Chapter 2: The Spread of Global Economic Freedom

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1 Introduction

American foreign policy has long been guided by the idea that freedom spreads from one country to others. According to this idea, introducing freedom to a repressed country ignites the spread of freedom throughout a region, infecting other countries. Conversely, lower levels of freedom (or higher levels of repression) in one country also infects others—spreading tyranny to a region.

America's recent intervention in Iraq is a good example. According to George W. Bush, one of the goals was "to spread freedom throughout the Middle East."[2] Bush and his supporters argue that "[a] new regime in Iraq would serve as a dramatic and inspiring example of freedom for other nations in the region … A liberated Iraq can show the power of freedom to transform that vital region, by bringing hope and progress into the lives of millions."[3]

One need not look to leaders or events as recent as George W. Bush or the War on Terror, however, to see that foreign policy is often guided by the belief that freedom spreads across countries. During the Cold War, for instance, both American and Soviet leaders envisaged international affairs as a kind of domino game where tipping one country toward capitalism or socialism would lead to the adoption of a similar economic organization by its neighbors. In fact, American Cold War strategists called this idea the "domino theory."[4] In 1961, John F. Kennedy warned Americans of the imminent threat that communism in Cuba posed of infecting the entire hemisphere. This idea also played a role in America's interventions in South Korea and Vietnam.

These examples illustrate the *geographic* spread theory, in which freedom (or the lack of it) spreads directly to geographic neighbors. The *trade* spread theory holds that freedom can also spread directly between countries that are trading partners, independent of whether they are geographic neighbors.[5] As an example, Richard Nixon maintained that trade was an important carrier of the communist virus. In a 1953 speech, Nixon argued:

> If Indochina falls, Thailand is put in an almost impossible position. The same is true of Malaya with its rubber and tin. The same is true of Indonesia. If this whole part of South East Asia goes under Communist domination or Communist influence, Japan, who trades and must trade with this area in order to exist must inevitably be oriented towards the Communist regime.[6]

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2 *President Addresses the Nation in Prime Time Press Conference*, Presidential News and Speeches, April 13, 2004 (The White House), <http://www.whitehouse.gov/news/releases/2004/04/20040413-20.html>.

3 *President Discusses the Future of Iraq*, Presidential News and Speeches, February 26, 2003 (White House), <http://www.whitehouse.gov/news/releases/2003/02/20030226-11.html>.

4 President Dwight Eisenhower was the first to use the term "domino theory" publicly by name in 1954. See "The President's News Conference of April 7, 1954," *Public Papers of the Presidents of the United States: Dwight D. Eisenhower, 1954* (US Government Printing Office, 1960), pp. 382–83.

5 We explore the channels through which freedom may spread geographically and by trade in the next section.

6 Quoted in Allan Cole, *Conflict in Indo-China and International Repercussions: A Documentary History, 1944-55* (Cornell University Press, 1956), p. 171.

Twenty years later, Nixon used the inverse of this logic to open trade relations with China.

In the 1980s, Ronald Reagan used both the trade and geographic spread theories of freedom as justifications for foreign intervention. For example, Reagan argued that if communism gained a foothold in a significant country in Latin America, the rest of its region was soon to follow, which threatened to "spread communism throughout Central America."[7]

American foreign policies guided by the idea that freedom spreads can easily be found as far back as the administrations of Franklin Delano Roosevelt and Woodrow Wilson. America is not the only country whose policies have been guided by this theory, of course—it was clearly a central component in the Cold War policies of the former Soviet Union as well. Despite the spread theory's long history in global foreign affairs, no one has yet investigated whether economic freedom or repression does, in fact, spread significantly from country to country. Is capitalism contagious? If so, to what extent; and how does it spread?

This chapter, based on excerpts from our study, "Contagious Capitalism," is the first to examine these questions empirically. We estimate the rate of spread of economic freedom between countries using spatial econometric models designed precisely to measure this type of geographic dependence. We use panel data that covers more than 100 countries between 1985 and 2000. Our analysis considers both channels through which freedom might spread: geography and trade.

Our results suggest that economic freedom does in fact spread, although not as strongly as might be suggested by the emphasis this idea has been given in US foreign policy. Our analysis reveals that, if the average level of economic freedom of a country's neighbors (or trading partners) were to rise by one unit in the Summary Economic Freedom Ratings, the country in question would experience a 0.2 unit increase in its Economic Freedom Rating.

Section 2 explores the channels through which economic freedom may spread through geography and trade. Section 3 discusses our data and empirical findings. Section 4 discusses the implications of our results for foreign policy and offers some predictions about the future path, and spread, of global economic freedom.

2 Theories of How Economic Freedom Spreads

No one has provided an explicit model of how economic freedom might in fact spread between countries. However, the rhetoric and actions of world leaders interested in increasing freedom abroad suggests two channels through which this could occur: geography and trade. Historically, the idea of geographic spread has wider support in the policies of national governments. As noted above, American and Soviet activities during the Cold War certainly favored spreading economic freedom or socialism through geography. More recently, the War on Terror supported by America and its western European allies is grounded in this theory as well. However, the policies of Ronald Reagan, Richard Nixon, and Woodrow Wilson incorporated the idea that trade was also an important channel through which this spread could occur.

Geographic Channels

When labor and capital are able to move between countries, competition between governments, such as that described by Tiebout (1956), can create strong incentives for geographic neighbors to increase domestic economic freedom, leading capitalism to spread throughout regions.[8] If a country liberalizes its economy substantially, for instance by lowering taxes and regulation, it is likely to attract additional foreign businesses and direct investment through agents seeking the most profitable locations to undertake economic activity.

The firms and citizens that find this move the least costly are those in neighboring nations that share a border with the liberalizing economy. Their movement or potential movement puts pressure on neighboring countries to undertake similar market-oriented reforms to avoid losing their tax base. If these nations' neighbors in turn liberalize to avoid losing their tax base to their liberalizing neighbors, and so on, the resulting competition spreads greater economic freedom throughout a region.

The diffusion of pro-freedom ideas and technologies between neighboring countries could also cause economic freedom to spread geographically. Examples of freedom-enhancing ideas and technologies might be institutional or organizational arrangements that make the market more effective, or technologies that make it possible to streamline government activities. Neighbor-

7 *Radio Address to the Nation on United States Assistance for the Nicaraguan Democratic Resistance*, March 8, 1986 (Ronald Reagan Presidential Library), <http://www.reagan.utexas.edu/archives/speeches/1986/30886a.htm>

8 Charles Tiebout, "A Pure Theory of Local Government Expenditures," *Journal of Political Economy* 64, (October 1956), pp. 416–24.

ing countries can more easily discover, observe, and replicate the activities of the countries around them and import successful ideas and technologies at a lower cost than if they had to look further abroad to find them. If one country stumbles upon freedom-enhancing ideas or technologies, its geographic neighbors become more likely to adopt them as well. Once these countries' have adopted freedom-enhancing ideas or technologies, their neighbors become more likely to adopt them, and so on. This process may cause a cascade whereby economic freedom in one country spreads to countries around it.

Trade Channels

The second major channel through which economic freedom might spread is international trade. The idea that foreign trade helps to spread freedom is at least 150 years old. Classical liberal thinkers, such as the Frenchman, Frederic Bastiat, and the Englishman, Richard Cobden, argued in the mid-nineteenth century that free trade stimulates the growth of economic freedom abroad by disseminating new ideas from free countries to those that are less free. These ideas could be like the ones considered above that spread geographically. They could also be new methods of production, new attitudes toward openness, and new ways of thinking about life—namely life oriented toward market exchange versus isolationist subsistence.[9] In the twentieth century, development economist P.T. Bauer (2000) advanced this argument, and noted the freedom-enhancing properties of imports, in particular for Africa.[10]

By promoting greater wealth, imports to the developing world, for example, give a taste of capitalism's fruit to countries with less economic freedom. After experiencing some of these benefits, such nations may be more inclined to liberalize economically in their domestic sphere, increasing their economic freedom. When these nations exchange with their trading partners, they may pass some of their now higher economic freedom along as well, causing freedom to spread through trade. Though he was not a classical liberal, Richard Nixon used this argument to open trade between the United States and China in 1972. A decade before, critics also used this argument to contest John Kennedy's declaration of a trade embargo with communist Cuba. Ronald Reagan, for example, was fond of pointing to this alleged benefit of liberalizing US trade with foreign countries as a channel through which to spread economic freedom across the globe.

3 Data and Empirical Methodology

We examine both geography and trade as potential channels by which economic freedom might spread. Our basic empirical strategy is therefore twofold. First, we search for geographic, or "spatial," dependence in both the levels and changes in Summary Economic Freedom Ratings between geographic neighbors over time. Second, we do the same for trading partners. For both analyses, we construct a panel of Economic Freedom Ratings in 102 countries, at five year intervals, between 1985 and 2000. The full list of countries included in our analysis is given in the appendix.

Spatial Econometric Methods

While this chapter includes the estimates from a few of the empirical specifications from our full-length study, we try to present the results in a non-technical manner. However, it is worthwhile to discuss very briefly the intuition behind the econometric methodology we employ. Readers wanting the full technical details and expanded results and robustness checks are referred to our full paper cited in the opening footnote.

A spatial econometric model specifies each country's dependent variable, in our case economic freedom, as a function of the weighted average value of economic freedom in its neighbors or trading partners. For geography, each contiguous geographic neighbor of country *i* is weighted equally. In our full study, we perform numerous robustness checks including also weighting neighboring countries by their population, but it does not affect our results. For trade, each trading partner country is weighted by its share of the country's imports.

For readers who have a basic understanding of time-series econometrics, one useful analogy is to think of the geographic neighbor model as analogous to a time-series model but with lags over geographic distances rather than over time. So, for a country *i*, one spatial lag refers to all of *i*'s contiguous geographic neighbors.[11]

9 When countries trade, the cost of going to war also rises, thus promoting peace. See Erik Gartzke, "Chapter 2: Economic Freedom and Peace," *Economic Freedom of the World: 2005 Annual Report* (Fraser Institute, 2005), pp. 29–44.

10 Peter Bauer, *From Subsistence to Exchange and Other Essays* (Princeton University Press, 2000).

11 There are two general types of spatial econometric models, a spatial autoregressive model (SAR) and spatial error model (SEM). The SAR model is analogous to an autoregressive (AR) time-series model, while the SEM model is analogous to the moving average (MA) time-series model that includes a spatially correlated error structure. Unlike standard time-series

In its levels form, the spatial econometric model attempts to predict the level of the Economic Freedom (EFW) Rating at time *t* for country *i* based on country *i*'s own lagged freedom level (EFW at time *t* – 1) and the average, contemporaneous economic-freedom level in all of country *i*'s neighbors (or trading partners). Including the lagged freedom level of the country controls for all factors that were already reflected in the country's prior economic-freedom level (such as colonial and legal origins, ethnolinguistic fractionalization, etc.). We also estimate the model both including and excluding regional dummy variables to control for other unobserved, but geographically based, factors that may affect economic freedom levels.

In its change form, the econometric model attempts to predict the change in the EFW rating for country *i* based on country *i*'s own lagged freedom level and the average, contemporaneous change in economic freedom in all of country *i*'s neighbors (or trading partners). Again, we try the model both including and excluding regional dummy variables for the reasons cited above. Because the change specification looks specifically at how economic freedom changes within countries, it completely controls for, and removes any factors that determine, the underlying levels of economic freedom in a country. If the results from the change specification are similar to the results from the levels specification, we can be assured that these other factors are not underlying our empirical estimates.

The estimated regression coefficient on the neighbors' weighted average economic freedom (level or change, depending on the model) is typically termed "rho" (ρ) in the spatial econometrics literature. This coefficient is the estimated degree to which economic freedom spreads from country *i*'s neighbors (or trading partners) to country *i*. More precisely, ρ measures how much a one-unit change in the *average* level of economic freedom of country *i*'s neighbors changes economic freedom in country *i*.

An estimated ρ coefficient of 0.3, for example, would mean that, if the average level of freedom across all of country *i*'s neighbors increased by one unit, country *i* would experience a 0.3-unit increase in its EFW rating. Bear in mind that this is the response to the change in the average freedom level of all neighbors. Thus, if only one neighboring country's freedom changes, the impact on country *i* would depend on how this one neighbor's change affects the overall average rating of all neighboring countries.

Spread of Economic Freedom through Geography

A visual example will help to clarify exactly what our model is estimating. Consider the data presented in Figures 2.1a and b. These charts show the Summary Economic Freedom Ratings for countries of the world, and how they changed between 1985 and 2000. When comparing the two figures it is clear that both the levels of economic freedom, and the changes in economic freedom through time, show a degree of geographic correlation. In levels, North America and western Europe are darker regions, with clear geographic groupings of countries with a higher level of freedom. When considering how the pattern changed between 1985 and 2000, there are clear geographic groupings that changed together (e.g., in parts of South America, Asia, and Africa most clearly). Our model essentially estimates the degree of correlation among the levels and changes in EFW Ratings for neighboring countries.

The results of our estimations on the geographic spread of economic freedom are presented in Table 2.1. The important numbers in the table are the coefficient estimates for ρ, the rate at which freedom spreads. The coefficient estimate of 0.2 in the levels specification suggests that a country, *i*, whose geographic neighbors are on average one unit freer than the neighbors of some other country, *j*, is on average 0.2 units freer than *j*. The coefficient estimate from the change specification suggests that a country,

Table 2.1: The Spread of Economic Freedom through Geography—Regression Results

Independent Variable	Level of Economic Freedom	Change in Economic Freedom
Constant	0.350 (1.11)	1.293*** (5.04)
ρ (Geographic Spread)	0.183*** (5.18)	0.218*** (4.00)
Lagged Own Freedom Level	0.800*** (27.76)	–0.157*** (5.67)
Log-likelihood	–225.73	–229.90
R-squared	0.79	0.06
Number of Observations	408	408

Notes
Absolute t-ratios in parentheses.
Regression also includes regional dummy variables.
Statistical significance as follows: * = 10%, ** = 5%, *** = 1%.

models, however, spatial models allow dependence to be bi-directional rather than only unidirectional, as it is in a time-series model (e.g., past only affects future, not vice versa). This is important since we are interested in how economic freedom may flow into and out of multiple countries, influencing economic freedom in a region. We estimate both spatial autoregressive (SAR) and spatial error (SEM) models in our paper, "Contagious Capitalism," which is available at <http://www.peterleeson.com/Contagious_Capitalism.pdf>, and our results are virtually identical. In this chapter, we present only the SAR results.

Figure 2.1a: Geographic Correlations in Economic Freedom, 1985

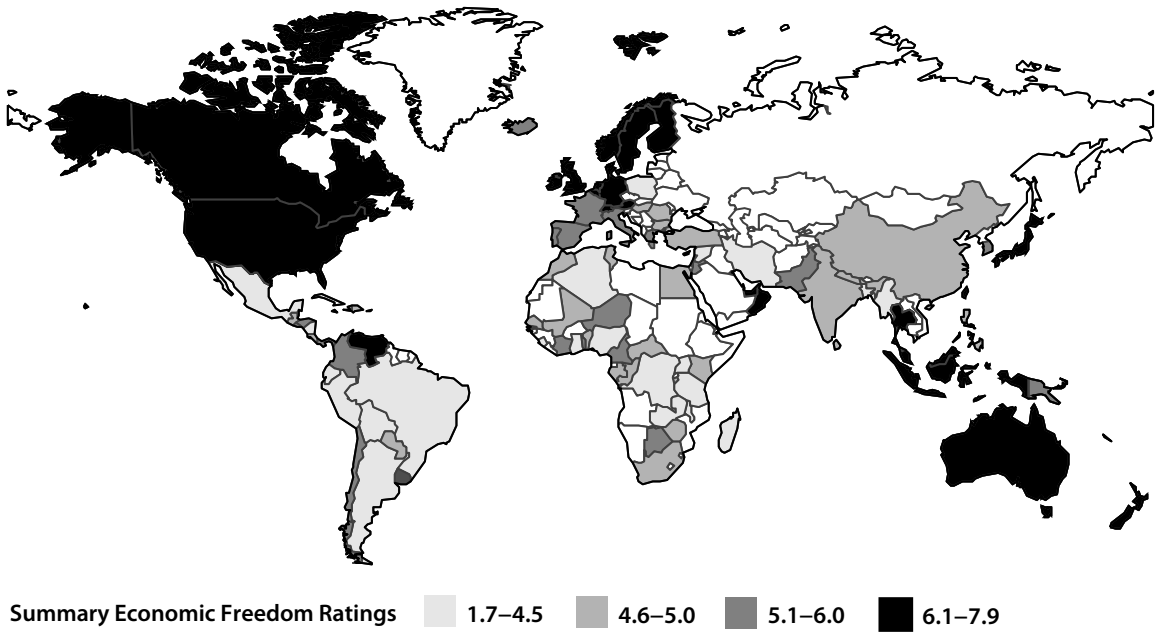
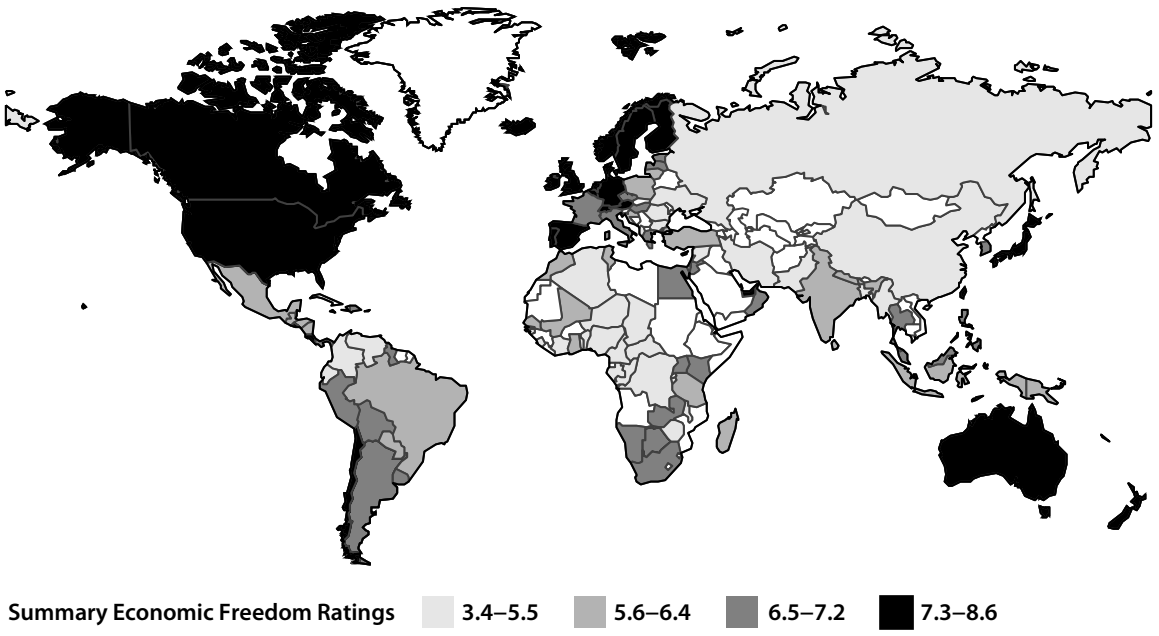


Figure 2.1b: Geographic Correlations in Economic Freedom, 2000



Source: Authors' calculations.

i, whose geographic neighbors are experiencing changes in economic freedom on average one unit higher than the neighbors of some other country, *j*, is experiencing changes in economic freedom also roughly 0.2 units higher than *j*.

The remarkable similarity in the estimates from both the level and change of freedom specifications, generally around 0.20, gives us strong confidence in the precision of our estimated degree to which economic freedom (whether measured in levels or changes) spreads across countries. In a nutshell, our estimates imply that if the EFW Ratings of a country's neighbors is one unit higher, that country will have a freedom rating on average 0.20 higher as a result.

The other result worth noting is the coefficient estimate on the country's own lagged freedom in the levels specification. This coefficient is a measure of institutional persistence—that is, how much of a country's previous level of economic freedom persists into the current period (in our model, five years later). Our model estimates a high degree of persistence, with a coefficient of 0.8 implying that a country maintains 80% of its economic freedom from five years ago.[12] Using a standard compound growth equation ($FV = PV\ (1 + r)^t$, this would imply an *annual* rate of persistence of approximately 0.956 from one year to the next in a country's EFW Rating.

Panels (a) and (b) of Figure 2.2 present a hypothetical set of countries who are geographic neighbors, along with hypothetical data on each country's levels of economic freedom at two points in time, EFW1995 and EFW2000, to illustrate the implications of our main estimates on the geographic spread of economic freedom from Table 2.1. In panel (a), we simulate the direct (partial equilibrium) impact of a change in just one neighbor's EFW Rating, momentarily holding the ratings of other neighbors' ratings constant and ignoring all second-order changes. Here, we have increased the economic freedom level of neighboring country *j* by 4 units (from a Rating of 3.0 to a Rating of 7.0). Because the direct impact of this change is to increase the average Rating across all neighbors by only ¼ of this change (because there are four neighbors, weighted equally here), the neighbor average rises by only 1 unit, from 4.0 to 5.0. Given a coefficient estimate of 0.20, this would imply that country *i*'s level of economic freedom would rise by 0.2 units (1.0 times 0.2), from 4.5 to 4.7.

In reality, the change in country *j*'s economic freedom would also spread to countries *m* and *k*, and then the first-round changes in these countries would again spread to their neighbors, and so forth. In panel (b) of Figure 2.2 we simulate the general equilibrium impact (including all direct and indirect changes). The impact on country *i* is larger once these indirect impacts are included, from 0.20 to 0.22, and now the EFW Ratings of all other countries are affected as well. Country *l*, a second-degree neighbor (a neighbor of a neighbor of *j*) experiences only a 0.03 increase in economic freedom from the 4-unit increase in country *j*. The overall EFW Rating in the region rises from 4.10 to 5.04, but most of this is due to the 4-unit increase in country *j*. Excluding *j*, the impact of this change on the average regional freedom in the surrounding countries is an increase of only 0.17 (from 4.38 to 4.55).

This effect is statistically significant but economically modest, particularly considering the large size of the change for the neighboring country *j*. The 4-unit change in freedom we have simulated is a full ⅔ of the difference between the highest and lowest scoring countries in the EFW index. Even a change this large, however, has only around a 0.22 impact on the first ring of neighboring countries, and a minimal 0.03 impact on the second surrounding ring of countries.

In panels (a) and (b) of Figure 2.3, we simulate the impact of a simultaneous increase in the economic freedom of all of *i*'s neighbors. Again, panel (a) shows the direct (partial equilibrium) impact only, while panel (b) shows the full general equilibrium impact including both direct and indirect impacts.

Here we use a smaller magnitude of change—with each neighbor increasing by 2.0 units—but now the change occurs across a larger number of countries in the region. Examining the direct impact in panel (a), the average economic freedom of country *i*'s neighbors rises by 2.0 units from 4.0 to 6.0. Again given the coefficient estimate of 0.20, this would imply that country *i*'s level of economic freedom would rise by 0.4 units (2.0 × 0.2), from 4.5 to 4.9. In panel (b), which also includes the indirect impacts, the effect is somewhat larger, with country *i*'s freedom rising by 0.45 rather than 0.40. The surrounding countries all get an extra 0.25 increase also after including the indirect impacts. Overall regional economic freedom rises from 4.10 to 5.99, and increase of 1.89.

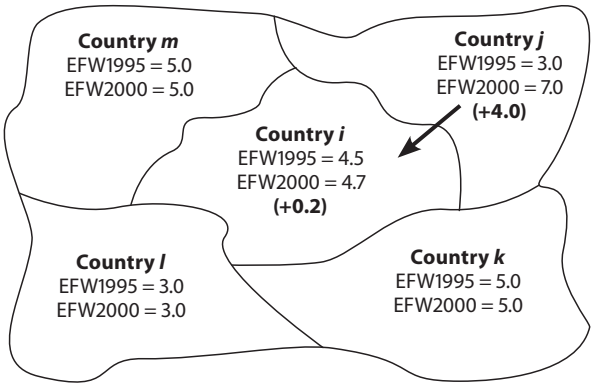
These examples illustrate an important implication of our results. Because of the dilution effect of multiple neighbors, even a large change in the economic freedom of one neighbor has only a limited impact on a country. On the other hand, when broad regional changes occur, such as the fall of the Soviet bloc, or the formation of a free-trade union, the impact can be much more substantial.

12 The coefficient on own lagged freedom in the change specification is interpreted differently: it would suggest that countries with lower beginning levels of economic freedom tend to have larger positive changes in freedom in subsequent years.

Figure 2.2: Simulated Spread Impact—One Neighbor + 4.0 in EFW score

(a) Partial equilibrium (direct) impact of a +4 unit change in neighbor *j*'s economic freedom on country i

Average of *i*'s Neighbors
EFW1995 = 4.0
EFW2000 = 5.0



(b) General equilibrium (direct + indirect) impact of a +4 unit change in neighbor j's economic freedom on all countries, including country i

Average of *i*'s Neighbors
EFW1995 = 4.00; EFW2000 = 5.12

Average Regional EFW (including *j*)
EFW1995 = 4.10; EFW2000 = 5.04 (+0.94)

Average Regional EFW (excluding *j*)
EFW1995 = 4.38; EFW2000 = 4.55 (+0.17)

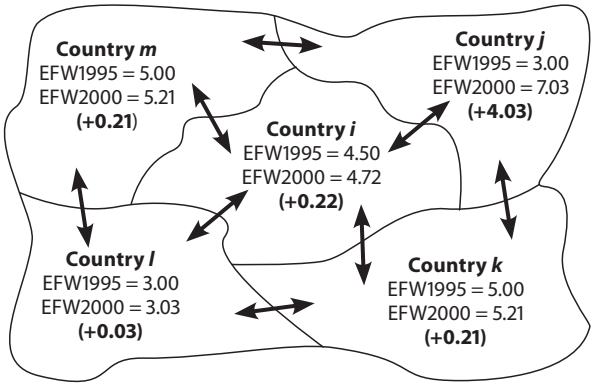
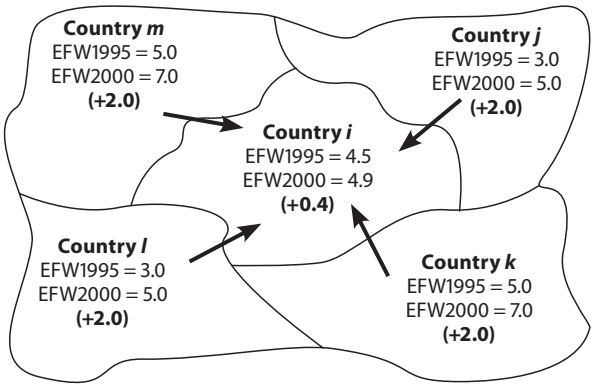


Figure 2.3: Simulated Spread Impact—All Neighbors + 2.0 in EFW score

(a) Partial equilibrium (direct) impact of a +2 unit change in all neighbor's economic freedom on country *i*

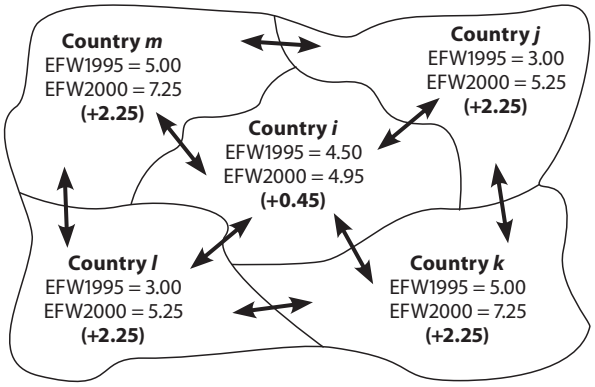
Average of *i*'s Neighbors
EFW1995 = 4.0; EFW2000 = 6.0



(b) General equilibrium (direct + indirect) impact of a +2 unit change in all neighbor's economic freedom on all countries, including country i

Average of *i*'s Neighbors
EFW1995 = 4.00; EFW2000 = 6.25

Average Regional EFW (including all)
EFW1995 = 4.10; EFW2000 = 5.99 (+1.89)



The overall results suggest that indeed economic freedom does spread geographically, but at a modest rate. Interventions that target one country are likely to have little impact on surrounding countries. Furthermore, widespread regional changes in freedom do build momentum and have the highest impact on neighboring countries.

Spread of Economic Freedom through Trade

It is now time to turn to the other channel through which economic freedom may spread—international trade. We repeat our specifications above but, instead of using the average freedom level of a country's neighbors to predict their Rating, here the import-share weighted average of the country's trading partner's Ratings is used.

The biggest drawback of considering trade as a channel by which economic freedom spreads is the potential for endogeneity. Although countries cannot choose their location in the world (and thus cannot choose their geographic neighbors), they obviously can and do choose trading partners. Thus, what may look like economic freedom spreading between trade partners could in fact be countries simply choosing to trade with nations that have similar levels of economic freedom. If so, the estimated spread rate would be biased upward.

We deal with this issue in two ways. First, we are able to reduce the impact of reverse causality in our trade regressions to some extent by controlling for lagged economic freedom. If countries are importing from certain nations primarily because they share many of the same historical institutional structures, including the lagged freedom term will account for this.

Second, we can also partially circumvent the potential for endogeneity by looking at changes in economic freedom in addition to levels. While it might be reasonable to think that countries with similar institutional features, and thus similar levels of economic freedom, choose to import from one another more, there is no reason to think that countries choose to import more from others whose economic freedom is changing by the same magnitude. Furthermore, if we find that economic freedom spreads at a similar or lower rate through imports compared to geography, which we know does not suffer from endogeneity, we can be more confident that reverse causality is not biasing our estimates that consider trade.

The results of our estimations on the spread of economic freedom through trade are presented in Table 2.2. The results from both the level and change of freedom specifications are similar to before. The coefficient in the level specification for trade does rise to 0.32 (compared to 0.183 for geography) and the coefficient in the change specification for trade falls slightly to 0.197 (compared to 0.218 for geography).

Table 2.2: The Spread of Economic Freedom through Trade—Regression Results

Independent Variable:	Level of Economic Freedom	Change in Economic Freedom
Constant	−0.795*	1.266***
	(1.89)	(4.73)
ρ (Trade Partner Spread)	0.322***	0.197*
	(6.00)	(1.93)
Lagged Own Freedom Level	0.811***	-0.152***
	(28.42)	(5.28)
Log-likelihood	−219.25	−232.87
R-squared	0.79	0.06
Number of Observations	392	392

Notes
Absolute t-ratios in parentheses.
Regression also includes regional dummy variables.
Statistical significance as follows: * = 10%, ** = 5%, *** = 1%.

At face value, in the levels specification it appears that economic freedom spreads about ten percentage points more strongly through trade than through geography. However, we should interpret this larger coefficient with caution, since the larger effect for trade may reflect endogeneity that we could not remove in the freedom-level regressions. The estimate from the change specification (which accounts for endogeneity better) is more similar to the estimates using geographic neighbors. On the other hand, if this slightly higher coefficient in the levels regression is not simply due to an endogeneity bias, it implies that trade is a better route by which to spread economic freedom.

Overall, the spatial coefficients in both models for geography and trade are always highly significant and between 0.2 and 0.3. This closeness strengthens our confidence that we have correctly identified the extent to which economic freedom spreads between countries of the world.[13]

13 To check the robustness of our findings, we tried rerunning our regressions including islands, indicated by dummy variables, in the sample; excluding islands, using both the SAR and SEM models; and using a population-weighted spatial weight matrix in our regressions that look at geographic spread. Our results can be found in our full paper; they are robust to these different measures.

4 Conclusions

The history of global foreign policy is strongly grounded in the idea that economic freedom spreads between countries. This theory has explicitly or implicitly guided foreign policy for some of the most important global events in the twentieth and twenty-first centuries. WWI, WWII, the Cold War, and most recently the War on Terror have all, to one extent or another, been influenced by the belief that capitalism (or the lack of it) does indeed spread between countries by geography and trade.

We searched for spatial dependence in economic freedom between geographic neighbors and trade partners using a panel of more than 100 countries between 1985 and 2000. Our results confirm that economic freedom does indeed spread through both geography and trade, in both levels and changes.

Significantly, economic freedom spreads at about the same rate through both geography and trade, in both levels and changes. Countries "catch" about 20% of their average geographic neighbors' and trading partners' levels and changes in economic freedom. This result is remarkably robust to alternative specifications and estimation techniques.

Although these results provide strong evidence that freedom spreads, they also suggest freedom does not spread as strongly as the domino theory behind American and Soviet foreign relations during the Cold War suggested. The idea that reforms within a few key nations would substantially alter the state of economic freedom in the rest of the region does not appear to be correct.

While it is important to be cautious in drawing policy implications from our analysis, the results point to several conclusions. First, while economic freedom changes in one country have only a modest impact on neighboring countries, when multiple neighbors experience simultaneous changes in economic freedom the impact is much greater. Thus broad regional changes in freedom can and do have significant impacts on surrounding countries.

Second, by liberalizing their trade with foreign nations, economically free countries can exert at least a modest positive impact on economic freedom in less free nations. While the effect of trade liberalization with any one country is again relatively small in terms of the broader impact on other neighbors, free-trade agreements that allow a number of nations to simultaneously coordinate trade liberalization could have a sizeable influence on spreading economic freedom to economically repressed regions of the world.

Appendix

Countries Included in the Geographic Spread Regressions

Algeria
Argentina
Australia
Austria
Bahamas
Bahrain
Bangladesh
Barbados
Belgium
Belize
Benin
Bolivia
Botswana
Brazil
Burundi
Cameroon
Canada
Chile
China
Colombia
Dem. R. Congo
Rep. of Congo
Costa Rica
Cote d'Ivoire
Cyprus
Denmark
Dominican Republic
Ecuador
Egypt
El Salvador
Fiji
Finland
France
Gabon
Germany
Ghana
Greece
Guatemala
Haiti
Honduras
Hong Kong
Hungary
Iceland
India
Indonesia
Iran
Ireland
Israel
Italy
Jamaica
Japan
Jordan
Kenya
Kuwait
Luxembourg
Madagascar
Malawi
Malaysia
Mali
Malta
Mauritius
Mexico
Morocco
Myanmar
Nepal
Netherlands
New Zealand
Nicaragua
Niger
Nigeria
Norway
Pakistan
Panama
Paraguay
Peru
Philippines
Portugal
Senegal
Sierra Leone
Singapore
South Africa
South Korea
Spain
Sri Lanka
Sweden
Switzerland
Syria
Taiwan
Tanzania
Thailand
Togo
Trinidad and Tobago
Tunisia
Turkey
Uganda
United Arab Emirates
United Kingdom
United States
Uruguay
Venezuela
Zambia
Zimbabwe

Countries Included in the Trade Spread Regressions

All of the above countries except Belgium, Botswana, Luxembourg, and Syria, for which no trade data was available.