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Prosperity and the Welfare State: The Effect of Benefit Generosity and Wage Coordination on Absolute Poverty and Prosperity in Cross-National Perspective

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Abstract

The goal of the welfare state is the redistribution of income in order to reduce poverty and reduce inequality. Income inequality and relative poverty are often cited as major policy concerns, and are tracked by economists. Economists and policy makers also value measures of absolute poverty as it more closely tracks the actual well being of the poor. Some studies have found a link between generous social benefits or transfers and reduced absolute poverty, based on the difference between post-transfer poverty and pre-transfer poverty. But models suggest that benefits may have an endogenous effect and increase pre-transfer poverty. This paper expands on absolute poverty research by using two measures of post-tax-transfer poverty and two measures of prosperity. The paper explores the correlation between generous benefits and these standard of living measures across 14 countries using the Luxembourg Income Study, keeping GDP per capita constant. Poverty and prosperity are defined using the median income and quintiles of the US in a given year and converting currencies from the other countries using purchasing power parity and consumer price index. The paper also considers wage bargaining and minimum wage policy.

Introduction

A growing literature has focused on welfare generosity and its effect on growth, poverty and unemployment. Much of it suggests that social welfare institutions and labor market rigidities have a negative impact on growth and tend to increase unemployment (Siebert, 1997; Agell, 1999; Nickell, 1997; Mortensen, 2005; OECD *Jobs Study,* 1994; IMF, 2003; Sapir, 2004). There is also evidence that these institutions may alleviate poverty (Scruggs and Allan, 2005; Kenworthy, 1998) and hence have positive policy implications in this regard.

Definitions of poverty vary, but most often it is defined either by a relative measure, such as half the median income, or an absolute measure such as a certain number of dollars in disposable income per day or per year. The United States Census Bureau uses an income threshold that varies according to family size and which uses a measure of money income before taxes that does not include capital gains or non-cash benefits (such as public housing, Medicaid, and food stamps).

Poverty definitions have changed with time in developed countries. Early measures such as Rowntree's 1899 investigation, defined poverty as the inability to purchase essentials such as food, shelter, clothing and heating. Later Rowntree expanded his own definition, and today the absolute income thresholds for poverty are generally higher than what is required to afford such basic necessities and, for example, most households under the poverty threshold in America receive cable or satellite TV (Rector and Johnson, 2004). The definition of poverty used affects the cross-national comparison outcome significantly (Blackburn, 1994).

Relative measures of poverty essentially measure income equality when used for international comparisons or comparisons over time. Those who use this measure often argue that being relatively poor in a society is a disadvantage and a society should strive for income equality. Equalization of income the chief aim of socialist societies according to scholar of Socialism, R. G. Hawtrey (Hawtrey, 1926). Another well-known goal is the elimination of unemployment.

The goal of the welfare state is the redistribution of income in order to reduce poverty and reduce inequality. Income inequality is often cited as a major policy concern, and is tracked with many measures by economists. Economists also value

absolute measures of poverty, because even with higher relative poverty, the poor may have a higher standard of living if there is less absolute poverty (Scruggs and Allan, 2005).

For example, if the median income in country A is $20,000 and in country B is $40,000, and the percent of households below half the median is ten percent in country A and 14 percent in country B, the 14 percent below half the median in country B may be better off than the ten percent in country A. In country B, all 14 percent may have incomes of $18,000, while all ten percent in country A must have incomes at or below $10,000 to be considered poor. If this is the case and these incomes are converted with purchasing power parity estimates, we must conclude that the poor in country B are better off than those in country A.

Using an absolute measure of poverty, instead of a relative one, we would probably find that there is less poverty in country B, though it may depend upon the threshold for poverty employed. Median incomes and quintiles for a selection of countries in 1985 can be found in Table 1.

-- Table 1 about here --

Many economists have confirmed economic theory such as Hayek's well-known *Constitution of Liberty* (Hayek, 1960) and shown that the welfare system can lower economic growth and increase unemployment levels. If welfare benefits help the poor but reduce overall growth, they may hurt the poor in the longer run by reducing economic mobility, employment or wages. In this paper the author will explore how poverty and

prosperity are affected by generosity of the welfare state using two definitions each of poverty and prosperity.

Studies have also shown that unionization and wage bargaining or wage coordination can affect economic growth in both the short-term and long-term (Kim, 2005). This often shows up as unemployment, but with wage bargaining one can trade off wages for employment levels. In countries with high unionization, often either incomes (as in Sweden) or employment levels (as in Belgium) are comparatively low. A good explanation for why collective bargaining does not necessarily lead to higher employment levels can be found in Layard and Nickell, 1990.

In this paper, the author includes a measure of wage coordination, which tracks unionization as well as other kinds of coordinated bargaining, to see whether this wage rigidity has an effect on poverty and prosperity using the chosen measures.

One central tenet of economic theory involves the effect on the free market of price controls. Minimum wages, as a type of price control have long been considered a cause of unemployment, though much debate has resurfaced on the potential trade-off and worth of such regulations. Obviously the policy is intended to increase the income of the poorest workers. It is interesting to see whether the outcome of such a policy can be viewed at the national level in terms of effect on income, poverty and employment.

Scruggs and Allan (2005) and Kenworthy (1998) both found a link between generous social benefits and reduced absolute poverty. In both models the reduction of poverty was based on the difference between post-transfer poverty and pre-transfer poverty. The idea is to see whether social benefits have the effect of lowering the poverty level found before the benefits, or transfers, were given; or whether the benefits

were poorly targeted or positively influenced poverty in other areas so that the overall level of poverty was not reduced.

The problem with this approach is that economic models predict and recent papers have confirmed (Kim, 2000) that welfare benefits have an endogenous effect in this model in that they increase pre-transfer poverty. So, the pre-transfer poverty may be higher than the post-transfer poverty, indicating a poverty reducing effect, but the pre-transfer poverty level is higher than it would be if there were not benefits, hence the overall effect on poverty is unknown.

Kenworthy (1998) considered this but rejected the impact of social programs on pre-tax-transfer poverty as insignificant (note: he only had n=15 samples). Kim (2000) finds that when divided into generosity and efficiency, there is a significant correlation between social benefits and pre-tax-transfer poverty and so suggests, "pre-tax-transfer poverty may be endogenous and should not be treated as constant". He explains, "a higher level of generosity and/or efficiency is likely to increase pre-tax-transfer poverty." Kim had n=27 observations.

The author of this paper will expand on this research by using two quite different measures of post-tax-transfer poverty and two different measures of prosperity and will explore the correlation between generous benefits and these standard of living measures. Further, the paper will explore the correlation between wage bargaining and these measures.

The author asks both whether social welfare generosity affects the percent of households in absolute poverty for both measures and also whether such generosity affects the amount of absolute prosperity in the society. For this paper, the author uses

data from the Luxembourg Income Study[1] (LIS) from 14 countries, for a total of 47 observations. LIS has five waves of data approximating 1980, 1985, 1990, 1995 and 2000, although some countries lack data for one or more of the waves and the year of each wave differs slightly between countries. The author ran a sensitivity test with just two samples from each country, to test whether the imbalance in number of samples per country has any effect and found that the imbalance had no effect on findings.

This paper will define two types of poor and two types of prosperous households in order to gauge the effect of the welfare state on income levels more broadly. In casual discussion people discuss poverty and mean the very poor, often economists use half the median income to measure this kind of poverty. People also discuss those who struggle to reach the middle class and fail, living a substandard life of sorts due to lack of prosperity. Those below the middle class are those who have not reached the median income or more broadly the middle quintile, so that another measure of the poor could be the bottom two quintiles in a given country. Similarly, prosperity can be defined as twice the median income or the top two quintiles.

-- Table 2 about here --

This paper defines poverty and prosperity in this way, using absolute measures based on U.S. medians and quintiles for the given year, and investigates the relationship of these with social welfare spending and wage coordination. The author finds that social welfare generosity has a negative impact on prosperity and a positive correlation with

[1] Luxembourg Income Study (LIS) Micro database, (1980-2000); harmonization of original surveys conducted by the Luxembourg Income Study, Asbl. Luxembourg, periodic updating.

poverty and wage coordination has a negative impact on prosperity and a mixed impact on poverty, holding GDP per capita (which has the expected impact on prosperity and poverty) constant.

The author also considers whether the median income in a given country as well as the median of the countries income quintiles are affected by social welfare spending and wage coordination. In fact, social spending does appear to have a negative affect on the median wage and the median of the upper four after-tax-transfer quintiles, while wage coordination has no effect on the median wage and a negative effect on median income of the top quintile.

On the other hand, social benefits have no significant effect on the after-tax-transfer income of the bottom quintile, though policy would imply that it should have a positive effect. Wage coordination does have a positive effect on the bottom quintile, with 90% certainty.

These results are interesting and have not been studied elsewhere. The results do not conflict with other literature, but they do shed a new light on many of the current arguments in this area. A measure of prosperity is not wholly different from measures of inequality, as it tracks the wealthier in a society. There is no debate about the fact that social welfare spending helps to reduce inequality. This paper sheds light on how inequality is reduced: by making fewer wealthy, not by making fewer poor. It also illustrates the effect on after-tax-transfer incomes of the whole of society in several ways, all of them showing a general drag on incomes as a potential effect of social spending. What might be most enlightening is that it isn't simply a reduction of the very rich and a

lowering of very wealthy incomes to slightly more modest levels. Rather, the effect is significant for incomes that are considered modest in the United States.

Politicians may convince voters that an increase in taxes to fund new social welfare spending will only affect the top few percent, those who earn more than they can spend; but these results indicate that the spending may affect the middle class and even create a larger pool of "low-income" households in absolute terms, by dragging incomes down.   Income normally rise over time, so households may not notice lost income and may stay in the same relative position, but when compared with countries who have not spent as much on social welfare benefits, they will have lower incomes. It is also important to recognize that because these are after-tax-transfer incomes, it is not true to say that the lost income is made up with transfers or in-kind benefits.

The author also asks whether GDP per capita is itself affected by social spending and finds that it is negatively correlated with higher levels of spending. Though it could have an endogenous effect in the poverty model, there did not seem to be strong multicollinearity and so it was still used as an independent variable.

Finally the paper briefly considers minimum wage levels and effect on poverty and prosperity, median wages and unemployment. The author finds no statistical effect on poverty or prosperity measures and no effect on the median wage. There was a positive effect on the median wage of the bottom quintile, with 90% certainty.

Minimum wage levels had no effect on overall unemployment levels, but there was also a positive correlation with long-term unemployment (the percent of unemployed remaining so for at least one year), holding unemployment levels constant. The author

also considered the effect of wage coordination on employment and found a possible reducing effect on unemployment levels.

This correlation is central to the reasoning of those who profess central coordination as the socially minded way to reduce unemployment. But, like minimum wages, wage coordination was also correlated with higher long-term unemployment. It seems that, as many economists have argued, labor market rigidities may prevent some contracts from being joined.

This result is also interesting. The debate regarding minimum wages has resurfaced, with many economists questioning the impact of relatively low national minimum wages. Perhaps the effects are as often seen in the duration of unemployment as in overall levels of unemployment, and if so, this could be an important policy implication.

Empirical Methods

In this paper the author defines poverty and prosperity each by two absolute measures. POOR1 is the percent of households below half the U.S. median household disposable income (for example in 1991 the median household after-tax-transfer income in 2003 dollars was $22,576 and so half the median was $11,290). POOR2 is the percent of households below the U.S. second quintile cutoff (this should be approximately 40% for the US, and in 1991 this threshold was $18,505). PROSPEROUS1 is the percent of households above twice the U.S. median (in 1991, $45,158). PROSPEROUS2 is the

percent of households above the third U.S. quintile cutoff (this should be approximately 40% for the U.S. and in 1991 was $26,139.)

Welfare benefit generosity is modeled using SocBen, the percent of GDP spent on social benefits compiled by the OECD (Gross public social expenditures as percentages of current GDP, OECD Social Expenditure Data Base) and is lagged by one year. The author also takes the average of social spending over the five years previous to the poverty year, for SocBen5YrAvg.

Natural log of GDP per capita is captured by GDPC, and is based on RGDPL from the LIS Comparative Welfare States Dataset (in 1996 international dollars obtained by adding up consumption, investment, government and exports, and subtracting imports in any given year) for the same year as the Net Disposable Income for the given country.

Wage coordination is measured with WCOORD, also found in the LIS Comparative Welfare States Dataset, (originally based on Lane Kenworthy "Wage-Setting Measures: A Survey and Assessment." World Politics 54: 57-98). Level 1 is described as fragmented wage bargaining, confined largely to individual firms (the US and UK post-1970s have been at level 1); level 2 is bargaining mainly at industry-level but without intensive union concentration, and so on until the highest level, level 5 is centralized bargaining or government imposition of wage schedule or wage freeze and extremely high degree of union concentration (Norway was at level 5 for each year of this study).

If models that suggest that welfare benefits may cause unemployment, reduced growth and increased income equality are correct, it is possible that SocBen may affect

these poverty and prosperity variables and also may affect GDPC. The paper postulates the following equations.

$$POOR_{ti} =\ +\ SocBen_{it-1} +\ WCOORD_{ti} +\ GDPC_{ti} + U_{ti}$$

$$GDPC_{ti} =\ +\ SocBen_{it-1} +\ WCOORD_{ti} + U_{ti}$$

POOR is proxied by the different definitions of poverty and prosperity.

The author did not find a strong correlation between generous social welfare and GDPC with a one year lag, but there was a negative correlation (not significant) and based on the results of the first equation, in particular the effect of social welfare on prosperity, it could be postulated that there may be a long-term effect on GDPC as well. Using a five-year average of SocBen, represented by SocBen5YrAvg, there was a correlation with GDPC, indicating that social welfare spending may reduce GDP per capita over time (table 5). The author did not find evidence of strong multicollinearity, however to indicate rejection of GDPC from the first equation. The author holds GDPC constant and disregards this possible endogeniety (the results are the same without this variable but using it increases the R squared).

In order to define POOR1, the author computed the household equivalent 50-percent-of median poverty threshold for the United States for the given year. This threshold was then used to compare disposable income of households from the other countries by converting their income into dollars using the Organization for Economic Cooperation and Development (OECD)'s current purchasing power parity values for the country-year in question and indexing both for inflation to a common year to use for all

waves (2003). Poverty rates were computed as the percentage of equivalent households with disposable income below the threshold. The equivalence scale used is the square root of family size (E= 0.5).

The after-tax-transfer income used (Net Disposable Income) in the LIS refers only to disposable income defined as net of capital, income and payroll taxes and cash transfers and quasi-cash transfers. This means that in-kind goods and services like education, housing, or health care are excluded, as are consumption taxes like sales taxes or VAT. This is the best approximation commonly found for cross-national comparisons and may in this case work out quite well. Though higher benefit countries may offer more in-kind benefits, they tend also to have significantly higher VAT or sales taxes.

Median income level, captured by MedDPI, was calculated as the median income using LIS after-tax-transfer income data, as described above. The median income for each quintile was calculated similarly and produced the variables Quin1, Quin2, Quin3, Quin4 and Quin5. Unemp is the standardized unemployment rate provided by the OECD. LTU is the long-term unemployment rate defined as percent of unemployed who have been looking for work for at least one year, also provided by the OECD. MinWage is the hourly minimum wage in purchasing power parity adjusted 2003 dollars for each country, calculated from the minimum wages provided by the OECD.

Empirical Results

The author finds that welfare generosity has a significant effect on both measures of poverty and both measures of prosperity, holding wage coordination and GDP per capita constant.

-- Table 3 about here --

From Table 3 we find that using POOR1, the percent of households with disposable income below half the median disposable income of the United States for the given year (around $11,000), welfare generosity as defined by SocBen, had a significant (>99 percent) positive effect on the poverty variable but the R squared for this regression was low. Using SocBen5YrAvg, the positive correlation was no longer significant. Wage coordination (90 percent significance) and GDP per capita (95 percent significance) had a negative impact on the poverty number.

For the broader measure of poverty, POOR2, defined as being in the bottom two quintiles of the U.S. for that year, wage coordination has an insignificant positive correlation with poverty. Welfare spending has a large positive correlation (> 99 percent significance), and GDP per capita again has a negative (reducing) effect. The adjusted R squared is better for this equation at 0.6. Results are almost identical using SocBen5YrAvg, but with a higher R squared.

For the narrow definition of prosperity as having at least twice the U.S. median income, PROSPEROUS1, welfare generosity and wage coordination have a negative impact and of course GDP per capita has a positive effect. The R squared is 0.83.

The outcome is similar for the more broadly defined PROSPEROUS2, which includes all households that make it into the top two U.S. quintiles. Both welfare generosity and wage coordination have negative effects on prosperity. Particularly if it also has a long-run effect on GDP per capita, it could make prosperity in real terms difficult to achieve for the majority of households. The R squared for this equation is 0.81 with SocBen and 0.86 with SocBen5YrAvg (Table 4).

As for the effect on GDP per capita (Table 5), the five-year average, SocBen5YrAvg, does have some effect on GDPC. There is a negative correlation at the 95% significance level with or without holding WCOORD constant (R squared 0.12).

Social spending, as captured by SocBen, had a negative correlation with the overall median income, MedDPI, and the median income of the top four quintiles (Table 6). It had no significant correlation with the median income of the bottom quintile, Quin1. Wage coordination, WCOORD, had a positive correlation with the median income of the bottom quintile at 90% significance and a negative correlation with the median income of the top quintile, Quin5. The R squared was as high as 0.78 for the top quintile.

The regression had similar results using five-year average for social benefit amounts, although the significance for SocBen5YrAvg on the second quintile income was reduced to 90%. The R squared and the F* for most regressions were also higher using the five year average (Table 7).

The effects of wage coordination and minimum wages on incomes, unemployment and long-term unemployment were also interesting. MinWage (Table 8

and 9) had no significant correlation with poverty (R squared 0.34 - 0.69) or prosperity

(R squared 0.74 – 0.81), nor did it have an effect on the median wage (R squared 0.72).

At 90% significance, MinWage had a positive correlation with the median income of the

bottom quintile, Quin1 (R squared 0.24), and no significant correlation with any other

quintile (R squared 0.54 – 0.74). These results should make policy makers who advocate

the minimum wage quite happy. The effect on employment may not be so positive,

however (Table 10).

Although SocBen did, MinWage did not have a significant correlation with

overall unemployment as captured by Unemp (R squared 0.16), but when Unemp was

controlled for, there was a positive correlation between MinWage (as well as SocBen)

and the percentage of unemployed who are long-term unemployed, LTU (R squared 0.74

with or without GDPC controlled for). The effect of WCOORD on employment is

similar (Table 11). There is, in fact, a negative correlation with Unemp (R squared 0.15)

but with Unemp controlled for the correlation with LTU is positive (R squared 0.60 or

0.64 with GDPC controlled for).

Finally, when the regression includes both MinWage and WCOORD (Table 12),

the results are similar, but with a higher R squared. SocBen has a positive correlation

with Unemp, while WCOORD is no longer significant (R squared 0.28); SocBen and

WCOORD have a positive correlation with LTU, while MinWage is no longer significant

(R squared 0.92).

Conclusion

  The chosen definition of poverty greatly affects the results obtained when
determining whether policy choices have a negative or positive impact on it. Some
economists choose to define it in relative terms and others use absolute measures. Still,
most economists define it narrowly as those below a certain threshold and do not
simultaneously gauge the impact of the given policies on the incomes of the rest of the
society.

  Policy makers, on the other hand, may care to know how a policy choice will
affect not only the very poor but also the broader "working class". Policy makers may
also be interested in how the policy will affect the chances of households to become
"prosperous" in absolute terms. If social benefits reduce inequality, what is the resulting
income level of these more equal households?   How might the nation compare to other
countries in GDP per capita or median income? Is it worth it to spend on social benefits
if the affect on the very poor is unclear and the effect on the rest of society is to make it
near impossible to reach prosperity?

  It could be argued that this correlation between higher levels of poor and higher
spending on social benefits is due to something else entirely. A correlation is not
necessarily evidence of causation. Perhaps something else entirely is causing both. One
could argue that cultural values influence the preference for fewer work hours, which
might be just as highly correlated with low incomes and high levels of poor as social
benefit levels are. The primary economic argument against that line of reasoning is that
most of these countries are fairly similar in culture; in all countries leisure is welcomed

and in none of them is a large number of hours spent in worship or another cultural replacement for work. Indeed, the data shows that the lower number of hours worked in Europe is not due to preference, but at least in large part, due to necessity. From Europe's own Sapir Report (2003):

> "It appears that Europeans work part-time to a greater extent than Americans because of lack of employment opportunities rather than because of preference. Just under 8% of Americans in 1997 said they worked part-time because they could not find full-time work compared with nearly 20% in Europe."

One could also postulate that something highly correlated with social benefits could be causing the increase in absolute poverty. For example high taxation required to fund high levels of benefits might in fact be the causative factor. This paper does not address that question. Even if it is the tax level alone, it is unlikely that taxation could be reduced enough to reverse the effect without a reduction in benefit spending. Each of the countries has a unique tax system with different levels of payroll, consumption and income taxes; overall tax levels have been correlated with unemployment and may be highly correlated with social spending.

If the disincentive effects of high taxation combined with the reduction in after-tax income levels are the cause of the results, then it may not be social spending in particular but spending in general that reduces after-tax incomes. But it is most enlightening to regress with social spending levels in particular as they are guided by a policy goal of helping the poor and increasing general welfare. Yet the transfers and benefits awarded do not make up for the loss in income that is caused by either the taxation or the other incentive effects.

Is there an obvious alternative interpretation of the cross-country correlations that seem to characterize the data on the relationship between income levels and social

welfare spending? If not then these results should inspire policy makers to carefully consider whether welfare spending will achieve the desired results and whether the results will be worth the potential trade-offs.

If this paper is correct, the trade-off is as follows. An increase in social benefit spending will potentially have a long-term negative effect on GDP per capita. It will most likely have a negative effect on the percent of households that can become prosperous as defined by achieving a level of income that would put them in the top 40% in the United States. It will also have a negative effect on the ability of households to reach a higher income of twice the US median. It will likely have the effect of "dragging down" households into the income level that would put them in the bottom two quintiles in the US. And increasing this social spending may have no effect on the very poor as defined by having an income less than half the US median, it may even increase those numbers.

So, is this a worthwhile policy? Can it really be said to reduce poverty, or only to reduce inequality?

Welfare state generosity is known to reduce inequality, and using pre- and post-tax-transfer incomes and poverty levels, many have found a negative (reducing) effect on poverty.   Models and empirical results, however, suggest that welfare state generosity may affect the pre-tax-transfer poverty level. Removing pre-tax-transfer poverty from the equation, the author found a strong correlation between social benefits and higher poverty by at least one measure as well as between social benefits and lower prosperity. The effect was greatest on the more broadly defined measures. A one-year lag of the

social benefits and a five-year average of social benefits with a lag was used to build a case for causation.

Another question for policy makers (insofar as they pass regulations that give power to the unions) and for workers who may consider joining a union is whether the rigidities caused by collective wage bargaining are a good idea or whether wages may be held down by such activities, or employment levels effected.

Though wage coordination may reduce the percentage of households below half the US median, they may also reduce the percentage of households who earn enough to make it into the top two quintiles in the US – a modest household income of $26,139 after taxes in the early 1990s. This increased equality of incomes comes at a price – the absolute incomes of the majority of households are low compared with the majority of households in countries that have less unionization.

In addition, both wage coordination and social benefits may have an effect on long-term unemployment. So, when only unemployment levels are tracked in order to make policy decisions regarding whether to raise the minimum wage or protect wages through wage coordination measures, some important effects of the rigidities may be missed. Long-term unemployment can reduce economic mobility and cause a sort of "poverty trap". Those unlucky enough to be without union jobs may be stuck receiving social benefits rather than working and advancing in a career.

Though economic theory proposes that a wage floor will produce a surplus of workers, when wage coordination and long-term contracts are involved, the type of unemployment effect is less clear. Some economists have created models to suggest that wage coordination should allow for the elimination of unemployment altogether, even

with a wage floor. But even if unemployment is low in many cases with high wage coordination, one unseen effect may be that for those who do become unemployed, the chance of finding a new job becomes very low.

A certain level of short-term unemployment can be simply the result of workers finding better work and taking the time to find a good match rather than taking the first available job. A high level of unemployment is certainly a sign of recession. Long-term unemployment is generally a symptom of a stagnating job market or, especially with low overall unemployment, a symptom of labor market rigidities and a high opportunity cost of re-entering the work force.

Generous social benefits can allow an unemployed worker to take their time looking, while rigidities prevent a firm from hiring a worker unless they absolutely must. But a few months ought to be enough time to casually find a new job, so there is no reason to believe that it would be good policy to have a high level of long-term unemployment.

References

Agell, Jonas. "On the benefits from rigid labour markets: norms, market failures and social insurance." *Economic Journal*, 109, 453, February 1999, pp F143-64

Blackburn, McKinley, L. "International Comparisons of Poverty," *The American Economic Review,* Papers and Proceedings of the Hundred and Sixth Annual Meeting of the American Economic Association, 84, 2, May 1994, pp 371-4

Hayek, F.A. *The Constitution of Liberty*. London & Henley: Routledge & Kegan Paul, 1960.

International Monetary Fund. "Unemployment and Labor Market Institutions: Why Reforms Pay Off." *World Economic Outlook April,* 2003, pp. 129-150.

Kenworthy, Lane**.** "Do Social-Welfare Policies Reduce Poverty? A Cross-National Assessment" *Social Force*s, 77, 3, March 1999, pp. 1119-39

Kim, Doh-Khul. "Unionization, Unemployment, and Growth in Korea: A Cointegration Approach," *Atlantic Economic Journal*, 33, 2, June 2005, pp 225-33

Kim, Hwanjoon. "Do Welfare States Reduce Poverty? A Critical Shortcoming in the Standard Analysis of the Anti-Poverty Effect of Welfare States." *European Journal of Social Security*, 3, 1, 2001, pp. 25-44

Layard, R.; Nickell, S. "Is Unemployment Lower if Unions Bargain Over Employment?" *The Quarterly Journal of Economics*, 105,3, August 1990.

Mortensen, Dale, T. "Growth, Unemployment and Labor Market Policy," *Journal of the European Economic Association* (April-May 2005) 3: pp. 236-58*.*

Nickell, Stephen. "Unemployment and Labor Market Rigidities: Europe versus North America." *Journal of Economic Perspectives,* 11, 3, Summer 1997, pp 55–74

Organization for Economic Cooperation and Development. *OECD Jobs Study, Evidence and Explanations, Part I: Labor Market Trends and Underlying Forces of Chang*e. *Part II: The Adjustment Potential of the Labor Market.* OECD. Paris.

Peracchi, Franco. "Earnings inequality in international perspective", in F. Welch, ed., *The Causes and consequences of Increasing Inequality*, University of Chicago Press, Chicago, 2001, pp 117-52.

Rector, Robert E.; Johnson, Kirk A. "Understanding Poverty in America." Backgrounder #1713, Heritage Foundation, 2004.

Sapir, Andre; Aghion, Philippe; Bertola, Giuseppe; Hellwig, Martin; Pisani-Ferry, Jean; Rosati, Dariusz; Viñals, José; Wallace, Helen. "An Agenda for a Growing Europe:

Making the EU Economic System Deliver," Report of an Independent High-Level Study Group established on the initiative of the President of the European Commission, 2004.

Scruggs, Lyle; Allan, James. "The Material Consequences of Welfare States: Benefit Generosity and Absolute Poverty in 16 OECD countries" *Comparative Political Studies* (forthcoming October 2006)

Siebert, Horst. "Labor Market Rigidities: At the Root of Unemployment." *The Journal of Economic Perspectives*, 11, 3, summer 1997, pp 37-54

Table 1
Median Net Disposable Incomes* in 1985**

Country	Median of 1st quintile	Median of 2nd quintile	Median of 3rd Quintile	Median of 4th quintile	Median of 5th quintile	Median Income
Italy	5867	9677	13498	18346	27064	13687
Germany	6572	9603	12251	15229	21033	12546
France	7204	10642	14112	18025	26173	14155
Austria	7400	10964	14243	17816	24227	15825
Australia	7403	11968	16500	23690	33073	17580
Belgium	7573	10002	12691	15688	21119	13154
Sweden	7604	11759	14971	18108	23227	15121
US	7937	15646	22511	31136	46492	22849
Canada	8135	13801	18943	25346	36752	20566
Denmark	8449	11703	15383	19324	25179	17023
UK	8458	11832	16052	21828	32257	16856
Finland	9396	12779	15696	19190	25106	15208
Norway	10396	15545	19461	23888	31462	19205

* Incomes in 2003 PPP adjusted dollars
** 1984 for France, 1985 for Australia and Belgium, 1986 for the United States, United Kingdom and Norway, 1987 for Canada, Sweden, Denmark and Austria, 1989 for Germany and Italy.

Table 2
A Sample of Poverty, Prosperity, SOCX, WCOORD and GDPC in 1985*

Country	POV1	POV2	PROS1	PROS2	SOCX	WCOORD	GDPC
Netherlands	51.54	87.12	0.096313	3.25	26.92	3	17606.00
Belgium	38.00	83.97	0.20226	3.42	25.94	5	16987.00
Sweden	25.17	76.37	0.12417	3.95	29.99	4	19770.00
Italy	40.83	75.58	0.95537	8.30	21.62	2	18914.00
Austria	21.57	68.78	0.5263	8.34	24.10	4	17403.00
France	30.95	71.59	1.72147	11.54	23.09	2	17125.00
Germany	21.02	65.21	1.64885	11.60	23.95	4	19011.00
Denmark	22.37	61.65	1.36284	11.92	26.99	5	20948.00
Norway	12.44	49.68	1.76807	19.40	19.10	5	19942.00
UK	25.41	58.57	2.73472	20.04	21.10	1	16377.00
Switz	13.42	50.43	5.26014	24.46	14.20	5	22413.00
Canada	14.50	43.60	4.50543	30.28	17.39	1	21719.00
Australia	16.70	45.63	4.60	30.86	13.26	4	18386
US	17.79	38.99	10.77573	40.55	12.96	1	24179.00

* 1981 for Switzerland, 1984 for France, 1985 for Australia and Belgium, 1986 for the United States, United Kingdom and Norway, 1987 for Canada, Sweden, Denmark, Austria and the Netherlands, 1989 for Germany and Italy.

Table 3
OLS Regression of Poverty/Prosperity Function

Variable	POVERTY1	POVERTY2	PROSPERITY1	PROSPERITY2
Constant	174.454**	375.629***	-87.507***	-188.414***
	(2.215)	(3.786)	(-5.381)	(3.145)
SOCX	0.501***	1.301***	-0.276***	-1.274***
	(3.200)	(5.996)	(-5.926)	(-7.772)
WCOORD	-1.183*	0.606	-0.626***	-1.846***
	(-1.738)	(0.713)	(-4.667)	(-3.664)
GDPC	-16.241**	-35.327***	9.965***	24.469***
	(-2.069)	(-3.606)	(6.144)	(4.211)
$\hat{\sigma}$	7.507	8.442	1.394	5.088
N	47	47	47	47
$R^2/\bar{R}^2$	0.22 / 0.17	0.63 / 0.60	0.82 / 0.81	0.82 / 0.81
F*	4.10	24.12	67.05	66.26

* = 90%, ** = 95%, *** = 99% confidence, numbers in parentheses are t-statistics. Heteroskedasticity Consistent. These t-values and standard errors are based on White's heteroskedasticity consistent variance matrix.

Table 4
OLS Regression with five-year benefit span

Variable	POOR1	POOR2	PROSPEROUS1	PROSPEROUS2
Constant	369.782***	570.989***	-110.845***	-313.68***
	(3.765)	(4.964)	(-6.238)	(5.949)
SocBen5YrAvg	0.274*	1.200***	-0.211***	-0.992***
	(1.820)	(4.022)	(-4.802)	(-5.280)
WCOORD	-1.303*	0.295	-0.761***	-1.792***
	(-1.742)	(0.302)	(-4.962)	(-3.146)
GDPC	-35.187***	-54.036***	12.176***	36.261***
	(-3.602)	(-4.760)	(6.807)	(7.044)
$\hat{\sigma}$	6.881	7.670	1.246	4.131
N	39	39	39	39
$R^2/\bar{R}^2$	0.39 / 0.34	0.70 / 0.68	0.87 / 0.85	0.87 / 0.86
F*	7.38	27.70	75.50	81.57

* = 90%, ** = 95%, *** = 99% confidence, numbers in parentheses are t-statistics. Heteroskedasticity Consistent. These t-values and standard errors are based on White's heteroskedasticity consistent variance matrix.

Table 5
OLS Regression of GDPC

Variable	Model 1	Model 2
Constant	10.130*** (122.27)	10.137*** (116.857)
SocBen5YrAvg	-0.008** (-2.613)	-0.007** (-2.477)
WCOORD	N/A	-0.008 (-0.535)
$\hat{\sigma}$	0.123	0.124
N	39	39
$R^2 / \bar{R}^2$	0.16 / 0.13	0.16 / 0.12
F*	N/A	3.53

* = 90%, ** = 95%, *** = 99% confidence, numbers in parentheses are t-statistics. Heteroskedasticity Consistent. These t-values and standard errors are based on White's heteroskedasticity consistent variance matrix.

Table 6
OLS Regression on Median income and Quintiles

Variable	MedDPI	Quin1	Quin2	Quin3	Quin4	Quin5
Constant	5.316*** (4.893)	7.907*** (7.672)	5.894*** (5.457)	5.778*** (5.605)	6.22*** (6.433)	6.441*** (6.625)
SocBen	-0.016*** (-5.520)	-0.003 (-1.205)	-0.011*** (-3.755)	-0.016*** (-5.772)	-0.020*** (-7.398)	-0.023*** (-9.084)
WCOORD	-0.009 (-0.872)	0.023* (1.958)	0.009 (0.691)	-0.001 (-0.129)	-0.015 (-1.500)	0.458*** (-3.403)
GDPC	0.489*** (4.552)	0.115 (1.132)	0.383*** (3.610)	0.438*** (4.307)	0.432*** (4.513)	0.458*** (4.738)
$\hat{\sigma}$	0.099	0.108	0.118	0.099	0.098	0.101
N	47	47	47	47	47	47
$R^2 / \bar{R}^2$	0.66 / 0.64	0.11 / 0.05	0.39 / 0.35	0.63 / 0.61	0.73 / 0.71	0.79 / 0.78
F*	28.38	1.81	9.27	24.73	38.34	54.71

* = 90%, ** = 95%, *** = 99% confidence, numbers in parentheses are t-statistics. Heteroskedasticity Consistent. These t-values and standard errors are based on White's heteroskedasticity consistent variance matrix.

Table 7
OLS Regression on Median income and Quintiles with 5 yr soc

Variable	MedDPI	Quin1	Quin2	Quin3	Quin4	Quin5
Constant	2.932**	5.800***	2.752**	2.830***	3.669***	4.398***
	(2.397)	(4.438)	(2.255)	(2.401)	(3.003)	(3.502)
SocBen5YrAvg	-0.012 ***	0.000	-0.006*	-0.011***	-0.018***	-0.019***
	(-3.251)	(0.025)	(-1.950)	(-2.891)	(-3.585)	(-4.757)
WCOORD	-0.007	0.024*	0.008	-0.002	-0.018	-0.039***
	(-0.634)	(1.686)	(0.596)	(-0.172)	(-1.378)	(-3.159)
GDPC	0.717***	0.318**	0.684***	0.720***	0.676***	0.654***
	(5.934)	(2.489)	(5.743)	(6.229)	(5.637)	(5.303)
$\hat{\sigma}$	0.093	0.107	0.111	0.093	0.096	0.097
N	39	39	39	39	39	39
$R^2 / \bar{R}^2$	0.72 / 0.70	0.18 / 0.11	0.50 / 0.46	0.70 / 0.67	0.76 / 0.74	0.82 / 0.81
F*	30.13	2.58	11.64	27.16	36.76	54.06

* = 90%, ** = 95%, *** = 99% confidence, numbers in parentheses are t-statistics. Heteroskedasticity Consistent. These t-values and standard errors are based on White's heteroskedasticity consistent variance matrix.

Table 8
OLS Regression on Min Wage effects

Variable	POOR1	POOR2	PROSPEROUS1	PROSPEROUS2
Constant	272.255**	458.427***	-88.250***	-259.367***
	(3.104)	(4.531)	(-2.731)	(-3.522)
SocBen	0.580**	1.473***	-0.343***	-1.500***
	(2.286)	(5.045)	(-4.495)	(-6.798)
MINWAGE	-1.575	-0.835	-0.399	-0.0168
	(-1.354)	(-0.732)	(-1.569)	(-0.019)
GDPC	-25.279***	-43.109**	10.269***	31.530***
	(-3.009)	(-4.385)	(3.224)	(4.487)
$\hat{\sigma}$	7.889	8.418	1.882	5.557
N	26	26	26	26
$R^2 / \bar{R}^2$	0.42 / 0.34	0.73 / 0.69	0.77 / 0.74	0.83 / 0.81
F*	5.22	19.49	24.38	36.40

* = 90%, ** = 95%, *** = 99% confidence, numbers in parentheses are t-statistics. Heteroskedasticity Consistent. These t-values and standard errors are based on White's heteroskedasticity consistent variance matrix.

Table 9
OLS Regression on Min wage effects on Median income and Quintiles

Variable	MedDPI	Quin1	Quin2	Quin3	Quin4	Quin5
Constant	3.026**	5.099***	3.889**	3.509**	3.800**	5.037***
	(2.007)	(3.358)	(2.461)	(2.154)	(2.385)	(2.615)
SocBen	-0.019***	0.0029	-0.011***	-0.017***	-0.021***	-0.026***
	(-4.764)	(1.255)	(-3.024)	(-4.662)	(-5.562)	(-5.501)
MinWage	0.024	0.044*	0.025	0.026	0.017	-0.006
	(1.354)	(1.785)	(1.151)	(1.277)	(0.932)	(-0.298)
GDPC	0.704***	0.359**	0.566***	0.648***	0.661***	0.598***
	(4.878)	(2.569)	(3.832)	(4.230)	(4.388)	(3.247)
$\hat{\sigma}$	0.112	0.112	0.115	0.113	0.112	0.129
N	26	26	26	26	26	26
$R^2/\bar{R}^2$	0.76 / 0.72	0.33 / 0.24	0.59 / 0.54	0.72 / 0.68	0.77 / 0.74	0.75 / 0.71
F*	22.96	3.60	10.66	18.91	24.18	21.57

* = 90%, ** = 95%, *** = 99% confidence, numbers in parentheses are t-statistics. Heteroskedasticity Consistent. These t-values and standard errors are based on White's heteroskedasticity consistent variance matrix.

Table 10
OLS Regression of Minimum Wage and SocBen on Unemp and duration

Variable	Unemp	LTU	LTU Model 2	LTU Model 3
Constant	0.109**	-0.404**	-0.668***	0.924
	(2.080)	(-2.352)	(-6.006)	(0.706)
SocBen	0.003**	0.024***	0.018***	0.018***
	(2.528)	(5.981)	(5.080)	(4.931)
MinWage	-0.010	0.035	0.060***	0.051***
	(-1.187)	(1.328)	(4.079)	(3.000)
Unemp	N/A	N/A	2.417***	2.026***
			(5.755)	(4.554)
GDPC	N/A	N/A	N/A	-0.151
				(-1.233)
$\hat{\sigma}$	0.035	0.129	0.099	0.099
N	26	26	26	26
$R^2/\bar{R}^2$	0.23 / 0.16	0.59 / 0.56	0.77 / 0.74	0.78 / 0.74
F*	3.38	16.88	24.61	18.94

* = 90%, ** = 95%, *** = 99% confidence, numbers in parentheses are t-statistics. Heteroskedasticity Consistent. These t-values and standard errors are based on White's heteroskedasticity consistent variance matrix.

Table 11
OLS Regression of WCOORD on LTU

Variable	Unemp	LTU Model 1	LTU Model 2	LTU Model 3
Constant	0.068*** (4.820)	0.053 (0.658)	-0.274*** (-4.397)	3.395** (2.562)
SocBen5YrAvg	0.002** (2.425)	0.009*** (2.60)	0.001 (0.419)	-0.001 (-0.185)
WCOORD	-0.008*** (-2.882)	0.023 (1.228)	0.062*** (5.258)	0.055*** (4.937)
Unemp	N/A	N/A	4.810*** (7.648)	4.137*** (6.977)
GDPC	N/A	N/A	N/A	-0.357*** (-2.745)
$\hat{\sigma}$	0.026	0.168	0.113	0.107
N	38	38	38	38
$R^2 / \bar{R}^2$	0.20 / 0.15	0.17 / 0.12	0.63 / 0.60	0.68 / 0.64
F*	4.32	3.63	19.69	17.71

* = 90%, ** = 95%, *** = 99% confidence, numbers in parentheses are t-statistics. Heteroskedasticity Consistent. These t-values and standard errors are based on White's heteroskedasticity consistent variance matrix.

Table 12
OLS Regression of WCOORD and MinWage on LTU

Variable	Unemp	LTU Model 1	LTU Model 2	LTU Model 3
Constant	0.033	-0.179	-0.204*	0.585
	(1.115)	(-1.599)	(-1.846)	(0.692)
SocBen	0.002***	0.015***	0.014***	0.013***
	(3.107)	(5.713)	(4.016)	(3.624)
MinWage	0.002	-0.008	-0.009	-0.012
	(0.446)	(-0.510)	(-0.588)	(-0.749)
WCOORD	-0.001	0.088***	0.089***	0.087***
	(-0.185)	(5.343)	(5.668)	(5.538)
Unemp	N/A	N/A	0.769	0.585
			(0.863)	(0.692)
GDPC	N/A	N/A	N/A	-0.112
				(-1.358)
$\hat{\sigma}$	0.018	0.056	0.056	0.055
N	23	23	23	23
$R^2 / \bar{R}^2$	0.38 / 0.28	0.93 / 0.92	0.93 / 0.92	0.94 / 0.92
F*	3.80	81.88	62.02	51.10

* = 90%, ** = 95%, *** = 99% confidence, numbers in parentheses are t-statistics. Heteroskedasticity Consistent. These t-values and standard errors are based on White's heteroskedasticity consistent variance matrix.

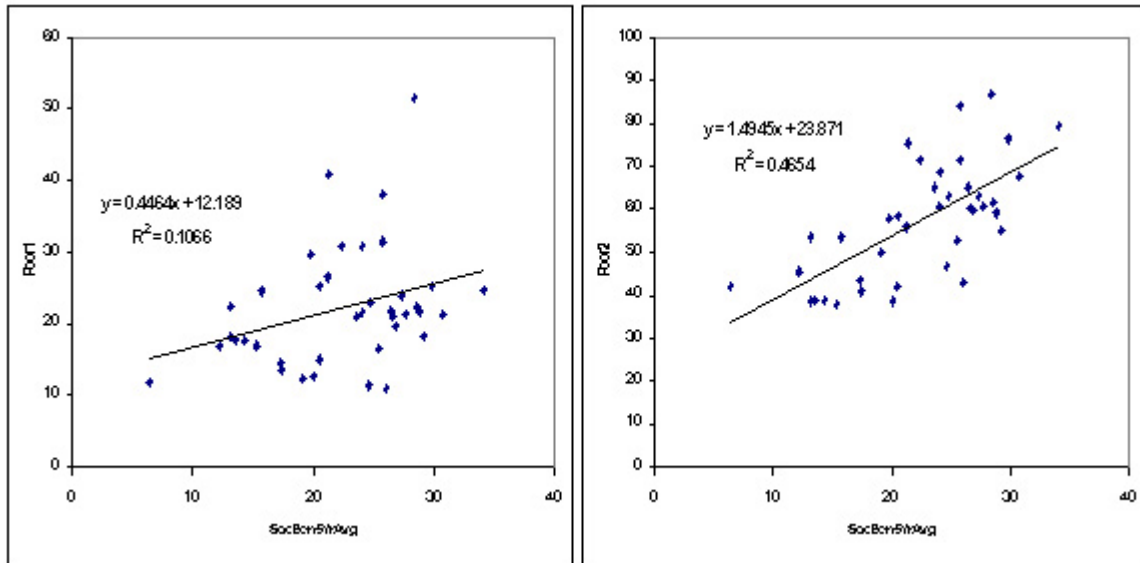**Figure 1**
Benefit Generosity and Poverty Correlation

Figure 2
Benefit Generosity and Prosperity Correlation