ECONOMIC FREEDOM AND HUMAN WELFARE: SOME EMPIRICAL FINDINGS Herbert G. Grubel

When I attended graduate school in economics at Yale, one of my professors, Henry Wallich, in 1960 published a book entitled *The Cost of Freedom*. This book reflected the conventional wisdom of the time that appeared also in the leading textbooks in economics: to achieve lower unemployment, higher economic growth and a more equitable distribution of income, governments have to increase regulation and taxation. The achievement of these policy goals was considered to be worth the loss of economic and personal freedom brought on by the accompanying increased size of government.

Economic theory provided the justification for a wide range of policies. Keynesian macroeconomic models wrapped into the neoclassical synthesis offered lower unemployment through countercyclical budget imbalances. A little inflation was promised to lower unemployment further, taking advantage of the Phillips curve trade-off. Economic growth was to be stimulated by the proper mix of monetary and fiscal policies, the public ownership of industry, and planned investment in "strategic" industries. Regulation promised the elimination of market failures. Social insurance programs would provide income security and equalize the distribution of income.

Seemingly strong empirical evidence promised success for these policies. In the United States increased government activism during and after the Second World War was accompanied by strong economic performance, especially during the 1960s. Krushchev's famous announcement "We will bury you economically" was taken seriously as the Soviet Union appeared to grow rapidly and had no unemployment. Sweden's successful efforts to equalize income were accompanied by low unemployment, industrial peace and rapid economic growth.

Cato Journal, Vol. 18, No. 2 (Fall 1998). Copyright © Cato Institute. All rights reserved.

Herbert G. Grubel is Professor of Economics at Simon Fraser University and a Senior Fellow of the Fraser Institute.

The conventional wisdom on these issues began to fade with the inflation and stagflation in the United States during the 1970s and early 1980s. The collapse of the Soviet Union has revealed that the officially pronounced superior economic performance of central planning was a sham. The miracle of Sweden's economic and social performance has lost its luster with the release of recent statistics. In 1960, Sweden's per capita income was 6 percent higher than that of Canada. In 1995, Sweden's per capita income was 14 percent lower than Canada's. Unemployment in Sweden has become a persistent problem (see Lindbeck 1997). Japan's stagnating economy of the 1990s is seen by many as evidence of the pitfalls of national industrial strategies.

During the heyday of Keynesianism, Milton Friedman's (1962) book *Capitalism and Freedom* rejected much of the conventional wisdom of the time. Even though his book was a bestseller its message was largely ignored by the establishment in economics. However, at a meeting of the Mont Pelerin Society in Cambridge, England, in 1984, the idea was first raised to challenge the conventional wisdom on the relationship between economic freedom and economic performance. In 1986, a group of economists met in California to flesh out the idea. Michael Walker of Canada's Fraser Institute organized the conference, attended by Milton and Rose Friedman, Armen Alchian, Arnold Harberger, Assar Lindbeck, and many other distinguished economists. Other meetings followed and resulted in a number of studies of the nature of economic freedom and the relationship between it and economic development.

In 1996, James Gwartney, Robert Lawson, and Walter Block, with much input by Alvin Rabushka, published the first volume *Economic Freedom of the World*. In 1997, Gwartney and Lawson published an update of that study. Those volumes contain an index of economic freedom that was compiled with the help of economists from many countries.

More specifically, the 1997 edition of *Economic Freedom of the World* presents for 115 countries data on the extent to which governments restrict economic freedom through inflationary and unstable monetary policy, regulation, taxation, and restraints on international exchange. Seventeen such measures are combined into an index that reflects the strength of economic freedom in each country. In 1995 Hong Kong had a Freedom Index of 9.3 out of 10 and placed first in the ranking of the 115 countries. Algeria ranked last with an index of 1.9 out of 10.

The following analysis uses this data base first to present as a reminder the most powerful and fundamental conclusions found in the volume containing the basic statistics. I then present evidence on the effect that economic freedom has on other indicators of human well-being like unemployment, life expectancy, and income distribution.

Before I present my empirical evidence, I have two comments on methodology. First, quoting Friedman in the Preface to the 1996 publication of the *Economic Freedom of the World* (p. viii): "There is nothing in the way the indexes are calculated that would prevent them from having no correlation whatsoever with such completely independent numbers as per capita GDP and the rate of growth of GDP." The same holds true for the correlation with social indicators.

Second, I present my findings in simple bar graphs. I follow the precedent of the first publication of the Economic Freedom Index and group countries into quintiles, according to their economic freedom. For each of these quintiles I then show the values of social performance indicators and possible systematic relationships. I also present regression estimates that confirm the results obtained through the use of the bar graphs.

The focus on the relationship between economic freedom and the economic and social conditions of countries fails to examine the influence that many other variables have on social outcomes. However, as is well recognized by econometricians, the use of multiple regressions for such purposes brings its own problems. The estimates presented by analysts are often considered to be the result of data-mining. They are seen to be less the product of classical statistical inference and more a sophisticated way of reflecting the researcher's *a priori* expectations and values. This can hardly be said of the analytical approach used here, which has the additional advantage of producing visually powerful results.

Economic Freedom, Income, and Economic Growth

The first two figures are based on the entire population of 115 countries ranked in the Economic Freedom index. Figure 1 shows for each quintile of countries, ranked from "most free" to "least free," their average per capita income in U.S. dollars based on purchasing power parity. For example, for the quintile of countries with the most freedom, per capita GDP was \$14,829. Figure 2 shows the growth of real per capita income over the 1985–96 period by quintile ratings of economic freedom (from highest to lowest). These graphs show clearly and unambiguously that income levels and growth rates are higher the greater is a country's economic freedom. The postwar conventional wisdom was not only wrong, the opposite of what it



SOURCE: Gwartney and Larson (1997: 34).



SOURCE: Gwartney and Larson (1997: 34).

290

asserted is true. Economic freedom is not associated with economic costs, it brings economic benefits.¹

Economic Freedom and Unemployment Rates

Many experts consider income, as measured by the national income accounts, to be an inadequate indicator of economic well-being. Unemployment and the distribution of power between employers and employees, they argue, are also important indicators because they help determine the distribution of income. In response to these concerns, governments have enacted policies to reduce unemployment, grant benefits to the unemployed, strengthen the power of unions, set minimum wages, and regulate collective bargaining procedures. As a result, the freedoms of employers and employees have been severely restricted. The question is whether and to what extent such reductions in labor-market freedom produce the expected benefits in terms of unemployment.²

Figure 3 shows unemployment rates for 20 OECD countries during the 1993–96 period grouped into quintiles, according to the level of economic freedom (with quintile 1 representing those countries with the most economic freedom and quintile 5 representing those with

¹There is a rapidly growing literature that adds the Economic Freedom Index as an independent variable to the traditional variables explaining economic growth in studies involving large numbers of countries. Easton and Walker (1997: 332) conclude "Economic freedom is important as well as model improving." Gwartney, Lawson, and Holcombe (1998: 26) conclude, "There is a strong and robust relationship between increases in economic freedom... and economic growth. This relationship is present even after measures of physical and human capital are taken into account." Presumably, these findings derived from multiple regressions explain the strong results shown in Figures 1 and 2. Both papers contain bibliographies of related studies.

Farr, Lord, and Wolfenberger (1998: 8) have considered the possibility that the causal relationship runs from economic freedom to economic growth, as is suggested by Friedman's model, but it also could have the reverse causal connection. It is possible, in principle, that economic freedom is a luxury that countries will consume increasingly as income rises under regimes that generate indices of low economic freedom. The authors used Granger causality tests and found that "past values of economic freedom help predict future values of economic growth." But they also found that "the opposite occurs." Thus, they concluded that, "Taken together, this evidence suggests bilateral causality, or feedback, between economic freedom and economic growth." I am not convinced by these statistical findings. Casual historical evidence suggests to me clearly that in recent years developing countries like those in Southeast Asia experienced significantly higher economic growth after increasing economic freedom through free trade and domestic deregulation. At the same time, many developing countries that failed to deregulate had stagnating economies.

²Economists are engaged in a serious debate about the extent to which the high unemployment rates prevailing in European countries are due to these legislated restraints on labor-market freedom. For recent surveys of this controversy, see Nickell (1997) and Siebert (1997).



SOURCES: Gwartney and Larson (1997: 34), OECD (1997).

the least). Except for unemployment rates of the countries in the third quintile, less economic freedom is associated with higher unemployment rates. There is a striking parallel with the result that government policies that reduce freedom also reduce income levels and economic growth. In both cases, policies create outcomes that are the opposite of those intended and expected under the conventional wisdom.³

My results support those who argue for the deregulation of labor markets to lower unemployment. However, my results do not address the issue emphasized by those opposed to deregulation on the grounds that it would increase income inequalities. This subject will be discussed below in an analysis of the correlation between economic freedom and income distribution.

³The results of this analysis would be strengthened by the use of an index for labormarket freedom rather than economic freedom more generally. Gwartney and Lawson are working on such an index and expect to have it included in the next edition of the *Economic Freedom of the World* for the OECD countries for which a basic data base exists. I believe that there is a high degree of correlation between labor-market freedom and overall economic freedom in these countries because they are both driven by the same ideology. I therefore expect that the results of Figure 3 would be much the same if countries were grouped into quintiles according to labor-market freedom rather than economic freedom.

United Nations Measures of Human Development

The idea that national income statistics measure human welfare only imperfectly has prompted the United Nations Development Program (UNDP) to publish annually indicators of social well-being for 175 countries. The so-called Human Development Index gives equal weight to life expectancy at birth, adult literacy rates, school enrollment, and real per capita incomes. This index is used by some to argue that countries with high levels of government intervention can produce much better social conditions than countries with less intervention and the same level of income.⁴ Such claims invite empirical scrutiny in the light of the Economic Freedom performance of these countries.

Figure 4 shows the average value of the Human Development Index for countries grouped into quintiles. The calculations are based on 113 countries that appear in both the UN and Fraser Institute tables. Most of the 62 countries omitted from the UN list of 175 are



FIGURE 4



⁴Canada in recent years has ranked first on the UNDP list. This ranking is used by Canadian politicians to defend the country's costly social programs and to justify the growing gap in real per capita income between Canada and the United States. During the 1970s, Cuba's policies to increase literacy rates and access to medical services were used as an example of the success of policies that put social well-being ahead of economic growth and personal and economic freedom. small, underdeveloped countries, and many have been formed only recently as a result of the break-up of the Soviet Union and other nations.

Figure 4 indicates, in general, that greater economic freedom is associated with higher levels of human development. It could be argued that the results of Figure 4 are not surprising since the UN Human Development Index has per capita income as one of its main components. Therefore, I considered separately the relationship between economic freedom and the components of the UN Human Development Index.

One component, income per capita, has already been examined in Figure 1. Figures 5 and 6 show the relationship between economic freedom and the other two components of the UN Index—life expectancy at birth and adult literacy rates, respectively. As can be seen, for both series, the last two quintiles fall outside of the basic pattern, probably for the reasons given in the preceding paragraph. However, it is clear that the pattern found for the basic index cannot be attributed simply to differences in the per capita income of the countries.

I have searched the regular statistical tables in the appendix to the *Human Development Report* for other indicators of social well-being. Unfortunately, there are few that cover a wide range of countries. The exception is the rate of mortality of children under five. My



FIGURE 5

SOURCES: Gwartney and Larson (1997: 34), UNDP (1997: Table 1).



SOURCES: Gwartney and Larson (1997: 34), UNDP (1997: Table 1).

analysis, not reproduced here, shows a very strong and consistent relationship: the greater economic freedom, the lower is infant mortality.

However, the 1997 edition of the *Human Development Report* contains a special compilation of the "Human Poverty Index" for 78 low- and middle-income countries.⁵ The index consists of a linear combination of countries' percentages of people expected to die before the age of 40 and who are illiterate. It also contains three economic measures: the percentages of those with access to clean water and health care and the percentage of malnourished children under age five.

Figure 7 shows the relationship between economic freedom and the Human Poverty Index for 55 countries. The results are quite strong, given the heterogenous nature of the sample of the world's poor- and middle-income countries. The proportion of the population afflicted by poverty, as measured by the index, is generally greater the less free is the economy. The data suggest unambiguously that the 40 percent of countries with the least economic freedom have

⁵It is interesting to note that the list includes Singapore and Chile. The report does not explain the exclusion of high-income countries from the list.



SOURCES: Gwartney and Larson (1997: 34), UNDP (1997: 21, Table 1.1).

the highest levels of poverty, and the 40 percent with the highest economic freedom have the lowest poverty levels, by a large margin.⁶

Table 1 presents regression estimates for the sets of cross-section data used in Figures 3–7. Each of the slope coefficients has the expected sign, and except for the first regression (i.e., with respect to Figure 3), each is statistically significant to a high degree.

Economic Freedom and Income Distribution

Almost all countries have policies aimed at creating a more equal distribution of income than is produced by a free market. Such policies involve progressive income taxation and transfer payments to low income earners, mostly through social insurance programs providing welfare, unemployment, health, and pension benefits. The collection of the funds needed for these transfers results in a reduction in economic freedom. In addition, income redistribution policies induce changes in behavior. High marginal tax rates lead to tax evasion and transfer payments, and social insurance programs induce moral hazard. To limit the effects of these induced changes in behavior requires laws that further reduce economic freedom.

⁶Norton (1998) has used the same UN data base to examine the relationship between human poverty and property rights. He concludes, "The institution of private property is closely linked with the well-being of the poorest members of the world community."

		TABLE 1			
	REGRESSION RESULT (Independent Vari	s for Data Shov able: Economic	wn in Figures 3- Freedom Index)	7	
Reference	Dependent Variable	Intercept	Slope Coefficient	t-Value	R-Squared
Figure 3	Unemployment Rate	24.1	-0.2	-1.5	.12
Figure 4	Human Development Index	207.1	9.3	7.7	.35
Figure 5	Life Expectancy at Birth	420.7	4.6	7.4	.33
Figure 6	Adult Literacy Rate	379.9	7.8	6.1	.25
Figure 7	Human Poverty Index	595.7	-6.1	-5.4	.35

ECONOMIC FREEDOM AND HUMAN WELFARE

Based on these considerations, I hypothesize a negative correlation between equality in the distribution of income *after* transfers and taxes, on the one hand, and economic freedom across countries, on the other. In my model the measured degree of income equality is the result of government policies. It is considered to be the determinant of economic freedom and economic outcomes like income and growth. In my regressions, therefore, the equality of income is the independent variable.

Other studies have focused on the determinants of income equality.⁷ They therefore use income levels, growth, and economic freedom as the independent variables. I think that this analytical approach is justifiable only if the data on income inequality are *before* both transfers and taxes. The data available to me were for most countries an average of income distribution after transfers (55 percent of the observations) and after taxes (45 percent).⁸

The following analysis uses information on 56 countries for which I was able to obtain matching data for the measure of inequality, the Economic Freedom Index, per capita income levels, and economic

⁷Berggren (1998) runs regressions in which income equality is the dependent variable and economic freedom, income levels, and growth are the independent variables. His theory is simple and appealing. He suggests that an increase in economic freedom, *ceteris paribus*, can "induce higher equality, if the poor are able to take advantage of the freer economic setting, perhaps brought about through trade liberalization or the introduction of more secure property rights, to a larger degree than the rich" (p.11). Similarly, higher levels of income and growth can result in greater income equality as they lead to more education and health to those with lower incomes. The result of these influences on income distribution can be established only empirically.

Berggren uses the same data on income equality by Deininger and Squire (1996) as I use. He finds strong support for the hypothesis that income equality increases with economic freedom, income, and growth. More specifically, using income equality as the dependent variable in a multiple regression, he finds that the coefficient is positive for the level of economic freedom in 1985, negative for the change in economic freedom between 1975 and 1985, and negative for per capita income. He concludes, "Sustained and gradual increases in economic freedom influence equality measures positively" and "the absolute level of economic freedom appears to be negatively related to equality in some cases" (p.22). His most robust finding involves a positive empirical relationship between *increases* in freedom and *increases* in equality, holding constant income levels and growth.

⁸I used a data set recently published by Deininger and Squire (1996) in the *World Bank Economic Review.* The authors examined 2,600 studies on income distribution covering nearly all countries of the world. They included in their sample only those studies that met strict standards of quality and comparability. Each observation for a country consists of the average of results taken from different studies and time periods. The average for each country mixes survey data (652 observations) based on both income after transfers (55 percent) and income after transfers and taxes (45 percent of all observations). The payment of transfers involves taxation and other restrictions on economic freedom so that for the former set of measures I would expect a negative correlation between equality and economic freedom. growth for the 1980–93 period. The measure of income equality used here is the ratio of family income earned by the top quintile of households relative to the bottom quintile. An increase in this ratio means greater income inequality.⁹

An examination of the scatter diagram for all 56 countries suggests that countries with incomes above \$17,000 and with income below that level make up two distinct subsets of observations. Table 2 presents for the 17 countries with per capita incomes above \$17,000 simple regressions of income inequality on income levels in 1995, economic growth for 1980 to 1993, and economic freedom in 1995. As can be seen, for all three equations the correlations and the slope coefficients are statistically significant at the 5 percent level.¹⁰ The signs on the slope coefficients confirm the initial hypothesis. Greater income inequality is associated with higher economic freedom, higher income levels, and higher economic growth rates. In other words, policies that bring about greater income equality also result in lower economic freedom, income, and growth.

The quantitative effects of the influence of income distribution policies on economic freedom and economic performance are shown

	7	TABLE 2		
Regression Pef (Indep	RESULTS FOR CAPITA INC endent Vari	DR 17 COUNTR COME OF OVER able: Income	eies with \$17,000 Inequalit	Annual y)*
Dependent Variable	Intercept	Slope Coefficient	<i>t</i> -Value	R-Squared
Income Levels Income Growth Freedom Index	15.5 - 2.4 - 4.8	.92 3.8 3.1	2.3 2.0 2.4	.25 .21 .26

*Income inequality is measured as the ratio of family income earned by the top quintile of households relative to the bottom quintile.

SOURCES: Deininger and Squire (1996), Gwartney and Lawson (1997).

⁹The data base also includes information on Gini coefficients. I have chosen to use only the ratio of the top to bottom quintiles, mostly on the grounds that this measure is easier to explain and appears to be used most widely by those arguing in favor of policies for greater income equality. This measure is also used by Berggren (1998). The correlation coefficient(R-squared) between the ratio and the Gini coefficient is .79.

¹⁰Identical regressions were estimated for the 38 countries in the sample with less than \$17,000 income. Only the coefficients for the regression using the freedom index were statistically significant. The results imply that, for low-income countries, greater income equality is associated with lower economic freedom. The two other pairwise regressions were not statistically significant.

in Tables 3 and 4. Both tables show differences in the four variables for the averages of the top three and bottom three countries in the group of 17. In Table 3, the top and bottom three countries are those with the highest and lowest incomes per capita, respectively. In Table 4, the top and bottom three countries are those with the highest and lowest ratios of average incomes, respectively.

The results in Table 3 imply the following. Consider that a country with the highest income per capita imposes taxes at the rate of 1.3 percent of income on earners in the top quintile and transfers the resultant revenue to those in the bottom quintile. The income of the first group falls from 780 to 770 and that of the second rises from 100 to 110.¹¹ The ratio of the income of the top and bottom quintile will have fallen from 7.8 to 7.0. The costs of redistribution are a reduction in freedom of 16 percent, a decrease in per capita income of 49 percent, and a reduction in the rate of real per capita income growth of 12 percent.

The results in Table 4 imply that the top quintile earners have to pay a tax of 7.4 percent on an income of 900 to pay transfers of 67, which raise the income of the bottom quintile from 100 to 167. The new ratio of 5 results in a reduction of 15 percent in economic freedom, a decrease of 17 percent in per capita income, and a reduction of 52 percent in the growth of per capita income.

The empirical results reported in Tables 3 and 4 should be treated with much caution, but they lend themselves to the illustration of what in principle is one of the most important arguments against redistributive policies that slow economic growth. Consider Country A in which the income of the bottom quintile is 100 and grows at 1.6 percent annually. Country B, identical to Country A, raises the income of the bottom quintile to 110 and experiences a reduction in the growth rate to 1.4 percent. After 49 years, the absolute level of income of those in the bottom quintile will be 217 in both Countries A and B. Thereafter, the income of the bottom quintile will be higher and by a growing margin in Country A. In the second example, where the income redistribution policies resulted in a 67 percent increase in the income of the bottom quintile, the differences in the rates of economic growth equalize the income of that group in the two countries at 291 after 49 years.

¹¹For this calculation the key variable is the ratio of top to bottom quintile incomes. The index of 780 for the top and 100 for the bottom can readily be scaled up to reflect actual money incomes. For example, if the top and bottom quintile incomes were \$78,000 and \$10,000, respectively, the tax rate of 1.3 percent would lower the income of the top quintile by \$1,000, and the transfer to the bottom quintile would raise the income by the same amount.

	TABL	.Е 3		
INCOME EQUALIZAT	ION AND ITS EF	FECTS ON FF	REEDOM AND INCO	OME
(Differences betweet)	en the Average	es for the T	hree Countries w	ith
	est and rowest	r Per Capila	THCOHIES	
Performance Indicators	Top 3 Countries	Bottom 3 Countries	Difference in Value of Index	Percentage Gain or (Loss) (Top 3 = 100)
Income Distribution Ratio of Quintiles	7.8	7.0	0.8	11
Economic Freedom Index	8.0	6.9	1.1	(16)
Per Capita Income 1995	26.2	17.6	8.6	(49)
Per Capita Growth Annual Av. 1980–93	1.6	1.4	0.2	(12)
NOTE: The top three countries in per capita inco Ireland, and New Zealand. SOURCES: Deininger and Squire (1996), Gwartney	me are Hong Kon _i and Lawson (1997	g, the United S 7).	itates, and Canada. T	he bottom three are Finland,

ECONOMIC FREEDOM AND HUMAN WELFARE

	TAF	81.E.4		
INCOME EQUALIZATIC	on and Its E	FFECTS ON F	reedom and Inco	ME
(Differences betwee	en the Avera	ges for the T	hree Countries w	ith
the Highest a	and Lowest H	čatios of Inco	ome Quintiles)	
	Top 3	Bottom 3	Difference in	Percentage Gain or
Performance Indicators	Countries	Countries	Value of Index	(Loss) (Top 3 = 100)
Income Distribution Ratio of Quintiles	8.9	4.2	4.7	53
Economic Freedom Index	7.9	6.7	1.2	(15)
Per Capita Income 1995	23.9	19.8	4.1	(17)
Per Capita Growth Annual Av. 1980-93	2.3	1.2	1.1	(52)
NOTE: The top three countries in per capita inconthe Netherlands and the United Kingdom.	me are Hong Ko	ong, the United 3	States, and Ireland. Th	e bottom three are Belgium,

SOURCES: Deininger and Squire (1996), Gwartney and Lawson (1997).

CATO JOURNAL

This is not the place to evaluate the merit of income redistribution policies in detail. The shortcomings of the preceding analysis are obvious. It neglects the effects of taxes and subsidies on the middle three quintiles. There are questions about the changing members of the different quintiles since a large proportion turns over every year. There are problems with the comparison of utility between individuals and, in the case of the illustration, different generations. Nevertheless, the preceding analysis shows empirically that policies designed to achieve greater equality of income reduce the rate of economic growth, levels of income, and the levels of economic freedom. Advocates for income redistribution policies should consider these negative effects when evaluating the net benefits of such policies.

Conclusion

This paper uses the Economic Freedom Index to show that greater economic freedom does not have a cost in terms of income levels, income growth, unemployment rates, and human development, as has been the conventional wisdom during much of the postwar era. To the contrary, economic freedom is associated with superior performance on all of these criteria of human well-being.

However, there is a widespread belief that the equality of income distribution is an important aspect of a society's, and therefore its members', well-being. In Canada, for example, in the political arena much is made of the statement, "A society is judged on the basis of how well it cares for its poor, elderly, and sick." It is relatively well known that income redistribution policies result in blunted incentives to work, invest, and take risks. As a result of those distortions, economic growth and income levels are reduced. Efforts to redistribute income also require policies to limit changes in behavior of individuals wanting to avoid taxes and wanting to qualify for transfer payments. All of these policies amount to reductions in economic freedom. The calculations presented here support these hypotheses. Income redistribution policies reduce freedom and the levels and rates of growth of per capita incomes.

References

- Berggren, N. (1998) "Economic Freedom and Equality: Friends or Foes?" Paper presented at the 23rd Annual Conference of the Association of Private Enterprise Education, Dallas, Tex. (Forthcoming in *Public Choice.*)
- Deininger, K., and Squire, L. (1996) "A New Data Set Measuring Income Inequality." World Bank Economic Review 10(3): 565-91.
- Easton, S., and Walker, M. (1997) "Income, Growth, and Economic Freedom." *American Economic Review* 87(2): 328-33.

CATO JOURNAL

- Farr, K.W.; Lord, R.A.; and Wolfenbarger, J.L. (1998) "Economic Freedom, Political Freedom and Economic Growth: A Causality Analysis." Paper presented at the 23rd Annual Conference of the Association of Private Enterprise Education, Dallas, Tex.
- Friedman, M. (1962) *Capitalism and Freedom*. Chicago: University of Chicago Press.
- Gwartney, J.; Lawson, R.; and Block, W. (1996) *Economic Freedom of the World* 1975–95. Vancouver, B.C.: Fraser Institute.
- Gwartney, J. and Lawson. R. (1997) *Economic Freedom of the World 1997, Annual Report.* Vancouver, B.C.: Fraser Institute.
- Gwartney, J.; Lawson, R.; and Holcombe, R. (1998) "Economic Freedom and the Environment for Economic Growth." Working Paper. Policy Sciences Center, Florida State University.
- Lindbeck, A. (1997) "The Swedish Experiment." Journal of Economic Literature 35 (September): 1273–1319.
- Nickell, S. (1997) "Unemployment and Labor Market Rigidities: Europe versus North America." *Journal of Economic Perspectives* 11(3): 55–74.
- Norton, S.W. (1998) "Poverty, Property Rights, and Human Well-Being: A Cross-National Study." *Cato Journal* 18(2): 233–45.
- OECD (1997) Economic Outlook. Paris: OECD.
- Siebert, H. (1997) "Labor Market Rigidities: At the Root of the Unemployment in Europe." *Journal of Economic Perspectives* 11(3): 37–54.
- UNDP (1997) Human Development Report 1997. New York: Oxford University Press.
- Wallich, H. (1960) The Cost of Freedom. New York: Harper.
- World Bank (1996) *World Bank Development Report 1996.* New York: Oxford University Press.