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Chapter

Why Coevolution of Culture and Institutions Matters for Economic Development and Growth?

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Abstract

Theoretical considerations that choose to make reference to the institutional and cultural considerations presuppose that these are in an optimal form. However, this is not the case in the real world. This chapter argues that the coevolution requirements of institutional and culture change are critical for economic outcomes. When institutions and culture coevolve in an optimal pattern, economic development and growth are facilitated. In contrast, when institutions and culture deviate from the optimal pace of coevolution, incompatible alterations of institutions and culture may end up causing an inability of the policy designers to implement the required changes in institutions and/or cultural behaviors. The result can be a series of failing attempts to implement a modernized progrowth framework of institutional settings and cultural behaviors. Using a dataset of 80 countries for the period 1981–2019, the analysis concludes that institutions and culture are complements—and not substitutes—in terms of their role in economic development, as when both sizes are strong it leads to higher levels of GDP per capita. When either or both of them are at a weak level, economic development is much lower.

Keywords: culture, institutions, economic development, economic growth, coevolution

1. Introduction

Many studies and empirical works have come to conclusions about the important role of the institutional and/or cultural background in economic development and growth. Theoretical constructs that choose to refer to the institutional and cultural background presuppose that both of these backgrounds are in optimal form. However, this is not the case in the real world.

The requirements regarding the coevolution of the institutional and cultural background are crucial to the development process of an economy. When institutions and culture coevolve in an optimal pattern, economic growth is facilitated. In contrast, when institutions and culture deviate from the optimal pace of coevolution, incompatible alterations of institutions and culture may end up causing an inability of the policy designers to implement the required changes in institutions and/or cultural behaviors. The result can be a series of failed attempts to implement a modernized development framework for the institutional and cultural background of societies, leading to the perpetuation of stagnated growth prototypes.

A stagnated growth prototype can be transformed into a progrowth one by introducing ambitious institutional and cultural alterations through structural reforms. These reforms require the optimal coevolution of institutions and culture. However, the process of the reorganization of the institutional background and the change of culture can be seriously interrupted by the so-called coevolution requirements of institutions and cultural background. In fact, the evolution of institutions and culture can be toward the same direction but may not coincide time-wise. Then, the prevailing cultural background, which has not been altered yet, could work as a brake to the new institutional setting or vice versa. Therefore, the implementation of structural reforms can fail, given that institutional and cultural behaviors can be incompatible.

The purpose of this chapter is to highlight the problems arising from the asynchronous change of the institutional and cultural background for the economic development and growth. In that way, the aim is to highlight the interconnection between the institutional and cultural background and how this interconnection affects the economies. In other words, the chapter aims to show whether the institutional and cultural background functions in a complementary or substitutive way in their role in economic development, contributing to the debate on whether or not they coevolve. The analysis is based on a sample of 80 countries for the period from 1981 to 2019.

The structure of the chapter is as follows: In Section 2, the coevolution of institutions and cultural requirements is presented. In Section 3, why institutions and culture usually lead to stagnated growth prototypes is presented. In Section 4, a descriptive analysis on culture is presented and institutions are complements or substitutes, while Section 5 analyses the fact that structural reforms that promote growth need institutional and cultural changes that also promote growth. Finally, the chapter ends with the conclusions.

2. The coevolution of institutions and culture

In general, the problem of coevolution in a system, the subparts of which evolve at a different pace, creates imbalances and failures in its effective operation. The evolution of institutions and culture does not always present a compatible path of evolution leading to conflicts when institutions and culture do not match. The issue under investigation has a time dimension, but usually it has a qualitative nature as well. In other words, institutions may change at the same direction with the cultural background, but these changes may not be compatible as far as the end result is concerned.

Thus, incompatibility may arise because either the institutions may change but not the cultural background or the cultural behaviors may change but the institution changes do not follow. In addition, incompatibility may appear because both concepts may evolve but their stationary equilibrium is not characterized by the optimum supplementary combination of institutions and cultural behavior matching.

But there is an even worse situation of incompatibility. This is when a change in institutions may appear and the noncompatible cultural behaviors would act to oppose and cancel these changes and vice versa. This is a very probable situation, which can arise after the implementation of an institutional structural reform, which we usually expect to be enforced and have fruitful results on growth in short- or medium-term horizon, but the prevailing cultural behaviors may sterilize those reforms.

On the one hand, the cultural background is usually a slow-moving structure, which evolves in the long and the very long run (sometimes it can take more than 100 years to change). Globalization effects and other megatrends (e.g., the aging) may lead to incremental changes of the cultural background. Norris and Inglehart [1] conclude to the cultural backlash hypothesis in the sense that factors such as generational substitution, increased access to higher education, urbanization, increased gender equality, and increased ethnic diversity have led to cultural background changes in the last decades in the high developed world. Moreover, there may exist several external shocks (like an economic crisis) or migration shocks that can change the cultural background even in the short run [2, 3].

On the other hand, institutions can change at different speeds too. Institutions can be divided into two categories, based on the speed of their evolution: fast-moving institutions (such as political institutions), which can change overnight, either through a legislative intervention or after revolutionary moments; and slow-moving institutions (such as the property rights, cooperation procedures, etc.), which need a long period of time through a gradual and constant process of evolution [4]. A basic question raised is why countries with ineffective institutions do not "copy" the institutions of developed countries [5]. The answer lies in the fact that institutions do not change easily; it takes 10–100 years for formal institutions and 100–1000 years for informal in order to be changed [6]. Thus, the political leadership usually finds it very difficult to innate a similar process of structural reform.

In this way, during the process of their evolution, a vicious cycle of interaction between the institutions and culture can be created. If the two concepts could change at the same rate, that is, when there is coevolution, then the economy could approach a new point of equilibrium, enhancing the efficiency of the economic system.

The relevant literature on the coevolution of institutions and culture focuses on the hypothesis of the natural selection of the institutions [7–11]. According to that, some institutional and behavioral traits might give competitive advantage to individuals or populations within their local environment [12]. Nevertheless, gaining an understanding of the way in which institutions and culture interact is not an easy task, due to the endogenous character of their evolution [13, 14].

Samuel Bowles' contribution to the field of coevolution process [8–10, 15–17] focuses on the impact of the institutions on human behavior through the ways in which particular institutional settings prompt individuals to draw one or another response from their varied behavioral repertoires. Furthermore, the structure of social interactions, both within and between groups, affects the pace and direction of cultural evolution, the economic institutions and policies that influence ingroup-outgroup relationships, and other aspects of preferences, casting doubt on the economists' canonical premise that preferences are exogenous [18]. In addition, some institutions may reduce the variance of reproductive success within groups and, thus, weaken the force of selection on the level of individuals [8]. The emergence of these institutions depends on the existence of such group-beneficial traits and these in turn may only be able to proliferate if these institutions are in place.

According to Veblen [19], institutions shall be understood as the rules, habits, and other culturally transmitted norms that individuals follow when interacting with each other [20]. He shows that evolution may also create institutions that are complementary to the mate choice based on genetically fixed preferences, which can be interpreted as genetically coded information processing. The evolutionary theory of institutional change of [19] centers on the notion of "habits of thought,", where habits are viewed as durable and adaptable—in the long run—propensities on how to think and act. Because these habits reside within individuals,

institutional change involves the simultaneous coevolution of both shared prevalent habits of thought (institutions) and the habits of individuals [21]. Endogenous interactions among institutions and culture, and their coevolution are important during economic evolution [13].

However, we do not have adequate critical information on how economic institutions may impact on culture, due to the fact that we know very little about the process of cultural transmission, which means that we do not have adequate information on who acquires what trait from whom, under what conditions, why, how, and how persistent the traits may be once the initiating environment is withdrawn [22]. Furthermore, there is no strong evidence on how culture and institutions evolve over time and whether they mutually reinforce each other or whether one is a precursor to the other [23]. Thus, the question is posed on whether culture and institutions coevolve or they proceed independently or causality is unidirectional.

Bisin and Verdier [24] claim that culture and institutions jointly evolve and interact, and focus on the process as determined by the interaction and not on the cause of the interaction. They define the cultural (or institutional) multiplier as the ratio of the total effect of institutional (or cultural) change on economic prosperity divided by the direct effect, that is, the counterfactual effect that would have occurred had the distribution of cultural traits in the population (or the institutions) remained constant after the institutional (or cultural) change. In that way, they contribute to the analysis of whether culture and institutions coevolve or their change is incompatible in time and quality considerations.

In sum, the coevolution process of institutions and culture is the product of complex interactions between human behavior, preferences, economic performance, and time. How and in which speed the institutions change vis-à-vis the cultural background-and vice versa-is particularly important, as coevolution affects the effectiveness of the growth model, since different degrees of compatibility can be observed.

3. The role of institutions and culture in stagnated growth prototypes

The existence of an optimum structure of institutions that is associated with an optimal nexus of cultural values can exist at the theoretical level for the sake of simplifying reality and for improving the analytical tools of comprehension. Thus, in real economy, "stagnated growth prototypes" are created since usually the institutions and culture that prevail interrupt the process of economic development and growth and could be characterized as idiosyncratic [25]. The prevalence of a stagnated growth prototype has crystal-clear effects on the mode of operation of the economies, the most important one being the increase in the level of insecurity and the inefficient allocation of resources. Thus, an optimal growth pattern often cannot be encountered, as the existence of idiosyncratic institutions is one of the most significant reasons for the deviation from the optimal pattern [25].

For instance, a stagnated growth prototype could be described as following[1] [25]: (a) Existence of extractive institutions [26]. The economies that are dominated by extractive institutions are characterized by the absence of established relations between the members of the economic system. This results in the emergence of conditions that favor factors that enhance the existence of idiosyncratic institutions. Factors that enhance the creation of idiosyncratic institutions (hierarchies and high transaction costs) are coordination failures, asymmetries of

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[1] It is not the only possible form of deviation from optimality but we chose to concentrate on that due to the fact that it could describe better an emerging economy that faces a long period of stagnation.

information, evolution path dependence, and rent-seeking activities, which all lead to the appearance of high systematic risk. (b) Existence of specific characteristics that act in a peculiar manner, shaping human behavior and preferences. This could be the case when there exist idiosyncratic cultural values like uncertainty avoidance behaviors, in-group collectivism, high time discount preferences, and lack of trust, as well as nondiversified investment attitudes [27, 28] and loss aversion behaviors [29–31].

There is a two-sided effect between idiosyncratic institutions and idiosyncratic cultural background described above, since the existence of idiosyncratic institutions can lead to the formation of an idiosyncratic cultural background and vice versa. This interrelationship perpetuates the existence of idiosyncratic institutions and cultural characteristics. Thus, a stagnated growth prototype is generated and prevails. This stagnated growth prototype has no endogenous energy to break the barriers to growth. Stagnated institutions always affect culture and vice versa, through the coevolution pattern that they follow and that has a long lasting ability to survive. When a stagnated growth prototype is prevailing in an economy, it can experience long periods of stagnation or periods near stagnation. These periods usually can be interrupted only by large waves of foreign incoming capital, which usually take the form of a very large public or private investments in specific sectors.

4. Culture and institutions: complements or substitutes?

In this section, we try to examine whether the cultural and the institutional background of the societies and the economies are characterized as substitutes or complemented issues in relation to their effects on economic development. To achieve the objectives of the chapter, a dataset of 80 countries[2] is used for the period of 1981–2019.

Initially, as a measure of economic development, GDP per capita (purchasing power parity; 2011 international dollars) is used derived from the World Economic Outlook (WEO) database of the International Monetary Fund (IMF).

To measure the cultural background, the present chapter makes a selective selection of seven cultural values that express the cultural background of the societies that make up the sample under analysis, based on relevant studies in the literature [2, 32–34]. The data contributing to the cultural background were compiled from the World Values Survey (WVS) and supplemented by data from the European Values Study (EVS) for corresponding questions, on the following waves: 1981–1984, 1990–1994, 1995–1998, 1999–2004, 2005–2009, 2010–2014, and 2017–2019.

Specifically, for the measurement of the cultural background, an overall measure was used that emerges as the first principal component of a principal component analysis (PCA) for the following seven cultural values: generalized trust, control of life, respect, independence, honesty, competition affinity, and

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[2] The countries used in the analysis are the following: Albania, Algeria, Argentina, Armenia, Australia, Azerbaijan, Bangladesh, Belarus, Bosnia and Herzegovina, Brazil, Bulgaria, Burkina Faso, Canada, Chile, China, Colombia, Croatia, Cyprus, Czech Republic, Dominican Republic, Ecuador, Egypt, Estonia, Ethiopia, Finland, France, Georgia, Germany, Ghana, Haiti, Hong Kong, Hungary, India, Indonesia, Iran (Islamic Republic of), Italy, Japan, Jordan, Kazakhstan, Republic of Korea, Kuwait, Kyrgyzstan, Latvia, Lebanon, Libya, Lithuania, Malaysia, Mali, Mexico, Republic of Moldova, Morocco, Netherlands, New Zealand, Nigeria, Norway, Pakistan, Peru, Philippines, Poland, Romania, Russian Federation, Rwanda, Serbia, Slovakia, Slovenia, South Africa, Spain, Sweden, Switzerland, Thailand, Tunisia, Turkey, Ukraine, United States, Uruguay, Venezuela, Vietnam, Yemen, Zambia, Zimbabwe.

work ethic. The cultural values of honesty, competition affinity, and work ethic result again as the primary components from specific PCAs—using queries selected by WVS and EVS to express each value. The way generalized trust, control of life, independence, honesty, competition affinity, and work ethic are calculated is described in [2], while for the variable respect in [33]. The first principal component that emerges for the overall measurement of the cultural background follows a normalization on a scale of 0–10 (according to [35]), with 0 signaling a weak cultural background and 10 signaling a strong cultural background.

To measure institutional background, the World Economic Freedom Index is used as reported by the Fraser Institute [36]. The construction of the index is based on 42 subindices and is set on a scale of 0–10, with 10 representing the best performance and 0 the worst performance. Despite the availability of alternative indicators to reflect the institutional background of economies (such as the Heritage Foundation's financial freedom index and the protection against the risk of expropriation of the ICRG), the Fraser Institute Index is used as the most appropriate because of the long period under study as well as due to the sample size of the countries covered by this indicator. The degree of economic freedom, based on this indicator, is calculated on the basis of the institutions and policies applied by each country in five areas: size of state, rule of law, access to a strong currency, freedom of international trade, and regulatory environment in bank credit, employment, and entrepreneurship.

Authoritative research has consistently confirmed that people living in countries with a high degree of economic freedom enjoy a higher level of prosperity, have wider political and social rights, and present longer life expectancy. Hall and Lawson [37] conduct a literature review using the Fraser Financial Freedom Index. They result in 402 articles using this index, 198 of them using it as an independent variable. They note that 134 of these 198 articles conclude that financial freedom leads to faster economic development and growth, better living standards, higher levels of happiness, etc., while only 8 articles conclude that financial freedom has a negative impact to economic growth through increasing economic inequalities. Williamson et al. [35, 38–40]—among others—use the Fraser Financial Freedom Index as a measure of the quality of the institutional background. They note that this is a comprehensive measure that includes the factors that historically economists have found to be significantly related to economic development and growth.

The foundation of the relationship between the cultural and institutional background and their relation to GDP per capita of the economies is outlined in a four-quadrant scatter plot, as shown in **Figure 1**.

The first quadrant (A) brings together countries with strong institutional and weak cultural backgrounds, the second quadrant (B) countries with strong institutional and cultural backgrounds, the third quadrant (C) countries with weak institutional and cultural backgrounds, and the fourth quadrant (D) countries with weak institutional and strong cultural backgrounds.

For each country included in the sample, its average values for the cultural background, institutional background, and GDP per capita are calculated for the entire analysis period, so that for each country, there is one value for each variable. Following the methodology of [41], countries with a strong cultural background/institutional background are those with scores above 7, while those with a weak cultural background/institutional background are those with score below 6.

Figure 2 illustrates in a descriptive way the relationship between cultural and institutional background and their relation to the level of economic development. Countries in quadrants (A) and (B) clearly outperform those countries in quadrants (C) and (D), as they have a stronger institutional background. Moreover, countries
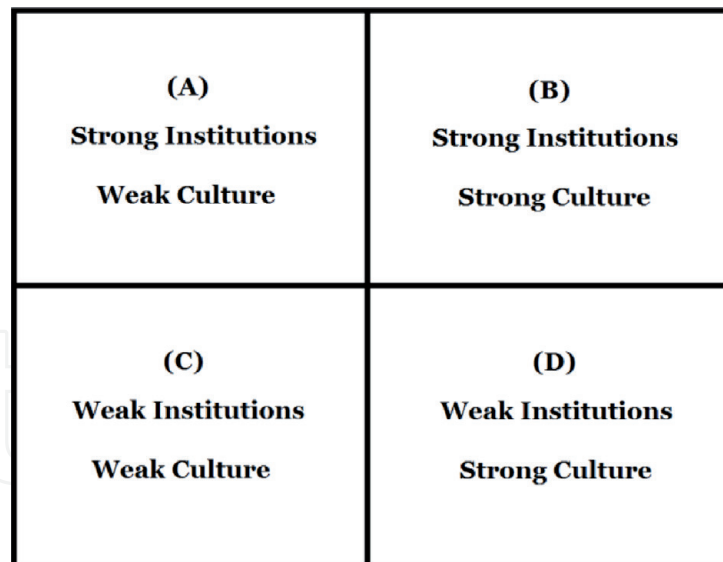
(A) **Strong Institutions** **Weak Culture**	(B) **Strong Institutions** **Strong Culture**
(C) **Weak Institutions** **Weak Culture**	(D) **Weak Institutions** **Strong Culture**

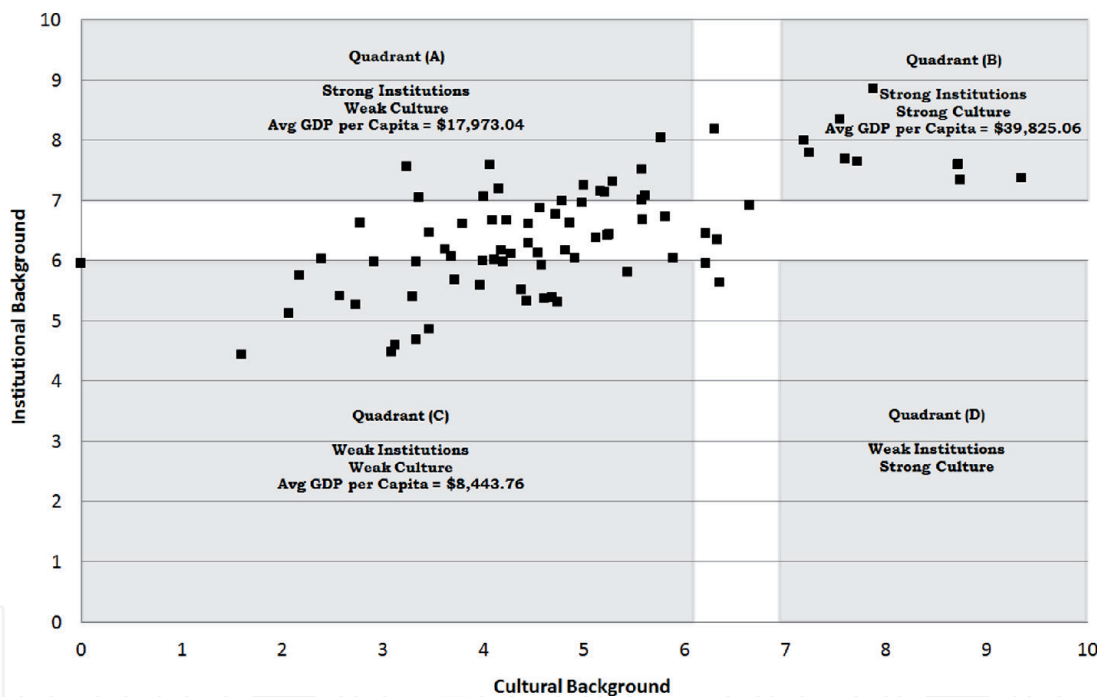**Figure 1.**
Strength of institutions and culture.

Figure 2.
Descriptive foundation of the cultural/institutional background relationship and the GDP per capita.

belonging to quadrants (B) and (D) clearly outperform those in quadrants (A) and (C), as they present a stronger cultural background.

Quadrant (B) countries, those with strong institutional (average 7.83) and strong cultural background (average 8.07), have the highest average GDP per capita of $ 39.826. This group includes countries such as Norway, Sweden, Hong Kong, Switzerland, and Canada, countries that are characterized by high economic freedom and at the same time by social behaviors that promote economic development and growth, such as high levels of generalized trust, respect, independence, and honesty. In contrast, countries in quadrant (C), those with weak institutional (average 5.39) and weak cultural background (average 3.41), have the lowest average GDP per capita of $ 8.443. This group includes countries such as Iran, Libya, Zimbabwe, Algeria, and Venezuela, that is, countries with a low degree of economic

	Country	GDP per capita	Cultural background	Institutional background
Quadrant A: Strong Institutions, Weak Culture	France	34558.47	5.61	7.08
	Spain	28817.90	5.21	7.14
	New Zealand	28268.62	5.76	8.05
	Czech Republic	26175.23	4.15	7.21
	Slovakia	20558.37	4.00	7.07
	Lithuania	19989.40	5.16	7.16
	Estonia	19887.70	5.57	7.52
	Malaysia	17286.46	5.57	7.01
	Latvia	16185.53	4.99	7.25
	Kazakhstan	15735.42	4.78	7.00
	Chile	15360.80	5.28	7.31
	Lebanon	12649.27	3.36	7.05
	Georgia	5716.39	4.06	7.59
	Armenia	5075.77	3.23	7.57
	Vietnam	3330.30	5.89	6.05
	Average of Quadrant A	**17973.04**	**4.84**	**7.21**
Quadrant B: Strong Institutions, Strong Culture	Norway	55653.87	9.35	7.38
	Switzerland	49494.08	7.54	8.35
	The Netherlands	40332.87	8.71	7.61
	Hong Kong	37889.14	7.87	8.86
	Germany	37573.25	7.60	7.69
	Sweden	37068.91	8.74	7.34
	Canada	36705.35	7.18	8.00
	Australia	36647.47	7.24	7.81
	Finland	33646.95	8.71	7.60
	Japan	33247.75	7.72	7.65
	Average of Quadrant B	**39825.96**	**8.07**	**7.83**

	Country	GDP per capita	Cultural background	Institutional background
Quadrant C: Weak Institutions, Weak Culture	Libya	26331.32	3.33	4.69
	Russian Federation	19549.52	4.58	5.94
	Poland	16716.41	5.44	5.81
	Argentina	15807.43	4.60	5.38
	Venezuela	15032.13	1.60	4.45
	Iran	14920.61	3.46	4.87
	Brazil	12418.27	2.73	5.27
	Algeria	11667.48	3.09	4.48
	Dominican Republic	9441.76	4.19	5.98
	Egypt	8778.71	4.69	5.40
	Ecuador	8530.45	3.72	5.69
	Ukraine	7201.05	4.74	5.32
	Nigeria	4075.95	2.07	5.13
	Pakistan	3639.66	3.97	5.59
	Ghana	3585.80	2.17	5.75
	India	3413.81	3.33	5.99
	Zambia	2782.47	3.29	5.41
	Zimbabwe	2540.86	3.12	4.60
	Bangladesh	2180.83	4.43	5.34
	Haiti	1777.94	0.00	5.96
	Mali	1641.60	2.57	5.43
	Burkina Faso	1195.23	2.91	5.99
	Ethiopia	977.15	4.37	5.52
	Average of Quadrant C	**8443.76**	**3.41**	**5.39**
Quadrant D: Weak Institutions, Strong Culture	—	—	—	—

Note: Countries not falling into a quadrant are (not characterized by either strong or by weak institutional and cultural background): Albania, Azerbaijan, Belarus, Bosnia and Herzegovina, Bulgaria, China, Colombia, Croatia, Cyprus, Hungary, Indonesia, Italy, Jordan, Republic of Korea, Kuwait, Kyrgyzstan, Mexico, Republic of Moldova, Morocco, Peru, Philippines, Romania, Rwanda, Serbia, Slovenia, South Africa, Thailand, Tunisia, Turkey, the United States, Uruguay, and Yemen.

Table 1.
Countries belonging in each quadrant and averages.

freedom and social attitudes that oppose economic development and growth processes. A comparison of these two quadrants highlights that the institutional and cultural backgrounds are complementary, as when both are strong, a significantly higher degree of economic development is achieved. Countries in quadrant (A), those with strong institutional (average 7.21) but weak cultural backgrounds (average 4.84), average GDP per capita of $ 17.973. This group includes countries such as Latvia, the Czech Republic, Georgia, Lebanon, and Kazakhstan, which, while characterized by a high degree of economic freedom, are also characterized by social behaviors that are opposed to economic development and growth processes. A comparison with quadrant (C) shows that the improvement of the institutional background leads to a much higher level of economic growth. Also, the scatter chart does not show countries belonging to quadrant (D) characterized by weak institutional and strong cultural background, while the opposite relationship holds (quadrant A). This demonstrates that the cultural background alone is not sufficient and exists only in a strong form when there is also a strong institutional background, thus reinforcing the hypothesis of complementarity between the two kinds of background.

Table 1 gives a detailed breakdown of the countries belonging to each quadrant and the average of each country for GDP per capita, cultural background, and institutional background.

5. Structural reforms that promote growth need institutional and cultural changes that also promote growth

Structural reforms imply changes both at an institutional and cultural level in order to ensure economic development and growth in the long term by raising the growth potential. This is so because they are able to increase the GDP, reduce unemployment, and 'fortify' the economy against potential shocks. In this direction, what is regarded as structural reform may include the intervention in transaction costs, product and service markets, and the labor market, reducing entry barriers, improving public sector administration, and enhancing the role of private sector over government [42]. Structural reforms usually include policies that make labor markets more adaptable and responsive, liberalizing the service sectors, increasing competition in product and service markets, improving the institutions for the strengthening of market efficiency, improving the entrepreneurial climate, and encouraging innovation [43]. Additionally, structural reforms are the key to sustainable development [44] as the enhancement of productivity constitutes a factor that promotes the improvement of the standard of living in emerging and developing economies, leading to a removal of the obstacles to the efficient utilization of resources. Thus, the need for transformation from a stagnated to an optimal growth model requires structural reforms referring to institutions and culture.

Institutions are one of the most important areas affected by the implementation of structural reforms [45]. This is why structural reforms usually concern institutional reforms that involve market, or even nonmarket, institutions. Essentially, market institutions refer to economic institutions and thus reforms concern institutions such as the labor market, the product market, the taxation, social security and financial system, etc. Reforms in nonmarket institutions may concern political institutions (quality of democracy, politicians/political parties, municipalities, etc.) or social institutions (judicial system, legal system, army, education system, healthcare system, etc.).

Johnson [45] examines the relationship between the time of the implementation of major reforms and the institutional quality index, concluding that countries

with more powerful institutions (as they are approached from the perspective of property rights and the rule of law) introduced important reforms earlier. In other words, it seems that there is a negative association between the time of the implementation of structural reforms and the quality of the institutions.

Moreover, Kafka [3] concludes that the only way for economies to improve their institutional background and their innovative performance and to converge with the economies that form the frontier of performance in innovation and institutions is through economic policies to accelerate change in the institutional background, such as structural reforms. Her analysis concludes to the creation of thermal maps that present—for each of the 152 economies included in the analysis—the specific institutions that need to be structurally reformed.

Furthermore, surveys such as those by [46–48] associate political institutions with economic reform effectiveness. Rajan and Zingales [47] note that democracy can obstruct reforms, if special interests prevail in the societies where these reforms are implemented, given that the capitalists are usually fortified in speculative positions and, thus, they often are the primary opponents of economic reforms, which may disrupt their interests. Fernandes and Rodrik [46] reach a similar conclusion, stressing that interest groups may block reforms if there is certainty over the distribution of the benefits of structural reforms. Also, Giuliano et al. [48] note that the increase in the quality of democratic institutions has a positive and statistically significant impact on structural reforms. Haggard [49] claims that the institutions may overcome collective action dilemmas by restricting the selfish behavior of interest groups.

The literature seems to be especially interested in the question of whether the extensive and swift institutional changes lead to a reduction of the output that is produced, even when these changes involve institutions of higher quality and greater effectiveness. For example, Roland and Verdier [50] note that firms do not invest after structural reforms because they wait until the economy is stabilized, and this fact results in a reduction of product produced. Moreover, Blanchard and Kremer [51] explain that the reduction of output produced is the result of the ineffectiveness of negotiations between the firms. While a great deal of institutions can develop in a very short period of time [52], there are other institutions that require a significant amount of time in order to function effectively.

As far as the cultural background is concerned, often this must also change for the impact of structural reforms to be more effective. As Kafka [3] points out, changing the cultural background through economic policy requires a long-term wait for results that can exceed 20 or 30 years, while requiring interventions focused on the education of societies. But what economic policy makers should not miss is to take into account the cultural characteristics of their society before making decisions. Not all societies are ready to accept all economic policies and each economic policy is expected to have different efficiencies based on the cultural characteristics of the society for which it is intended for [3]. Structural reforms must take into account not only the formal rules and procedures but also informal behaviors and deep-rooted models and values that lie between the formal declaration of the intention to implement a particular structural reform and its actual implementation [53]. Ban [54] argues that cultural background is a critical issue in every attempt to implement a structural reform.

An additional problem that arises regarding the cultural background concerns the fact that not all societies are ready to accept the structural reforms that are designed by the political actors. Consequently, reforms must have the appropriate flexibility in order to adapt to the needs of the society; only in this case will the society accept reforms and allow their implementation. Besides, the basic problem

is that the changes of the cultural background can only be slow-moving [55–57], even though there are behaviors that change even in a short-term horizon.

6. Conclusions

The forces deployed in the society either encourage the prevalence of features that promote a progrowth model or lead to a variety of problematic growth models, or to a mixture of progrowth and antigrowth characteristics with ambiguous results.

The transformation of a stagnated model to a progrowth one is not an easy task, focusing mainly on the coevolution requirements. Since the coevolution requirements cannot be met, there is a possibility that a perpetual stagnated prototype may become stronger. More specifically, the stagnated growth prototype may be transformed into a progrowth optimal prototype through suitable structural reforms on institutional and cultural background. However, the coevolution process taking place between institutions and culture may interrupt this process, having as a result a series of failing attempts to implement a modernized progrowth framework of institution settings and cultural behaviors leading to the salvation of the existing stagnated growth prototype, despite the probable design of ambitious structural reforms.

The analysis of the chapter reveals the complementary relationship between the institutional and cultural background in terms of their role in economic development and growth, as when both sizes are strong it leads to higher levels of GDP per capita. When either or both of them are at a weak level, economic development is much lower.

Thus, the existence of economic freedom is an important condition for economies to thrive. However, when these conditions are accompanied by social behaviors that promote economic development and growth and relate to individuals' trust and independence, the highest possible level of economic growth is achieved.

For instance, the presence of institutional structures that adequately manage property rights and contracts between economic actors has a positive impact on the level of economic development. But when this is accompanied by a high level of generalized trust and respect for other members of the society, the positive impact on economic development multiplies as the performance of the already satisfying cultural background improves. In addition, when there is an institutional background in which government spending, taxation, and the size of state-controlled enterprises are such that state decisions do not replace private choices, financial freedom is increased with significant benefits for economic performance. But when this institutional framework characterizes societies that are independent of choices, the benefits of the institutional and cultural background to the level of economic development are even more crucial.

By presenting in a different way the conclusion about the complementarity of the two sizes, the results of the analysis lead to the fact that even if the institutional background is strong, it depends on whether the cultural background is weak (quadrant A in the analysis) or strong (quadrant B in the analysis) to determine whether or not an economy achieves satisfactory economic development. Thus, the same institutional background may have a different impact on economic development depending on the cultural background.

This relationship gives a good explanation of why economic policies, such as structural reforms, are effective in some countries and noneffective in others. The transformation of a stagnated growth prototype to a progrowth one is not an easy task, focusing on the coevolution requirements. Since the coevolution requirements

cannot be met, there is a possibility that a perpetual stagnated prototype may become stronger. More specifically, the stagnated growth prototype may be transformed into a progrowth optimal prototype through suitable structural reforms on institutional and cultural background. However, the coevolution process taking place between institutions and culture may interrupt this process, having as a result a series of failing attempts to implement a modernized progrowth framework of institution settings and cultural behaviors leading to the salvation of the existing stagnated growth prototype, despite the probable design of ambitious structural reforms. Thus, the conclusion on the complementarity of the two sizes is therefore an important contribution for all those who design or pursue economic policy in either developing or developed economies.

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