opposite is true. The overwhelming majority of Americans have health insurance. Similarly, the partially refundable income tax credit for children in the US tax code would be economically equivalent to a universal child allowance if it were made fully refundable. While some large employers and a few states provide some benefits, Americans are much further away from having universal sickness insurance and paid family leave.
References


Figures and Tables

Figure 1: Social Welfare Expenditures as a Percent of GDP by GDP per capita in the World (162 countries, FY 1998)

Log of social welfare expenditures as a percent of GDP
Log of GDP per capita (constant 1995 US$)

Source: The World Bank, World Development Indicators (1997)

Figure 2: Social Welfare Transfers as a Percent of GDP in 14 Rich Nations: with and without Employer-provided Benefits (FY 2001)

Note: For data sources see footnote 2.
Figure 3: Social Welfare Transfers in US $ Per Person in 14 Rich Nations: with and without Employer-provided Benefits (FY 2001)

Figure 4: Percentage of GDP Spent on Welfare

Figure 5: Percentage of children age 5-14 enrolled in public primary schools in 1830, 1870 and 1900 (a)

% of children age 5-14 enrolled in public primary schools

Note: 1830 data for the following are missing: Australia, Canada, Ireland, Belgium, France, Italy, Spain, Netherlands, Finland & Sweden. 1870 data for Finland is missing.


Figure 6: Secondary school (public & private) students per 1000 children in 1900 and 1930 (a)

Note: When distinguishing private school enrollment is shown in white.
* Secondary source does not indicate whether expenditures include private institutions.
** Year 1870 data is extrapolated from years 1871 and 1872.
*** Year 1900 data is public only.
**** as Prussia in 1900, public only in 1930

Figure 7a: Percentage of the population that has attained at least upper secondary education, by age group (FY 1970, 2001)

% of population

Note:
Year 1970 data is from 2001 in age group 55-64 (equivalent to 25-34 in 1970). Data in 2001 is from 25-34 age group.
*Year of reference 2000
Source: OECD Education at a Glance (2002). Table A1.2. Population that has attained at least upper secondary education

Figure 7b: Percentage of the population that has attained at least upper tertiary education, by age group (FY 1970, 2001)

% of population

Note:
Year 1970 data is from 2001 in age group 55-64 (equivalent to 25-34 in 1970). Data in 2001 is from 25-34 age group.
*Year of reference 2000
Source: OECD Education at a Glance (2002). Table A2.3. Population that has attained tertiary education
### Table 1: Growth Rates in Per Capita GDP: 14 Currently Rich Nations in 3 Time Periods

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Notes:
- GDP per capita is in constant 2000 US dollars.
- Growth rate is calculated using a compounding interest formula.
- Growth rate for the last period is for 1870-1912
- No data prior to 1900
- No data prior to 1901