The Effect of Economic Freedom on Civil Liberties in the Short Run: Physical Integrity Rights, 2000–2011

Robert Szarka*

University of Connecticut

Abstract

Many writers—most famously F. A. Hayek and Milton Friedman—have posited a relationship between economic freedom and political freedom and/or civil liberties. Despite sustained interest, this relationship has been the subject of little empirical study. I estimate the short-run effect of a measure of economic freedom (using the Economic Freedom of the World index) on measures of civil liberties (using the CIRI Human Rights Dataset). In contrast to most previous studies using Freedom House's Freedom in the World index, I treat civil liberties as distinct from political freedom and consider several fundamental liberties separately.

JEL Codes: P0, B0

Keywords: economic freedom, civil liberties, human rights, F. A. Hayek, Milton Friedman

I. Introduction

In 1944, in the first edition of *The Road to Serfdom*, Friedrich A. Hayek warned that continuing the central planning measures adopted during wartime in order to promote the "common welfare" might ultimately lead to totalitarianism. If the success of a book that echoed Herbert Spencer's warning about "The Coming Slavery" (Spencer [1884] 1981, pp. 31–70) six decades earlier was surprising at the time, the book's continued popularity seven decades hence—at a time when wholesale planning, at least, has been largely discredited—is shocking. Bruce Caldwell, the current editor of Hayek's collected works, argues that renewed interest in *Serfdom* is misplaced, since "Hayek was arguing against [full] socialist planning, not the welfare

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state" (Caldwell 2011, p. 84). In contrast, Andrew Farrant and Edward McPhail argue that recent commentators have correctly, albeit unsubtly, interpreted Hayek's thesis as applicable to something far short of a full command economy (Farrant and McPhail 2010a, 2010b, 2010c). As Hayek himself put it in the preface to the 1976 edition, with a socialism oriented toward extensive income redistribution, "the ultimate outcome tends to be very much the same, although the process by which it is brought about is not quite the same" as that described in *Serfdom* (Hayek [1944] 2007, p. 55).

The sustained popularity and influence of *Serfdom* is rivaled only by Milton Friedman's *Capitalism and Freedom*, which characterized competitive capitalism as "a system of economic freedom and a necessary condition for political freedom" (Friedman [1962] 2002, p. 4). The book's focus on concrete policy issues within the context of a modern welfare state suggests that Friedman, too, saw the relationship between economic and political freedom as relevant to the contemporary welfare state.

History does not seem to have borne out a strong version of Hayek's or Friedman's thesis: the encroachment on economic freedom in liberal democracies after World War II does not appear to have dramatically impacted political freedom.¹ Further, as Farrant and McPhail (2009) note, the order in which authoritarian regimes have arisen is the reverse of that in Hayek's story: first dictatorship, then nationalization.

Nevertheless, beyond the intrinsic value of economic freedom or its contribution to economic growth, the nature of the relationship between economic and political freedom remains salient. For example, Martin (2012) argues that the Arab Spring of 2010–2012, which was sparked by the self-immolation of a desperate Tunisian entrepreneur, can be interpreted as "a revolution for economic freedom" (p. 94) and an attempt to break "the vicious circle between economic and political oppression" (p. 95). Likewise, despite hopes that mainland China's cautious embrace of economic freedom, which has done so much to raise Chinese living standards, will eventually

¹ For example, Gordon Tullock observed in a 1986 discussion that the predictions of Hayek's and the Friedmans' work had been falsified by the experience of countries like Sweden (Walker 1988, p. 61). Stigler (1988, p. 146) expresses similar skepticism.

result in greater political freedom, substantive changes have yet to materialize.²

In this paper, I distinguish between political freedom and civil liberties—two concepts often lumped together under the name "political freedom" in empirical work related to this topic—and explore the possibility that we can analyze the impact of economic freedom on civil liberties separate from its impact on political freedom. I also explore the possibility that economic freedom is more important for some civil liberties than others, and at different levels of economic freedom (and its covariates). The results suggest that it may be useful to consider these concepts separately in future work.

II. Literature Review

In the preface to a later edition of *Capitalism and Freedom*, Friedman noted: "If there is one major change I would make, it would be to replace the dichotomy of economic freedom and political freedom with the trichotomy of economic freedom, civil freedom, and political freedom" (Friedman 2002, pp. ix–x). While he saw economic freedom as a necessary condition for both political freedom and civil freedom, political freedom was not a necessary condition for political or civil freedom. Further, political freedom "under some circumstances promotes economic and civic freedom, and under others, inhibits economic and civic freedom" (Friedman 2002, p. x). He offered Hong Kong as an example of a country where economic and civil freedom flourished despite—or even because of—the absence of political freedom.³

Hayek, too, distinguished between democracy, as representative government, and various freedoms he referred to as individual, personal, cultural, or spiritual. The market facilitates economic cooperation in the absence of complete agreement about ultimate ends, whereas planning requires that unanimity be enforced even where none exists. Thus, while a democratic government that

² President Clinton, who delinked trade and human rights issues beginning in 1994, later explained: "Just as democracy helps make the world safe for commerce, commerce helps make the world safe for democracy" (Clinton 1996, p. 36). Yet Freedom House (2014) currently scores China in the least free category in political rights.

³ See also Walker (1988, p. 64), where Friedman claims, "There is almost no doubt that if you had political freedom in Hong Kong you would have much less economic and civil freedom than you do as a result of an authoritarian government."

confines its action to the sphere where agreement exists is compatible with freedom, "planning leads to dictatorship because dictatorship is the most effective instrument of coercion and the enforcement of ideals." It is the suppression of freedom entailed by planning that chiefly concerns Hayek: "We have no intention, however, of making a fetish of democracy ... democracy is essentially a means, a utilitarian device for safeguarding internal peace and individual freedom." Nor is democracy an infallible guarantor of freedom: "there has often been much more cultural and spiritual freedom under an autocratic rule than under some democracies—and it is at least conceivable that under the government of a very homogenous and doctrinaire majority democratic government might be as oppressive as the worst dictatorship" (Hayek [1944] 2007, p. 110).

This attitude toward democracy is consistent with that of other writers in the liberal tradition, who see the state's legitimate role (if any) primarily as safeguarding individual negative liberties (in the sense of Berlin [(1958) 1969]). Democracy is simply the most expedient form of government, because it "makes possible the adaptation of the government to the wishes of the governed without violent struggles" (Mises [1927] 2010, p. 42) and ensures the peace that is necessary for the full enjoyment of private property. Some writers in this tradition go so far as to find a role for government in keeping markets competitive, issuing sound money, or providing basic relief of poverty, but none would advocate policies that were essentially redistributive.⁴

It may be difficult to categorize every liberty neatly as economic, political, or civil, but the literature does provide some specific examples. Jewkes (1948, p. 190) lists five "fundamental forms of freedom," labeling three of them "the so-called 'economic' freedoms." These are "freedom in the choice of occupation," "freedom in the disposal of incomes," and "freedom to acquire and to hold property."⁵ Friedman ([1962] 2002, p. 9) claims that "the kind of economic organization that provides economic freedom directly" is "competitive capitalism," and provides many specific examples of government policies that impinge on economic freedom, including

⁴ Farrant and McPhail (2012) argue that, contrary to some claims, Hayek did not support a "welfare state."

⁵ The remaining freedoms are "freedom of expression in all its forms" and "freedom to choose and to change the members of the governing body of the community," which I would characterize as a civil liberty and a political freedom, respectively.

price controls, discretionary control of money, interference with international trade and exchange, occupational licensure, and redistributionist income policies. As a practical matter, Friedman's involvement in the early development of the Economic Freedom of the World (EFW) index (Gwartney, Lawson, and Hall 2014 and previous versions) used in much of the empirical literature should give us some confidence that it reflects at least his conception of economic freedom.⁶

The overwhelming choices for measures of political and/or civil freedom in this literature have been the political rights (PR) and civil liberties (CL) indexes of the Freedom in the World dataset produced by Freedom House (FH) (2014), usually combined into a single aggregate score. The two indexes do correspond broadly to the concepts of political freedom and civil liberties with which we are concerned, but the CL index in particular reflects consideration of economic freedoms. In addition to potential overlap between the CL index and a measure of economic freedom, it's unclear whether its treatment of trade unions and peasant organizations is consistent with a liberal conception of economic freedom. I employ different measures of both political freedom and civil liberties in the sections that follow.

The results of previous empirical work in this area are mixed. Farr, Lord, and Wolfenbarger (1998) use the EFW index and the average of the FH indexes, as well as log GDP, to examine the relationship between economic and political freedom at five-year intervals over 1975–1995, finding "no statistically significant relationship between economic freedom and political freedom" but finding some evidence suggesting an indirect relationship: "The one factor that does seem to tie these two together, however, is the level of economic wellbeing. 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" (p. 257). Likewise, Thies (2007) studies the EFW index and the combined FH indexes for 1975-2005 over five-year intervals and finds "strong evidence that political freedom is a cause of economic freedom and only weak evidence that economic freedom is a cause of

⁶ Some empirical work has instead used a similar index produced by the Heritage Foundation in partnership with the *Wall Street Journal* (Heritage Foundation [2014] and previous versions).

political freedom, and \dots strong evidence that both economic freedom and political freedom are causes of economic growth." (p. 115).⁷

Lawson and Clark (2010) use the EFW index and the average of the FH indexes to examine the validity of the "Hayek-Friedman hypothesis" from 1970 to 2005 at five-year intervals.⁸ They set arbitrary thresholds to operationalize Friedman's statement of the hypothesis such that "a large measure of political freedom" is a country with a measure one standard deviation better than the mean of the FH index and "something comparable to a free market" is a country with a measure one-half of a standard deviation better than the mean of the EFW index. Their test of the hypothesis is then to look for violations, defined as a country above the first but below the second threshold in a given year. They find seventy-six such cases (in which thirty-three countries are represented) and argue that, since this subset represents a small percentage of the overall sample-and since the proportion of such cases diminishes over time-this is evidence in favor of the hypothesis. Although notable for its explicit focus on Friedman's formulation of the hypothesis, this approach does little to establish a causal relationship. Similarly, Tures (2006) finds a statistically significant correlation between economic and political freedom using contingency tables based on broad categories (free, partly free, not free) of the EFW index and the combined FH indexes. While this approach does little to establish a causal relationship, it may be worth noting that the correlation is not as strong when the sample is limited to developing countries.

Webster (2012) performs Granger causality tests on the EFW index and the two FH indexes considered separately over 2001–2009, finding weak evidence that economic freedom Granger-causes civil liberties (FH's CL index), strong evidence that political freedom (FH's PR index) Granger-causes economic freedom, and strong evidence that civil liberties Granger-cause economic freedom. Webster interprets the latter two results as clear support for Friedman's and Hayek's theories. But, while Friedman certainly argued that political freedom could impact economic freedom under some circumstances, the primary claims in Hayek's and Friedman's work concerned the reverse direction.

⁷ Theis's economic freedom score for 2005 is constructed from a 2003 EFW score and a 2005 score from the Heritage index.

⁸ The 1972 FH data are matched to the 1970 EFW data.

A related issue is whether economic freedom is unambiguously good for political freedom. Burkhart (2000) conducts a crosssectional study that examines the relationship between democracy (measured using the 1998 Polity IV dataset, described in section 3) and economic freedom (measured using the 1995 index of economic freedom produced by Freedom House) and controlling for the level of economic development using the Human Development Index (HDI). He finds that economic freedom up to some threshold contributes positively to political freedom, but that past the threshold economic freedom has a negative effect on political freedom. Since most Western democracies are currently past that threshold, his findings could be interpreted as an argument against especially Hayek's warning to liberal democracies like the United Kingdom. Of course, as noted earlier, the relationship of economic freedom to democracy may differ from its relationship to civil liberties, and the latter may be more important. Burkhart's use of the HDI, which measures health and educational attainment as well as GDP, may also account for these results.

Finally, although I do not consider this issue at length here, there are also reasons to expect that political freedom influences economic freedom (positively or negatively). De Haan, Lundström, and Sturm (2006, pp. 179–80) survey recent empirical work related to this question. Likewise, economic freedom may also be important because it promotes economic growth. See Hall and Lawson (2014) for references to this literature.

III. Data and Methods

To explore the relationship between economic freedom and civil liberties, I have studied the Physical Integrity Rights Index (PIRI) reported in the CIRI Human Rights Dataset (Cingranelli, Richards, and Clay 2014). The aggregate PIRI is the sum of four scores, each assigned values of 0 (no government respect for the right), 1, or 2 (full government respect for the right), and thus it has nine possible values, where 0 indicates no government respect and 8 indicates full government respect for the four rights in question. The disappearance (DISAP) score indicates the frequency of "cases in which people have disappeared, political motivation seems likely, and the victims have not been found"; the extrajudicial killing (KILL)

⁹ Unlike the other indexes from Freedom House already mentioned, this index was produced only once.

score indicates the frequency of "killings by government officials without due process of law"; the political imprisonment (POLPRIS) score indicates the frequency of "incarceration of people by government officials because of: their speech; their non-violent opposition to government policies or leaders; their religious beliefs; their non-violent religious practices including proselytizing; or their membership in a group, including an ethnic or racial group"; and the torture (TORT) score indicates the frequency of "the purposeful inflicting of extreme pain, whether mental or physical, by government officials or by private individuals at the instigation of government officials." I begin by studying the aggregate index and then examine each of the four scores individually.

Using the PIRI avoids a problem noted earlier with using FH's CL index: overlap between the measures of the two concepts.¹⁰ A link between economic freedom and these fundamental civil liberties would also be strong evidence for the salience of economic freedom.

My identification strategy involves eliminating any noncausal association between economic freedom and civil liberties by conditioning on potentially confounding variables: the level of income and the level of political freedom. I begin with the following empirical model:

$CL_{it} = \alpha + \beta_1 EF_{i,t} + \beta_2 PF_{i,t} + \beta_3 GDP_{i,t} + \beta_4 POP_{i,t} + \tau_t + \rho + \varepsilon_{it}$

where CL is a latent measure of civil liberties, EF is economic freedom, PF is political freedom, GDP is the level of economic output (measured as the log of per capita GDP), POP is the (log of) population of country *i*, τ is a time dummy, and ρ is a set of region dummies.

The measures of civil liberties I study are assigned discrete, ordered values. Assuming that these observed values correspond to ranges of the unobserved *CL* variable, and that ε_{it} is distributed normally, gives us the ordered probit model. I also add a lagged value of *CL* on the right side to address concerns with autocorrelation. As

¹⁰ The use of the PIRI also avoids another issue with the FH indexes: top censoring. Whether by construction, or whether due to their respect for a broad range of political and civil liberties and the detail lost to aggregation, Western countries such as the United States consistently score in the top category as reported by Freedom House. Regrettably, this is not the case when focusing on the PIRI.

a robustness check, I also examine a version of the model that includes a measure of inequality as an additional control.

EF is the EFW index mentioned earlier. It is constructed from forty-two data points measuring components of economic freedom in five broad areas: size of government: expenditures, taxes, and enterprises; legal structure and security of property rights; access to sound money; freedom to trade internationally; and regulation of credit, labor, and business. To permit matching across the greatest number of years, I use the chain-linked rating, which attempts to compensate for variations in the availability of data points over time. Higher EFW scores indicate greater economic freedom.

PF is the combined democracy and autocracy score from the Polity IV dataset (Marshall, Gurr, and Jaggers 2014). This score ranges from -10 to 10, with higher levels indicating a more democratic and less authoritarian form of government. The score is constructed by considering factors such as openness to citizen participation, constraints on executive power, and the openness and competitiveness of executive recruitment.

GDP is the log of GDP per capita in constant 2005 US dollars and *POP* is the log of total population,¹¹ both obtained from the World Bank. The CIRI dataset provides the UN region and subregion variables used for the region dummies.

The twelve years for which both the PIRI and the EFW index contain annual observations are 2000–2011.¹² After matching all four datasets, I have up to 1,343 observations representing 114 countries available to estimate the basic model. Thus, although the panel is unbalanced, most countries have full or nearly full coverage.

As a robustness check, I also attempted to control for a measure of inequality. Unfortunately, finding a measure of inequality that is comparable across a wide variety of countries and available for consecutive years over the period under study proved challenging. I used a measure of inequality from the All the Ginis dataset (Milanovic 2014), which compiles and adapts Gini coefficients from

¹¹ Although I don't present a formal model of decision-making by a country's rulers, it seems reasonable to suppose that controlling and extracting rents from a larger population might involve different trade-offs that make repressive strategies more attractive.

¹² The EFW score was only reported for five-year intervals before 2000. However, because the PIRI is available for 1999, I am able to use a lagged dependent variable without losing coverage for 2000.

multiple datasets. For a Gini coefficient, higher numbers indicate more inequality.

IV. Results

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Table 1 reports the results of four alternate specifications of a panel random-effects ordered probit model, using the Huber-White sandwich estimator to compute standard errors. In all four specifications, the regressand is the aggregate PIRI score. Specifications 1–3 differ only by which region dummy variable is included (possibly none). Specification 4 is identical to specification 3, save for the inclusion of the inequality measure.

Regressor	1	2	3	4				
CL (lag)	.459***	.462***	.461***	.837***				
	(.055)	(.055)	(.054)	(.117)				
EF	.189**	.252***	.248***	.189**				
	(.075)	(.071)	(.070)	(.083)				
PF	.068***	.054***	.045**	.041**				
	(.015)	(.018)	(.020)	(.020)				
GDP (log)	.377***	.353***	.288***	.193**				
	(.064)	(.072)	(.083)	(.097)				
POP (log)	526***	470***	532***	353***				
	(.068)	(.071)	(.068)	(.099)				
GINI				027***				
				(.010)				
Time dummies	Y	Υ	Y	Y				
Region dummies	Ν	Y	Ν	Ν				
Subregion dummies	Ν	Ν	Υ	Y				
Obs	1,337	1,337	1,337	516				
Countries	114	114	114	100				

Table 1. Ordered Probit Results (Aggregate PIRI Score)

Note: Robust standard errors in parentheses.

p < 0.1, p < 0.05, p < 0.05, p < 0.01

Interpretation of the coefficients in the ordered probit model is not straightforward, but the positive coefficient on the EFW score in all specifications does indicate that higher levels of economic freedom imply a lower probability of scoring in the lowest category (0, no respect) and a higher probability of scoring in the highest category (8, full respect) of the PIRI. Although using the measure of inequality reduces the number of observations from 1,337 to 516 and changes the composition of the sample, so that significance levels are lower and interpretation is less clear, the results are in line with those from the full sample.

 Table 2. Marginal Effect of One Standard Deviation Change in EF on PIRI

 under Alternate Scenarios

Scenario	8	7	6	5	4	3	2	1	0
+1	+3.4	+2.0	-1.3	-2.0	-1.3	51	24	03	00
Means	+.01	+2.4	+6.0	78	-5.5	-1.7	34	01	00
-1	+.01	+.64	+1.9	+2.2	+.62	65	-1.9	-1.6	-1.1

Further insight can be gained by examining the marginal effect of economic freedom. Since the ordered probit model allows for nonlinear effects, we must examine the effect at a given value of the regressors. Table 2 reports marginal effects from specification 3, under three alternate scenarios: "means," with the regressors at their sample means (and the random effect set to zero); +1, with the regressors set one standard deviation from the means in the direction that would increase the probability of full respect;¹³ and -1, with the regressors set one standard deviation from the means in the opposite direction. So, for example, at the sample means, a one standard deviation (.954) increase in the EFW score implies a .01 percent, 2.4 percent, and 6.0 percent greater probability of achieving a PIRI score of 8, 7, or 6, and a .78 percent, 5.5 percent, 1.7 percent, .34 percent, .01 percent, and <0.01 percent lower probability of achieving a score of 5, 4, 3, 2, 1, or 0, respectively.¹⁴ (The mean PIRI score in the regression sample is 4.84, with a standard deviation of 2.22.)

These results suggest that increasing economic freedom can have a positive short-run impact on government respect for physical integrity rights. But is the effect the same for all the rights that compose the PIRI? In table 3, I present the results of panel ordered probit regressions, using the same regressors as in specification 3, for each of the four components of the PIRI.

¹³ In this scenario, the Polity IV score is set to its maximum of 10.

¹⁴ Not all marginal effects are significant at the 95 percent level.

Regressor	DISAP	KILL	POLPRIS	TORT
CL (lag)	1.19***	.738***	.894***	.861***
	(.184)	(.130)	(.099)	(.122)
EF	.240***	.281**	.114	.318**
	(.087)	(.130)	(.096)	(.136)
PF	.058***	.011	.069***	.015
	(.017)	(.024)	(.021)	(.023)
GDP (log)	010	.215	.257***	.368***
	(.087)	(.134)	(.068)	(.116)
POP (log)	412***	716***	303***	520***
	(.087)	(.096)	(.060)	(.072)
Obs	1,339	1,343	1,341	1,343
Countries	114	114	114	114

Table 3. Ordered Probit Results (Individual PIRI Indicators)

Note: Robust standard errors in parentheses.

p < 0.1, p < 0.05, p < 0.01

The coefficient of the EFW score is significant at the 95 percent level or above for three of the four components: disappearance, extrajudicial killing, and torture. For each of these components, an increase in economic freedom increases the probability that the government fully respects the right (a score of 2) and decreases the probability that the government has no respect for the right (a score of 0). As for the aggregate PIRI score, we can gain further insight by examining the marginal effects. Table 4 presents the marginal effects under the same alternate scenarios for these three components.

Table 4.	Marginal Effect of	a One Standard De	viation Change	in EF on
Individua	al PIRI Indicators un	der Alternate Scenari	ios	
Scenario	DISAP	KILL	TORT	

Scenario	DISAP			KILL			TORT		
	2	1	0	2	1	0	2	1	0
+1	+1.4	-1.1	20	+5.0	-4.6	40	+7.2	-4.3	-2.9
Means	+1.2	-1.2	01	+8.5	-7.7	81	+.35	+11	-12
-1	+5.8	-3.4	-2.3	+2.7	+2.9	-5.6	+.02	+4.5	-4.5

These results suggest that the effect of an increase in economic freedom is more pronounced for some civil liberties and in certain contexts. In a given country at a given time, increasing economic freedom may not make an appreciable difference to all civil liberties; progress toward full respect for physical integrity rights may be uneven. Nevertheless, increasing economic freedom appears to have a universally positive effect, however small.

V. Conclusion

The results suggest that distinguishing between political freedom and civil liberties, and studying the relationship of economic freedom to each separately, could help us understand the conditions under which freedom can survive and grow. The direst of Hayek's warnings have not come to pass, but that does not mean that our choice of economic institutions has no consequences for a free society. If we add that economic freedom may have indirect effects through a positive impact on economic growth and political freedom, the consequentialist case for economic freedom may be quite strong.

In addition to exploring this dataset further—considering the dynamics of mutual causation and examining the components of the EFW index—future research could examine alternative measures of both economic freedom and civil liberties. Studies of changes over a longer time could be especially valuable in attempting to evaluate Hayek's arguments about the endogeneity of preferences. More could also be learned about both the mechanisms by which economic freedom impacts civil liberties and the role of political and civil institutions in mediating the relationship.

One area that deserves special consideration is how neighboring countries (in the sense of geography, cultural similarity, and/or degree of intercourse) influence the attainment of freedom within a given country, which I have addressed here only by including time and region dummies. In particular, migration—or the threat of migration—may play a role in disciplining the state's rulers and halting the slide toward serfdom. If so, this effect would help explain why, despite some influence of economic freedom on other freedoms, serfdom is not an inevitable outcome.

References

- Berlin, Isaiah. (1958) 1969. "Two Concepts of Liberty." In Four Essays on Liberty. Oxford: Oxford University Press, 1–32.
- Burkhart, Ross E. 2000. "Economic Freedom and Democracy: Post-Cold War Tests." *European Journal of Political Research*, 37(2): 237–53.
- Caldwell, Bruce. 2011. "Hayek on Socialism and on the Welfare State." *Challenge*, 54(1): 82–97.
- Cingranelli, David L., David L. Richards, and K. Chad Clay. 2014. The CIRI Human Rights Dataset.

- Clinton, William Jefferson. 1996. Between Hope and History: Meeting America's Challenges for the 21st Century. New York: Random House.
- De Haan, Jakob, Susanna Lundström, and Jan-Egbert Sturm. 2006. "Market-Oriented Institutions and Policies and Economic Growth: A Critical Survey." *Journal of Economic Surveys*, 20(2): 157–91.
- Farr, W. Ken, Richard A. Lord, and J. Larry Wolfenbarger. 1998. "Economic Freedom, Political Freedom, and Economic Well-Being: A Causality Analysis." *Cato Journal*, 18(2): 247–62.
- Farrant, Andrew, and Edward McPhail. 2009. "Hayek, Samuelson, and the Logic of the Mixed Economy?" Journal of Economic Behavior & Organization, 69(1): 5–16.
- Farrant, Andrew, and Edward McPhail. 2010a. "Does F. A. Hayek's Road to Serfdom Deserve to Make a Comeback?" *Challenge*, 53(4): 96–120.
- Farrant, Andrew, and Edward McPhail. 2010b. "Hayek's New Popularity." *Challenge*, 53(5): 78–91.
- Farrant, Andrew, and Edward McPhail. 2010c. "A Response to Caldwell on F. A. Hayek and *The Road to Serfdom*," *Challenge*, 54(1): 98–112.
- Farrant, Andrew, and Edward McPhail. 2012. "Supporters Are Wrong: Hayek Did Not Favor a Welfare State." *Challenge*, 55(5): 94–105.
- Freedom House. 2014. Freedom in the World 2014. Washington, DC: Freedom House.
- Friedman, Milton. (1962) 2002. *Capitalism and Freedom*. Chicago: University of Chicago Press, fortieth anniversary ed.
- Gwartney, James, Robert Lawson, and Joshua Hall. 2014. Economic Freedom of the World: 2014 Annual Report. Vancouver: Fraser Institute.
- Hall, Joshua, and Robert Lawson. 2014. "Economic Freedom of the World: An Accounting of the Literature." *Contemporary Economic Policy*, 32(1): 1–19.
- Hayek, F. A. (1944) 2007. The Road to Serfdom: Text and Documents—The Definitive Edition. Chicago: University of Chicago Press.
- Heritage Foundation. 2014. 2014 Index of Economic Freedom. Washington, DC: Heritage Foundation.
- Jewkes, John. 1948. Ordeal by Planning, New York: Macmillan.
- Lawson, Robert A., and J. R. Clark. 2010. "Examining the Hayek-Friedman Hypothesis on Economic and Political Freedom." *Journal of Economic Behavior* & Organization, 74(3): 230–39.
- Marshall, Monty G., Ted Robert Gurr, and Keith Jaggers. 2014. Polity IV Project: Political Regime Characteristics and Transitions, 1800–2013.
- Martin, Emmanuel. 2012. "On One Forgotten Cause of the Arab Spring: the Lack of Economic Freedom." *Economic Affairs*, 32(3): 94–96.
- Milanovic, Branko. 2014. All the Ginis dataset. The World Bank.
- Mises, Ludwig von. (1927) 2010. Liberalism. Auburn, AL: Mises Institute.
- Spencer, Herbert. (1884) 1981. The Man versus the State, with Six Essays on Government, Society and Freedom. Indianapolis: Liberty Classics.
- Stigler, George J. 1988. Memoirs of an Unregulated Economist. New York: Basic Books.
- Thies, Clifford F. 2007. "The Relationship between Political and Economic Freedom Reconsidered." *Journal of Private Enterprise*, 22(2): 95–118.
- Tures, John A. 2006. "Are We Taking Certain Liberties by Assuming a Relationship Exists between Economic and Political Freedom?" *Journal of Private Enterprise*, 22(1): 22–36.

- Walker, Michael A., ed. 1988. Freedom, Democracy and Economic Welfare. Vancouver: Fraser Institute.
- Webster, Allen L. 2012. "A Granger Causality Test of the Hayek-Friedman Hypothesis: Must Political Freedom and Economic Freedom Coexist?" *Journal of Applied Business and Economics*, 13(5): 64–75.