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Path Break versus Path Drift: A Comparative Approach to Explain Variations in Institutional Effects on Economic Growth

Tamilina, Larysa and Tamilina, Natalya

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Abstract

This study introduces a comprehensive model of institutional grafting wherein cultural, structural, and political forces shape new legal institutions. The model is used to argue that a country's growth rates are a function of the distance that the new legal institutions develop to these three forces. We further argue that the distance's size varies depending on the mode of institutional change: drift phase or path break. We demonstrate that the distance is usually large during a path break but tends to be significantly smaller for institutions emerging in the drift phase. As such, the new legal institutions strongly impact economic growth in the drift phase and only modestly influence growth rates during institutional path change. In the latter case, the political dimension's quality determines the success of both a country's growth trajectories and institutional reforms. These propositions are tested empirically based on a sample of 106 countries derived from the POLITY IV Project's website.

JEL Classifications: O17, O43, O57, P26, P37

Keywords

Institutional economics, formal institutions, institutional change, institutional grafting

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Growth theory asserts that good formal institutions are conducive to rapid economic development (see Acemoglu and Robinson, 2012 for an overview). Empirical research largely supports this claim but suggests that the direction and strength of institutional impacts on growth rates may vary depending mainly on the maturity level of formal institutions (Barro, 1997; Przeworski & Limongi, 1993) or a country's level of economic prosperity (Eicher & Leukert, 2009; Lee & Kim, 2009). Our study argues that the mode of institution building can also contribute to explaining this variation. By offering a theoretical model of institutional grafting, we identify possible implications for how formal institutions impact a country's growth patterns depending on the mode of their formation: either path-drifting or path-breaking.

By limiting the scope of our analysis to legal institutions, we demonstrate that formal institutions are a strong predictor of a country's economic growth when the country's institutional change evolves along the established institutional path. When legal institutional frameworks undergo radical and profound reforms aimed at breaking into a new institutional path, they only marginally influence growth rates. In the latter case, the political dimension's quality predefines the success of both economic growth and institutional reforms. By determining the new legal institutions' maturity levels and their congruence with local cultures or economic structures, the political dimension shapes the country's growth patterns during or immediately after transitioning to a new institutional path.

Literature Review and Extension

Institutional economics distinguishes between two modes of institutional grafting: drift/evolution and critical junctures (Acemoglu & Robinson, 2012). In the drift phase, or during evolutionary institutional

change, rules emerge from the bottom up and evolve spontaneously from cultural values and societal norms with the government only formalizing what is already primarily shaped by individual attitudes (Easterly, 2008). In this case, institutional change is gradual in nature and constrained by previous institutions, while also expected to be additive and not too ambitious (Platteau, 1996). Drastic changes in the existing institutions are believed to harm the economy, even if there is no obvious reason for such institutions to exist (Easterly, 2008). Institutions are deemed unique to a society and closely linked to its history, which is why societies are expected to substantially diverge in their formal institutions both in the short and long run (Boudreaux & Alicia, 2007).

By contrast, path-breaking institutional change, or critical junctures, abruptly alters the entire institutional framework through a top-down design of new institutions. Institutions are viewed as written laws devised by political leaders (Easterly, 2008). Drastic changes in the existing institutional framework is deemed possible, whereas determining an optimal set of institutions that can be introduced in any country is seen as attainable (Boudreaux & Alicia, 2007). The path-breaking approach denies the historical link to the past or culture in the institution building process by suggesting that there might be “one globally unique best set of institutions, towards which all societies are thought to be developing” (Easterly, 2008). Replicating institutions from more advanced societies to less advanced societies is hence considered feasible and efficient.

We argue that the mode of institution building can determine how formal institutions impact economic growth. We adopt Portes’s sociological model of institutional grafting (2006) as a base analytical framework for juxtaposing how drift-phase and path-breaking institutional reforms influence growth rates. According to Portes (2006), formal institutions are influenced by a dual set of forces. On the one hand, a country’s culture consists of values and norms that dictate how economic agents and authority figures should conduct themselves. On the other hand, a country’s social structure includes power and elites (who control that power) who are embedded within a certain class structure with a clearly specified

status hierarchy. Portes (2006) further suggests that regardless under which mode institutions are formed, they must be compatible with the culture and social structure to ensure a successful institutional creation. If institutions emerge spontaneously from a country's social norms, customs, beliefs or traditions (Easterly, 2008), dominant classes and political elites must be persuaded or compelled to legalize them (Portes, 2006). If imposed by political elites, institutional change must presuppose a shift in the underlying values to enable its cultural acceptance (Portes, 2006).

We further expand this approach by arguing that successful legal institution formation or transformation is embedded within a three-dimensional framework, and any incongruence with it may potentially create three forces of opposition to a country's economic growth. The first dimension is culture (as in Portes, 2006), similar to North's concept of informal institutions (North, 1990). It includes prevalent values/norms that dictate right and wrong, as well as one's behavioral compliance with these values/norms. The second dimension is economic structure, which describes the nature of economic arrangements and economic infrastructure in a country within which economic transactions are undertaken. It includes financial and banking systems, taxation, labor market institutions, etc. The third dimension is political, where we distinguish between (1) political elites who deal with formalizing institutions (as in Portes, 2006) and (2) political institutions whose rules formalize how prevailing political interests are organized into a legal framework and according to which new legal institutions are introduced.

We also adopt Portes's assumption that legal institutions should be commensurate with the logic of all three dimensions in order to function effectively and promote economic growth. We expect that the odds of achieving the needed congruence between legal institutions and the three dimensions may vary across the modes of institutional change (drift/evolution and path-breaking/critical junctures). In order to identify possible levels of such incongruence for each of the two cases, we analyze the logic of institution

building inherent to each of the modes by applying the three-dimensional framework of institutional grafting.

More specifically, the drift-phase institutional change can be described as follows. As economic agents operate, they accumulate knowledge and experience, which leads to technological advancements and further promotes the division of labor (Davis, 2010). This changes how a country organizes its production processes and shifts the structural dimension by introducing new industries, competition terms, pricing strategies, and conditions of resource allocation across various economic sectors. Profound change in the technological and economic domains leads economic agents to transform their thinking and value systems. As a result, existing legal institutions are no longer adequate or commensurate with the new economic structure and prevalent cultures, raising market transaction costs (North, 1990).

Contractual arrangements create demand for institutional change to lower transaction costs to exploit new opportunities (Pejovich, 1999). To overcome the existing inconsistencies, economic agents introduce informal changes (Eggertsson, 1997) among formal “rules of the game” to make the institutional framework more flexible. If they are efficient and compatible with the interests of political elites, these changes are captured by the political dimension, which formalizes and legalizes them through the existing political institutions (Portes, 2006). In this way, the informal changes acquire the status of formal institutions. Private international commercial law provides an example of the drift-phase institutional grafting (Boettke, Coyne, & Leeson, 2008): The development of cross-culture exchange in 11th and 12th-century Europe led to the spontaneous formation of the *lex mercatoria*, an informal system of customary law rooted in international commercial norms (Boettke et al., 2008). These informal institutions appeared to be effective and were later formalized into international commercial law.

The drift-phase institutional change’s properties can be summarized as follows. First, since institutional change is usually promoted by economic agents through a bottom-up approach, the new legal institutions should reflect values, norms, and preferences that are dominant among economic agents and

are therefore congruent with the cultural dimension. Second, legal institutions should be compatible with the existing economic structure, since changes in the old institutions primarily occur as a reaction to economic or technologic shifts. Third, political elites have a minor role in institution creation that is restricted to formalizing the new institutions. The success of institutional reforms depends on how rapidly and effectively political institutions adopt informal changes to legal institutions corresponding to the new cultural and structural conditions.

The logic of path-breaking institutional reforms occurring at critical junctures differs substantially from the drift-phase logic. With path-breaking institutional change, shifts in a country's political system, often triggered by a political regime change, precede changes in its economic system. Usually, the economic crisis caused by the previous regime's shortcomings justifies political elites in introducing essential alterations in both political and economic domains (Olson, 1982). Alternatively, if the population is dissatisfied with the current regime, citizens may demand changes in both political and economic systems even if the incumbent elites resist such reforms. Radical political change can occur either through revolutions (Acemoglu & Robinson, 2012), as recent events in the Arabic world demonstrate, or in a peaceful manner without wars and coups (Olson, 1982), as in the majority of post-communist countries during the collapse of socialism (Aslund, 2007).

The new political regime transforms the logic of economic processes and requires profound and radical reforms in the economic and structural systems' organization. The altered political and economic logic, in turn, requires adjusting the legal institutional framework, and a new set of legal institutions is often immediately introduced. Many pitfalls exist at various stages of carrying out institutional reforms when breaking into a new institutional path. First, the political power shift and the new political institutions' initial immaturity may create temporary power vacuums and opportunities for political or economic elites to seek rents through the new legal institutional framework (Aslund, 2007). Second, even if this is not the case and the population's interests dominate during the institutional grafting process, the

new legal institutions' quality depends on whether the political elites, incumbent to handle the institutional grafting, are sufficiently familiar with the new political and economic regimes and relevant legal rules. Third, since such knowledge and skills are often missing, building a new institutional framework will likely be limited to borrowing legal rules from countries with political and economic orders similar to those desired. As a result, the new legal institutions become imposed from without (Pejovich, 1999), which may lead to three forms of incongruence.

First, implanting foreign institutions into another local context may disrupt their congruence with characteristics of the existing cultural dimension (Boettke et al., 2008; Kyriazis & Zouboulakis, 2005; Portes, 2006). Since culture is unique and slow to change, economic agents may perceive and interpret the new legal rules through a prism of the former regime's values. Because of this, economic agents might assign meanings to the new laws that are different from their actual context (Portes, 2006), causing the newly introduced legal institutions to mutate or to be only marginally enforced (Portes, 2006).

Second, a similar incongruence may emerge between the new legal institutions and the local structural dimension. Political regime change requires profound economic and structural reforms that can be constrained by the local economy's specificities or by politicians failing to introduce needed reforms. New legal rules may hence conflict with the country's former economic structure, as occurred when Western industrial legislation was introduced in the former Soviet Union countries. Designed for postindustrial societies with mostly medium and small businesses, Western laws proved inefficient for many soviet economies characterized by an overrepresentation of large (state) enterprises.

Third, by copying more advanced societies' legal institutions, the government risks an imbalance between the new legal institutional framework and local political interests, causing incongruence between the political dimension and legal institutions. This leads to introducing constant changes to the new legal framework and presents opportunities for rent-seeking by political or economic elites, which can severely

destabilize a country's local economy. Such rent-seeking during Russia's transition to capitalism added up to a staggering of 55-75% of GNP (Aslund, 2007).

The learning experience should minimize or eliminate every kind of incongruence (Nelson & Sampat, 2001). If political elites design and introduce adjustment policies during the transition period, the incompatibility between the new legal institutions and political interests or economic structures can be gradually narrowed. Similarly, if economic actors learn that adapting to the new legal institutions can expand their opportunity set, they may change their cultural values and behaviors. For instance, post-communist countries in which new democratic governments successfully introduced economic and legal reforms experienced a rise in pro-democratic attitudes among citizens (Aslund, 2007) and in support for a free-market economy (Aslund, 2007). East-European countries' transition from socialism to capitalism and Japan's post-war reconstruction are good examples of the path-breaking approach to institutional grafting (Boettke et al., 2008). Both experienced profound changes in their political regime, major economic rules, and key legislation.

The path-breaking institutional grafting's properties can be summarized as follows. First, the top-down approach to implementing radical institutional reforms may create incongruence between the new legal institutions and the prevalent cultures, at least at the initial reform stage. Second, the local economy's specificities can cause incongruence between the new legal institutions and the structural dimension. Third, the role of political elites is superior and is not confined to legalizing new institutions but extends to their selection, design, introduction, and subsequent adjustment to the current cultural and structural dimensions. The quality of new legal institutions and their congruence with the three dimensions might depend on the quality of the country's political change and the professionalism of political elites incumbent to handle the institutional grafting under the new conditions.

Our juxtaposition hence suggests that the odds of ensuring congruence between the new legal institutions and the three dimensions differ substantially for the two modes of institutional change. This

allows us to argue that economies might be endowed with different opportunity sets for growth, depending on the mode of institutional grafting through which the new legal institutional framework is introduced: drift/evolution or path-breaking/critical junctures. We summarize these differences in five propositions outlined below:

Proposition 1: Since legal institutions stemming from the drift phase are more congruent with the three dimensions than legal institutions introduced through path-breaking institutional reforms, drift-phase institutions are expected to foster economic growth more effectively. When congruence exists, economic agents encounter fewer frictions during their interactions, making more transactions possible and leading to higher economic growth. We hence formulate the following hypotheses:

Hypothesis 1(a): Path-breaking institutional change produces legal institutions that develop greater incongruence to the three dimensions than in the drift phase.

Hypothesis 1(b): The incongruence's negative impact on growth rates is greater during path-breaking institutional change than in the drift phase.

Hypothesis 1(c): Legal institutions' positive impact on economic growth is greater during the drift phase than during path-breaking institutional change.

Proposition 2: Drift-phase institutional change restricts the role of political elites and political institutions to capturing and formalizing alterations promoted by economic agents. By contrast, pursuing a new institutional path requires the political dimension to implement not only novel institutional reforms but also considerable changes to all three dimensions: political, structural, and cultural. Due to the political dimension's increased role in handling the transition, we expect that the political dimension's impact on growth rates is greater for path-breaking countries than for path-drifting countries. This is especially true in the case of political elites who design and manage the transition process. By contrast,

economies of the drift phase should be more sensitive to the quality of their political institutions through which their (usually less profound and more cumulative) bottom-up institutional change is formalized. We hence anticipate that

Hypothesis 2: The political dimension's positive impact on economic growth is greater during path-breaking institutional change than in the drift phase.

We further suggest that there are three aspects that can explain differences between the two modes of institutional grafting regarding the political dimension's role in fostering economic growth: (a) defining the new legal institutions' quality (see Property 3), (b) determining the extent of incongruence between the new legal institutions and the cultural or structural dimensions (see Property 4), and (c) influencing how any incongruence impacts economic growth (see Property 5).

Proposition 3: During path-breaking institutional change, legal institutions' quality depends on the political dimension to a greater extent than during a drift-phase institutional evolution. The top-down nature of path-breaking institutional reforms makes the new legal institutions a function of how savvy political elites are in managing the institutional grafting process (the choice of an optimal number of laws, clarity of law formulations, etc.). The political institutions' quality in turn determines how effectively and efficiently the new legal framework, designed by political elites, is introduced and enforced. By contrast, the drift mode's bottom-up evolution of legal institutions presupposes a weaker dependence of the legal institutions' quality on the political dimension. We hence expect that

Hypothesis 3: The political dimension's positive impact on the quality of legal institutions and the overall legal institutional change is greater during path-breaking institutional change than in the drift phase.

Proposition 4: The ultimate extent of incongruence between the new legal institutions and the cultural and structural dimensions is more a function of the political dimension's quality in the countries changing institutional path than in the countries drifting along the established institutional path. Due to a top-down design of legal rules during path-break, the political dimension determines whether the new legal institutions reflect a consistent logic with that of economic structures and dominant cultural values. During the drift-phase, institutional change in contrast emerges from a society's social norms, customs, beliefs or traditions as a reaction to economic shifts or technological innovation, thereby limiting the political dimension's role in building a legal institutional framework. This enables greater independence of the new legal institutions' congruence with the cultural and structural dimension from political elites and political institutions. We hence anticipate that

Hypothesis 4: The political dimension's impact on the extent of incongruence between legal institutions and the cultural or structural dimensions is greater during path-breaking institutional change than in the drift phase.

Proposition 5: Since incongruence between legal institutions and cultural and structural dimensions are more likely to emerge during a path break, the need for reforms mitigating such incongruence's negative impact on economic growth is expected to be greater when a country changes its institutional path. By contrast, path-drift institutional reforms seldom require such adaptation measures, because their legal institutions usually emerge from existing economic structures and cultures. Since such adaptation measures or reforms are designed and implemented by the political dimension, we hypothesize that

Hypothesis 5: The incongruence's negative impact on growth rates is smaller when the political dimension is of better quality. This is even more so for path-breaking institutional change than for drift-phase institutional change.

Data and Method Description

To test our hypotheses, we rely on Eicher's and Leukert's (2009) approach of splitting the sample into subsamples. In forming our subsamples, we use the idea that path-breaking institutional change presupposes a profound transformation of the entire institutional framework resulted from a political regime change. To identify whether a country has experienced recent changes in its political regime, we use the POLITY IV Project's website (<http://www.systemicpeace.org/polity/polity4.htm>), which provides information about political regime characteristics and transitions between 1800 and 2015 with a polity score for a wide range of countries. The values of a country's annual polity score range from -10 to 10, with values 6 and above denoting full democracy and -6 and below denoting full autocracy. In our analysis, a country has experienced a political regime change if: (1) polity score values shifted from at least -6 or below to at least 6 and above; (2) this change is rapid and occurred within a few years; (3) this change occurred after 1980. Any earlier transition is expected to produce institutions that would adhere to the local structural and cultural characteristics through the learning process and eliminate any incongruence. In this case, the new formal institutions would follow a drift-phase path in their maturation process; (4) the change is stable with no signs of reverting to the previous regime in the following years; (5) there have not been persistent fluctuations in the regime trend of more than 3 points since 1980. Regime trend fluctuations denote political instability, which is a separate issue with respect to growth analysis and has both positive and negative effects on economic development (Jong-A-Pin, 2009).

Based on the polity score trends, we form two subsamples (see Appendix 1): path-breaking and path-drifting (due to space limits, we do not provide a country choice description but can send it upon

request). Our path-breaking subsample includes 51 countries that transitioned to a different political regime involving a radical change in political and economic rules. The selected countries are heterogeneous in their starting points. This does not contradict the purpose of our analysis since the quantitative impact of initial conditions on the selection of reforms and rates of economic growth is small and tends to rapidly decline over time (Berg, Borensztein, Sahay, & Zettelmeyer, 1999; Falcetti et al., 2000).

Our drift subsample is limited to 55 countries that have not experienced political regime change or have experienced profound but gradual change (each stage of change not being greater than a 3-point fluctuation in the polity score). These countries are also heterogeneous in their characteristics and include both democracies and autocracies, as well as developed and developing economies.

We are primarily interested in comparing how formal legal and political institutions impact economic growth for the two country groups: path drift versus path break. The quality of legal institutions is approximated through a contract enforcement and property rights protection index sourced from the Economic Freedom of the World online data (see <http://www.freetheworld.com/> for a detailed description of the index composition). The values vary from 1 (bad legal institutions) to 10 (good legal institutions). Formal institutions are considered to be good when they are clearly defined and well-enforced, which means that the institutional scores are closer to 10.

The political dimension's quality is measured through the control of corruption in government, government effectiveness, the quality of regulation, and voice and accountability. All political indexes are sourced from the World Bank Group database and vary from -2.5 (bad political situation) to 2.5 (ideal political situation). The four indexes are highly correlated, with the voice and accountability index showing the greatest uniqueness in its variance (due to space limits, we do not report factor loading and uniqueness variances but can send them upon request). We use this index to describe democratic settings' quality in a country and hence the quality of political institutions. The three remaining indexes are

combined by using the STATA *predict* option for factor analysis to construct a single measure approximating the quality of political elites and its policymaking.

In measuring the cultural dimension, we draw upon the idea that economic growth is sensitive to individualistic or collectivist cultures (Gorodnichenko & Roland, 2010). Individualism emphasizes personal freedom and achievement by awarding social status to personal accomplishments, such as important discoveries, innovations, etc., thereby promoting economic growth. Collectivism encourages conformity and discourages individuals from standing out (Gorodnichenko & Roland, 2011), which negatively impacts a country's growth rates. Since we do not have yearly data on individualism and collectivism, we link the culture to the concept of collective action: Individualism is expected to make collective action more difficult than collectivism, as individuals pursue their own goals without internalising collective interests (Gorodnichenko & Roland, 2011). As such, we use a centralized collective bargaining index to approximate how collectivist or individualistic a culture is. This index is sourced from the Economic Freedom of the World website (see <http://www.freetheworld.com/> for a detailed description of the index composition), with the values varying from 1 "more collectivist culture" to 10 "more individualistic culture".

We operationalize the structural dimension through the following set of Economic Freedom of the World index groups: private sector credit, capital controls, foreign ownership/investment restrictions, and starting a business (see <http://www.freetheworld.com/> for a detailed description of the index composition). By using the STATA *predict* option for factor analysis, we further combine the selected items into a single construct with values ranging between 0 "underdeveloped economic structure" and 1 "well-developed economic structure".

The legal institutional scores and the three dimensions' variables are rescaled to vary between 0 and 1. The variables' minimum and maximum values from the pooled sample are used as benchmarks for rescaling. Table 1 presents descriptive statistics for the key variables.

[insert Table 1 here]

To test our hypotheses empirically, we use the dynamic GMM method proposed by Arellano and Bond (Arellano & Bover, 1995; Blundell & Bond, 1998). The procedure for applying this technique is well-documented by Pääkkönen (2010) or Lee and Kim (2009). It requires that the equation is first-differenced to eliminate the heterogeneity in production function. Then, an instrumental variable method is applied on the differenced model, with lagged values of the endogenous variables used as instruments for the variables themselves. To avoid an overfitting bias, we often restrict instruments to only few lags of the respective variables. We further use the STATA *collapse* sub-option to create one instrument for each variable and lag distance rather than one for each time period, variable, and lag distance. We also add the sub-options *small* to request small-sample corrections to the covariance matrix estimate. We calculate a two step estimator instead of a one step. Additionally, we use the sub-option *noleveleq* that invokes difference instead of system GMM. To demonstrate the correctness of the model, we report the number of instruments generated by the model, the results from a *Hansen overidentification test*, and the *Arellano-Bond test for AR(2)* serial correlation in the residuals. STATA command *extabond2* is used for calculating the model parameters.

We utilize yearly data for the period from 1996 to 2014. We apply the same model to both subsamples while ensuring that a standard set of conditioning variables and standard periods are used. Our base growth model consists of two variables: investment and inflation. Investment is included, since it is the key predictor in the majority of growth models. Macroeconomic stability is, in turn, considered a precondition for economic recovery during transition to a new institutional path (Fischer, Sahay, & Vegh, 1996). Hence, the base model is:

$$\ln Y_{it} = \alpha \ln Y_{it-1} + \beta_1 \ln K_{it} + \beta_2 \ln MS_{it} + \varepsilon_{it} \quad (1)$$

Where Y_{it} is a measure of economic development limited to economic growth and operationalized through an annual real GDP growth rate, Y_{it-1} is one-period-lagged economic growth. K stands for the investment in physical capital measured through gross capital formation as a percentage of GDP. MS represents macroeconomic stability captured by annual consumer price inflation. The main source for the above variables is the World Bank electronic database.

We begin the analysis by calculating incongruence between legal institutions and the three dimensions as: $Distance = [(Dimensions' \text{ value} - Legal \text{ institutional index}) / Legal \text{ institutional index}]$. We further rescale their values to vary between 0 and 1.

The distance variables' impact on growth rates are modeled as:

$$\ln Y_{it} = \alpha \ln Y_{it-1} + \beta_1 \ln K_{it} + \beta_2 \ln MS_{it} + \beta_3 D_Culture_{it} + \beta_4 D_Structure_{it} + \beta_5 D_Politics_{it} + \varepsilon_{it} \quad (2)$$

Where $D_$ is a measure of the distance between the quality of a country's legal institutions and one of the three dimensions.

We further test the hypotheses about variations in the impact of legal and political scores on economic growth between the two subsamples. As such, we include formal legal institutions (LI) into the base model:

$$\ln Y_{it} = \alpha \ln Y_{it-1} + \beta_1 \ln K_{it} + \beta_2 \ln MS_{it} + \beta_3 LI_{it} + \varepsilon_{it} \quad (3)$$

Similarly, we include political dimension indexes (PI) into the base model:

$$\ln Y_{it} = \alpha \ln Y_{it-1} + \beta_1 \ln K_{it} + \beta_2 \ln MS_{it} + \beta_3 PI_{it} + \varepsilon_{it} \quad (4)$$

At this stage of the analysis, we are able to compare the coefficient estimates of the legal institutional variable, LI , and the political dimension variables, PI , between the path-drifting and path-breaking subsamples.

To explore how the political dimension impacts legal institutional change, we run the following model:

$$LI_change_{it} = \alpha LI_{it-1} + \rho_1 Life_expect_{it} + \rho_2 PI_{it} + \mu_{it} \quad (5)$$

Where LI_change stands for an annual change in the legal institutional index during the period analyzed and is calculated as $[(\text{Legal Institutional Index in year } t - \text{Legal Institutional Index in year } (t-1)) / \text{Legal Institutional Index in year } (t-1)]$. LI_{it-1} is a lagged value of the legal institutional index, PI is political dimension scores, and $Life_expect$ stands for life expectancy (as in Acemoglu, Johnson, & Robinson, 2001; Islam, 2004). Since formal institutions may influence the quality of life and impact life expectancy, we insert the life expectancy variable into the *gmmstyle* option and instrument it with the lagged values of the variable itself. We also use latitude as a strictly exogenous instrument and include it in the *ivstyle* option.

The political dimension's impact on the distance that the new legal institutions develop to the cultural and structural dimensions is modeled as:

$$D_variables_{it} = D_variables_{it-1} + \rho_1 Life_expect_{it} + \rho_2 PI_{it} + \mu_{it} \quad (6)$$

Where $D_variables$ are the distances that legal institutions develop to the cultural and structural dimensions. $D_variables_{it-1}$ is a lagged value of the distance variables, PI is political dimension indexes, and $Life_expect$ stands for life expectancy.

The political dimension's impact on the relationship between the distance variables and growth rates are modeled as:

$$\ln Y_{it} = \alpha \ln Y_{it-1} + \beta_1 \ln K_{it} + \beta_2 \ln MS_{it} + \beta_3 PI_{it} + \beta_4 D_Culture_{it} + \beta_5 D_Structure_{it} + \beta_6 PI * D_Culture_{it} + \beta_7 PI * D_Structure_{it} + \varepsilon_{it} \quad (7)$$

Where $PI * D_Culture$ and $PI * D_Structure$ are interaction terms between the political indexes and the distance that legal institutions develop to the culture or economic structure respectively. Other variables are as described above.

Empirical Results

Table 2 reports results supporting the key line of our argumentation (see hypothesis 1(a)) that the incongruence between legal institutions and the three dimensions depends on the mode of institutional change. The distance variables' values are significantly greater for the path-breaking subsample than for the path-drifting subsample. Table 3 demonstrates that any incongruence between legal institutions and the three dimensions is a negative factor of economic growth, and this is mainly so for the path-breaking countries. This is in line with hypothesis 1(b). When breaking into a new institutional path, a country's growth rates are highly sensitive to the distance that the new legal institutions develop to the quality of political elites. Also, incongruence between path-breaking legal institutions and the cultural dimension may considerably diminish economic growth rates. For path-drifting countries, the only danger to economic growth is when legal institutions veer away from existing cultural values.

[insert Table 2 and Table 3 here]

As expected, the impact of legal indexes on economic growth strongly varies between the path-drifting and path-breaking subsamples (see table 4). Legal institutions are instrumental to growth rates of economies in the drift phase, whereas this relationship is considerably weaker during a path break. This is consistent with hypothesis 1(c). These results stand up to the alternative model specification choices and to the exclusion of resource-rich countries from the analysis.

Our results reported in Tables 5 and 6 also point out to a variation in how the political dimension impacts economic growth between the two subsamples, supporting Hypothesis 2. Economies operating within a path-breaking institutional framework are more sensitive to the quality of their political elites, whereas the drift-sample economies need strong political institutions to grow faster. Note that in both subsamples, the political dimension's impact on growth rates is substantially greater than the legal

institutional scores' impact. The results also remain robust to alternative model specification choices or to the exclusion of resource rich countries from the subsamples.

[insert Table 4 and Table 5 and Table 6 here]

To disentangle the political dimension's role in fostering economic growth, we analyze the proposed three channels. First, our empirical results confirm hypothesis 3 that the path-breaking institutional grafting or change is sensitive to the political dimension's quality (see table 7). We do not find any positive relationship between the political dimension and legal institutional scores or their change for the drift sample. Rather, our results suggest that when countries drift along established institutional paths, a strong political dimension can constrain productive institutional development. Second, tables 8 and 9 provide support for hypothesis 4. The newly introduced legal institutions shift closer to the cultural and structural dimensions when the political dimension is stronger, especially in the path-breaking subsample. Third, table 10 suggests that even when distances between the new legal institutions and the two above dimensions persist, their negative impact on economic growth can be offset with a superior political dimension. The positive interaction terms support the rationale presented in hypothesis 5. Surprisingly, this positive interaction is stronger in the path-drifting than in the path-breaking subsample. Overall, this three channel analysis demonstrates that the political dimension should restrict its role when bottom-up institutional change evolves. When a country changes its institutional path, the political dimension essentially shapes the legal institutional change trajectory, the extent of incongruence between new legal institutions and existing cultures and economic structures, and how significantly this incongruence affects a country's economic growth patterns.

[insert Table 7 and Table 8 and Table 9 and Table 10 here]

Conclusion and Discussion

We demonstrate that drift-phase institutional change produces legal institutions that are congruent with the logic of this study's three dimensions: cultural, structural, and political. By contrast, path-breaking institutional change may lead institutions to develop large distances to these dimensions. Because of these distances, the quality of legal institutions might only marginally impact growth rates of economies moving to a new institutional path. Rather, a country's economic growth is strongly impacted by the quality of its political dimension, especially its political elites and their policymaking. Our analysis demonstrates that during a path break, the political dimension determines legal institutional change dynamics, the extent of incongruence between new legal institutions and the prevalent cultures and economic structures, and whether any incongruence influences economic growth rates during and after the transition to a new institutional path.

When legal institutions are created from the bottom up during a path drift, the political dimension in contrast has less impact on the country's economic development, while allowing the existence of a strong relationship between legal institutional scores and growth rates. Here, the political dimension's role is relatively passive and limited to ensuring good political institutions that can effectively capture and formalize informal changes promoted by economic agents. A strong political elite and their policymaking can harm drift-phase economies if they directly intervene in the institutional change process. They can only foster economic growth by mitigating the negative impacts of incongruence between legal institutions and cultural or economic structures, if such incongruence emerges.

Future research can eliminate two major limitations of our study. First, the analysis could integrate countries with unstable regime trends. Second, alternative economic development measures could demonstrate our findings' robustness regarding how the mode of institution building impacts economic progress throughout the world.

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Table 1. Descriptive Statistics for Key Variables Used in the Analysis.

VARIABLES	No. of observations	Mean	SD	Min.	Max.
The path-drifting subsample					
GDP per capita growth	947	2.363	4.590	-15.146	61.009
Legal institutions	659	0.672	0.161	0.116	0.962
The political dimension					
Political institutions	880	0.531	0.243	0.056	0.865
Political elites	880	0.500	0.198	0.098	0.819
The cultural dimension					
The structural dimension	608	0.613	0.164	0.183	0.883
Distance to the political dimension					
Distance to political institutions	527	0.507	0.207	0.000	1.000
Distance to political elites	614	0.472	0.175	0.025	0.975
Distance to the cultural dimension	608	0.193	0.054	0.013	0.294
Distance to the structural dimension	608	0.250	0.123	0.000	0.609
Gross capital formation	527	0.260	0.102	0.000	0.728
Inflation	910	24.514	13.808	7.869	219.069
Life expectancy	906	4.524	7.018	-4.479	128.419
Legal institutional change	990	72.624	8.953	36.000	84.000
Latitude	609	-0.003	0.071	-0.287	0.662
The path-breaking subsample					
GDP per capita growth	990	0.359	0.195	0.014	0.711
Legal institutions	898	3.389	4.696	-31.342	33.030
The political dimension					
Political institutions	650	0.502	0.119	0.139	0.758
Political elites	848	0.505	0.140	0.124	0.764
The cultural dimension					
The structural dimension	845	0.501	0.192	0.000	0.935
Distance to the political dimension	597	0.686	0.120	0.201	0.885
Distance to political institutions	528	0.503	0.190	0.048	1.000
Distance to political elites	611	0.583	0.133	0.158	1.000
Distance to the cultural dimension	609	0.272	0.095	0.000	0.484
Distance to the structural dimension	597	0.392	0.124	0.053	1.000
Gross capital formation	528	0.358	0.160	0.054	1.000
Inflation	876	23.895	8.906	0.293	74.822
Life expectancy	872	7.841	10.551	-35.837	121.608
Legal institutional change	933	67.401	9.316	36.000	82.000
Latitude	599	0.006	0.086	-0.393	0.456
	936	0.322	0.193	0.011	0.667

Note: The legal institutional scores, the three dimensions' measures and distance variables are rescaled to vary between 0 and 1.

Table 2. Mean Values for the Distance Variables, by Mode of Institutional Grafting.

VARIABLES	The path-drifting subsample	The path-breaking subsample	t-test for equality of means	
			Mean difference	Sig. (2-tailed)
Legal economic institutions	0.672	0.502	0.170	0.000
Distance to the political dimension				
Distance to political institutions	0.472	0.583	-0.111	0.000
Distance to political elites	0.193	0.272	-0.079	0.000
Distance to the cultural dimension	0.250	0.392	-0.142	0.000
Distance to the structural dimension	0.260	0.358	-0.098	0.000

Table 3. The Distance Variables' Impact on Economic Growth, by Mode of Institutional Grafting.

VARIABLES	The path-drifting subsample				The path-breaking subsample			
	(1)	(2)	(3)	(4)	(1)	(2)	(3)	(4)
Ln(Growth) _(t-1)	0.117* (0.061)	0.025 (0.069)	0.045* (0.023)	0.021 (0.026)	0.245*** (0.059)	0.281*** (0.070)	0.266*** (0.049)	0.212*** (0.033)
Ln(Capital)	0.301 (1.098)	1.953** (0.918)	0.118 (0.374)	0.871 (0.575)	-2.574*** (0.926)	-1.504 (0.920)	-1.361** (0.658)	-0.835* (0.439)
Ln(Inflation)	-0.124 (0.258)	-0.498*** (0.146)	-0.301*** (0.061)	-0.369*** (0.079)	-0.082 (0.095)	0.022 (0.082)	-0.068 (0.053)	0.071* (0.037)
Distance to the cultural dimension	-23.380*** (4.920)				-3.236*** (1.234)			
Distance to the structural dimension	6.118*** (1.374)				-1.314** (0.638)			
Distance to the political dimension								
Distance to political institutions					2.993*** (0.854)			
Distance to political elites					0.583 (2.479)			
<i>Number of instruments</i>	21	21	33	33	21	21	21	33
<i>Hansen test of overid. restrictions (Prob > chi2)</i>	0.141	0.180	0.262	0.215	0.356	0.156	0.162	0.185
<i>Arellano-Bond test for AR(2)(Pr > z)</i>	0.255	0.557	0.455	0.529	0.905	0.660	0.741	0.166
<i>Number of observations</i>	301	251	258	257	326	295	303	303
<i>Number of countries</i>	45	42	45	45	45	44	46	46

Note: Standard errors in parentheses. All the variables specified in the model are included in the gmmstyle option. For Model (1) and Model (2) instruments used are from the second to the sixth lags of the respective variables. For Model (3) and Model (4), instruments are extended to the ninth lags of the respective variables. In the case of the path-breaking subsample, we preserve the number of instruments from the second to the sixth lags of the respective variables for Model (3).

*p < .10, ** p < .05, *** p < .01.

Table 4. The Impact of Legal Institutions on Economic Growth, by Mode of Institutional Grafting.

VARIABLES	The path-drifting subsample				The path-breaking subsample			
	(1)	(2)	(3)	(4)	(1)	(2)	(3)	(4)
Ln(Growth) _(t-1)	-0.067*** (0.017)	-0.066* (0.037)	-0.092*** (0.028)	-0.041 (0.028)	0.201*** (0.024)	0.346*** (0.046)	0.270*** (0.029)	0.326*** (0.039)
Ln(Capital)	2.270*** (0.337)	2.004*** (0.714)	2.498*** (0.379)	1.266*** (0.354)	-0.402*** (0.146)	-2.027*** (0.605)	-1.644*** (0.324)	-2.473*** (0.623)
Ln(Inflation)	-0.412*** (0.042)	-0.540*** (0.128)	-0.360*** (0.063)	-0.641*** (0.096)	0.017 (0.021)	-0.001 (0.051)	0.004 (0.034)	-0.040 (0.048)
Legal institutions	5.958*** (0.721)	8.620*** (1.263)	8.440*** (0.714)	10.440*** (0.661)	3.518*** (0.411)	5.128*** (1.130)	4.182*** (0.744)	4.629*** (1.058)
<i>Number of instruments</i>	42	29	37	29	42	29	37	29
<i>Hansen test of overid. restrictions (Prob > chi2)</i>	0.323	0.122	0.287	0.259	0.236	0.150	0.387	0.134
<i>Arellano-Bond test for AR(2)(Pr > z)</i>	0.890	0.742	0.838	0.798	0.379	0.977	0.689	0.655
<i>Number of observations</i>	315	315	315	242	340	340	340	310
<i>Number of countries</i>	45	45	45	33	46	46	46	42

Note: Standard errors in parentheses. All the variables specified in the model are included in the gmmstyle option. Model (1): Instruments are from the second to the eighth lags of the respective variables. The collapse sub-option is included. Time dummies appear in the ivstyle option; Model (2): Time dummies are omitted; Model (3): An alternative model specification choice is used such as restricting instruments from the second to the tenth lags of the respective variables; Model (4): Resource rich countries are excluded from the analysis. To keep the number of instruments less than the number of countries, we use the specification choice from Model (2) for calculating the model's parameters.

* p < .10, ** p < .05, *** p < .01.

Table 5. The Impact of Political Institutions' Quality on Economic Growth, by Mode of Institutional Grafting.

VARIABLES	The path-drifting subsample				The path-breaking subsample			
	(1)	(2)	(3)	(4)	(1)	(2)	(3)	(4)
Ln(Growth) _(t-1)	0.019 (0.039)	-0.001 (0.031)	0.007 (0.025)	0.037** (0.017)	0.328*** (0.034)	0.280*** (0.031)	0.251*** (0.020)	0.278*** (0.029)
Ln(Capital)	1.428*** (0.525)	1.051*** (0.337)	0.991*** (0.210)	0.987*** (0.207)	-0.813 (0.605)	0.195 (0.332)	0.204 (0.138)	-0.155 (0.273)
Ln(Inflation)	-0.457*** (0.159)	-0.081 (0.074)	-0.075 (0.052)	0.056** (0.023)	0.017 (0.069)	0.026 (0.049)	0.093*** (0.026)	0.044 (0.042)
Political institutions	11.012*** (2.854)	10.590*** (1.513)	9.382*** (1.089)	8.399*** (0.906)	7.179* (3.718)	-0.305 (2.721)	0.033 (2.298)	-2.029 (2.367)
<i>Number of instruments</i>	25	33	41	33	25	33	41	33
<i>Hansen test of overid. restrictions (Prob > chi2)</i>	0.117	0.123	0.273	0.400	0.104	0.113	0.164	0.215
<i>Arellano-Bond test for AR(2)(Pr > z)</i>	0.445	0.271	0.316	0.227	0.273	0.235	0.152	0.150
<i>Number of observations</i>	320	320	320	235	357	357	357	329
<i>Number of countries</i>	51	51	51	36	49	49	49	45

Note: Standard errors in parentheses. Column (1): All the variables specified in the model are included in the gmmstyle option. Instruments used are from the second to the seventh lags of the respective variables. The collapse sub-option is specified; Column (2): Additionally, time dummies appear in the ivstyle option. Instruments are reduced to the sixth lags of the respective variables; Column (3): An alternative model specification choice is applied such as using the instruments from the second to the eighth lags of the respective variables; Column (4): Resource rich countries are omitted from the analysis, the specification choice from Model (2) is applied with instruments reduced to the sixth lags of the respective variables.

* p < .10, ** p < .05, *** p < .01.

Table 6. The Impact of Political Elites' Quality on Economic Growth, by Mode of Institutional Grafting.

VARIABLES	The path-drifting subsample				The path-breaking subsample			
	(1)	(2)	(3)	(4)	(1)	(2)	(3)	(4)
Ln(Growth) _(t-1)	-0.484** (0.197)	-0.025 (0.010)	-0.100*** (0.020)	-0.307*** (0.056)	-0.181 (0.158)	-0.060** (0.030)	-0.211*** (0.030)	-0.309*** (0.027)
Ln(Capital)	1.595 (1.652)	1.109*** (0.304)	0.401** (0.185)	0.467 (0.434)	2.015 (2.755)	1.119*** (0.128)	1.055*** (0.154)	0.639*** (0.137)
Ln(Inflation)	0.352** (0.146)	0.160*** (0.018)	0.176*** (0.017)	0.080** (0.031)	0.477*** (0.141)	0.261*** (0.026)	0.141*** (0.044)	0.173*** (0.039)
Political elites	-9.616 (5.961)	-1.558** (0.653)	-2.144*** (0.318)	-1.631 (2.626)	13.460* (7.484)	8.010*** (0.549)	9.403*** (0.887)	10.037*** (0.777)
<i>Number of instruments</i>	13	45	35	35	13	46	35	35
<i>Hansen test of overid. restrictions</i> (Prob > chi2)	0.518	0.968	0.701	0.998	0.621	0.794	0.354	0.547
<i>Arellano-Bond test for AR(2)(Pr > z)</i>	0.040	0.297	0.122	0.107	0.945	0.239	0.128	0.118
<i>Number of observations</i>	320	320	320	235	357	357	357	329
<i>Number of countries</i>	51	51	51	36	49	49	49	45

Note: Standard errors in parentheses. Column (1): All the variables specified in the model are included in the gmmstyle option. Instruments are restricted to the thirteenth, fourteenth, and fifteenth lags of the respective variables. The collapse sub-option is included; Column (2): An alternative model specification choice is applied such as omitting the collapse sub-option; Column (3): Alternatively, we increase instruments to the fourteenth, fifteenth and sixteenth lags of the respective variables and omit the collapse sub-option; Column (4): Resource rich countries are omitted from the analysis.

* p < .10, ** p < .05, *** p < .01.

Table 7. The Political Dimension's Impact on Legal Institutional Grafting, by Mode of Institutional Grafting.

VARIABLES	The path-drifting subsample				The path-breaking subsample			
	Legal Institutional Scores (1)	Legal Institutional Scores (2)	Legal Institutional Change (3)	Legal Institutional Change (4)	Legal Institutional Scores (1)	Legal Institutional Scores (2)	Legal Institutional Change (3)	Legal Institutional Change (4)
Legal Institutions _(t-1)	0.638*** (0.031)	0.670*** (0.039)	-0.741*** (0.030)	-0.625*** (0.027)	0.449*** (0.040)	0.478*** (0.046)	-1.386*** (0.055)	-1.398*** (0.075)
Life expectancy	0.003*** (0.001)	0.003*** (0.001)	0.004*** (0.001)	0.003*** (0.001)	0.005*** (0.001)	0.003*** (0.001)	0.010*** (0.001)	0.007*** (0.001)
The political dimension								
Political institutions	0.027 (0.066)		-0.096*** (0.022)		0.560*** (0.054)		1.302*** (0.108)	
Political elites		-0.002 (0.135)		-0.528*** (0.053)		0.106** (0.054)		0.297*** (0.074)
<i>Number of instruments</i>	33	33	43	43	33	33	43	43
<i>Hansen test of overid. restrictions (Prob > chi2)</i>	0.128	0.116	0.272	0.267	0.133	0.139	0.309	0.253
<i>Arellano-Bond test for AR(2)(Pr > z)</i>	0.358	0.358	0.722	0.714	0.243	0.583	0.951	0.683
<i>Number of observations</i>	515	515	515	515	492	492	492	492
<i>Number of countries</i>	49	49	49	49	48	48	48	48

Note: Standard errors in parentheses. All the variables specified in the model are included in the gmmstyle option. Time dummies appear in the ivstyle option. The ivstyle option also contains the latitude variable that is considered strictly exogenous. Instruments used are from the fifth to the eleventh lags of the respective variables for Model (1) and Model (2) and from the fifth to the twelfth lags of the respective variables for Model (3) and Model (4).

* p < .10, ** p < .05, *** p < .01.

Table 8. The Political Dimension's Impact on the Distance Variables, the Path-Drifting Sub-Sample.

VARIABLES	Distance to the cultural dimension		Distance to the structural dimension		Distance to political institutions	Distance to political elites
	(1)	(2)	(3)	(4)	(5)	(6)
Distance to the cultural dimension _(t-1)	0.541*** (0.012)	0.573*** (0.021)				
Distance to the structural dimension _(t-1)			0.392*** (0.012)	0.318*** (0.016)		
Distance to political institutions _(t-1)					0.659*** (0.066)	
Distance to political elites _(t-1)						-0.104*** (0.038)
Ln(Capital)	-0.074*** (0.006)	-0.079*** (0.005)	0.279*** (0.015)	0.303*** (0.015)	-0.146*** (0.028)	-0.054*** (0.013)
Ln(Inflation)	0.003*** (0.001)	0.004*** (0.001)	-0.014*** (0.001)	-0.012*** (0.001)	0.009*** (0.003)	0.002** (0.001)
The political dimension						
Political institutions	0.250*** (0.024)		0.392*** (0.030)			0.376*** (0.034)
Political elites		0.018 (0.058)		1.076*** (0.059)	1.351*** (0.205)	
<i>Number of instruments</i>	44	44	42	42	31	31
<i>Hansen test of overid. restrictions (Prob > chi2)</i>	0.422	0.308	0.334	0.398	0.157	0.210
<i>Arellano-Bond test for AR(2)(Pr > z)</i>	0.371	0.410	0.104	0.105	0.596	0.263
<i>Number of observations</i>	419	419	353	353	404	400
<i>Number of countries</i>	45	45	43	43	47	47

Note: Standard errors in parentheses. All the variables specified in the model are included in the gmmstyle option. Time dummies appear in the ivstyle option. Instruments used are as follows. In Model (1) and Model (2), instruments are from the second to the ninth lags of the respective variables. In Model (3) and Model (4), instruments are from the seventh to the fourteenth lags of the respective variables. In Model (5) and Model (6), instruments are from the fourth to the eighth lags of the respective variables.

* p < .10, ** p < .05, *** p < .01.

Table 9. The Political Dimension's Impact on the Distance Variables, the Path-Breaking Sub-Sample.

VARIABLES	Distance to the cultural dimension		Distance to the structural dimension		Distance to political institutions	Distance to political elites
	(1)	(2)	(3)	(4)	(5)	(6)
Distance to the cultural dimension _(t-1)	0.716*** (0.018)	0.704*** (0.018)				
Distance to the structural dimension _(t-1)			0.368*** (0.024)	0.317*** (0.019)		
Distance to political institutions _(t-1)					0.476*** (0.039)	
Distance to political elites _(t-1)						0.339*** (0.056)
Ln(Capital)	-0.005 (0.007)	-0.006 (0.008)	0.024 (0.022)	-0.048*** (0.019)	-0.053*** (0.011)	-0.014 (0.012)
Ln(Inflation)	-0.001 (0.001)	-0.001 (0.001)	0.004 (0.004)	0.012*** (0.003)	0.000 (0.003)	-0.001 (0.002)
The political dimension						
Political institutions	-0.164** (0.073)		1.837*** (0.361)			-0.560*** (0.156)
Political elites		-0.236*** (0.040)		-1.706*** (0.273)	-0.325*** (0.109)	
<i>Number of instruments</i>	44	44	32	32	31	31
<i>Hansen test of overid. restrictions (Prob > chi2)</i>	0.361	0.390	0.123	0.229	0.179	0.268
<i>Arellano-Bond test for AR(2)(Pr > z)</i>	0.507	0.501	0.211	0.155	0.122	0.341
<i>Number of observations</i>	428	428	378	378	416	416
<i>Number of countries</i>	45	45	44	44	46	46

Note: Standard errors in parentheses. All the variables specified in the model are included in the gmmstyle option. Time dummies appear in the ivstyle option. Instruments used are as follows. In Model (1) and Model (2), instruments are from the second to the ninth lags of the respective variables. In Model (3) and Model (4), instruments are from the first to the fifth lags of the respective variables. In Model (5) and Model (6), instruments are from the fourth to the eighth lags of the respective variables.

* p < .10, ** p < .05, *** p < .01.

Table 10. Interactions between the Political dimension and Distances in their Impact on Economic Growth, by Mode of Institutional Grafting.

VARIABLES	The path-drifting subsample				The path-breaking subsample			
	(1)	(2)	(3)	(4)	(1)	(2)	(3)	(4)
Ln(Growth) _(t-1)	-0.059*** (0.009)	-0.099*** (0.029)	0.067*** (0.012)	0.116*** (0.027)	0.276*** (0.023)	0.236*** (0.028)	0.240*** (0.019)	0.298*** (0.030)
Ln(Capital)	1.372*** (0.220)	1.146*** (0.315)	0.438*** (0.098)	0.754*** (0.289)	0.497** (0.228)	0.324** (0.158)	1.021*** (0.107)	0.457* (0.272)
Ln(Inflation)	-0.291*** (0.062)	-0.279*** (0.067)	0.004 (0.047)	-0.039 (0.073)	0.009 (0.028)	0.092*** (0.032)	-0.048 (0.036)	-0.062 (0.055)
Distance to the cultural dimension	-26.240*** (3.785)	-33.770*** (5.046)			-3.895** (1.652)	-4.231** (1.932)		
Distance to the structural dimension			-5.058* (2.945)	-24.780*** (3.337)			-7.265*** (1.223)	-7.967*** (2.132)
Political institutions	-2.497** (1.101)		-4.384** (2.039)		1.765 (2.567)		-0.846 (1.572)	
Political elites		-21.620*** (4.561)		-39.840*** (5.430)		-10.710*** (2.420)		-11.760*** (2.426)
Distance to culture X X Political institutions	46.690*** (6.612)				11.550*** (2.863)			
Distance to culture X X Political elites		71.560*** (10.920)				11.490*** (3.457)		
Distance to structure X X Political institutions			23.050*** (5.037)				18.670*** (1.982)	
Distance to structure X X Political elites				75.870*** (7.282)				21.060*** (3.598)
<i>Number of instruments</i>	43	43	43	37	43	43	43	37
<i>Hansen test of overid. restrictions</i>	0.357	0.312	0.465	0.493	0.251	0.231	0.368	0.245
<i>Arellano-Bond test for AR(2)(Pr > z)</i>	0.483	0.819	0.376	0.505	0.306	0.251	0.214	0.431
<i>Number of observations</i>	252	252	211	211	294	294	267	267
<i>Number of countries</i>	45	45	45	45	44	44	44	44

Note: Standard errors in parentheses. All the variables specified in the model are included in the gmmstyle option. Instruments used are from the second to the eighth lags of the respective variables. The collapse sub-option is included.

* p < .10, ** p < .05, *** p < .01.

Appendix 1. List of Countries Used in the Analysis.

The path-drift subsample		The path-breaking subsample	
Australia	Laos PDR	Albania	Lesotho
Austria	Luxembourg	Argentina	Liberia
Bahrain	Mauritius	Armenia	Lithuania
Belgium	Mexico	Bangladesh	Macedonia
Botswana	Morocco	Benin	Madagascar
Cameroon	Netherlands, the	Bhutan	Malawi
Canada	New Zealand	Bolivia	Mali
China	Norway	Brazil	Moldova
Colombia	Oman	Bulgaria	Mongolia
Costa Rica	Papua New Guinea	Burundi	Mozambique
Cyprus	Portugal	Cabo Verde	Nicaragua
Denmark	Rwanda	Chile	Panama
Djibouti	Saudi Arabia	Congo, Dem. Rep.	Paraguay
Dominican Republic	Singapore	Croatia	Philippines
Egypt	Sri Lanka	Czech Republic	Poland
Equatorial Guinea	Swaziland	El Salvador	Romania
Finland	Sweden	Estonia	Russia
France	Switzerland	Georgia	Serbia
Germany	Syria	Guatemala	Sierra Leone
Greece	Trinidad & Tobago	Guyana	Slovak Rep.
Guinea	Tunisia	Hungary	Slovenia
India	Turkmenistan	Indonesia	Taiwan
Ireland	United Arab Emirates	Kenya	Ukraine
Israel	United Kingdom, the	Korea South	Uruguay
Italy	United States, the	Kyrgyzstan	Zambia
Jamaica	Uzbekistan	Latvia	
Japan	Vietnam		
Kazakhstan			

Note: Some of these countries lack data on institutional or political indexes, which results in a smaller number of countries actually used in each type of analysis.