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The Relationship Between the European Union Accession Process and Institutional Quality of Acceding Countries

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Abstract: Studies on the European Union Accession Process (EAP) have mainly examined the relationship between the integration process and economic growth. Hitherto, much emphasis has been placed on examining the sources of institutional convergence and evaluating the framework of the EAP, rather than focusing on the effectiveness of the implementation itself. In other words, little research on de facto improvement of institutional quality stemming from the accession process exists. The paper aims to further explore the relationship between the EAP and improvement of institutional quality. In order to quantify this, we employ robust econometric methods and analyze a panel data set in the period 1996–2011 of 23 countries that are currently subject to enlargement policies of the European Union. Based on the World Bank Governance Index, our results show that there exists a positive relationship between the EAP and the institutional quality in the acceding countries, where one step in the accession process is associated with an increase of 0.012 points in the governance index.

Keywords: Institutions, Europeanization, European Accession Process JEL Codes: F53, F55, O52

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Prerequisites

Constitutionally, membership in European Union (EU) is obtainable for any European country that votes for it in a national referendum, given consent from current member countries and that it is willing to comply with requirements set out by the EU. Article 49 in the Treaty of the European Union states that any European country that respects the democratic values of the EU and is committed to promoting them can apply for membership. However, the European continental demarcation is considered to be ambiguous, i.e. it is not clear which countries are European and which are not, obstructing the question of membership on a country specific level.¹

Moreover, applicants must meet outset criteria to accession to conjoin. These are stated in the Copenhagen Criteria, where the institutional requirements of the union are specified. The conditions set out appeal to the economic, political and legal sphere of institutions and exist to ensure that acceding countries meet the elementary institutional requirements of the EU. As stated in the Copenhagen Criteria, countries that wish to join the union need to have (1) stable institutions guaranteeing democracy, the rule of law, human rights and respect for and protection of minorities; (2) a functioning market economy and the capacity to cope with competition and market forces in the EU; and (3) the ability to take on and implement effectively the obligations of membership, including adherence to the aims of political, economic and monetary union.

In order to meet the above criteria, a candidate country must adopt, implement and enforce all chapters of the Acquis Communautaire; the body of rules, political principles and judicial decisions for the EU. This condition often implies years of preparations for candidate countries that wish to join the Union, including, beyond changing national laws, the changing or setting up of necessary administrative or judicial bodies to oversee the legislation.

¹ <u>http://ec.europa.eu/enlargement/policy/conditions-membership/index_en.htm (retrieved April 15, 2013)</u>

1 Introduction

It has been pointed out that convergence performance, i.e. the economic convergence of transition economies towards developed economies, is the most adequate measure in evaluating the success of the EU's integration process (Halmai and Vásáry 2012). Throughout time more focus and effort has been put on research on the contribution from effective and adequate institutions, allowing for more explanatory weight from the institutional field. Over the last decade studies have brought about several indications for a causal and positive relationship between institutions and economic performance (Acemoglu, Johnson and Robinson 2002), stressing that "governance matters" (Kaufmann, Kraay and Mastruzzi 2005). It has been shown that monetary and fiscal government policies as well as institutional choices affect growth (Barro and Sala-i-Martin 1992, 1995; Chalk and Tanzi 2002), indicating that the convergence performance of the EU also ought to be evaluated on the strength of institutional convergence.

There seems to be a shared belief that certain institutions are more prosperous than others, and policies promoted by multinational economic institutes often have a "western" design (Schweikert et al. 2010). Hitherto conducted empirical research has shown that countries with relatively homogenous policies and economic predispositions have converged in economic performance. This result is foremost applicable to the OECD members, but has led to speculation about the possibilities of 'convergence clubs;' ideas that build on the fact that convergence easier may occur between countries with similar institutions and aggregate human capital (Barro and Sala-i-Martin 2003; Baumol 1986). However, it is difficult to assess to which extent the European Union qualifies as a convergence club. What is well established, on the other hand, is that economic integration stimulates institutional convergence, and the removal of trade barriers, such as the Union's "four freedoms," are considered to be the engines of the European convergence process (Halmai and Vásáry 2012).

The process of EU enlargement is complex and demanding for joining countries, requiring the fulfillment of several economic, legal and political criteria. These demands incorporate development and change of formal institutions within those countries that do not initially possess them. New countries are knocking on the Union's door, many of them still not recovered from the economic

stagnation following the political decomposition in the beginning of the nineties. Their economic transition in some respect possibly hinges upon the development of formal institutions.

Creating alignment through conditionality is believed to support institutional convergence toward European institutions in the acceding countries, however it naturally raises questions about if institutional improvement actually occurs amongst the aspiring countries. Our study specifically aims at analyzing the effects of the European Accession Process on institutional improvement in the countries at which the policies are aimed. Hence, the purpose of this thesis is to *assess whether the European Accession Process is positively related to de facto institutional improvement in currently acceding countries.* We use established theory of institutional convergence and Europeanization to derive our hypothesis. Assuming that institutional change, in the form of institutional convergence will enhance institutional quality we explore the relationship between countries' progress in the European Accession Process² and institutional quality, identifying several potential drivers to institutional change. Theoretically, external political and economic drivers are believed to cause institutional change through competitive deregulation and harmonization (Tiebout 1956; Koop and Siebert 1990), while internal political and economic drivers are thought to affect institutional change by changes in the capacity to capture and underpin coordinative solutions in an evolving context (Ostrom 1990).

We thus hypothesize that participation in the EAP will be found to have a positive relationship with institutional quality. To investigate this we use a panel data set on the 8 economies currently participating in EAP. Data stretches from 1996–2011 and is compiled from reliable statistical databases belonging to the World Bank. To measure institutional quality we create an index based on the geometrical average of the World Bank Governance Indicators (WBGI). We begin with a regular ordinary least squares estimation and continue by adding country fixed effects and time-invariant control variables, in attempt to isolate the causal effect of the EAP. Since no prior research have examined the relationship between current EAP and institutional quality we draw on a model developed by Schweickert, Melnykovska et al. (2008), who have conducted an empirical study on how EU as an external factor might influence institutional quality.

 $^{^{\}rm 2}$ Henceforth referred to as the EAP.

The remainder of this paper will be organized as follows. Section 2 discusses relevant theoretical background within the field of institutions, institutional change and Europeanization. Section 3 is devoted to prior research and related theories on drivers of institutional change. Section 4 presents a model of institutional change to establish our hypothesis, followed by a brief presentation of method and data. Section 5 contains presentation and a discussion of the results. In section 6, the results are analyzed and from this we are able to draw a conclusion. Section 7 then presents a robustness discussion of our model. Finally, section 8 concludes by presenting the insights from this study and discussing the implications of our results.

2 Theoretical Foundations

2.1 Definitions

The word *institutions* bears many connotations. In colloquial language it can refer to all sorts of things: organizations, universities, establishments, habits, and other significant practices.³ To obtain a proper picture of the European convergence process it is important to possess an understanding of what institutions, in this context, really are. There are various delineations (Hodgson 1988, Veblen 2005), but current literature principally succumb to the Northian definition. Conforming to praxis, we define institutions as "humanly devised constraints that shape human interaction" (North 1990, p. 3), which can be seen as "the *formal* rules of the game" (Williamson 2000, p. 597) embedded in a context of values, norms and ideologies (Williamson 2000).

It is important to distinguish between informal and formal institutions: *informal institutions are* closely tied to the concept of culture, often seen as the underlying traditions, customs, values and norms of a society. These are persistent over time and impose constraints on the design of formal institutions (Williamson 2000). *Formal institutions* are viewed as economic and political instruments used to underpin and improve efficient coordinative solutions (Ostrom 1990). These are the "executive, legislative, judicial, and bureaucratic functions of government as well as the distribution of powers across different levels of government" (Williamson 2000, p. 598) and constitute the institutional environment, the subject addressed in this thesis. Formal institutions are *legislative regulation* or *policies*, which can be observed in markets, hierarchies, and other systems that enable credible commitment between actors (Williamson 1985; Hall and Soskice 2004).

The relationship between formal and informal institutions is perhaps difficult to grasp at first, but put another way it simply states that formal rules, such as laws and policies, are constructed with implicit respect to prevailing norms and values.

Aside of institutions we must define the how we view the acceding countries, which are the main units of observation in this thesis. These are viewed as *political economies*, rather than merely economies, implying that they are subject to the interplay between economics, law and politics. As such, the study of political economies investigate the creation and implementation of formal

³ http://www.merriam-webster.com/dictionary/institutions (retrieved May 17, 2013).

institutions and public policy and how institutions develop in different social and economic systems, such as capitalism, socialism and communism.⁴

In conformity with state of the art theory, more specifically the Varieties of Capitalism approach (Hall and Soskice 2004), political economies are believed to be actor-centered,⁵ implying that the institutional arrangements of a country reflect the needs of the firms and industries that are in it. This induces a cyclical relationship between prosperous industries and institutions: institutions underpinning industries that generate capital inflows will be enforced, further enhancing capital inflows. Political economies are thus subject to institutional path-dependency and tend to gravitate towards stable institutional configurations over time. Accordingly, path-dependency implies that changes in formal institutions are thought of as difficult and iterative processes, expected to face inertia and evolve slowly due to inherent resistance (ibid).

2.2 Institutional Change

Our parameter of interest when examining the European convergence process is institutional change. Seeing institutions as a result of coordination capabilities, it becomes evident that institutional development and change is partly triggered by changes in the capacities to capture and underpin coordinative solutions in an evolving context (Ostrom 2010). Put another way, this means that the durability of formal institutions rests substantially on how well it supports the interests of relevant actors. When an institution fails to serve such interests it becomes more fragile and susceptible to change (Hall and Thelen 2001). Despite the fact that institutional configurations are subject to path-dependency, the institutional differences between political economies are not fixed over an indefinite amount of time. Since economies respond to their surrounding environment, the nature of their institutions is bound to change in the presence of contextual change. In this way, current national regimes are said to be subject to globalization—international forces beyond the control of national governments—that reshape the dynamics of economic interaction (Berger and Dore 1996; Keohane and Milner 1996; Friedman 1999; Hall and Soskice 2004).

Globalization and increased technological development has lead actors to face a more similar pressures (Knill and Holzinger 2009), indirectly implying that problems and solutions that political economies face have become more uniform. Institutional change has thus been related to the topic

⁴ http://www.investopedia.com/terms/p/political-economy.asp (retrieved May 13, 2013).

⁵ Actors refer to organizations or firms within a political economy.

of policy convergence. Knill (2005, p. 768) defines *policy convergence* as "[...] any increase in the similarity between one or more characteristics of a certain policy (e.g. policy objectives, policy instruments, policy settings) across a given set of political jurisdictions in supranational institutions states, regions, and local authorities over a given period of time. Policy convergence thus describes the end result of a process of policy change over time towards some common point, regardless of the causal processes." Given the above definition of formal institutions as policies, policy convergence is in this thesis regarded as equivalent to institutional convergence.

However, cross-national convergence cannot solely be explained by "natural" policy convergence. Political economies still face unique problems and differ in their institutional configurations and the current European Convergence process has been observed to take place through various channels. Further literature on institutional convergence is divided into four different categories (Bennett 1991; DiMaggio and Powell 1991; Dolowitz and Marsh 2000; Drezner 2001; Hoberg 2001), but these can essentially be seen as complementary explanations. First, classical economics stresses that convergence is a result of increased globalization, trade and institutional competitiveness. This is called *institutional competition* and relies on the idea is that countries subject to cross-national deregulation will change their institutions in order to compete for capital flows, eventually causing formal institutions of economies to converge (Tiebout 1956; Koop and Siebert 1990).⁶ Second, convergence is tied to *deliberate harmonization of legislation and policies* in multinational negotiations, also referred to as voluntary adoption (Dolowitz and Marsh 2000; Koop and Siebert 1990). Third, literature on convergence makes a distinction between harmonization and *imposition* (Bennett 1991; Dolowitz and Marsh 1996, 2000), where the former refers to deliberate agreements of policy or legislative harmonization, in absence of coercion. The latter aims at constellations in which countries or international organizations force other countries to adopt certain policies by exploiting asymmetries in political or economic power (Bennett 1991). Finally, institutional convergence can be triggered by communication and information exchange in cross-national networks (Bennett 1991).

Even though the EU has conventionally been seen as the leading spirit, it has not been the only source to institutional convergence across Europe. Policy-wise there seems to be a shared belief that some institutions are more prosperous than others. This view has, inter alia, been validated by

⁶ Razin and Zadka (1991), for example, showed how convergence in cross-national tax policies could be explained by governmental efforts to compete for capital flows.

international institutes' use of similar indicators⁷ for evaluating institutional quality. As Chang (2011) previously argued, there might be an increased tendency toward advocating and adopting such socalled Global Standard Institutions (GSIs) (Chang 2011). The diffusion of such institutions has primarily been encouraged by international organizations, mainly extracted through the principle of conditionality.⁸Loans and financial support have been conditional on institutional and policy development, with the purpose of stimulating institutional change. The EAP have, in many aspects, been governed by the same principle. Although, EU's conditionality has referred to the exchange of institutional adjustments for membership,⁹ requiring the implementation and fulfillment of the Acquis Communautaire and the Copenhagen Criteria, as described in the preface (Schimmelfennig and Sedelmeier 2004; Tews 2002).

As mentioned, convergence processes among political economies with stable institutional configurations are rarely natural. Many of the explanations to inertia and opposition to institutional convergence draw upon theories of comparative capitalisms, stressing that institutional configurations of political economies are specifically designed to suit the industries of that economy, creating institutional comparative advantages across nations which, to some extent, undermine incentives to institutional convergence (Boyer and Drache 1996; Rodrik 1997; Hall and Soskice 2004). Specific national institutional configurations have been specially discussed in the case of the EU, which due to national oppositions has, throughout time, experienced several difficulties in initializing and proceeding with its regulatory harmonization.

2.3 Europeanization

Research within the field of convergence attributable to the European Union is linked to theories of Europeanization. Europeanization has for long been a topic of interest for many researchers; much literature has been written on the subject and the foundation of work keeps growing (Nicolaides 2010). The term refers to the adaption to common rules and practices across Europe (ibid). Several definitions pinpoint how the European Union has contributed to such extent that Europeanization is nowadays perceived as "EU-ization" (Anastasakis 2005). A simple definition of Europeanization

⁷ E.g. World Bank Governance Indicators, EBRD Transition Indicators, Heritage Index of Economic Freedom

⁸ For instance, it has been argued that the spread of neoliberal monetary and trade policies to Third World governments was driven by pressures from international financial institutions based on conditionality (Dolowitz and Marsh 1996; Meseguer and Yebra 2003).

⁹ As opposed to conditional loans.

on this basis is "a process in which states adopt EU rules" (Schimmelfennig and Sedelmeier 2005). Radaelli (2000a, p. 4) defines Europeanization as "processes of (a) construction, (b) diffusion and (c) institutionalization of formal and informal rules, procedures, policy paradigms, styles, 'ways of doing things', and shared beliefs and norms which are first defined and consolidated in the EU policy process and then incorporated in the logic of domestic discourse, identities, political structures and public policies." Even though the definitions vary, a mutual consensus applies in which Europeanization is a term associated with an expectation that EU is a source of impact to changes in domestic policies and processes (Nicolaides 2010).

Further on, if convergence can be observed, the reasons to why are highly debated. When differing between compulsory and voluntary adaptation (Radaelli 2000; Kaeding 2007; Nicolaides 2010), the EU conditionality is compatible with the first. Compulsory adaptation is characterized by imposed regulatory demands, with non-compliance being punishable. In the accession process the penalty can be represented by a delay in the process of becoming a member. The EU's essential role in determining when the conditions for membership are met is also debated, stating that the Union is a referee in its own game (Grabbe 1999). In any case, aspiration to enter the Union is in to some extent voluntary, which makes it difficult to assess whether accession is compulsory in a proper sense. Such voluntary adaptation is likely an outcome of aspiration and adaptation to surroundings.

Although most literature exhibits a positive attitude towards Europeanization, some researchers have expressed concerns about the EAP. Despite the fact that Page and Wouters (1995), Rometsch and Wessels (1996), Knill and Holzinger (2005, 2009), and Kaeding (2007) have all observed increasing similarities in legislative regulation and policies, there are some who claim there is no evidence suggesting such convergence. Rather said, they assert that an increasing number of member countries introduce more diversity into the Union. Some argue that the EUs' policy-making employs double standards, referring to the contradictory ambitions of the subsidiarity principle and the "acquis" (Grabbe 2002). Furthermore, recent research notices a growing enlargement opposition among EU member countries as well as a weakened priority of trade issues, suggesting that the transformative power of the EU is rather weak (Gawrich et al. 2009; Schimmelfenning and Sedelmeier 2005). Tichy (1992) finds that the EU is too diverse to contrive as an integration area and Koop and Siebert (1993) propose institutional competition and differing levels of integration for every broad policy matter as a better solution to integration than regulatory harmonization. Authors

also state that institutional competition can be "[...] especially helpful in the process of integrating the former communist countries into the EU" (Koop and Siebert 1993, p. 28), which is an argument that should be recognized, considering the European Enlargement Process currently aims at post-communist countries¹⁰ in eastern Europe.

2.4 Concluding Remarks

To summarize, various academic disciplines act and interact in defining and explaining institutional convergence. Studies within the institutional field draw from economics, politics, ethnology, and sociology, making economic modeling rest upon more vague and unquantifiable concepts such as culture, religion, and traditions. Theories have analyzed how institutional change and convergence, and established theories are complementary in describing how these processes are believed to occur.

The theoretical framework of this section reflects which underlying relationships we are assuming to hold. To provide for comprehension we will state the essential assumptions drawn from the outlined theory. First, we believe that economic convergence is partly facilitated through institutional convergence. Second, we think that institutional convergence occurs through institutional change, which signifies a change in the prevailing set of formal institutions. Finally, we believe that a suitable measure of institutional convergence is *improvement* of institutional quality. Institutional improvement is measured as the positive change in institutional quality over time.¹¹ The topic of this thesis deals specifically with the case of institutional improvement in relation to the current European enlargement. Referring to the theoretical foundations above, we further want to investigate whether it is possible to determine if the EAP have caused institutional improvement, in order to establish if it has been successfully implemented as an instrument to stimulate institutional convergence.

¹⁰ However, it should also be recognized that these countries have not been a part of Soviet and thus might have differed in their policy practices. Elder theories in Comparative Economics argue that the economic systems in the former socialist countries at Balkan differ from those of Soviet, in the sense that they were not, to the same extent, subject to central planning but rather built upon cooperative market solutions

¹¹ Henceforth referred to as Institutional Improvement.

3 Previous Research

Section 2 outlined the theory of how various channels can facilitate institutional convergence. To present a comprehensive picture and add weight to our analysis, we devote Section 3 to the empirical evidence within the field of institutional convergence. The following paragraphs explain potential drivers to institutional improvement and explores the underlying connections.

3.1 Drivers of Institutional Change

Referring to the theories outlined in section 2.1, industrial performance is thought to contribute to the shape of formal institutions, favoring those that evoke capital inflows (Hall and Soskice 2004). Capital inflows in the shape of *foreign direct investment* have shown to have a positive, and sometimes endogenous, relationship to institutional quality (Méon and Sekkat 2007). The relationship is somewhat contradictory in the sense that both good and bad governance can give rise to high levels of FDI. Coarse institutions are thought to increase FDI in at least two ways: speed, where a corruptive environment is thought to facilitate a more rapid establishment of firms (Leys 1965), and policy design, where countries with poor institutions, theoretically, have *relatively* more possibilities to improve their formal institutions creating opportunities for investors (Huntington and Dominguez 1975). Good governance, on the other hand, attracts foreign investors because of reduced risk (Harms and Ursprung 2002), and indirectly through workforce health and infrastructural quality (Mody and Srinivasan 1998; Globerman and Shapiro 2002).

Further on, *trade* is thought to induce institutional change by the creation of economic dependencies to other countries. This is confirmed by studies showing that more open economies tend to have better institutional quality (Wei 2002; Islam and Montenegro 2002). Havrylyshyn (2006) also suggests that openness and liberalization tend to assist economic recovery and construct democratic institutions.

The relationship between *aid* and institutions is more complex. Aid is generally received for two reasons, either as a reward of meeting certain institutional conditions or as a voluntary instrument to improve institutions (Brempong et al. 2011).¹² In the first case, there exists a short-term positive relationship, where the incentive for change lies in the conditional reception of aid. However, in the long term the relationship turns negative, anticipating the fact that reception of aid implies poor

¹² http://www.acbf-pact.org/Data/Sites/1/docs/tapnets/bilateralaidgoodgovernance.pdf (retrieved May 10, 2013).

institutions and might repress government incentives to use money efficiently. Even when certain institutional demands are set, there is no guarantee that the institutional quality will keep improving once the aid is received—rather, one can anticipate a regress in governmental effort and misallocation of the additional resources (Boone 1995).

Early development literature advocates that endowment of natural resources contributes to growth-by including endowment of such resources in the production function it increases current or future output level (Lewis 1955; Rostow 1960; Viner 1952). However, when studying developing countries, Ranis (1991), Lal and Myint (1996), and Sachs and Warner (1995) all find that resourceabundant countries have underperformed in comparison to the resource-deficient ones. Lal and Myint (1996) deduce this underperformance to policy failure. Modern research within this field aims at identifying negative effects of natural resource endowment on institutional development, focusing on the associated rent-seeking behavior.¹³¹³ It is thought that governments use resource-related revenues to mitigate disunity and avoid accountability, thus inhibiting institutional development and resisting pressures for institutional reform (Isham et al. 2003; Sala-i-Martin and Subramanian 2003). Collier and Hoeffler (2005) suggest that the probability of civil conflict increases as a result of competition for rents. Bornhorst, Gupta and Thornton (2009) analyze oil and gas endowment and find a negative relationship between hydrocarbon and government revenue. They conclude that countries that receive large revenues from the exploitation of natural resource endowments are likely to reduce their domestic tax effort which, in turn, creates less incentives for public scrutiny of government. To address this issue, initiatives to promote transparency of resource revenues have increased, in order to antagonize the poor use of natural resource wealth and associated governance issues (Sala-i-Martin and Subramanian 2003).

There is mutual consensus of a negative relationship between inflation and governance implying that low levels of inflation encourage government to improve the quality of institutions (Minea and Villieu 2009; Al-Marhubi 2000). One explanation is that institutional quality is associated with higher tax collections, supplying government with revenue. Low inflation results in low seignorage,¹⁴

¹³ Rent-seeking is the term for obtaining economic gain from others without reciprocating any benefits back to society through wealth creation. A famous example is lobbyism—swaying public policy in an attempt to benefit certain companies (<u>http://www.forbes.com/sites/davidmarotta/2013/02/24/what-is-rent-seeking-behavior/</u>), retrieved May 15, 2013.

¹⁴ The difference between the value of money and the cost to produce it.

implying that government must seek other sources of income. This provides government with an incentive to improve the quality of institutions in order to increase tax revenues (Minea and Villieu 2009). By examining the relationship between inflation and corruption. Al-Marhubi (2000) finds that high inflation is associated with high levels of corruption, indicating poor governance. Thus, low targeting inflation is desirable.

There is perhaps most research to find on the relationship between economic growth and institutional quality. Hitherto, empirical research has established two-way causality between these parameters. Furthermore, Hall and Jones (1999) and Acemoglu et al. (2000) show that the quality of institutions are related to per capita income. Reidpath and Allotey (2006) confirm the contrary: a causal relationship between GDP¹⁵ per capita and governance quality.

Being the topic of this study, the impact of Europe on institutions was specifically discussed in Section 2. Shortly summarized, many theories confirm that the European Union has a positive impact on institutions. Melnykovska et al. (2008) discover a positive relationship between the institutional development in the CIS¹⁶ and European policies. Expanding the framework on Europeanization, new theories suggest what may be labeled Westernization, i.e. external influence on institutional change by Western international organizations. Westernization is thought to be a more appropriate designation than Europeanization, in the sense that it accounts for additional external effects from the West beyond the EU conditionality (Schweikert et al. 2010). Inter alia, this incorporates influences from regional security, trade and investment relations such as the North Atlantic Treaty Organization (NATO) and the World Trade Organization (WTO). Similar to that of the EU, NATO has introduced an enlargement strategy, MAP, entailing that membership is conditional on institutional improvement. Various research probate the positive impact of NATO on institutional quality. Melnykovska et al. (2008) summarize the research of Gibler and Sewell (2006) as "NATO's effect on reducing external threats has acted as a precondition for any impact the EU might have had." In addition, using panel data, Belke et al. (2009) show that the effect of NATO accession on institutional quality in post-socialist countries is positive and independent of any EU effect. Despite positive findings, many researchers question the relationship, diverting the

¹⁵ At purchase price parity

¹⁶ Commonwealth of Independent States, including the following countries: Armenia, Azerbaijan, Belarus, Kazakhstan, Kyrgyzstan, Moldova, Russia, Tajikistan, Turkmenistan, Ukraine, and Uzbekistan.

discussion to indirect effects (Gibler and Sewell 2006). Membership and participation in the WTO is also conditional on institutional change and therefore thought to entail convergence. Nevertheless, the WTO standards are to great extent formulated by the U.S. and the European Commission, suggesting a convergence towards these state structures (Steinberg 2004).

3.1 Concluding Remarks

Section 3 has outlined the conclusions of previous empirical studies on potential drivers to institutional change and explained in which way these drivers may affect institutions. Taking these sources into consideration, we proceed by formulating a model on the relationship between the EAP and institutional quality.

4 The Model

Previous sections have described the theoretical foundations and empirical evidence of institutional change, convergence, and improvement. The following section aims to make use of this information to construct an empirical model of the relationship between the EAP and institutional quality. Using quantitative data and standard econometric methods, we create the model and formulate our hypothesis. To provide an illustrative answer to the empirical question, we draw from prior empirical methods by Schweickert et al. (2008), adopting their categorization of variables, which distinguishes the parameters of institutional convergence in a comprehensive manner.

4.1 Model Specification

4.1.1 Assumptions

To fully state our case we will once again mention which underlying relationships we are assuming to be true. First, we believe that economic convergence is partly facilitated through institutional convergence. Second, we think that institutional convergence occurs through institutional change, i.e. a change in the prevailing set of formal institutions. Finally, we believe that a suitable measure of institutional convergence is improvement of institutional quality. Institutional improvement is measured as the positive change in institutional quality over time.

This thesis deals specifically with the case of institutional improvement in relation to the current European enlargement. Referring to the theoretical foundations above, we further want to investigate whether it is possible to determine if the EAP has caused institutional improvement, in order to establish whether it has been successfully implemented as an instrument to stimulate institutional convergence.

4.1.2 Institutional Quality

We use the Worldwide Governance Indicators (WBGI)¹⁷ to measure institutional quality. The indicators cover a period of 16 years, 1996–2011, with gaps for every second year from 1996–2002. WBGI consists of six indicators, namely, voice and accountability; political stability and absence of violence; government effectiveness; regulatory quality; rule of law; and control of corruption. To obtain a single measure of institutional quality we create an index based on the WBGI. The indicators are weighted equally and the index is normalized from 0 to 1, where 0 indicates low levels

¹⁷ In research often referred to as the World Bank Governance Indicators (WBGI).

of institutional quality. A positive change in the WBGI index is used as a measure of institutional improvement.

Following Kaufmann (2004) we argue that the WBGI provides for a comprehensive measure of institutional quality. The classifications can be appointed to the three different institutional dimensions recognized in the Copenhagen Criteria (Schweikert 2004), leading us to believe that the WBGI is a suitable measure for the purpose of this study. Due to the similarity of ratings in our sample¹⁸, ranging between 0.26 (Serbia 1998) and 0.58 (Croatia 2004), "poor" and "high" institutional quality refers to relative performance vis-à-vis other countries in the sample.

4.1.3 The Accession Process

The agreements of the accession process are, by nature, convenient to use as indicators on how far a country has proceeded in the process. We let five essential and compulsory agreements indicate each step in the accession process. The scale is based on the following steps, in succeeding order: (1) signed Stability and Association Agreement¹⁹; (2) application to the EU; (3) official candidacy status; (4) negotiations and implementation of the "acquis;" and (5) signed Treaty of Accession. Each step is weighted equally, making up a finite discrete distribution indexed from one to five. This is reasonable to assume since the EAP demands gradual implementation of institutions—every step requires the adoption of new formal institutions, and even though the "acquis" stands out, the entire process is conditional on institutional change. Instead of weighting, which would be based on rather loose assumptions, time is expected to allow for important steps to carry more explanatory weight, as the process is iterative and more extensive demands take longer time to implement. However, duration of the process also depends on which initial institutions a country is endowed with. This could, to some extent, interfere with this assumption, but as we study a relatively homogenous cluster, we do not believe that this will affect our results. Nevertheless, as a second check we introduce a complementary measure of the accession process, where different steps are linearly interpolated across time. This is designed accordingly: if we let N denote the stage in the accession process and j and k points in time for two subsequent stages (e.g. a country proceeds to stage $N_{2005} = 4$ in j = 2005 and then to stage $N_{2008} = 5$ in k = 2008), then for some point in time *i*, where j < i < k, it holds that $N_i = N_j + 1$

$$(i-j)\cdot \frac{N_k-N_j}{k-j}$$

¹⁸ This refers to the accession countries, except Iceland.

¹⁹ Henceforth referred to as SAA.

The duration of the currently prevailing status is forecasted and linearly interpolated with respect to statements from the European Commission²⁰. This makes the variable finitely continuous, which we believe is a sensible way to depict the actual accession process.

4.1.4 The Countries

The observed countries²¹ are all currently taking part in the EAP. There are two principal reasons for studying the current acceding countries separately. First, the choice to narrow panel size is made in order to enable the results to have clearer policy implications. The chosen group is relatively homogenous, sharing a similar heritage in history and language stocks²² as well as similar initial levels of institutional quality, making it a suitable cluster for specialized policy conclusions. Second, the EAP differs from other European policy programs because it promises membership in the EU. Our interest is mainly to capture whether this conditional effort to institutional harmonization has had a positive impact on institutional quality in the Western Balkans. A quantitative approach has not been employed in any previous studies with the same purpose and we hope that our analysis can provide a start for further research within this field.

A country is classified as "acceding" when all the EU membership terms are agreed on and the country is awaiting ratification by all member states. In the observed group only Croatia classifies as acceding.²³ The status of "candidacy" is given countries that are negotiating the "acquis," or have been officially signaled and are awaiting negotiations to begin. The European Commission lists The Former Yugoslav Republic of Macedonia, Iceland, Montenegro, Serbia, and Turkey as present candidate countries. Lastly, the Commission recognizes potential candidates as countries that will be offered official candidate status when they are ready. Currently, these are Albania, Bosnia and Herzegovina, and Kosovo.²⁴ All the countries listed above are currently taking part in the accession process, and so if there exists a relationship between the accession process and institutional quality,

²⁰ <u>http://ec.europa.eu/enlargement/countries/strategy-and-progress-report/</u>retrieved Mars 22, 2013.

²¹ Countries currently taking part in the EAP are: Albania, Bosnia and Hercegovina, Croatia, Iceland, FYR Macedonia, Montenegro, Serbia, and Turkey.

²² All countries except Iceland and Turkey are located at Balkan. Five of the countries share an Ottoman history and heritage (Serbia, Macedonia, Montenegro, Bosnia and Hercegovina, Turkey, and Albania) and five of the countries are previous members of Socialist Federal Republic of Yugoslavia (SFRY). Even though former SFRY has communist attachments, institutional theory emphasizes that SFRY essentially developed cooperative market economies, differing from planes economies in other socialist countries.

²³ Membership is expected to be observed at the 1st of July 2013.

²⁴ This designation is without prejudice to positions on status, and is in line with UNSCR 1244 and the ICJ Opinion on the Kosovo Declaration of Independence.

we find it likely to be recognizable in this sample. However, it must be recognized that a few countries, such as Iceland, already had well-developed institutions ahead of accession, fulfilling most requirements, wherefore the Union's impact becomes harder to quantify. Recognizing this problem, we later drop Iceland from our observations, further specified in Section 5 below.

4.1.7 Creating a Suitable Control Group and Adding Variation to Data

To improve the model and add variation to the data we later append countries currently participating in the EU's other policy programs, more specifically: the European Neighborhood Policy (ENP). The ENP comprises partnership and cooperation agreements between the EU and countries located in Northern Africa, the Middle East and Central Asia. Currently the European Neighborhood Policy serves as the second most integrative policy next to enlargement, and is directed towards considered neighbors. The design of the ENP borrows significantly from enlargement strategies making it a natural extension to European institutional enlargement (Kleenman 2010). However there is one very important factor that differentiates it from the real accession process, namely that it lacks the promise of a future membership. At large both policies are built upon the idea of 'carrots and sticks,' which implies that the policy combines rewards and punishment to induce behavior. This suggests that the main difference between the EAP and the ENP should lie in the exercised conditionality of membership, making it a suitable control group for the examining the effects from the accession process. The motive for this is to explore whether the relationship between the EU's policy programs and institutional quality prevails in a broader setting. Further on, an additional reason for adding the ENP is that the initial number of countries requires strong assumptions in order to perform suitable econometric testing. To investigate whether we have made functioning assumptions and if the relationship actually holds the test is expanded by adding countries.

4.1.5 Internal and External Drivers

We restrict the model to economic factors that could affect institutions during the studied period of time. Since we want to study the effect of regulatory and policy harmonization, we control for other economical sources to institutional improvement—however, institutions-related parameters such as government spending, fiscal freedom, and business freedom are not included as they are themselves indicators of institutional quality and thus do not distort the relationship we attempt to discern. To produce an accurate estimate we control for economic factors at two levels: internal and external. External drivers are essentially multinational commitments that are conditional on institutional development and capital flows. The multinational commitments taken into consideration are those of

the EU, WTO and NATO. Capital flows are in turn divided into two sub-categories, industry driven contribution that stems from export and foreign direct investment, and financial assistance such as aid a second group of control variables is connected with internal economic performance and includes inflation as a measure of financial stability and annual GDP growth as a measure of economic growth. Since institutions are assumed to be slow in change it is reasonable to employ a regression where the volatile variables are smoothed over time. The argument coming forth is that it is not likely that the volatility itself will be the cause of any change in the dependent variable; rather, the parameters are used to illustrate how changes over time are related to institutional quality. Because of this, all quantitative measures are averaged across a period of three years. By controlling for these factors we should be able to create a clearly defined variable of the EAP.

4.1.6 Political Components and Culture

It is also emphasized that formal institutions are embedded in a constraining context of informal institutions (Williamson 1990). However, these are predicted to be persistent and constant over the studied period of time, and will not be subject to observation. Country specific characteristics such as culture, values, norms, and other factors that could be related to these are thus omitted from the econometric analysis. Due to their high persistence over time, we can make credible assumptions about them being unobserved time-constant factors when practicing econometric analysis.

One of the more severe shortcomings of our model is the shortage of political parameters. Parameters such as corruption, distributions of political opinions, and survey data on EU-support would add complexity and comprehensibility to the model. These are essentially omitted due to the lack of data,²⁵ and we recognize that this will probably result in an omitted variable bias problem.

²⁵ See Misspecification Analysis.

4.2 Regression

We summarize the suggested variables above in the econometric model to be used, regressing institutional quality on stage in the EAP, controlling for NATO and WTO membership; exports, aid and FDI level; inflation and GDP growth; and level of fuel exports:

 $GovernanceIndex_{t} = \beta_{0} + \beta_{1}AccessionProcess_{t} + \beta_{2}NATO_{t} + \beta_{3}WTO_{t} + \beta_{4}Exports_{t} + \beta_{5}Aid_{t} + \beta_{6}FDI_{t} + \beta_{7}Inflation_{t} + \beta_{8}GDPgrowth_{t} + \beta_{9}FuelExports_{t} (+ \theta_{t} + \alpha) + \varepsilon_{t}$

where α accounts for time- invariant country fixed effects and θ_t is a dummy variable for time allowing for the intercept to vary and thus controlling for trending effects. The components α and θ_t are not employed in all regressions, but are successively added into the framework to correct the model in an econometric sense, and -from which follows - capture additional effects.

4.3 Hypothesis

In light of the frameworks presented in section 2 and the research presented in section 3, we hypothesize that the European Accession Process is positively related to institutional quality. In our regression, this is equivalent to hypothesizing that the parameter β_1 is positive, which can be compared with the coming estimates.

5 Method and Data Presentation

An econometric approach is applied to in order to investigate the existence of a relationship between the EAP and institutional quality. First, we apply a general model including the countries that are currently participating in the accession process. To disentangle effects from the EAP specifically, we gradually revise the model by adding control variables and correcting for data issues.

We proceed systematically by employing different versions of the model. First, we run a general OLS regression, followed by a fixed effects model (FE) controlling for time-invariant country specific effects and a feasible general least squares regression (FGLS) to allow for heteroskedasticity and autocorrelation in the error terms. Secondly we use the same econometric methods, but incorporate the internal variables that we believe have been omitted. To add dynamics to our analysis, we then exchange the discrete ENP variable in the FGLS regression to test the interpolated variable. Further, we continue to develop the model by differencing the regressions. This enables us to correct for time-invariant country-specific factors as well as heteroskedasticity and autocorrelation in parallel, and we make use of time dummies to allow for intercepts. We employ both the interpolated and the discrete variables in this regression. Finally, we run the same regression on a dataset with increased panel size to verify the findings.

The reason to why we continue to apply the FGLS estimator is that the Wooldridge test for autocorrelation tests positive at the 10 percent significance level. The occurrence of autocorrelation is common in panel data and in non-random sampling such as our country sample (Wooldridge, p 350). Assuming that changes over time in the idiosyncratic error are not the same within each country, we specify a panel specific AR(1). Nevertheless we recognize the deficits with using the FGLS to our sample. As the number of observed countries is smaller than number of time-units in our first sample, we have to make rather strong assumptions about our data. This is why we later increase the number of panels by appending more countries. When expanding the sample the assumption of n > t holds. The Wooldridge test for autocorrelation continues to test positive, and becomes significant at the percent level.

Continuing, we drop Iceland from our observations. This is a justified for several reasons. Iceland is an outlier compared to the rest of the group, given its much higher level of institutional quality, and is not a country that experiences transitional institutional improvement. Instead the financial institutions of Iceland have, rather, been battered by the financial crisis in 2008. Iceland's institutional quality has thus experienced a negative trend.

Panel data for 1996–2011 on the economic variables of the acceding countries and countries currently taking part in the ENP have been collected from World Bank Statistical Database and time series data on institutional quality, as mentioned, comes from the World Bank Governance Indicators (WBGI). To allow for a single and comparable measure, the indicators have been arithmetically averaged. Data on other programs, evaluation schemes and agreement specifics are compiled from the official website of the European Union and the European Commission's progress reports. A detailed specification of variables and data sources is provided in the Appendix.²⁶

Table I and table II below exhibit the results of two models, measuring the relationship between internal and external variables and institutional quality. The first model displays a regression of external variables on institutional change, while the second one incorporates both external and internal variables. Both models use a regular OLS estimation with robust standard error, a fixed effects regression as well as a FGLS regression adjusted for heteroskedasticity and panel-specific autocorrelation (AR(1)).

In table III we display a FGLS regression that control for both internal and external factors of institutional change, as well as country and time-specific factors. The model in Table III has the same structure as Table II, but use the interpolated EAP variable instead of the discrete. Both models are adjusted for heteroskedasticity and panel-specific autocorrelation. Table IV displays the results of differenced model including the ordinary and the extended sample size, using the interpolated measure of the EAP. Table V has the same structure and contains the same variables, except for that it uses the discrete ENP variable.

²⁶ Table 3.

| Table I: External Variables Model | | | | | | |
|-----------------------------------|-----------|-----------|-----------|--|--|--|
| | OLS | FE | FGLS | | | |
| Governance Index | (1) | (2) | (3) | | | |
| | | | | | | |
| Acession Process | 0.0178*** | 0.0140*** | 0.0165*** | | | |
| | (0.00366) | (0.00355) | (0.00299) | | | |
| NATO membership | 0.00392 | -0.000393 | 0.00278 | | | |
| | (0.0113) | (0.00726) | (0.00908) | | | |
| WTO membeship | 0.0153 | 0.0329 | 0.0178** | | | |
| | (0.0166) | (0.0173) | (0.00737) | | | |
| Exports | 0.149 | 0.170 | 0.231*** | | | |
| | (0.119) | (0.0970) | (0.0435) | | | |
| Aid reception | -0.348 | -0.186 | -0.277*** | | | |
| - | (0.271) | (0.117) | (0.0924) | | | |
| FDI | 0.223** | 0.180** | 0.168*** | | | |
| | (0.0995) | (0.0611) | (0.0476) | | | |
| Constant | 0.374*** | 0.364*** | 0.356*** | | | |
| | (0.0340) | (0.0303) | (0.0159) | | | |
| R-squared | | 0.722 | | | | |
| Number of countries | 7 | - | 7 7 | | | |

| Table II: External and Internal Variables Model | | | | | |
|---|-----------|------------|------------|--|--|
| | OLS | FE | FGLS | | |
| Governance Index | (1) | (2) | (3) | | |
| | | | | | |
| Accession Process | 0.0148*** | 0.0105*** | 0.0100*** | | |
| | (0.00472) | (0.00197) | (0.00338) | | |
| NATO membership | -0.00817 | 0.0113 | 0.00395 | | |
| | (0.0101) | (0.0116) | (0.0109) | | |
| WTOmembership | 0.0237 | 0.0404* | 0.0265*** | | |
| | (0.0200) | (0.0186) | (0.00894) | | |
| Exports | 0.0744 | 0.104** | 0.124** | | |
| | (0.103) | (0.0300) | (0.0502) | | |
| Aid reception | -1.023** | -0.500* | -0.866*** | | |
| | (0.436) | (0.237) | (0.193) | | |
| FDI | 0.245*** | 0.200*** | 0.208*** | | |
| | (0.0782) | (0.0321) | (0.0462) | | |
| Inflation | -0.0116 | -0.0567*** | -0.0498*** | | |
| | (0.0282) | (0.0118) | (0.0137) | | |
| GDP growth | 0.195 | 0.188 | 0.0292 | | |
| | (0.194) | (0.197) | (0.0783) | | |
| Fuelexports | 0.0629 | -0.0509 | -0.0960 | | |
| | (0.171) | (0.0805) | (0.0632) | | |
| Constant | 0.408*** | 0.394*** | 0.421*** | | |
| | (0.0384) | (0.0222) | (0.0226) | | |
| R-squared | | 0.792 | | | |
| Number of countries | , | 7 | 7 7 | | |

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Robust standard errors in parentheses *** p<0.01, ** p<0.05, * p<0.1

| Table III | FGLS with the interpolated EAP variable |
|--------------------------|---|
| Governance Index | |
| | |
| Accession Process | 0.0241*** |
| | (0.00323) |
| Aid | -0.447*** |
| | (0.105) |
| FDI | 0.00953 |
| | (0.0366) |
| Exports | 0.0466* |
| | (0.0270) |
| GDP | -0.0280 |
| | (0.0477) |
| Inflation | -0.0191** |
| | (0.00942) |
| Fuel Exports | -0.111*** |
| | (0.0128) |
| NATO Membership | -0.0226** |
| | (0.0101) |
| WTO Membership | 0.0158*** |
| | (0.00532) |
| Constant | 0.415*** |
| | (0.0118) |
| Observations | 223 |
| <u>Number of country</u> | 22 |

Standard errors in parentheses *** p<0.01, ** p<0.05, * p<0.1

| Table IIIV. Differencing using interpolated ENP variable | | |
|--|------------|------------|
| | | |
| | All | Accession |
| Governance Index | countries | countries |
| | | |
| Accession Process | 0.0120** | 0.0110** |
| | (0.00476) | (0.00476) |
| Aid | 0.542*** | -0.323 |
| | (0.137) | (0.350) |
| FDI | -0.0229 | -0.132 |
| | (0.0327) | (0.142) |
| Exports | 0.0274 | 0.0419 |
| | (0.0421) | (0.112) |
| GDP | 0.120** | 0.262** |
| | (0.0492) | (0.103) |
| Inflation | -0.0428 | -0.0923* |
| | (0.0276) | (0.0518) |
| Fuel Exports | -0.0305 | -0.0175 |
| r · · · | (0.0260) | (0.0322) |
| WTO Membership | 0.00855*** | 0.00646** |
| r i i i r | (0.00165) | (0.00284) |
| NATO Membership | 0.00202 | 0.00148 |
| | (0.00235) | (0.00305) |
| 2003 | 0 | 0 |
| | (0) | (0) |
| 2004 | -0.00244 | 0.00888* |
| 2001 | (0.00373) | (0.000000) |
| | (0.00075) | - |
| 2005 | -0.00594 | 0.0212*** |
| | | |
| | (0.00387) | (0.00486) |
| 2006 | -0.00387 | 0.00896* |
| | (0.00387) | (0.00510) |
| 2007 | 0.00262 | 0.00659 |
| | (0.00352) | (0.00521) |
| 2008 | 0.00244 | 0.00542 |
| | (0.00388) | (0.00593) |
| 2009 | -0.00337 | 0.00790 |
| | (0.00420) | (0.00574) |
| 2010 | -0.00856** | -0.00318 |
| | (0.00381) | (0.00546) |
| 2011 | -0.00993** | -0.00431 |
| | (0.00399) | (0.00544) |
| Constant | 0.00172 | -0.00394 |
| | (0.00291) | (0.00431) |
| | () | () |
| Observations | 150 | 52 |
| Number of countries | 20 | 8 |
| | | - |

Standard errors in parantheses, *** p<0.01, ** p<0.05, * p<0.1

| Table V. Differencing using the discrete ENP variable | | |
|---|--------------------|------------------------|
| Governance Index | All countries | Accession Countries |
| | | |
| Accession Process | 0.00240 | -0.00113 |
| Aid | 0.534*** | -0.113 |
| | (0.135) | (0.339) |
| FDI | -0.0149 | -0.264* |
| | (0.0315) | (0.141) |
| Exports | 0.0239 | 0.0801 |
| | (0.0436) | (0.115) |
| GDP | 0.120** | 0.285*** |
| | (0.0499) | (0.107) |
| Inflation | -0.0413 | -0.109** |
| | (0.0281) | (0.0535) |
| Fuelexports | -0.0248 | -0.0248 |
| | (0.0257) | (0.0356) |
| NATO Membership | 0.00317 | 0.00848*** |
| | (0.00246) | (0.00263) |
| WTO Membership | 0.00820*** | 0.00106 |
| 2222 | (0.00170) | (0.00305) |
| 2003 | 0 | 0 |
| 2004 | (0) | (0) |
| 2004 | -0.00252 | 0.00955° |
| 2005 | (0.00377) | (0.00524) |
| 2005 | -0.00717° | -0.0221 |
| 2006 | 0.00592) | 0.00322) |
| 2000 | (0.0034) | (0.00756) |
| 2007 | 0.00252 | 0.00343) |
| | (0.00356) | (0.00555) |
| 2008 | 0.00153 | 0.00649 |
| 2000 | (0.00397) | (0.00632) |
| 2009 | -0.00384 | 0.00775 |
| | (0.00434) | (0.00613) |
| 2010 | -0.00825** | -0.00455 |
| | (0.00388) | (0.00563) |
| 2011 | -0.0103** | -0.00483 |
| | (0.00412) | (0.00556) |
| Constant | 0.00251 | -0.00229 |
| | (0.00297) | (0.00439) |
| | | |
| Observations | 150 | 52 |
| Number of countries | 20 | 8 |

Standard errors in parentheses, *** p<0.01, ** p<0.05, * p<0.1

6 Results

6.1 Empirical Results

6.1.1 Table I and Table II

Table I, again, displays the relationship between institutional quality and the accession process, using several external control variables. All three regressions indicate a positive relationship between the accession process and institutional quality. The OLS regression shows that every step in the accession is parried by a 0.0178 increase in the governance index, holding other variables constant. The coefficient drops to 0.0165 ceteris paribus, when adjusting for heteroskedasticity and autocorrelation in the FGLS regression. When adjusting for fixed effects, the same relationship displays that a deviation of one step from the EAP mean, is paralleled by an increase of 0.0140 in the governance index. All the EAP variables are statistically significant at the 1 percent level and the F-statistic confirms that the independent variables are jointly significant for all regressions. Moreover, the robust standard errors decrease when adjusting the regular OLS regression for fixed effects as well as autocorrelation in the idiosyncratic error and heteroskedasticity. Aside of the EAP, only FDI is significant at a 5 percent level, in the OLS and FE models. However, when correcting for autocorrelation and heteroskedasticity, all variables except NATO become significant at the 1 percent level. The WTO coefficient displays a value of 0.0178, but is only significant in the FGLS Regression, at a 5 percent level. Nevertheless, as internal variables are not taken into account we suspect that the model is subject to omitted variable bias.

In model 2, we introduce internal variables, comprising geometrically averaged values of annual growth in GDP, inflation levels, and fuel exports. The F-statistic confirms that the variables are jointly significant. The number of significant control variables increase in all three models, confirming our belief about omitted variable bias in the previous regressions. All EAP variables are statistically significant at the 1 percent level but, as visualized in table II, adding more variables decreases the EAP coefficients. The OLS Regression and FGLS regression have the same interpretation and display an EAP coefficient of 0.017 respectively 0.010, indicating that a one-step advancement in the accession process correlates positively with an index increase. Both coefficients are statistically significant at 1 percent. The coefficient of WTO membership increases in model 2,

but is only significant²⁸ in the FGLS and FE regressions where it displays a value of 0.0404 respectively 0.0265.

6.1.2 Table III

As the FGLS estimator corrects for data issues inherent in our sample we henceforth pursue by using it exclusively. Table III present the relationship between the interpolated EAP variable and institutional quality. The coefficient of 0.0241 is statistically significant and demonstrates standard errors of 0.0032. Structurally this means that an advancement of one step in the EAP is paralleled by and 0.0241 increase in the governance index. The WTO parameter is positive and has a value of 0.0158 while the NATO coefficient is negative with a value of -0.0266. Both are statistically significant.

6.1.3 Table IV

A differenced equation essentially measures the one-unit-of-time-change in the independent variable in relation to a one-unit-of-time change in the dependent variable, all other factors held equal. The interpretation differs from that of an ordinary regression. Table IV illustrates how yearly progress in the accession process relates to a yearly change in institutional quality, ceteris paribus. The results are time-demeaned, which implies that the country-specific and time-invariant factors have been differenced away. The second row displays the EAP countries in a differenced FGLS regression on governance index where we use the interpolated accession process as our independent variable. The coefficient is 0.0110 and statistically significant. The first row displays the same regression, but that includes all countries, EAP and ENP, to add variation to data. The coefficient of the interpolated EAP variable is 0.0120 and statistically significant. The interpretation from this is that yearly advancement in the accession process is paralleled with a yearly increase in governance index, ceteris paribus all other one-year-changes in the control variables *and compared to the countries not being part of the EAP*. Both NATO and WTO display positive coefficients, but only the latter is statistically significant.

²⁸ The chosen significance level is 5 percent, although we emphasize lower levels in case of the EAP.

6.1.4 Table V

Table V exhibits two regressions with the same structure as in Table IV, the solely difference is that is that the regressions in Table V employ the discrete EAP. As both tables show the discrete variable is not significant. The first regression includes all countries into the regression, and the EAP coefficient is positive but not statistically significant. The second regression displays a negative and insignificant EAP coefficient. Finally, the WTO coefficient is positive in both regressions but insignificant in the second regression, while the NATO parameter is positive in both regressions but insignificant in the first. It the second regression the coefficient has a value of 0.0848 at a 1 percent significance level.

6.2 Discussion of Results

Looking at outcomes of the first three tables we can observe four things. First of all, for all standard regressions²⁷ it holds that the EAP variable is positive and statistically significant at 1 percent. Adding more variables does not change the result, although there is a small reduction in the size of the parameters for all regressions, clearly indicating that the initial model is subject to omitted variable bias. When gradually taking more variables into account the model gains credibility, even though it is reasonable to believe that the risk of omitted variable bias remains. ²⁸ The lack of variables is in many ways a source to result misspecification in terms of parameter size and significance.

Secondly, the statistical properties²⁹ of the FGLS regression in the second model lead us to assume that this is the most proper econometric method to use when estimating the underlying relationship between the observed group and the EAP, and we therefore use it when we proceed to develop the model.

Third, we observe that the interpolated EAP coefficient in Table III obtains markedly small standard errors of 0.0032 implying the prediction is rather precise. This interpretation is, however, somewhat down-played by the fact that the interpolated construction has not been employed in previous studies and that it is still subject to investigation.

²⁷ Table I, II and III.

²⁸ See Misspecification Analysis.

²⁹ As the FGLS regression allows for heteroskedasticity and autocorrelation in error terms it corrects some of the data issues inherent to the panels.

Finally, when comparing the two variables, the coefficient of the discrete EAP variable shows that advancement by one step in the accession process is correlated with an increase of 0.010 (FGLS, Table II) in the institutional quality index. An equivalent regression using the interpolated EAP variable, that indicates that an advancement by one step in the accession process is correlated with an increase of 0.024 (FGLS, Table III) in the institutional quality index. As will be spoken of, this attributable to how the variable is modeled over time, presenting the accession process as continuous rather than discrete. We cannot draw any specific policy conclusions from the interpolated EAP variable, but seems sensible to use it to illustrate the true course of events.

So far the discussion has only addressed models that have corrected data separately. In the differenced regressions, the structural problems of country specific fixed effects and data problems are accounted for simultaneously, leading us to believe that these are the regressions that are interesting for further analysis. Concerning the last tables (Table IV and V), the incorporation of new countries is not an alteration to previous regressions. Despite inadequacies, results display a positive relationship to the accession process even when the sample size increases, signaling robustness of our "simple" model. Although, there should be some watchfulness when considering the regressions employing the discrete variable (Table V), as they are both insignificant and the regression including only the accession countries displays a negative coefficient.

The underlying reason to incorporating the NATO and WTO into the regressions is to disentangle the effect of other possible supranational sources to institutional change. However when interpreting the results, it becomes evident that these also fall into the category of explanatory variables, as they are also supra-national conditional policies and thus require similar control variables. It therefore becomes important to acknowledge the impact of these when discussing the results. Moreover, some of the NATO results are worrisome. Previous research has indicated that NATO is a supranational source to institutional change within countries. In our regressions, NATO membership does not demonstrate any relationship with the sample countries' institutional quality. A potential explanation to this is that the variable does not provide any information about the impact of NATO's policy program MAP, which is conditional on institutional development. The variable in our regression has been designed to account for NATO members rather than NATO applicants, and potential effects stemming from the MAP might have been realized ahead of membership. Therefore it is important to acknowledge that the EAP variable might be still be subject to omitted variable bias,

even when controlling for NATO as the design of this variable is subject to misspecification. The parameters of the WTO variable are, at the contrary, uniform in demonstrating a positive and, dominantly, statistically significant relationship between WTO and institutional improvement.

As to our concerns: due to small sample size and a homogenous population, we suspect there is little variation in the data in the regressions that only incorporate the accession countries. This has several implications on our results. First, the coefficients on some of the variables do not tell us much. For example, the coefficient on aid in the FGLS regression on model two³⁰ is statistically significant, but should not be assumed to have any explanatory power. A one percentage point increase in aid to GDP is not likely to be matched by a 0.886 decrease in institutional quality. Although indicating a relationship in line with theory³¹, the magnitude of the impact of aid in each model signals a lack of precision (omitted variable bias). There are several potential explanations for this: first, the relationship between aid and institutional quality is probably not causal; second, the model probably suffers from omitted variable bias; and third, the sample size is too small (or limited) to enable conclusions on that particular relationship.

Further, we acknowledge the potential deficits in the differenced regressions. 1996-2002 only contains data for every second year, adjusted to the governance index, and because of this the time period is reduced to half of its initial size. It is therefore not possible to obtain any results from these years, causing omitted values and lowering the quality of results. This affects the inference of both the discrete and the interpolated variable, even though the case of the discrete is more severe. We continue to believe that the information from the EAP parameters is valuable, as much progress in the accession process is attributable to the years after 2003. Even so, we sadly admit that potential interesting information, especially concerning institutional convergence and improvement during the post-war period from 1996-2003 at Western Balkans, disappears in the differenced regressions.

³⁰ Table II.

³¹ Outlined in section 3.2.

6.3 Inference of Parameters

This section is devoted to the interpretation of the two EAP variables in the differenced regressions. Additionally, an elaborative discussion about the implications of the distributions of the independent variables is pursued. This is done to provide for a sensible explanation to which of the results we believe reflect the underlying relationship between the EAP and institutional improvement most accurately.

The interpretation of the differencing regressions is not entirely intuitive, but these regressions remain most interesting for inference. The essence of a differenced equation is that it captures the relationship between changes in the independent variable from one year to another, to changes in the dependent variable from one year to another, ceteris paribus, while demeaning time-constant, omitted factors inherent in the composite error. Applied to our case, the differenced regression will only take into account changes in the institutional quality years when the value of (*AccessionProcess*_{t+1} – *AccessionProcess*_t) is positive. The coefficient β_1 , showing the relationship between the accession process and institutional quality, will thus be based on parallel shifts for both, all other factors held equal.

As the interpolated variable pictures the accession process as continuous, it will increase gradually throughout time, implying that the Δ EAP will be positive for every year. However, the results would not be statistically valuable if the variable were to change with the same amount each year across the time and did not vary across panels. The problem is solved by interpolating between each step, causing the differences to differ over time and country, as long as countries continue to advance in the accession process.

The discrete EAP variable will, on the other hand, only show positive values for the years when acceding countries are upgraded in the accession process. In such a scenario the parameter of interest, the EAP coefficient, will only account for the parallel changes that occur from a promotion, ignoring the time periods in between. Adding to this, the average duration of being in the accession process is 2.636, measured in EAP steps. This would imply that each country on average contributes to the regression with 2, 63 cross- sectional observations in which the EAP variable is accounted for, over a period of seven years — a rather small and deceptive amount for statistical inference.

The results clearly side with this, being insignificant for both the studied and the extended group when using the discrete EAP variable.

The reason for having such an elaborative approach to the settlement of an appropriate independent variable is that it has several implications to the interpretation of our results. The differenced regressions are believed to carry important weight for our assessments about causality. But since the results are parted in their implications, likely due to the differences in the distributions of the independent variables, we have to provide a comprehensive motivation to why we choose to believe one measure before the other.

It is not possible to automatically refrain from the usage of a discrete variable, as it has been employed for similar purposes previously (Schweickert et al 2008). The use of binary variables in policy analysis is frequent, especially to analyze the immediate effects. However when a policy stretches over a longer period and is gradually implemented over time it becomes more difficult to formulate its impact through binary variables. Even though the different steps in the accession process could potentially be modelled as injections to improvement in a differencing model, which would concur with the idea of designing the EAP variable as discrete, this is highly unlikely to reflect reality. Another possibility is to introduce lags, although within our discrete system it is difficult to formulate lagged variables that allow for adequate interpretation, the effects of the different agreements are for several reasons expected interfere with one another making it difficult to distinguish separate effects.

Essentially to make proper use out of a differenced regression, the independent variable must have some variation across panels and time (Wooldridge 2009), which is more accurately depicted with the interpolated variable. Additionally, to theoretically justify our decision, we conform to prevailing theory when we argue that institutional change occurs slowly (Williamson 1990), that the accession process is gradually implemented and that it, as a consequence, must be appropriately distributed over time when making statistical inference. In this case we have allowed the measures to speak for themselves, the design of the interpolated variable is mostly built upon the course of actual events. Thus, we conclude by stating that we believe the interpolated measure of the EAP to be provide for a good measure for ascertaining the relationship between the EAP and institutional quality.

7. Analysis

Regarding causal inference of our results, this analysis brings us back to where we started, namely in the theoretical foundations. To give a more intuitive explanation of the interpretation conducted from this study we will briefly depict the situation. We can distinguish two potential relationships within the regressions. Either the EU only accepts new members if they have high institutional quality, whereas the EU itself is not an explanatory factor to institutional quality. This assertion should in many senses be true, given the Copenhagen Criteria, and provides for one potential causal link. On the other hand the willingness to join the Union and advance in the accession process could cause countries to change their regulatory frameworks and improve institutional quality. What is striking is that so few of the acceding countries initially had good institutions.

The accession process implies adoption of the EU's entire regulatory framework, what might at a first glance seem like an overwhelming task. The EAP itself rests upon the idea that the EU trades membership for institutional change, which in essence aims to create institutional convergence. Many would argue that these requirements automatically cause institutional improvement, but no check-up has been made to assure that this actually occurs. There is no guarantee that an advancement in the EAP leads to institutional improvement, or that the stated requirements are actually adopted. Several factors, like unspoken political agenda, trade relations and other strategic determinants, such as fuel exports, could function as plausible explanations to advancements in the accession process rather than institutional improvement.

Thus, it essentially becomes a question of legitimacy. The justification of the EAP as an integrative tool rests entirely upon its effectiveness in implementation, in principal translating to it being a source to institutional improvement. Imposing foreign rules through conditionality is according to theory potentially enabled by power asymmetries (Bennett 1991), but it is not economically justifiable if it has not been proven to actually improve institutional quality. This reasoning is what warrants the quantitative approach of this thesis and what allows us to ask whether there is an underlying causal relationship between the EAP and improvement of institutional quality. Our most sophisticated regression, which differences the model using the interpolated measure of the EAP, (Table IV) reveals that *a yearly advancement in the accession process is paralleled with a yearly increase of 0.0120 in the governance index, holding fixed for all factors including the countries not being part of the EAP.*

This regression controls for external and internal variables, country-specific effects and other timeinvariant factors, as well as corrects for heteroskedasticity and autocorrelation in the error terms. More importantly it has facilitates a setting similar to that of a randomized trial with a treatment and control group, by making use of the differences between the EAP and the ENP. As referred to before³² the ENP policies in many ways resembles the EAP policies, only differing structurally in that the EAP holds the promise of future membership in the EU. By contrasting them in a regression it becomes possible to separate the effects of the "membership-carrot", the conditionality associated with membership, on the improvement of institutional quality.

Results clearly suggest a positive connection between the EAP and institutional quality, which remains true for almost all of the regressions. Adoption of European institutions can therefore legitimately be thought of as a potential driver and the statistical properties of the differenced FGLS regression and the framing of the model speak in favor of causality.

Nevertheless we have repeatedly argued that we believe that the NATO variable is not properly designed, and acknowledged that the FGLS estimator is consistent but biased. Also, the size of the coefficient of the EAP decreases subsequently when controlling for additional variables, which makes it difficult more to disregard the problem of omitted variable bias. It is also arguable whether the ENP serves as an adequate control group, as the diversity between member countries once again leads us to believe that there are several control variables missing in the regression, suggesting that it is not reliable for causal interpretation. We thus refrain from stating that the relationship between the EAP and institutional quality is causal, but emphasize that there are substantial indications towards that an underlying relationship exists and that an extended model could possibly confirm a causality.

Both the EU and the acceding countries have motives to stress an improvement in the quality of institutions of the acceding countries (Nicolaides 2010). Nevertheless, much literature on convergence through regulatory and policy integration states that integration through harmonization is time-consuming and difficult to achieve (Koop and Siebert 2003). Regardless of causality, the results exhibit that the accession process is not a fundamental explanation to convergence and institutional improvement. This thesis shows that the accession process is a potential driver to institutional change, but also displays that it is not the most powerful. We advert to this line of reasoning when we, in

³² Footnote 25, p 21.

agreement with previous research (Koop and Siebert 1993; Tischy 1991) stress the importance of considering other sources to convergence such as trade and FDI, when creating policies directed towards institutional improvement. We also emphasize the importance of country-specific policy design and stress that there are no "general recipes". One type of policy is not applicable on all scenarios; policy frameworks must be carefully developed with respect to country or cluster specific pre-conditions. Even though the EU engages in profiling and adapting the accession process, insufficient efforts might be an explanation to the limited impact of the accession process.

8 Conclusion

Our results are uniform in demonstrating that the accession process has a robust, positive relationship to institutional quality, in line with our hypothesis. This could be explained with institutional theory on regulatory and policy harmonization, on which we based the hypothesis —implying that conditional adoption of rules through the accession process should cause institutional change in terms of convergence, subsequently giving rise to institutional improvement. Whether this is the causal link in our case, cannot be ascertained. The FGLS estimation suggests that there is a positive and causal relationship between institutional quality and the accession process, when differencing away country specific factors and letting the time intercept vary. However FGLS is a consistent but biased estimator, and we cannot be assured that the model controls properly for omitted variable bias. Due to this and because of our small sample size we will remain restrictive in our interpretation of causality. However we will acknowledge that the results point in a favorable direction and that institutional quality and the EAP nevertheless, exhibit positive correlation, implying that there is some sort of underlying relationship.

9 Misspecification Analysis and Future Research

9.1 Regarding the FGLS Model

Although the Woolridge test only tests significant for autocorrelation at the 10% significance level we proceed by using the FGLS model adjusted for autocorrelation and heteroskedasticity, explained further in Section 5. However, using a FGLS method is primarily suitable if n > t, which in this case implies if the number of observed countries is larger than the number of observed years. Even if this assumption does not hold true in all models, we regard the FGLS as a good estimator for our study.

9.2 Regarding Endogeneity and Instrumental Variables Regression

There are reasons to expect two-way causality running between the variables in the regression, not least evident in theories confirming endogenous relationships outlined in Section 3. These draw on examples of FDI and economic growth. Due to the difficulties of IV regressions, we identify such endogeneity as defects to our model rather than trying to correct it by applying an instrumental variables regression. Although it would have been favorable to complement existent models with an IV regression, the difficulties of identifying relevant instruments makes it rather complicated. Also, if an IV model is not handled correctly, e.g. a usage of weak instruments, it might as well generate loss of precision and be of no improvement over the regular model (Baum 2012).

9.3 Regarding the Index

The current governance index is based on an arithmetic average of the scores for the six indicators, each indicator bearing equal weight. This is not always a justified method. A preferable index would have accounted for each indicators respective importance when determining an overall "score" of institutional quality, as well as combining several indexes. Thus, an optimal index would consist of a combination of the weight-averaged indicators of several indexes. Also, the choice of the particular index can awaken questions. Several organizations provide similar indexes or measurements of governance/institutional quality, so why would the WBGI be more suitable? Section 4.1.2 outlines the reasoning behind our choice of index. What it does not mention, however, is that other indexes, such as the EBRD index, cover longer time periods. Previous criticisms outline general defects of the indexes and indicators used to measure institutional quality, such as a lack of objectiveness and credibility in the data as it is based on expert opinion or polls and tend to reflect the political or ideological agenda of the organizations providing the measures.

9.4 Regarding Lagged Effects

One could suspect that the impact deriving from the EAP is not noticeable immediately, but that it can take years to distinguish due to gradual adaptation. Also, setting up necessary processes to enable adoption in the long run might cause a weakening in institutional quality in the short run. Slow adaptation is apparent in the accession process and the many years it often takes to implement all the criteria.³⁰ To examine such successive effect is possible by implementing a lag in the corresponding variable. However, when further exploring this possibility, we acknowledge that the lagged effect of one year would coincide with the effect of another year in the EAP, making it harder to distinguish the true relationship.

9.5 Regarding Omitted Variable Bias

Doubtless that institutional change often is triggered by political reasons, it was highly desirable to include political factors in our model. However, we experienced difficulties in collecting relevant information. The lack of data on expressed opposition to EU membership resulted in a decision to eliminate it as a political internal variable. The only obtainable data on such opinions was valid for years 2006, 2008, 2009, and 2010 and was only applicable to the Balkan states. Including a political variable with insufficient data in our regressions would likely manipulate the results. Furthermore, the available data indicated an overall low opposition in the Balkan states, with a mean of 7.3% excluding Croatia.³¹ It is rather unlikely that such low opposition would induce a considerably negative impact on institutional quality.³²

Many theories point out time invariant variables such as culture and religion as some of the main determinants of institutional quality and change. Yet again, we refer to the time-invariant model controlling for such fixed effect. Stressing the lack of variables, it would have been advantageous to control for factors such as corruption and conflict. Yet again, due to the small sample size and their homogeneity, there is also a high possibility that this would not have improved the model and that, for example, a conflict in either country truly would have impacted other countries in the sample. Concluding, we attribute most disadvantages of the model to the insufficient sample. With respect to this, we add more countries in an attempt to correct for some of these drawbacks. This is

³⁰ As discussed in the preface.

³¹ Opposition disregarded due to full accession 2013.

³² http://www.iss.europa.eu/uploads/media/cp126-The_Western_Balkans_and_the_EU.pdf (retrieved May 15, 2013).

displayed in Table V in the appendix and a belonging discussion is provided in Section 6.2. To put an end to the discussion of the model and finalizing this paper, one can always argue that there exists a possibility of omitted variable bias. The problem is unavoidable and lies in the near impossibility of identifying all variables with simultaneous relationships to the dependent variable

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Appendix

May 15, 2013

\\ariables

Specification

Source dcx ramgiog from 0-! W!BGI cn,gc:of6 im3icato:rs wh1:re high

Table III: Var aibles

| Gl | Govemance Index ramgiog from O-! Arithm1:tic S.\cn,gc:of6 im3icato:rs wh1:re high inde:ll: imd.icar ood govemam:e | W!BGI |
|--------|---|--|
| AP | A-cocsron Process. btd.ltxodl scaic:raogin,g firom 0-8 wh-tre O=mo jitogjcss aod &=acccdimg ODli!Dt }' | EU Agrei:me:nt |
| NATO | Bummy \'11.1iab c wite:re. ⊨mcfnbcr, O=atbcrwisc | NATO |
| W110 | Bummy \'11.1iab c witere. ⊨mcmbcr, O=atbcrwisc | W IO |
| EXP | Ex rts as % of GD:P, goom-ciric a"<"<:ra c O\'cr Clilrrcmt aod pa!il: h12/0 years | World Bamk Data,\IOa-ld! \'t::lnpme:rrbo'''ica ars: |
| AID | l'."rt officjal dovc opmcm assis.taoce aod oftiicjalaid received ('% of GDP}, goom-ttric a\'CJ:B.ge over CWTcnt and pBS two ye:BJS: | \VorldBamk Data,\o'Oa-ld! \rdnpme:rrbo"'ica ars: |
| FDI | Foreign direct inivc.stmcm, mctinffo\\.FS (% of GH!P). Geom-etric a <"era c o\'cr current and past two years | \VorldBamk Data,Wi:M"ld! JX\elo;pmcrrt Jn-dl cstors: |
| liNF'L | Inffilatiom,oomrum1:rpricc:s (IIJliD!Ial %). Geometr c avcrage over currem and pBSt mb yean | World Bamk Data,WOa-Id! !Xvclopme:nt!lin:dica[ars. |
| GDP' | GDPgrow1h (anrms1 %), goomcmc a101c.rago ovcr L'J!IJTCM a1td! pastmo)"4:-a:rs | World Bamk Data,WOa-ldl IX\'l::lo;pmcnt oo"ica[ars |
| FEXP | Fu.cl cxpo:rt:s ("A. of mcn::haorusc c:xports;) | World Bamk Data,WOa-ldl IX\'t:lopme:rrtbo"'ica[ars: |

| | Coun1ries | AI' | NcgOiialio | Candidlatc | Applicatio | SAAr>igned | El'i1P | El'i1PAP | AA force | PCA force | WTO | NATO |
|---|-------------------------------|------------------|------------------------------|-----------------|----------------|--------------|--------------|----------|----------|-----------|------|-------|
| Molltmodel | Acacssion ammtrics | | | | | | | | | | | |
| | <u>Troublession animetros</u> | | | | | | | | | | | |
| | Albaoia | | | | 2009 | 2006 | | | | | UXXI | 2009 |
| | Boscia and Hc:rn:go\ioa | | | | | 200B | | | | | | |
| | Croatia | 2011 | 2005 | 2004 | 2003 | 2002 | | | | | UXXI | 2009 |
| | Leiaou Ma cdonia EVR | | 2010 | 2010 | 2009 | 2002 | | | | | 2002 | 1.949 |
| | Monteine gI"o | | | 2005 | 2004 2008 | 2002 | | | | | 2002 | |
| | Serbia | | | 201.0 | 2002 | 2007 200B | | | | | | |
| | Тињеу | | 2005 | UXXI | 1.996 | | | | | | | 1.952 |
| anded nuxJel | - | | | | | | | | | | | |
| | El'i1Pcoumrios | | | | | | | | | | | |
| | Algeria | | | | | | 2 004 | | 2005 | | | |
| | Armenia | | | | | | 2004 | | | UXXI | 2003 | |
| | Azerbaijan | | | | | | 2004 | 2006 | | UXXI | | |
| | Belarus | | | | | | 2004 | | | | | |
| | Egypt | | | | | | 2004 | 2007 | | L917•• | | |
| | Georgia | | | | | | 2004 | 2006 | | | UXXI | |
| | [srnd | | | | | | 2004 | 2005 | 2000 | | | |
| | Jordanien | 2004 2005 2002 | | 2002 | | UXXI | | | | | | |
| | Lebanon | | | | | | 2004 | 2007 | 2006 | | | |
| | Libya | | | | | | 2004 | 0005 | | 1.000 | 2007 | |
| | Moldavia | | | | | | 2004 | 2005 | 2000 | L993 | 2002 | |
| | NIO:TOCOO | | | | | | 2004 | | 2000 | | | |
| | S) Ha TWI inio | | | | | | 2004 | 200.5 | 10011 | | | |
| | Ukraine | | | | | | 2004 | 2005 | 15511 | 1993 | 200B | |
| 'Proms lant or catholic chu | ru tia l lity | | | | | | 2001 | 2000 | | 1000 | 2008 | |
| Cooperation Agracmoo. | , | | SAA = S;abl | iry and Associa | ation A.grccmc | flt | | | | | | |
| AI'= Sigocxi Treaty of Aoccs; sion ENP = Europe | | ean :'llei.ghbor | nood Policy | | | | | | | | | |
| Nc:golialioo = sk:tt of a<:ocssion negotiations El'dPAP=EuropeanNcighborboodPolicyActionPlian | | Action Plian | | | | | | | | | | |
| Candidlatc = ro civcd ca | ndidlatc starus | | AA = Associatioo Agreement t | | | | | | | | | |

Table IV: Index specification

Appliaalioo=Year ofEU applicatioc

PCA = PBI1:ru:rsltip aod Coop::rn.tionAgrccmcnt



Figure 1: Institutional development during EU accession process



Figure 2: Institutional development

| Governance Index | |
|------------------|-------------------------------|
| EU | 0.00 80 ". |
| NATO mcmbmhip | (0.00132) 0.MN |
| WTO membership | 0.001941) 0.ms7, , |
| Exports | 0.0209 (0.029&) |
| Aid! roce:ption | 0.4%4 (0.125) |
| FDI | 0.004 17 (0.Cl'40E) |
| hfilatiam | 0.01 J (0.0100) |
| GDP gmW1il. | 0.0349 (0.0520) 0.12540 |
| Fuel exports | (0.013.)) 0.3 |
| Carutant | (0.0126) |

'fable V:ENP Countries hlch11.dedl

Number of countriesStmdard mars in pare.ntitescs••• p 0.01, •• p 0.0s, • p 0.1



Figure 3: Institutional development all countries'