

The Global Spread of Think Tanks and Economic Freedom*

Benjamin Powell
Professor of Economics, Rawls College of Business
Director, Free Market Institute
Texas Tech University

And

Matt E. Ryan
Associate Professor of Economics
Duquesne University

Abstract

Only a few countries had free market think tanks prior to 1980. Today there are nearly 500 such think tanks operating in nearly 100 countries. We examine the role that these think tanks played in the sizable increase in economic freedom around the globe that has occurred over the last 40 years. We find that aggregate think tank years is associated with larger increases a country's economic freedom scores over five and 10 year periods.

JEL Codes: H1, P5,

Key Words: Social Change, Economic Freedom, Think Tanks

* We thank Russel Sobel, Associate Editor Diana Thomas, and two anonymous referees for detailed suggestions on earlier drafts, the participants at Texas Tech's Free Market Institute seminar series for helpful comments on an earlier draft, Ryan Griggs for research assistance, the Atlas Foundation for providing think tank data, and the John Templeton Foundation for financial support.

I. Introduction

The period between 1980 and 2005 witnessed a significant liberalization of the world economy. Economic freedom in the 101 countries, for which there are data over this time period, increased by an average of 29 percent (Gwartney, Lawson, and Hall 2014). Andrei Shleifer dubbed this period of increased freedom and the accompanying increases in living standards “The Age of Milton Friedman” (Shleifer 2009). During this same period, market orientated think tanks spread rapidly around the globe. This paper investigates the relationship between the spread of free market think tanks and the global increase in economic freedom.

Think tanks with an explicit mission of studying the workings of free markets and agitating for social change that would lead to freer markets have a long history in the United States and Great Britain. The Foundation for Economic Education (FEE), founded in 1946, was the first free market think tank in the United States.¹ Sir Antony Fisher started the United Kingdom’s first free market think tank when he founded the Institute for Economic Affairs (IEA) in 1955. There were 19 free market think tanks in the world by 1970 but only six of them existed outside of the United States. The number had grown to 40 free market think tanks in 13 different countries by the end of the 1970s. Since then the number of think tanks has exploded. Today there are at least 468 free market think tanks operating in 98 countries around the globe (see Figure 1).²

¹ The American Institute for Economic Research was founded in 1933 and while the institute generally favors free markets those positions were developed more in its later years. Early on it focused on economic research related to business cycles, economic methodology, and personal finance.

² There is a smaller number of think tanks in the figure because founding date data was not available for all of them.

The spread of these think tanks was not accidental. Fisher believed that the foundation laid by IEA had helped play a role in ushering in the Thatcherite revolution in Great Britain. In 1981, while living in the United States, he founded the Atlas Economic Research Foundation to “institutionalize this process of helping start up new think tanks” and “Friends like Milton Friedman, Friedrich Hayek, and Margaret Thatcher applauded the idea of replicating the IEA model far and wide.”³ Hayek provided a letter of endorsement that Fisher used to help secure early funding for Atlas. The letter, in part, read,

I entirely agree with you that the time has come when it has become desirable and almost a duty to extend the network of institutes of the kind of the London Institute of Economic Affairs.

The future of civilization may really depend on whether we can catch the ear of a large enough part of the upcoming generation of intellectuals all over the world fast enough. And I am more convinced than ever that the *method* practiced by the IEA is the only one which promises real results (Frost 2002: 155 emphasis original).

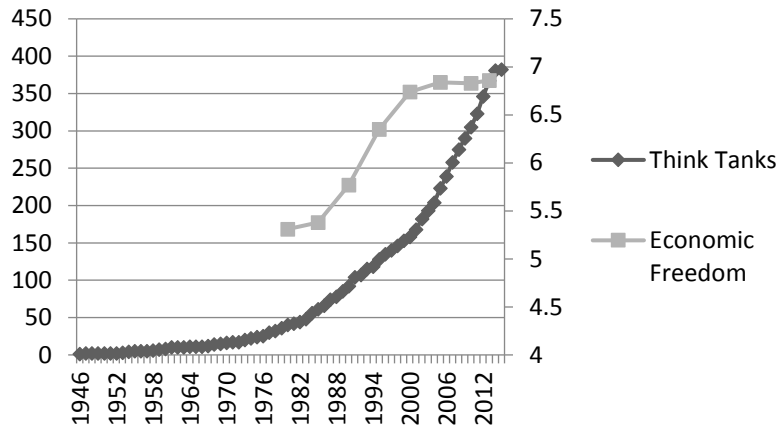
According to Fisher’s biographer, Gerald Frost, Fisher set up Atlas to give detailed advice to new think tanks about “legal structures, fund raising, budgets, staffing, publications, findings and commissioning authors, editing manuscripts, marketing, media relations, and how to keep politicians at arms length” based on IEA’s model (Frost 2002: 155). The vision at Atlas today is “To win the long-term policy battles that will shape history, we need freedom champions to create credible institutes – well-managed and independent of vested interests – that use sound business practices to advance sound public policy ideas.”⁴ Atlas has helped many intellectual entrepreneurs found these think tanks in their home countries. In other cases, they’ve found

³ <https://www.atlasnetwork.org/about/our-story>

⁴ Ibid.

existing think tanks and helped to bring them into the global network of think tanks with similar missions.

Figure 1: Think Tanks and Global Economic Freedom



A quick perusal of any of these think tanks’ mission statements reveals that they are interested in increasing economic freedom in their countries. For example, the Center for Liberal Democratic Studies (Serbia) wants to “To influence public policy in Serbia basing policies on the principles of a free society.”⁵ For many, their name reveals their goal. The Freedom Institute (Jakarta), Freedom Factory (South Korea), Foundation for Economic Freedom (Philippines) to name but a few randomly chosen examples.

According to Frost’s biography of Fisher,

The cumulative impact of the Atlas institutes is impossible to assess, and difficult to keep up with. However, the practical consequences of their programmes can be seen not only in successful reforms undertaken in Britain, Canada, and the US, but also in Italy, Spain, Central and Eastern Europe (where the influence of IEA-institutes is admittedly difficult to separate from other influences), India, Argentina, Brazil, Chile, Mexico, Australia, New Zealand, and parts of Africa (Frost 2002: 171).

⁵ <https://www.atlasnetwork.org/partners/global-directory/center-for-liberal-democratic-studies>

There is little broad based scholarly empirical research that examines the effectiveness of free market think tanks in changing public policy. We attempt to measure whether, on average, these think tanks have played a role in the global increase in economic freedom. Our study will have the benefits and drawbacks of any cross-country empirical study. We make no claim about the effectiveness of any one individual think tank in any particular country as any one of those stories could be unique.

Leeson et. al. (2012) is the most closely related study. It examined the role that state-based free market think tanks played in changing policy in U.S. states. They found little evidence that state-based free market think tanks impacted economic policy in a more “pro-market” direction. However, they did find that state-based free market think tanks are associated with more pro-market citizen attitudes. As they note, one reason they might not have found an effect on policy is that their panel data spanned only 13 years. If, think tank influence on policy only manifests itself through the long-run battle of ideas by influencing citizen views, which only later influence economic policy, their study would not be able to find the link between think tank years and public policy.

Another reason that Leeson et. al. might not have detected an influence of think tanks in U.S. states is that differences in policy across states is much narrower than differences in policy across countries. This study is the first to examine how differences in think tank years is associated with differences in economic freedom across nations and our data spans 40 years allowing us to examine the long run as well as the short run impact of think tanks.

We use the well-known *Economic Freedom of the World Annual Report* (Gwartney et. al. 2014) to examine how think tank years is associated with changes in economic freedom. This

index has been used in more than 100 papers to examine how economic freedom impacts income, growth, and a host of other economic outcomes (for surveys see: De Haan, Lundström, and Sturm (2006), Hall and Lawson (2014)). Relatively recently, scholars have begun to use the index to examine factors that lead to changes in economic freedom.

There is evidence that economic freedom is enhanced by fiscal decentralization (Cassette & Paty, 2010), more educated politicians (Dreher, Lamla, Lein, & Somogyi, 2009), and by the competitiveness of the political environment (Leonida, Maimone Ansaldo Patti, & Navarra, 2007). Djankov, McLiesh, Nenova, and Shleifer (2003), and Bjørnskov (2010) examined the determinants of legal institutions consistent with the economic freedom. Bologna and Young (Forthcoming) examine the relationship between economic crises and freedom and find little consistent evidence that crises impact economic freedom. Clark et. al. (2015) find that greater immigration stocks and flows are associated with increases in economic freedom. O'Reilly and Powell (2015) find that wars lead to decreased economic freedom in regulation but no statistically significant effect on the size of government. This paper contributes to this literature by addressing how think tanks, with stated missions to improve economic freedom, impact a countries' level of economic freedom.⁶

II. Data and Methodology

Our dependent variable, economic freedom, comes from Gwartney, Lawson, and Hall's (2014) *Economic Freedom of the World Annual Report* (EFW). The EFW index measures the consistency of a nation's policies and institutions with economic freedom. The report

⁶ Other contributions to the literature on the causes of economic freedom include, Crampton (2002), Hall et al. (2011), Brown (2014), Hall (2015), March et al. (forthcoming).

incorporates 43 variables across five broad areas: 1. Size of Government; 2. Legal Structure and Property Rights; 3. Access to Sound Money; 4. Freedom to Trade Internationally; and 5. Regulation of Credit, Labor, and Business. At its most basic level, the EFW index measures the extent to which individuals and private groups are free to buy, sell, trade, invest, and take risks without interference by the state. To score high on the EFW index, a nation must keep taxes and spending low, protect private property rights, maintain stable money, keep the borders open to trade and investment, and exercise regulatory restraint in the marketplace. The 2014 index covers 152 countries. Scores are available in five year increments going back to 1970 though country coverage decreases as the data goes back in time.

Our main variable of interest is “think tank years.” However, measuring think tank years is problematic. A think tank with a large professional staff and large budget for advertising and commissioning studies presumably would have more of an impact on a country’s freedom than a three person think tank that only maintains a website and issues an occasional policy brief or op-ed. Even if the data were available, which it is not, it would be rather arbitrary to create a measure of think tank years that summed up policy studies, books, journal articles, op-eds, media appearances, and all of the other activities think tanks do. Although imperfect, the best proxies for activity are likely the total number of employees or their budgets. Unfortunately, no systematic data on number of employees exists and what budget data was available was inadequate for empirical analysis.

Thus, because of these data limitations, we are left with a rather crude measure of think tank years. We sum aggregate think tank “activity” in a given year by simply summing the total number of think tanks operating in any country in a given year. Then we sum total yearly

activity across ten- and five-year periods. These think tanks are mostly intended to influence the “battle of ideas” by pushing public opinion in a more market oriented direction and creating policy ideas that can be “on the table” when an opportunity to reform arises rather than directly lobbying for any one piece of legislation. Thus, their impact on a country’s economic freedom could be cumulative and only manifest itself over time. Ideally, an event study methodology with granger causality tests would be used to investigate how think tanks impact freedom. Unfortunately, we are precluded from using this methodology for multiple reasons. First, the fact that economic freedom data is only available in five year increments, with most think tanks founded in between dates we have economic freedom scores, makes this methodology impractical. Second, in most countries, multiple think tanks are founded in any 10 year period, thus prior and subsequent think tanks pollute the event analysis of the founding of an individual think tank. Thus, looking at a decade’s worth of total think tank years, while imperfect, is the best method available to measure whether think tanks impact economic freedom.

Our think tank data comes from the Atlas Network. It contains country of origin and founding date for 386 think tanks around the globe. The Atlas network provides training, financial support, networking activities to free market think tanks around the globe. Although not every free market think tank is a member of their network, we believe that their data covers the vast majority of those free market think tanks that exist and certainly almost all that are of any significant size.

The United States and the United Kingdom are clear outliers. We have 12 think tanks in the United Kingdom and 136 think tanks in the United States in our data set. In each of these

countries there was significant think tank years that pre-dates our economic freedom data. Each country also has a common classical liberal heritage that might make them unique. For these reasons we drop them from our baseline analysis but include them later as a robustness check. Our baseline analysis covers 121 countries that had economic freedom scores over at least one ten year span. Think tanks operated during at least one 10 year period in 59 of these countries.

In all regressions we use country and year fixed effects. The latter is necessary to control for the global trend of increased economic freedom. Our only other baseline control is a country's initial level of economic freedom because prior research has consistently found that the freer a country is, the harder it is to increase its freedom score. Baseline regressions examine aggregate think tank years over a decade and that decade's change in economic freedom. The data available allows us to analyze the period from 1970 through 2010.

In additional regressions, we also control for population size and interact it with think tank years because presumably the same level of think tank years in a small country would create more pressure for change than in a much larger country. We also examine shorter five year time periods and allow for lagged think tank years to have an impact on later decades.

Table 1 contains descriptive statistics.

Table 1: Descriptive Statistics

	<u>All</u>		<u>Non US & UK</u>	
	<u>Mean</u>	<u>St. Dev.</u>	<u>Mean</u>	<u>St. Dev.</u>
Change in Economic Freedom				
10 year	0.425823	0.865089	0.429974	0.867468
5 year	0.213488	0.651733	0.215441	0.655653
Aggregate Think Tank Years				
10 year	111.9493	948.3674	43.31788	132.42
5 year	55.97467	479.0268	21.65894	67.32207
(Aggregate Think Tank Years) ²				
10 year	910463.8	1.64 x 10 ⁷	19382.46	97948.85
5 year	232412.4	4323770	4997.619	25962.56
Aggregate Think Tank Years * Population				
10 year	21576.85	284082.6	2901.988	20914.33
5 year	10584.5	141139.2	1429.285	11015.28
(Aggregate Think Tank Years) ² * Population				
10 year	2.70 x 10 ⁸	5.07 x 10 ⁹	1107480	7782255
5 year	6.77 x 10 ⁷	1.32 x 10 ⁹	290273.1	2338740
Population (millions)				
10 year	36.27759	127.8631	34.57451	127.2694
5 year	35.02997	123.9613	33.35633	123.361
Initial Freedom Level				
10 year	5.911468	1.340819	5.872791	1.320715
5 year	5.964087	1.347383	5.927975	1.33

III. Results

MAIN

Our main results are contained in Table 2. In our baseline model—Regression 1—we control for only the initial level of freedom at the beginning of the decade and country and time period fixed effects and find that aggregate think tank years over a 10 year period increases economic freedom over that decade and is significant at the 99% level of confidence. A one standard deviation increase in think tank years leads to a 0.18 point increase in economic freedom over the ten-year period. As expected, initial levels of economic freedom were

negatively associated with subsequent improvements in freedom and were also significant at the 99% level of confidence.

Table 2 - Think Tanks' Impact on Economic Freedom

Dependent Variable - 10-year Change in Economic Freedom

Regression	1	2	3	4	5
Aggregate Think Tank Years During Decade	0.0013228*** (0.0004512)	0.0036014*** (0.0009741)	0.001395*** (0.0004758)	0.0035277*** (0.0010217)	0.0035248*** (0.0010255)
(Aggregate Think Tank Years) ²		-0.00000276*** (0.00000105)		-0.00000301** (0.00000125)	-0.00000301** (0.00000125)
Aggregate Think Tank Years * Population			-0.00000574** (0.00000289)	-0.0000116* (0.00000611)	-0.0000115* (0.00000613)
(Aggregate Think Tank Years) ² * Population				0.00000000 (0.00000000)	0.00000000 (0.00000000)
Population			0.0092577*** (0.0025012)	0.0095060*** (0.0026315)	0.0095060*** (0.0026366)
Post-Commie (=1 if post-communist economy)					0.0452572 (0.9217744)
Initial Freedom Level	-0.5621953*** (0.0589736)	-0.5970057*** (0.0598039)	-0.5859874*** (0.0583579)	-0.6127058*** (0.0591994)	-0.6126000*** (0.0593537)
N	387	387	383	383	383
F	45.53	33.34	27.21	19.41	16.57

Note: All regressions contain year- and country-fixed effects.

*** (**, *) denotes statistical significance at the 99% (95%, 90%) level.

In Regression 2 we include aggregate think tank years squared. Aggregate think tank years remains positive and significant but the negative and significant result on the squared term indicates that as more and more aggregate think tank years accumulate the marginal year is less effective at increasing freedom. Intuitively, we suspect this indicates that low hanging “policy fruit” is grabbed first. Essentially, policy reform becomes harder to achieve once some of the most politically possible policy reforms are made. Of course our statistical analysis cannot rule out the possibility that think tanks themselves somehow become less effective as they mature and multiply but the low-hanging fruit explanation is more intuitive.

Regression 3 controls for the size of a country’s population and interacts it with think tank years. Larger populations are associated with bigger increases in economic freedom but population is negatively associated (95% level) with increases in economic freedom when it is interacted with think tank years.⁷ This indicates that any given level of think tank years will do less to increase economic freedom in a larger country than a smaller country. Our main variable of interest, Aggregate think tank years, remains positively and significantly associated with increases in economic freedom. The marginal impact of think tank years on economic freedom would fall below zero only in countries with a population greater than 243 million.

⁷ It is beyond the scope of this paper to test the robustness of the association between population size and subsequent change in economic freedom or to lay out a theoretical case for the association between the two variables. It is worth mentioning however that, although statistically significant, the economic significance is small. As a ballpark approximation, the world population annual growth rate is 1%-2%. With a mean population of 34.57 million in our sample, that yields a population change over a decade of about a maximum of 7 million and a change in economic freedom over ten years of 0.066 index points. Other research (Clark et al. 2015) has found that larger immigrant stocks and flows are correlated with larger increases in economic freedom. To the extent that differences in population are driven by differences in immigration rates perhaps that partially explains our result but this is just a conjecture and ultimately an area for future investigation.

Only two of the countries—China and India—in our dataset satisfy this condition, and these data points constitute less than 2% of our dataset.

Regression 4 includes all controls and all variables retain significance and sign.

Regression 5 then controls for whether the country was a post-communist to insure that the fall of the Soviet Block was not driving our results. All variables retained their signs, significance, and magnitude. Over the five regressions a one standard deviation change in think tank years increases economic freedom over the decade by 0.16 to 0.45 points.⁸ In unreported regressions we also examined the impact of think tank years lagged by a decade.

Unfortunately, collinearity prevented us from being able to include a lagged variable with the current decade's think tank years in the same regression. Including only the lagged variable was not significant. This is consistent with our finding the negative coefficient on the squared term.

ROBUSTNESS: FIVE-YEAR

As Table 1 illustrates, the average change in economic freedom is almost twice as large in ten-year periods compared to five-year periods. This is one reason why most prior studies have focused on at least 10 year long periods when trying to explain changes in economic freedom. Despite the smaller average change, our regression results examining five-year periods are consistent with our 10-year results. Table 3 repeats the same regressions from Table 2 but for five-year periods rather than ten-year periods. All variables retain statistical significance (three increase) and maintain the same sign. Most remain similar in magnitude. A

⁸ Values calculated at mean think tank years and population levels where appropriate.

one standard deviation change in aggregate think tank years during a five-year period results in an increase of economic freedom between 0.11 and 0.30 points.⁹

Table 3 - Think Tanks' Impact on Economic Freedom

Dependent Variable - 5-year Change in Economic Freedom

Regression	6	7	8	9	10
Aggregate Think Tank Years	.0017231*** (.0004768)	.004747*** (.0010206)	0.0019239*** (0.0005068)	0.0051113*** (0.0010873)	0.0050894*** (0.0010884)
(Aggregate Think Tank Years) ²		-0.00000699*** (0.00000209)		-0.00000851*** (0.00000251)	-0.00000849*** (0.00000251)
Aggregate Think Tank Years * Population			-0.00000752*** (0.00000288)	-0.0000183*** (0.00000710)	-0.0000181** (0.00000711)
(Aggregate Think Tank Years) ² * Population				0.0000000 (0.0000000)	0.0000000 (0.0000000)
Population			.0056124*** (0.0013167)	0.0062138*** (0.0014501)	0.0062132*** (0.0014507)
Post-Commie (=1 if post-communist economy)					0.2452413 (0.3827943)
Initial Freedom Level	-.2996636*** (.0282335)	-.3233249*** (.0289054)	-0.3200237*** (0.0284407)	-0.3415264*** (0.0290216)	-0.3420236*** (0.0290446)
N	827	827	819	819	819
F	56.36	41.86	33.25	24.41	20.96

Note: All regressions contain year- and country-fixed effects.

*** denotes statistical significance at the 99% level.

⁹ Again, values calculated at mean think tank years and population levels where appropriate.

INCLUSION OF THE UNITED STATES AND UNITED KINGDOM

As mentioned earlier, the United States and United Kingdom are outliers both in their extended history with a classical liberal heritage and with significant think tank years occurring before our economic freedom data begins. In Regression 9, when the 148 think-tanks in the United States and the United Kingdom are included in the baseline analysis, with only a control for the initial level of freedom and country and period fixed effects, aggregate think tank years loses its statistical significance. However, the United States also has a very large population, so failing to control for that fact when the aggregate think tank years variable is so large biases the result. In Regression 10 with our full set of controls, our main variable of interest, aggregate think tank years, retains its statistical significance and has the same sign as in our main results.

Table 4 - Inclusion of United States and United Kingdom

Dependent Variable - 10-year Change in Economic Freedom

Regression	9	10
Aggregate Think Tank Years During Decade	-0.0000255 (0.0000614)	0.0014887*** (0.0005797)
(Aggregate Think Tank Years) ²		0.000000341 (0.000000340)
Aggregate Think Tank Years * Population		-0.00000264 (0.00000224)
(Agg. Think Tank Years) ² * Population		0.0000000 (0.0000000)
Population		0.0072933*** (0.0023743)
Initial Freedom Level	-0.5024365*** (0.0554555)	-0.5970208*** (0.058669)
N	395	391
F	41.98	18.53

Note: All regressions contain year- and country-fixed effects.

*** (**) denotes statistical significance at the 99% (95%) level.

REVERSE CAUSALITY

As we explained earlier, our measure of aggregate think-tank activity precluded us from conducting an event study and looking at issues of reverse causality. We attempt to address the issue by using an even more crude measure, a simple dummy variable, for the presence of think-tanks. We ran regressions, with the control variables and fixed effects, examining whether a simple dummy variable was correlated with increases in freedom and we specifically tested to see if a dummy for a think tank before a five year change in freedom or after a five

year change in freedom was correlated. Unfortunately, a simple dummy proved too crude of a measure and the dummy variable didn't achieve statistical significance in any of the regressions.

IV. Conclusion

The global rise in economic freedom since 1980 has coincided with the spread of free market think tanks across the globe. We find that there were greater increases in economic freedom in countries when there were greater levels of aggregate free market think tank years. Our estimates indicate that a one standard deviation increase in think tank years was associated with an increase of economic freedom between 0.16 to 0.45 points over a ten-year period depending on our specification. Using one estimate (Gwartney, Holcombe, and Lawson 2006) of the impact that economic freedom has on economic growth, our results indicate increased think tank years translates into 0.23 to 0.65 percentage points of higher annual economic growth. This strikes us as economically significant.

Our OLS results cannot, of course, rule out reverse causality or endogeneity. The increased intellectual support for the supremacy of freedom over central planning could have led to both the adoption of greater economic freedom and the founding of more think tanks. Although we control for period effects to take account of this, perhaps the battle of ideas was more decisive in countries that both increased economic freedom more and led to the founding of more think tanks. More work should be done to examine how ideas and cultural values changed and whether these changes preceded think tank years or followed it.

Although our finding of a correlation between think tank years and increases in economic freedom should be interpreted with some caution, it is not a stretch to believe there

is some causation, when, after all, the world-wide network of these think tanks was created specifically to achieve a freer global economy.

References

- Bjørnskov, Christian. 2010. "How Does Social Trust Lead to Better Governance? An Attempt to Separate Electoral and Bureaucratic Mechanisms." *Public Choice*, 144(1-2): 323–346.
- Bologna, Jamie and Andrew Young. Forthcoming. "Crises and Government: Some Empirical Evidence." *Contemporary Economic Policy*.
- Brown, Matthew. 2014. "The Geography of Economic Freedom" In *Economic freedom and Economic Education: Ideas and Influence of James Gwartney*, ed. Joshua C. Hall, 105-121. Beloit: Beloit College Press.
- Cassette, Aurélie, and Sonia Paty. 2010. "Fiscal Decentralization and the Size of Government: A European Country Empirical Analysis." *Public Choice*, 143(1-2): 173–189.
- Clark, J.R., Robert Lawson, Alex Nowrasteh, Benjamin Powell, and Ryan Murphy. 2015. "Does Immigration Impact Institutions?" *Public Choice*, 163(3-4): 321-336.
- Crampton, Eric. 2002. "You Get What You Vote For: Voter Preferences and Economic Freedom." *Journal of Private Enterprise*, 18(1): 29-56.
- De Haan, Jakon, Susanna Lundström, and Jan-Egbert Sturm. 2006. "Market-Oriented Institutions and Policies and Economic Growth: A Critical Survey." *Journal of Economic Surveys*, 20(2): 157–191.
- Djankov, Simeon, Caralee McLiesh, Tatiana Nenova, and Andrei Shleifer. 2003. "Who Owns the Media?" *Journal of Law and Economics*, 46(2): 341–382.
- Dreher, Axel, Michael Lamla, Sarah Lein, and Frank Somogyi. 2009. "The Impact of Political Leaders' Profession and Education on Reforms." *Journal of Comparative Economics*, 37(1): 169–193.
- Frost, Gerald. 2002. *Antony Fisher: Champion of Liberty*. London: Profile Books.
- Gwartney, James, Randall Holcombe, and Robert Lawson. 2006. "Institutions and the Impact of Investment on Growth." *Kyklos*, 59(2): 255-73.
- Gwartney, James, Robert Lawson, and Joshua Hall. 2014. *Economic Freedom of the World: 2014 Annual Report*. Vancouver: Fraiser Institute.

- Hall, Joshua. 2015. "Institutional Convergence: Exit or Voice?" *Journal of Economics and Finance*, 40(4): 829-840.
- Hall, Joshua, and Robert Lawson. 2014. "Economic Freedom of the World: An Accounting of the Literature." *Contemporary Economic Policy*, 32(1): 1–19.
- Hall, Joshua, Robert Lawson, and Rachel Wogsland. 2011. "The European Union and Economic Freedom." *Global Economy Journal*, 11(3): 1-16.
- Leeson, Peter T., Matt E. Ryan, and Claudia R. Williamson. 2012. "Think Tanks." *Journal of Comparative Economics*, 40(1): 62-77.
- Leonida, Leone, Dario Maimone Ansaldo Patti, and Pietro Navarra. 2007. "Towards an Equilibrium Level of Market Reform: How Politics Affects the Dynamics of Policy Change." *Applied Economics*, 39(13): 1627–1634.
- March, Ray, Conrad Lyford, and Benjamin Powell. Forthcoming. "Causes and Barriers to Increases in Economic Freedom." *International Review of Economics*.
- O'Reilly, Colin, and Benjamin Powell. 2015. "War and the Growth of Government." *European Journal of Political Economy*, 40(A): 31-41.
- Shleifer, Andrei. 2009. "The Age of Milton Friedman." *Journal of Economic Literature*, 47(1): 123-135.