

POLITICAL REGIME STABILITY AND ECONOMIC FREEDOM

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This article assesses the impact of political regime stability, as measured by political regime experience or the number of years a particular political regime has been in place, on the adoption of institutions of economic freedom. Following Gwartney, Lawson, and Hall (2014), this article broadly defines institutions of economic freedom as the formal and informal conventions determining the protection of private property, free competition, and freedom of exchange.

In a very influential article, Acemoglu and Robinson (2006) proposed that incumbent rulers have more incentives to adopt institutions of economic freedom when facing either very low or very high political competition (i.e., when they belong to highly entrenched autocratic regimes or when they face highly competitive democracies) but not when facing mild political competitive levels in between. In my interpretation of Acemoglu and Robinson's (2006) model, the implicit key variable in both of the cases conducive to the adoption of institutions of economic freedom is the expectation of political regime stability. Highly entrenched autocratic regimes have incentives to adopt such institutions because they expect themselves (or their dynasty broadly understood) to remain in power in the future. At the other extreme, incumbent rulers facing highly competitive democracies have incentives to adopt such institutions because

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highly competitive democracies generate expectations of intertemporal political competition.

I propose that history (particularly the extent of political regime experience embedded in the polity) plays a relevant role in forming expectations of political regime stability. In the case of autocracy, long-standing regimes are typically expected to remain stable in the future to a larger extent than new regimes. In the case of democracy, rulers and citizens develop expectations of democratic stability as they develop common democratic values. Such values develop through the slow and lengthy accumulation of a stock of civil liberties and political rights gained with democratic experience.

I test political regime experience as a determinant of the adoption of institutions of economic freedom as measured by the change in the Economic Freedom of the World Index (EFWI) (Gwartney, Lawson, and Hall 2014) over the five-year periods ending in 1985, 1990, 1995, 2000, 2005, and 2010. I find strong support for the argument that both democratic and autocratic experience are positively associated with larger changes in EFWI.

Background and Context

While political and economic freedom have been increasingly adopted in the world in recent decades, neither one of these trends has been a necessary nor a sufficient condition for the other. Indeed, within the last three decades, some countries adopted institutions of economic freedom while adopting or strengthening their democracies, others adopted such institutions without modifying their autocratic regimes, and others were unable to do so despite having opened their political systems.¹

The aforementioned evidence is not surprising. Although largely studied, the relationship between political and economic freedom still poses a challenging puzzle. Conventional wisdom has long suggested that political freedom is a condition for economic freedom (e.g., see Hayek 1944 and Friedman 1962). First, many of the institutions needed for political freedom—such as an independent judiciary, civil

¹The world average of EFWI increased from 5.31 in 1980 to 5.67 in 1990, 6.59 in 2000, and 6.81 in 2010 (Gwartney, Lawson, and Hall 2014). Similarly, the world average of the democratic index produced by the *Polity IV Project* (Marshall, Gurr, and Jaggers 2014) increased from 3 in 1980 to 4.17 in 1990, 5.18 in 2000, and 5.73 in 2010 (both indices are measured on a 0 to 10 scale).

liberties, and private property rights—carry the seeds of economic freedom. Second, through the generation of political competition, political freedom induces incumbent rulers to adopt Pareto-improving institutions (Barro 1973). Third, political freedom, and the resulting system of checks and balances, reduces rent-seeking behavior (see Aslund, Boone, and Johnson 1996; North 1990; and Rodrik 1999).

An important study providing evidence on the Hayek-Friedman hypothesis is that of Lawson and Clark (2010), which finds “relatively few instances of societies combining relatively high political freedom without relatively high levels of economic freedom.” It has also been shown that the causality may go in the other direction—that is, economic freedom may determine political freedom. Two important studies making this argument are Farr, Lord, and Wolfenbarger (1998) and Wu and Davis (1999). Using different econometric methodologies, both studies find that economic freedom may indirectly determine political freedom by first determining economic well being or development (as measured by GDP per capita).

While appealing at both positive and normative levels, several authors have contested the aforementioned view and posed that autocratic regimes may be more conducive to economic freedom, particularly at the beginning of the liberalization process when layoffs and cuts in entitlements are common (see Edwards 1991, Sen 1999, and Fidrmuc 2000). The cases of Pinochet’s Chile, Chiang Kai-shek’s Taiwan, and some of the Persian Gulf countries, among others, have been commonly used as evidence of this proposition. Additionally, as argued in the public choice literature, given that politicians tend to favor key interest groups that can guarantee reelection, political freedom may not provide the incentives for incumbent rulers to adopt institutions of economic freedom (see Rowley, Tollison, and Tullock 1989; Alesina and Perotti 1994; and Block 2002).

Reconciling both views, Acemoglu and Robinson (2006) have suggested that the relationship between political and economic freedom may not be linear because the adoption of institutions of economic freedom not only increases economic output (and, consequently, the incumbent ruler’s share of economic output), but also creates political turbulence that increases the probability that the incumbent ruler is replaced. If the incumbent ruler belongs to a highly entrenched autocratic regime, however, this effect is not binding and the ruler feels secure enough to adopt institutions of economic freedom. At the other extreme, if the incumbent ruler faces a highly competitive

democracy, the ruler may be *forced* to adopt institutions of economic freedom while fiercely competing for office—a result consistent with Barro’s (1973) political principal-agent paradigm. It is only when the incumbent ruler faces mild levels of political competition, therefore, that the optimal choice may be to not adopt institutions of economic freedom in order to reduce the probability of being replaced.

An important insight of Acemoglu and Robinson’s (2006) model is that, in both of the extreme cases conducive to the adoption of institutions of economic freedom, the implicit key variable is the expectation of political regime stability. Highly entrenched autocratic regimes have incentives to adopt such institutions because they expect themselves (or their dynasty broadly understood) to remain in power in the future. At the other extreme, incumbent rulers facing highly competitive democracies have incentives to adopt such institutions because highly competitive democracies generate intertemporal political competition—that is, the adoption of efficient institutions increases the probability of staying or regaining power in the future through new elections. Indeed, the longer the political regime is expected to remain stable, the higher the incentives for incumbent rulers to adopt institutions of economic freedom as the discounted value of their future share of economic output increases.

Importantly, the expectation of political regime stability also makes citizens less prone to threaten the regime even if the adoption of institutions of economic freedom negatively affects them in the short run. Workers who lose their job as the result of privatization, for example, would be less willing to instigate a coup or a revolution if they expect the regime to remain stable. This effect further strengthens the incentives for incumbent rulers to adopt institutions of economic freedom, generating a virtuous cycle.²

²The idea of “political regime stability” advanced here is inversely related to the idea of “regime uncertainty” advanced by Higgs. Studying the duration of the Great Depression, Higgs (1997) referred to regime uncertainty as the uncertainty of private owners regarding the definition of property rights in the future. Regime uncertainty à la Higgs, therefore, reduces private owners’ incentives to invest and undertake productive activities. Inversely, of course, regime certainty generates the opposite incentives as private owners can safely expect to earn the returns of their investment and productive activities. Here, I refer to political regime stability as the expectation that the political regime (democracy or autocracy) will continue in place in the future. In this sense, political regime stability also provides incumbent rulers with the incentives to *invest* in the adoption of institutions of economic freedom. These institutions will increase the economic pie, and incumbent rulers can safely expect to have the opportunity to earn their share of the economic pie in the future.

While several variables may affect the expectation of political regime stability, I propose that history plays a relevant role in this regard. In the case of autocracy, long-standing regimes are typically expected to remain more stable in the future than new regimes. The longer the duration of an autocratic regime, the stronger the signal it sends regarding its reach and dominance, and the more citizens expect the regime to remain stable in the future.³ In the case of democracy, rulers and citizens develop expectations of democratic stability as they develop common democratic values (Clague et al. 1996, Gerring et al. 2005, Persson and Tabellini 2009). Such values, however, do not form overnight or in a vacuum but through the slow and lengthy accumulation of a stock of civil liberties and political rights gained with democratic experience.⁴

Several authors have studied political regime experience as a determinant of economic performance. Some of the most relevant studies include Clague et al. (1997), Grier and Munger (2006), Gerring et al. (2005), Gerring et al. (2011), and, as noted, Persson and Tabellini (2009). Although most of these studies argue that political regime experience affects economic performance through the adoption of institutions of economic freedom, *none test this connection explicitly*. Gerring et al. (2005), for example, assume that as countries accumulate democratic experience they also accumulate “political capital,” understood as the overall health of the polity and defined by some of the same components that Gwartney, Lawson, and Hall (2014) use to define economic freedom—for example, low corruption levels, high bureaucratic quality, and the rule of law. Similarly, Persson and Tabellini (2009) assume that, by generating expectations of democratic stability, long democratic experience helps to improve the country’s “investment climate” characterized by the rule of law and also defined by the main components of Gwartney, Lawson, and Hall’s (2014) definition of economic freedom. My aim is to fill this gap in the

³One check of the validity of this argument is provided by Clague et al. (1996), who find a negative correlation between the elapsed duration of an autocrat’s rule and the likelihood of a coup d’état.

⁴Persson and Tabellini (2009) report empirical evidence suggesting that democratic experience reflects the extent to which rulers and citizens develop common democratic values. Using data from the World Value Surveys for the late 1990s for a large cross-section of countries, they find that the agreement of citizens with the question “Democracy may have problems but is it better than any other form of government?” is strong and positively correlated to their own indices of democratic experience.

literature by formally testing for the influence of political regime experience, for both democratic and autocratic countries, on the adoption of institutions of economic freedom.

An important exception in the aforementioned literature is the study by Clague et al. (1996) which finds that property and contract rights are positive and significantly correlated with the age of democratic and autocratic regimes using data from 1930 to 1990. Clague's (1996) study is closely related to the present study as property and contract rights constitute central elements of economic freedom. However, my article expands on Clague's (1996) results by using a systematic measure that encompasses all elements of economic freedom and reflects the overall state of the institutional environment.⁵ Although this article also differs from Clague (1996) in the choice of political regime indicators, econometric methodology and, of course, the period of study (my data covers the period from 1980 to 2010), my results are consistent with his.

Model and Data

As several authors have documented, the adoption of institutions of economic freedom is a slow and gradual process that requires the evolution of a complex structure of norms, conventions, and expectations (de Haan and Sturm 2003; Leonida, Ansaldo, and Navarra 2007). Thus, to better capture the adoption of institutions of economic freedom using indices such as EFWI, one must look at periods spanning several years. While there is, of course, no magic number, periods spanning five years provide a reasonable time horizon to conduct this exercise. Explaining changes in EFWI over increasingly longer periods of time introduces increasing noise. As time goes by, the change in EFWI is likely to be influenced by an increasing number of factors, events, and variables other than the ones capturing political regime experience. An additional operational advantage of using changes over five years is that one can use EFWI data from 1970 to 2000, which, for that period, are available only every five years.⁶

⁵Besides measuring property and contract rights, EFWI also includes indicators of the freedom to trade internationally, the size of the government, and the extent of regulation.

⁶Studying the effects of contemporaneous levels of democracy on the adoption of institutions of economic freedom, Lundstrom (2002) finds that using changes in EFWI over 5, 10, or 20 years produces qualitatively similar results.

The specification is, therefore, as follows:

$$\Delta EF_{i,t-(t-5)} = \alpha_0 + \alpha_1 PRE_{i,t-5} + \alpha_2 PRC_{i,t-5} + \alpha_3 EF_{i,t-5} + \alpha_4 CV_{i,t-5} + \varepsilon_{i,t} + \nu_i$$

where $\Delta EF_{i,t-(t-5)}$ is the change in the level of economic freedom in country i over a five-year period (from $t-5$ to t); $PRE_{i,t-5}$ is the measure of political regime experience in country i at period $t-5$; $PRC_{i,t-5}$ is a measure of the political regime's current level or index of democracy or autocracy in country i at period $t-5$; $EF_{i,t-5}$ is a measure of the initial level of economic freedom in country i at period $t-5$; and CV is a vector of control variables that include $GDPpc_{i,t-5}$, the level of GDP per capita in country i at period $t-5$, and $GDPpcg_{i,t-5}$, the growth rate of GDP per capita in country i at period $t-5$.

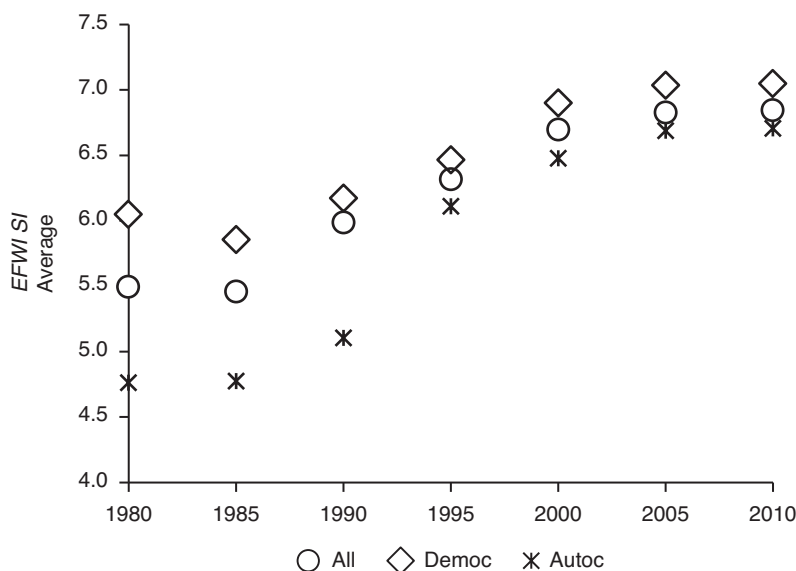
Notice that the independent variables are all observed at period $t-5$ corresponding to the starting point of the change in the level of economic freedom. Thus, the specification minimizes endogeneity biases due to potential contemporaneous simultaneity between EF and independent variables PRC , $GDPpc$, and $GDPpcg$. Notice as well that given that the dependent variable measures the change in EF , it is important to control for the initial level of EF , $EF_{i,t-5}$.

Following the discussion in the previous section, one would expect α_1 to be positive and significantly different from zero for both democratic and autocratic countries. In contrast, one would expect ambiguous results for α_2 (as indicated earlier, the relationship between current levels of political and economic freedom remains largely unresolved). One would also expect α_3 to be negative and significantly different from zero as decreasing marginal returns set in for countries presenting higher initial levels of EF .

Economic Freedom (EF)

The indices of economic freedom most frequently used in the literature are the EFWI produced by the Fraser Institute (Gwartney, Lawson, and Hall 2014) and the Index of Economic Freedom (IEF) produced by the Heritage Foundation and the *Wall Street Journal* (Miller, Holmes, and Kim 2014). Data for the EFWI are available every five years from 1970 to 2000 and yearly thereafter until 2012. Data for the IEF are available yearly from 1995 to 2014. Given that the main interest resides on the effect of political regime experience, the length of the historical time series is important for the empirical

FIGURE 1
 AVERAGE LEVEL OF *EFWI SI*, 1980–2010,
 SELECTED COUNTRIES



NOTE: The sample includes 93 democratic and 44 autocratic countries.

exercise. Thus, I will measure the adoption of institutions of economic freedom using the EFWI as it is the index with the longest historical coverage.

The EFWI measures the level of economic freedom in five areas: size of government; legal structure and security of property rights; access to sound money; freedom to trade internationally; and regulation of credit, labor, and business. The EFWI's Summary Index (*EFWI SI*) aggregates the information in these five areas into a single value measured on a 0 to 10 scale, where 10 is the highest level of economic freedom.

The adoption of institutions of economic freedom is, indeed, a slow and gradual process. Figure 1 shows the evolution of the average level of *EFWI SI* for the countries and periods in the samples used in the baseline model.⁷ The figure shows the averages for all countries and, separately, the averages for democratic and autocratic countries as defined below. Notice that the average *EFWI SI* for all countries

⁷The samples of countries used in the analyses are available upon request.

remained virtually constant from 1980 to 1985 and then increased by less than half a point in each of the next five-year periods.

It is also important to note that democratic countries presented an average *EFWI SI* more than one point higher than that of autocratic countries in 1980, 1985, and 1990. That gap dramatically decreased in 1995, however, and has remained at less than 0.4 points in the most recent five-year periods. In other words, within the sample, autocratic countries have essentially caught up with democratic countries in terms of *EFWI SI* levels in the last two decades.

Political Regime's Current Level of Democracy or Autocracy (PRC)

Data on political regime type are derived from the *Polity IV Project* produced by the Center for Systemic Peace (2014), and, alternatively, the *Freedom in the World Country Ratings* produced by the Freedom House (2015).

The *Polity IV Project* reports indices of the level or extent of democracy (Democ) and autocracy (Autoc), each on a 0 to 10 scale, from 1800 to 2013. Both of these indicators aggregate measurements of the competitiveness of political participation, the openness and competitiveness of executive recruitment, and the constraints on the chief executive. While the Democ and Autoc indices do not share any categories in common, many countries have mixed regime traits and, therefore, can have middling scores on both indices. To unify these scores, the *Polity IV Project* generates the index *Polity2*, which is computed by subtracting the Autoc score from the Democ score. As a result, *Polity2* ranges from +10 (strongly democratic) to -10 (strongly autocratic). I use *Polity2* as the measure of *PRC*.

As is customary in this line of research (e.g., see Boix, Miller, and Rosato 2012; and Mainwaring and Pérez-Liñán 2013), I define country *i* as democratic in period $t-5$ if *Polity2* is greater than or equal to 5. Conversely, I define country *i* as autocratic in period $t-5$ if *Polity2* is less than or equal to -5.

To test the robustness of the results, I alternatively use the *Freedom in the World Country Ratings*, which reports indices of political rights (PR) and civil liberties (CL), each on a 1 to 7 scale, from 1972 to 2014. If the average of these two indices is greater than or equal to 1 and less than 3, the *Freedom in the World Country Ratings* classifies the country as “Free” in that period. If the average of the two indices is strictly greater than 5, the country is classified as

“Not Free.” Finally, if the average of the two indices is greater than or equal to 3 and less than or equal to 5, the country is classified as “Partly Free” in that period. I use the average of the PR and CL indices (hereafter *FHA*) as the alternative measure of *PRC*. Consistent with the literature, I define country *i* in period $t-5$ as democratic if it is classified as “Free.” Conversely, I define country *i* in period $t-5$ as autocratic if it is classified as “Not Free.”

While using the $t-5$ lagged value of *PRC* minimizes a potential endogeneity bias, it does introduce another complication. Take the case of a country that was characterized as democratic in period $t-5$ but underwent important political changes within the next five years (e.g., a coup d'état) and, as a result, was characterized as autocratic in period t . In that case, drawing a relationship between the change in *EFWI SI* over the five-year period and the value of *PRC* at period $t-5$ will not be warranted. Clearly, the country's democratic condition at $t-5$ has drastically changed during the period in which we observe the change in *EFWI SI*. To avoid this problem, I eliminate from the sample any country characterized as democratic at $t-5$ but not characterized as such at any period between then and t . Similarly, I eliminate from the sample any country characterized as autocratic at $t-5$ but not characterized as such at any period between then and t . As a result, the exercise considers only countries consistently characterized as democratic or autocratic over the five-year periods analyzed.

Political Regime Experience (PRE)

The measure of political regime experience is the variable *Durable*, included in the *Polity IV Project*, which reports “the number of years since the most recent regime change (defined by a three-point change in *Polity2* over a period of three years or less) or the end of a transition period defined by the lack of stable political institutions (denoted by a standardized authority score).”⁸

To test the robustness of the results, I alternatively use the variable *Duration* from Boix, Miller, and Rosato (2012), which “equals the number of consecutive years the country has had the same regime type.” Data are available from 1800 to 2007.

⁸Note that, based on this definition, the variable *Durable* will revert to 0 if the country transitions from one type of autocratic regime to another. For example, the overthrow of a monarchy by a communist regime will restart the count of *Durable* even though both types of regime could be labeled as autocratic.

Control Variables

Following previous empirical literature on the adoption of institutions of economic freedom (e.g., Clague et al. 1996; Adserá, Boix, and Payne 2003; and de Haan and Sturm 2003), I use the level of GDP per capita and its growth rate at period $t-5$ as control variables. More developed countries, or countries growing at a faster pace, may be inclined (or face less popular resistance) to adopt institutions of economic freedom. To some extent, these variables also capture the overall state of the economy at period $t-5$. Typically, more developed countries, or countries growing at a faster pace, do so because they enjoy macroeconomic stability and higher levels of education. Data for *GDPpc* and *GDPpcg* are derived from the Penn World Table (Feenstra, Inklaar, and Timmer 2015).

Regression Results

To maximize the number of observations, the regression analysis covers changes in *EFWI SI* over the five-year periods ending in 1985, 1990, 1995, 2000, 2005, and 2010. Depending on the variables used to capture *PRC* and *PRE*, my samples vary from 44 to 93 countries.

The baseline models, for both democratic and autocratic countries, capture *PRC* and *PRE* using the variables *Polity2* and *Durable*, respectively. Thus, the baseline models maximize data consistency, as both political variables are derived from the same database (i.e., the *Polity IV Project*). Tables 1 and 2 present the descriptive statistics for the variables used in the baseline models for democratic and autocratic countries, respectively.⁹

Table 3 presents the fixed-effects unbalanced panel regression results for the sample of democratic countries. The results for the baseline model are displayed in Column 1. Columns 2 through 4 test the robustness of the results by alternatively using the variables *Duration* and *FHA* to capture *PRE* and *PRC*, respectively. Notice that the Hausman test favors the used of fixed over random effects in all four regressions. The results in Column 1 show strong support for the theoretical arguments presented in the previous section: *Durable* is positive and significantly correlated with Δ *EFWI SI*. The coefficient of *Durable* indicates that, other things equal, one additional year of democratic experience during the period of study was

⁹Correlation matrices underlying all of the regressions are available upon request.

TABLE 1
DESCRIPTIVE STATISTICS: DEMOCRATIC COUNTRIES

Variable	Definition	# Obs	Mean	Std. Dev.	Min	Max
$\Delta EFWI SI_{t-(t-5)}$	Change in the Economic Freedom of the World Summary Index over a 5-year period	358	0.06	0.13	-0.34	0.99
<i>Durable</i> $t-5$	Democratic experience: Number of years of uninterrupted democracy up to $t-5$	369	32.17	38.03	0	196.00
<i>Polity2</i> $t-5$	Democratic index at period $t-5$	369	8.51	1.68	5.00	10.00
<i>EFWI SI</i> $t-5$	Economic Freedom of the World Summary Index at period $t-5$	358	6.53	1.18	2.47	8.84
<i>GDPpc</i> $t-5$	GDP per capita at constant 2005 US\$	369	13,614.48	14,936.48	143.78	80,925.22
<i>GDPpcg</i> $t-5$	GDP per capita growth rate at $t-5$	369	2.62	3.30	-11.50	15.41

TABLE 2
DESCRIPTIVE STATISTICS: AUTOCRATIC COUNTRIES

Variable	Definition	# Obs	Mean	Std. Dev.	Min	Max
$\Delta EFWI SI_{t-(t-5)}$	Change in the Economic Freedom of the World Summary Index over a 5-year period	98	0.05	0.13	-0.25	0.57
<i>Durable</i> _{$t-5$}	Autocratic experience: Number of years of uninterrupted autocracy up to $t-5$	126	23.51	14.88	0.00	79.00
<i>Polity2</i> _{$t-5$}	Autocratic index at period $t-5$	126	-7.52	1.25	-10.00	-5.00
<i>EFWI SI</i> _{$t-5$}	Economic Freedom of the World Summary Index at period $t-5$	98	5.27	1.21	2.99	7.74
<i>GDPpc</i> _{$t-5$}	GDP per capita at constant 2005 US\$	126	6,093.20	13,186.60	191.78	81,947.24
<i>GDPpcg</i> _{$t-5$}	GDP per capita growth rate at $t-5$	126	3.04	5.84	-12.84	25.11

TABLE 3
REGRESSION RESULTS FOR DEMOCRATIC COUNTRIES,
DEPENDENT VARIABLE Δ *EFWI SI*

	(1)	(2)	(3)	(4)
<i>Durable</i> $t-5$	0.003*** (0.001)	0.003* (0.001)		
<i>Duration</i> $t-5$			1.9e-04 (4.54e-04)	0.004*** (0.001)
<i>Polity2</i> $t-5$	0.017* (0.009)		0.013 (0.009)	
<i>FHA</i> $t-5$		0.013 (0.02)		0.006 (0.018)
<i>EFWI SI</i> $t-5$	-0.117*** (0.009)	-0.069*** (0.011)	-0.103*** (0.008)	-0.082*** (0.011)
<i>GDPpc</i> $t-5$	-1.81e-06 (1.62e-06)	-3.69e-06** (1.60e-06)	1.08e-06 (1.43e-06)	-4.69e-06*** (1.46e-06)
<i>GDPpcg</i> $t-5$	9.41e-04 (0.002)	-0.001 (0.002)	5.34e-04 (0.002)	-1.46e-04 (0.002)
Constant	0.59*** (0.078)	0.457*** (0.070)	0.589*** (0.080)	0.485*** (0.061)
R-squared within	0.441	0.298	0.416	0.334
Hausman	33.68***	8.67*	24.09***	12.4**
Countries	93	65	93	70
N	358	255	358	282

NOTES: Standard errors in parentheses. Statistical significance: * <0.1 , ** <0.05 , *** <0.01 .

associated with a 0.003 larger change in *EFWI SI* over five years. To better assess the magnitude of this coefficient, consider that the standard deviation of the variable *Durable* was 38.03 years and the standard deviation of the variable Δ *EFWI SI* was 0.13 points (see Table 1). Thus, a coefficient of 0.003 indicates that, other things equal, one standard deviation higher value of *Durable* was associated with a 0.885 standard deviation higher value of Δ *EFWI SI*.

As an illustration of this result, take the cases of Colombia and Moldova that were almost one standard deviation apart in terms of the variable *Durable* in 2005. As per this variable, Colombia had 48 years of democratic experience that year while Moldova had

only 14. According to the coefficient found in Table 1, such difference in terms of democratic experience would have been associated with a 0.8 standard deviation higher value of $\Delta EFWI SI$, and that was, in fact, approximately the case. Due to several reforms implemented in the late 2000s, which included a reduction of the fiscal deficit and the design of business-friendly regulations, Colombia experienced a 0.085 change in $EFWI SI$ from 2006 to 2010. Moldova, on the other hand, experienced a 0.002 negative change in $EFWI SI$ during the same period. The difference in these two values was 0.7 of a standard deviation of $\Delta EFWI SI$.

Notice as well that the current level of democracy is positive and significantly correlated with $\Delta EFWI SI$ although, as we shall see, this result is not robust. Additionally, and as expected, the initial level of $EFWI SI$ is negative and significantly correlated with $\Delta EFWI SI$, confirming that decreasing marginal returns in the process of increasing EF eventually set in. I also find that $GDPpc$ and $GDPpcg$ are not significantly correlated with $\Delta EFWI SI$.

The positive and significant relationship between democratic experience and $\Delta EFWI SI$ is confirmed in two of the three regressions used to test the robustness of the results. The only regression in which α_1 , although positive, is not significantly different from zero is the one in Column 3 in which I use *Duration* and *Polity2* to capture *PRE* and *PRC*, respectively. On the contrary, the positive and significant correlation between the current level of democracy and $\Delta EFWI SI$ is not confirmed in any of the robustness tests. As already mentioned, the ambiguous results regarding the effects of the current level of democracy on the adoption of institutions of economic freedom are expected and consistent with previous literature.

The robustness tests also show that the initial level of $EFWI SI$ is consistently negative and significantly correlated with $\Delta EFWI SI$. I also find that $GDPpc$ becomes negative and significantly correlated with $\Delta EFWI SI$ in two of these additional regressions. This last result could be capturing the fact that wealthier countries typically enjoy higher initial levels of economic freedom and, therefore, tend to present smaller increases in this variable. The robustness tests confirm that $GDPpcg$ is never significantly correlated with $\Delta EFWI SI$.

Table 4 presents the fixed-effects unbalanced panel regression results for the sample of autocratic countries. As in Table 3, the results of the baseline model are displayed in Column 1 in which I use the variables *Polity2* and *Durable*. Columns 2 through 4 test

TABLE 4
REGRESSION RESULTS FOR AUTOCRATIC COUNTRIES,
DEPENDENT VARIABLE Δ *EFWI SI*

	(1)	(2)	(3)	(4)
<i>Durable</i> $t-5$	0.008*** (0.003)	-0.001 (0.001)		
<i>Duration</i> $t-5$			0.012*** (0.003)	0.008*** (0.001)
<i>Polity2</i> $t-5$	0.016 (0.025)		0.004 (0.022)	
<i>FHA</i> $t-5$		0.080** (0.032)		0.064** (0.026)
<i>EFWI SI</i> $t-5$	-0.148*** (0.023)	-0.085*** (0.020)	-0.187*** (0.024)	-0.158*** (0.021)
<i>GDPpc</i> $t-5$	2.86e-06 (2.98e-06)	6.91e-07 (3.8e-06)	3.29e-06 (2.69e-06)	2.78e-06 (3.27e-06)
<i>GDPpcg</i> $t-5$	-0.004 (0.002)	0.001 (0.002)	-0.003 (0.002)	0.001 (0.002)
Constant	0.769*** (0.244)	.047 (0.224)	.443* (0.244)	0.047 (0.184)
R-squared within	0.486	0.298	0.572	0.466
Hausman	17.65***	5.26	33.93***	32.68***
Countries	44	45	44	46
N	98	123	98	128

NOTES: Standard errors in parentheses. Statistical significance: * <0.1 , ** <0.05 , *** <0.01 .

the robustness of the results by alternatively using the variables *Duration* and *FHA*.

Again, the results show strong support for the theoretical arguments presented in the previous section: *Durable* is positive and significantly correlated with Δ *EFWI SI*. The coefficient of *Durable* indicates that, other things equal, one additional year of autocratic experience during the period of study was associated with a 0.008 larger change in *EFWI SI* over five years. To better assess the magnitude of this coefficient, consider that the standard deviation of the variable *Durable* for autocratic countries was 14.88 years and the standard deviation of the variable Δ *EFWI SI* was 0.13 points. Thus,

a coefficient of 0.008 indicates that, other things equal, one standard deviation higher value of *Durable* was associated with a 0.916 standard deviation higher value of Δ *EFWI SI*. Thus, autocratic experience seems to have had a stronger impact on Δ *EFWI SI* than democratic experience did in the years covered by the analysis. This result is consistent with Figure 1, which showed that autocratic countries made larger improvements in *EFWI SI* from the 1980s to the 1990s and 2000s.

As an illustration of this result, take the cases of China and Morocco, which were almost one standard deviation apart in terms of the variable *Durable* in 1995. As per this variable, China had 46 years of autocratic experience that year while Morocco had only 30. According to the coefficient found in Table 2, such difference in terms of autocratic experience would have been associated with a 0.985 standard deviation higher value of Δ *EFWI SI*. That was, in fact, approximately the case. China embarked on large economic freedom reforms in the second half of the 1990s, which translated into a 0.134 change in *EFWI SI* from 1996 to 2000. Morocco, on the other hand, experienced a 0.02 negative change in *EFWI SI* during the same period. The difference in these two values was 1.1 standard deviations of Δ *EFWI SI*.

Notice as well that the current level of autocracy is not significantly correlated with Δ *EFWI SI*. Also, as expected, the initial level of *EFWI SI* is negative and significantly correlated with Δ *EFWI SI*. As in the case of democratic countries, I also find that *GDPpc* and *GDPpcg* are not significantly correlated with Δ *EFWI SI*.

The positive and significant relationship between autocratic experience and Δ *EFWI SI* is confirmed in two of the three regressions used to test the robustness of the results. The only regression in which α_1 is not significantly different from zero is the one in Column 2 in which I use *Durable* and *FHA* to capture *PRE* and *PRC*, respectively. The nonsignificance of the coefficient of the current level of autocracy is confirmed when using *Duration* and *Polity2* to capture *PRE* and *PRC*, respectively. However, when using *FHA* to capture *PRC*, I find a positive and significant relationship between the latter variable and Δ *EFWI SI*. Again, the ambiguous results regarding the effects of the current level of political freedom (in this case the lack thereof) on the adoption of institutions of economic freedom are expected and consistent with previous literature. The robustness tests also show that the initial level of *EFWI SI* is

consistently negative and significantly correlated with Δ *EFWI SI*. Finally, in the case of autocracies, I never find a significant relationship between *GDPpc* or *GDPpcg* and Δ *EFWI SI*.¹⁰

As a final exercise and further test of the robustness of the results, I ran regressions pooling all countries (democratic and autocratic) together.¹¹ Table 5 shows the results. In Column 1, I pooled together the countries defined as democratic and autocratic as per the cut-off values defined above for the *Polity2* variable. In Column 2, I pooled together all countries for which data were available (this includes countries that were not characterized as democratic or autocratic at $t-5$, i.e., countries for which their *Polity2* values at $t-5$ fell between -5 and 5). As the two columns show, the coefficient of *PRE* is always positive and significantly correlated with Δ *EFWI SI*.¹² All of the regressions reported in the article have also been run using clustered standard errors; the results are qualitatively identical in every case.¹³

Conclusion

In this article, I find that both democratic and autocratic experience are positively associated with larger changes in *EFWI SI*. In the baseline model, other things equal, one standard deviation higher value of *Durable*, measuring democratic experience, is associated with a 0.885 standard deviation larger change in *EFWI SI* over a five-year period. Similarly, other things equal, one standard deviation higher value of *Durable*, measuring autocratic experience, is associated with a 0.916 standard deviation larger change in *EFWI SI* over a five-year period.

¹⁰Notice as well that the Hausman test favors the use of fixed over random effects in three of the four regressions. The regression in which the Hausman test favors random effects is the one in Column 2, the only case in which *PRE* is not significantly correlated with Δ *EFWI SI*. Although not shown in the table, I ran the random effects regression for the model in this column and found that the results remained qualitatively similar.

¹¹To this end, I ran a Chow test that indicated that one could not reject the hypothesis that the coefficients of *PRE* for the separate regressions for democratic and autocratic countries were equal (i.e., pooling all countries together was warranted).

¹²Although in these columns the coefficient of *PRC* is also positive and significantly correlated with Δ *EFWI SI*, this result is not robust when the sample is split between democratic and autocratic countries.

¹³The results are available upon request.

TABLE 5
REGRESSION RESULTS POOLING
DEPENDENT VARIABLE $\Delta EFWI SI$

	(1)	(2)
<i>Durable</i> _{<i>t</i>-5}	0.003*** (8.4e-04)	0.002*** (7.4e-04)
<i>Polity2</i> _{<i>t</i>-5}	0.013*** (0.002)	0.012*** (0.002)
<i>EFWI SI</i> _{<i>t</i>-5}	-0.114*** (0.008)	-0.11*** (0.007)
<i>GDPpc</i> _{<i>t</i>-5}	-1.51e-06 (1.35e-06)	6.00e-07 (1.34e-06)
<i>GDPpcg</i> _{<i>t</i>-5}	-5.98e-04 (0.001)	-5.76e-04 (0.001)
Constant	0.622*** (0.039)	0.627*** (0.038)
R-squared within	0.418	0.375
Hausman	68.15***	81.21***
Chow	0.49	0.87
Countries	117	126
N	456	527

NOTES: (1) Democratic and autocratic countries; (2) All countries. Standard errors in parentheses. Statistical significance: * < 0.1, ** < 0.05, *** < 0.01.

I also find ambiguous results for the relationship between current levels of democracy and autocracy and changes in *EFWI SI*. These results are consistent with evidence documented in previous literature that current political regime types are poor predictors of the adoption of institutions of economic freedom. Additionally, I find that the initial level of *EFWI SI* is negative and significantly correlated with changes in *EFWI SI*, which indicates that decreasing marginal returns in the process of increasing economic freedom eventually set in. I also find that, in general, GDP per capita and its growth rate are not significantly correlated with changes in *EFWI SI*.

The results of this article suggest that political regime stability, as measured by political regime experience, matters more than the type of political regime itself in the slow and lengthy process of adopting institutions of economic freedom. In fact, contrary to the conventional wisdom suggesting that political and economic freedom go hand in hand, within the period and sample covered by my empirical exercises, autocratic experience had a bigger impact on the adoption of institutions of economic freedom than democratic experience. While the intention of this article is not to derive a policy implication in favor of a particular type of political regime, the results shed light over a mechanism through which long-established autocracies (democracies) may command a higher probability at establishing institutions of economic freedom than recently established democracies (autocracies).

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