

ECONOMIC FREEDOM, POLITICAL FREEDOM,
AND ECONOMIC WELL-BEING:
A CAUSALITY ANALYSIS

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In recent years, a renewed interest has been shown in trying to further comprehend the factors that determine a country's rate of economic growth. This is important since a higher growth rate means greater national output, potentially higher living standards, and an enhanced ability to attain economic and social objectives. Earlier studies of the causes of economic growth focused on the importance of increasing exogenous quantities of physical resources (land, labor, and capital) to enhance the rate of growth, while more recent evidence suggests that growth is determined by a much larger set of endogenously determined variables.¹

Institutional factors—the political and economic customs and practices that exist within countries—have received particular attention in a number of recent studies. The importance of these factors lies in the fact that all economic decisions are made within a given institutional setting. And while it is difficult to know with certainty how these factors influence economic growth, it is generally assumed that greater economic and political freedom act as catalysts to enhance growth. But economic growth may also, in turn, enhance economic and political freedom.²

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¹Studies that have identified specific endogenous causal factors of economic growth include Barro (1991); Grossman and Helpman (1994); Lucas (1988); Mankiw, Romer, and Weil (1992); Pack (1994); Romer (1994); and Solow (1994).

²For a recent discussion of political and economic freedom from an institutional perspective, see Hanke and Walters (1997).

Most of the previous studies of the interrelationships between measures of economic freedom, political freedom, and economic growth have concentrated on only one aspect at a time, ignoring any potential feedback or multilateral relationships. Studies that have explicitly considered the impact of various political freedoms on economic growth include Bardhan (1993), Barro (1993, 1994, 1996), Barro and Sala-i-Martin (1995), Dasgupta (1990, 1993), Easterly and Pritchett (1993), Grier and Tullock (1989), Hanke and Walters (1997), Kor-mendi and Meguire (1985), Pennar et al. (1993), Przeworski and Limoni (1993), Ryan (1994), and Scully (1988, 1992). Evidence has generally supported the belief of a positive linkage between political freedom and growth, but there have always been dissenters who believe that political freedom might be negatively related to growth, particularly for nations at lower levels of economic or political development. Furthermore, most previous studies have failed to adequately address the possibility of reverse causation between economic growth and political freedom. This weakness has been singled out in studies by Barro and Sala-i-Martin (1995); Huber, Rueschemeyer, and Stephens (1993); Levine and Renelt (1992); Levine and Zervos (1993); Przeworski and Limoni (1993); and Solow (1994). Specifically, a question remains concerning the direction and significance of the impact of political freedom on economic growth and the contribution of economic growth, if any, to the enhancement of political freedom.

In a similar vein, another group of studies have examined the relationship between economic freedom and economic growth. While most of the research in this area has found that economic freedom does make a significantly positive contribution to growth (Barro and Sala-i-Martin 1995; Gastil 1978; Gwartney, Lawson, and Block 1996; Islam 1996; Scully 1988), there is also the possibility, as noted by Barro and Sala-i-Martin (1995), of an inverse relationship running from growth to economic freedom.

Finally, links between economic freedom and political freedom have long been theorized. However, perhaps due to the tendency to lump the two concepts together, limited empirical evidence exists to support any possible interrelationship. In *Capitalism and Freedom*, Milton Friedman (1962: 10) considered the links between the two freedoms and suggested, "The relationship between political freedom and economic freedom is complex and by no means unilateral."

Little effort has been forthcoming to analyze potential multilateral relationships that may exist among measures of economic freedom, political freedom, and economic growth. In addition, questions have arisen concerning whether the interrelationships vary over different stages of development. The purpose of this paper is to offer evidence

concerning the direction of causation between measures of economic freedom, political freedom, and economic growth among both industrial and nonindustrial countries. As such, the empirical results may help to identify relationships that may improve upon endogenous growth models (see Grier and Tullock 1989). Moreover, by showing that particular policy-growth relationships apply across countries, our study should improve policy decisions and economic performance (see Levine and Zervos 1993).

Causality in Economic Analysis

The issue of causality is at the foundation of any study that examines an economic relationship. General understanding of how a change in one variable affects another is paramount in comprehending economic behavior and in formulating policy. Fortunately, economic theory is often available to help guide the building of models that are used to empirically examine the causal relationships among variables. However, this is not always the case. As an example, currently there is no theory that provides a sufficient explanation of the possible connections, if any, among measures of economic freedom, political freedom, and economic growth.

A methodology that has been used extensively in recent years to gain further insight into such situations is Granger causality (see Granger 1969). To briefly explain how this methodology works, assume there are two time series, X and Y , where evidence is sought of a potential causal relationship. The following fundamental procedure is used to test for Granger causality running from X to Y . If, while controlling for the information contained in past (lagged) values of Y , past (lagged) values of X add significantly to the explanation of current Y , then X is said to “Granger-cause” Y . A symmetric test can also be performed to test for Granger causality running from Y to X . If, while controlling for the information contained in lagged values of X , lagged values of Y add significantly to the explanation of current X , then “ Y Granger-causes X .” A finding that only one of these relationships is true provides support for a unilateral line of causation. However, if both are found to be true, support for a bilateral (or jointly determined) relationship is provided. If neither relationship is found to exist, the assumption is made that the two variables are unrelated. It should be noted that this methodology does not provide “proof” of causation. The results from such tests should only be interpreted as showing that prior changes in one variable add (or do not add) significantly to the explanation of the future value of another variable. However, these Granger results do provide valuable information that

can aid in the development of new theories or in the refinement of existing ones.

A more formal test for Granger causality running from X to Y is shown as:

$$Y_t = a_1 + \sum_{j=1}^J b_j Y_{t-j} + \sum_{k=1}^K c_k X_{t-k} + v_t$$

where v_t is assumed to be a white noise error term and Y_{t-j} and X_{t-k} represent the information contained in lagged values of Y and X . The number of lagged values (J and K) for the independent variables is chosen by the investigator to adequately capture the integrity of the relationship. To conduct the Granger-causality test, the above regression equation is estimated with and without X_{t-k} followed by an F -test to test the null hypothesis that $c_k = 0$ for $k = 1, \dots, K$. A rejection of the null hypothesis implies that X Granger-causes Y .

The formal test for Granger causality running from Y to X is performed using a symmetrical test shown as:

$$X_t = a_2 + \sum_{l=1}^L e_l X_{t-l} + \sum_{m=1}^M f_m Y_{t-m} + v_t$$

where once again v_t is assumed to be a white noise error term and the appropriate lag structure (L and M) is chosen by the researcher. If the null hypothesis $f_m = 0$ for $m = 1, \dots, M$ is rejected, then Y Granger-causes X . If the null hypothesis for each of the above Granger-causality tests is rejected, the evidence would indicate that the relationship between X and Y is bilateral, which implies they are jointly determined.

This methodology is employed here to test for Granger-causal relationships between economic freedom, political freedom, and the level of economic well-being. Since the extent of any connection among these variables is unclear, a series of tests are performed using nine different equations. The first three equations are used to test for unilateral Granger causality of the level of economic well-being. Specifically, these equations allow for tests to determine if economic freedom Granger-causes economic well-being and if political freedom Granger-causes economic well-being. Those relationships are examined in time t for country i using EF as the measure of economic freedom, PF as the measure of political freedom, and $\ln GDP$ (the natural log of per capita GDP) as a measure of economic well-being in all the specified equations.³

³See the following section for a complete description of the data.

$$(1) \text{LnGDP}_{t,i} = \alpha_{1,i} + \beta_1 \text{LnGDP}_{t-1,i} + \nu_{t,i}^4$$

$$(2) \text{LnGDP}_{t,i} = \alpha_{2,i} + \beta_1 \text{LnGDP}_{t-1,i} + \theta_1 \text{EF}_{t-1,i} + \nu_{t,i}$$

$$(3) \text{LnGDP}_{t,i} = \alpha_{3,i} + \beta_1 \text{LnGDP}_{t-1,i} + \phi_1 \text{PF}_{t-1,i} + \nu_{t,i}$$

Equation (1) is used to control for the information contained in lagged values of the dependent variable while equations (2) and (3), which are extensions of equation (1), also include the information contained in lagged values of economic freedom and political freedom, respectively.⁵ In these equations, θ_1 and ϕ_1 are interpreted as the change in the natural log of per capita GDP that results from a one-unit change in the measures of economic freedom and political freedom, respectively. If equation (2) makes a significant contribution to the explanation of *LnGDP* over and above equation (1), the conclusion would be that *EF* Granger-causes *LnGDP*. This would mean that prior levels of economic freedom are significantly related to the current level of per capita GDP. If the results show that equation (3) makes a significant contribution to the explanation of *LnGDP* relative to equation (1), then *PF* Granger-causes *LnGDP*. Again, this would mean that prior levels of political freedom are significantly related to the current level of per capita GDP. To formally test if equations (2) and (3) make significant contributions to the explanation of *LnGDP* relative to equation (1), an *F*-test is used.⁶

The next three equations are used to test for unilateral Granger causality of economic freedom. Equations (4), (5), and (6) are used specifically to test if political freedom Granger-causes economic freedom and if the level of economic well-being Granger-causes economic freedom.

$$(4) \text{EF}_{t,i} = \gamma_{1,i} + \theta_2 \text{EF}_{t-1,i} + \nu_{t,i}$$

$$(5) \text{EF}_{t,i} = \gamma_{2,i} + \theta_2 \text{EF}_{t-1,i} + \phi_2 \text{PF}_{t-1,i} + \nu_{t,i}$$

$$(6) \text{EF}_{t,i} = \gamma_{3,i} + \theta_2 \text{EF}_{t-1,i} + \beta_2 \text{LnGDP}_{t-1,i} + \nu_{t,i}$$

If the null hypothesis that $\phi_2 = 0$ is rejected, equation (5) adds significantly to the explanation of *EF* and implies that *PF* Granger-

⁴The error terms ($\nu_{t,i}$) are assumed to be white noise. Each variable included in the study was tested using an augmented Dickey-Fuller test and judged to be stationary.

⁵A one-period lag structure was selected for all the specified equations to economize on degrees of freedom. The equations were also examined using a two-period lag structure, but the results did not differ substantially from those shown here. Results of the two-period lag specification are available from the authors upon request.

⁶A simple *t*-test can also be used in this case since the equations are specified with a one-period lag structure.

causes *EF* or that information contained in lagged values of political freedom makes a significant contribution to the explanation of current economic freedom. If the null hypothesis $\beta_2 = 0$ is rejected, equation (6) adds significantly to the explanation of *EF* and implies that *LnGDP* Granger-causes *EF* or that information contained in lagged values of the per capita GDP growth rate makes a significant contribution to the explanation of current economic freedom.⁷

The final three equations are used to test for unilateral Granger causality of political freedom. Specifically these equations are used to test if economic freedom and the level of economic well-being Granger-cause political freedom.

$$(7) PF_{t,i} = \lambda_{1,i} + \phi_3 PF_{t-1,i} + v_{t,i}$$

$$(8) PF_{t,i} = \lambda_{2,i} + \phi_3 PF_{t-1,i} + \theta_3 EF_{t-1,i} + v_{t,i}$$

$$(9) PF_{t,i} = \lambda_{3,i} + \phi_3 PF_{t-1,i} + \beta_3 LnGDP_{t-1,i} + v_{t,i}$$

If the null hypothesis that $\theta_3 = 0$ is rejected, equation (8) adds significantly to the explanation of *PF* and implies *EF* Granger-causes *PF* or that information contained in lagged values of economic freedom significantly improves the forecast of current political freedom. If the null hypothesis $\beta_3 = 0$ is rejected, equation (9) adds significantly to the explanation of *PF* and implies that *LnGDP* Granger-causes *PF* or that information contained in lagged values of per capita GDP significantly improves the forecast of current political freedom.

Additional information can also be gathered if the results from the unilateral tests shown in equations (1) through (9) are compared to each other. For example, if *EF* is shown to Granger-cause *LnGDP* using results from the first three equations and *LnGDP* is shown to Granger-cause *EF* using the information provided in equations (4) through (6), the conclusion would be that the two are bilaterally related or jointly determined. Similar information can also be drawn for other possible bilateral relationships shown in the specified equations.

Data

A recently published work by James Gwartney, Robert Lawson, and Walter Block (1996) contains estimates of economic freedom (*EF*) for more than 100 countries over the 1975–95 period. Those estimates are based on objective information for each country in four

⁷In equations (6) and (9), $\beta_2/100$ and $\beta_3/100$ are interpreted as the absolute change in the dependent variable given a one percent change in per capita GDP.

component areas: (1) money and inflation, (2) government operations and regulations, (3) takings and discriminatory taxation, and (4) restrictions on international exchange. Ratings of each component are determined for five-year nonoverlapping periods (1971–75, 1976–80, 1981–85, 1986–90, and 1993–95). The component scores range from 0 to 10, with 10 representing the highest possible rating. From these ratings, three summary indexes for each country are calculated, each using a different weighting scheme. Since there is no clear evidence that one summary index is superior, we use an average of the three. Our study includes only four economic freedom observations per country (1975, 1980, 1985, and 1990) because of data limitations on other variables that are also used.

Political freedom (*PF*) is measured for each country using data reported in the annual *Freedom in the World* reports published by the Freedom House. This data is reported in two time series, one ranking political rights and the other ranking civil liberties. Each is measured using an ordinal seven-point scale with 1 representing the highest level of political rights or civil liberties and 7 representing the lowest. In our study, political freedom is measured as the sum of political rights and civil liberties. We averaged the data using five annual observations, so that it conforms to the measures of economic freedom in the Gwartney, Lawson, and Block study.

The level of economic well-being is captured in our regression equations by using the natural log of real per capita gross domestic product adjusted for changes in the terms of trade (*LnGDP*) available from the Penn World Tables, version 5.6 (see Summers and Heston 1991). As with political freedom, the data here are also averaged over five-year periods to conform with the Gwartney, Lawson, and Block measures of economic freedom.

The Granger-causality tests among the above variables use data gathered and examined separately for two groups of countries—an industrial group and a nonindustrial group. In the Gwartney, Lawson, and Block study, 20 industrial countries comprise one set of data for Granger-causality testing while 78 nonindustrial countries make up another set (see Table 1). The nonindustrial group includes as many countries as possible for which observations are available for the above variables.

The data set for each group of countries is similar to the one used by Blomstrom, Lipsey, and Zejan (1996), where a limited number of time-series observations from a large number of countries are pooled to capture and exploit the time-series properties of all countries together in an effort to explore for causal relationships. However, a risk in using pooled cross-sectional time series data is that cross-

TABLE 1
INDUSTRIAL AND NONINDUSTRIAL COUNTRIES INCLUDED
IN THE STUDY

Industrial	Nonindustrial	
1. United States	<i>Central and South America</i>	
2. Canada	1. Argentina	40. Nepal
3. Australia	2. Belize ^a	41. Pakistan
4. Japan	3. Bolivia	42. Philippines
5. New Zealand	4. Brazil	43. Singapore
6. Austria	5. Chile	44. South Korea
7. Belgium	6. Columbia	45. Sri Lanka
8. Denmark	7. Costa Rica	46. Taiwan
9. Finland	8. Dominican Republic	47. Thailand
10. France	9. Ecuador	
11. Germany	10. El Salvador	<i>Africa</i>
12. Iceland	11. Guatemala	48. Algeria
13. Ireland	12. Haiti	49. Benin
14. Italy	13. Honduras	50. Botswana
15. Netherlands	14. Jamaica	51. Burundi ^a
16. Norway	15. Mexico	52. Cameroon
17. Spain	16. Nicaragua	53. Central African Republic ^a
18. Sweden	17. Panama	54. Chad
19. Switzerland	18. Paraguay	55. Congo
20. United Kingdom	19. Peru	56. Ivory Coast
	20. Trinidad/Tobago	57. Gabon
	21. Uruguay	58. Ghana
	22. Venezuela	59. Kenya
		60. Madagascar
	<i>Europe/Middle East</i>	61. Malawi
	23. Cyprus	62. Mali
	24. Egypt	63. Mauritius
	25. Greece	64. Morocco
	26. Hungary ^a	65. Niger
	27. Iran	66. Nigeria
	28. Israel	67. Rwanda
	29. Jordan	68. Senegal
	30. Malta ^a	69. Sierra Leone
	31. Portugal	70. Somalia
	32. Romania ^a	71. South Africa
	33. Syria	72. Tanzania
	34. Turkey	73. Togo
		74. Tunisia
	<i>Asia</i>	75. Uganda
	35. Bangladesh	76. Zaire
	36. Fiji	77. Zambia
	37. India	78. Zimbabwe ^a
	38. Indonesia	
	39. Malaysia	

^a Complete data for 1975 are not available for these countries. Therefore only three observations were used (1980, 1985, and 1990).

country differences may be so significant as to overwhelm any time-series information that is available in the data. For example, distinctive, and perhaps unique, characteristics among countries can result in significant differences in the levels of economic freedom, political freedom, and economic well-being. If this country-specific information is not controlled for, it may bias the results and provide an inaccurate picture of any “true” relationship that may exist among the variables being studied. In an effort to control for country-specific information, a complete set of intercept dummy variables is included in each estimated regression equation.

Empirical Results

The ordinary least-squares parameter estimates for equations (1) through (9), which are used in the Granger-causality tests, are shown in Tables 2 through 4. The country dummy variables, which are included when estimating each of the specified regression equations to help control for country-specific information, do not have their parameter estimates shown in the tables so that attention can be focused on the parameters that are pertinent for testing.⁸ *A priori*, it is expected that, if a significant relationship is found to exist among any of the variables being studied, it should be positive.

The results displayed in Table 2 are used to test for unilateral Granger causality of the level of economic well-being. The empirical results indicate that past economic freedom is significantly related to the current level of real per capita GDP. This is shown by looking at the *t*- and *F*-statistics under the columns labeled equation (2). Similar tests show no evidence of a significant relationship between past political freedom and the current level of economic well-being, which is confirmed by reviewing the *t*- and *F*-statistics under the columns labeled equation (3). These findings—that economic freedom Granger-causes the level of economic well-being while political freedom does not—are present for both industrial and nonindustrial countries. The lack of support from the empirical evidence for a significant relationship between political freedom and economic well-being may be due to the fact that enhancements to political and civil liberties take considerable time to blossom in ways that could eventually lead to higher levels of economic well-being. Unfortunately, given the methodology used in this study, the limited amount of available data is not sufficient to adequately explore for that possibility.

⁸These parameter estimates are available from the authors upon request.

TABLE 2
RESULTS FOR GRANGER CAUSALITY OF ECONOMIC WELL-BEING
(Dependent Variable = LnGDP_t)

Independent Variable	Industrial Countries (N = 60)			Nonindustrial Countries (N = 228)		
	Equation (1)	Equation (2)	Equation (3)	Equation (1)	Equation (2)	Equation (3)
LnGDP _{t-1}	0.9573 (9.788)*	0.8840 (8.852)*	0.9408 (9.555)*	0.3055 (3.846)*	0.2829 (3.533)*	0.3196 (4.006)*
EF _{t-1}	—	0.0578 (2.118)**	—	—	0.0387 (1.699)**	—
PF _{t-1}	—	—	-0.0132 (-1.145)	—	—	0.0150 (1.425)
R ²	0.9448	0.9506	0.9467	0.9732	0.9737	0.9736
F-statistic	—	4.4870**	1.3130	—	2.8450***	2.0300

NOTES: t-statistics are in parentheses below estimated coefficients.

* statistically significant at the 99 percent level (one-tail test).

** statistically significant at the 95 percent level (one-tail test).

*** statistically significant at the 90 percent level (one-tail test).

The results reported in Table 3 are used to test for unilateral Granger causality of economic freedom. These results show that for both industrial and nonindustrial countries, the past level of real per capita GDP is a robust factor that significantly improves the explanation of current economic freedom. These results also show, for both sets of countries, that past political freedom makes no statistically significant contribution to the explanation of current economic freedom. This evidence implies that the level of economic well-being Granger-causes economic freedom while political freedom does not. These findings, along with those above, also suggest that the relationship between the level of economic well-being and economic freedom is bilateral or jointly determined. The bilateral relationship is not surprising since countries that experience a higher level of economic well-being in response to more economic freedom are likely to liberalize their economies even more.

The final set of results, which are shown in Table 4, are used to test for unilateral Granger causality of political freedom. These results indicate that the prior level of economic well-being positively Granger-causes political freedom for both industrial and nonindustrial countries.⁹ However, results once again show no statistically significant relationship between economic freedom and political freedom. Earlier results suggested that political freedom did not Granger-cause economic freedom and these findings suggest that economic freedom, likewise, does not Granger-cause political freedom. The lack of evidence of a Granger-causal relationship running in either direction between economic freedom and political freedom may reflect Friedman's comment that the relationship between these variables is very complex and difficult to determine. The one factor that does seem to tie these two together, however, is the level of economic well-being. This is shown to Granger-cause both economic freedom and political freedom, while economic freedom is shown to Granger-cause the level of economic well-being. This result seems to imply that the relationship between economic freedom and political freedom depends on the level of a nation's per capita GDP—that is, political freedom may be affected by the impact of real per capita GDP, which is affected by the level of economic freedom.

Conclusion

The Granger-causality methodology is employed in this paper to investigate for "causal" relationships among measures of economic

⁹Recall that the measures of political freedom range from 1 to 7, with 1 representing the most freedom. The negative sign for β_3 , the coefficient on $\ln GDP_{t-1}$, indicates that a higher economic growth rate is associated with enhancements to political freedom.

TABLE 3
RESULTS FOR GRANGER CAUSALITY OF ECONOMIC FREEDOM
(Dependent Variable = EF_t)

Independent Variable	Industrial Countries (N = 60)			Nonindustrial Countries (N = 228)		
	Equation (4)	Equation (5)	Equation (6)	Equation (4)	Equation (5)	Equation (6)
EF_{t-1}	0.3079 (1.054) [†]	0.2722 (0.921) [†]	-0.1322 (-0.554) [†]	0.1682 (2.193)**	0.1718 (2.172)**	0.1305 (1.672)**
PF_{t-1}	—	-0.1156 (-0.910)	—	—	-0.0298 (-0.813)	—
$\ln GDP_{t-1}$	—	—	4.6529 (5.326)*	—	—	0.7963 (2.901)*
R^2	0.8116	0.8156	0.8921	0.8546	0.8553	0.8625
F - statistic	—	0.8280	28.368*	—	0.6600	8.1170*

NOTES: t-statistics are in parentheses below estimated coefficients.

* statistically significant at the 99% level (one-tail test).

** statistically significant at the 95% level (one-tail test).

*** statistically significant at the 90% level (one-tail test).

[†]An interesting finding for the industrial countries is the lack of statistical significance of θ_2 , the coefficient on EF_{t-1} in equations (4) through (6). If the equations are estimated without the dummy variables included, θ_2 is highly statistically significant for all three equations. This implies that cross-country differences among industrial nations do more to explain current economic freedom than does the past history of economic freedom.

TABLE 4
RESULTS FOR GRANGER CAUSALITY OF POLITICAL FREEDOM
(Dependent Variable = PF_t)

Independent Variable	Industrial Countries (N = 60)			Nonindustrial Countries (N = 228)		
	Equation (7)	Equation (8)	Equation (9)	Equation (7)	Equation (8)	Equation (9)
PF _{t-1}	0.5127 (9.987)*	0.5081 (9.739)*	0.4994 (9.897)*	0.2341 (2.832)*	0.2386 (2.882)*	0.2168 (2.619)*
EF _{t-1}	—	-0.0799 (-0.658)	—	—	-0.1743 (-0.976)	—
LnGDP _{t-1}	—	—	-0.7729 (-1.799)**	—	—	-1.0636 (-1.693)**
R ²	0.9123	0.9133	0.9192	0.8910	0.8917	0.8931
F-statistic	—	0.4340	3.2370***	—	1.4800	4.458**

NOTES: t-statistics are in parentheses below estimated coefficients.

*statistically significant at the 99% level (one-tail test).

**statistically significant at the 95% level (one-tail test).

***statistically significant at the 90% level (one-tail test).

freedom, political freedom, and economic well-being. The analysis is conducted using two sets of pooled cross-sectional time-series data: one for industrial countries and one for nonindustrial countries. In an effort to control for any cross-country differences, dummy variables are included in each data set.

The results indicate that both industrial and nonindustrial countries exhibit similar Granger-causal relationships among the variables studied. Specifically, the results show that economic freedom Granger-causes the level of economic well-being for both industrial and nonindustrial countries. In addition, the level of economic well-being is shown to Granger-cause economic freedom, suggesting a feedback effect or evidence that the two are endogenously related. For both sets of countries, evidence is also found that the level of economic well-being Granger-causes political freedom while no reciprocating evidence is found that political freedom Granger-causes the level of economic well-being, implying a univariate line of causation. Finally, no evidence is found of a Granger-causal relationship running in either direction between economic freedom and political freedom for industrial or nonindustrial countries.

These results confirm those of previous studies that show that economic freedom is an important factor driving growth, but they also indicate that there is a feedback effect occurring suggesting that the level of economic well-being also enhances economic freedom. Results in this paper provide no support for previous studies that suggest that political freedom significantly affects the level of economic well-being, but they do provide evidence for the reverse—that the level of economic well-being enhances political freedom. While we do not find support for a direct relationship between economic freedom and political freedom, the results do imply an indirect relationship through the level of real per capita GDP. Our findings indicate that economic and political freedom are related through the impact of economic freedom on the level of economic well-being and the subsequent impact that the level of economic well-being has on political freedom.

While this evidence does not definitively confirm any of the suggested causal relationships among the measures of economic freedom, political freedom, and economic well-being, it does provide information that there are some likely links that deserve further investigation. In addition, as more observations become available on each of the variables used in this study, supplemental analysis using this methodology can be undertaken to explore for alternative lag structures to ensure that these findings are robust and not model specific. Moreover, further disaggregation of the data could be examined for consistency

with these findings and for further insight into the components that comprise the various measures.

Perhaps Robert Skidelsky's (1995) statements that "No one knows how to make societies grow faster" and "The only safe rule is to create an environment in which enterprise can flourish" are true. A growing body of evidence seems to suggest that liberty is indeed important and necessary for the enhancement of economic well-being. As such, policies that are developed and implemented without considering what F. A. Hayek (1960) called "the constitution of liberty" are likely to yield disappointing results.

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