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The role of quality of institutions in economic growth of Western Balkans

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STRESZCZENIE

Rola jakości instytucji we wzroście gospodarczym Bałkanów Zachodnich

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Niniejsza rozprawa analizuje zależność między jakością instytucji a rozwojem gospodarczym krajów Bałkanów Zachodnich w latach 1990-2021. W tym celu wykorzystuje porównawczą analizę panelową obejmującą dziewięć państw Europy Środkowej, Południowej i Południowo-Wschodniej jako grupę odniesienia. Odwołując się do teorii wzrostu i rozwoju oraz ekonomii instytucjonalnej i politycznej, badanie sprawdza, czy jakość instytucji wpływa na rozwój w gospodarkach transformujących się i pokonfliktowych. Weryfikuje też, czy efekty te różnią się pomiędzy wymiarami instytucjonalnymi, krajami i horyzontami czasowymi.

Analiza empiryczna opiera się na zbilansowanym panelu piętnastu krajów, z czego sześć gospodarek Bałkanów Zachodnich stanowi próbę zasadniczą, a dziewięć krajów porównawczych pełni funkcję punktu odniesienia oraz podstawy testów odporności wyników. Zastosowano szeroki zestaw estymatorów, obejmujący estymację metodą najmniejszych kwadratów, modele panelowe z efektami stałymi i losowymi, podejście skorelowanych efektów losowych (Mundlaka), podejścia instrumentalne oraz dynamiczne systemowe estymatory uogólnionej metody momentów. Pozwoliło to na uwzględnienie w analizach nieobserwowalnej heterogeniczności, kontrolę endogeniczności oraz zależności poziomów dochodu od ścieżki.

Wyniki wskazują, że jakość instytucji jest dodatnio i istotnie powiązana z poziomem rozwoju gospodarczego. Instytucje oddziałują na wzrost głównie poprzez mechanizmy długookresowe, nie przez krótkookresowe zmiany poziomu dochodu. Kontrola korupcji i efektywność rządzenia okazują się najbardziej stabilnymi i odpornymi wymiarami instytucjonalnymi. pozostałe wskaźniki ładu instytucjonalnego mają słabsze lub silnie kontekstowe znaczenie przy uwzględnieniu dynamiki. Potwierdzono także realne zależności od ścieżki w regionie.

Słowa kluczowe: wzrost gospodarczy; Bałkany Zachodnie; wskaźniki jakości instytucji; dane panelowe; modele panelowe; skorelowane efekty losowe; metoda zmiennych instrumentalnych

ABSTRACT

The role of quality of institutions in economic growth of Western Balkans

Filloreta Brahimi

This dissertation examines the relationship between institutional quality and economic growth. It considers this relationship as a fundamental dimension of economic development in the Western Balkans from 1990 to 2021. The study uses a comparative panel framework with a reference group of nine Central, Southern, and Southeastern European economies. Drawing on economic growth theory, institutional economics, and political economy, the study investigates whether governance quality and institutional quality contribute to development in transitional and post-conflict regions. It also explores whether these effects differ across institutional dimensions, countries, and time horizons.

The empirical analysis uses a balanced panel of fifteen countries. Six Western Balkan economies make up the core sample, while nine reference group countries are used for benchmarking and robustness checks. The study employs A comprehensive set of estimators. These include pooled OLS, fixed- and random-effects panel models, correlated random effects (Mundlak), instrumental-variable approaches, and dynamic system GMM. This approach allows for the treatment of unobserved heterogeneity, endogeneity, and income persistence.

The results show that institutional quality has a substantive and positive impact on long-run economic development in the region. These findings contribute to academic debates by providing comparative and dynamic evidence from transitioning and post-conflict economies. Insights from the analysis underline how improving control of corruption and government effectiveness can meaningfully influence economic policy and reform strategies in the Western Balkans and similar contexts. Strong income persistence is observed, confirming developmental path dependencies across the region.

Keywords: Economic Growth; Western Balkans; Institutional Quality Indicators; Panel Data; Panel Data Models, CRE, IV-2SLS.

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This PhD has been a long and often quiet journey. It demanded persistence, patience, and many hours of work that only my family and my mentor could see. Along the way, it shaped not only my research skills but also how I think, question assumptions, and work through uncertainty. Completing this dissertation marks the end of an important chapter of growth, both academic and personal.

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This dissertation is also a reflection of the life we shared alongside it.

I dedicate this work to the memory of my father, who knew that my thesis had been approved and was very happy about it but did not live to see its completion.

LIST OF PUBLICATIONS

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LIST OF ABBREVIATIONS

2SLS	Two-Stage Least Squares
AJR	Acemoglu, Johnson, and Robinson
ALB	Albania
BIH	Bosnia and Hercegovina
CC	Control of Corruption
CEE	Central and Eastern Europe
CM	Common Market
CPI	Corruption Perceptions Index
CRE	Correlated Random Effects
CU	Customs Union
DV	Dependent Variable
EBRD	European Bank for Reconstruction and Development
EISD	European Identity on Security and Defense
ERRF	European Rapid Reaction Force
ESDI	European Security and Defense Identity
EU	European Union
FDI	Foreign Direct Investment
FE	Fixed Effects
FTA	Free Trade Area
GATS	General Agreement on Trade in Services
GATT	General Agreement on Tariffs and Trade
GDP	Gross Domestic Product
GE	Government Effectiveness
GMM	General Method of Moments
ICT	Information And Communications Technology
ILI	Institutional Legacy Index
IMF	International Monetary Fund
IPA	Instrument for Pre-Accession Assistance
IV	Instrumental Variables/Independent Variable
KOS	Kosovo
LDV	Lagged Dependent Variable

LSDV	Least Squares Dummy Variables
LDCs	Least Developed Countries
MKD	Macedonia
MNE	Montenegro
NATO	North Atlantic Treaty Organization
NEG	New Economic Geography
NGT	New Generation Theory
NNEG	New New Economic Geography
OECD	Organization for Economic Co-operation and Development
OLS	Ordinary Least Squares
PCA	Principal Component Analysis
PESD	Politique européenne de sécurité et de défense
PfP	Partnership for Peace
PS	Political Stability
PTA	Preferential Trade Agreement
PWT	Penn World Table
QoG	Quality of Government Dataset
R&D	Research And Development
RE	Random Effects
RG	Reference Group
RL	Rule of Law
RQ	Regulatory Quality
SBTC	Skills-Biased Technological Change
SPSEE	Stability Pact for Southeastern Europe
SRB	Serbia
TFP	Total Factor Productivity
TWFE	Two-way Fixed Effects
UNCTAD	United Nations Conference on Trade and Development
UNCAC	United Nations Convention Against Corruption
UN	United Nations
VA	Voice and Accountability
VIF	Variance Inflation Factor
WB	Western Balkans
WEU	Western European Union

WGI	World Governance Indicators
WTO	World Trade Organization

EXECUTIVE SUMMARY

This dissertation examines the relationship between institutional quality and economic growth in the Western Balkans over the period 1990-2021, using a comparative panel framework that embeds the region within a broader European reference group. It addresses a key, long-standing question in political economy: why have Western Balkan economies exhibited persistent income gaps and slow convergence relative to European Union (EU) members despite prolonged reform efforts, external support, and formal integration processes?

Instead of attributing these outcomes exclusively to transitional challenges or deficiencies in policy design, the thesis argues that institutional persistence, historical legacies, and limited complementarities across governance dimensions shape long-run development paths.

The theoretical framework synthesizes classical, neoclassical, and endogenous growth theory, as well as contemporary institutional economics, discussed in Chapters I and II, treating institutions as slow-moving, historically embedded constraints rather than as policy instruments capable of generating rapid economic change. While earlier literature often focused on individual institutional pillars such as property rights or corruption control, this dissertation emphasizes complementarities among institutional quality dimensions, including regulatory quality, administrative capacity, rule of law, political stability, and accountability. This led us to use several composite institutional measures, while distinguishing explicitly between within-country and between-country institutional effects.

The analysis critically examines institutional persistence and path dependence as key views on institutional change. Institutional persistence highlights the durability of weak governance structures sustained by entrenched elites, bureaucratic inertia, and informal networks. Path dependence, on the other hand, emphasizes the role of critical historical junctures, including the dissolution of the former Yugoslavia, post-conflict transitions, and EU accession processes. The dissertation shows that neither perspective alone fully explains observed development paths. Institutional development in the Western Balkans results from the interplay of inherited constraints, external incentives, and domestic political change.

A historical-institutional discussion situates contemporary outcomes within this broader context. Ottoman administrative legacies contributed to informality and administrative weakness in parts of the region, while Austro-Hungarian influence fostered stronger bureaucratic traditions. The Yugoslav period added a further institutional layer, combining capable administrative systems with political fragmentation and ethnic divisions. The breakup of Yugoslavia proved painful to the region and led to numerous conflicts in the 90s with far-reaching repercussions. The conflict between Kosovo and Serbia is unfortunately still simmering and not fully resolved. These overlapping legacies account for the significant institutional diversity in the Western Balkans. Kosovo is discussed as part of this historical and institutional context, but is excluded from the econometric analysis due to data limitations.

Economic growth in the dissertation is measured using the logarithm of real GDP per capita levels, consistent with the focus on long-run income outcomes. Institutional quality is measured mainly using the Worldwide Governance Indicators (WGI) of the World Bank Group (Kaufmann, Kraay, & Mastruzzi, 2010). Principal Component Analysis is employed to construct composite institutional quality indices, while an Institutional Legacy Index captures historically rooted institutional constraints and persistence.

The empirical approach is described in Chapter III and is implemented in Chapter IV in a sequential manner, utilising fixed-effects estimators, correlated random-effects models as outlined by Mundlak, fixed-effects instrumental-variable estimators, and dynamic panel models employing the System GMM estimator. The five main hypotheses are developed as a result of a critical review of theoretical and empirical literature in Chapter II. The results are discussed in Chapter IV, and then conclusions are drawn in Chapter V.

The empirical results support Hypothesis H1, indicating that institutional quality is positively associated with income levels primarily through persistent cross-country differences rather than through short-run within-country changes. **Hypothesis H2 is partially supported**. Among individual governance dimensions, regulatory quality and government effectiveness exhibit the most robust and stable associations with income levels. At the same time, corruption control and rule of law show weaker and less consistent effects. **Hypothesis H3 is strongly supported**, as historical institutional legacies remain economically meaningful across fixed-effects (FE), correlated random-effects (CRE), and instrumental-variable (IV) specifications. The findings from the dynamic system GMM analysis show that income levels tend to remain stable over time. This persistence means that the impact of institutions on economic growth is more about shaping countries' long-term prosperity, rather than driving rapid changes in the short term. In other words, improvements in institutional quality gradually influence development, but do not deliver immediate boosts to economic performance.

The analysis also provides partial support for Hypotheses H5 and H4. Interaction terms indicate that EU and NATO membership/candidacy function primarily as external commitment and credibility mechanisms, reinforcing institutional reforms rather than substituting for domestic institutional capacity. Conversely, past military conflicts exert a negative long-run effect, reflecting enduring institutional and economic costs for the post-conflict societies. This is in line with prior results in the literature.

Across specifications, composite institutional measures are more robust than individual governance indicators. This points to the presence of clear institutional complementarities.

The policy implications are formulated in Chapter V. The results suggest that sustained convergence with the European Union cannot be achieved in the Western Balkan region through isolated reforms or formal integration alone. Ultimately, lasting progress relies on steady gains in regulation, administration, and political stability, while gradually overcoming old institutional barriers. External support or anchoring in international bodies and frameworks such as the EU or NATO helps, but true reform must come from strong, credible institutions at home.

Most existing studies on the Western Balkans focus on individual countries or specific governance dimensions, and rarely analyze the combined effects of institutional quality, conflict exposure, and EU and NATO integration across the entire region. Thus, the literature offers limited evidence regarding how these factors jointly influence long-term development outcomes in the Western Balkans.

The dissertation contributes to the literature by providing a context-sensitive and empirically grounded assessment of how institutional quality shapes long-run income levels in the Western Balkans. Its main contributions lie in explicitly separating within-country institutional variation from persistent cross-country differences, demonstrating the enduring economic relevance of historical institutional legacies, and showing that composite measures of institutional quality outperform individual governance indicators in explaining development outcomes. By combining historical analysis with a carefully structured empirical strategy, the study advanced understanding of institutions as slow-moving, complementary, and historically embedded determinants of economic development rather than short-run policy levers.

INTRODUCTION

Background

Research has shown that institutions have a significant influence on economic performance, often exerting a powerful impact when considered alongside other factors (Ben Ali & Krammer, 2016). Post- World War II research increasingly focused on explaining cross-country differences in growth. To achieve tangible results in analyzing changes in economic growth across countries, it is essential to examine what prevents certain regions or countries from investing more in physical, human, and technological capital. Researchers emphasize the roles of both formal and informal institutions, which collectively shape the overarching framework within which individuals and entrepreneurs engage in economic activities (Baronchelli, 2024).

Institutions include formal and informal rules, traditions, habits and regulations, as well as organizations. They shape economic and social interactions with feedback loops. This includes legal systems, property rights, governance structures, and cultural norms (Miozzo & Yamin, 2012). They influence both the credibility of foreign investment and domestic governance through formal and informal channels.

Researchers assess institutional quality by effectiveness, efficiency, and adaptability, among other factors. High-quality institutions promote economic development and stability, while poor-quality institutions hinder growth (Fayissa & Nsiah, 2013). Academic studies examine how institutional quality affects economic outcomes, such as investment, entrepreneurship, and societal well-being (Acemoglu et al., 2005).

The literature on defining institutions as fundamental determinants of economic development, both directly and indirectly, is extensive. The main question concerns the quality of institutions, specifically what causes some to favour development and others not, and the processes of institutional change. Scholars distinguish among various institutional types that shape growth. The examination of economic growth in relation to institutions has seen notable advancements in recent decades, especially with the rise and recognition of endogenous growth theory, the deep and shallow determinants of economic growth perspective, and progress in institutional economics. This theoretical framework gained increased attention in the early twentieth century, highlighting the significance of internal factors, particularly institutions, in fostering sustainable economic development (Haidar, 2012).

Rodrik (2020) conducted an assessment of the main drivers of economic development. The study highlighted the significance of institutions as a core driver, classifying them as semi-endogenous. It identified geography as the sole exogenous driver, and the extent of openness to trade, as well as semi-endogenous factors, as key contributors to income disparities between the world's most developed nations and underdeveloped. Moreover, institutions wield considerable influence over a country's political stability.

Economic growth and democracy are mutually reinforcing over the long run, as higher income levels tend to increase demands for political accountability and institutional constraints on power (Lipset, 1959; Barro, 1996). At the same time, democratic institutions contribute to growth by protecting property rights, improving policy credibility, or reducing political uncertainty (Acemoglu et al., 2019; Persson & Tabellini, 2009). Ben Ali & Krammer (2016) found that democracies that safeguard public rights and property are more conducive to economic growth. However, they noted the link between democracy and development is not always clear. Dictatorships, while lacking long-term stability, can drive growth when stable. Democratic institutions that enable political representation are major contributors to development (Rodrik, 2000).

Several authors draw a clear line between economic and political institutions. Economic institutions are crucial for economic development because they shape incentives and efficiency. In contrast, political institutions control power distribution and resolve conflicts (Acemoglu et al., 2001). Inclusive political and economic institutions drive long-term economic prosperity. Such institutions are characterized by broad-based participation and equitable distribution of power and resources. In contrast, extractive institutions concentrate power and wealth within a narrow elite and are associated with economic stagnation and poverty. The share of both in society matters.

A factor at play is also the extent of inequality within a society. Obobisa et al. (2023) show that including inequality makes its coefficient negative and significant, whereas adding institutional quality reduces it and renders it insignificant. Redistributive institutions reallocate resources, while efficient institutions boost collective welfare by promoting cooperation (Siegle, 2001).

Research in these areas examines how economic factors, geographic features, openness, and institutional quality interact. Authors use theory and data to analyze the dynamics that shape economic development and outcomes (Knox et al., 2014). Acemoglu et al. (2005) show that strong institutions create stability for economic agents, enabling productive activities and sustained growth. This research analyzes institutional characteristics using indices such as the Worldwide Governance Indicators (WGI), including the rule-of-law dimension, to measure quality across countries.

In particular, Acemoglu, Johnson, and Robinson (2005) demonstrate that institutional quality and political structures are fundamental drivers of long-run economic development. Their findings show that inclusive institutions are central to sustaining growth and the success of structural transformation. This institutional perspective has become a foundation of modern development economics and political economy (Acemoglu & Robinson, 2012; North, 1990; Rodrik, Subramanian, & Trebbi, 2004).

For emerging and developing economies, transition states, and least developed countries (LDCs), successful economic convergence is strongly conditioned on the ability to anchor domestic institutions within more advanced economic and political frameworks. In this context, accession processes, whether to the European Union (EU), the WTO, or regional trade and investment regimes, preferential trade agreements (PTAs), free trade areas (FTAs), customs unions (CUs), or even common markets (CMs), act as external commitment mechanisms. These, in turn, discipline domestic policymaking and accelerate institutional upgrading (Campos, Coricelli, & Moretti, 2014; EBRD, 2013; Roland, 2004). Empirical evidence shows that institutional quality before accession, the credibility of reform during negotiations, and post-accession enforcement capacity are decisive for the success of economic integration and long-term growth performance (Berglöf et al., 2010; Boeri & Terrell, 2002; Estrin & Uvalic, 2014).

This dissertation examines how institutional quality affects economic growth in the Western Balkans relative to the regional reference group of countries. It identifies specific institutional challenges that may influence the region's efforts to join a broader regional economic organization. Understanding the impact of institutional quality on economic growth is crucial for shaping effective policy and promoting sustainable development.

No economy is ideal. Understanding the impact of institutionalization on economic growth in the short run means implementing reforms that remove the most distortions. Hausmann, Pritchett, and Rodrik (2005) define these as the *constraints of growth*. In the Western Balkans, the Berlin Process, the Open Balkans, and the EU have each imposed a series of reforms. These aim to reframe the region's accountability, legislation, and political stability, and combat corruption as a major barrier to development. They also seek to reinforce the rule of law and attract investments. The long-run aspects of institutions are even more important, as institutional change takes time.

The history of institution formation in South-Eastern Europe is shaped by the layered histories of Ottoman, Austro-Hungarian, and later Yugoslav rule. The Ottoman Empire institutionalized patrimonial systems of rule, which featured centralization of power, informal bargaining, and weak bureaucratic rationalization (Vervaet, 2004). These structures led to weak property rights and clientelist networks that still shape governance in parts of the region. Empirical evidence links these historical legacies to modern shortcomings in administration and the rule of law. Countries most deeply incorporated into the Ottoman Empire are often characterized by slower institutionalization (Susko, 2024).

These legacy challenges the idea that state-building is a neutral or purely technical process. It also highlights how imperial government creates path dependencies that limit reform. In comparison, Austro-Hungarian rule brought aspects of law codification, professional bureaucracy, and infrastructure investment. This left a more positive institutional imprint, especially in regions like Slovenia and Croatia.

Habsburg rule led to traditions of municipal self-governance, judicial independence, and administrative legality. These traits contributed to greater institutional resilience during periods of change. However, such legacies were also hierarchical and centralized, limiting broader civic involvement. This reveals the ambivalence of imperial governance in shaping long-term directions (Ukshini, 2021). Empirical research across post-communist states shows that former Habsburg states tend to perform better in institutional terms, particularly in public administration and the courts. This supports the idea that variations in imperial rule explain current differences in governance quality.

The Yugoslav heritage created hybrid institutions that combined socialist self-management and authoritarian centralization. The system raised social welfare and industrial growth but also led to inefficiencies and ethnically dominated institutions. The breakup of Yugoslavia exposed the model's vulnerability. It can be traced to a lack of centralized coordination and unresolved disputes between Balkan nations. As a consequence, it led to institutional disintegration and a war. The socialist legacy, combined with earlier imperial influences, continues to affect governance, especially in the Western Balkans.

These layered legacies mean that institutional performance in the region is not simply the result of post-1990 reforms. Instead, it reflects centuries of governance practice, with each period imposing its own structural limits. These limits often overlap. This paper examines the Western Balkans, a region in the process of joining a regional economic organization, the European Union, to understand how institutional quality affects economic growth. The Western Balkans include Albania, Bosnia and Herzegovina, Croatia, Kosovo, Montenegro, North Macedonia, and Serbia. These countries are undergoing major political transitions and economic reforms.

Literature Gap

Scholars have examined the historical evolution of Western Balkan institutions and economic transition. However, the literature lacks a clear, integrated understanding of how institutional quality, shaped by Ottoman, Austro-Hungarian, and Yugoslav legacies, influences current economic growth, especially during the ongoing process of regional integration and anchoring in a more advanced integration block. Most studies assess institutional performance separately, focusing on governance reforms, historical legacies, or EU accession requirements, but rarely link these areas.

Researchers acknowledge the persistence of path dependencies and governance weaknesses. Despite this, there is little empirical work that disentangles the effects of overlapping historical layers on today’s institutional constraints on growth. Current research also overlooks the differentiated impacts of reforms introduced through the Berlin Process, the Open Balkan initiative, and EU conditionality. As a result, the literature does not explain why institutional improvements progress unevenly across Western Balkan countries, or how these variations shape economic growth trajectories. This stresses the need for a focused investigation linking institutional quality, historical legacies, and the region's ongoing integration processes to economic development patterns in the Western Balkans.

This dissertation fills this gap by analyzing the Western Balkans (1990-2021) using various econometric approaches for a dynamic panel of countries of the region in a multidimensional institutional context. The analysis uses historical and geopolitical instruments and incorporates robustness checks across integration and conflict contexts.

Problem Statement

The Balkan region, shaped by its complex history and varied economies, is at a turning point in development. At its core is the question of how the quality of institutions affects both the speed and nature of economic growth. Even with progress, the region still faces lasting problems from weak institutions, inconsistent governance, and the recent effects of conflict. Policymakers and stakeholders need to understand how institutional quality links to economic growth to encourage lasting prosperity in the Balkans, especially the Western Balkans. To speed up reforms, they need to be more targeted, but at the same time, take into account the institutional context.

One of the central issues confronting the Balkan region is the varying degrees of institutional quality across its countries. While some nations have achieved major progress in strengthening transparency, strengthening the rule of law, and bolstering regulatory frameworks, others continue to struggle with systemic corruption, bureaucratic inefficiencies, and inadequate legal protections. These differences in institutional quality not only shape the overall investment climate but also influence resource allocation, market efficiency, and the prospects for growth, including the so-called inclusive growth.

Moreover, the impact of institutional quality on economic growth in the Balkans is complex. Strong institutions encourage entrepreneurship, attract foreign investment, and support innovation. In contrast, weak or broken institutions slow economic growth, scare away investors, and increase inequality. Understanding how institutional quality affects economic growth is key to creating policies that address the causes of these problems and help the region grow.

The Balkan region's geopolitical context adds complexity to the link between institutions and development. Located at Europe's crossroads, the Balkans are shaped by regional dynamics and flows of capital and labor. Shifting geopolitical alignments also play a role. It is crucial to see how regional and domestic institutional factors combine to shape economic outcomes. This helps guide practical and relevant policy and fosters regional cooperation.

In light of these considerations, this study seeks to critically examine the role of institutional quality in driving economic growth in the Balkan region. By employing a multi-disciplinary approach that integrates insights from economics, political science, and development studies, the research aims to show the mechanisms through which institutions influence key indicators of economic performance, including investment levels, productivity gains, and income distribution. The empirical strategy aims to verify a set of five hypotheses that are proposed as a result of a review of theoretical and prior empirical research.

Research Significance

The Balkan region has consistently attracted scholarly attention because of its complex historical trajectories and geopolitical significance. Existing literature presents diverse outlooks on the relationship between institutions and economic development. However, significant gaps persist, notably about the effects of institutional quality in transitional and post-conflict settings such as the Western Balkans.

Previous research has established a positive association between real GDP per capita, its growth, and improvements in institutional quality. However, the literature remains inconclusive about the direction and mechanisms of causality, partly because of the potential for mutual reinforcement between economic development and institutional improvement. These ambiguities underline the necessity for empirical strategies that explicitly address persistence, endogeneity, and historical legacies, rather than relying solely on static correlations.

This study furthers the literature through systematically analyzing the institutional-development nexus in the Western Balkans and a comparative group of countries, employing a dynamic, multidimensional empirical framework. By examining governance quality, conflict legacies, and external integration, the dissertation addresses enduring debates in institutional economics, including those identified by Furubotn and Richter (2008) regarding the complex, non-linear interactions between institutions and economic performance. The regional focus matters because corruption, weak rule of law, and fragile post-conflict institutions still shape development and make policymaking harder in the Western Balkans.

This research is significant as it offers a context-sensitive, empirically grounded analysis of how institutions influence development in the Balkans, without oversimplifying complex institutional dynamics into prescriptive policy formulas. The analysis spans the period 1990 to 2021 and explicitly considers the region's historical, political, and institutional specificities. Accordingly, the dissertation aims to clarify why institutional reforms have resulted in uneven economic outcomes in the Western Balkans and to inform future research and policy discussions on institutional change in transitional economies.

Research Questions

This dissertation draws on institutional economics and political economy. It formulates research questions to empirically examine how institutional quality, historical legacies, and external integration shape economic development in the Western Balkans. The questions capture both the aggregate effects of governance and the differentiated roles of institutions. The study also accounts for persistence, conflict legacies, and the region's unique transitional context. The following seven research questions are addressed:

1. Does institutional quality play a statistically significant role in shaping long-run economic development outcomes in the Western Balkans?
2. Which dimensions of institutional quality are most strongly associated with economic development, and do composite institutional measures outperform individual governance indicators?
3. To what extent do historical institutional legacies and institutional persistence continue to influence contemporary development outcomes in the Western Balkans?
4. Do past military conflicts exert a lasting negative effect on the relationship between institutional quality and economic development?
5. Do external anchors, such as EU and NATO membership, condition the relationship between institutional quality and economic development in the region?
6. Are institutional effects on economic development driven primarily by persistent cross-country differences or by short-run within-country institutional changes?
7. Do institutional effects remain economically meaningful once income persistence and dynamic adjustment are explicitly accounted for?

Research Objectives

Considering the complex institutional trajectories and development challenges in the Western Balkans, this dissertation provides a systematic empirical assessment of the relationship between institutional quality and long-term economic development in the region from 1990 to 2021. The study tackles the following research objectives:

1. To identify which dimensions of institutional quality are most strongly associated with development outcomes and whether composite institutional measures outperform individual indicators.
2. To examine the role of institutional persistence and historical legacies in shaping contemporary development trajectories.
3. To analyze how past military conflicts condition the relationship between institutional quality and economic development.
4. To evaluate the role of external anchors, particularly EU and NATO membership, in reinforcing institutional effectiveness and development outcomes.

Scope of the Study

This study considers how institutional quality relates to long-term economic development, measured by income levels, in the Western Balkans from 1990 to 2021. The empirical analysis uses comparative panel data to test the main hypotheses and answer the research questions. The panel consists of Western Balkan economies and a broader European reference group. This helps to separate regional dynamics from general development trends. Kosovo is considered in its historical and institutional context, but it is excluded from the econometric analysis because there is insufficient data.

The analysis focuses on persistent, structural institutional effects. It does not consider short-term growth fluctuations. Institutional quality is defined as a complex, slow-changing phenomenon. The study measures it with composite indicators and specific governance components. The study also looks at institutional persistence, historical legacies, conflict exposure, and the impact of EU and NATO membership on development.

This study limits itself to identifying associations and conditional relationships tied to long-term development. It does not try to estimate the causal effects of specific policy reforms. The study uses several panel estimators: fixed effects, correlated random effects (Mundlak), instrumental-variable approaches, and dynamic panel models. These methods help separate within-country changes from long-lasting country differences and address income persistence and endogeneity. The study does not forecast growth, rank countries, or assess individual reform programs.

Accordingly, the dissertation adopts an analytical rather than prescriptive approach, uniquely contributing by unpacking how uneven development outcomes in the Western Balkans result from the intersection of governance quality, historical constraints, conflict legacies, and external integration. This approach fills a gap in comparative regional studies, while acknowledging limits imposed by data availability and the gradual nature of institutional change.

Research hypotheses

This dissertation formulates research hypotheses for empirical testing, based on institutional economics and the literature on economic growth and development. The analysis draws on previous research on governance, growth, and institutional change in transitional and post-conflict economies, focusing on the Western Balkans and nine reference group states from 1990 to 2021. I formulate the following hypotheses:

1. ***Hypothesis 1:*** *Institutional quality played a positive role in the economic development of the Western Balkans.*
2. ***Hypothesis 2:*** *Among institutional quality dimensions, corruption control and government effectiveness have the most significant impact on the economic development of the Western Balkans.*
3. ***Hypothesis 3:*** *The present state of the quality of institutions in the Western Balkans was determined by the historical persistence of institutions and the historical legacy of the Western Balkans.*
4. ***Hypothesis 4:*** *Former military conflicts in the Western Balkans still affect the relationship between institutional quality and economic growth.*
5. ***Hypothesis 5:*** *EU & NATO membership/candidacy play a significant role in securing the economic development of the Western Balkans.*

Structure of the thesis

The dissertation is organized into five chapters.

Chapter I establishes the theoretical foundations by reviewing classical, neoclassical, and endogenous growth theories and situating institutions as deep determinants of economic development. It introduces key concepts such as convergence, institutional complementarities, path dependence, and persistence, providing the conceptual framework that motivates the empirical analysis.

Chapter II reviews the empirical literature on institutions and development in transition economies, with particular emphasis on the Western Balkans. It synthesizes evidence on which institutional dimensions matter for long-run development, discusses identification challenges in the literature, and critically examines competing perspectives on institutional persistence and path dependence. The chapter also provides a historical-institutional account of the region, covering Ottoman, Austro-Hungarian, Yugoslav, and post-conflict legacies, as well as the role of EU and NATO integration as external institutional anchors. The identified research gap leads directly to the methodological approach outlined in the next chapter.

Chapter III presents the methodological framework and empirical strategy. It describes the data, variable construction, and measurement of institutional quality, including composite indicators and historical legacy measures. The chapter sets out the econometric approach, combining numerous methods and estimators, and explicitly maps the research hypotheses to the corresponding empirical specifications.

Chapter IV reports and interprets empirical, mainly econometric results. The analysis proceeds sequentially, starting with descriptive statistics and static pooled and panel estimates, then moving to correlated random-effects and instrumental-variable results, and finally dynamic system GMM specifications. It accounts for interaction effects across and includes robustness checks. Each hypothesis is evaluated, robustness discussed, and findings synthesized with the preceding theoretical framework.

Chapter V summarizes the key findings and clarifies the contribution of the dissertation to the literature. It discusses implications for long-run development in the Western Balkans, proposes some policy recommendations, including specifically for my home country, Kosovo, and identifies limitations and areas for future research.

CHAPTER I. THE ROLE OF INSTITUTIONS IN ECONOMIC GROWTH: THEORETICAL FOUNDATIONS

1.1 Introduction

This chapter lays out the main ideas for studying how institutional quality affects economic growth. It covers basic concepts in growth, development, institutional economics, and political economy, and explains how institutions influence incentives, investment, and long-term progress.

1.2 Economic Growth and Economic Development

Economic growth and economic development are distinct but related concepts. Economic growth refers specifically to an increase in a country's GDP over time (Van den Berg, 2016), while economic development encompasses a broader, long-term process that improves living standards and well-being. Capital accumulation, technological progress, population dynamics, and productivity are key drivers of economic growth. However, a higher GDP does not necessarily ensure economic development, which includes qualitative improvements beyond mere output increases (King & Levine, 1994).

Economic development is a complex process that involves both quantitative changes, such as increased output, and qualitative changes, particularly in education, social well-being, and environmental sustainability. But rapid, unsustainable development can cause environmental harm and social inequality, putting future generations at risk (Rostow, 1991).

Economic growth is necessary for economic development, but not sufficient. Economic development is a broader concept that includes social, political, and environmental progress as well as economic factors (Adelman, 1965), whereas economic growth focuses on the quantitative increase in output.

1.3 Drivers of Economic Growth and Economic Development

Economic growth is commonly understood as a sustained increase in an economy's productive capacity and real output over time. In the long run, growth reflects the combined effects of factor accumulation, productivity improvements, and the institutional and policy environment. Literature traditionally distinguishes between *proximate (shallow) drivers* of growth, such as physical capital accumulation, labor input, and technological progress, and *deeper determinants* that shape incentives, efficiency, and resource allocation (Rodrik, 2005).

At first, adding more physical capital raises output by increasing the amount that can be produced. Neoclassical growth models, such as the Solow- Swan model, focus on saving and investing in capital as the main ways to grow. But as more capital is added, its returns decline, so adding capital alone cannot sustain lasting growth unless technology also improves (Solow, 1956; Villalobos Céspedes, 2020). Studies show that more capital helps at first but becomes less important over time and cannot fully explain income differences between countries (Huynh et al., 2020). Growth accounting also often finds that part of output growth is not explained by capital increases, suggesting that other factors are important too (Özgür Bayram Soylu, 2018; Nkoro & Uko, 2023).

As a result, total factor productivity (TFP) emerges as a central driver of long-term economic growth. TFP captures technological progress, efficiency gains, and improvements in resource allocation that cannot be explained by factor accumulation alone (Solow, 1957). A large empirical literature demonstrates that differences in productivity account for the majority of variation in income levels across countries, particularly among economies with comparable factor endowments. Easterly and Levine (2001) show that cross-country income divergence is better explained by differences in TFP than by capital accumulation, highlighting increasing returns to technology rather than convergence. TFP improvements allow economies to generate more output from the same inputs, raising income levels and sustaining growth over time (Hao et al., 2023).

Beyond TFP, human capital constitutes another critical growth driver, influencing both factor productivity and the capacity to adopt and generate new technologies. Investment in education and skills enhances labor productivity directly and complements physical capital accumulation, particularly in economies undergoing structural transformation (Lucas, 1988; Mankiw, Romer, & Weil, 1992). In this sense, human capital serves as a bridge between traditional factor-based growth explanations and innovation-driven growth processes emphasized in endogenous growth theory. However, measures that focus solely on educational quantity may fail to capture quality and relevance, which are essential to productivity gains (Dabic et al., 2021; Nkoro & Uko, 2023).

Endogenous growth models go further by showing that capital is not a passive part of growth. Romer (1990) and similar knowledge-based models argue that knowledge, innovation, and human capital are central to ongoing growth, not just physical capital. Investments in research, skills, and innovation create spillovers and lasting returns, thereby sustaining high growth. Studies of these models point to R&D spending, technology diffusion, and new knowledge as key components of development (Binfarè et al., 2023; Harkness, 2022). When productive factors are concentrated in certain areas, and technology differs, it shows why productivity-focused growth is so important (Liu et al., 2023).

Related strands of the literature, including models by Grossman and Helpman, emphasize the interactions among capital accumulation, innovation, and openness. These models suggest that economies combining physical investment with innovation-friendly environments - supported by education systems, R&D policies, and openness to knowledge flows - tend to experience higher and more sustained growth (Hosseini Yazdi et al., 2022). At the same time, empirical research shows that market imperfections, sectoral heterogeneity, and differences in governance quality substantially affect the returns to both physical and knowledge capital (Jalilian et al., 2007b). Higher productivity also enhances international competitiveness, export performance, and structural transformation by reallocating resources toward more efficient sectors (Cole, 2007; Fukao, 1994; Chávez & Rodríguez-Puello, 2022). Foreign direct investment (FDI), in particular, represents a critical conduit through which openness translates into long-run growth, as it facilitates the transfer of advanced technologies, managerial know-how, and access to international production networks. Empirical evidence shows that economies more open to FDI inflows tend to experience higher productivity growth and faster structural upgrading, particularly when absorptive capacity is supported by human capital and sound institutions (Borensztein et al., 1998; Alfaro et al., 2004).

More recently, researchers have seen that institutions and policies are key in shaping growth. Institutions help growth by encouraging investment, protecting property rights, lowering transaction costs, and helping markets function well (North, 1990; Acemoglu, Johnson, &

Robinson, 2005). Though institutions are usually seen as deeper causes rather than direct drivers, their impact affects all growth channels by changing how capital, labor, and technology are used. This is especially important in countries going through transitions or coming out of conflict, like in the Western Balkans, where weak institutions can limit the benefits of good resources and human capital. Moreover, the growth-enhancing effects of FDI are strongly conditional on governance quality and financial development, reinforcing the complementarity between external openness and domestic institutional strength (Jalilian et al., 2007b; Hermes & Lensink, 2003).

1.4 The Convergence Debate

A central question in growth theory concerns whether poorer economies tend to catch up with richer ones over time. A phenomenon is commonly referred to as economic convergence. Early neoclassical growth models predict income convergence due to diminishing returns to capital, implying that capital-scarce economies should grow faster than capital-rich ones (Solow, 1956). This mechanism underlies the concept of absolute convergence, often termed the "catching-up effect," which can be simplified to the statement that less developed economies grow faster than wealthier ones. We should thereby observe a narrowing of income disparities over time. As countries with lower initial capital per capita adopt existing technologies and production methods, they are expected to experience higher marginal returns to investment and thus foster rapid growth. However, the concept of absolute convergence depends on restrictive assumptions, including efficient capital allocation, similar technologies, and comparable institutional and policy environments (Gianfrate & Peri, 2019).

Empirical evidence shows that the idealized assumptions underlying absolute convergence seldom hold in practice. Absolute convergence posits that all economies, regardless of structural differences, will catch up to a single global steady state. In contrast, conditional convergence asserts that economies converge only if they share similar structural characteristics, such as human capital, institutional quality, policy frameworks, and trade openness, rather than converging universally toward a common steady state (Barro & Sala-i-Martin, 1992; Mankiw et al., 1992). Within this framework, poorer countries grow faster than richer ones only when these key conditioning factors are sufficiently aligned, implying convergence toward country-specific steady states rather than uniform catch-up (Al-Bassam, 2013).

Within this evolving empirical literature, further distinctions have emerged, particularly between beta convergence and sigma convergence. They constitute complementary yet conceptually distinct approaches. Beta convergence refers to a process in which initially less developed economies exhibit faster growth rates than initially wealthier ones. This is consistent with diminishing returns to capital accumulation (Kenney & Zysman, 2020). In empirical applications, beta convergence is identified when the coefficient on initial income in growth regressions is negative, indicating that lower starting income levels are associated with higher subsequent growth rates (Haley, 1973). However, evidence of beta convergence does not necessarily imply a reduction in income inequality over time.

Sigma convergence, by contrast, focuses explicitly on the dispersion of income levels across economies. It is observed that when the standard deviation or variance of income per capita declines over time. It thus implies a narrowing of income gaps between the rich and the poor economies (Dixon & Maré, 2007). As Barro and Sala-i-Martin have shown, beta convergence can occur without sigma convergence, namely, faster growth in poorer countries does not automatically translate into reduced inequality.

Building on these nuanced perspectives, the literature recognizes persistent divergence patterns in global income distribution, which have led to the development of the club convergence concept. Club convergence suggests that economies tend to form clusters, or “clubs,” characterized by similar growth trajectories and steady states rather than by universal convergence (Capolupo, 1998). Countries within a given club may share institutional frameworks, policy regimes, levels of human capital, or regional integration arrangements, which jointly shape their development paths (Jalilian et al., 2007a). Economies facing comparable constraints or endowed with similar advantages may converge toward distinct equilibria while diverging from other groups. This, in turn, could reinforce stratification in global income distribution (Younas et al., 2022). Initially, the poor are likely to remain poor, and the rich are likely to remain rich. A key question from this perspective is whether the Balkans, or the Western Balkans, form a coherent convergence club themselves, or are part of the broader convergence club in the CEE or even the wider European context. This remains to be answered.

Although conditional and club convergence offer insight into trends within more homogeneous groups, persistent global income disparities remain. This empirical regularity challenges the explanatory power of convergence models based solely on factor accumulation and technological diffusion. Increasingly, institutional quality, historical legacies, and political constraints have been identified as the main factors explaining why some economies fail to converge despite favorable initial conditions (Acemoglu & Robinson, 2012). Institutional weaknesses can limit technology adoption, distort incentives, and reduce the effectiveness of investment, thereby preventing convergence even when capital accumulation and education levels improve.

The convergence debate is especially important for transition and post-conflict economies, such as those in the Western Balkans. These economies often have low to moderate rates of investment in physical and human capital, but make little progress in catching up with advanced economies. This gap suggests that catching up depends on more than just gaining more resources. It may be shaped by how institutions work and last over time. Therefore, to understand convergence in these settings, we must go beyond standard economic models and use frameworks that examine institutions, history, and external constraints. This sets the stage for the data analysis in the following chapters.

1.5 Classical and Neoclassical Growth Theories

1.5.1 Classical growth theory

Classical economists like Smith, Ricardo, and Malthus laid the foundations for how we think about economic growth. Smith argued that dividing work and specializing leads to greater prosperity (Smith, 1776). Ricardo (1817) focused on comparative advantage, showing that trade and specialization help countries use their resources better and increase production. Malthus, on the other hand, warned that if the population grows too quickly, it can outpace resources and lower living standards (Winch, 1993). Even though they had different views, they all saw long-term growth as limited by capital, resources, and population, not by ongoing innovation from within the economy.

The classical tradition lacked a formal idea of human capital as a major force in long-term growth. While Smith noted learning-by-doing and skill gains from specialization, he didn't view knowledge, education, and innovation as separate, lasting growth engines. Jean-Baptiste Say stood out by seeing entrepreneurship and innovation as key to growth. He argued that new technology and better methods raise efficiency and welfare (Van den Berg, 2016).

Classical models also treated technological progress as exogenous, meaning it was an external, given factor rather than the result of economic incentives or institutions. The classical framework did not systematically analyze how education systems, research and development, or property rights influence innovation. From a modern perspective, this is a key limitation, as government policies and institutions play a central role in shaping productivity and long-term growth.

The neoclassical growth theory that followed addressed these shortcomings and refined the framework by including diminishing returns to capital and giving technology a central role. Unlike classical models, aggregate capital increases cause the marginal return on new investment to fall. Sustained growth, therefore, requires technological progress (Jewkes, 1967). This idea was confirmed and formalized in the key Solow-Swan model, which links output to capital accumulation, labor growth, and technological progress (Villalobos Céspedes, 2020).

1.5.2 Solow- Swan neoclassical growth model

The Solow-Swan neoclassical growth model is a key framework for understanding long-run economic growth. It puts emphasis on capital accumulation, labor growth, and external technological progress. In comparison to earlier models, it shows that output comes from capital and labor with diminishing returns. Hence, economies move toward a steady-state income per capita shaped by savings, population growth, depreciation, and technology. More savings or investment temporarily boost income, but do not sustain per capita growth without technology advances. Thus, long-run growth in GDP per capita depends solely on technological change, which raises productivity over time (Solow, 1956; Solow, 1957; Swan, 1956).

From a long-run perspective, the Solow-Swan model highlights that differences in income levels across countries arise largely from variations in capital intensity and productivity rather than permanent differences in growth rates. This insight led to the prediction of conditional convergence. It happens when poorer economies grow faster than richer ones if they share similar structures (Mankiw, Romer, & Weil, 1992). However, the model's treatment of technology as exogenous limits its ability to explain why productivity growth differs persistently across countries.

The Golden Rule in the neoclassical model shows the level of capital that would give the highest possible consumption per worker. However, this is a theoretical result and does not take into account real-world factors like institutions, politics, or differences in people's preferences.

Phelps (1961) further contributed to this discussion, highlighting that the Golden Rule of capital accumulation governs the conditions for maximizing steady-state consumption per capita by determining the optimal capital stock per worker. According to Chatterjee et al. (2022), this principle holds that steady-state consumption per capita is maximized when the marginal productivity of capital equals the sum of the population growth rate and the depreciation rate.

1.5.3 Augmented neoclassical growth model

The Mankiw- Romer- Weil (MRW) model was built on the Solow- Swan framework by adding new factors to better explain why countries have different income levels and how they catch up over time.

The MRW model added human capital, such as education and skills, as a separate factor next to physical capital and labor. This helped explain why some countries are richer than others, since differences in education matter a lot. By including human capital, the model matched real-world data better and showed more realistic rates of convergence. This also answered critics who said the original Solow model put too much weight on unexplained technology differences.

Human capital means the knowledge, skills, and abilities that people have. Including it in growth models shows that education and health are important for making workers more productive and raising economic output.

Studies on human capital show that individuals' skills, knowledge, and abilities improve productivity and economic value (Blundell et al., 2005). Economies that develop human capital benefit from increased productivity, innovation, and competitiveness. Formal education, from basic schooling to higher levels, contributes to human capital formation (Cascio & Narayan, 2022). In the MRW framework, differences in education explain why some countries converge only conditionally, not absolutely.

One way to measure human capital is by looking at the average years of schooling in a country. More years of education usually mean a more skilled workforce. This measure is popular because it is easy to compare across countries. Besides education, things like health, motivation, and social skills also add to a person's human capital.

Recognizing and investing in human capital is essential for sustainable economic and social development. Health is a key part of human capital because it affects productivity and participation in economic activities. Health metrics, such as life expectancy or general health indicators, can act as proxies for human capital. A healthy workforce is likely to be more productive (Peters et al., 2022). Including health variables broadens the MRW concept of effective labor.

Adding human capital to growth models helps us better understand what drives economic growth. Investing in education and health is key, and governments can support growth by focusing on these areas. This is especially important for countries in transition or recovering from conflict, where strong human capital can help make up for weak institutions.

The MRW model still treated technology as something outside the model, but it showed that many differences between countries are actually due to differences in human and physical capital. It supported the idea that poorer countries can grow faster if they have similar savings, population growth, and human capital. However, it did not solve the main problem of treating technological progress as something given.

1.5.4 Limitations of exogenous growth models

Even though the Solow- Swan and MRW models are clear and have shaped policy, they have important weaknesses. The biggest issue is that they treat technological progress as something outside the model, so they cannot explain why some countries innovate more than others or why growth rates stay different over time. This means they miss how policies, human capital, or institutions actually affect productivity and long-term growth.

Another problem with the Solow-Swan model is that it ignores the role of institutions. It does not consider how things like property rights, good governance, and the rule of law encourage investment and innovation. Evidence shows that these factors are very important for long-term development, especially in countries that are changing their economic systems or building new institutions (Harkness, 2022).

In addition, human capital is treated as largely homogeneous in the basic Solow framework. This simplification overlooks the role of education, skills, and learning in driving productivity growth and facilitating technological diffusion. More educated workers not only enhance labor productivity but also accelerate the absorption and adaptation of new technologies, hence influencing long-run growth paths (Kurz, 1996). Although the MRW model partially addresses this issue by introducing human capital, it still does not explain how education systems, institutional incentives, and policy frameworks shape its accumulation.

The assumption of perfect competition further limits the realism of exogenous growth models. In practice, markets are often characterized by imperfections, market power, and entry barriers, all of which are strongly mediated by institutional arrangements. Institutions determine whether competition is fair, contestable, and efficiency-enhancing, consequently influencing innovation and investment incentives. Moreover, exogenous growth models largely ignore environmental constraints, implicitly assuming unlimited natural resources and overlooking the long-term effects of environmental degradation and pollution on growth (Obobisa et al., 2023).

Finally, by treating technological progress as an external force, the Solow-Swan framework overlooks the role of policy choices, governance quality, and institutional incentives in shaping research, innovation, and technological change. Innovation is not an automatic outcome but depends on well-defined property rights, effective public institutions, and supportive policy environments (Kenney & Zysman, 2020). These omissions significantly reduce the explanatory power of exogenous growth models.

1.6 Endogenous Growth Theory

Endogenous growth theory was developed as a response to the limits of earlier models that treated technological progress as something external and unexplained. Romer (1986, 1990) and Lucas (1988), showed that long-term economic growth can come from within the economy itself, especially through investment in education, research, and knowledge. Unlike the Solow-Swan model, this approach suggests that knowledge and skills can keep generating growth, thanks to spillovers and learning by doing. This means that policies, institutions, and incentives are not just background factors; they can have a lasting impact on how fast an economy grows. For countries where building strong institutions and investing in people are key challenges, endogenous growth theory offers a more realistic way to think about development.

1.6.1 First-generation endogenous growth

The first generation of endogenous growth models, such as the AK framework (Rebelo, 1991) and later models by Romer (1990) and Lucas, aimed to address the limits of the Solow- Swan neoclassical growth model by making the sources of long-term growth part of the model itself.

In contrast to the Solow- Swan framework, in which technological progress is exogenous by default, the NGT model views technological change as an endogenous outcome of economic decisions of economic agents.

First-generation endogenous growth theory assumes that technological progress and productivity growth come from intentional investments in research and development, education, and building human capital (Acemoglu & Autor, 2011). It means that rather than being an external shock, technological progress results from deliberate actions and incentives. Firms and individuals pursue innovation, study, accumulate, and generate knowledge that sustains growth. Thus, economies with greater capital accumulation and knowledge formation may experience persistent growth without converging to a common steady state, as the neoclassical model predicts (Cascio & Narayan, 2022).

In models like Romer’s (1990), technological progress depends directly on how much is invested in research and development and other factors, instead of being left as an unexplained leftover (Alam & Murad, 2020). This means that public policies and institutions, such as support for education or protecting intellectual property, can have a lasting impact on how fast an economy grows, not just on its income level.

By making technological progress part of the model, first-generation endogenous growth theories allow for the possibility that some countries may not catch up with others, and that differences in growth can persist. Growth now depends more on how much countries invest in research, education, and innovation, rather than just on the resources they start with. This is a big change from older models and sets the stage for later theories that focus on competition, creative destruction, and the role of institutions (Mazon et al., 2023).

One important criticism of first-generation endogenous growth models is known as the Jones effect. Jones (1999) pointed out that these models regularly link long-term technological progress to the size of the population, suggesting that bigger countries should always grow faster because they have more potential innovators. But in reality, data does not show that countries with larger populations always grow faster. What matters more is the quality of human capital, how well innovation systems work, and the strength of institutions. Investments in education, research, and good governance are more important than just having a large population (Haley, 1973; Chou et al., 2020). By focusing too much on population size, early models missed the real drivers of innovation. This criticism led later models to pay more attention to institutions, market structure, and how efficiently countries innovate.

1.6.2 Second-generation (Schumpeterian) models

The second generation of endogenous growth theory, most closely associated with Aghion and Howitt (1992, 1998), builds on and extends the foundations laid by first-generation models. This second-generation approach, often referred to as Schumpeterian or post-Schumpeterian growth theory, centers on innovation, competition, and creative destruction in the long-run dynamics of economic growth. In contrast to earlier endogenous growth models, which emphasized scale effects and knowledge accumulation, second-generation models explicitly model innovation as a competitive, discontinuous process. It also means that the models usually have a separate R&D sector responsible for the generation of patents or innovations to be used in the production and increasing their productivity over time.

Aghion and Howitt see innovation as the main engine of growth. Technological progress comes from intentional R&D that creates better products and processes. Innovation results from economic incentives and drives productivity growth. New technologies replace older ones; this is frequently referred to as creative destruction, pushing the technological frontier (Younas et al., 2022). Growth continues through a series of continuous innovations.

As we stressed above, the central idea in second-generation endogenous growth theory is creative destruction, a term introduced by Schumpeter and incorporated into models by Aghion and Howitt. Creative destruction means that new technologies, firms, and industries replace outdated ones. This shifts resources to more productive uses (Emami Langroodi, 2017). While it boosts productivity and long-term growth, it also introduces transitional costs and distributional effects, which first-generation models largely overlook.

Like earlier endogenous growth theories, Schumpeterian models make technological change fully endogenous. Technological progress results from economic activities, investments, and policy choices, not from outside trends (Smulders, 2012). Competition plays a double role. Competition on the one side stimulates innovation by eroding monopoly profits. Too much market power can discourage R&D. On the other hand, too much competition can harm growth as well. Thus, the models predict a non-linear relationship between the degree of competition and innovation rate in the economy.

The role of competition in stimulating innovation is further emphasized by Rivera-Batiz and Romer (1991), who argue that competitive pressure is essential to sustaining incentives to invest in research and development and to prevent technological stagnation. Market structure, entry and exit dynamics, and intellectual property regimes, therefore, become central determinants of innovation intensity and growth outcomes.

Schumpeterian growth theory has key policy implications. Policies supporting competition, intellectual property rights, and R&D investment are seen as vital for sustained innovation-led growth. Poor regulation or excessive market power can suppress innovation (Bovenberg & Smulders, 1996). Diao et al. (1999) show that policy interventions, market changes, and investments in human capital all interact with innovation to shape growth over time.

Empirical extensions of Schumpeterian growth theory have provided supporting evidence for the relationship between innovation, competition, and economic performance. Solleiro-

Rebolledo et al. (2023), among others, show that economies with stronger competitive environments and higher innovation intensity tend to achieve superior growth outcomes, though with heterogeneous effects across sectors and countries.

Overall, second-generation endogenous growth theory represented a notable progress in growth economics by explicitly modeling innovation as a competitive and discontinuous process. By integrating creative destruction, evolving market structures, and policy incentives into the analysis of technological change, this framework offered a richer, more realistic understanding of long-run growth dynamics. At the same time, its assumptions about incentive structures and enforcement implicitly highlight the importance of institutional quality, providing a natural bridge to the institutional analysis developed in subsequent sections (Seyfang & Smith, 2007).

1.6.3 Innovation, R&D, and endogenous technological progress

The endogenous technological progress framework shows how economic agents actively shape technology. It stresses the importance of purposeful R&D investment for long-term growth. Recognizing technological progress as endogenous rather than exogenous explains the mechanisms behind innovation, creative destruction, and development. This shift moves away from earlier models and has major effects on economic theory and policy, particularly during times of rapid technological change (Cacciattolo, 2015).

A central insight of endogenous growth theory is that technological progress emerges from deliberate actions undertaken by firms, individuals, and policymakers. Economic agents actively engage in R&D activities to create new technologies, improve existing ones, and enhance productivity (Dabic et al., 2021). These investments generate dynamic feedback loops between R&D expenditures, knowledge accumulation, and innovation, in which increases in knowledge raise the economy’s capacity for further technological advancement (Huber, 2008). Innovation is therefore understood as a cumulative process encompassing the introduction of new products and production methods, as well as incremental improvements in efficiency and organization (Amor & Hassine, 2017). In quality ladder models, this is about the emergence of higher value-added products, while in the differentiated models, it's about the number of varieties of products on offer.

Investing in R&D on purpose is crucial because it builds up knowledge, which then drives how fast technology improves. The more knowledge a country creates through R&D, the more it can keep innovating and growing (Dabic et al., 2021). In this view, technological change is closely tied to creative destruction, where new technologies replace old ones and resources move to better uses. Creative destruction is seen as a key reason for economic energy and long-term growth (Cacciattolo, 2015; Emami Langroodi, 2017).

This approach also points out how market forces and institutions shape innovation. Competition, intellectual property rights, and how easy it is for firms to enter or leave the market all affect whether companies invest in R&D and how new technologies spread. Market forces do not just decide how much innovation happens, but also what kind of technologies are developed and used (Carrillo, 2002; Sylwester, 2001). Because of this, the way markets are set up and the policies that support innovation are very important for growth.

Some endogenous growth models talk about threshold effects. This means that if a country does not invest enough in R&D, it can get stuck and not grow. But once it passes a certain level of investment, it can start a positive cycle where more innovation leads to higher productivity and income, which then allows for even more R&D (Setterfield, 2014; Marvel et al., 2016). This idea is important for policy because it suggests that targeted support, like R&D subsidies, protecting intellectual property, and investing in education and research, can help countries break out of stagnation and achieve steady growth.

A substantial body of empirical research has examined the validity of endogenous technological progress models using real-world data. Studies consistently find a positive relationship among R&D investment, innovation outcomes, and economic growth, supporting the proposition that economies that engage in purposeful knowledge creation tend to achieve higher long-run growth rates (Bassanini et al., 2000; Indris & Primiana, 2015). Empirical analyses across industries and sectors further illustrate how innovation dynamics vary in practice and how policy frameworks shape the innovation landscape (Ahmed et al., 2021; Ezeanolue et al., 2019).

Overall, the recognition that technological progress is endogenous constitutes a paradigm shift in growth economics. By explicitly modeling innovation as the outcome of intentional investment, competitive pressures, and institutional incentives, endogenous growth theory offers an increasingly dynamic and realistic account of long-run economic development. At the same time, this perspective implicitly raises the question of why incentives to invest in R&D, education, and innovation differ across economies. This issue cannot be truly addressed without incorporating institutional quality, thereby motivating the institutional analysis developed in subsequent sections (Oikonomou et al., 2023).

1.6.4 Trade, openness, growth and technology diffusion

The Grossman & Helpman (1994, 1995) model is an important part of the research on trade and growth. It shows that being open to trade helps spread technology and supports long-term development. Instead of seeing trade as just a way to move goods, this model highlights how trade lets countries share knowledge and technology, which then boosts productivity and innovation.

Building on the principle of comparative advantage, the Grossman- Helpman framework broadens traditional trade theory by showing that countries engage in trade not only to exchange final goods but also to access foreign technologies embedded in traded inputs and capital goods. As noted by Cacciatore and Ghironi (2021), trade openness allows economies to import technologically advanced goods, facilitating technology absorption and upgrading within domestic production processes.

A key idea in this model is that imports bring in new technology. When countries import machines or parts, they also get access to better ways of producing and managing. By using these imports, local firms and workers learn from foreign technology, which helps them become more productive and innovate step by step (Bassanini et al., 2000; Alam & Murad, 2020). This process is gradual and depends on how well the country can absorb and use new knowledge.

The model also talks about learning by doing. This means that as countries produce more, export, and interact with global markets, they learn and improve their technology. The more a country takes part in world trade, the more it can learn and become productive, especially in industries where knowledge spreads easily. This supports the idea that being open to trade helps growth, not just by specializing, but by learning and getting better over time (Freeman, 1980).

However, openness does not imply automatic convergence. While trade can facilitate access to foreign technology, its growth effects depend critically on complementary domestic conditions, including human capital, institutional quality, innovation capacity, and the ability to reallocate resources efficiently. Economies lacking sufficient absorptive capacity may remain locked into low-value-added segments of global value chains, limiting the developmental impact of openness. As a result, trade openness can lead to both convergence and divergence, depending on how effectively countries translate external knowledge inflows into domestic productivity gains.

This means that simply opening up to trade, lowering barriers, or focusing on exports is not enough to guarantee steady growth or catching up. These policies only work well if they are backed by strong institutions, investment in skills and innovation, and ways for the economy to learn from imported technologies.

1.6.5 Implications of new growth theory for the convergence debate

New Growth Theory (NGT) has played an important role in the debate about whether countries become more similar or different in terms of income and living standards over time. By focusing on factors like innovation and investment that come from inside the economy, NGT has added useful ideas to this discussion (Capolupo, 1998).

Older neoclassical models said that poorer countries would catch up with richer ones because of diminishing returns to capital. But NGT challenged this idea by saying that growth depends on things like investment in R&D, which are not automatic (Lutz, 2001). This means that some countries can keep growing faster than others if they invest more in innovation, skills, and knowledge. Research shows that countries with more human capital and innovation tend to grow more, which can actually make the gap between countries bigger if others do not invest in these areas.

Another viewpoint emphasized within the NGT framework focuses on the central role of human capital and innovation in driving cumulative growth. Economies that invest in education, skills, and research are better positioned to exploit the benefits of technological progress and achieve higher levels of productivity. In the context of the convergence debate, this emphasis implies that catch-up is conditional on domestic capabilities, and that insufficient investment in human capital and innovation may prevent convergence altogether (Buevich et al., 2020; Chou et al., 2020; Solleiro-Rebolledo et al., 2023).

Researchers also talk about 'club convergence,' which is an idea from NGT. This means that while some countries can catch up by adopting new technology, this usually happens only among groups of countries with similar levels of education, institutions, and technology. Therefore, instead of all countries moving toward the same level, we see groups of countries converging together, while others are left behind (Capolupo, 1998; Setterfield, 2014).

These ideas matter for policy. In less developed countries, it is important to build up human capital, encourage innovation, and support R&D. In richer countries, policymakers need to keep investing in education, research, and new technology to stay ahead and avoid falling behind. Studies show that countries follow different growth paths, shaped by their own choices and investments, not by a single rule (Ahmad & Hall, 2023).

In summary, NGT changes the way we think about convergence. Instead of assuming all countries will catch up, it shows that divergence, conditional convergence, and club convergence can all happen. By focusing on the role of innovation and human capital, NGT gives a more realistic view of why some countries grow faster than others. Convergence is possible, but it depends on policies, institutions, and long-term investment in knowledge and skills (Ahmed et al., 2021; Binfarè et al., 2023).

1.6.6 Limitations of growth theory

A common criticism of the neoclassical growth model is that it assumes technological progress affects all sectors in the same way. Some studies say this is too simple and ignores the role of people, innovation, and real investment in driving progress. Neoclassical models usually focus on building up physical capital and labor as the main sources of growth (Setterfield, 2014). Davis & Weinstein (2003) point out that these models usually miss the differences in types of capital and labor, and do not pay enough attention to human capital, knowledge, and innovation. They also assume that adding more capital always brings smaller returns, but as Acemoglu et al. (2005) note, this is not always true. Sometimes, increasing returns or non-linear effects are important.

Even with their progress, both neoclassical and endogenous growth theories often overlook the role of institutions in shaping economic performance. In the Solow-Swan model, institutions are not included at all, and things like savings, population, and technology are treated as outside factors. Endogenous growth theory does include human capital and innovation, but usually assumes that institutions are perfect or do not matter. Because of this, these models can explain how growth happens, but not why some countries invest more in education, research, or innovation than others. In reality, factors such as property rights, good governance, and the policy environment are key to a country's growth path.

As emphasized by North (1990) and Acemoglu, Johnson, and Robinson (2005), economic actors respond to incentives shaped by property rights, contract enforcement, and political constraints - factors that are largely absent from standard growth models. Similarly, Rodrik (2005) argues that institutions constitute a "deep determinant" of development, influencing not only factor accumulation but also the effectiveness of policies and market outcomes. The omission of institutional quality, therefore, limits the explanatory power of both neoclassical and new growth theories. That could be particularly the case in the transition and post-conflict economies where weak governance fundamentally constrains economic behavior and long-run growth.

New growth theory values knowledge and innovation, but sometimes treats all knowledge as the same. In reality, different types of knowledge, like practical skills or know-how, can have different effects on growth (Fils et al., 2023). Marvel et al. (2016) include human capital and R&D as fundamental factors, but some studies say the way knowledge is built up and spread is not always clear. It can be hard to model how knowledge is created and shared. Also, some models assume perfect competition, but in real life, markets are often not perfect. When firms have more control over prices, it can change how much they want to innovate.

Because of this, new growth theory may need to do more to explain how growth is shared across society (Brixiova et al., 2009). Even if the economy grows overall, not everyone benefits equally, which can lead to more inequality and social problems. Neoclassical models regularly focus on technology as the main driver of growth, but do not look closely at how the results are spread among different groups or regions (Emami Langroodi, 2017).

This means that both neoclassical and endogenous growth theories do not explain well why growth can happen at the same time as rising inequality, regional gaps, or social exclusion.

Other things, like social capital, culture, and the quality of institutions, are also important for not just how fast economies grow, but how fair and sustainable that growth is (Akeju & Olanipekun, 2014).

Some researchers say that both neoclassical and endogenous growth theories could be better if they included more dynamic ways of modeling policies. Understanding how policies, institutions, and economic results affect each other would help in making better growth strategies. Adding ideas from behavioral economics could also improve these models by taking into account that people and organizations do not always act rationally, and that psychology matters too (Gani, 2012).

As the world becomes more connected, future growth theories need to look at how countries depend on each other, how trade works, and how new ideas spread across borders. Growth models should also include environmental sustainability. For growth to last, we have to recognize that resources are limited and that economic activity can have environmental costs (Zhou et al., 2020).

1.7 Skills-biased Technological Change

Endogenous growth theory shows that technological progress relies on building skills, encouraging innovation, and sharing knowledge. But what matters most is how these changes affect the skills that people need in the labor market. Growth is not just about new technologies, but also about making sure workers have the right skills to use them. Skills-biased technological change (SBTC) helps explain why some workers benefit more than others from new technology, and why the mix of skills in the workforce is just as important as the average level of education.

SBTC has significantly impacted labor markets and economic structures over the past few decades (Cascio & Narayan, 2022). Technological improvements disproportionately favor individuals with higher education, increasing demand for skilled labor and often disadvantaging those with lower levels of education.

Information technology and automation are changing what employers look for in workers. In the past, technology mostly replaced low-skilled jobs, but now even some higher-skilled and routine jobs are at risk. Jobs that need more education and analytical thinking are growing, while routine jobs are disappearing.

Because skilled workers are in higher demand, wage gaps have grown, and income inequality has increased. At the same time, automation of routine work has split the labor market, with more jobs at the high and low ends and fewer in the middle (Chávez & Rodríguez-Puello, 2022).

SBTC also changes what skills are needed in education. Skills like problem-solving, critical thinking, and creativity are now more important, leading to changes in school programs and a push for workers who can adapt and learn new things (Cascio & Narayan, 2022).

To deal with the challenges of SBTC, policies need to be focused and practical. Education policies should help people gain new skills throughout their lives, for example, by making it easier to access training and upskilling. Investments in education and training should match the real needs of the modern workforce, especially in technical and analytical skills. Labor market policies should also help workers retrain and find new jobs, so they can move into roles that need different skills. These steps can help lower the risk of job loss and reduce inequality (Edwards & Richey, 1963).

To reduce the inequalities caused by SBTC, policies like progressive taxes, targeted social programs, and inclusive economic strategies are important. Progressive taxes can help share income more fairly, while social programs can support and train workers who lose their jobs. Inclusive policies should make sure that everyone benefits from new technology, not just a few. These steps can help fight income inequality and build a fairer and more sustainable economy (Etim, 2023).

To make the most of the opportunities from SBTC, policymakers and businesses need to work together to support innovation and create jobs in areas that need both technical and human skills. This can include helping entrepreneurs get funding, encouraging research and development, and building partnerships between schools and businesses to prepare people for work. These actions can help create new markets and make the economy more dynamic (Buera et al., 2022).

SBTC is changing economies, labor markets, and education systems in important ways. Policymakers, teachers, and business leaders need to understand what is driving these changes and how they affect people, so they can respond to the challenges and make the most of new opportunities. With the right policies, we can get the benefits of new technology while reducing the risks and negative effects (Brixiova et al., 2009).

The effects of SBTC whether it brings more growth or more inequality- depend on a country's institutions. Policymakers need to look at how their education, labor, and social protection systems work, because these shape how well people can adapt to new technology. By making institutions stronger, we can help make sure that innovation benefits everyone and that no one is left behind. Good policies include better education for all, stronger worker protections, and social safety nets for those affected by technological change.

1.8 Shallow versus Deep Determinants of Economic Growth

Following Rodrik (2005), the contemporary literature distinguishes between proximate ("shallow") determinants of economic growth and deeper structural determinants that shape long-run development trajectories by conditioning incentives, constraints, and feasible policy choices. While shallow determinants operate through immediate economic mechanisms, deep determinants influence how these mechanisms function and whether their effects are sustained over time.

Dani Rodrik extended the discussion to understand economic growth and added various factors that influence a country's economic growth trajectory, defining deep and shallow determinants of economic growth (D. Rodrik, 2020). Rigobon and Rodrik (2005) identify institutions - such as the quality of governance, legal frameworks, and property rights - as core deep determinants. Strong and inclusive institutions provide a stable and predictable environment for economic activity, fostering investment, innovation, and long-term growth. Social capital, encompassing trust, social cohesion, and networks within a society, is also considered a deep determinant, as high levels of social capital facilitate cooperation, reduce transaction costs, and support economic development.

In Rodrik's framework, three broad categories of deep determinants are typically identified: geography, openness, and institutions. Although analytically distinct, these factors interact closely and jointly shape development outcomes. Geography sets initial conditions, openness determines exposure to global opportunities, and institutions govern how these opportunities are translated into productive economic outcomes.

1.8.1 Geography (first and second nature)

Geography refers to a country's physical and locational characteristics, including climate, disease environment, natural resource endowments, and access to markets, among others. These largely exogenous factors influence economic development through agricultural productivity, transportation costs, exposure to external shocks, and early state formation (Sachs, 2003; Acemoglu et al., 2001). Geographic conditions may shape comparative advantage and initial income levels, but they do not mechanically determine long-run growth outcomes. Geography is considered the only deep determinant of growth of purely exogenous nature.

The distinction between the first and second nature of geography is well established. The first nature of geography includes physical characteristics such as climate, topography, and natural resources, which affect agriculture, infrastructure development, and vulnerability to natural disasters (Rodríguez-Martínez et al., 2019; Shaban & Vermeylen, 2015). The second nature of geography reflects human modification of space through urbanization, industrialization, and infrastructure development. New Economic Geography (NEG), key to second nature, emphasizes how agglomeration forces, transportation costs, and economies of scale shape the spatial concentration of economic activity and regional disparities (Fujita et al., 1999; Knox et al., 2014).

How much geography matters depends a lot on the quality of a country's institutions and the policies it follows. Good institutions can help a country deal with difficult geography, while weak ones can make problems worse. Therefore, geography is an important limit, but it does not decide everything by itself.

1.8.2 Openness (extent of integration)

Openness means how much a country is linked to the world through trade, investment, including FDI inflow, and new technology. Rodrik sees openness as a semi-endogenous factor, and its benefits depend strongly on how good a country's institutions are.

In economic research, openness is typically measured through trade-to-GDP ratios, foreign direct investment flows, and financial integration indicators (Grossman & Helpman, 1995; Choong et al., 2004). Higher openness can improve efficiency, foster innovation, and facilitate technology transfer (Lutz, 2001; Alam & Murad, 2020). At the same time, openness exposes economies to external shocks and adjustment pressures, particularly in the absence of adequate regulatory and institutional frameworks (Anjum & Perviz, 2016).

Without complementary institutions, openness alone may generate volatility, rent-seeking, or premature deindustrialization rather than sustained growth. This conditional nature of openness is especially relevant for transition and post-conflict economies, where formal liberalization often precedes institutional capacity building (Gozgor, 2014; Madanizadeh & Pilvar, 2019).

1.8.3 Quality of broadly defined institutions

Institutions are the most important deep factor for economic growth which is semi-endogenous in Rodrik's approach. They set the rules, protect property, make sure contracts are respected, and keep political power in check. By reducing uncertainty, they encourage people to invest, innovate, and be more productive.

According to Lin and Nugent (1995), institutions are broadly defined as humanly devised rules that govern and shape human interaction by structuring expectations. North and Thomas emphasized that secure and stable property rights were central to the rise of the West and the onset of modern economic growth. At the same time, Oskar Lange argued that prosperous economies have historically been built on private property. Rodrik (1995) demonstrated that government coordination and institutional capacity played a crucial role in the early growth of South Korea and Taiwan, even in the absence of fully liberalized markets.

Unlike geography, institutions are created by people and can be changed, at least in theory. But they are often slow to change because of history, politics, and social habits. This means that shallow reforms like opening trade or building roads may not have much long-term effect if deeper changes to institutions do not happen.

1.8.4 Shallow determinants and policy levers

On the other hand, Rodrik (2020) categorizes macroeconomic policies - such as fiscal and monetary policy - as shallow determinants. While important for short-term stabilization, they do not fundamentally alter long-run growth trajectories. Trade and industrial policies, infrastructure investment, and technology adoption are similarly classified. These factors can raise productivity and output in the short run, but often fail to address deeper underlying constraints.

Shallow determinants are tools that policymakers can use, but how well they work depends on deeper factors like strong institutions, skilled people, and trust in society. Without these, policy changes may only bring short-term results.

Rodrik's way of thinking helps explain why the same policies work in some countries but not in others. Geography gives each country its starting point, openness shows how connected it is to the world, and institutions decide how well a country can use these chances.

This way of thinking shapes the approach of this dissertation. Here, the quality of institutions is seen as the main factor explaining growth, while also taking into account history and how much a country is connected to the outside world. This links traditional growth theory with a focus on institutions, which will be explored in more detail in the next sections.

With this background, the next part examines institutions as the key deep driver of economic growth. It will discuss what institutions are, how they work, and how they affect development, setting the stage for the analysis in the following chapters.

1.9 Institutions and Their Role in Economic Growth and Development

Institutional economics developed as a response to the limits of traditional theories, putting institutions at the center of how economies grow and develop. Instead of seeing growth as just a result of more resources or new technology, this approach looks at the rules - both official and unofficial - that shape incentives, reduce uncertainty, and guide how people and businesses interact. North (1990) explains that institutions affect the costs of doing business and influence whether an economy focuses on productive work or on activities that do not create real value. Later, Acemoglu, Johnson, and Robinson (2005) showed that when institutions protect property rights, enforce contracts, and limit the power of elites, they help economies grow in a stable way. On the other hand, weak or extractive institutions hold back investment and innovation. For countries like those in the Western Balkans, with their complex histories and ongoing reforms, this way of thinking helps us better understand why some economies succeed while others struggle.

Over the past 30 years, the importance of institutions in economic life has come back into focus. While early economists like Smith and Mill recognized their value, it was not until the 1990s that institutions again became central to explaining development. Douglas North, who won the Nobel Prize in 1993, put institutions and the limits they create at the heart of economic analysis.

Modern research offers several ways to think about why institutions differ across countries. One view is that societies will usually choose institutions that help the economy work better and raise incomes. According to this idea, if an institution is not working well, it should eventually be replaced by something better as people and businesses adapt (North, 1990; Acemoglu, Johnson, & Robinson, 2005).

Another perspective focuses on social conflict, arguing that institutions often reflect the outcome of struggles between different groups in society. Sometimes, even if an institution is not good for the economy as a whole, it can survive because it benefits those who hold power (Acemoglu & Robinson, 2012).

A third approach looks at the influence of beliefs, values, and shared ways of thinking. According to this view, institutions sometimes last not because they work best or are fair, but because people in society accept them as normal and legitimate (North, 1990; Greif, 2006).

There is also a historical perspective, which says that institutions often develop as a result of past events or turning points. Once in place, they can be hard to change, even if they are not ideal, because people and organizations get used to them over time (Pierson, 2000).

For countries in transition or recovering from conflict, it is important to see that all these factors, efficiency, power, beliefs, and history, work together to shape institutions. As Rodrik (2008) points out, what works in one place may not work in another, and reforms regularly fall short if they do not fit the local context.

Changing institutions is rarely quick or straightforward. This helps explain why some countries keep struggling with weak institutions, and why the same reforms can have very different results in different places. The Western Balkans are a clear example of this.

A powerful illustration of the causal role of institutions is provided by the Korean "natural experiment." At the end of World War II, North and South Korea were economically, culturally, and ethnically homogeneous, with the North arguably more industrialized. The exogenous political division of the peninsula led to the adoption of radically different institutional systems: centrally planned communism in the North and a capitalist system with strong state intervention, but initially without full democracy, in the South. Over the medium and long run, these institutional differences generated stark divergences in economic performance, income levels, and living standards, underscoring that institutions, rather than geography or culture, were decisive in shaping development outcomes (Acemoglu, Johnson, & Robinson, 2005; Acemoglu & Robinson, 2012).

The division of Germany into East and West provides a closely related natural experiment. Despite shared history, culture, and factor endowments, the imposition of distinct political and economic institutions following World War II led to persistent differences in productivity, income, and economic structure, many of which remained observable even decades after reunification (Redding & Sturm, 2008).

At the subnational level, similar institutional legacies can be identified in Central and Eastern Europe. Brodzicki and Umiński (Brodzicki & Umiński, 2017) analyze the long-run impact of historical partitions of Poland - reflected in differentiated institutional arrangements under Prussian, Austrian, and Russian rule - on contemporary trade performance and economic outcomes across Polish voivodeships (NUTS2 regions). Their findings indicate that historical institutional variation continues to shape regional economic structures and external trade integration (Brodzicki & Umiński, 2017).

Finally, the dissolution of Yugoslavia and the subsequent divergent trajectories of its successor states constitute another natural experiment in institutional divergence. Despite common socialist legacies and similar initial conditions, differences in post-transition institutional reform, governance quality, and political stability have resulted in heterogeneous growth paths across the Western Balkans, reinforcing the argument that institutional choices are central to long-run development outcomes (EBRD, 2019; Acemoglu & Robinson, 2012).

1.9.1 Institutions and their types

Institutions are formal and informal rules that structure social, political, and economic interactions. North (1990) calls them the “rules of the game” that shape incentives, reduce uncertainty, and guide behavior. He defines institutions as the human-made constraints that influence and define human interactions, making clear they are created and shaped by individuals in society. North notes neoclassical theory's limitation in overlooking institutions and clarifies the difference between organizations as "players" and institutions as "rules of the game." By reducing uncertainty, lowering transaction costs, and securing property rights, institutions are fundamental to exchange.

Institutions differ from organizations: organizations are system players, while institutions are their governing rules. By constraining or enabling behavior, institutions affect transaction costs, coordination, and resource allocation, influencing economic performance (Williamson, 2000; Greif, 2006).

According to Hodgson (1999), institutions share several key features:

- The importance of agent interaction and feedback effects.
- A sufficiently large group shares conceptions, norms, and routines.
- Institutions persist and are self-reinforcing, but are not immutable or immortal.
- Norms and processes are transmitted and adapted.

A key distinction in the literature is between **formal and informal institutions,** each shaping economic and social outcomes in distinct ways. Formal institutions refer to codified rules, such as constitutions, laws, regulations, property rights, and contractual frameworks, enforced by official authorities and typically altered through deliberate political or legal processes (La Porta et al., 1999; Djankov et al., 2003). In contrast, informal institutions encompass norms, customs, traditions, social trust, and unwritten codes of conduct, evolving slowly and resisting change. Critically, when formal enforcement mechanisms are weak, informal institutions can be equally, if not more, influential (Helmke & Levitsky, 2004; Tabellini, 2010).

Institutions can be classified by **functional role.** Economic institutions govern market interactions by setting property rights, enforcing contracts, regulating competition, and shaping access to finance (Acemoglu, Johnson, & Robinson, 2001; Hall & Jones, 1999). Political institutions define power distribution, decision-making, and constraints on rulers (Persson & Tabellini, 2003). Legal institutions - judiciary and law enforcement - ensure rule credibility and impartial dispute resolution. Weaknesses in one area, such as judicial independence, can undermine overall effectiveness, even if formal rules seem strong (Voigt, 2013; Feld & Voigt, 2003).

A crucial distinction is between **de jure** and **de facto** institutions. *De jure* institutions are formally codified rules, such as laws and property rights. D*e facto* institutions reflect how these are enforced in practice, including behavior, administrative capacity, informal norms, and power relations.

This distinction clarifies why similar reforms can cause different outcomes. Many transition economies adopt advanced de jure frameworks, but de facto quality often lags due to weak enforcement, political interference, or corruption.

Evidence suggests economic performance aligns more with *de facto* institutional quality than with formal rules (North, 1990). Acemoglu and Robinson (2012) show that persistent gaps between *de jure* and *de facto* institutions reflect power imbalances and selective enforcement. Rodrik (2008) argues that institutional effectiveness depends more on credibility and enforcement than form. In post-conflict and transition economies such as the Western Balkans, formal reforms may not translate into higher investment, productivity, or growth.

Inclusive versus extractive institutions, as described by Acemoglu & Robinson (2012), are another key distinction. Inclusive institutions ensure broad economic opportunity, secure property rights, and reward investment and innovation. Extractive institutions concentrate power and resources among elites, discouraging productivity and fostering rent-seeking. Differences in inclusiveness explain much of cross-country income gaps and development paths (Acemoglu et al., 2001; Easterly & Levine, 2003).

Inclusive economic institutions emerge when political institutions distribute power and constrain elites, aligning de jure and de facto authority. Here, property rights are secure, markets are open, and innovation is rewarded, sustaining growth. Extractive institutions result from concentrated, weakly checked power, allowing elites to design rules that generate rents, limit competition, and block creative destruction. Extractive institutions may mimic inclusive ones in form, hiding weaknesses behind legal compliance.

For this dissertation, the distinction between inclusive and extractive institutions serves as a primary analytical tool. Governance indicators such as control of corruption, rule of law, and government effectiveness reveal how institutions function in practice—either inclusively or extractively. This lens helps explain why reforms often fail to produce expected growth and why improvement in formal rules may have uneven impacts, particularly in the Western Balkans. This central distinction guides the empirical approach.

Institutions vary in flexibility and adaptability. Some are "fast-moving," such as regulatory policies and procedures, and can be quickly reformed. Others are "slow-moving," including norms and informal power structures, which change slowly and reinforce persistence (Roland, 2004; North, Wallis, & Weingast, 2009). This time dimension explains why reforms often have uneven or delayed effects.

These classifications show institutional quality is inherently multidimensional. Institutions act through several channels, interact, and are embedded in historical and social contexts. This complexity requires empirical analysis that distinguishes among institutional dimensions and accounts for their persistence over time (Kaufmann, Kraay, & Mastruzzi, 2010), which informs this dissertation's empirical strategy.

1.9.2 Institutional persistence and path dependence

A key idea in institutional economics is that once institutions are set up, they often remain in place even if they are not effective (North, 1990). This happens because those who benefit from the current system have little motivation to support change, and changing the rules can be expensive and difficult. As a result, institutions can last a long time, even when they are not working. To understand why some economies face challenges, it is important to consider how past decisions and historical influences, like colonialism or politics, still affect how things work today. Often, people who gain from weak or extractive institutions will resist reforms, making it even harder for countries to develop over time.

This persistence of institutions helps explain why countries with similar resources can end up with very different levels of development. Even big events like wars or changes in government do not always lead to real change, unless new institutions take root in society (Acemoglu and Robinson, 2012). In many transition countries, including the Western Balkans, change has been slow and often unfinished. Here, the legacy of the Ottoman period, Yugoslavia, and the post-socialist era still shapes how economies work and why progress can be so difficult.

1.9.3 Channels of impact of institutions on economic growth

Institutions influence economic growth through multiple, interrelated channels that shape incentives, reduce uncertainty, and determine how efficiently resources are allocated over time. Rather than operating as a single, uniform mechanism, institutional quality affects growth by conditioning investment decisions, productivity dynamics, human capital accumulation, and the effectiveness of public policy (North, 1990; Acemoglu, Johnson, & Robinson, 2005).

Investment and capital accumulation

One of the most direct channels through which institutions affect growth is by shaping incentives for private and public investment. Secure property rights, predictable enforcement of contracts, and protection against expropriation reduce uncertainty and lower the risk premium investors face, thereby encouraging both domestic and foreign capital formation (Knack & Keefer, 1995; Mauro, 1995; Acemoglu et al., 2001). As emphasized by Acemoglu and Robinson, secure property rights safeguarded by effective institutions incentivize entrepreneurship, innovation, and long-term investment by ensuring that economic agents can appropriate the returns to their activities.

When the rule of law is weak and corruption is common, people are less willing to invest for the long term. Instead, they focus on short-term gains and low-value activities, which hold back real economic progress.

Productivity, innovation, and resource allocation

Institutions influence growth by affecting total factor productivity through allocative efficiency and innovation incentives. Effective regulatory frameworks and competition policies facilitate entry and exit, enabling resources to flow toward more productive firms and sectors (Hall & Jones, 1999; Acemoglu et al., 2005). Inclusive institutional environments also facilitate economic coordination and the diffusion of technology by lowering barriers to entry and reducing political or economic exclusion. In contrast, extractive institutions tend to stifle competition and impede the diffusion of new ideas and technologies.

In countries where institutions are weak, resources often end up in the wrong hands. Firms that are not productive can survive just because they have political connections or benefit from corruption, instead of competing fairly (Hsieh & Klenow, 2009).

Human capital accumulation

Institutional quality determines returns to education by influencing labor-market openness, recruitment practices, and employment credibility. Where skills are rewarded, individuals invest in education; in weak environments, human capital may be underutilized or diverted to other uses, limiting its impact on growth (Pritchett, 2001; Krueger & Lindahl, 2001).

Policy credibility and macroeconomic stability

Strong institutions make government policies more predictable and trustworthy. When courts are independent and public administration is professional, people and businesses can plan for the future (Rodrik, 2000; Persson & Tabellini, 2003). But if political power is unchecked, policies can change suddenly, making it hard to trust reforms.

Distribution, social cohesion, and conflict risk

Institutions affect growth by shaping income distribution, social cohesion, and political stability. Inclusive institutions reduce conflict by ensuring broader access to opportunities and dispute resolution (Acemoglu & Robinson, 2012).

When institutions are inclusive, they are more likely to provide important public services like education, healthcare, and infrastructure. This helps people develop their skills and supports long-term growth. Extractive institutions tend to concentrate rents and increase the likelihood of political instability and conflict, imposing long-run growth penalties (Collier & Hoeffler, 2004).

Formal political-economic transmission mechanism

Building on the conceptual distinction between economic and political institutions, and between de jure and de facto power, institutional effects on growth can be formally described as a dynamic system of interdependent relationships. Economic institutions at time t shape economic performance at time t by influencing incentives faced by rational agents, and they determine the distribution of economic resources at time $t+1$. These economic institutions are themselves the outcome of collective choices, formed under conditions of conflict of interest among social groups, where outcomes depend critically on the distribution of political power.

Political power at time t determines the economic institutions at that time. Political power has both a *de jure* component, rooted in political institutions such as constitutions, electoral systems, and formal constraints on authority, and a *de facto* component, reflecting groups' capacity to mobilize collectively and their control over economic resources. Political institutions at time t shape *de jure* political power, while the distribution of resources at time t shapes *de facto* political power. Together, these forces influence political institutions at time $t+1$, generating a dynamic feedback loop between political power, institutional arrangements, and economic outcomes.

This way of looking at institutions shows that they are shaped by ongoing political and economic struggles, not just set from outside. Changing the laws on paper does not always change who holds power, so reforms may not have the hoped-for effect on growth.

1.9.4 Measurement of institutional quality

Measuring institutional quality is not straightforward, since institutions are complex and often hard to see directly. Unlike things like physical capital or labor, we cannot measure institutions directly, so we have to rely on different indicators, surveys, or legal data. Early research mostly used simple measures like expropriation risk or political instability (Knack & Keefer, 1995), which shows how difficult it is to capture the full picture of how institutions actually work.

Worldwide governance indicators (WGI)

The Worldwide Governance Indicators (WGI), created by the World Bank in 1999, are the most common way to compare institutional quality across countries. WGI looks at six main areas: voice and accountability, political stability and absence of violence, government effectiveness, regulatory quality, rule of law, and control of corruption (Kaufmann, Kraay, & Mastruzzi, 2010). These indicators bring together information from experts, business surveys, and household surveys, which allows for broad comparisons between countries and over time.

The six dimensions are developed from information from 32 sources, reflecting the experiences of citizens, entrepreneurs, public- and private-sector experts, and NGOs worldwide regarding governance quality. The sources are grouped into four types:

- surveys of households and businesses (9 sources, including Afrobarometer, Gallup, and the Global Competitiveness Report).
- Companies producing business information for commercial purposes (4 sources, including Economist Intelligence Unit, Global Insight, and Political Risk Services).
- non-governmental organizations (11 sources, including Global Integrity, Freedom House, Reporters Without Borders).
- public sector organizations (8 sources, including the Country Policy and Institutional Assessment (CPIA) indices for the World Bank's International Development Assistance, the European Bank for Reconstruction and Development).

From 2016 to 2021, the latest available year, the WGI covers 200 countries. Indicators are normalized to the world average and range from ±2.50.

The main strength of WGI is that it is easy to compare across countries and over time, which makes it useful for studying long-term development. However, there are some problems, such as possible bias in perceptions, unclear methods for combining the data, and errors that can come from using similar sources more than once.

Alternatives to the Worldwide Governance Indicators and the rationale for their use

Besides WGI, there are other datasets that try to measure institutional quality in different ways. For example, the International Country Risk Guide (ICRG) provides data on political risk, corruption, bureaucratic quality, and law and order, and is often used in research on growth and political economy. Still, these alternatives usually cover fewer countries, can be expensive to access, and often focus more on the needs of investors than on broader development issues.

Some datasets, like Polity IV, focus on things like regime type, limits on executive power, and political competition (Marshall & Jaggers, 2002). While these are important for political research, they do not tell us much about how well governments actually work or deliver services, so they are less useful for studying economic governance. Freedom House indicators look at civil liberties and political rights, but they also have some bias and do not cover economic institutions well, which limits their use in growth studies.

There are also measures that focus on specific parts of institutions. Legal-origin indicators (La Porta et al., 1999) look at court systems and how well investors are protected. The Doing Business indicators measure how easy it is for firms to deal with regulations and paperwork (Djankov et al., 2002). Firm-level surveys, like those from the World Bank, give detailed information about corruption, contract enforcement, and regulatory problems. However, these sources often change their methods, do not cover all countries, and do not go back very far in time, so they are less useful for studying long-term trends across many countries.

The Doing Business Index, from the World Bank Group, looks at how easy it is to do business by measuring things like property rights and how efficient regulations are. These indicators help compare countries and give a general view of institutional quality (Thomas, 2010).

In addition to numbers and statistics, researchers also use qualitative methods like case studies and content analysis. Case studies look at how history, politics, and society shape institutions in a specific country. Analyzing legal documents and institutional rules can show how strong or effective institutions are (Knoll & Zloczysti, 2012). Surveys and perception-based measures, such as Transparency International's CPI, give us a sense of how people see corruption and the quality of governance. By combining these different methods, we can get a fuller picture of how institutions work and how they affect development and society (Kaufmann, Kraay, & Zoido-Lobatón, 1999).

Recent research pays more attention to how institutions actually work in practice, not just what the laws say. For example, measures like settler mortality, colonial history, legal origins, and state capacity are used to capture long-term institutional differences (Acemoglu et al., 2001; Besley & Persson, 2009). However, these measures do not change much over time and cannot show how institutions evolve, which is especially important for countries going through transition or recovering from conflict.

All of these approaches show that we cannot measure institutional quality with just one number. Researchers now often use several indicators or focus on specific areas of governance to get more reliable results, especially in countries where reforms are uneven and the rules on paper do not always match what happens in reality.

Arguments and counterarguments for the use of WGI

The WGI database is a prominent tool for measuring institutional quality, offering a comprehensive assessment of governance through six distinct dimensions using numerous data sources (Kaufmann, Kraay, & Mastruzzi, 2010). Its broad and consistent country and time coverage is particularly valuable for studying transition and post-conflict economies, where institutional change varies across domains. The quantitative, multidimensional indicators facilitate cross-country comparisons and trend analysis. Reliance on expert surveys lends credibility and captures subjective governance aspects, in line with the literature's focus on multidimensional institutional analysis (Rothstein, 2011).

Still, WGI has its weaknesses. Because it relies on expert surveys, there can be bias or the results may only reflect the views of certain groups. Since WGI is based on perceptions, it can have errors, and the way people see governance can be affected by how the economy is doing at the time. Also, expert opinions may not always match the real situation on the ground, and perceptions can differ a lot between countries and cultures (Gani, 2011). For these reasons, in this dissertation, I use WGI as a useful proxy for governance, but not as a perfect or exact measure of how institutions actually perform.

There is also a trade-off between having broad coverage and getting detailed information. WGI covers many areas, but sometimes it does not go deep enough into specific aspects of institutions. Still, its wide coverage and consistency over time make it a sensible option for comparing countries. Researchers often point out both the strengths and weaknesses of WGI, and agree that it is best used together with other methods to get a more complete and accurate picture (Kaufmann, Kraay, & Zoido-Lobatón, 1999). In this dissertation, I take these limitations into account by using dynamic models, checking the robustness of results, and being careful not to over-interpret the numbers.

1.9.5 Linking WGI to institutional and economic theory

While institutional theory provides a rich conceptual framework for understanding economic development, empirical analysis requires observable proxies that can capture key dimensions of governance. The Worldwide Governance Indicators (WGI) operationalize institutional quality across six distinct dimensions, each corresponding to specific mechanisms emphasized in economic and institutional theory (Kaufmann, Kraay, & Mastruzzi, 2010). Establishing a clear theoretical link between these indicators and growth mechanisms is essential for meaningful empirical interpretation.

Control of corruption is most closely aligned with theories emphasizing rent-seeking, investment incentives, and allocative efficiency. In institutional economics, corruption represents a form of informal taxation that distorts relative prices, discourages productive investment, and reallocates resources toward unproductive activities (North, 1990; Mauro, 1995). From the perspective of growth theory, weak corruption control increases uncertainty and reduces the expected returns to capital accumulation and innovation, directly affecting investment and productivity channels.

The rule of law reflects the credibility of contract enforcement, property rights protection, and legal predictability. This dimension maps directly onto classical institutional theories that identify secure property rights as a precondition for long-term growth (Acemoglu, Johnson, & Robinson, 2001; Hall & Jones, 1999). In both neoclassical and endogenous growth frameworks, a weak rule of law undermines incentives for capital accumulation, innovation, and firm entry, thereby slowing structural transformation and convergence.

Government effectiveness captures the quality of public administration, policy implementation, and service delivery. This dimension is closely related to state capacity and administrative competence, which are central to theories of development that emphasize the role of the state in providing public goods, coordinating investment, and enforcing rules

(Besley & Persson, 2009). Effective governments enhance policy credibility, reduce transaction costs, and improve the growth impact of openness and macroeconomic stability.

Regulatory quality reflects the ability of the state to design and implement policies that support private sector development. From a growth perspective, regulatory quality influences firm dynamics, competition, and resource allocation, linking it to endogenous growth and Schumpeterian models that emphasize entry, exit, and innovation incentives (Aghion & Howitt, 1992). Poor regulatory quality can entrench incumbents, suppress competition, and limit productivity gains even in otherwise open economies.

Political stability and absence of violence relate to theories that emphasize uncertainty, conflict risk, and the durability of economic institutions. Political instability increases investment risk and shortens planning horizons, thereby weakening both capital accumulation and innovation incentives (Collier & Hoeffler, 2004). In post-conflict and transition economies, this dimension is particularly relevant for understanding persistence effects and delayed convergence.

Voice and accountability capture participatory institutions, civil liberties, and political pluralism. In political economy theory, this dimension is associated with inclusive institutions, constraints on executive power, and long-term accountability (Acemoglu & Robinson, 2012). While its short-run growth effects may be ambiguous, voice and accountability are expected to influence development indirectly by improving institutional legitimacy, reducing elite capture, and supporting sustainable reform trajectories.

Importantly, theory does not predict that all dimensions should exert uniform or immediate effects on growth. Instead, differences in statistical significance across indicators may reflect variation in transmission channels, time horizons, historical constraints, and country-specific attributes. This interpretation is consistent with institutional persistence, path dependence, and the conditional nature of growth processes emphasized throughout this chapter.

1.9.6 Endogeneity of institutions and economic growth

The relationship between institutions and economic growth constitutes a major challenge for researchers. Institutions such as laws, government structures, and political systems are not fixed; they evolve in response to economic, social, and political developments (Miozzo & Yamin, 2012). This makes it hard to determine causality, as institutions can shape the economy while the economy can also influence institutions. For instance, stronger institutions can promote growth by offering better incentives, yet economic growth may lead to demands for improved governance and rule of law (Kaufmann & Kraay, 2002). This association calls for careful analysis to identify growth drivers (Ben Ali & Krammer, 2016).

Another problem is that research can be biased if important factors are left out. For example, things like culture, geography, or history can affect both institutions and economic growth, but they are not always easy to measure or include in studies. This makes it hard to get clear results. Institutions are also always changing, and their history matters for how they work today (D. Rodrik, 2000). On top of that, measuring institutions is not simple, especially when using surveys or perceptions, which can lead to mistakes in the data. All these issues mean that researchers have to be very careful in how they design their studies and choose their methods (Furubotn & Richter, 2008; Yılmaz et al., 2012).

To deal with these challenges, researchers use different methods. Some use special techniques like instrumental variables or natural experiments to try to find changes in institutions that are not caused by the economy. For example, they might use historical facts like settler mortality or legal origins to measure institutional quality (Acemoglu et al., 2001; La Porta et al., 1999). However, these methods do not always work well in every context. Another approach is to use dynamic panel data methods, which use information from previous years to help control for factors that are hard to observe (Arellano & Bond, 1991; Blundell & Bond, 1998).

Some researchers argue that the two-way relationship between institutions and growth is not just a statistical issue, but a central aspect of how economies evolve. Both change together over time, influenced by politics, society, and external events (North, Wallis, & Weingast, 2009). This is especially evident in countries undergoing significant change or recovering from conflict, where reforms and economic development occur simultaneously, and their effects are difficult to separate.

Because of these challenges, researchers today focus more on building careful models, checking their results, and being open about what their findings mean, instead of making strong claims about what causes what. The field is still developing, and dealing with the endogeneity problem is important for making research more reliable (Hodgson, 1999). In this dissertation, I use dynamic panel methods, lagged variables, and different model setups to reduce these problems, while also recognizing that institutions and growth influence each other in both directions.

1.10 Spatial Dimensions of Economic Growth

1.10.1 New economic geography (NEG) and new new economic geography (NNEG)

New Economic Geography helps us understand why some regions grow faster than others by looking at where economic activity takes place. Krugman (1991) showed that factors like economies of scale, transport costs, and market size can cause businesses and workers to gather in certain areas. When a place has an early advantage, it often attracts more firms and people, making it even stronger over time. This process can lead to big differences between regions, as some areas keep growing while others fall behind.

NEG shows that where a region is located and how easily it can reach big markets matter a lot for its long-term growth. Places with good access to markets and low trade costs attract more investment and skilled workers. On the other hand, regions that are far from main markets regularly struggle to catch up. This is especially important for small and divided economies like those in the Western Balkans, where some areas are much better connected than others.

NNEG extends this framework through incorporating firm heterogeneity, productivity sorting, and selection mechanisms, drawing on the insights of Melitz-type trade models (Melitz, 2003; Baldwin & Okubo, 2006). In this setting, only the most productive firms can bear the fixed costs of exporting or relocating to core regions, while less productive firms either remain domestic or exit the market altogether. As a result, openness and integration amplify spatial inequalities unless supported by institutions that facilitate firm upgrading, competition, and mobility.

NEG and NNEG both make it clear that geography and openness are not enough on their own. Institutions play a key role in deciding whether regions benefit from growth or fall further behind. Good infrastructure, fair regulations, and strong rule of law help regions take advantage of agglomeration. But if institutions are weak, it is hard for less developed areas to attract investment or new businesses, and local advantages can be wasted or misused.

For this dissertation, NEG and NNEG help connect the ideas of geography, openness, and the quality of institutions. They show why simply opening up or joining the EU does not guarantee that all regions will catch up. In many transition economies, growth is uneven because of where regions are located, which firms succeed, and how strong the institutions are. This makes it even more important to focus on improving institutions if we want integration to lead to real convergence.

1.10.2 Spatial persistence, agglomeration, and clusters

Building on the insights of NEG and NNEG, an important implication for development analysis is spatial persistence - the tendency for economic activity, productivity, and income to remain geographically concentrated over long periods. Spatial persistence reflects path-dependent mechanisms whereby early advantages (market access, initial industrial bases, or administrative centers) generate cumulative causation: firms co-locate to exploit scale economies, workers migrate toward opportunity, and knowledge spillovers intensify local productivity, strengthening the dominance of core regions over peripheries (Krugman, 1991; Fujita, Krugman, & Venables, 1999). From an empirical perspective, persistent spatial inequalities have been observed both within and across countries, suggesting that integration and mobility do not automatically dissolve geographic disparities (Redding & Venables, 2004). In this framework, convergence is not simply a macroeconomic outcome but a spatially mediated process, shaped by the distribution of market access and the durability of geographic frictions.

A central mechanism underpinning spatial persistence is agglomeration, often operationalized through industrial clusters and localized ecosystems of firms, skills, suppliers, and institutions. Agglomeration economies arise from multiple sources: (i) input-output linkages and thick markets, (ii) labor market pooling and matching efficiencies, and (iii) knowledge spillovers that accelerate innovation and learning (Marshall, 1890/1920; Duranton & Puga, 2004). The cluster literature asserts that these external economies can translate into sustained productivity differences across locations, especially when clusters evolve into innovation systems supported by specialized services, research capabilities, and cooperative networks (Porter, 1998; Audretsch & Feldman, 2004). At the same time, clusters can also generate congestion costs, inequality, and lock-in effects when specialization becomes excessive or when peripheral regions fail to build complementary capabilities (Duranton, 2007). Thus, agglomeration is not uniformly beneficial: its growth effects depend on whether clustering fosters upgrading and diversification rather than rent extraction or low-productivity specialization.

1.10.3 Institutions as mediators of spatial relationships

Institutions mediate spatial relationships by shaping whether agglomeration translates into inclusive productivity growth or entrenched divergence. Institutions influence spatial outcomes through several channels. First, they affect the security of property rights, contract enforcement, and regulatory predictability, which are fundamental for long-term investment in place-specific assets (North, 1990; Acemoglu, Johnson, & Robinson, 2005). Second, they determine the quality of public goods essential to clusters - such as infrastructure provision, zoning and land governance, competition policy, and dispute resolution - thereby shaping the costs and benefits of co-location (Glaeser, 2011). Third, institutions determine whether agglomeration economies are broadly shared or captured by elites through selective enforcement, corruption, or politicized allocation of public resources, thereby suppressing entry and weakening competitive dynamics (Rodrik, 2005; La Porta et al., 1999). In weak institutional environments, spatial concentration may persist, but its productivity effects can be muted or distorted by rent-seeking, informality, or under-provision of public goods.

Institutions also matter because the spatial allocation of economic activity is linked to state capacity and administrative effectiveness, particularly in transition and post-conflict contexts. Where administrative capacity is limited, governments may struggle to coordinate regional development, implement infrastructure projects, ensure fair procurement practices, or deliver basic services uniformly across the territory. This can increase spatial inequality by reinforcing the dominance of capital cities and a small number of core regions while leaving peripheral areas with persistently weaker connectivity and lower investment attractiveness (North, Wallis, & Weingast, 2009). Moreover, institutional quality influences the extent to which external integration, such as EU-related market access, translates into regional upgrading rather than concentrated gains. When institutions support competition, mobility, and innovation, integration can accelerate convergence by spreading productivity gains; when institutions are weak, integration may intensify core- periphery divergence through firm selection and clustering in already-advantaged areas.

In this dissertation, looking at spatial persistence and agglomeration adds to the focus on institutions and helps explain why growth is so uneven across countries. It shows why opening up to the outside world does not always bring equal benefits, especially in the Western Balkans, where weak infrastructure and institutions make it hard for all regions to attract investment. Development is not just about national policies, but also about where growth happens and how institutions shape these patterns. This is why understanding the role of institutions in managing spatial concentration is so important.

1.11 Chapter Summary and Theoretical Implications

Chapter I overviewed the theoretical foundations of economic growth, progressing from traditional growth models to a deeper institutional perspective. The discussion began with the neoclassical framework, in which long-run growth is spurred by capital accumulation and exogenous technological progress. The Solow- Swan model (Solow, 1956), along with its extensions incorporating human capital (Mankiw, Romer, & Weil, 1992; Weil, 2005), shows the role of education, skills, and health in raising productivity levels, while still predicting conditional convergence under tight assumptions.

Endogenous growth theory fundamentally revised the growth framework by internalizing or endogenizing technological progress. Romer (1990) andAghion et al. (1998) emphasize that innovation results from purposeful investment in human capital and R&D, generating knowledge spillovers and potentially persistent growth differentials. These models provide important explanations of divergence, club convergence, and the roles of skills and innovation. However, they also face empirical and conceptual limitations, including scale effects, a weak treatment of institutions, and limited explanatory power for cross-country differences in long-run development paths.

These limitations motivate a shift toward deeper determinants of economic growth. Drawing on Rodrik (2005, 2006), Chapter I distinguishes between shallow determinants and deep determinants, particularly geography and institutions. While geography shapes initial conditions and constraints, institutions emerge as the most fundamental determinant, structuring incentives, reducing uncertainty, and determining whether openness, capital accumulation, and technological change translate into sustained growth. The chapter emphasized that institutions are multidimensional, endogenous, and persistent, operating through multiple channels including investment, productivity, human capital formation, policy credibility, and social cohesion.

One of the main points in this chapter is to look at institutions from a political-economy view. Based on the work of Acemoglu and others, institutions are not just official rules, but also reflect who holds power in a country. This includes both the laws on paper and how things work in practice. The chapter also talks about the problems of measuring institutions and why I use the WGI as a way to capture different sides of institutional quality, even though it is not perfect.

All these theories show that economic growth depends on many things working together, like investment, new technology, good institutions, history, and links with other countries. Theories can help us understand the big picture, but they do not always tell us how these factors work in each country or which parts of institutions are most important in real life.

In short, Chapter I set the stage for the rest of the dissertation by giving the main ideas and tools I use later. It helps connect the general theories of growth to the real challenges and institutions found in the Western Balkans.

CHAPTER II. INSTITUTIONS AND ECONOMIC DEVELOPMENT IN TRANSITION ECONOMIES: EVIDENCE FROM LITERATURE AND WESTERN BALKANS

2.1 Introduction

Chapter I established the theoretical foundations for understanding why institutions matter for long-run economic development, distinguishing between proximate drivers of growth and deeper determinants that shape incentives, constraints, and the allocation of resources. Building on that conceptual framework, Chapter II shifts from theory to evidence. Its primary purpose is to synthesize the main empirical findings in the institutions- growth literature, clarify where results are robust and where they remain contested, and identify the methodological and substantive gaps that motivate the empirical strategy of this dissertation. In doing so, the chapter does not merely summarize prior work; it evaluates the empirical record through the lens of the central theoretical issues highlighted in Chapter I - persistence, path dependence, and the problem of causal identification.

The scope of the chapter reflects the substantive focus of the dissertation. While the institutions- development literature is global in orientation, the present study is concerned with transition and post-conflict economies, where institutional change is recent, uneven, and commonly shaped by political discontinuities. These contexts pose distinctive empirical challenges: formal institutional reforms may proceed faster than de facto enforcement, growth trajectories may reflect delayed adjustment, and institutional quality may be simultaneously a cause and a consequence of development. Within this wider category of economies, the Western Balkans occupy a central place in the analysis. The region combines post-socialist transition with conflict legacies, incomplete state-building, and ongoing external integration pressures, making it an analytically powerful setting for examining how institutional quality interacts with political incentives and historical constraints to shape development outcomes.

The chapter is also designed to provide a clear bridge to the empirical core of the dissertation. Chapter II develops the empirical rationale for the hypotheses tested later by reviewing baseline cross-country evidence, examining the endogeneity problem, and assessing the main identification strategies used in the literature, with particular emphasis on the seminal contributions that established institutions as a causal driver of long-run development. This synthesis informs the model design choices and variable selection presented in Chapter III, where data sources, institutional indicators, and econometric specifications are introduced and justified. It also motivates the structure of the empirical tests and robustness checks carried out in Chapter IV, where the hypotheses derived from the literature are evaluated using panel evidence for the Western Balkans and relevant comparators.

2.2 Institutions and Economic Growth: Empirical Evidence and Identification

2.2.1 Baseline cross-country evidence: institutions and long-run income/growth

Economic growth depends on many things at once. Investment, education, innovation, openness, and above all, the quality of institutions are all important. Researchers measure these factors in different ways, so it is not always easy to compare their findings or decide which factor matters most (Haidar, 2012). Most agree that growth is not driven by just one thing, but by how all these elements work together. Because of this, it is difficult to draw simple conclusions from the research (Siegle, 2001).

Many studies agree with this. Education, skills, and innovation are important for growth, but it is often the quality of institutions that decides how much these factors can help. Research shows that human capital and new knowledge can raise productivity, but this only works if institutions allow people and businesses to invest and use their skills (Beck et al., 2005; Lee et al., 2021; Easterly & Levine, 2001; Abdelbary & Benhin, 2019; Nkoro & Uko, 2023). In other words, strong institutions are often at the center of long-term development.

This focus on the quality of institutions is a big shift in how researchers think about growth. The evidence shows that countries with strong institutions, where property rights are protected, contracts are enforced, and corruption is controlled, usually have higher incomes and better economic results (Milgrom et al., 1990; Raju et al., 2020). Earlier studies also found that weak institutions often go together with slower growth, mostly because of higher costs and poor use of resources (Mauro, 1995). Good governance is often associated with greater investment and higher incomes (Kaufmann, Kraay, & Zoido-Lobatón, 1999; Kaufmann et al., 2005).

Even though these links are important, it is important to remember that cross-country studies mostly show general patterns, not clear proof that one thing causes another. Measures of institutions often rely on people's opinions and may only show the current situation. These measures usually matter more for long-term income than for short-term growth. Each country also has its own unique factors that can lead to very different results (Haidar, 2012). Remembering this helps us better understand the research and the continuing debate about what drives growth**.**

Because of these limits, there is still debate about what causes long-term development. Some researchers ask if institutions or geography matter more for explaining why some countries are richer than others. Others wonder if good policies can work when institutions are weak, or if strong institutions are needed for policies to succeed. These questions are important for how we study and understand economic growth.

2.2.2 Short-run vs long-run effects; static vs dynamic findings

Looking more closely at these questions, research shows that the link between institutions and growth depends on how we measure it and over what time period. Dynamic models show that changes in the economy and institutions often take time, while static models can miss this. It is important to separate short-term and long-term effects to understand what is happening (Temple, 1999; Rodrik, 2005).

Static models compare countries at one point in time or over a few years. They often find that good institutions go together with higher income, especially when looking at GDP per person. But these models assume that changes in institutions have quick effects, which is not realistic. In real life, economies change slowly. This means static models can make it seem like reforms work faster than they actually do. Policymakers should be careful and not expect quick results from institutional reforms.

Dynamic models use lagged dependent variables to examine persistence in income and growth. Persistence matters because both institutional quality and performance tend to be stable over time. When dynamics are included, observed short-run institutional effects usually shrink, while the long-run relationships, calculated as the contemporaneous coefficient divided by one minus the autoregressive parameter, remain sizable (Arellano & Bond, 1991; Blundell & Bond, 1998). This suggests that institutional quality is mainly associated with gradual gains in investment, human capital, and productivity, rather than immediate changes.

The literature shows institutional variables are more closely linked to long-run income levels than short-term growth rates. Short-run regressions yield weaker, less stable, or insignificant coefficients, while level and long-horizon analyses show strong relationships between governance and development outcomes (Temple, 1999; Rodrik et al., 2004).

Dynamic panel estimators, such as difference- and system-GMM, are by now a standard in growth research. These methods control for unobserved heterogeneity and explicitly model persistence (Bond et al., 2001). Controlling for dynamics usually makes the immediate effect of institutions on growth smaller but more robust. Long-run effects stay substantial. However, these methods also bring challenges: finite-sample bias, weak instruments, and sensitivity to lag selection. Researchers must use robustness checks and exercise care in their applications.

One important question is whether to focus on income levels or growth rates. Studies find that the quality of institutions matters more for how rich a country becomes than for how fast it grows each year. For policymakers, this means that institutions set the limits for what an economy can achieve. This is especially important for countries that are trying to improve their institutions (Pritchett & Summers, 2014).

These questions are especially important for countries in transition or recovering from conflict. In these situations, new laws and institutions are often put in place before the economy starts to improve. Static models may not show much effect from these changes, but dynamic models show that progress is slow and depends on history, how well rules are enforced, and stability. If we ignore these slow changes, we might wrongly think that institutions do not matter.

Most studies find that the effect of institutions grows slowly over time. Static models usually make short-term effects look bigger than they are, while dynamic models give a better picture of how institutions shape development in the long run (Arellano & Bond, 1991; Blundell & Bond, 1998; Rodrik, 2005). This is why it is important to use dynamic methods to tell the difference between quick changes and deeper, long-term effects.

2.2.3 Endogeneity problem: why simple correlations are insufficient

Despite the strong empirical link between institutional quality and economic development in cross-country studies, causal interpretation continues to be challenging. The central problem is endogeneity: institutions and economic outcomes are jointly determined by historical, political, and social forces, and are persistent. Thus, simple correlations or even multivariate regressions cannot establish whether institutions cause development, development improves institutions, or deeper factors drive both.

Reverse causality is the first source of endogeneity, obstructing efforts to establish clear causal pathways. While the literature often treats institutional quality as a driver of growth, economic development itself can strengthen institutions-raising demand for accountability, improving state capacity, and expanding fiscal resources to enforce rules. As countries achieve higher income, they may develop better public administration, more professional bureaucracies, and stronger legal systems, thereby generating a feedback loop from development to institutional improvement. Empirical estimates of institutional effects may thus capture the influence of economic growth on institutional quality rather than the reverse (Glaeser et al., 2004). As reiterated in Chapter I, this ambiguity is rooted not only in technical problems but also in theoretical uncertainty over which factor - economic development or institutional change - is the true driver.

A second major source of endogeneity is omitted variable bias stemming from unobserved or poorly measured factors that jointly influence institutions and economic performance. Cultural norms, social capital, colonial legacies, historical patterns of state formation, and geographic conditions may affect both governance quality and development outcomes. If these deep determinants are not adequately controlled for, institutional coefficients may reflect their influence rather than the independent effect of institutions. Even when country fixed effects are introduced, these controls account only for time-invariant heterogeneity and cannot fully address slowly evolving historical or political factors that evolve alongside institutions and income (North, 1990; Rodrik et al., 2004).

Measurement issues further exacerbate the endogeneity problem. Widely used institutional indicators, such as the Worldwide Governance Indicators, are typically based on perceptions, expert assessments, or composite indices constructed from heterogeneous sources. These measures are inherently noisy and may be influenced by contemporaneous economic conditions, creating simultaneity bias. For example, improvements in income or macroeconomic stability may lead survey respondents to perceive governance more favorably, even if underlying institutional structures remain unchanged. Measurement error of this kind TENDS TO attenuate estimated coefficients and blur the distinction between cause and effect, particularly in short panels or samples dominated by transition economies (Kaufmann et al., 2005; Arndt & Oman, 2006).

Another important challenge arises from institutional persistence and dynamic dependence. Institutions are widely recognized as slow-moving variables, typically shaped by historical legacies that persist over decades or even centuries. Economic outcomes, particularly income levels, display similar persistence. When lagged dependent variables are included in growth regressions to capture these dynamics, standard fixed-effects estimators are biased in short panels, leading to the well-known Nickell bias. Ignoring dynamics, on the other hand, risks overstating the contemporaneous effect of institutions by attributing long-run persistence to short-run changes (Bond et al., 2001). This issue is particularly salient in post-socialist and post-conflict contexts, such as the Western Balkans, where institutional reforms are recent, and their effects may unfold slowly.

Simple cross-sectional correlations or pooled regressions are therefore unable to credibly identify the causal impact of institutions on economic development that we are interested in. While such estimates are informative for establishing stylized facts, they provide limited guidance for theory testing or policy inference. This recognition has motivated a substantial methodological literature aimed at developing identification strategies to isolate exogenous variation in institutional quality. The next section reviews these strategies, highlighting their contributions and limitations, before turning to the seminal work of Acemoglu, Johnson, and Robinson (2001).

2.2.4 Identification strategies in literature

In response to the endogeneity problems outlined above, empirical literature has developed a range of identification strategies designed to isolate exogenous variation in institutional quality. These approaches differ in their underlying assumptions, data requirements, and capacity to capture deep versus proximate institutional effects. This section reviews the principal strategies employed in the literature, presenting their strengths and limitations, and situates them within the broader methodological evolution of institutions- growth research.

One prominent approach relies on IV estimation, in which institutions are instrumented using variables presumed to affect development only through their impact on institutional quality. Early contributions employed instruments such as legal origin, settler shares, or measures of ethnolinguistic fragmentation. Legal origin, for example, has been used as a proxy for institutional differences inherited from colonial powers, particularly in legal and regulatory frameworks (La Porta et al., 1998). Similarly, Hall and Jones (1999) use geographic and Western European influence as instruments to identify the effect of "social infrastructure" on output per worker. While these strategies represented important advances over simple correlations, their credibility depends critically on the validity of the exclusion restriction - a condition that is often difficult to defend, from an empirical perspective, as many proposed instruments may influence development through multiple channels.

A second strand of the literature exploits natural experiments and historical discontinuities to identify institutional effects. These studies typically leverage plausibly exogenous policy changes, administrative reforms, or historical shocks that generate variation in institutions across otherwise comparable units. For example, Banerjee and Iyer (2005) examine the long-run consequences of different land revenue systems imposed by British colonial authorities in India, while Becker et al. (2016) exploit historical variation in Habsburg versus Ottoman administration within Eastern Europe to study persistent differences in institutional quality. Related approaches use large-scale political partitions as quasi-experimental settings. The division of Germany after World War II provides a particularly clean institutional contrast, with East and West Germany sharing language, culture, and history but operating under radically different political and economic institutions for several decades (Redding & Sturm, 2008). Similar logic underlies comparative analyses of North and South Korea, where a common historical and ethnic background contrasts sharply with divergent institutional regimes. In Central and Eastern Europe, studies that exploit the historical partitions of Poland under Prussian, Austrian, and Russian rule likewise document long-lasting institutional and economic differences across regions exposed to distinct administrative and legal systems. By focusing on within-country or border discontinuities, such approaches substantially reduce concerns about unobserved heterogeneity and allow for more credible counterfactual comparisons. However, this strength in internal validity often comes at the expense of external validity, as estimated effects may remain context-specific and difficult to generalize beyond the particular historical settings under study.

A third identification strategy involves dynamic panel data methods, including generalized method of moments (GMM) techniques. Difference and system GMM estimators allow researchers to control for unobserved country-specific effects and to model persistence in both institutions and economic outcomes (Arellano & Bond, 1991; Blundell & Bond, 1998). These methods are particularly attractive in panels with many countries and short time dimensions, as is common in post-1990 transition datasets. By instrumenting endogenous variables with their own lags, dynamic panel data mitigates reverse causality and omitted-variable bias. Nevertheless, they do not fully resolve the problem of identifying deep institutional causes. This is because lagged instruments may still be correlated with long-run historical determinants. Moreover, instrument proliferation and weak identification remain practical concerns in applied work.

A broader critique emerging from the literature is that econometric sophistication alone cannot substitute for credible sources of exogenous institutional variation. Dynamic panels are well-suited to estimating short- and medium-run effects and to control for persistence, but they provide limited insight into the origins of institutional differences. This limitation is particularly relevant for regions such as the Western Balkans, where institutional trajectories are shaped by layered historical legacies, post-conflict settlements, and external integration pressures that predate the available data. As Rodrik (2005) argues, understanding long-run development requires identification strategies grounded in history and political economy rather than solely in econometric techniques.

Against this background, the literature increasingly recognizes the need to distinguish between proximate institutional changes - such as regulatory reforms or administrative improvements - and deep institutional structures rooted in political power and historical context. The former may be amenable to panel estimation, while the latter requires instruments or natural experiments that capture long-term variation. This distinction provides the conceptual bridge to the next subsection.

2.2.5 Seminal causal evidence: Acemoglu, Johnson, and Robinson (2001) and the institutional origins of development

The most influential empirical contribution to the institutions- development literature is the seminal work by Acemoglu, Johnson, and Robinson (2001), which fundamentally transformed how economists identify the causal impact of institutions on long-run economic development. The AJR study represents a decisive break from earlier correlational approaches by introducing a historically grounded instrumental-variable strategy that directly addresses institutional endogeneity.

The central contribution of Acemoglu et al. (2001) lies in demonstrating that differences in contemporary income levels across countries are largely explained by the nature of colonial institutions, rather than by geography, culture, or factor endowments per se. Exploiting historical variation in European settlers' mortality rates, the authors argue that mortality conditions shaped colonial settlement strategies, which in turn determined whether extractive or inclusive institutions were established. High settler mortality discouraged permanent settlement and led colonial powers to install extractive institutions designed to transfer resources to the metropole. In contrast, low-mortality environments encouraged settlement and the creation of institutions that protected property rights and supported long-term investment.

Settlers' mortality is used as an exogenous instrument for institutional quality, allowing the authors to identify a causal channel running from institutions to economic development. The empirical results show that once institutional quality is accounted for, traditional geographic variables lose explanatory power, in so doing establishing institutions as a fundamental cause of long-run growth.

This contribution clarifies and formalizes insights traceable to classical political economy. Adam Smith (1776) emphasized that prosperity requires secure property rights, contract enforcement, and predictable governance, arguing that commerce and manufacturing flourish under the regular administration of justice. However, Acemoglu et al. (2005) advance this intuition by embedding it within a modern political-economy framework, explicitly linking institutional outcomes to distributions of political power and elite incentives. Unlike Smith, whose arguments remained largely normative and descriptive, Acemoglu et al. provide a testable causal mechanism supported by historical data.

A key innovation of the Acemoglu et al. (2005) framework is the distinction between de jure and de facto institutions. Formal legal structures may exist, but their economic relevance depends on how political power is distributed and exercised in practice. This insight is particularly important for understanding cases in which formal property rights were protected for colonial elites, as in parts of the Caribbean and colonial India. At the same time, the majority of the population remained excluded from economic and political participation. In such circumstances, institutional arrangements favored extraction over broad-based development.

At the same time, the Acemoglu et al. (2005) approach has provoked notable debates. Certain Critics argue that the framework underplays the role of policy choices, human capital, and knowledge diffusion, and that institutional outcomes may themselves evolve in response to economic development. Nevertheless, even these critiques operate largely within the conceptual space defined by Acemoglu et al. (2005), stressing the paper's foundational status.

For transition and post-conflict economies, the relevance of this contribution is profound. The emphasis on historical persistence, elite incentives, and institutional path dependence provides a powerful lens for interpreting why institutional reforms often fail to deliver immediate growth dividends. In regions such as the Western Balkans, where formal institutions have undergone rapid change, but underlying power structures and enforcement mechanisms remain uneven, the Acemoglu et al. framework yields a compelling explanation for divergent development trajectories.

What makes Acemoglu, Johnson, and Robinson (2001) methodologically superior to earlier cross-country work is that they simultaneously addressed the three core weaknesses identified in earlier studies. First of all, they replaced purely contemporaneous correlations with a historically grounded source of exogenous variation in institutions, thereby strengthening causal interpretation. Secondly, they directly addressed long-run development by linking institutional differences to persistent historical settlement patterns, rather than relying on short-run variation in governance indicators. Finally, they provided for a coherent political-economy mechanism. That is, the settlement strategies shaping inclusive versus extractive institutions were empirically testable and transferable across settings. In doing so, the paper effectively reframed the institutions- development relationship from a debate about controls and specifications into a question of historically determined institutional trajectories, establishing a benchmark for causal identification that subsequent empirical work must either build upon or explicitly challenge (Acemoglu, Johnson, & Robinson, 2001; Rodrik et al., 2004).

2.3 Multidimensional Institutional Quality: Main Concepts

Institutional quality is a complex topic, and researchers rarely look at 'institutions' as just one thing. Instead, they break it down into several parts, such as accountability and checks on power, the legal system and how well laws are enforced, how corruption and state capture are controlled, how effective the government is, and the quality of regulations that support markets.

Political stability and the risk of conflict also play a role. This complexity is especially important in countries going through transition, where official reforms can happen faster than real changes on the ground, and different parts of the system may improve at different rates.

2.3.1 Empirical results by governance dimension (comparative synthesis)

Voice and accountability

Voice and accountability are important for economic growth because they give people the chance to express their views and influence decisions that affect their lives. When citizens can participate and the government listens to their needs, it helps build trust and makes policies more effective. Research shows that countries where people have a stronger voice tend to develop faster and achieve better economic results.

According to Freeman (1980), citizens participate actively in political processes and policy decisions. Rodrik (2020) also argued that sustainable economic development can be achieved through the strong contributions of active citizens and the involvement of vibrant civil society in policy-making. A similar study discussed that economies with strong democratic frameworks offer more opportunities to their citizens. Moreover, these economies often achieve higher levels of innovation, entrepreneurship, and investment to sustain economic growth. Pérez-Liñán & Altman (2017) contend that an effective accountability mechanism reduces corruption, enhances the rule of law, and creates an environment conducive to economic growth. Consequently, weak accountability may lead to the mismanagement of resources, hindering economic progress. Kaufman (2010) suggested that countries with strong institutional accountability frameworks tend to experience more favorable economic outcomes. Moreover, Acemoglu et al. (2005) argue that inclusive institutions, shaped by citizen voice and effective accountability mechanisms, are vital for sustained economic development. When marginalized groups have a voice in decision-making processes, policies are more likely to address their needs, supporting a more equitable distribution of resources and opportunities.

Studies show that accountability usually affects economic growth in an indirect way. It works by putting limits on those in power, reducing corruption, and making sure rules are enforced fairly. In countries in transition, this is even more obvious because you can have democratic institutions on paper, but still face problems like clientelism and elite control. Therefore, how much accountability helps growth depends a lot on how well corruption is controlled and how strong enforcement is.

Government effectiveness

Government effectiveness is a key determinant of economic growth and overall development. Global communities play a role in capacity building that supports the development of developing countries' economies by helping them protect their environment and use their resources effectively. Additionally, these communities help developing countries overcome financial constraints and develop production strategies efficiently to achieve economic development (Fereidouni et al., 2011).

Jorion & Goetzmann (1999) found that greater democracy statistically has a significant, positive effect on economic growth. Poor governance generates high costs and financial issues through poor strategies, high debt, and increased reliance on international funding to manage their economies. Ultimately, these poor policies affect entire states, and inflation can abruptly impact societies. Unstable government policies and disorder in rules and laws reduce investment opportunities. Historically, scholars have argued that democratic government is highly crucial for sustainable economic growth and social sustainability. Further, the development of good governance strongly influences democracy's role, shaping the environment and social activities (Al-Bassam, 2013).

International organizations such as the World Bank, UN, OECD, and IMF set objectives showing that economies has to align with the UN's Sustainable Development Goals, and these organizations intend to achieve them by 2030.

Nations have a responsibility to contribute to protecting this land from climatic hazards (Gani, 2012). Competitive advantage and standard of living serve as fundamental drivers of a nation's achievement. Therefore, researchers have identified institutions and economic development as important topics in recent years (Grindle, 2004). Different authors have investigated socioeconomic factors to assess development processes, yet institutional quality remains an essential pillar of economic growth, reflecting varying economic conditions across countries (Acemoglu et al., 2005; Furubotn & Richter, 2008; Lau et al., 2014).

In this dissertation, I see government effectiveness as the state's ability to put policies into practice, deliver services, and keep things running smoothly. In countries going through transition, this capacity can get better quickly with reforms and support from the EU. However, if corruption and weak enforcement are still present, they can block these improvements and limit the positive impact on growth.

Corruption control

Corruption is a persistent global phenomenon that negatively affects society and economic growth. We can distinguish between "low" and "high" corruption. When lower institutional levels, such as lower-level bureaucrats, engage in minor corruption and modest bribes, the phenomenon occurs more frequently and reaches citizens and small businesses. High-level corruption occurs at the highest levels of power, involves significant sums of money, such as in public works or public procurement, and markedly affects economic development. We can also differentiate between "systematic" or "endemic" corruption, which involves government or senior public administrators, and "individual" corruption, which occurs in sporadic, isolated cases.

The relationship between government size and inefficiency, including corruption, has been an important topic in economics. The research of Acemoglu & Autor (2011) indicated that, as one of the most influential factors in corruption, government failures, and state capture, it poses a high risk of developing a fully economically corrupted system. To reduce corruption, authors argue that higher wages are necessary to prevent bureaucrats from becoming corrupt. Other research also argues for the role of corruption in state capture and the role of government in state corruption (Gerring et al., 2005; Swaleheen, 2011; Teorell et al., 2007). Their arguments are also aligned with the flagship Corruption Perception Index (CPI), where specifically, Albania has undergone a decrease in score since 2020, no score changes are revealed for Bosnia and Herzegovina since 2020, a positive score change for Kosovo, a positive score for Montenegro, a positive score for North Macedonia, and no score changes for Serbia since 2020.

As the data revealed, except for Montenegro, all six WB countries have a low score index, meaning that corruption perception in the public sector is relatively high in the region, despite efforts to formalize the economy and decentralize power. Corruption and state capture in WB are considered a major concern for economic growth, development, and investment (SELDI Corruption Monitoring System, 2019). These data are also relevant to research by Qerimi & Sergi (2012). Among the harms that corruption causes to economic growth are market distortions, the infringement or elimination of healthy competition, the undermining of the rule of law, the weakening of government legitimacy, and increased dishonesty and mistrust within society.

In addition, it diminishes private-sector performance and can increase income inequality (Gupta et al., 2002; Jong-sung & Khagram, 2005). As a result of income inequality, the likelihood of increasing corruption is even higher (Jong-sung & Khagram, 2005). According to the literature, some of the most important factors with a bilateral effect on corruption are economic development and GDP (Paldam, 2002; Treisman, 2000), and trade liberalization, which increases economic competition and growth (Treisman, 2000). The level of democracy also moderates it. The level of democracy does not always reduce corruption, especially if it is not at satisfactory levels (Montinola & Jackman, 2002; Treisman, 2000).

Most studies agree that controlling corruption is very important because it directly affects investment, how resources are used, and whether people trust the state. In transition countries, corruption often shows up as state capture or political favoritism, and these problems can continue even if the laws look better on paper. In the Western Balkans, it is not just the amount of corruption that matters, but also what kind it is - whether it is small and frequent or large and organized.

Corruption control refers to the efforts, strategies, and measures implemented by governments, organizations, and societies to prevent, detect, and combat corruption. The empirical findings demonstrate that higher institutional quality is positively and economically meaningful associated with higher income levels across a wide range of model specifications.

Controlling corruption is important for supporting transparency, accountability, and the overall rule of law, and it plays a significant role in fostering economic development and social well-being. A sound legal framework is crucial for controlling corruption and ensuring that the legal system is equipped to investigate and prosecute corrupt actors (Rodríguez-Martínez et al., 2019). Moreover, an insight into effective legislation provides a clear definition of corrupt practices, delineates associated offenses, and prescribes appropriate penalties.

Preventive measures embedded in legal frameworks create a deterrent effect, discouraging individuals from engaging in corrupt activities (Miozzo & Yamin, 2012). In this context, the United Nations Convention against Corruption (UNCAC) reinforces a unified approach to combating corruption. Moreover, anti-corruption agencies are established in many countries to collaborate with law enforcement agencies to prevent corruption (Kaufman, 2010).

In this regard, the authors suggested that knowledge and awareness to promote ethical behavior and raise one's voice against corruption are fundamental to each region to ensure the quality of institutions. Educational campaigns can help develop a culture that rejects corruption and emphasizes integrity (Agasisti & Bertoletti, 2022). Similarly, strong, ethical leadership is essential for setting the tone from the top. Leaders who prioritize integrity and ethical behavior can influence organizational culture and reduce the likelihood of corruption (Antunez et al., 2023).

Studies have examined the dynamic relationship between corruption and economic growth, as well as its relationship to environmental protection. Younas et al. (2022) analyzed the relationship between corruption and economic development. They compared developed and developing countries using panel VAR and GMM to assess whether corruption control negatively affects economic development and FDI inflows in these countries. Moreover, this study concluded that these factors exhibit a positive, bidirectional impact in developing countries and a negative, unidirectional impact in developed countries. Raju et al. (2020) empirically examined South Asian countries to assess the effect of state administration quality on economic growth and found a positive effect. Another study by Abdelbary & Benhin (2019) examined the impact of governance on human development and economic productivity in Arab countries from 1995 to 2014 and found positive results.

Moreover, Samarasinghe (2018) used control of corruption as a critical governance indicator to analyze productivity growth. The study concluded that growth could be increased by a sixth through improved anti-corruption measures. Likewise, Garcia-Sanchez et al. (2013) demonstrated that effective leadership and government strategies are key drivers of sustainable economic growth.

Moreover, institutional quality factors and corruption control were analyzed to assess economic growth. The data was collected from 149 countries and found that institutional worthiness highly affects economic growth and has a direct impact (Rodríguez-Martínez et al.). Another study by Herrala & Goel (2016) in the MENA region assessed the effects of all dimensions of institutional quality. It concluded that corruption control is essential for these nations to manage economic progress.

Rule of law

Researchers analyzed that the rule of law is the cornerstone and the greatest assurance demanded by the people of an economy (Bingham, 2007). Rule-of-law principles refer to the acceptance of the superiority of state-level law over rules created by individuals (Tamanaha, 2004). A United Nations report stated that rule-of-law principles are based on equality before the law, accountability to the law, and legal certainty. Moreover, Kaufman (2010) emphasized that a transparent and accountable judicial system, law and order, and other property rights should be equally treated by all people in society. Moreover, people's trust in the police and the courts is crucial to the development of a strong economic structure (Haggard et al., 2008).

The connection between the rule of law and economic growth has become a topic of considerable discussion today. Kaufmann, Kraay, and Zoido-Lobatón (1999) analyzed 150 countries and found that the rule of law and income per capita are strongly related in these nations. Tamanaha (2004) believed that the rule of law is an essential dimension of institutional quality to measure economic development. On the other hand, Gastil & Sellar (2000) considered political stability and democracy to be more effective measures for assessing institutional quality.

Another report by Kaufmann, Kraay, & Zoido-Lobatón (1999) found that the rule of law raises GDP growth and has economic impacts. Moreover, Abdelbary & Benhin (2019), Chulalongkorn University, Thailand, and Kraipornsak (2018) noted that economic growth in African countries is slow due to scarce resources and a tropical climate. The authors suggested that international trade policies and the rule of law should be administered to meet the country's needs. Several studies have shown that the judicial system should be transparent and treat every individual equally (Bingham, 2007; Haggard et al., 2008). OECD countries were analyzed by Yılmaz et al. (2012) to investigate the importance of the rule of law and its impact on economic growth. The study's statistical results indicate that accountability, the rule of law, and economic growth are robustly related.

Adherence to the rule of law is exemplified by the preservation of property rights and the eradication of corruption. These attributes serve as alternative indices for gauging the rule of law's instantiation and observance. A plethora of scholarly investigations have examined the conceptualization of property rights, acknowledging their foundational significance in underpinning a flourishing free-market economy. Additionally, scholarly luminaries such as

Milgrom et al. (1990) have highlighted the importance of well-defined property rights as a fundamental determinant of economic growth, especially in their nuanced and differentiated impact on investment levels.

The rule of law is often seen as one of the most important factors for development because it shows whether rules are enforced. There is often a big difference between reforms written in laws and what actually happens in practice, especially in transition countries. Problems like a politicized judiciary or weak enforcement make it hard to close this gap.

Political stability

Political stability is widely regarded as a key institutional condition for sustained economic development. Empirical studies consistently show that stable political environments reduce uncertainty, support investment, and facilitate coherent policy implementation (Adams & Mengistu, 2008; Ndulu & O'Connell, 1999; Pradhan et al., 2011). Rather than acting as a direct growth engine, political stability shapes the conditions under which economic activity and institutional reforms can take hold.

The literature does not treat governance as a one-directional cause of growth. While more developed economies tend to exhibit higher political stability (Kraay et al., 1999; Adams & Mengistu, 2008), economic downturns can also undermine governance quality by shifting political priorities toward short-term crisis management (Furubotn & Richter, 2008; Seyfang & Smith, 2007). During periods of economic stress, governments regularly prioritize immediate stabilization over institutional strengthening, a pattern that may alleviate short-term pressures but weakens long-run development prospects (Reinhart & Rogoff, 2009). This reinforces the importance of examining long-term institutional relationships rather than short-run correlations.

Campos and Nugent (2002) provide strong empirical evidence that political stability matters for long-run economic performance. Using data from over 90 developing and transition economies, they show that stable political environments reduce policy uncertainty, attract foreign direct investment, and support market functioning. Political stability enables consistent policy implementation and lowers transaction costs, creating conditions favorable to entrepreneurship and capital accumulation.

Political instability has the opposite effect. Frequent government changes, civil unrest, and policy reversals undermine investor confidence and disrupt economic planning. In the Western Balkans, episodes of instability, unresolved conflicts, and nationalist tensions during the 1990s and early 2000s delayed institutional consolidation and contributed to uneven reform outcomes. As Campos and Nugent emphasize, instability erodes trust in public institutions, discouraging both domestic and foreign investment—an effect that is particularly damaging in post-conflict and transition settings.

Alesina et al. (1996) reach similar conclusions in their cross-country analysis of more than 100 countries. They show that high levels of political instability, measured through government turnover, leadership changes, and political unrest, are associated with lower per capita income growth. Political instability generates a climate of policy uncertainty, encouraging short-term, opportunistic policymaking and weakening incentives for long-term investment and reform.

These mechanisms are visible in the Western Balkans. In countries such as Bosnia and Herzegovina and Kosovo, fragmented political systems and weak coalition governments have often produced policy gridlock, delayed infrastructure investment, and underinvestment in education and innovation. By contrast, relatively more stable political environments, such as North Macedonia in the 2000s, were associated with more consistent growth trajectories, even in the absence of rapid institutional convergence.

Regulatory quality

Studies by Dollar & Kraay (2002) and Rigobon & Rodrik (2005) demonstrated the impact of government effectiveness on economic growth. The study found that democratic countries with regulatory quality positively affect both trade and economic growth (de Groot et al., 2004). In addition, regulatory quality and government effectiveness are two key dimensions explored by Amann (2006) to analyze the impact on GDP in emerging nations. Moreover, four dimensions are considered beneficial for sustainable economic growth and show a positive impact (Huang, 2010). Similar studies were also initiated by Huang (2010) to examine the role of regulatory quality in economic development.

Government initiatives to impose transparent, accountable regulations on economic activities to meet economic needs are significant. Financial growth, climate change, and human resource development are all key areas to focus on to inform policy regulation. According to Esty &

Porter (2005), regulatory quality is significant for environmental protection. Djankov et al. (2002) suggested that corporate entry into markets should be strictly regulated to reduce carbon emissions. Safavian et al. (2001) attribute these heavy regulations to arbitrary taxation, permit fees, and license issuance. Therefore, government authorities must define these guidelines to issue legal permits and other charges for the industries to support their production activities with reduced carbon emissions. Further, Makdissi & Wodon (2006) emphasize the need to focus on environmental regulation and economic growth. They supported the idea that economic growth can be achieved only by protecting natural resources and regulatory compliance to deliver positive effects.

On the other hand, Jalilian et al. (2007) emphasized that poorly implemented regulation can impose high costs on investors and businesspeople. These actions may disturb profitability, competition, and business growth. Further, the government's role in attracting investors to conduct their businesses in the country is another necessary step to enhance economic growth. According to Haidar (2012), corrupt regulatory procedures affect investment and entrepreneurial opportunities. Several studies also discussed labor market regulations, which are the backbone of the economy. Income level and employment benefits are key determinants of people's living standards and of the development of social and ethical norms (Lee et al., 2021). The author further explained that labor rights protection is essential to sustain economic growth.

Another empirical test (Haidar, 2012) examined the relationship between labor rights and economic growth. This extensive list of economies with data sets shows that human resource development programs lead to economic growth. In addition, Lee et al. (DATE - REF) analyzed a study in Malaysia to identify the effects of institutional quality on economic growth. The study indicates that economic growth and regulatory quality are positively related. It proves that effective administration can control economic and social issues. Similarly, there is a strong causal link between regulatory quality and economic performance.

Jalilian et al. (2007b) conducted a statistical analysis to seek the contribution of regulatory quality on economic growth and found a strong causal link between regulatory authority and economic performance. The author argued that developing countries could develop technical designs to formulate their regulatory structures. However, these nations are experiencing challenges in implementing regulatory quality institutions and capacity development programs.

Another study in MENA countries uses panel co-integration methodology to evaluate the effects of quality institutions, economic sustainability, and renewable energy consumption. The study found that these determinants are highly interdependent, with strong causal linkages among economic development, institutional factors, and renewable energy consumption. Hence, this casualty also exists between renewable energy consumption and economic growth, independent of institutional quality (Li et al., 2022).

In practice, regulatory quality often improves faster than the rule of law or corruption control, especially when there is outside pressure like EU requirements. This can create a situation where the laws and regulations look modern, but problems with enforcement and corruption still hold back real progress. This is a common issue in the Western Balkans, where legal reforms sometimes move ahead of real changes in the courts or in fighting corruption.

2.3.2 Why do results differ: measurement, samples, specification, timingEmpirical literature does not produce a single stable ranking of institutional dimensions, and divergence in findings is not necessarily evidence of theoretical inconsistency; it frequently reflects differences in measurement (sample composition, econometric specification and identification strategy or the time horizon under consideration.

First, measurement matters. Many governance indicators (including widely used composite indices) are perception-based, can be subject to halo effects, and may partly reflect contemporaneous economic performance rather than purely institutional fundamentals. This introduces attenuation and simultaneity concerns and can weaken short-run estimates in panel settings.

Second, samples matter. Results estimated on OECD-heavy, global developing-country, or transition-only samples can differ because the institutional-growth relationship is likely nonlinear and conditioned by administrative capacity, conflict exposure, and initial income levels. In post-conflict and late-transition settings, the same nominal reform may have different effects depending on enforcement and state capacity.

Third, specification and identification matter. Cross-sectional “levels” regressions often yield strong institutional coefficients, while growth regressions - especially over short horizons - produce weaker and less stable results. Dynamic panel settings can reduce bias due to persistence and unobserved heterogeneity, but they can also raise concerns about instrument validity. This implies that the apparent “importance” of a given dimension may partly be an artifact of model choice and the horizon of adjustment.

Fourth, timing matters. Institutional dimensions differ in speed of change: regulatory quality and some administrative reforms can move faster than the rule of law and corruption control. If growth effects are cumulative and long-run (as argued in Section 2.2.2), then studies focusing on short periods may under-detect the role of slow-moving institutional constraints, particularly in transition economies where implementation lags are considerable.

2.3.3 Implications for selecting “binding constraints” in transition contexts

Based on this analysis, my approach in this dissertation is to focus on which institutional problems matter most for growth in transition, emerging, and post-conflict countries. Not all weaknesses in institutions hold back growth in the same way. What certainly matters is whether reforms can remove the main obstacles that stop investment, productivity, and the fair use of resources.

Following this logic, the literature points to two main ideas that are important for the Western Balkans. First, areas like regulatory quality and some parts of government effectiveness can improve quickly, especially with outside pressure from the EU, but these changes may not lead to much growth if problems with enforcement and corruption are not fixed. Second, the most important factors are those that deal with corruption and the rule of law, because they affect how well other reforms work.

To be empirically meaningful, this hypothesis is interpreted here as a testable claim about comparative marginal effects: holding other dimensions constant, variation in corruption control and government effectiveness should exhibit the most robust relationship with development outcomes in the Western Balkans sample, once persistence and endogeneity are addressed through appropriate panel specification and robustness analysis. This provides a direct bridge to Chapter III (measurement choices and variable construction, as well as the empirical strategy) and Chapter IV (estimation and robustness checks, as well as the discussion of the results), where the dissertation evaluates which governance dimensions serve as binding constraints under the conditions of the Western Balkan transition. The preceding analysis points to a clear operational implication for my empirical strategy adopted in this dissertation. In transition, emerging, and post-conflict economies, institutional deficiencies do not constrain growth uniformly or symmetrically across different governance dimensions. Development outcomes are shaped primarily by whether reforms succeed in relaxing those institutional bottlenecks that most directly hinder investment, productivity, and the optimal distribution of resources.

2.4 Institutional Persistence, Path Dependence, and Reform Dynamics

The empirical literature on institutional persistence builds on a well-established theoretical tradition that emphasizes historical legacies, path dependence, and the political economy of reform. The idea of institutions as key drivers of economic performance has been central to development debates since the early 1990s. The works of Douglass North (1990) and Acemoglu, Johnson, and Robinson (2001, 2005, 2012) have critically influenced our knowledge of how institutions endure over time and set a nation's course toward development. North's historical institutionalism and Acemoglu and Robinson's persistence of institutions theory highlight the point that economic underdevelopment is not simply the result of bad policy decisions, geographical location, or the absence of capital, but a product of strongly embedded institutional arrangements resistant to change.

Douglass North's *Institutional Change and Economic Performance* (1990) inspired much contemporary research on institutions and economic growth. North describes institutions as society's "rules of the game" - formal rules such as laws and constitutions, as well as informal constraints such as norms, conventions, and codes of conduct. He believes institutions reduce uncertainty in human interactions, shape incentives, and affect transaction costs. Productive institutions lead to growth and innovation, while unproductive ones cause stagnation and rent-seeking.

One of North's key contributions is his emphasis on path dependence - the idea that history deeply shapes institutions. Once established, an institutional configuration tends to persist because of increasing returns, entrenched interests, and social legitimacy. North (1990) argued that change is usually gradual and incremental unless triggered by major exogenous shocks. However, critics such as Greif & Laitin (2004) argue that this view overlooks the impact of agency, social movements, and reformist leadership, and may overstate the inevitability of institutional persistence.

North's ideas are especially relevant for post-socialist countries. After communism ended, countries in the Balkans and former Soviet Union did not automatically get strong market institutions. Instead, they kept many old habits, like centralized control and informal networks, which still affect their economies today. North's theory helps us understand why some countries struggle to develop even after adopting new laws, but it does not fully explain why some manage to change while others do not.

Building on the work of North, Acemoglu, Johnson, and Robinson (AJR), advanced the institutionalist view. They distinguish between inclusive and extractive institutions. In *The Colonial Origins of Comparative Development* (2001), they argue that colonial-era institutions have lasting effects. Colonies where Europeans established secure property rights, such as the United States and Canada, later developed further. In contrast, colonies with extractive institutions, designed to send resources back to Europe, often remain less developed, as seen in parts of Africa or Latin America.

Acemoglu and Robinson's Why Nations Fail (2012) extends this argument. They say inclusive institutions, which protect property rights and allow broad participation, foster growth. In contrast, extractive institutions keep wealth and power in the hands of elites and hold back development. These institutions persist because those who benefit want to keep the rules unchanged. Institutional persistence, in this view, reflects stable political arrangements rather than chance or lack of information.

While the AJR framework is conceptually parsimonious and supported by extensive cross-country evidence, it has also attracted criticism. Scholars such as Chang (2007) argue that the inclusive-extractive dichotomy underestimates the complexity of the complex and nuanced interactions among culture, politics, and economic structures that shape institutional outcomes. Specifically, critics contend that reducing a spectrum of institutional characteristics to a binary risk ignoring hybrid or fluid institutional forms. Moreover, the binary distinction may be ill-suited to transitional contexts such as the Western Balkans, where institutions may be formally inclusive yet functionally extractive owing to factors such as corruption, clientelism, and weak enforcement, pointing to the framework's limitations in distinguishing between appearance and practice.

Acemoglu et al. (2005) show that the poverty of formerly wealthy regions is not only due to geography. Political and economic institutions matter more. In the Balkans, old weaknesses in institutions and governance have required major reforms to attract investment, boost productivity, and join global markets (Khan, 2001). Data shows a strong link between governance and income, confirming the central role of institutions in development.

Institutional literature does not offer a clear explanation of why institutions change. One strand highlights persistence, contending that institutions continue due to vested interests, elite capture, and bureaucratic routines (Mahoney & Thelen, 2010). From this perspective, entrenched networks sustain corruption, a weak rule of law, and a politicized administration, impeding and often rendering reform superficial. In the Western Balkans, governance reflects enduring legacies from Ottoman and socialist administrations.

By contrast, the path dependence perspective draws attention to the role of critical junctures - periods of political, social, or external disruption that open space for significant institutional change (Pierson, 2004; North, 1990). In the Western Balkans, the disintegration of Yugoslavia, post-conflict transitions, and the launch of EU accession processes constitute such junctures. While these shocks create opportunities for reform, scholars of path dependence emphasize that new institutional paths remain constrained by inherited structures and norms.

Considering both persistence and path dependence shows why some countries improve regulatory or administrative systems, especially under EU influence, but still face corruption and a weak rule of law. In the Western Balkans, reforms reflect both old habits and new pressures, leading to slow, uneven change.

2.4.1 Empirical evidence on institutional persistence

A substantial body of empirical literature documents the persistence of cross-country and within-country income differences and links this persistence to long-lasting institutional arrangements. Rather than converging mechanically as predicted by early neoclassical growth models, economies routinely exhibit strong path dependence, in which historical institutional choices determine contemporary economic outcomes over long periods.

Seminal cross-country contributions emphasize institutions as deep determinants of long-run income levels. Hall and Jones (1999) show that differences in social infrastructure - capturing property rights protection, rule of law, and constraints on elites - account for a large share of international income disparities. Building on this insight, Acemoglu, Johnson, and Robinson (2001) exploit variation in European settler mortality to instrument for institutional quality, demonstrating that extractive colonial institutions persistently depress income levels centuries later. Related evidence on historical reversals of fortune further reinforces the notion that institutional trajectories, once set, can generate durable divergence rather than convergence.

The persistence of income differences is not confined to cross-country comparisons. A growing literature exploits historical discontinuities, borders, and institutional partitions to identify path dependence within otherwise comparable units. Studies of colonial land tenure systems in India show that districts under different revenue regimes show persistent gaps in public goods provision, human capital, and income long after formal institutional reforms (Banerjee & Iyer, 2005). Similarly, analyses of historical partitions in Central and Eastern Europe demonstrate that regions subject to distinct imperial administrations - such as Habsburg versus Ottoman or Russian rule - continue to differ systematically in institutional quality, trust, and economic performance (Becker et al., 2016).

Perhaps the clearest illustration of institutional path dependence arises from political partitions. The division of Germany after World War II created a sharp institutional discontinuity between East and West Germany, despite shared language, culture, and pre-war development levels. Empirical evidence shows that this institutional separation generated large and persistent differences in economic outcomes, with reunification only partially erasing the legacy of socialist institutions (Redding & Sturm, 2008). Comparable logic underlies analyses of the Korean peninsula, where a common historical and ethnic background contrasts with starkly divergent institutional regimes and income trajectories following post-war partition, reinforcing the role of institutions in directing long-run development paths.

From a broader theoretical perspective, these findings coincide with models of increasing returns, multiple equilibria, and institutional complementarities. Pierson (2000) argues that once institutional arrangements become embedded, self-reinforcing mechanisms - such as learning effects, coordination benefits, and political feedback loops - limit the scope for rapid institutional convergence. As a result, economies may remain locked into distinct development trajectories even amid globalization and technological diffusion.

Overall, the empirical literature provides strong support for the view that institutions exhibit substantial temporal persistence and that income dynamics are path dependent. While growth accelerations and institutional reforms can alter trajectories, their long-run effectiveness is often conditioned by inherited institutional structures. This persistence has important implications for empirical modeling and policy analysis, suggesting that contemporary economic outcomes cannot be fully explained without accounting for historical institutional legacies and the constraints they impose on convergence.

2.4.2 Slow-moving vs fast-moving institutions and reform sequencing

An important refinement in the institutional literature distinguishes between slow-moving and fast-moving institutions, emphasizing that not all institutional components evolve at the same pace or respond equally to reform efforts. Slow-moving institutions typically include informal norms, cultural values, belief systems, and deeply embedded social practices. In contrast, fast-moving institutions encompass formal rules such as laws, regulations, constitutions, and policy frameworks. This distinction has important consequences for understanding both institutional persistence and the sequencing of reforms.

Early contributions highlight that formal institutional change can be implemented relatively quickly through legislation or policy interventions, whereas informal institutions adjust gradually and often lag behind formal reforms. North (1990) argues that institutions are embedded in shared mental models and informal constraints, which evolve incrementally and shape how formal rules are interpreted and enforced. As a result, rapid changes in formal institutions may produce limited or even unintended effects if they are not aligned with prevailing informal norms.

This insight is developed further in the political economy literature on institutional complementarity and sequencing. Roland (2004) formalizes the distinction between fast- and slow-moving institutions, showing that reforms targeting fast-moving institutions may fail or generate instability when slow-moving institutions remain misaligned. Similarly, Williamson (2000) conceptualizes institutions as operating at different levels, ranging from deeply embedded social norms to governance structures and resource allocation mechanisms, each characterized by distinct adjustment horizons. From this perspective, effective reform requires consistency across institutional layers rather than isolated changes at a single level.

Empirical evidence supports the relevance of this distinction. Studies of post-socialist transition demonstrate that rapid legal and policy reforms - such as privatization or trade liberalization - often preceded the development of complementary enforcement mechanisms, administrative capacity, and trust. In many cases, this sequencing problem contributed to weak state capacity, rent-seeking, and uneven growth outcomes. Acemoglu, Johnson, and Robinson (2005) emphasize that institutional reforms that ignore underlying political equilibria are unlikely to be sustained, as entrenched interests can adapt formal rules to preserve existing power structures.

The interaction between slow- and fast-moving institutions also helps explain heterogeneity in reform outcomes across countries facing similar external pressures. Rodrik (2008) argues that "second-best" institutional arrangements may outperform formally optimal designs when they are better aligned with local constraints and informal norms. This perspective suggests that gradual, context-specific reforms may dominate rapid institutional transplantation, notably in environments characterized by low trust or weak enforcement.

2.4.3 Critical junctures and partial reform equilibria in transition economies

The literature on institutional change emphasizes the role of critical junctures, defined as periods of heightened uncertainty in which existing political and economic equilibria are destabilized and the scope for institutional transformation expands (Capoccia, 2016). In transition economies, such junctures typically arise in the aftermath of regime collapse, systemic crisis, or major geopolitical shocks - breakups, revolutions, or military conflicts. While these moments create opportunities for rapid reform, they also expose societies to the risk of institutional lock-in into suboptimal arrangements.

Critical juncture theory highlights that institutional outcomes during transition are highly sensitive to initial conditions and early policy choices. North (1990) and Pierson (2000) argue that decisions taken during these formative periods can generate self-reinforcing dynamics, as newly created institutions shape incentives, redistribute power, and constrain subsequent reform options. In this view, transition paths are not only contingent but also path dependent, with early reforms exerting long-lasting effects on political and economic trajectories.

A central insight from the transition literature is that incomplete or uneven reforms can give rise to what has been termed "partial reform equilibria." Hellman (1998) develops this concept to explain why some post-socialist economies became trapped in institutional configurations characterized by limited market liberalization, weak rule of law, and pervasive rent extraction. In such equilibria, early reform winners - often politically connected firms or insiders - acquire both the means and the incentives to block further reforms that would threaten their rents. As a result, transition stalls not because reform capacity is absent, but because political opposition to bigger institutional change becomes endogenous to the reform process itself.

Empirical evidence from post-communist transition economies provides strong support for the view that incomplete and poorly sequenced reforms can entrench partial reform equilibria. A substantial body of research shows that countries that implemented rapid price liberalization and mass privatization without simultaneously strengthening legal enforcement, competition policy, and core state capacities often experienced large distributional shocks, widespread asset stripping, and the emergence of oligarchic ownership structures (Blanchard & Kremer, 1997; Hellman, 1998; Åslund, 2007). In these settings, weak contract enforcement and underdeveloped regulatory frameworks allowed early reform winners - often insiders with political connections - to appropriate rents, undermining both market competition and the legitimacy of reform processes (Hoff & Stiglitz, 2004; Roland, 2004).

These outcomes frequently translated into declining public trust in both markets and democratic institutions, generating political resistance to further reform and increasing support for policy reversal or state capture (Frye, 2002; Pop-Eleches, 2009). As reform beneficiaries consolidated economic and political power, they were able to block complementary institutional reforms - such as judicial independence, competition enforcement, and transparent tax administration - that would have threatened their rents, thereby stabilizing partial reform equilibria over extended periods (Hellman, Jones, & Kaufmann, 2003; Acemoglu, Johnson, & Robinson, 2005). Empirical cross-country evidence confirms that such equilibria were associated with lower investment, weaker state capacity, and inferior long-run growth performance across the post-socialist world (Campos & Coricelli, 2002; EBRD, 2019).

By contrast, transition paths that combined early market liberalization with credible institution-building were more likely to escape low-quality institutional traps. Countries that invested early in tax capacity, judicial reform, regulatory oversight, and competition policy - often supported by external anchors such as EU accession - were better able to sustain reform momentum and limit rent extraction (Roland, 2004; Pop-Eleches & Tucker, 2017). This divergence stresses the importance of reform sequencing and political constraints at critical junctures, reinforcing the argument that institutional change in transition economies is shaped not only by the speed of liberalization but by the interaction between early reforms, distributional outcomes, and evolving political coalitions.

The concept of critical junctures also helps explain cross-country heterogeneity among transition economies exposed to similar external pressures, such as EU accession or international financial conditionality. While these external anchors can relax constraints on reform, their effectiveness depends on domestic political coalitions and the institutional legacies inherited at the onset of transition. Acemoglu, Johnson, and Robinson (2005) emphasize that reforms that fail to alter underlying political equilibria are unlikely to be sustained, even when formal institutions seem to converge.

2.4.4 Implications for interpreting governance improvements vs growth outcomes

The strands of the literature discussed above have important implications for how observed improvements in governance indicators should be interpreted in relation to economic growth. In comparison, many empirical studies document positive relationships between institutional quality and long-run income levels, the evidence on institutional persistence, reform sequencing, partial-reform equilibria and the prevalence of growth reversals or the so-called hysteresis following shocks, cautions against mechanically interpreting governance reforms or expecting rapid growth responses over short horizons that could lead to the so-called growth miracles or growth accelerations (Hausmann et al., 2005).

First, just because a country passes new laws or reforms its institutions does not mean growth will follow right away. If old habits and power structures remain, these changes may only look good on paper. Real improvements in how things work often take much longer, and the benefits may not be felt everywhere at once.

Second, some parts of institutions, like laws and regulations, can change quickly, but deeper things like trust or state capacity change much more slowly. This means that even if reforms happen on paper, real growth may lag behind, or some countries may grow even if their formal institutions improve only slowly.

Third, sometimes reforms are made mainly to satisfy outside demands or to protect the interests of powerful groups, rather than to bring real change. In these cases, improvements in governance indicators may not lead to real progress because the underlying power structures remain unchanged.

Finally, the link between governance and growth is not simple or the same everywhere. Big changes can happen when countries go through major turning points, but in normal times, reforms may have only a small effect. This means we need to look carefully at each country's situation, rather than expecting the same results everywhere.

Nations with well-functioning institutions demonstrated greater capacity to allocate resources efficiently, implement effective policies, and address socio-economic challenges such as poverty, inequality, and regional disparities. Improved access to quality education and healthcare, coupled with investments in infrastructure, bolstered human capital development and long-run productivity growth (Marvel et al., 2016).

Moreover, institutional quality influences the efficiency and effectiveness of public service delivery, including education, healthcare, and infrastructure development (Etim, 2023). Hence, institutional quality played a central role in fostering macroeconomic stability and fiscal discipline. Countries with robust institutions governing monetary policy, fiscal management, and public expenditure tended to experience lower levels of inflation, more sustainable debt levels, and greater fiscal resilience in the face of external shocks. Sound institutional frameworks also provided investors and creditors with confidence, reducing borrowing costs and enhancing access to international financial markets for Western Balkan nations (Cacciatore & Ghironi, 2021).

2.5 Western Balkans: Definition, Scope, and Regional Context

This section looks at the Western Balkans through the lens of the institutions and development literature. The region is a clear example of a late and difficult transition, where political limits have slowed progress. Here, we can see how issues like slow institutional change, the order of reforms, and the gap between laws on paper and how things work in practice are especially visible.

The Western Balkans offer unique insights into the institutions-growth nexus. Institutional change in the region is recent and uneven, causing governance indicators to shift quickly while remaining embedded in historical legacies. The region faced critical junctures—the breakup of Yugoslavia, violent conflict in the 1990s, post-conflict state-building, and the start of EU accession. These events changed formal institutions, but core political dynamics often continued. External anchors, such as EU conditionality, spurred institutional alignment, providing a clear link for comparing de jure governance improvements with economic outcomes.

These features of the Western Balkans fit with the challenges discussed earlier in the chapter. It is hard to say for sure how institutions cause growth, and reforms do not always lead to quick or clear results. Often, changes in laws move faster than real improvements in how the state works or how leaders are held accountable. The Western Balkans are a good example of this, showing why it is difficult to judge the true impact of reforms.

Because of these points, I do not see the Western Balkans as an exception, but as a useful case to study. My goal is to see if better governance actually leads to more growth, while taking into account the slow pace of change and other factors. This is why, in the next chapters, I use methods that help separate short-term effects from long-term changes. Building on the empirical and theoretical perspectives reviewed in Sections 2.2-2.4, this section situates the Western Balkans within the broader institutions-development literature as a paradigmatic case of late, incomplete, and politically constrained transition. The region is not introduced as a descriptive background, but as an empirical setting in which the central mechanisms discussed earlier - institutional persistence, reform sequencing, partial reform equilibria, and de jure-de facto divergence - are distinctly pronounced and observable.

2.5.1 Defining the Western Balkans: countries, periodization, transition phases

According to Osbild and Bartlett (2019), the Western Balkans (WB) comprise six European transition economies: Albania, Bosnia and Herzegovina, Kosovo, Montenegro, North Macedonia, and Serbia, which are not yet members of the European Union but formally aspire to accession. In contemporary political economy and EU policy discourse, the term "Western Balkans" has gained prominence precisely to distinguish these countries from other Southeast European states that have already completed the accession process, most notably Slovenia and Croatia, which now serve primarily as comparative benchmarks rather than core units of analysis in this dissertation.

The Western Balkans have faced many challenges for a long time. The region has gone through big changes in population, economy, and politics, as well as waves of emigration and repeated problems with institutions. The breakup of Yugoslavia in the early 1990s was a turning point, creating new independent countries like Slovenia, Croatia, Serbia, Montenegro, Bosnia and Herzegovina, North Macedonia, and Kosovo. Each country took its own path, but all have struggled since then to build stable politics, fix their economies, and keep society together.

The Western Balkans are not all the same, but they do share some important features. Most of these countries went through a late and unfinished transition from socialism, faced problems after conflicts, and had to rebuild their states, often with help from outside. Albania is a bit different because it was not part of Yugoslavia, but it also had a sudden move from a planned to a market economy. All these changes happened while state institutions were still weak and reforms were not complete. These points help explain why change in the region is often slow and uneven.

From a geopolitical perspective, scholars such as Bieber (2019) note unresolved issues from Yugoslavia's breakup. These include contested borders, ethnic fragmentation, and fragile inter-state relations. Such issues hinder regional cooperation and political stability. Because of this, European Union integration has become a central goal for the region. It is seen as an anchor for institutional reform, economic development, and long-term security. However, empirical evidence from Tziarras (2023) and others shows growing public scepticism, enlargement fatigue, and declining trust in EU conditionality. These trends weaken the transformational power of external incentives.

The literature notes significant differences in economic performance and reform capacity across Western Balkan countries. This confirms why uniform reform prescriptions are unlikely to work. Hulsey and Keil (2019) show that Bosnia and Herzegovina faces unique structural constraints compared to more centralized, administratively cohesive states. Country analyses reveal divergent development paths. Sulstarova (2018) finds that Albania's transition was marked by macroeconomic instability, high inflation, and sharp output declines, followed by gradual liberalization and private-sector growth held back by corruption and weak enforcement. Vasiljević et al. (2020) report that Serbia attracted more foreign direct investment, especially in manufacturing and services, but faces bureaucratic and governance challenges that limit productivity. Todorovski et al. describe North Macedonia's export-led growth model, supported by targeted investment, but note ongoing unemployment and labor-market rigidities.

Historical legacies and ethnic complexities are central to understanding the region's socio-economic dynamics. Dhamo (2021) notes that long-term attitudes, trust, and political behavior in the Balkans are formed by historical experiences, conflict, and state formation. This reinforces the persistence of informal institutions, even as formal reforms take hold. Socio-economic development in the region is therefore closely tied to education, healthcare, and social inclusion. These dimensions show significant variation across countries.

Geographically, the Western Balkans are in southeastern Europe, at the crossroads of Central Europe, the Eastern Mediterranean, and Eurasian trade routes. The World Bank (2022) reports the region's population is about 17.4 million. Most Western Balkan countries are landlocked, except for Albania and Montenegro. Slovenia and Croatia, which have Adriatic coasts, are excluded from this analysis due to their EU membership. The region's landlocked location and small markets can constrain trade integration and economies of scale. This heightens the importance of institutional quality and external integration for growth.

Institutional and political-economic context

A key feature of the Western Balkans is the gap between formally convergent institutions and varied de facto performance. Most countries have adopted constitutions, legal codes, and regulatory frameworks similar to European standards. However, enforcement, property rights protection, and public institution credibility remain inconsistent. This situation reflects socialist legacies, wartime disruption, and post-conflict settlements.

Bosnia and Herzegovina represents the most extreme case of institutional fragmentation, operating under a compound governance structure established by the Dayton Peace Agreement, which has resulted in overlapping jurisdictions, veto players, and persistent coordination failures. Kosovo's institutional development has been shaped by contested international recognition and prolonged external supervision, while Serbia combines relatively strong administrative capacity with persistent political centralization and governance challenges. Montenegro and North Macedonia represent smaller, more centralized systems, yet remain vulnerable to elite capture and limited accountability. Albania, although not part of the Yugoslav federation, shares many regional characteristics, including weak rule-of-law enforcement, informality, and historically low institutional trust.

These institutional configurations make the Western Balkans a paradigmatic case for examining the distinction between de jure and de facto institutions emphasized by Acemoglu, Johnson, and Robinson. Formal institutional reforms have often proceeded faster than underlying changes in political incentives, elite behavior, and enforcement capacity, resulting in partial reform equilibria rather than sustained institutional convergence.

Conflict legacy and institutional persistence

Another important point is the lasting impact of the wars in the 1990s. Unlike most of Central and Eastern Europe, the Western Balkans suffered from violent conflict, displacement, and deep divisions. These events destroyed economies, weakened states, and damaged trust in society, with effects that are still felt today.

The way conflict and slow institutional change interact is key to understanding development in the region. After the wars, many countries focused on keeping peace and sharing power, sometimes at the cost of building strong and efficient institutions. This has made it harder to carry out reforms and support growth.

Demographic and structural constraints

From a structural perspective, the Western Balkans are characterized by small domestic markets, high openness, persistent emigration, and unfavorable demographic trends. As shown in Table 1, the region's total population is approximately 16.1 million, with Serbia accounting for nearly 40%. Natural population growth is weak or negative in most countries, and outward migration - particularly of young and skilled workers - has become a defining feature of the regional labor market.

Expanding elderly populations and shrinking workforces are also big challenges for long-term growth in the Western Balkans. This puts more pressure on government budgets, pensions, and healthcare. By 2050, the share of older people is expected to rise quickly, even more than in many EU countries, but with fewer resources to handle these changes.

Table 1: Population of the Western Balkans

Country Name	Total population in 2024	Land Area (sq. km)	Natural pop. change
Albania	2,377,128.00	27,400	0.05
Bosnia and Herzegovina	3,164,253.00	51,200	-0.35
North Macedonia	1,824,359.00	25,220	-0.23
Montenegro	623,525.00	13,450	0.1
Serbia	6,586,476.00	84,090	-0.57
Kosovo	1,594,353.00	10,887	0.9
TOTAL Western Balkans	**16,169,094.00**	**212,247**	

Source: *World Bank. Eurostat. Last updated October 2025.*

Religion

Religion and national identity play a big role in how institutions work in the Western Balkans. They shape trust in society, how people get involved in politics, and whether the state is seen as legitimate. These informal factors affect how well formal reforms can succeed.

When discussing the Western Balkans, religion is fundamental, acting as a glue within communities and as a disintegrating factor as well. The Balkans present an extremely diverse religious makeup, resulting from the region's historical inheritance of long-standing domination. On the one hand, Austria and Hungary, in various forms and under various names, occupied the area corresponding to present-day Slovenia, Croatia, and northwestern Bosnia and Herzegovina between 1102 and 1918.

On the other hand, the Ottoman Empire, which between the fourteenth century and the beginning of the fifteenth century occupied the territory extending from central-southern Bosnia to Albania, played a major role in the region's history. This division has also had repercussions in religious terms. In areas under Austro-Hungarian control, Catholicism spread more widely, though not exclusively. Today, Catholicism predominates in Croatia and Slovenia, reflecting Western European influence. It is interesting to note, nevertheless, that a survey recorded by the Eurobarometer in 2019 found that people who declare themselves atheists or agnostics in Slovenia are, respectively, 14% and 4%. This fact derives from a deeper secularization of Slovenian institutions.

Another aspect that highlights Croatia's desire to distinguish itself from other Slavic peoples is the preservation of the Glagolitic alphabet as an alternative to the Cyrillic alphabet in the religious sphere and, to this day, in many monuments of national inspiration. Ottoman domination instead encompassed the central and southern Balkans. One of the most visible legacies of Ottoman domination in the region is the presence of large areas with a Muslim majority: today, Kosovo (93.8%), Albania (82.1%), and Bosnia and Herzegovina (51%) are the only countries in Europe with a non-Christian majority. Although "Balkan" Islam has always been moderate and far from the rigidity typical of some Arab countries, it is known for extensive forms of syncretism with other traditional religions and customs.

Last but not least, the third central religious core of the Balkans is Orthodox Christianity, which constitutes the majority in Serbia (84.6%), Montenegro (72%), and North Macedonia (69.6%).

Nationalism and ethno-sociology

Albanians were among the most important national minorities in Yugoslavia, mainly residing in Kosovo, parts of Macedonia, Montenegro, and Serbia. Although recognized as a minority, they were not considered “constituent people".

With the death of Tito, ethnic tensions increased, as did demands for autonomy, especially in Kosovo. The breakup led to institutional vacuums, loss of administrative capacity, and economic collapse across the successor states (Bartlett, 2009).

Before the 1990s, real state capitalism began in Eastern Europe, characterized by forced industrialization and an emphasis on large industrial complexes (Fiocca, 2023).

Serbian nationalization was foreshadowed in the publication of the "Memorandum" by the Serbian Academy in September 1986. With the collapse, an uneven and prolonged transition began, leaving behind different institutional legacies that keep shaping the governance and economies of the Western Balkan countries today.

Balkan identity

Identity in the Western Balkans functions as a slow-moving informal institution rather than a unified cultural construct. There is no singular “Balkan identity”; instead, the region is characterized by overlapping national, religious, and historical identities that shape political legitimacy, social trust, and attitudes toward state authority. These identity structures influence how formal institutions are perceived, complied with, and enforced.

The Yugoslav socialist period temporarily suppressed national differentiation by imposing a common state identity, but its collapse revealed substantial heterogeneity in institutional capacity and governance traditions across successor states. This divergence itself puts emphasis on the argument advanced in the institutional persistence literature that formalized convergence without alignment of informal norms produces limited and uneven reform outcomes.

In recent years, the idea of a European identity has become important, especially through the EU accession process. But adopting European norms is still uneven across the region, because trust in institutions and political incentives differ from country to country. Projects like the 'Open Balkans' show efforts to build a shared regional identity, but their impact is limited by weak enforcement and different ways of governing.

Therefore, identity does not directly cause growth, but it shapes how well reforms work, how outside pressure is received, and how people relate to the state. This supports my main argument: in the Western Balkans, slow-changing informal factors interact with formal rules, which helps explain why economic results are still so different across the region.

Overall, these features make the Western Balkans a strong case for studying how institutions affect economic development. The region brings together:

- High institutional variation within a relatively small and comparable group of countries,
- Strong historical persistence and post-conflict effects,
- External institutional pressure through EU and NATO integration, and
- Observable divergence in growth outcomes despite broadly similar reform templates.

This combination allows for testing not only whether institutions matter for economic development, but also which institutional dimensions matter most, under what conditions, and with what temporal dynamics. As such, the Western Balkans provide a perfect context for evaluating the empirical relevance of institutional persistence, external anchoring mechanisms, and post-conflict legacies - core themes developed in this dissertation.

2.5.2 Political economy context: state-building, fragmentation, governance capacity

The political economy of the Western Balkans is defined by the coexistence of formal institution-building efforts and persistent constraints on effective governance. Since the early 1990s, all Western Balkan countries have pursued state-building and market transition under conditions of contested sovereignty, weak administrative capacity, and - in several cases - post-conflict political settlements that stressed stability and power-sharing over institutional efficiency (Bartlett, 2009; Bieber, 2019). As a result, the region exhibits a characteristic gap between de jure convergence toward European legal and regulatory templates and de facto variation in enforcement, accountability, and policy implementation capacity (Acemoglu, Johnson, & Robinson, 2005; EBRD, 2019).

A central feature of this context is the incomplete consolidation of state authority. In Kosovo, the legacy of contested international recognition and prolonged external supervision has shaped institutional development, affecting the credibility and reach of public institutions and complicating long-horizon policy commitments (Visoka & Doyle, 2016; World Bank, 2020). In Serbia, comparatively stronger administrative capacity has coexisted with recurring governance concerns linked to political centralization, the politicization of public administration, and the uneven autonomy of oversight institutions (Bieber, 2018; Stojanović, 2020). Albania's state-building challenges have been shaped less by the post-Yugoslav dissolution and more by the institutional disruptions of its idiosyncratic transition from centralized socialism, with persistent informality and weaker rule enforcement affecting state capacity and revenue mobilization (Sulstarova, 2018; Grzymala-Busse, 2019). These differences show that the state is not the same everywhere in the Western Balkans. How well institutions work, how much people trust them, and how far their authority reaches all vary from country to country, and these differences matter a lot for economic growth (Fukuyama, 2013).

Institutional fragmentation represents a particularly binding constraint in parts of the region. Bosnia and Herzegovina is often treated as an extreme case, where the governance framework set up by the Dayton Peace Agreement created overlapping jurisdictions, multiple veto players, and coordination failures that weaken policy coherence and reduce the efficiency of public spending (Bieber, 2010; Keil & Perry, 2015). By contrast, Montenegro and North Macedonia are smaller and more centralized, yet remain exposed to elite capture, limited accountability, and capacity bottlenecks in core functions such as judicial enforcement, public procurement, and regulatory oversight (Hulsey & Keil, 2019; EBRD, 2019). In political-economy terms, these arrangements influence development not only by shaping the content of formal policies but also by determining whether policies can be credibly implemented, sustained across electoral cycles, and insulated from rent extraction (North, Wallis, & Weingast, 2009).

Another important issue in the Western Balkans is that politics often relies on personal connections and patronage, which creates risks of state capture and weak rule enforcement. Many reforms look good on paper but are not fully put into practice, so informal ways of doing things and selective enforcement continue (Hellman, 1998; Hellman, Jones, & Kaufmann, 2003). Corruption in this context is not just a problem of ethics or administration, but a deeper issue that discourages investment, hurts competition, and makes it harder for the state to collect revenue (Hoff & Stiglitz, 2004; Rothstein, 2011). This is especially damaging for small economies that need strong, predictable rules to attract investment and support growth (Campos & Coricelli, 2002).

External anchoring has been a central countervailing force. EU accession conditionality and, for some countries, NATO integration have provided an institutional reform template and a monitoring framework that can raise the political returns to formal institutional change (Schimmelfennig & Sedelmeier, 2005; Vachudova, 2014). However, the effectiveness of external anchors depends on domestic political coalitions and administrative capacity. Where compliance incentives are strong and bureaucratic capability is sufficient, external conditionality can accelerate improvements in regulatory quality and public-sector management (EBRD, 2019; Pop-Eleches & Tucker, 2017). Where incentives weaken - due to enlargement fatigue, credibility gaps, or domestic contestation - formal reforms may become increasingly decoupled from enforcement, reinforcing the de jure-de facto divergence highlighted throughout the institutions literature (Tziarras, 2023).

In the Western Balkans, the quality of institutions thoroughly comes down to how well governments can do their job despite many obstacles. This means being able to enforce rules, keep promises, and provide public services, even when the state is divided, its authority is questioned, and there are ongoing conflicts over resources (Fukuyama, 2013; Acemoglu & Robinson, 2012).

2.5.3 Historical-institutional layers of Western Balkans

The way institutions work today in the Western Balkans is the result of several different historical systems, not just one. The Ottoman, Austro-Hungarian, and Yugoslav socialist periods each left its own mark, and these influences still affect how states function, how laws are applied, and how much people trust the government. These systems did not just follow one after the other. Instead, they mixed in different ways, so each country in the region ended up with its own unique combination.

This history is very important for understanding why governments in the Western Balkans work differently today, and why some countries have stronger institutions than others. Instead of all following the same path after socialism, each country started from a different place, which still affects how well reforms work.

The Ottoman period is remembered for indirect rule, personal authority, and weak enforcement of formal laws. Instead of clear rules and strong local government, power often depended on personal connections, tax collection by private individuals, and informal deals. While the Ottomans were often tolerant of different cultures and religions, they did not focus much on building strong local institutions or a rule-based public administration. In places like Albania, Kosovo, Bosnia and Herzegovina, and parts of North Macedonia, this history led to ongoing habits of informal bargaining, local power centers, and politics based on personal ties rather than clear rules.

Empirical studies link this legacy to lower contemporary levels of generalized trust, weaker bureaucratic professionalism, and greater reliance on informal networks (Inalcik, 1973; Acemoglu, Johnson, & Robinson, 2001; Becker et al., 2016). Consistent with this literature, countries with stronger Ottoman institutional exposure tend to score lower on judicial independence and corruption control indicators, suggesting a long-run transmission of patrimonial governance norms. In parts of today's Western Balkans - particularly Albania, Kosovo, and Bosnia and Herzegovina - these patterns persist in the form of weaker tax capacity, clientelist politics, and limited judicial effectiveness.

In contrast, areas that were once under the Austro-Hungarian Empire developed a more centralized and formal way of governing. The Habsburgs focused on things like land records, a professional civil service, regular taxes, and clear legal rules. This system was not perfect, but it helped build stronger state institutions and more predictable relations between the state and citizens. Even today, regions with this history tend to have higher trust in institutions, less corruption, and better public services (Becker et al., 2016; Grosfeld & Zhuravskaya, 2015).

Within the Western Balkans, this legacy is most visible in Croatia and in parts of Bosnia and Herzegovina, which continue to outperform neighboring countries in government effectiveness and regulatory quality. The comparatively stronger institutional performance of Croatia relative to other Western Balkan economies can be plausibly linked to this inherited bureaucratic rationality rather than to post-1990 reforms alone.

The Yugoslav socialist period introduced a distinct institutional layer that cut across these imperial legacies. Yugoslavia combined centralized political control with decentralized economic management under the system of workers' self-management. Compared to other socialist regimes, it allowed greater autonomy for enterprises, openness to trade, and labor mobility. At the same time, political authority remained concentrated within the ruling party, and legal institutions were subordinated to political objectives. This twofold structure generated relatively strong human capital formation and industrial capacity but weak judicial independence and blurred property rights (Bartlett, 2009; Uvalić, 2018).

This mix of institutions helps explain why some countries that came out of Yugoslavia, like Serbia, Montenegro, and North Macedonia, have decent administrative and technical capacity but still struggle with political instability, weak accountability, and too much power in the hands of leaders. Yugoslavia tried to reduce differences between regions by sharing resources and using common rules, but it never fully erased the old differences.

The breakup of Yugoslavia in the 1990s was a turning point that brought back old institutional habits and created new problems after the wars. War, the breakup of states, and ethnic divisions broke the continuity of government and damaged social trust, especially in Bosnia and Herzegovina, Kosovo, and parts of Serbia. When Yugoslav institutions disappeared, they left gaps that were filled by informal networks, patronage, and outside arrangements (Bieber, 2010; Roland, 2004). As a result, post-Yugoslav transitions unfolded on historically uneven institutional foundations, amplifying divergence rather than convergence across countries.

These layers of history help explain why, even though countries in the Western Balkans have tried similar reforms since 1990, the results have not been the same. The success of reforms depends a lot on what each country inherited in terms of administration, legal culture, and trust. Often, we see technical improvements in government, but ongoing problems in areas like politics and the rule of law. This fits what we see in the data on governance in the region.

2.5.4 Why the Western Balkans are a distinctive empirical setting for institutions-growth research

The Western Balkans constitute a particularly distinctive and analytically powerful setting for studying the institutions- growth relationship. First, the region combines high institutional heterogeneity within a relatively small, comparable group of countries, limiting variation in geography, culture, and development levels while preserving meaningful differences in governance quality.

Second, institutional outcomes are determined by strong historical persistence and layered legacies: - Ottoman, Austro-Hungarian, socialist, and post-conflict/war. These allow the analysis of long-run institutional effects within a contemporary transition context.

Third, the region has been subject to intense external anchoring pressures, most notably through EU accession conditionality, providing a quasi-natural experiment in formal institutional convergence with uneven de facto enforcement.

Finally, despite broadly similar reform templates, Western Balkan economies exhibit observable divergence in growth, investment, and social outcomes, allowing identification of which dimensions of institutional quality act as binding constraints on development. Together, these features make the Western Balkans a prime example for evaluating institutional persistence, reform sequencing, and the growth effects of governance quality in post-socialist and post-conflict economies.

Based on the above theoretical and empirical considerations, the following hypotheses are formulated:

Hypothesis 1: Institutional quality played a positive role in the economic development of the Western Balkans.

Hypothesis 2: ***Among institutional quality dimensions, corruption control and government effectiveness have the most significant impact on the economic development of the Western Balkans.***

Hypothesis 3: The present state of the quality of institutions in the Western Balkans was determined by the historical persistence of institutions and the historical legacy of the Western Balkans.

2.6 Conflict, Post-Conflict Recovery, and Institutional Performance

2.6.1 Conflict as an institutional shock. Driving mechanisms

The long-term economic impacts of historical conflicts have appeared as an essential area of concern in development economics and political economy. Collier et al. (2003) advanced the World Bank's research on the economics of civil war, fundamentally changing how scholars as well as policymakers understand the legacy of internal conflict. Their study confirmed that civil wars not only yield short-term economic destruction but also cause lasting structural damage that inhibits growth after conflict, exacerbates poverty, and increases the prospects of further violence. Collier et al. (2003), in their classic work, *Breaking the Conflict Trap: Civil War and Development Policy*, present an empirically grounded and policy-relevant framework demonstrating that civil wars are both the result and a cause of underdevelopment. They define the "conflict trap," in which nations with a recent history of civil war tend to fall back into conflict, experience poor economic growth, and suffer institutional decay. They conclude that civil war reduces GDP growth by 2.3% per year of war, and even after peacetime returns, nations take years - if not decades - to return to pre-war economic levels.

One important finding of Collier et al. (2003) is that conflict leaves a legacy of institutional weakening, the destruction of human capital, and harm to infrastructure. Capital flight, skilled workforce brain drain, and the loss of state legitimacy aggravate these effects. These civil wars tend to consolidate informal economies, criminal networks, and warlord rule, posing system-level challenges to post-conflict reconstruction. The post-war era, thus, needs not only infrastructure rebuilding but also the return of trust, legitimacy, and productive capabilities - all long-term imperatives. There are several mechanisms by which conflict works contrary to economic development. In institutional terms, conflict constitutes a compound shock that simultaneously erodes state capacity (ability to tax, regulate, and deliver services), destroys generalized trust and social capital, and weakens legitimacy (the perceived rightfulness of authority), thereby weakening compliance and enforcement (Besley & Persson, 2011; Fearon & Laitin, 2003).

The most obvious effect of war is the destruction of physical capital. Roads, bridges, factories, and power lines are often damaged or destroyed, making it very hard for the economy to function. Without this basic infrastructure, it is difficult to produce goods, move them to market, or connect with other countries. Rebuilding all of this is extremely expensive and usually requires help from outside. The process is slow and complicated, especially when institutions are weak, and there are problems with corruption and security.

The destruction of electricity grids and energy infrastructure, in turn, hinders industrial production and service provision, forcing most businesses to close for extended periods or operate informally. Furthermore, destroyed transport arteries restrict access to markets and services, disconnecting rural communities and widening urban-rural gaps. The longer the infrastructure stays nonfunctional, the greater the discouragement of private investment and the deepening of poverty. In addition, the unpredictable nature surrounding the non-resolution of conflict or the threat of renewed conflict discourages long-term capital investment and postpones essential maintenance on existing infrastructure.

The combined outcome is a steep decline in productivity, a slowdown in economic recovery, and reduced state capacity to tax and fund development programs. In nations like Syria, Iraq, South Sudan, and Bosnia and Herzegovina, several decades after the end of the conflict, the physical destruction of capital still limits the growth prospects as well as the resilience of development. Rebuilding infrastructure, therefore, is not exclusively an engineering or financial exercise, though a foundation for post-conflict stabilization that demands coordinated efforts by governments, international donors, private-sector entities, and local communities. Crucially for institutional performance, infrastructure loss similarly weakens territorial reach and administrative presence, amplifying reliance on informal enforcement and non-state providers of order.

Human capital losses are among the most destructive and long-lasting effects of constant war, with major implications for long-term economic growth and population stability. As most schools are destroyed or closed, there is displacement of teachers and disruption of education services, mostly in the rural or conflict-affected regions, due to the armed conflict. The kids and teenagers are driven out of classrooms because of security threats, or by forceful relocation, or by young soldiers' recruitment. Cessation of schooling at critical developmental periods leads to weaker cognitive development, lower educational attainment, and fewer life and job skills.

When many people are forced to leave their homes, it becomes even harder for children to go to school or learn a trade. Many grow up without the skills they need, a phenomenon sometimes called a lost generation. War also kills or injures adults, so there are fewer skilled workers and less knowledge passed on. The trauma of war makes it harder for children to learn and work later in life. This slows down the recovery of the whole economy. Rebuilding human capital means more than just opening schools. It also means helping people heal, teaching adults basic skills, and investing in teachers and young people so that the cycle of low skills does not continue. Once trust and social ties are broken, institutions struggle even more.

Violent conflict significantly degrades state institutions, eroding the rule of law, dismantling governance frameworks, and weakening the state's administrative capabilities. State institutions are usually targeted, co-opted, or excluded from power during civil war or long periods of violent instability by combatants, warlords, or militant movements. Disintegration weakens the functionality and credibility of public institutions, leading to the collapse of public service delivery, judicial autonomy, and bureaucratic professionalism. Further, the lack of proper control during conflict times creates a setting favorable to corruption, nepotism, and rent-seeking. In most post-conflict countries, public institutions become instruments of political patronage rather than meritocracy apparatuses for service delivery or governance.

As institutions become more vulnerable to elite capture, a clique of politically exposed individuals takes over decision-making, appropriates state resources for personal use, and inhibits reform. This reinforces inequality and demoralizes democratic mechanisms, as citizens lose confidence in the impartiality and effectiveness of state institutions. In nations such as Iraq, Libya, and South Sudan, institutional collapse following and during conflict has impeded state reconstruction and driven cycles of instability. Restoring institutional integrity in such situations requires more than technical support - it requires profound political transformation, anti-corruption measures, and sustained efforts to rebuild citizens' confidence in public power and governance systems. This is the core legitimacy channel. When citizens perceive institutions as captured or discriminatory, compliance falls, enforcement costs rise, and state effectiveness weakens even after formal peace (Lake, 2016; Walter, 2015).

Protracted conflicts and civil wars have a devastating impact on national economic integration, leading to market fragmentation and the proliferation of informal or shadow economies. As central governments lose power over territories, particularly rural or peripheral regions, these areas usually fall to insurgents, militias, or local warlords who organize parallel economic structures. These war economies are often constructed on criminal activities like smuggling, drug trafficking, arms trade, and poaching natural resources such as diamonds, timber, or oil. These non-formal sectors become embedded in the local economy, typically providing livelihoods for civilians and resources for armed actors.

They are beyond state regulation and taxation, however, and reduce states' revenues while undermining formal economic recovery efforts. That dual -economy phenomenon strengthens local autonomy and criminal networks, which are harder to reintegrate into a unified national economic system in the aftermath of conflict. For instance, in the Democratic Republic of Congo, mineral-rich areas have traditionally been under the control of autonomous armed groups that do not report to the central government. In the same way, in Afghanistan, opium cultivation has funded non-state actors and warped agricultural markets. The survival of these informal economies during post-conflict periods makes state-building harder, diminishes policy efficiency, and inhibits the development of the private sector, all of which require special approaches to economic reintegration and formalization. In institutional terms, conflict can shift equilibria toward "informal order," where governance is provided through networks and coercion rather than rules - raising transaction costs and lowering investment (Acemoglu, Robinson, & Santos, 2013).

Perhaps the most long-lasting effect of conflict is the substantial increase in perceived risk faced by both domestic and foreign investors. Armed conflict undermines property rights, erodes contract enforcement, and creates unstable security conditions, circumstances fundamentally incompatible with the long-term planning horizons required for productive investment. As a result, armed conflict and wars exert a strongly negative effect on foreign direct investment (FDI) by heightening political risk, macroeconomic uncertainty, and the probability of asset destruction or expropriation, thereby raising the required risk premium for investors. Empirical evidence consistently shows that both the onset and persistence of conflict significantly reduce FDI inflows, with adverse spillovers to neighboring countries through regional risk contagion and disrupted trade and production networks (Blomberg & Hess, 2006; Collier & Hoeffler, 2004). Even after hostilities subside, many countries continue to suffer from a persistent "post-conflict stigma," as investors stay cautious due to lingering uncertainty over political stability, the risk of renewed violence, and institutional fragility. This heightened risk aversion goes beyond FDI to private credit markets and domestic entrepreneurship, slowing reconstruction and structural recovery. Consequently, post-conflict economies often experience delayed FDI revival unless peace is accompanied by credible institutional reforms, strengthened governance, and durable security guarantees that restore investor confidence (Busse & Hefeker, 2007; Davies, 2015). For obvious reasons, this may apply in particular to the Balkans and the Western Balkans.

Banks, insurance companies, and large companies often see post-conflict countries as high-risk, so it is harder and more expensive to get investment. Countries like Libya and Yemen, for example, have not attracted much private investment due to persistent conflict and weak institutions. Insecurity also makes people from the diaspora less likely to send money home or invest. For a country to recover, it is essential to create a stable and predictable environment for investment, with clear laws and real security. The effects of conflict last a long time, not just because of the damage done during the war, but also because of the slow recovery of trust and institutions (Cerra & Saxena, 2008).

We also have to point out environmental losses. Not only do armed conflicts ruin human lives and institutions, but they also leave lasting, often irreparable effects on a nation's environment and natural resource base. Military campaigns, scorched earth policy, and unbridled resource exploitation may result in long-term environmental degradation that compromises the sustainability of post-conflict rehabilitation. Forests can be cleared for strategic reasons or through illegal logging; weapons, fuel, or chemicals can contaminate water bodies; and cultivated lands can be rendered unusable by landmines or chemical contamination.

When governments lose control during conflict, there is often no one to manage how resources are used. This leads to illegal mining, poaching, and deforestation, sometimes by armed groups or by people just trying to survive. The cost is especially high in countries where most people depend on farming. For example, in Darfur, fighting over water and land has both caused and been made worse by conflict. In Iraq, war has led to oil spills and pollution that have ruined farmland. These problems mean less food, more disease, and sometimes force people to leave their homes. Fixing the environment after war takes a long time and a lot of planning, and most post-conflict countries have few resources to do it. Recovery plans need to include protecting the environment and involving local communities to make sure people can rebuild their lives.

For research, it is important to see that environmental damage from conflict isn't only a direct hit to productivity, but also a problem for governance when the state cannot control resources (Addison, Le Billon, & Murshed, 2002). All these channels show that conflict can cause long-term losses, not just from what is destroyed during the war, but also from slow changes in institutions and society that last long after peace returns. The next section looks at what the research says about the long-term effects of conflict on economic growth and governance.

2.6.2 Empirical evidence: long-run growth and governance effects of conflict

Collier et al. (2003) show that civil war causes both direct economic losses and long-term damage to institutions. Later studies find that the negative effects on output last for years after the conflict ends, even if growth rates eventually return to normal (Cerra & Saxena, 2008; Blattman & Miguel, 2010). However, the way institutions are affected by conflict is not the same everywhere. It depends on how strong the state was before the war, what kind of political agreement is reached after, and whether the country relies on natural resources (Fearon, 2005; Walter, 2015; Addison et al., 2002).

There are three main findings in the research that are important for this dissertation. First, conflict makes it harder for people and businesses to invest and slows down the building of capital. This happens because conflict increases risks, undermines property rights, and weakens the government's ability to collect and spend money (Collier et al., 2003; Cerra & Saxena, 2008).

Second, conflict makes governance worse. It creates more chances for corruption, allows powerful groups to take control, and makes public administration less professional. These problems are common in countries after conflict (Besley & Persson, 2011; Acemoglu et al., 2013).

Third, conflict damages trust, social norms, and relations between groups. These social scars make it harder for markets and institutions to work well, and slow down recovery, even after peace is restored (Justino, 2009; Nunn & Wantchekon, 2011).

Researchers use different methods and definitions of conflict, but the main message is that conflict is not simply a temporary problem. It can change the direction of a country's institutions and cause long-lasting harm to economic growth. This is why it is important to see conflict as a key factor that affects both growth and how well reforms work after the conflict ends.

These patterns are found in many studies, but how strong and long-lasting the effects are depends a lot on how strong institutions were before the war, what kind of political agreement is made after, and how much outside support there is. The Western Balkans is a good example, because the region has faced conflict, difficult state-building, and ongoing reforms linked to the EU. It is also useful to compare the Western Balkans to other conflict-affected regions in the world.

2.6.3 Illustrative comparative cases and post-conflict trajectories

Rwanda

The 1994 genocide in Rwanda ranks among the most devastating events of the last century, causing immense human and economic loss. More than 800,000 people were killed in just a few months, and the country lost about 60 percent of its GDP (Verwimp & Bundervoet, 2009). Lives were destroyed along with the nation's social and economic foundations. Infrastructure was in ruins, farms ceased productivity, and government operations ground to a halt.

Human resources suffered deeply; professionals, civil servants, and academics were murdered or forced to flee, while schools and hospitals closed their doors. In the aftermath, Rwanda was left extremely fragile, heavily reliant on external support for food, reconstruction, and basic social services. Yet, since the early 2000s, Rwanda has experienced an impressive economic recovery. Growth has been sustained, governance strengthened, and improvements noted in health and education indicators. However, underneath this recovery lie unresolved structural and social weaknesses.

In spite of these advances, Rwanda remains deeply scarred by the trauma of genocide, with many survivors and displaced people still suffering. Critics maintain that, although the government promotes reconciliation and development, it allows constrained political freedom and open debate. The administration is highly centralized and efficient, but it lacks democratic openness. Economic growth has bypassed many, widening gaps between rich and poor as well as between urban and rural populations. Verwimp & Bundervoet (2009) argue that GDP gains cannot conceal persistent ethnic tensions, land disputes, and political challenges born from the genocide.

Afghanistan

Afghanistan is a clear example of how long-term conflict can destroy a country's economy and institutions, and gives a contrasting case to Rwanda. Since 1979, the country has faced almost nonstop war, from the Soviet invasion to civil wars, the rise of the Taliban, foreign intervention, and the Taliban's return in 2021. By the mid-1990s, Barakat & Ellis (1996) noted that years of fighting had ruined Afghanistan's infrastructure, wiped out much of its capital, and left key institutions like the courts, schools, and hospitals in ruins. Roads, irrigation, and public services stopped working, and the government could barely function. Comparing Afghanistan to Rwanda reveals the range of consequences post-conflict states experience.

The consequences of this destruction have been severe. Afghanistan now deals with weak human capital, high illiteracy, poor access to education, and sharp disparities between men and women in schooling and employment. Foreign aid accounts for more than 70% of public spending, yet it has not spurred lasting development. Corruption persists, security is fragile, and local power groups frequently eclipse government authority. Even during periods of international support, growth typically depended on military spending and aid rather than on the foundations of a strong local economy.

The return of the Taliban has made Afghanistan's economy even more unstable, with money leaving the country, banking problems, and a growing humanitarian crisis. The illegal economy, especially opium production and trafficking, has grown because the state is weak. This supports the idea that after conflict, economies frequently turn to shadow markets and rent-seeking. As a result, poverty and inequality remain high, and growth is limited. Afghanistan shows that without strong institutions and secure property rights, even large amounts of foreign investment cannot bring lasting development. Long-term violence changes a country's economy and politics, making it very hard to achieve peace and growth.

2.6.4 Post-conflict growth experiences

Post-conflict growth is not automatic. Collier and Hoeffler (2004), in their influential book, claim that the first decade after a civil war is the most critical period to determine whether a nation will sustain peace or relapse into war. Using empirical evidence from several countries, they point out that post-conflict settings tend to be characterized by low institutional capacity, political instability, and economic exposure, which, in turn, provide fertile ground for the outbreak of violence again if not handled properly. The authors stress the need for selective international assistance and robust peacekeeping efforts at this stage to support economies and provide security.

Collier and Hoeffler also warn against blanket development aid. In its place, they call for conflict-sensitive aid policies that stress security sector reform, infrastructure reconstruction, job creation, and institution-building. Their report indicates that nations that are given timely and consistent post-war assistance, combined with credible reform, are much more likely to remain at peace and enjoy sustained growth. In contrast, neglect or procrastination within the foreign community can create power vacuums, ignite factional rivalries, and widen inequalities, leading to a relapse into war.

The authors further acknowledge that non-economically reintegrated rebel groups, e.g., via disarmament, demobilization, and reintegration (DDR) programs, tend to return to criminality or insurgency. Hence, the Collier-Hoeffler model requires that economic reconstruction in post-conflict states be conditional, precarious, and highly contingent on institutional quality, peace consolidation measures, and the availability of long-term external assistance. Addison, Le Billon, and Murshed (2001) build on the conflict-development literature by placing particular emphasis on the noticeable challenges faced by resource-endowed post-conflict nations.

These authors assert that, though natural resources can, in theory, supply capital for reconstruction, in most cases, they nurture more violence and hinder post-conflict recovery. This paradox, better known as the "resource curse," is especially acute in nations emerging from war, where institutions are fragile, and governance is disjunctive. The authors emphasize that competition for valuable natural resources - such as diamonds, oil, or timber - is frequently a cause of renewed conflict, particularly if resource management becomes inextricably linked with ethnic, regional, or factional identities.

In Angola, for example, management of oil revenues and diamond fields remained at the heart of post-conflict politics, generating an environment of exclusion and corruption that undercut inclusive economic growth. In the same way, in the Democratic Republic of Congo (DRC), rival warlords and outside actors leveraged mineral riches, perpetuating instability and making centralized statehood all but impossible. Addison et al. highlight that clear resource management, effective regulatory institutions, and sound mechanisms for income distribution are vital to post-conflict states not reverting to conflict.

In addition, they posit that international actors such as donors, multinational companies, and the UN should be actively involved in overseeing and enforcing responsible extraction, particularly in fragile states with low state regulatory capacity. Therefore, in natural wealth-rich post-conflict environments, natural wealth can either catalyze recovery or exacerbate governance institutions, and regulatory capacity heavily influences divisions and hence growth outcomes. Further, Barbara Walter (2010) adds an important political consideration to the debate by pointing out that post-conflict economic growth is indistinguishable from the quality of the political settlement. Her work shows that power-sharing, inclusive peace agreements substantially lower the risk of conflict recurrence and raise the prospects of stable development.

The underlying concept is that if all the main blocs and identity groups - ethnic, religious, regional, or ideological - are incorporated into the post-war political framework, they have an interest in dedicating effort to peace rather than violence. Inclusive settlements provide security guarantees, opportunities for political participation, and access to economic benefits, generating a collective interest in the country's stability and prosperity. By comparison, elitist or exclusionary peace deals that exclude major players may create a sense of injustice, disenfranchisement, and ultimately, a resumption of hostilities.

Walter (2010) points out the value placed on institutional mechanisms such as constitutional redesign, proportional representation, decentralization, and transitional justice to ensure that post-conflict institutions reflect the heterogeneity of society. She further asserts that outside peace guarantors, such as regional organizations or international peacekeepers, may assist in policing the conditions of inclusive agreements and preventing spoilers. She critiques technocratic responses to post-conflict development that focus on macroeconomic recovery in isolation from political grievances and legitimacy. In Walter's view, growth would be shallow and unproductive without a resilient and open political order that protects and represents all parties.

Whereas most studies focus on macroeconomic factors and state-level variables, Brück, Justino, and Verwimp (2013) offer a much-needed micro-level lens, arguing that sustainable post-conflict growth requires attention to household resilience, migration flows, health impacts, and intergroup trust. Their analysis shows that even if GDP growth reoccurs following conflict, citizens and communities can remain in deep economic and social distress. Conflicts tend to destroy household wealth, lower educational levels, and increase health emergencies, particularly for women and children. These impacts do not immediately appear in national statistics but produce intergenerational effects on productivity, labor market performance, and poverty.

Among their findings is that displacement and forced migration strongly influence long-term welfare. Internally displaced persons (IDPs) and refugees are frequently denied access to jobs, rights over property, and equal treatment, which undermines their potential for adding to post-conflict reconstruction. In addition, returnees can have difficulties reentering society, particularly when there is no reconciliation or restitution of land. The authors further highlight that intergroup social capital - the faith between political, religious, or ethnic groups - is usually discredited or destroyed in the course of civil war. Restoring trust is key not only for social harmony but also for fostering economic collaboration, effective local government, and successful market engagement.

Furthermore, Brück et al. point out the necessity of targeted measures in post-conflict environments, such as psychosocial assistance, school re-enrollment programs, and small business loans, which directly enhance household welfare and resilience. Their strategy challenges decision-makers to shift from focusing on GDP to understanding the day-to-day realities of post-conflict groups, stressing that macroeconomic recovery must be matched by micro-level development to generate sustainable peace and broad-based growth.

Collectively, these studies show an essential lesson: post-conflict economic growth is not inevitable. Though the cessation of hostilities may offer a chance for renewal, whether that chance is grasped or lost depends on a multi-dimensional interplay among institutions, political decisions, resource governance, and social rehabilitation. Collier and Hoeffler's focus on prompt aid and reform, Addison et al.'s caution regarding resource-induced relapse, Walter's support for more inclusive peace, and Brück et al.'s micro-level observations all remind us that growth in the aftermath of conflict calls for careful, context-driven strategies. The vulnerability of peace, the ongoing memory of conflict, and the institutional rot left by war mean that development should not be taken for granted - it must be created, fostered, and safeguarded.

Furthermore, those findings destabilize overly simplistic accounts that automatically correlate peace with prosperity. In real life, peace is a necessary but insufficient condition for growth. Unless inclusive political institutions are established, economic inequality is redressed, social justice is assured, and civil society resilience is enhanced, post-war societies risk relapse or stagnation. All these scholars argue for an inclusive, multidimensional approach to post-conflict development that combines security, governance, economics, and human well-being.

2.6.5 Western Balkans conflict legacy: stylized facts and expected channels

Military conflicts in the region, such as those witnessed during the breakup of Yugoslavia in the 1990s, led to widespread destruction of infrastructure, displacement of populations, and deep-seated ethnic divisions. These conflicts shattered trust in institutions, weakened governance structures, and undermined the rule of law. The breakdown of centralized authority and the emergence of new states further complicated efforts to build strong and accountable institutions (Lange et al., 2017).

In addition to the impacts above, former military conflicts in the Western Balkans have also led to significant demographic shifts and challenges related to the integration of refugees and internally displaced persons (IDPs). The mass displacement of populations during conflicts has strained resources and infrastructure in host communities, exacerbating social tensions and economic disparities. The influx of refugees and IDPs has also placed pressure on social services, housing, and employment opportunities, further impeding efforts at post-conflict reconstruction and reconciliation (Bartlett, 2009; Uvalic, 2012).

Empirical research indicates that former military conflicts in the Western Balkans have had a significant negative impact on economic growth and development. Studies have found that countries affected by conflict experienced declines in GDP per capita, investment, and productivity growth rates in the aftermath of violence. The destruction of infrastructure, loss of human capital, and disruption of economic activities during conflict contributed to long-term economic stagnation and impeded efforts at reconstruction and recovery (Dabrowski & Myachenkova, 2018a).

The persistence of ethnic tensions and still unresolved conflicts in some parts of the Western Balkans continues to hinder institutional development and economic growth. Ethnic divisions often intersect with political and institutional dynamics, leading to polarization, patronage networks, and rent-seeking behavior. Weak institutional capacity and ineffective governance worsen social inequalities and maintain cycles of instability, undermining investor confidence and economic progress (Uvalic, 2012).

Bosnia and Herzegovina represents the most analytically transparent illustration of how post-conflict institutional arrangements can lock in low-growth equilibria in the Western Balkans. The 1992-1995 Bosnian War, prompted by the breakup of Yugoslavia, caused the deaths of around 100,000 individuals and the displacement of more than two million. The war destroyed industrial infrastructure, agricultural output, and city housing, effectively breaking the country's economy. Upon the cessation of hostilities under the Dayton Peace Agreement of 1995, it brought sorely needed peace, along with a highly intricate and fragmented system of governance. It was broken into two autonomous states - the Federation of Bosnia and Herzegovina and Republika Srpska - along with the Brčko District, which is governed by a rotating presidency and international oversight.

It is argued by Caplan (2005) that this institutional setup, although effective in stemming violence, ingrained ethnic divisions and incapacitated the central government's ability to rule effectively. Policy coordination continues to be difficult because of duplicative competencies, dispersed administrations, and a lack of coordinated political will. This derelict mode of governance has had direct implications on retarded economic growth, unemployment, and low investor confidence. Inter-ethnic mistrust still taints labor mobility, investment choices, and national policy-making. The most important employer, the public sector, is permeated by inefficiencies and clientelism, further dampening productivity. Consistent with Collier et al.'s thesis, Bosnia's political economy has been trapped in a low-growth equilibrium in which the same mechanisms intended to maintain peace have locked in institutional inefficiencies and stifled reform.

Furthermore, despite enormous economic aid from the European Union and foreign donors, Bosnia's EU membership process has been sluggish, largely because it has been unable to establish consistent national institutions and carry out structural reforms. Continuance of wartime political leaders, ethnic polarization, and elite capture have suggested that, even though fighting has officially ended, the state remains in a post-conflict political stagnation. Bosnia and Herzegovina illustrates how legacies of conflict can be locked in through peace settlements, building in place governance systems that are change-resistant and glacially slow to provide inclusive development.

From the perspective of the channels identified in Section 2.6.1, Bosnia and Herzegovina combines extreme administrative fragmentation, weak fiscal and regulatory capacity, and low institutional legitimacy, resulting in high coordination costs and limited reform traction.

Studies examining the impact of past military conflicts on social cohesion in the Western Balkans suggest that these conflicts exacerbate ethnic divisions, foster mistrust, and undermine social capital. Empirical analysis indicates that countries affected by conflict experience higher levels of social polarization, intergroup tensions, and discrimination. The legacy of conflict still shapes social identities, attitudes, and behaviors, hindering efforts at reconciliation and encouraging inclusive societies.

Moreover, the proliferation of small arms and light weapons during conflicts has posed serious security challenges in the region. The availability of these weapons has perpetuated cycles of violence, hindered disarmament efforts, and fueled organized crime and illicit trafficking networks. In turn, these security threats undermine stability and impede economic development by discouraging investment and hindering the movement of goods and people across borders (Lange et al., 2017).

Moreover, the aftermath of conflict has generated challenges for transitional justice, reconciliation, and post-conflict reconstruction. Addressing the legacies of past atrocities, ensuring accountability for human rights abuses, and fostering social cohesion are essential for building resilient and inclusive institutions. However, the process of transitional justice and reconciliation is often slow and contentious, further obstructing efforts to strengthen institutions and promote economic growth (Hajdini et al., 2023).

Research suggests that conflict undermines governance structures, weakens the rule of law, and fosters corruption and impunity. The breakdown of centralized authority and the emergence of informal power structures further erode institutional capacity and hinder efforts to build accountable and transparent institutions. Empirical analysis highlights the negative correlation between conflict intensity and measures of institutional quality, such as government effectiveness, regulatory quality, and control of corruption (Štilić et al., 2023). Overall, former military conflicts in the Western Balkans continue to exert major influence on the region's institutional quality and its relationship with economic growth. Addressing the legacies of conflict, strengthening governance structures, supporting transparency and accountability, and fostering social cohesion are essential for overcoming the challenges caused by conflict and unlocking the region's full potential for sustainable development and prosperity (Šiljak & Nielsen, 2023).

Furthermore, the environmental consequences of conflict in the Western Balkans have been significant but often overlooked. Military activities, such as the use of landmines and the destruction of industrial infrastructure, have resulted in soil and water contamination, deforestation, and habitat destruction. These environmental degradation issues not only pose immediate health risks to local populations but also impede long-term sustainable development efforts by compromising natural resources essential for agriculture, tourism, and other industries (Dabrowski & Myachenkova, 2018b).

Additionally, the protracted nature of some conflicts in the Western Balkans has contributed to a "lost generation" phenomenon, wherein young people who grew up amidst violence and instability face limited educational and economic opportunities. This lack of prospects perpetuates cycles of poverty and marginalization, hindering social mobility and exacerbating intergenerational inequalities. Efforts to address the multiple challenges stemming from former military conflicts in the Western Balkans require comprehensive and coordinated approaches. This entails investing in infrastructure rehabilitation, promoting job creation and skills training programs, strengthening social protection systems, and enhancing regional cooperation on security and environmental issues (Lange et al., 2017).

Moreover, supporting dialogue and reconciliation among communities, promoting intercultural understanding, and supporting grassroots initiatives for peacebuilding and conflict resolution are essential for building resilient and inclusive societies in the region. In conclusion, while the impacts of former military conflicts in the Western Balkans are intricate and multifaceted, handling these challenges provides opportunities for sustainable development and peacebuilding. By giving priority to investments in infrastructure, human capital, and environmental sustainability and by fostering social cohesion and reconciliation, the region can overcome the legacies of conflict and reach its full potential for prosperity and stability (Topcu & Aras, 2013).

Based on the points above, I propose the following hypothesis:

Hypothesis 4: Former military conflicts in the Western Balkans still affect the institutional quality and economic growth relationships.

2.7 External Anchors and Institutional Change

When countries try to change their institutions, external anchors like the EU or NATO integration can help keep reforms on track. These anchors work by connecting reforms to real benefits, such as access to markets, financial support, or security. This makes it harder for political leaders to go back on their promises or act only in their own interest. But for these anchors to work effectively, it is not enough to have strong outside pressure. The chances of actually joining, the ability to enforce rules, and the readiness of local institutions all matter a lot.

2.7.1 Institutional anchoring and post-socialist transformation

The works of Campos and Coricelli (2002) are among the pioneering studies on the role of institutions in the economic transformation of post-socialist states in Eastern Europe and the Western Balkans. They contend in the paper, Growth in Transition: What We Know, What We

Do not, and What We Should, that the process of institutional reform, especially the establishment of credible market-supporting institutions, has been a prime mover of economic performance in the shift between planned and market economy systems. Findings show that variation in institutional quality has contributed a large percentage of the cross-country growth disparity within the region in the 1990s and the early 2000s.

Their main point is that opening up the economy is not enough for long-term growth if strong institutions are missing. In many countries, quick liberalization without good laws and courts led to corruption and powerful groups taking control. According to Campos and Coricelli, outside anchors like the EU and NATO helped some countries, such as Poland, Hungary, and Slovenia, to build trust, attract investment, and carry out more serious reforms.

They also claim that these external anchors pushed local leaders to build better institutions and follow international standards, even when local politics were divided. This idea is especially important for the Western Balkans, where weak governance and old conflicts have slowed down reforms. In this region, the EU's clear demands for things like independent courts and fighting corruption have been a key reason for progress in policy and administration.

Moreover, the European Bank for Reconstruction and Development has been monitoring the institutional and economic development of transition economies since the early 1990s. Its annual transition reports, especially those from the 2010s, emphasize that EU and NATO integration processes have served as external anchors of institutional quality, notably in the Western Balkans and Central and Eastern Europe.

Based on EBRD reports (e.g., 2013, 2017, 2019), countries that advanced considerably toward EU accession (e.g., Croatia, Romania, Bulgaria) or NATO membership showed faster improvements in governance indicators, including the rule of law, regulatory quality, and public sector transparency. The potential for EU membership to build reform momentum, even in politically charged settings, by linking institutional advancement to concrete economic and geopolitical benefits such as access to structural funds, trade preferences, and security assurances.

The EBRD also finds that reforms usually speed up just before a country joins the EU, with new laws, anti-corruption agencies, and more open markets. But after joining, there is a risk that progress can slow down or even go backwards if the pressure from the EU is reduced. For example, Poland and Hungary have faced problems with democracy after joining. In the Western Balkans, countries like Serbia and North Macedonia have only made slow progress, showing that outside pressure alone is not enough if there is no real political will.

A key lesson from the EBRD is that external anchors work best when joining the EU seems realistic, the rules are clear, and civil society is involved. If EU membership looks unlikely or is politically difficult, reforms can lose momentum and leaders may only pretend to make changes rather than truly improve institutions.

2.7.2 Institutional anchoring – case studies from the Balkans

Credible commitment and lock-in effects – Croatia's success with reforms

One of the strongest mechanisms of institutional anchoring is the credible commitment device, in which the desire to join the European Union (EU) or NATO serves as a coercive force that ties domestic reforms to international standards. This has been particularly evident in Croatia, which is an exemplary case of how institutional anchoring can spur state modernization. In the early 2000s, the state made EU accession a core pillar of its political and economic policy, leading to extensive institutional realignment. The EU acquis communautaire, which defines the legal and regulatory standards that a country must meet in order to be a member, served as a reform blueprint across the judiciary, anti-corruption, public administration, and business regulation areas.

Data from the EBRD and World Bank show that between 2001 and 2013, Croatia improved in the rule of law, government effectiveness, and fighting corruption, which helped it join the EU in 2013. The risk of losing EU membership if reforms stopped made these changes more believable and attracted more foreign investment. But after joining, the push for reform slowed down, which is a common problem when outside pressure is removed. Still, Croatia's experience shows that strong external commitment, together with local agreement and good administration, can lead to real change.

Technical assistance and benchmarking - Serbia's incomplete transition

The Serbian experience demonstrates the limitations of institutional anchoring when a strong domestic political will and credible accession deadlines are lacking. Serbia has been an official EU membership candidate since 2012. Although it has received considerable support in the form of pre-accession funds (IPA) and technical assistance, the results of its reforms have been uneven and often superficial. The EU and other international actors have offered advice on judicial reform, media regulation, corruption prevention, and procurement. However, Freedom House (2022) and the EBRD transition reports indicate ongoing issues in media freedom, the independence of the judiciary, and executive intrusion, and imply that reform is either stalled or rolled back due to elite opposition and democratic regression.

In addition, Serbia's strong political and economic relationships with non-EU players like Russia and China weaken the EU's clout and make the political arithmetic of reform more difficult. Empirical research (e.g., Börzel & Schimmelfennig, 2017) has established that in those nations where the EU lacks effective sanctioning power or where elites resort to EU jargon without a commitment to its principles, institutional anchoring becomes symbolic rather than substantive. Therefore, Serbia shows that technical assistance and progress indicators are not adequate on their own - they need to be embedded within a credible and enforceable political structure to overcome elite resistance and deliver substantive institutional development.

Security guarantees and political reforms - North Macedonia's dual anchoring

North Macedonia is an example of how both NATO and EU integration can help drive reforms. For years, the country struggled with the name dispute with Greece and political instability. But when it focused on joining NATO, which happened in 2020, it brought more security and pushed forward reforms in defense, democratic control, and relations between different ethnic groups.

The Prespa Agreement in 2018, which solved the name issue, was a turning point for North Macedonia’s EU path. The promise of EU and NATO membership encouraged leaders to make tough decisions and start reforms in the courts, media, and anti-corruption. Reports show that these changes have improved government and public trust, even though there are still problems with putting reforms into practice and making courts fully independent.

The complementarity between security and economic anchoring in North Macedonia provides important lessons: when geopolitical alignment is combined with institutional incentives, it can strengthen reformist coalitions and exclude blocking elites. However, persistent EU foot-dragging in offering formal accession talks has led to public disenchantment, underscoring that institutional anchoring must be combined with timely, concrete advances to sustain the reform drive and democratic legitimacy.

Market access, domestic ownership - Albania's stopped progress

The case of Albania illustrates how EU market access and pre-accession assistance can encourage and positively influence institutional reforms. However, implementation remains weak and limited. As Börzel (2021) points out, reforms driven primarily by external incentives risk producing “front institutions”. Regional initiatives such as the Multiannual Action Plan (MAP) for a Regional Economic Area aim to complement EU accession by increasing trade, investment, mobility, and digital integration across the Western Balkans. These mechanisms encourage regulatory convergence, innovation, and competition, while strengthening institutional capacity for market governance.

Table 2: Multiannual Action Plan - key elements

MAP Policy Pillar	Core Focus	Institutional Relevance
Trade & Investment	Free movement of goods, services, and capital	Builds regulatory coherence and reduces transaction costs
Mobility	Academic and labor mobility, recognition of qualifications	Improves human capital and mutual institutional trust
Digital Integration	Connectivity, cybersecurity, digital governance	Enhances efficiency and transparency
Innovation & Industry	SME support, green and circular economy	Strengthens institutional adaptability

Source: *Balkan Group Research Center, pp.14.*

However, external frameworks alone cannot substitute for domestic political ownership. The Open Balkan initiative reinforces regional cooperation but cannot replace the transformative role of EU accession, which remains the main driver of institutional convergence (Keil & Arkan, 2014; Noutcheva, 2016; Panagiotou, 2021). Sustainable institutional development, therefore, depends on the synergy between external incentives and credible internal reform coalitions.

2.7.3 Membership of Western Balkan countries in international organizations

European Union

The breakup of Yugoslavia triggered a series of initiatives to establish a new system of relations in the Western Balkans. The EU introduced a 'regional approach' in the region through the Stability Pact for South-Eastern Europe (SPSEE) in 1999. The primary goals were to promote peace, democracy, respect for human rights, and economic prosperity, encouraging stability in the region. The Stabilization and Relationship Process, initiated in June 1999, has remained a cornerstone of EU support for continuing economic, political, and legal reforms in the Western Balkans. The EU's assistance has been multi-faceted, including specific financial aid programs, privileged access to EU markets through autonomous trade preferences, and the establishment of contractual relations through Stabilization and Relationship Agreements signed between 2001 and 2008.

Additionally, the EU has provided technical and financial assistance to facilitate harmonization with the Acquis Communautaire, the body of EU law (*Action Plan for Western Balkans to Address Challenges*, 2022). The process of EU accession and enlargement, along with initiatives such as the Regional Economic Area, the "mini-Schengen" initiative, and the Common Regional Market, represents a new political agenda for the Western Balkans. These efforts aim at enhancing regional cooperation, economic integration, and political stability. In 2017, the prime ministers of the Western Balkans introduced a Multi-annual Action Plan (MAP Area) as part of the Berlin Process initiated in 2014, showing a commitment to advancing regional cooperation and tackling common challenges.

Table 3: WB - EU membership status

Country	**Candidate status**	**Accession Negotiation**
Albania	Candidate since June 2014	Opened July 2022
Bosnia and Herzegovina	Candidate since Dec 2022	Not opened yet (preconditions ongoing)
North Macedonia	Candidate since 2005	Opened July 2022
Kosovo	Potential candidate/Kosovo submitted its application for EU membership on 15 December 2022	No formal negotiations yet
Montenegro	Candidate since 2010	Opened June 2012
Serbia	Candidate since 2012	Opened January 2014

Source: *Own elaboration based on European Commission Enlargement Package 2025 reports (European Commission, 2025).*

WTO

The integration of the Western Balkans into the global economy has been facilitated by institutional partnerships, especially with the World Trade Organization (WTO), established in 1995 after the GATT (1974). This organization promotes free, rules-based multilateral trade and covers 96% of world trade. Its institutional and legal framework sets the rules for international trade relations, emphasizing transparency and mutual benefit for nations with different levels of development.

For Western Balkan countries, joining the WTO means agreeing to follow international trade rules and improve their own institutions. This can help these countries export more, especially in sectors where they can be more competitive, and it encourages them to make their laws and regulations more similar to those in other countries.

Being part of the WTO also supports the process of joining the EU, because it helps the region become part of the global trading system. This can make the economies of the Western Balkans more stable and competitive, and it encourages long-term improvements in their institutions.

Table 4: WTO Regional Integration Pillars

Institutional Mechanism	Core Function	Relevance for Western Balkans
WTO Membership	Reduces trade barriers, ensures rules-based competition	Strengthens policy credibility and investor confidence
EU Pre-Accession & IPA Funds	Regulatory alignment, judicial reform	Improves institutional quality and governance effectiveness
Regional Integration (CEFTA/Open Balkan)	Facilitates free trade and labor mobility	Encourages intra-regional institutional convergence

Source: *Own elaboration.*

Table 5: WTO Membership Status 2025

WTO Membership Current Status 2025					
ALB	**BIH**	**KOS**	**MKD**	**MNE**	**SRB**
Member 8 September 2000	Current status in the accession process	Expression of interest in the membership application	Member 4 April 2003	Member 29 April 2012	Current status in the accession process

Source: *Own elaboration based on Article XI.1 of the WTO*.

Looking at the table, we see that only Albania, North Macedonia, and Montenegro are members of the WTO, while Serbia, Kosovo, and Bosnia and Herzegovina are still negotiating. This shows how different the situation is from country to country. Over the past 20 years, the idea of joining the EU has been a strong driver of change in the region. However, progress has been uneven, and many difficulties remain, both because of local problems and because the EU itself has not always offered clear support. The process of adopting European laws and values is still ongoing.

IMF

Research has shown that adherence by WB countries to international markets and organizations is crucial, as it affects direct and indirect economic growth and value (Ilahi et al., 2019). The International Monetary Fund (IMF) plays a crucial role in ensuring macroeconomic stability and supporting institutional reforms in the Western Balkans. The International Monetary Fund (IMF) is an organization comprising 190 countries collaborating to promote global monetary cooperation, ensure financial stability, facilitate international trade, encourage employment, foster sustainable economic growth, and alleviate worldwide poverty (IMF, 2022).

Being part of the IMF has helped Western Balkan countries connect better with the global economy and improve things like fiscal discipline and transparency. For example, service exports such as tourism have grown in Albania, Montenegro, and Serbia. However, problems like informality and corruption have limited these benefits. In many cases, weak governance means that the positive effects of IMF membership are not fully felt in the region.

The data makes it clear that not all Western Balkan countries have the same access to financial resources or the same ability to attract foreign investment.

Albania and Montenegro both face large trade deficits, with Albania at -8.9 and Montenegro at -13.8. Kosovo and Serbia have smaller deficits, while Bosnia and Herzegovina receives the largest share of IMF resources among the group.

In the Western Balkans, attracting investment is still difficult because of unstable public administration, changing government policies, and ongoing problems with informality and corruption. These issues make investors hesitant and slow down economic growth in the region. I will return to these challenges later in this work

Table 6: IFM membership of the Western Balkans and the countries' financial profiles

Country	Date of IMF membership	Number of arrangements since membership	Article IV / Country Report (latest)	Projected real GDP growth (%)	Projected consumer prices (%)	Quota (SDR mn)	SDR holdings (SDR mn)	Outstanding purchases & loans (SDR mn)	Current account balance (% GDP)	Notes
Albania	15-Oct-91	8	23-Dec-25	3.6	2.8	139.3	204.92	26.3	-2.8	GDP/CPI are 2026 projections; CA is 2025 projection.
Bosnia and Herzegovina	14-Dec-92	6	4-Sep-25	2.7	2.6	265.2	2.78	36.99	-4.1	CA from 2025 Article IV press release/staff report.
Montenegro	29-Jun-09	1	20-Nov-25	3.2	2.3	60.5	69.15	0	-18	Outstanding credit: none (as of Sep 30, 2025). CA is 2025 expectation.
North Macedonia	14-Dec-92	9	6-May-25	3.2	3	140.3	0.2	203.44	-2.9	CA taken from Article IV press release table (line 799+).
Kosovo	18-Jan-07		23-Dec-24	4	2.7	82.6	125.51	142.07		Arrangements/CA not shown in IMF 'At a Glance'; credit/SDR from IMF finances.
Serbia	14-Dec-92		10-Jul-25	3.6	4	654.8	2.43	0		At-a-glance page omits SDR/credit; IMF finances show no outstanding credit (as of Sep 30, 2025).

Source: *Own elaboration based on the IMF 2025.*

Foreign policy and the common security relationship to the Western Balkans (PESD and NATO)

Since the dissolution of the former Yugoslavia, the EU and other Western partners have been actively involved in preserving stability in the Western Balkans. Through its Common Security and Defense Policy, the EU has become a key factor in regional security cooperation.

In the early 21st century, the region underwent considerable progress in peace and geopolitical stability. Active EU engagement, combined with NATO military operations, provided more than a decade of relative security in the Western Balkans (Mazurek, 2013).

In 1995, NATO stressed the imperative of including more countries in a community based on sustainable values and institutions in its Enlargement Study. The study emphasized that NATO's expansion would safeguard the freedom and security of all members (NATO, 1995). In the Western Balkans, the journey toward NATO membership commenced through the Partnership for Peace (PfP), a bilateral cooperation program established at the NATO Summit in January 1994. PfP served as a joint framework between NATO and non-NATO countries in Eastern Europe or the post-Soviet space.

NATO also provided training programs and reform tools aligning defense sectors with alliance standards (Kříž & Stixová, 2012). The various countries of the Western Balkans have realized and fulfilled at different levels and deadlines the standards necessary to become members of this organization. Therefore, their membership took place in different periods; for example, Croatia and Albania joined in 2009, while Montenegro joined in 2017. North Macedonia became a member of the organization in 2020 after resolving the name conflict with Greece.

Furthermore, Serbia continues to have a fragile relationship due to NATO's intervention in 1999 and its role in the quest for Kosovo's independence. Bosnia’s NATO accession remains blocked by political divisions mirroring Serbia’s neutrality. Kosovo aspires to NATO membership and continues alignment efforts (MFA, 2022).

Table 7: Membership of Western Balkan states in NATO

NATO MEMBERS	
Albania	1st April 2009
Montenegro	5th June 2017
North Macedonia	27th March 2020

Source: *Own elaboration based on the North Atlantic Treaty Organization, 2025.*

2.7.4 Anchors in the Western Balkans: why effects may be conditional and uneven

EU and NATO integration have given countries in the Western Balkans strong reasons to reform their institutions, but the results have not been the same across the region. These external incentives work best when there is a real chance of joining, clear conditions, and enough local capacity to make changes happen. In places where politics are divided or institutions are weak, reforms commonly remain on paper and do not lead to real change. The long and uncertain process of joining the EU or NATO can also make people lose trust in reforms, leading to only partial or symbolic changes. Because of this, EU and NATO membership have not always led to the same results across the region. Their impact depends a lot on local political and economic conditions.

This motivates the hypothesis that EU and NATO membership - and progress toward them - plays a statistically significant but conditional function in shaping economic development outcomes in the region.

Hypothesis 5: EU & NATO membership/candidacy play a significant role in securing the economic development of the Western Balkans.

2.8 Synthesis of the Literature, Research Gap, Research Hypotheses

2.8.1 What the literature explains well

The literature reviewed in Chapters I and II converges on several robust and widely supported findings. First, there is a strong empirical consensus that institutional quality is a fundamental determinant of long-run economic growth, operating through channels such as investment incentives, productivity, fiscal capacity, and market efficiency. Measures of government effectiveness, rule of law, and corruption control consistently show positive, statistically significant relationships with income levels and growth rates across countries and over time.

Another key point is that changing institutions is not easy, because history matters a lot. The past—whether it is a legacy of socialism, conflict, or other systems—still shapes how institutions work today. This is especially true in countries like those in the Western Balkans, where old habits and informal rules are still strong even after big political changes.

Research also shows that violent conflict has a deep and permanent impact on institutions and the economy. War weakens the state, damages infrastructure and human capital, and makes it harder for people to trust the government. The negative effects of conflict can last for many years, even after the fighting stops.

Finally, many studies point out that connections with the EU and NATO can help countries improve their institutions. These external partners encourage reforms and can help keep governments on track, especially in countries that are still building their economies and institutions.

2.8.2 What remains unresolved?

Even with all this progress, some important questions are still open. For example, it is not clear which aspects of institutional quality matter most for growth across different countries and contexts. Researchers still debate whether fighting corruption, improving government, or strengthening the rule of law is most important, especially in places with weak states and a history of conflict.

Another unresolved issue is about timing. We do not know whether better institutions lead to rapid economic growth or whether the effects only show up after many years. This is especially uncertain in countries where old institutions are slow to change.

There is also little research on how the effects of conflict and the influence of the EU or NATO work together. We certainly do not know if joining these organizations can help overcome the problems caused by preceding conflicts, or if they just hide deeper issues with institutions.

Most studies compare many countries at once and often ignore the special challenges faced by regions like the Western Balkans, where the political and economic situation is very complex.

2.8.3 Specific research gap for the Western Balkans

The Western Balkans provides a unique context for examining how institutions affect economic growth due to its experience with post-socialist transition, periods of conflict, and paths toward EU and NATO integration. While some research exists on individual countries in the region, few studies examine the combined effects of these factors across all Western Balkan countries as a group, making this a significant gap in the literature.

In particular, there is a lack of research that uses data from all Western Balkan countries since 1990 to study:

- the growth effects of institutional quality,
- the relative importance of specific institutional dimensions,
- the conditioning role of conflict exposure, and
- the moderating impact of EU and NATO integration.

This dissertation directly confronts this research gap by investigating how various institutional factors, conflict exposure, and progress toward EU and NATO integration interact to affect economic growth in the Western Balkans. It uses data from all countries in the region and adopts an approach customized to their specific historical and political conditions.

2.8.4 Logic of hypothesis construction and the hypotheses

The hypotheses developed in this study follow directly from the theoretical framework outlined in Chapter I and the empirical and historical evidence reviewed in Chapter II. Chapter I established institutions as the central mediating variable linking political economy structures to economic outcomes, emphasizing persistence, credibility, and enforcement. Chapter II demonstrated that in the Western Balkans, institutional development has been shaped by three interacting forces: deep historical legacies, violent conflict, and externally imposed reform incentives.

Economic growth in the Western Balkans cannot be explained just by looking at institutions at one point in time. The relationship is complex and depends on history, conflict, and outside influences. The research questions in this study are meant to find out not only if institutions matter, but also how and under what conditions they help the economy grow.

Based on the review of literature and identified research gaps in Chapters I and II, the dissertation formulated the following hypotheses:

Hypothesis 1: *Institutional quality played a positive role in the economic development of the Western Balkans.*

Hypothesis 2: *Among institutional quality dimensions, corruption control and government effectiveness have the most significant impact on the economic development of the Western Balkans.*

Hypothesis 3: *The present state of the quality of institutions in the Western Balkans was determined by the historical persistence of institutions and the historical legacy of the Western Balkans.*

Hypothesis 4: *Former military conflicts in the Western Balkans still affect the relationship between institutional quality and economic growth.*

Hypothesis 5: *EU & NATO membership/candidacy play a significant role in securing the economic development of the Western Balkans.*

CHAPTER III. METHODOLOGICAL FRAMEWORK AND EMPIRICAL STRATEGY

3.1 Purpose and Positioning of the Empirical Strategy

This chapter develops the empirical strategy used to examine the relationship between institutional quality and economic growth (as a measurable proxy for development in the Western Balkans. Building directly on the theoretical framework established in Chapter I and the empirical synthesis presented in Chapter II, it translates the core conceptual arguments into a coherent econometric analysis that will be implemented in Chapter IV, with results and their discussion.

My main aim is to see if and how institutional quality genuinely shapes development in the Western Balkans, and to find out how strong this effect is in both statistical and practical terms. I pay special attention to the region's unique situation, including its history of transition, conflict, and the ongoing process of building strong states. I want to go beyond just showing correlations and instead understand what is actually driving development here.

I have chosen this approach because earlier research has left some important questions open. As I discussed in Chapter II, we know that institutions are important for long-term development, but it is difficult to show clear cause and effect. This is especially true in countries like those in the Western Balkans, where institutions are still being rebuilt after conflict and transition. Often, new laws are passed but not fully enforced, and it takes time for better governance to make a real difference in people's lives. By using a dynamic panel model with fixed effects and lagged variables, I try to deal with these problems and separate the short-term changes from the deeper, long-term impact of institutions.

I also want to make sure that my theory, research questions, and methods are all linked. To measure institutional quality, I use both an overall average and each governance indicator on its own, as described in Chapter II. I look at how different types of institutions, the effects of past conflicts, and outside factors like EU and NATO integration shape development. Each variable is connected to a specific question I want to answer. For example, I use the average index to see if the general quality of governance matters for growth. At the same time, I look at indicators like Government Effectiveness and Control of Corruption to understand how specific parts of governance influence the economy. By explaining how I build these variables and models, I set the stage for the detailed analysis in Chapter IV.

3.2 Sample Definition

3.2.1 Country coverage

This study examines the relationship between institutional quality and economic development in the Western Balkan region, using a balanced country-level panel covering the period 1990-2021, subject to data availability at the variable level. For this dissertation, the Western Balkans are defined as Albania, Bosnia and Herzegovina, North Macedonia, Montenegro, Serbia, and Kosovo, consistent with the European Union's political and institutional classification.

The focus on the Western Balkans is motivated by both theoretical relevance and empirical richness. Over the past three decades, the region has been among the most politically and economically unstable parts of Europe. The dissolution of Yugoslavia and the collapse of Albania's communist regime did not mark the end of transition but rather its beginning. The subsequent emergence of new states, repeated regime changes, unresolved sovereignty issues, and episodes of violent conflict produced an environment in which institutional reform has been uneven, contested, and frequently disrupted (Bonomi & Uvalić, 2019).

From a geographical and geopolitical perspective, the Western Balkans occupy a strategically significant position at the intersection of Central, Eastern, and Southern Europe. The region's heterogeneous landscapes, ethnic composition, and cultural legacies are mirrored in substantial variation in socio-economic outcomes, political systems, and institutional quality (Lange et al., 2017). This heterogeneity within a relatively compact geographic and historical setting makes the region particularly well-suited for studying how institutional differences translate into divergent development trajectories under broadly similar external conditions.

The Western Balkans also represent an optimal context for analyzing institutional change under external anchors. The region is internally divided among EU member and non-member states, EU candidate and potential candidate countries, and NATO members and non-members. This variation allows the empirical analysis to examine whether and how external integration frameworks condition the institutional quality-growth relationship, a central theme developed in Chapter II (Silander, 2019).

While Balkan countries differ in religion, language, and national identity, they share overlapping historical institutional legacies shaped by Ottoman, Austro-Hungarian, and Yugoslav governance systems. These layered legacies produced a fragile equilibrium of coexistence and conflict, which continues to shape institutional performance today. Studying the Western Balkans as a region, therefore, allows the dissertation to isolate institutional mechanisms operating under persistent historical constraints, rather than treating countries as independent, context-free observations.

Based on these considerations, the core empirical sample consists of six Western Balkan countries (Albania, Bosnia and Herzegovina, North Macedonia, Montenegro, Serbia, and Kosovo). To strengthen identification and benchmarking, the empirical analysis additionally incorporates a reference group of Central, Southern, and Southeastern European countries - specifically Austria, Slovenia, Croatia, Hungary, Italy, Greece, Bulgaria, Romania, and Turkey.

The European reference group serves as a benchmarking and identification device, not a counterfactual control group. These countries share some historical and institutional features with the Western Balkans, such as socialist legacies and EU-centric reforms, while exhibiting divergent post-transition trajectories. This creates valuable variation in institutional quality and income levels beyond what is available within the Western Balkans.

From an econometric perspective, the reference group improves identification of long-run institutional effects by expanding cross-sectional heterogeneity, which is particularly important given the slow-moving nature of institutions and the dominance of between-country variation observed in some of the estimated specifications. Without the reference group, estimates would rely exclusively on within-country variation over time, which is limited for governance indicators and risks understating long-run institutional effects.

At the same time, the reference group is not perfectly homogeneous, and this heterogeneity must be acknowledged explicitly. Differences in initial income levels, timing of EU accession, exposure to conflict, and reform sequencing mean that the reference group should not be interpreted as representing a single development path or policy benchmark. Instead, its role is to provide comparative structure, allowing the analysis to distinguish Western Balkan-specific constraints from broader post-transition dynamics.

The inclusion of Turkey merits particular attention. As the successor state to the Ottoman Empire, Turkey serves as a critical historical benchmark for assessing long-run institutional persistence in the region. At the same time, Turkey is a major regional economic and political power and a long-standing EU candidate country, making it uniquely positioned to capture the interaction between imperial legacies, partial Europeanization, and contemporary institutional dynamics. Including Turkey, therefore, strengthens the analysis of historical path dependence and external anchoring effects, without diluting the core focus on the Western Balkans.

Kosovo constitutes a special case within the sample due to its late declaration of independence and delayed inclusion in international statistical frameworks. Institutional quality indicators and some macroeconomic variables for Kosovo are available only from 2008 onward. Some key data are missing altogether. In light of this, Kosovo had to be eliminated from the econometric regressions.

I would like to stress that the regional focus enables the dissertation to move beyond purely national narratives and to capture how institutional quality interacts with history, conflict, and external incentives at a regional level - an approach increasingly emphasized in European policy analysis and development economics (Baumol, 1972; European Commission, 2008).

3.2.2 Time coverage

The empirical analysis covers the period 1990-2021, subject to data availability by country. This window is deliberately chosen to capture the full post-socialist and post-conflict transition phase of the Western Balkans, rather than short-run growth episodes or pre-transition institutional configurations.

The starting point around 1990 coincides with the collapse of socialist systems across the region, the disintegration of Yugoslavia, and the onset of fundamental political and economic restructuring. This period marks a critical institutional juncture during which new constitutional frameworks, market institutions, and governance structures were formally introduced, often amid conflict, state fragmentation, and limited administrative capacity.

It is important to note, however, that the availability of institutional quality indicators constrains the effective estimation window for some specifications. In particular, the Worldwide Governance Indicators (WGI) are available only from 1996 onward. Moreover, prior to 2002, WGI data were reported biannually (1996, 1998, 2000, and 2002), while annual data are available from 2002 to 2021.

To preserve time-series continuity and maximize the number of usable observations in panel estimations, missing annual values for the pre-2002 period were interpolated using linear interpolation between adjacent observations (i.e., taking the mean of the preceding and following available years). This procedure follows common practice in applied panel studies using governance indicators and is explicitly accounted for in robustness checks and sensitivity analyses.

The endpoint in 2021 reflects a trade-off between theoretical relevance and data availability. Extending the sample beyond 2021 would substantially reduce the availability and comparability of institutional indicators, particularly for governance measures derived from perception-based sources. At the same time, the chosen horizon encompasses several key phases emphasized in Chapter II: post-conflict reconstruction, EU accession negotiations, the global financial crisis, the spillovers of the Eurozone crisis, and the COVID-19 shock. This allows institutional effects to be examined across both "normal" and stress periods, strengthening the interpretation of long-run versus short-run dynamics.

Importantly, the selected time span is consistent with the theoretical argument that institutions affect development through slow-moving, cumulative mechanisms, rather than immediate growth responses. A shorter sample would risk conflating delayed institutional payoffs with institutional irrelevance.

3.2.3 Unit of analysis

The unit of analysis is a country-year panel, where each observation corresponds to a specific country in a given year. The dataset is unbalanced, reflecting differences in data availability across countries and indicators, particularly in the early transition years. For obvious reasons, Kosovo, following its declaration of independence, had to be left out due to data missingness.

An unbalanced panel is appropriate for two reasons. First, imposing a balanced structure would require discarding a substantial amount of valid information, especially for smaller or later-forming states. Second, modern dynamic panel estimators used in Chapter IV are well-suited to handling unbalanced panels, provided that missingness is not systematically related to the error term.

All estimations explicitly account for unobserved country-specific heterogeneity and temporal dynamics, ensuring that differences in sample length do not bias the core results. Where relevant, robustness checks are conducted on restricted subsamples to confirm that key findings are not due to the differences in coverage.

3.3 Data Sources and Construction

This study relies on a harmonized country-year panel dataset covering the Western Balkans and selected comparator economies over the period 1990-2021. The data are drawn from internationally recognized sources to ensure comparability, transparency, and replicability of results.

Economic outcome variables are obtained primarily from the Penn World Table (PWT) version 11.0 (Feenstra et al., 2015), which provides consistent measures of real GDP per capita, investment shares, government consumption, and human capital indices. These data are widely used in cross-country growth regressions and are suitable for both static and dynamic panel estimation.

Institutional quality indicators are sourced from the World Bank Worldwide Governance Indicators (WGI) database (World Bank 2025, Kaufmann & Kraay, 2024). The WGI provides six distinct governance dimensions - government effectiveness, control of corruption, rule of law, regulatory quality, voice and accountability, and political stability - measured annually and standardized on a common scale. These indicators are particularly appropriate for medium- to long-run institutional analysis and are extensively used in the empirical literature on institutions and growth.

Trade openness data are taken from the World Development Indicators (WDI), while foreign direct investment stock data are sourced from UNCTAD - UNCTADstat portal. Historical, geographical, and political variables, such as imperial legacies, exposure to conflict, EU and NATO status, and distance to Brussels, are constructed by the author based on historical records, EU documentation, and calculations. Ethnic fractionalization measures are drawn from the Quality of Government (QoG) dataset (Dahlberg et al., 2025)

Given differences in data availability across countries and years - particularly in the early transition period - the resulting dataset is an unbalanced panel. This structure is explicitly addressed in the econometric strategy through the use of fixed effects, dynamic panel estimators, and appropriate diagnostic tests. We also backfilled some of the missing data to obtain more balanced estimates.

3.4 Variables and Measurement

In this section, I explain how the main variables are defined and measured for the analysis. The econometric approach used in Chapter IV directly reflects the theoretical ideas discussed in Chapter II. Specifically, it bridges theory to measurement by detailing how each period—short-term, medium-term, and long-term—guides the selection of empirical strategies. In the short term, the analysis focuses on capturing instantaneous adjustments, while medium-term strategies track transitional dynamics, and long-term methodologies assess the enduring effects of institutional quality on economic development. This structure ensures that each empirical choice corresponds precisely to the theoretical framework, hence facilitating a coherent analysis of the variables in question.

3.4.1 Dependent variable: level of economic development

The primary dependent variable in this study is real GDP per capita in levels, measured as the natural logarithm of real GDP per capita based on data from PWT 11.0. The use of income levels rather than growth rates is deliberate and directly aligned with the theoretical framework of the dissertation, which conceptualizes institutions as deep, slow-moving determinants of long-run economic development rather than as short-run drivers of growth fluctuations.

By looking at GDP per capita levels, I can see how institutions shape long-term income and steady-state outcomes, as discussed in the institutional economics literature. In this view, institutions matter for development because they affect things like investment, productivity, and trust in policies, and these effects build up slowly over time instead of showing up right away.

Dynamic panel specifications incorporate lagged income levels to capture income persistence and conditional convergence dynamics, not short-run growth rates. The inclusion of a lagged dependent variable allows the empirical analysis to distinguish between highly persistent income dynamics and the incremental contribution of institutional quality, while avoiding the conflation of long-run structural effects with transitory shocks. To address potential endogeneity issues, we employ Generalized Method of Moments (GMM) estimators, which are particularly useful in managing the challenges posed by the inclusion of lagged dependent variables. This approach reassures the accuracy of dynamic panel choices and pre-empts common critiques by guaranteeing robust identification through carefully selected instruments.

Logarithmic transformation of GDP per capita ensures scale comparability across countries, reduces skewness, and allows estimated coefficients to be interpreted as semi-elasticities. While growth rates and initial income levels are used descriptively and for robustness checks, log GDP per capita levels remain the core outcome variable throughout the empirical analysis.

This modeling choice is fully consistent with the theoretical framework developed in Chapters I and II, which emphasizes that institutions primarily affect long-run development outcomes and equilibrium income levels, rather than generating rapid or mechanical changes in short-run growth rates.

3.4.2 Institutional quality indicators

Institutional quality IQ is the main explanatory variable in this study. In line with the literature and the study's hypotheses, institutional quality is operationalized in both aggregate and disaggregated forms.

Aggregate institutional quality

An aggregate institutional quality index is constructed as a simple average of the six WGI dimensions in_avg. This composite indicator serves two purposes. First, it captures the overall governance environment faced by economic agents. Second, it provides a parsimonious benchmark for assessing whether institutions matter for growth before decomposing effects across dimensions.

Using an aggregate index at the outset is justified by the high correlation among governance dimensions and by theoretical arguments suggesting that institutional complementarities may be more important than individual components. For instance, the rule of law can enhance regulatory quality by providing a stable legal framework that ensures fairness and transparency in market operations. This synergy between legal structure and regulatory practices illustrates how governance components work together to promote economic development more effectively than they could individually. This aggregate measure is used in baseline specifications and dynamic models to test the dissertation's main hypotheses.

Disaggregated institutional dimensions

To operationalize Hypothesis 2, institutional quality is also decomposed into its six constituent dimensions:

- Government Effectiveness captures the quality of public services, bureaucratic capacity, and policy implementation. It affects growth through improved policy execution and reduced administrative frictions.
- Control of Corruption measures the extent to which public power is exercised for private gain. High corruption deters investment and distorts resource allocation.
- Rule of Law shows belief in contract enforcement, property rights, and judicial effectiveness. This dimension is theoretically linked to long-run investment and productivity.
- Regulatory Quality captures the ability of governments to formulate and implement sound market-supporting policies. It affects entry barriers, competition, and private sector development.
- Voice and Accountability measures political participation, media freedom, and civil liberties. Its expected growth impact is indirect and potentially non-linear.
- Political Stability captures the likelihood of political violence or instability, which influences risk perceptions and investment horizons.

Each dimension is measured using standardized WGI scores. Measurement caveats include perception bias and limited short-run variability. These issues are addressed through lag structures, dynamic estimation, and robustness checks in Chapter IV. Notably, an estimated reliability ratio of approximately 0.85 for the WGI data suggests that while perception bias exists, it is not overly pronounced, and our methodological adjustments effectively mitigate its impact.

Additional PCA-based institutional instruments: contemporary quality vs. historical legacy

This study, apart from the disaggregated WGI indices and their average, employs two distinct PCA-based institutional constructs, each serving a different analytical and identification purpose: a contemporary institutional quality index (IQ_pca) derived from World Governance Indicators (WGI), and a historical Institutional Legacy Index (ILI) capturing more deep-rooted institutional persistence.

First, IQ_pca is constructed using Principal Component Analysis applied to the six WGI dimensions - control of corruption, rule of law, regulatory quality, government effectiveness, political stability, and voice and accountability. Rather than relying on individual governance indicators, which are highly correlated and may introduce multicollinearity, PCA extracts their shared variance into a single latent factor representing overall contemporaneous institutional quality. This procedure reduces dimensionality, improves estimation efficiency, and allows institutional quality to be treated as a unified construct in both static and instrumental-variable specifications.

Second, and conceptually distinct, the Institutional Legacy Index (ILI) is constructed via PCA on a set of time-invariant or slow-moving historical and structural variables, including imperial legacies (Ottoman, Austro-Hungarian, Yugoslav), interwar statehood arrangements, historical exposure to conflict, and ethnolinguistic fractionalization. Unlike IQ_pca, the ILI is not a measure of current governance performance, but rather a proxy for latent institutional inheritance - the historically embedded constraints, norms, and administrative traditions that shape how formal institutions function over time. Raw historical dummies are insufficient, As they impose discrete classifications on what is in reality a cumulative, overlapping, and path-dependent process. PCA provides a principled way to summarize these intertwined historical influences into a single continuous index capturing long-run institutional persistence.

This distinction is particularly important for the Western Balkans, where contemporary institutional outcomes reflect not only post-transition reforms and EU-related conditionality, but also deep historical legacies stemming from fragmented sovereignty, late state formation, socialist governance, and post-conflict reconstruction. By incorporating IQ_pca as a measure of present-day institutional quality and ILI as an external instrument anchored in historical persistence, the empirical framework explicitly separates current institutional performance from its deep historical determinants. This dual-PCA strategy strengthens identification in the

IV estimations, mitigates concerns of reverse causality, and ensures that estimated effects of institutions on economic development are not conflated with unobserved, time-invariant historical heterogeneity.

3.4.3 Control variables

I include control variables to make sure I am measuring the effect of institutions, not other factors that additionally influence growth. These controls are grouped by their main economic role.

- Human capital is measured using the PWT human capital index (hc), capturing education-based productivity differences based on average years of schooling and returns to education from PWT 11.0.
- Openness is proxied by the log of trade openness (exports plus imports over GDP - lnopen), reflecting integration into global markets,
- Investment and capital formation are captured through the share of gross fixed capital formation in GDP (csh_i from PWT 11.0),
- Macroeconomic structure is controlled for using the government consumption share and FDI stock (csh_g from PWT 11.0), as well as the log of FDI taken from UNCTAD data sets. Recognizing the possible risk of multicollinearity among control variables and their overlap with institutional variables, a variance inflation factor (VIF) check was conducted. This step confirms that our specifications are robust and not adversely affected by collinearity, providing greater confidence in isolating the unique contributions of institutional quality.

These variables are included as controls, not as alternative explanations, because they are ways that institutions affect the economy. Including them helps make sure the results for institutions are not biased by missing other important factors, the so-called omitted variable bias.

3.4.4 Description of variables

Table 8 summarizes all variables used in the empirical analysis, including dependent variables, institutional indicators, control variables, and instruments. The table also identifies data sources and construction methods. This structure directly maps onto the econometric models estimated in Chapter IV, assuring explicitness and internal consistency

Table 8: Key variables

No.	Category	Code	Variable	Variable Description	Source
1	Dependent Variable	lny	GDP per capita (log)	Log of Real GDP per capita	PWT 11.0
2	Institutional Quality	in_goveff	Government Effectiveness	Quality of public services, policy formulation, and implementation	WGI (World Bank)
3	Institutional Quality	in_cc	Control of Corruption	Extent to which public power is exercised for private gain	WGI (World Bank)
4	Institutional Quality	in_rol	Rule of Law	Confidence in the legal framework and enforcement	WGI (World Bank)
5	Institutional Quality	in_reg	Regulatory Quality	Ability to develop and implement sound policies	WGI (World Bank)
6	Institutional Quality	in_voice	Voice and Accountability	Citizen participation and freedom of expression	WGI (World Bank)
7	Institutional Quality	in_pol	Political Stability	Likelihood of political instability or politically motivated violence	WGI (World Bank)
8	Institutional Quality	in_avg	Composite Institutional Index	Simple average of six institutional dimensions	WGI (World Bank)
9	Institutional Quality	iq_pca	PCA overall measure of institutions	Principal Component Analysis result on WGI indicators subset	Own calculation
10	Institutional Quality	ILI	Institutional Legacy Index	PCA on a set of time-invariant or slow-moving historical and structural variables, including imperial legacies (Ottoman, Austro-Hungarian, Yugoslav), interwar statehood arrangements, historical exposure to conflict, and ethnolinguistic fractionalization	Own calculation
11	Controls	lnopen	Trade Openness (log)	Log of exports plus imports over GDP	Own calculation
12	Controls	lnfdistock	FDI Stock (log)	Log of foreign direct investment stock	WDI (World Bank)

13	Controls	csh_i	Investment Share	Share of gross fixed capital formation in GDP	UNCTAD
14	Controls	csh_g	Government Share	Share of government consumption in GDP	PWT 11.0
15	Controls	hc	Human Capital Index	Education-based human capital index	PWT 11.0
16	Instruments (History)	ottoman	Ottoman Empire Dummy	Dummy = 1 if the territory was under the Ottoman Empire historically	PWT 11.0
17	Instruments (History)	ah1867	Austro-Hungarian Empire Dummy	Dummy = 1 if the territory was under the Austro-Hungarian Empire historically	Own elaboration
18	Instruments (History)	yug	Yugoslavia Dummy	Dummy = 1 if the country was part of Yugoslavia	Own elaboration
19	Instruments (History)	mw1919	Mid-War Conflict Dummy	Dummy = 1 if the country experienced mid-war conflict (future Yugoslav states)	Own elaboration
20	Instruments (Proximity)	ln_brus_distance	Distance to Brussels (log)	Log of the distance from the capital city to Brussels	Own elaboration
21	Instruments (EU Pressure)	eucand	EU Candidacy Dummy	Dummy = 1 if the country is an EU candidate	Own elaboration
22	Instruments (EU Pressure)	eumem	EU Membership	Dummy = 1 if the country is an EU member	Own elaboration / EU Data
23	Instruments (Security)	nato	NATO Membership	Dummy = 1 if the country is a NATO member	Own elaboration / EU Data
24	Instruments (Ethnicity)	hief_efindex	Ethnic Fractionalization Index	Index measuring ethnic diversity	Own elaboration / EU Data
25	Instruments (Religion)	mus	Muslim Population Dummy	Dummy = 1 if dominant Muslim population	QoG database
26	Instruments (Religion)	orto	Orthodox Population Dummy	Dummy = 1 if dominant Orthodox population	Own elaboration

27	Conflict Indicator	mconflict	Military Conflict Indicator	Dummy for conflict incidence	Own elaboration
28	Regional dummy	wb	Western Balkan dummy	Dummy = 1 if the country is in the Western Balkans	Own elaboration

Source: *Own elaboration.*

3.5 Descriptive Patterns and Stylized Facts

3.5.1 Bivariate patterns: institutions and growth

This subsection shows some basic relationships between institutional quality and economic growth in the Western Balkans. The figures are meant to illustrate general patterns, not to prove cause and effect. They highlight broad trends and help explain why the econometric approach in Chapter IV was chosen. These figures do not establish causality and do not account for factors such as endogeneity, missing variables, or changes over time. Interpret these results as exploratory.

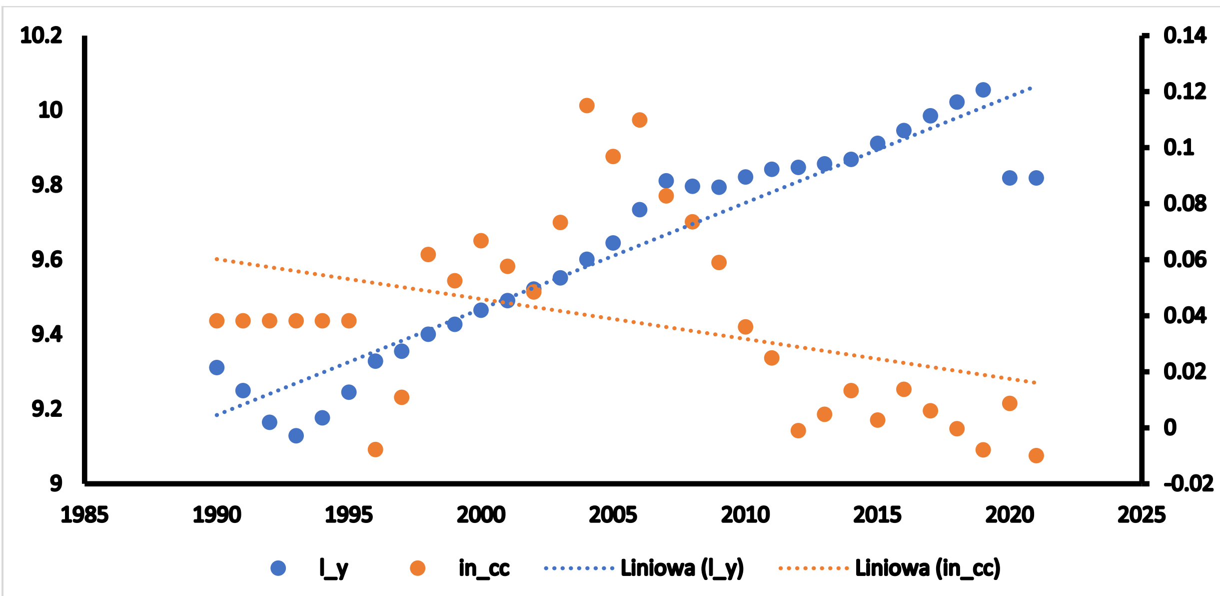


Figure 1: Control of Corruption and Economic Growth

Source: *Own elaboration.*

Figure 1 shows how control of corruption relates to GDP per capita growth. Countries that control corruption better often have higher growth rates, especially after 2000. Still, the data varies and sometimes reverses, so the link is not always clear or consistent over time and across countries. This pattern suggests that corruption control might matter more for long-term growth than for short-term changes, which is why later analysis uses dynamic methods. Like all figures in this section, this one is only for illustration and does not prove causality.

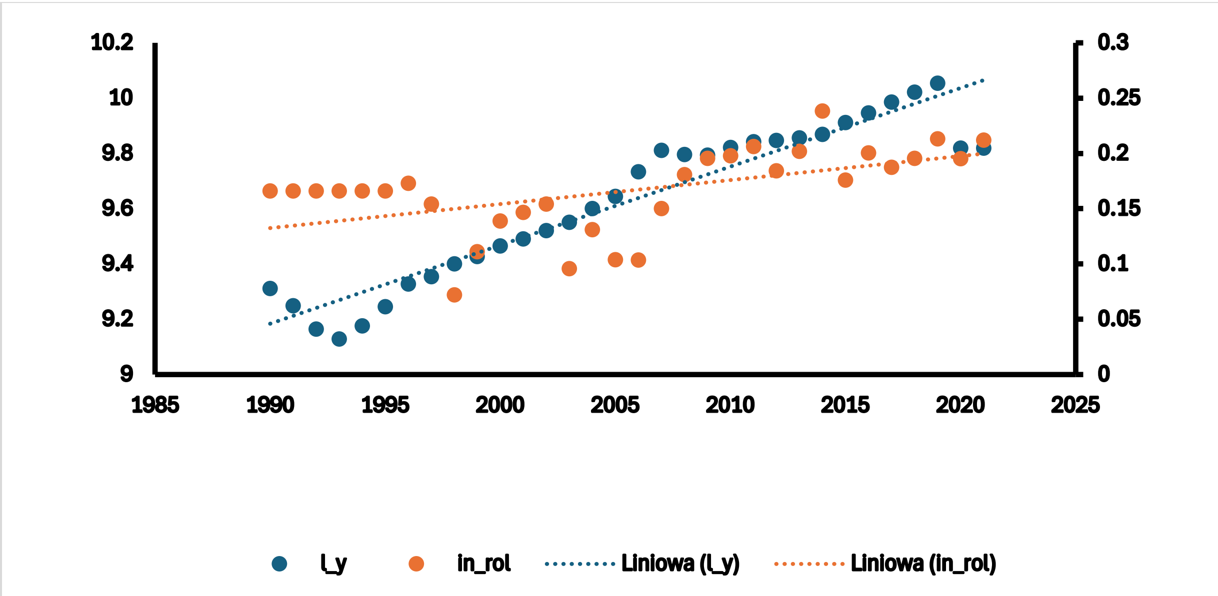


Figure 2: Rule of Law and Economic Growth

Source: *Own elaboration.*

Figure 2 shows that when the rule of law gets stronger, economic growth is usually more stable, especially in countries that have become more politically stable. Still, there are big differences between countries, which means that just improving the legal system is not enough. Other reforms are also needed to turn better laws into real economic progress.

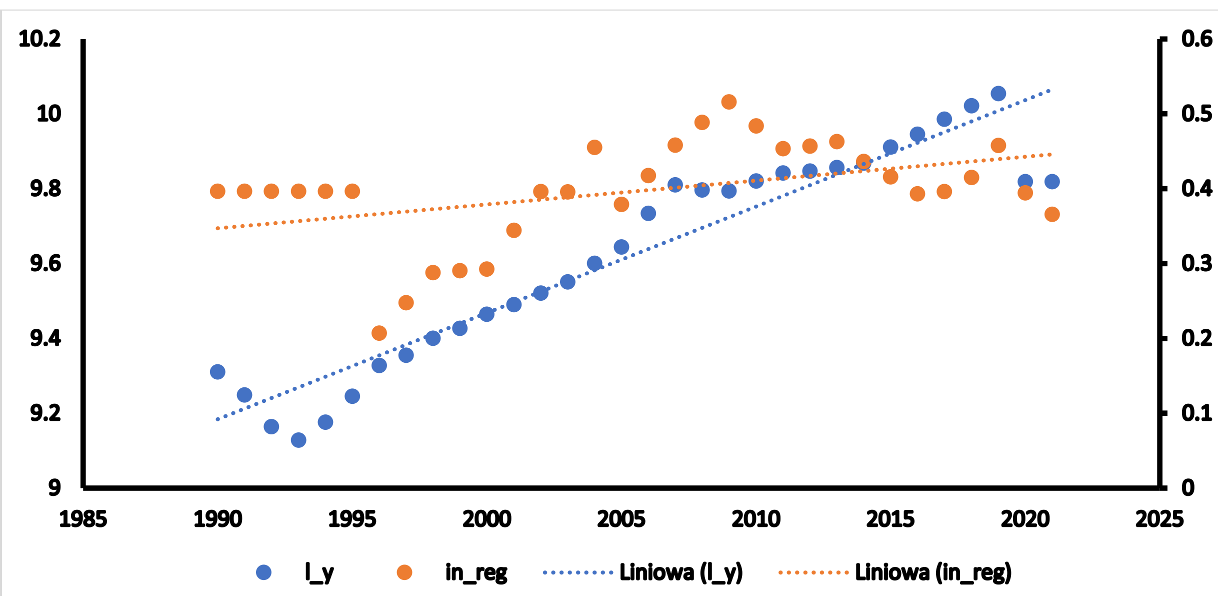


Figure 3: Regulatory Quality and Economic Growth

Source: *Own elaboration.*

Figure 3 shows that better regulations usually go together with higher economic growth, especially when countries are making big changes to join the EU. But this link has become weaker in recent years, which suggests it is not easy to keep regulations working well over time. Some of this may be because of problems left over from the old socialist systems, which have slowed down progress after 2010. It is important to see the difference between quick reforms and real, lasting changes in institutions.

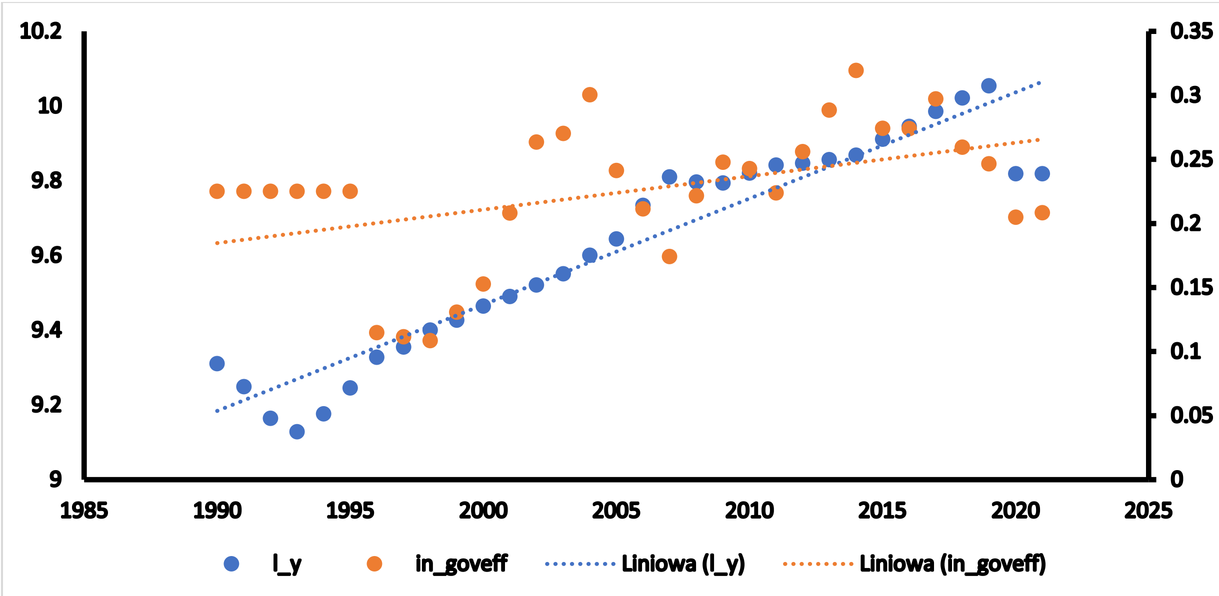


Figure 4: Government Effectiveness and Economic Growth

Source: *Own elaboration.*

Figure 4 shows that better government performance is linked to higher economic growth, but the connection is not simple. When the government works better, growth usually improves, but this often takes time and depends on the overall situation in the country. This means that government effectiveness helps most by making sure policies are put into practice, not by causing fast changes.

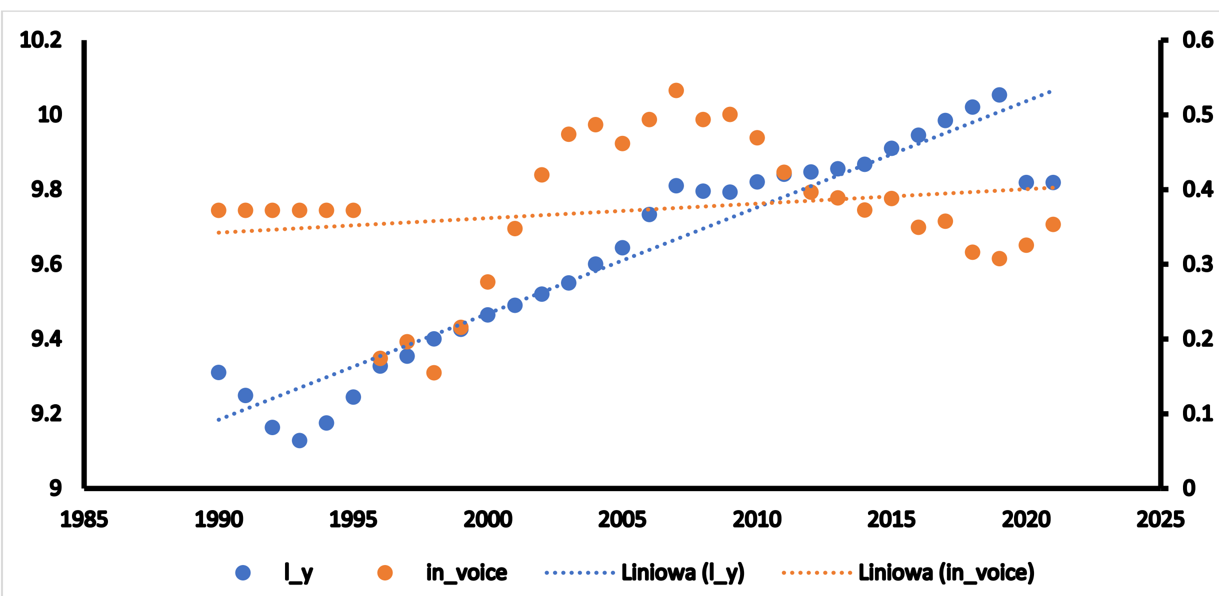


Figure 5: Voice and Accountability and Economic Growth

Source: *Own elaboration.*

Figure 5 shows that more voice and accountability were linked to higher economic growth at the start of the transition, but this link became weaker after 2010. This could mean that political openness helps growth only up to a point, and after that, things like how well the government works and stability matter more. It is important to remember that more democracy does not always mean more growth, and there are trade-offs to think about when making political and economic decisions.

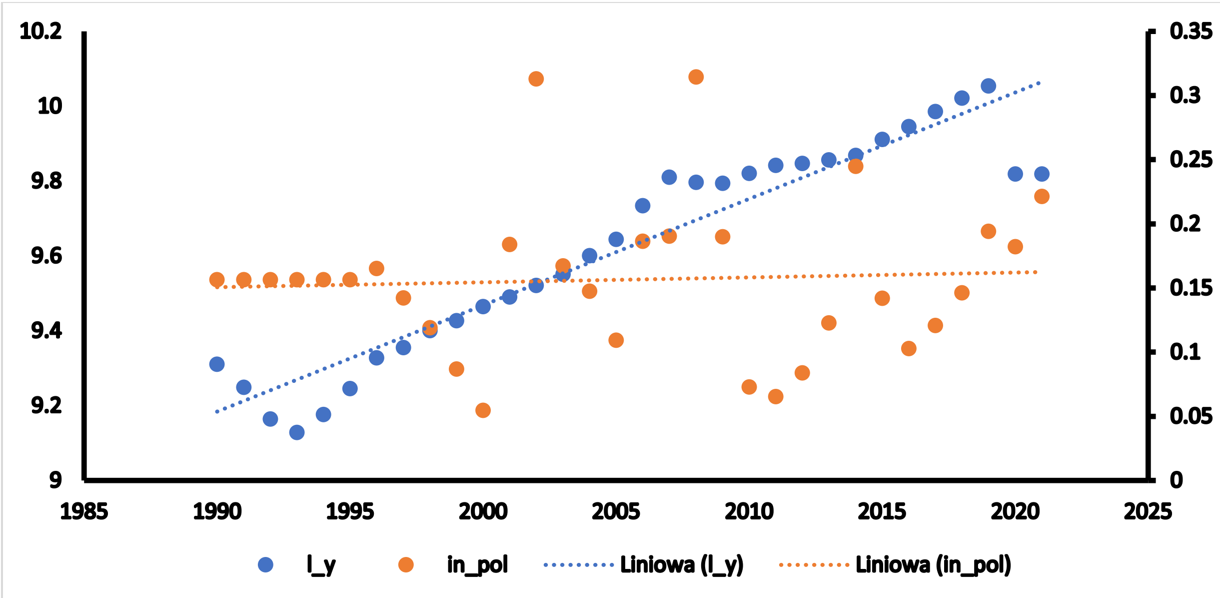


Figure 6: Political Stability and Economic Growth

Source: *Own elaboration*.

Figure 6 shows that political stability often comes with better economic growth, especially after times of conflict. But stability alone is not enough for long-term growth if there are no strong institutions and good policies. This means that while stability is important for development, it is not the only thing that matters.

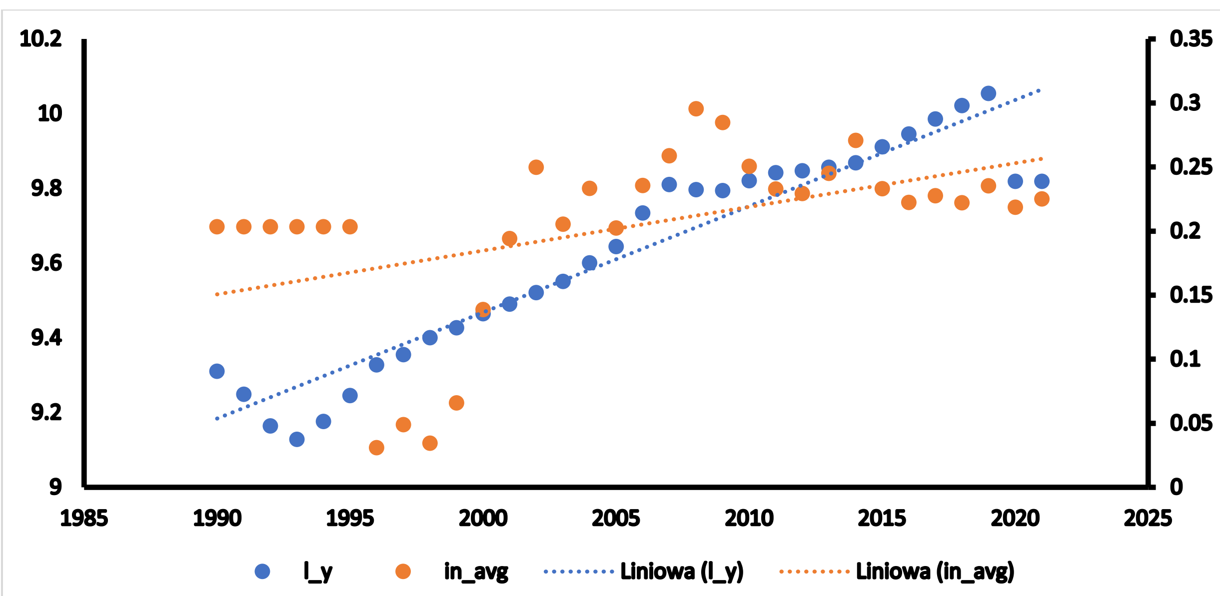


Figure 7: Composite Institutional Index and Economic Growth

Source: *Own elaboration*.

Figure 7 is maybe the most important one here. It shows that overall governance quality is a better sign of economic growth than looking at just one thing like voice, stability, or government effectiveness. However, after 2015, the link between governance and growth became weaker, which raises questions about how long growth can last, lacking further progress in governance. This figure also makes us ask which parts of governance work best together to support growth, which will be looked at more closely in the next analysis.

These stylized facts highlighted above point to a potential relationship between institutional quality and economic performance in the Western Balkans, while simultaneously emphasizing substantial heterogeneity, non-linearity, and potential reverse causality. These limitations showcase the necessity of a dynamic, multivariate, and instrumented econometric framework, which is applied in Chapter IV to identify short- and medium-run institutional effects while handling endogeneity and persistence.

3.5.2 Institutional trajectories and convergence gaps

This part looks at how institutions in the Western Balkans have changed over the long term and whether they are getting closer to European standards. The focus is on showing the main patterns, differences between countries, and how far each country is from the reference group. This helps explain why a more detailed analysis is needed in Chapter IV.

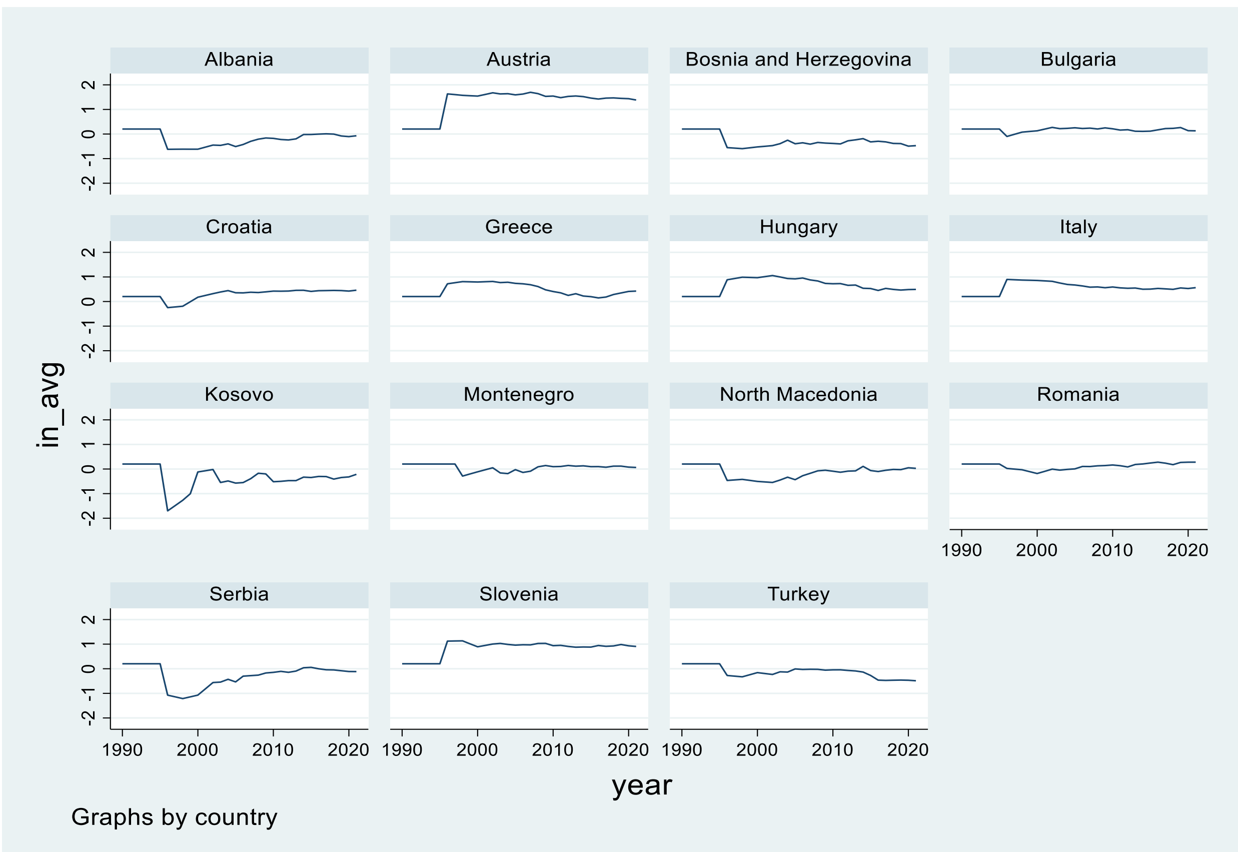


Figure 8: Composite Institutional Index 1990-2021 by countries

Source: *Own elaboration***.**

Figure 8 shows how the overall quality of institutions has changed in the Western Balkans and some reference countries from 1990 to 2021. The index goes from -2 to +2, with higher numbers meaning better governance. There are three main points. First, the Western Balkans started the 1990s with very weak institutions, and things got worse and more unstable during that decade because of war, the breakup of states, and big changes in the system. Second, since the early 2000s, most countries have slowly improved their institutions, helped by peace, rebuilding, and reforms pushed by the EU. These changes come from both local efforts and outside pressure to meet higher standards. Third, even with these improvements, there are still big differences between countries.

In the Western Balkans, Montenegro and North Macedonia have improved their institutions the most steadily, which shows stronger reforms and better management. Albania is also getting better, but it started from a lower level and has had more ups and downs. Bosnia and Herzegovina and Kosovo still struggle with instability and weak institutions because of political divisions, problems after the conflict, and not being able to enforce rules well. Serbia is somewhere in between, with big improvements after 2000 but slower progress in the last decade. Overall, these changes have been slow, not sudden, which fits with the idea of gradual institutional change.

By comparison, countries like Austria, Slovenia, and Greece have kept a high and stable institutional quality the whole time. Bulgaria and Romania have improved their institutions, mostly because of reforms to join the EU. Hungary and Turkey, on the other hand, have seen some decline after 2010. The fact that the Western Balkans are still catching up, while EU countries stay stable, shows that there is still a big gap in governance in Europe.

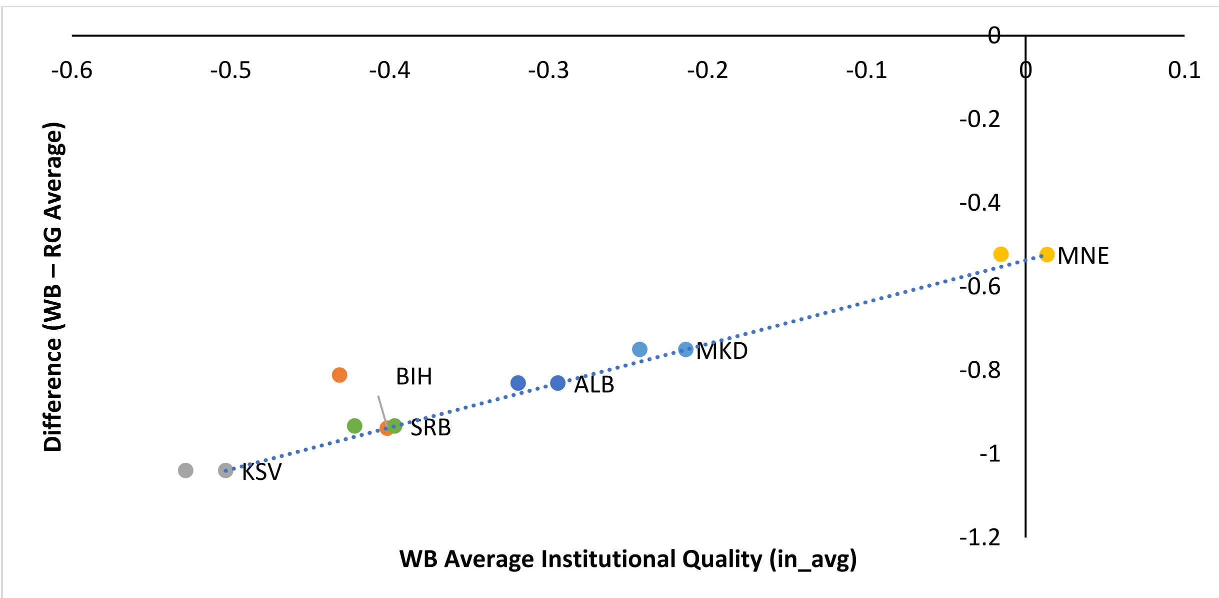


Figure 9: Institutional Quality: Western Balkans vs Reference Group

Source: *Own elaboration.*

Figure 9 compares the average quality of institutions in the Western Balkans to the reference countries. The Western Balkans are still behind, but the slow upward trend means they are catching up, even if progress is uneven. Countries with better institutions are closer to European standards, but none have fully caught up. Montenegro is the closest, while Kosovo is the farthest behind, showing that improvement is not the same everywhere.

Figures 8 and 9 show that while institutional quality in the Western Balkans has improved over time, convergence toward European standards of living has been slow, incomplete, and differentiated across countries. That points to strong institutional persistence, the importance of historical and conflict-related constraints, and the potential conditioning role of external anchors such as EU and NATO integration. These figures should be taken, however, as only an illustration and not as causal relationships, as they do not control for many important aspects, such as reverse causality, omitted variables, and dynamic feedback. As such, they motivate the use of more sophisticated econometric approaches, such as dynamic panel models, instrumental variables, or interaction terms, in Chapter IV to assess the causal impact of institutional quality on economic growth and to test the hypotheses developed in Chapters I and II.

3.6 Baseline Econometric Specification

In this section, I describe the models I use to study how institutional quality shapes economic growth. I explain how each model is set up, what kind of results it gives, and how I check if those results can be trusted. The analysis begins with **simple pooled models, then moves to panel models, and finally to dynamic models, as introduced** in Chapter II.

3.6.1 Pooled OLS and static panel benchmarks

start by using a pooled Ordinary Least Squares (OLS) model. This model looks at how things change across countries and over time, using both differences between countries and changes within each country.

[1]

$$lny_{it} = \beta_0 + \beta_1 IQ_{it} + \beta_2 X_{it} + u_{it} \text{ [1]}$$

where denotes real GDP per capita in country at time , represents institutional quality, and is a vector of control variables. In this model, the term β represents the average increase in GDP per capita credited to a one-unit improvement in institutional quality. Essentially, a higher institutional quality score translates to better governance, bringing about more efficient economic practices and growth.

Equation [1] provides a purely descriptive benchmark. Pooled OLS is simple and transparent. However, it is important to note that it is susceptible to bias, as we will discuss. It implicitly assumes that all unobserved country-specific characteristics are uncorrelated with institutional quality. In institutional analysis, this is implausible. Governance quality is firmly bound to history, geography, culture, and political trajectories. As shown by Knack and Keefer (1995) and Acemoglu, Johnson, and Robinson (2001), pooled OLS estimates in growth regressions are likely biased. This is due to omitted variables and reverse causality. For this reason, pooled OLS results are used only for orientation and comparison, not for causal inference.

To address these problems and better capture differences between countries and over time, I use panel models. Pooled OLS ignores these differences, which can lead to the wrong conclusions. panel models help me give a more accurate and realistic view of how institutions and growth are connected in different countries and years.

3.6.2 Fixed effects (FE) and random effects (RE) models

The FE specification controls for unobserved, time-invariant country characteristics. These include geography, historical legacies, and deep cultural traits. Year fixed effects are included to absorb common global shocks: If year fixed effects are included, the correct specification is:

$$lny_{it} = \alpha + \lambda_t + \beta_1 IQ_{it} + \beta_2 X_{it} + \alpha_i + \lambda_t + \ \varepsilon_{it} \text{ [2]}$$

where $\alpha_i$captures country fixed effects and $\lambda_t$captures time effects in the so-called two-way specification.

In contrast, the RE model assumes that unobserved country-specific effects are uncorrelated with the regressors:

$$lny_{it} = \alpha + \lambda_t + \beta_1 IQ_{it} + \beta_2 X_{it} + \mu_i + \varepsilon_{it} \text{ [3]}$$

The choice between FE and RE is based on the Hausman test (Hausman, 1978). Institutional quality likely correlates with countries' historical, cultural, and political characteristics (North, 1990; Acemoglu, Johnson, & Robinson, 2001). Thus, FE estimates are the main static panel benchmark in this analysis (Wooldridge, 2010; Baltagi, 2021). RE results are included for completeness and comparison only. However, static FE and RE models do not address reverse causality, simultaneity, or persistent dynamics between institutions and growth. The introduction of dynamic panel models, such as Arellano and Bond (1991), deals with these issues by using lagged levels as instruments for differenced errors, creating the conditions aiming at more robust causal inference. Still, this limitation should be noted when interpreting static model results (Arellano & Bond, 1991; Blundell & Bond, 1998).

The FE estimator eliminates all time-invariant country characteristics. This makes it suitable when institutional quality is correlated with deep structural factors—a widely held view in institutional economics (North, 1990; Acemoglu & Robinson, 2012). The RE estimator is more efficient under strict exogeneity, but relies on the assumption that institutional quality is orthogonal to unobserved country traits. This assumption is unlikely to hold in post-socialist and post-conflict settings.

The Hausman test guides the choice between FE and RE. Because institutions and historical-political factors are likely correlated, FE is the preferred panel benchmark. RE results are also reported for completeness.

Despite their advantages, both FE and RE models remain incomplete. They do not address reverse causality between growth and institutions. They also do not capture the dynamic persistence of economic performance emphasized in endogenous growth theory (Barro, 1991; Aghion & Howitt, 1998).

3.6.3 Static IV specification

To deal with the problem that growth and governance can affect each other, I use a Fixed Effects Instrumental Variable (FE-IV) method with Two-Stage Least Squares (2SLS). This approach helps me separate the part of institutional quality that is not influenced by other factors, so I can see more clearly what effect institutions really have on growth.

The first stage is specified as:

$$IQ_{it} = \pi_0 + \pi_1 Z_{it} + \pi_2 X_{it} + \mu_i + \lambda_t + v_{it} \text{ [4a]}$$

The second stage, in turn, is specified as:

$$lny_{it} = \alpha_i + \lambda_t + \beta_1 \widehat{IQ}_{it} + \beta_2 X_{it} + \varepsilon_{it} \text{ [4b]}$$

where Z_{it}denotes external instruments for institutional quality.

FE-IV estimation relaxes the strict exogeneity assumption by isolating variation in institutional quality that is plausibly exogenous. This approach follows a long tradition in the growth institutions literature, most notably Acemoglu, Johnson, and Robinson (2001), who employ historical instruments to identify institutional effects. In this study, FE-IV models are used to assess dimension-specific institutional channels and to complement FE estimates. However, because they remain static and do not account for growth persistence, FE-IV results are interpreted as supporting evidence rather than the main causal estimates.

In this study, FE-IV models are used to assess dimension-specific institutional channels and to complement FE estimates. However, because they remain static and do not account for growth persistence, FE-IV results are interpreted as supporting evidence rather than the main causal estimates.

3.6.4. CRE/Mundlak regressions

The CRE specification, following Mundlak (1978) and Chamberlain (1982), provides an intermediate identification framework between fixed-effects and instrumental-variable estimators, particularly appropriate to contexts with persistent institutional heterogeneity (Wooldridge, 2010). Its primary purpose is to explicitly separate within-country institutional variation from between-country, long-run institutional differences, therefore addressing the central limitation of fixed-effects models when employed to slowly evolving governance variables.

Unlike standard FE estimators, the CRE framework allows historically rooted institutional legacies and other time-invariant characteristics to enter the model directly, while still controlling for correlation between regressors and unobserved country-specific heterogeneity by including country means of all time-varying regressors.

The fixed effects model is useful for controlling for country differences that do not change over time. But it cannot show the impact of deep-rooted factors like history or geography, since these do not vary much within a country. This means that things like imperial history, religion, or distance to Europe are absorbed by the fixed effects and cannot be studied directly. To make the analysis clearer, I combine some of these historical factors into composite indices. This helps me show their overall impact better.

To address this limitation, this chapter supplements the FE analysis with a Correlated Random Effects (CRE) model, following Mundlak's (1978) approach. The CRE specification relaxes the strict exogeneity assumption underlying conventional random effects models by explicitly allowing unobserved country-specific heterogeneity to be correlated with the regressors. This is achieved by augmenting the random-effects model with country-specific means for all time-varying explanatory variables, thereby decomposing the total variation into within-country and between-country components. Formally, the CRE model is specified as:

$$\ln y_{it} = \alpha + \beta X_{it} + \gamma \bar{X}_i + \delta Z_i + \lambda_t + u_i + \varepsilon_{it}, [5]$$

where:

- $\ln\ y_{it}$denotes log GDP per capita,
- $X_{it}$is a vector of time-varying regressors, including institutional quality indicators and standard macroeconomic controls,
- $\bar{X}_i$represents the country-specific means of all time-varying regressors,
- $Z_i$is a vector of time-invariant variables capturing deep institutional legacies (e.g., historical empire exposure, conflict legacy, distance to Brussels, religious composition, and the Institutional Legacy Index, ILI),
- $\lambda_t$denotes year fixed effects capturing common global shocks,
- $u_i$is a country-specific random effect,
- and $\varepsilon_{it}$is the idiosyncratic error term.

The CRE estimator controls for the connection between the variables in the model and country differences, so it gives reliable results even if the usual random effects assumptions are not true. This method also includes the fixed effects model as a special case, which means I can directly compare results for changes within countries and differences between countries.

The CRE framework offers several advantages in the context of institutional analysis. Unlike the FE estimator, the CRE model permits the inclusion of historically determined variables - such as imperial legacies, long-run conflict exposure, and geographic characteristics - without relying on implausible within-country variation. Furthermore, coefficients on capture within-country, short- to medium-run relationships. In contrast, coefficients on and capture persistent, cross-country structural differences. One has to note that time-invariant instruments and deep historical determinants are economically meaningful primarily in the cross-section. The CRE framework allows these variables to contribute to identification without being mechanically eliminated by country fixed effects. Finally, the CRE approach fits naturally with the theoretical framework of institutional persistence and path dependence, according to which historical shocks shape long-run institutional equilibria rather than short-run fluctuations.

The CRE results are meant to add to, not replace, what I find with the fixed effects and dynamic GMM models. The fixed effects models focus on changes within countries, but do not consider historical differences.

CRE estimates recover between-country structural effects linked to institutional legacies and long-run development paths. System GMM, in turn, addresses dynamic persistence and endogeneity in income and institutional variables. In this sense, the CRE model is used for three main reasons:

- to check if the effects of institutions found in the fixed effects models still hold when we account for differences between countries, t
- to measure how important institutional legacies are using the Institutional Legacy Index (ILI), and
- to give a clear way to study historical factors that cannot be identified with fixed effects alone.

3.6.5 Dynamic specification

To capture the fact that economic growth and institutions change over time, I use a dynamic panel model that includes the previous value of the dependent variable. This helps to separate short-term effects from long-term ones, as discussed earlier in Chapter II.

The dynamic model is specified as:

$$lny_{it} = \rho lny_{i,t-1} + \beta_1 IQ_{it} + \beta_2 X_{it} + \alpha_i + \lambda_t + \varepsilon_{it} \text{ [6]}$$

where ρ captures growth persistence.

In this part of the analysis, I make a clear distinction between short-term changes and the long-term effects of institutions, as discussed earlier. Institutions do not change development outcomes overnight. Instead, they influence income over time through factors like investment, education, and trust in policies. To capture these gradual effects, I include the lagged dependent variable in the model. However, this choice can make some standard estimation methods, like pooled OLS and fixed effects, unreliable (Nickell, 1981).

Dynamic specifications have become standard in the modern growth literature (Arellano & Bond, 1991; Blundell & Bond, 1998; Rodrik et al., 2004), particularly in studies examining institutional persistence and conditional convergence.

A critical methodological choice in dynamic panel estimation concerns the choice between difference GMM (Arellano-Bond) and system GMM (Blundell-Bond). The difference GMM estimator eliminates fixed effects by first-differencing the model and uses lagged levels of endogenous variables as instruments. While consistent under standard assumptions, this approach performs poorly when the dependent variable and key regressors - such as log GDP per capita levels and institutional quality - exhibit high persistence. In such cases, lagged levels become weak instruments for differenced variables, resulting in biased estimates and substantial finite-sample inefficiency.

System GMM helps solve this problem by combining two sets of equations: one in differences and one in levels, each using different instruments. This approach makes the instruments stronger when variables do not change much from year to year, which is the case for both income and institutional measures in my data. Studies have shown that system GMM gives more accurate and efficient results than difference GMM, especially when working with data like mine that covers a short period and has persistent variables (Blundell & Bond, 1998).

Because both institutional quality and income change slowly and are influenced by their own past values, I use system GMM as the main dynamic estimator in this study. This approach contributes to capturing how income and institutions evolve over time while tackling problems such as reverse causality and feedback effects. To reduce overfitting, I limit the number of lags and use standard tests to assess the validity of the results. The number of instruments is kept reasonable relative to the number of countries, which helps ensure the findings are reliable.

3.7 Endogeneity and Identification Strategy

3.7.1 Sources of endogeneity

Endogeneity is a frequent challenge when we try to understand how institutions affect economic growth. This problem appears when the factors we use to explain growth are themselves connected to other influences we cannot measure, making it difficult to know what is truly causing what.

First, reverse causality (when cause and effect go both ways) signifies a fundamental concern: while stronger institutions may foster higher income levels, economic development itself can generate demand for better governance, more effective regulation, and stronger enforcement capacity. As income rises, societies may invest more in administrative quality, judicial capacity, and anticorruption mechanisms, leading to a two-way relationship between institutions and growth (Lipset, 1959; Glaeser, La Porta, Lopez-de-Silanes, & Shleifer, 2004). This simultaneity (occurring at the same time) makes it difficult to interpret contemporaneous (at the same time) correlations as causal effects running from institutions to development.

Second, omitted variable bias, a distortion that occurs when an important factor is left out of the analysis, may arise from unobserved political, social, or historical factors that jointly determine both institutional quality and economic performance. Variables such as elite fragmentation, state capacity, informal power structures, social trust, or geopolitical exposure are often difficult to observe or quantify but may systematically shape both governance outcomes and growth trajectories. Failure to account for these latent (hidden) factors can bias estimated institutional effects (Rodrik, Subramanian, & Trebbi, 2004; North, Wallis, & Weingast, 2009).

Third, measurement error in institutional indicators poses an additional challenge. Widely used governance measures, such as the Worldwide Governance Indicators, are constructed from perception-based surveys, expert assessments, and composite indices. These measures are subject to conceptual ambiguity, respondent bias, and limited temporal variation, particularly in short panels. Classical measurement error tends to bias coefficients toward zero. In contrast, non-classical measurement error can introduce more complex and less predictable distortions. This problem is especially pronounced in transition settings, where formal institutions may change faster than perceptions or enforcement capacity.

Fourth, institutional persistence and dynamic feedback effects imply that past institutional arrangements, historical legacies, and previous development outcomes strongly condition current institutional quality. Institutions evolve slowly, and their effects on growth often materialize over long horizons rather than within short-run fluctuations. Ignoring this persistence can lead to biased estimates and overstate the short-term impact of reforms (Acemoglu, Johnson, & Robinson, 2001; Acemoglu & Robinson, 2012). A historical example of this can be seen in the post-1990 reforms in the Czech Republic. After the fall of communism, the country implemented significant economic and institutional changes. However, the legacy of the previous regime continued to influence governance structures and economic policies. Over time, these reforms began to show their true impact, as the Czech Republic emerged as a stable and prosperous economy, validating the notion that the effects of institutional changes unfold gradually. Dynamic feedback further complicates identification, as past growth affects current institutions, which in turn influence future growth.

3.7.2 Identification strategy

To address the identification challenges inherent in the institutions-growth nexus, this study aims to separate the effects of institutional persistence from contemporaneous shocks. To achieve this, the primary empirical strategy relies on the System Generalized Method of Moments (System GMM) estimator, as developed by Arellano and Bover (1995) and Blundell and Bond (1998). This estimator is particularly well-suited to the data structure and the theoretical mechanisms emphasized in Chapters II and III, where institutional persistence, dynamic feedback, and endogeneity are central.

System GMM is selected as the main workhorse estimator for three interrelated reasons. First, it explicitly accounts for dynamic persistence in economic development by including a lagged dependent variable in the regression framework. A lagged dependent variable refers to using a previous value of the outcome variable as a predictor. This aspect is crucial because income levels and development trajectories exhibit strong path dependence. These dynamics reflect accumulated capital, institutional inheritance (the transmission of institutional traits over time), and historical shocks (significant disruptive events in the past). Conventional static estimators, on the other hand, fail to accurately account for these factors and would yield biased and inconsistent estimates in the presence of such dynamics (Nickell, 1981).

The estimator controls for unobserved country-specific effects, such as time-invariant historical, cultural, and institutional characteristics, by eliminating deep-roots controls through appropriate differencing and orthogonal deviations. This feature is essential given the importance of deeply rooted institutional legacies, such as Ottoman, Austro-Hungarian, and Yugoslav governance structures, which cannot possibly be directly observed but strongly influence both institutional quality and economic performance.

Third, and most importantly, system GMM mitigates reverse causality and simultaneity bias through internal instrumentation. Endogenous and predetermined regressors are instrumented using their own lagged levels and lagged differences, under the assumption that past realizations are correlated with current endogenous variables but uncorrelated with contemporaneous error terms. By combining equations in first differences employing equations in levels, System GMM improves efficiency and reduces weak-instrument problems that often affect Difference GMM in persistent series (Blundell & Bond, 1998).

This approach is especially useful for studying institutions, because it is hard to find outside factors that can be used as instruments. The tests used in System GMM, like the AR(2) and Hansen tests, are important for checking if the results are trustworthy. These checks are not purely technical details, but key steps to make sure the analysis is solid.

While System GMM serves as the primary estimator for causal inference, fixed effects (FE) estimates are retained as benchmark results. The FE models provide transparent within-country estimates that control for time-invariant heterogeneity and allow direct comparison with the broader empirical literature on institutions and growth. Differences between FE and System GMM results are interpreted as informative about the role of dynamics and endogeneity rather than as inconsistencies, strengthening the study's emphasis on robust and layered empirical identification.

3.8 Instruments and Proxies

3.8.1 Internal instruments

In the System GMM framework, internal instruments are constructed using lagged levels and lagged differences of endogenous variables. These lags capture the dynamic nature of the dataset by allowing the model to account for 'state-dependence,' where current observations are influenced by their previous states. Additionally, the use of both lagged levels and differences helps in 'shock purification,' which filters out unobserved shocks that might bias the estimation. This methodology strengthens the justification for instrument selection, providing confidence in the validity of the GMM approach.

The instrument strategy follows three principles:

- lag depth is restricted to avoid weak instruments,
- instrument matrices are collapsed to limit instrument proliferation,
- Instrument count is kept below the number of cross-sectional units.

Instrument validity is assessed using AR(2) tests for serial correlation and Hansen tests of overidentifying restrictions, as reported in Chapter IV.

3.8.2 External instruments and proxies

External instruments - historical regime dummies, EU and NATO membership indicators, geographic proximity to Brussels, and conflict history, are used only in the static FE-IV (2SLS) estimations reported in Chapter IV.

They are not used as external instruments in the system GMM estimations. Their purpose is to provide complementary evidence on institutional channels, not to identify dynamic causal effects. Exclusion restriction concerns are acknowledged and tested through robustness checks.

The following is a set of historical and structural variables proposed as institutional proxies and candidate instruments for institution quality.

Ottoman Empire

It is well known that the Ottoman tradition is considered a precursor to the Balkan institutional frameworks. Ottoman rule emphasized centralized government and reduced local independence, which influenced the trends of corruption, bureaucratic inefficiency, and poor property rights that persist today. This renders the variable highly significant in measuring variation in institutional quality across nations. The Ottoman dummy is a plausibly exogenous element of contemporary economic growth in exogeneity because its effect is mediated by institutional legacies, not by its impact on current GDP per capita. Nevertheless, one should be careful because Ottoman infrastructure investments (roads, trade routes) could have had a lasting impact beyond the institutions. However, the general view in institutional economics is that the main pathway is institutional quality.

Austro-Hungarian Empire

The Austro-Hungarian Empire abandoned a relatively advanced legal tradition, protection of property rights, and administrative capabilities, particularly in Croatia, Slovenia, and parts of Bosnia. This institutional legacy offers strong applicability to current institutional quality. The exogeneity assumption holds: the presence of the Austro-Hungarian rule does not directly affect current economic performance, but only through its institutional imprint. However, the exogeneity may be slightly threatened by the path dependency in both physical infrastructure and human capital accumulation under the Habsburg rule. However, empirical studies (e.g., Becker et al. 2016) indicate that the institutional transmission channel prevails.

Yugoslavia

Being part of Yugoslavia is a valuable tool, since the socialist federalism system was extremely centralized, with party rulers and the absence of political pluralism, which conditioned the institutional potential for the future after the state's disintegration. The topicality is high because the successor states inherited the Yugoslav system's bureaucratic and political practices. Exogeneity is even more controversial: the economic distortions created by socialism (industrial organization, 1980s debt crises) may have a direct impact on long-run growth, not just through institutions. To overcome this, the Yugoslavia dummy is generally treated as a historical anchor of institutional persistence rather than a direct factor in current economic performance.

Mid-war period

The mid-war conflict dummy captures political violence in territories through the interwar years, which weakened the credibility of state institutions and left a legacy of fragility. It is relevant in light of the historical correlation between violent conflict and weak institutional development documented in the successor states of Yugoslavia. In the case of exogeneity, interwar conflict can hardly have had a direct effect on GDP per capita growth in the 2000s, aside from its institutional legacy, since physical destruction and displacement would have faded over the decades. This renders it a potentially exogenous tool.

Collier and Hoeffler (2004) find that civil wars significantly weaken state capacity and slow institutional recovery, creating persistent governance deficits. This is consistent with the initial stage in the causal chain where conflict leads to weakened capacity. Besley and Persson (2011) similarly demonstrate that violent conflict undermines fiscal and legal capacity, leaving countries locked into fragile institutional equilibria. This corresponds to the intermediate step of weakened capacity directly affecting governance structures. In the specific case of the Balkans, Blagojević (2009) documents how the wars of the 1990s fragmented administrative structures and deepened ethnic divisions, leading to enduring institutional weaknesses in post-conflict states. This reflects the final stage, where weakened state capacity results in low growth and persistent institutional deficits. These findings validate the use of conflict as an empirically grounded proxy for institutional disruption, while also drawing attention to the importance of tackling potential endogeneity through appropriate modelling strategies.

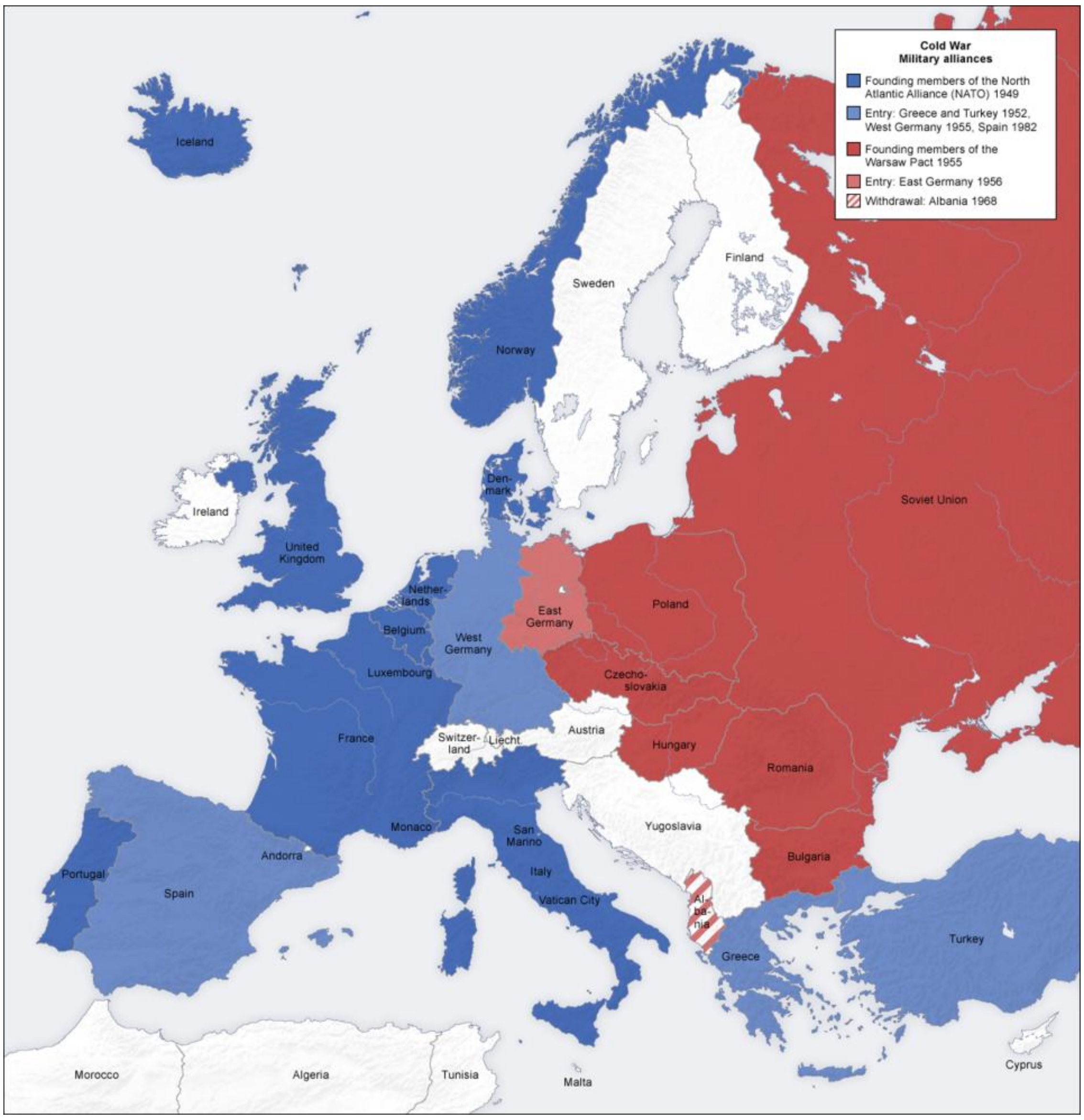
The maps shown below give a visual representation of long-run historical and institutional discontinuities across the Western Balkans, which motivated the instrumental variables strategy employed in the empirical analysis. Successive imperial and state formations — most notably Ottoman, Austro-Hungarian, and later Yugoslav administrative regimes — introduced particular legal traditions, bureaucratic capacities, and norms of state-society interaction that have proven highly persistent over time. These institutional legacies shaped early state capacity, contract enforcement, and governance quality, creating systematic cross-regional variation that predates contemporary economic outcomes. Via mapping these historical exposures, the analysis exploits exogenous variation in institutional inheritance that is strongly correlated with present-day institutional quality, satisfying the relevance condition for valid instruments.

Map 1: The region around 1560

Source: *"Historical Atlas" by William R. Shepherd, 1923,* maps.lib.utexas.edu/maps/historical/history_balkans.html

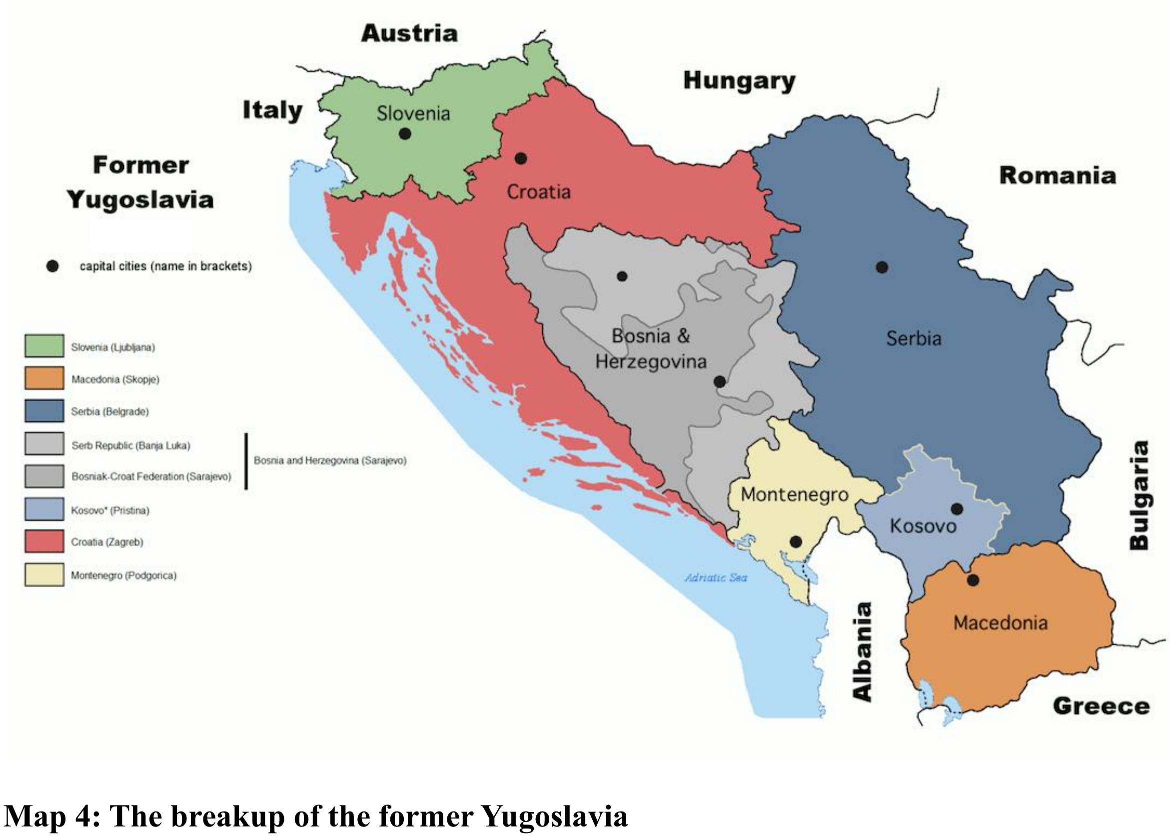
Map 2: International boundaries 1877

Source: Hermann Kinder & Werner Hilgemann, *The Penguin Atlas of World History*, *Volume 2: From the French Revolution to the Present*, Penguin Books.



Map 3: Map of Europe 1989 with division into military blocks

Source*: Wikimedia Commons. "Cold war Europe military alliances map".*



Map 4: The breakup of the former Yugoslavia

Source: Wikimedia Commons. Map of the Socialist Federal Republic of Yugoslavia (SFRY).

These historical boundaries and administrative regimes are plausibly exogenous to today's regional economic performance. Imperial borders and administrative splits were set by geopolitical factors, unrelated to local economics. While institutions today affect outcomes, they can't alter historical exposure. Thus, these instruments impact present performance mainly through institutional quality and capacity, not direct economic channels, providing credible exogenous variation for IV identification.

Geographic instruments

Distance to Brussels proxies the intensity of EU influence; nations closer to Brussels face more pressure to integrate, making the variable relevant for institutional reform. Distance is independent of modern economic development, meeting the exclusion criterion. While geography affects trade, this is covered by the trade openness variable, so its main growth impact is through increased institutional quality from EU integration pressures.

EU candidacy

The candidacy dummy is linked to institutional quality, since accession requires embracing the acquis communautaire and better governance. Growth shocks likely do not influence candidacy directly, as geopolitical and institutional factors matter more. There is some risk of reverse causality—higher growth may affect candidacy—but political factors outweigh growth. EU membership is an even stronger anchor for institutional quality, as members must follow EU rules. Exogeneity is plausible: short-run growth is not a main determinant of membership, but higher-income states may be correlated with growth, so robustness checks are needed (e.g., by excluding high-income members or adjusting initial incomes).

NATO membership

NATO membership entails security assurance and geopolitical cooperation with Western institutions, which, in turn, facilitates institutional reforms such as civilian-military control and legal convergence. This renders it applicable to institutional quality. Exogenously, NATO membership is essentially forced by security considerations rather than by economic performance, suggesting that these factors have little direct impact on growth. Nevertheless, military assistance or military expenditures related to NATO might affect economic performance, and this should be taken into account, as the exclusion limitation should be interpreted with care.

Levitsky and Way (2010) argue that external anchors such as NATO and the EU increased the costs of authoritarian practices, encouraging democratic consolidation in post-communist states. More recent evidence from the European Bank for Reconstruction and Development (EBRD, 2013) shows that countries integrated into EU frameworks experienced greater improvements in public administration and regulatory quality compared to non-members. These findings underline that EU/NATO membership operates as an empirically valid proxy for external institutional pressure, even if endogeneity concerns call for careful model specification.

Ethnic and religious instruments

Ethnic diversity, as measured by ethnolinguistic fractionalization, is closely linked to institutional quality. Higher fractionalization makes consensus formation more difficult. It weakens collective decision-making, which is associated with inferior policy outcomes and governance quality (Easterly & Levine, 1997; Rodrik et al., 2004). Fragmented societies are more prone to rent-seeking and coordination failures. This complicates the provision of public goods. Ethnolinguistic fractionalization is historically grounded, slow-moving, and largely predetermined. These features support its use as an instrument under the exclusion restriction. Ethnic diversity affects economic performance through two main channels: social conflict and productivity externalities (Alesina & La Ferrara, 2005). Social conflict undermines governance and institutional effectiveness. Productivity externalities arise from heterogeneous skills and perspectives that may foster innovation. Despite these opposing effects, both channels are widely understood to operate primarily through institutional quality.

The Muslim majority dummy reflects historically embedded cultural and institutional norms (Kuran, 2011). It is relevant due to the documented relationship between religious traditions and governance, particularly in the context of church-state relations and generalized social trust. Religious affiliation is slow-moving and historically transmitted, rendering it plausibly exogenous to short-run economic dynamics (Barro & McCleary, 2005). At the same time, religion may directly influence fertility, education, and labor supply, thereby violating the strict exogeneity assumption. To address this concern, the Muslim majority indicator is treated as an instrument capturing institutional cultural inheritance rather than as a direct determinant of economic outcomes.

Building on these religious considerations, the Orthodox tradition is associated with a hierarchical church structure and a historically closer connection between religious and state authority, shaping governance practices and the rule of law (Tabellini, 2010). These characteristics make Orthodoxy relevant for explaining cross-country variation in institutional quality. Exogeneity is plausible, as historical religious composition is deeply entrenched and not influenced by contemporary growth dynamics. While collectivist norms often linked to Orthodoxy may have direct implications for economic behavior, institutional economists emphasize that the dominant transmission mechanism operates through long-run institutional persistence rather than short-run economic channels.

The Christian tradition reflects deep historical norms that have shaped institutional development, particularly through the early differentiation between religious and political authority and the emergence of autonomous legal institutions. Western Christianity, especially in its Catholic and Protestant variants, is associated with earlier church-state separation, stronger constraints on executive power, and higher levels of generalized trust, all of which correlate with superior rule of law and governance quality (North, 1990; La Porta et al., 1999). Religious composition is slow-moving and historically transmitted, making it plausibly exogenous to short-run economic dynamics. I explicitly differentiate between Western Christian and Eastern Orthodox traditions. Although Christianity may directly influence economic behavior through education, work norms, fertility, and social attitudes, it is treated here as a proxy for institutional cultural inheritance rather than a direct growth determinant. Consistent with institutional economics, the primary transmission mechanism operates through durable institutional arrangements rather than contemporaneous economic choices (Acemoglu, Johnson, & Robinson, 2001).

Initial level of income

Initial income levels are a common economic factor and, to some extent, at least a historical control. They are relevant because institutional development often co-evolves with economic modernization. This makes them useful as instruments or controls for institutional persistence. The exogeneity argument holds that past income levels affect present growth only through the institutions they enabled, not directly. However, convergence theory suggests that initial income could mechanically predict subsequent growth (the catch-up effect), which complicates its strict validity as an instrument. Thus, it is typically used with caution and robustness checks.

3.9 Estimation Details and Diagnostics

This section outlines the diagnostic procedures applied consistently across estimation techniques to ensure econometric validity and robustness. For static panel models, the choice between fixed effects (FE) and random effects (RE) specifications is guided by the Hausman specification test (Hausman, 1978). Country-clustered robust standard errors are employed to account for heteroskedasticity and serial correlation within cross-sectional units (Arellano, 1987; Cameron & Miller, 2015). This approach is particularly appropriate given the potential for unobserved country-specific shocks, such as political instability or economic policy changes, which may simultaneously affect multiple economic variables within a country. By clustering at the country level, the method accommodates the unique shocks or variations that are shared among observations within the same country, thus ensuring a more reliable estimation of standard errors.

For dynamic specifications estimated using System GMM, first- and second-order serial correlation in differenced residuals is assessed using AR(1) and AR(2) tests (Arellano & Bond, 1991). Instrument validity is evaluated using Hansen and Sargan over-identification tests (Hansen, 1982; Sargan, 1958). To mitigate instrument proliferation and preserve test power, the instrument count is actively constrained through lag-depth restrictions and instrument collapsing (Roodman, 2009). All diagnostic statistics are reported and discussed in Chapter IV.

3.10 Hypotheses – Model Mapping & Robustness Strategy

To ensure transparency and replicability, each hypothesis is explicitly mapped to its corresponding econometric specification, with clear identification of key variables, interaction terms, and expected coefficient signs (Wooldridge, 2010).

Table 9: Hypotheses- model mapping

Hypothesis	Models	Key variables	Interaction/structure	Expected sign/pattern
H1	FE, CRE (Mundlak), System GMM	Aggregate institutional quality	-	Positive long-run association
H2	FE, CRE, FE-IV	Disaggregated WGI indicators	-	Positive, with the strongest effects for corruption control and government effectiveness
H3	FE, CRE, IV, System GMM	Institutional Legacy Index (ILI)	Persistence / between effects	Negative (persistent historical constraint)
H4	FE-IV, System GMM	Institutions × conflict legacy	Conditioning effect	Negative moderation
H5	FE-IV, System GMM	Institutions × EU / NATO	External anchors	Positive moderation

Source*: Own elaboration.*

Robustness is assessed through a comprehensive battery of sensitivity checks commonly employed in the institutions-and-growth literature (Levine et al., 2000; Acemoglu et al., 2001). These include the use of alternative institutional indicators, alternative lag structures in dynamic specifications, subsample analyses distinguishing EU versus non-EU and NATO versus non-NATO countries. Detailed robustness results are presented in Chapter IV.

Not every model and result is included in the main text. The results are available upon request.

3.11 Concluding Remarks

This chapter has developed a coherent empirical strategy for assessing the relationship between institutional quality and economic development in the Western Balkans, grounded in the theoretical arguments and empirical gaps identified in Chapters I and II. By combining pooled, fixed-effects, and random-effects models (including correlated random-effects, so-called Mundlak approach), instrumental-variable approaches, and dynamic panel estimators, the strategy is designed to disentangle short-run within-country variation from persistent cross-country institutional differences, while explicitly addressing endogeneity, unobserved heterogeneity, and income persistence. The construction of composite institutional measures and legacy indicators further enables a structured examination of institutional persistence and historical constraints on development outcomes. For instance, the legacy indicator linking current economic conditions to the historical influence of Ottoman administrative practices illustrates how past governance structures have left enduring marks on institutional frameworks. Building on this framework, Chapter IV implements the proposed estimators and variable constructions to empirically evaluate each research hypothesis, comparing results across specifications to assess robustness, identify conditioning mechanisms, and clarify how institutional quality shapes long-run income levels rather than short-run fluctuations in the Western Balkans.

CHAPTER IV. INSTITUTIONAL QUALITY AND ECONOMIC GROWTH: EMPIRICAL EVIDENCE FROM THE WESTERN BALKANS

4.1 Introduction

In this chapter, I look at how the quality of institutions is connected to economic development in the Western Balkans. Building on the earlier chapters that reviewed the theoretical and empirical literature establishing the main hypotheses and following the empirical strategy set out in Chapter III, I start with basic data and then move step by step to more advanced analysis. My aim is not to push one explanation, but to see how the link between institutions and income changes as we account for different factors like hidden differences between countries and the fact that institutions and income can influence each other over time. I look at both the overall quality of institutions and their main parts to understand which areas of governance are most important for long-term development in our region.

I begin the analysis by looking at simple statistics and basic relationships in the data to get a first sense of how institutions and economies have changed across countries and over time. After this, I use different statistical methods to see how institutions affect economic outcomes, both within each country and between countries. I also use more advanced models to deal with the fact that income and institutions can influence each other, and to check if the results hold when we consider things like the impact of past conflicts or the role of EU and NATO integration. By implementing these steps, I want to see if good institutions are just linked to higher income in the short term, or if they thoroughly help drive long-term development in the Western Balkans.

4.2 Descriptive Statistics and Correlation Matrix

Table 10 presents descriptive statistics for the full panel dataset. From the numbers, a convincing account of transformation in the Western Balkans can already be traced. These statistics not only provide an initial overview of economic performance, institutional quality, and historical-political characteristics but also hint at a region in transition with varied development stages and historical legacies forming its current path. The sample contains 448 country-year observations, ensuring sufficient temporal and cross-sectional variation for panel estimation.

The average real GDP per person (in logs) is 9.76, with a standard deviation of 0.70. The lowest value is 7.38, and the highest is 11.07, which shows big differences in income across the region. These differences indicate how countries in the Western Balkans have taken different paths since the transition period, with some moving faster than others in terms of reforms and economic growth.

Institutional quality is very different from one country to another, and it also changes over time. The main index I use to measure this (IQ_pca) is set up so that the average is zero, but it ranges from about -2.3 to 2.3. Another index, the Institutional Legacy Index (ILI), shows a similar pattern and captures the strong historical roots of governance in the region. When I compare current institutional quality to its value five years earlier, I see that institutions tend to persist, but there is still enough change to study how they affect development. This persistence is important for the analysis because it means I need to use models that take into account how institutions and income can influence each other over time.

When we look at the different parts of governance, like control of corruption, government effectiveness, regulatory quality, rule of law, and voice and accountability, we see a lot of variation between countries. The average scores are positive but not high, and the differences are especially big for political stability and rule of law. This means that even within the Western Balkans, countries face very different challenges. These differences point to the need for targeted reforms. For example, if one country has weak regulatory quality, it should focus on improving its rules and how they are enforced. If another country scores low on voice and accountability, it should work on making government more open and responsive to citizens. By looking at these details, policymakers can focus on the areas that matter most for their own country.

Macroeconomic control variables also vary widely. Trade openness (lnopen) and foreign direct investment stocks (lnfdistock) differ across countries, showing differences in global market integration. Human capital (hc) ranges from near zero to above 3.7, demonstrating differences in education and skills. Investment and government expenditure shares (csh_i and csh_g) are more stable, but still vary enough to allow identification in panel regressions.

The data also includes information about each country's history and politics, such as whether it was part of the Ottoman or Austro-Hungarian empires, its religious makeup, EU and NATO membership, and whether it has experienced conflict. The legacy of conflict, while not common in every country, is very important where it does appear, as it can affect things like migration, the state of infrastructure, and how much people trust each other. This is why I use the conflict legacy variable in combination with other factors to better understand its impact.

Overall, the data shows a lot of diversity in economic results, the quality of institutions, openness to the world, and historical background. This variety is important because it lets us study how different factors shape development in the Western Balkans. In the following steps, I will use statistical models to test whether the patterns we see in the data truly hold up when we control for other factors. For example, I will check if countries with better institutions truly do better economically, even after taking into account other differences. This careful approach is needed to move from just describing the data to understanding what actually drives development in the region.

Table 10: Descriptive Statistics

Variable	N	Mean	SD	Min	P25	Median	P75	Max
ILI	448.00	0.00	1.00	-1.31	-0.70	-0.38	0.89	2.42
IQ_pca	448.00	0.00	1.00	-2.27	-0.72	-0.20	0.77	2.34
IQ_pca_lag5	378.00	-0.01	1.04	-2.27	-0.77	-0.24	0.84	2.34
ah1867	448.00	0.43	0.50	0.00	0.00	0.00	1.00	1.00
cath	448.00	0.36	0.48	0.00	0.00	0.00	1.00	1.00
csh_g	448.00	0.24	0.06	0.13	0.19	0.24	0.28	0.53
csh_i	448.00	0.22	0.07	0.00	0.17	0.23	0.27	0.40
eucand	448.00	0.20	0.40	0.00	0.00	0.00	0.00	1.00
eumem	448.00	0.37	0.48	0.00	0.00	0.00	1.00	1.00
hc	448.00	2.32	1.25	0.00	2.11	2.89	3.14	3.71
hief_efindex	448.00	0.22	0.20	0.00	0.00	0.19	0.33	0.87
in_avg	448.00	0.23	0.63	-1.21	-0.22	0.11	0.72	1.70
in_avg_lag5	378.00	0.23	0.65	-1.21	-0.25	0.09	0.75	1.70
in_cc	448.00	0.06	0.68	-1.20	-0.37	-0.13	0.41	2.05
in_cc_lag5	378.00	0.06	0.70	-1.20	-0.37	-0.15	0.46	2.05
in_goveff	448.00	0.23	0.69	-1.19	-0.21	0.15	0.70	2.00
in_goveff_lag5	378.00	0.22	0.71	-1.19	-0.27	0.13	0.77	2.00
in_pol	448.00	0.17	0.72	-2.14	-0.35	0.18	0.71	1.41
in_pol_lag5	378.00	0.16	0.74	-2.14	-0.42	0.18	0.75	1.41
in_reg	448.00	0.36	0.59	-0.91	-0.11	0.38	0.76	1.69
in_reg_lag5	378.00	0.34	0.62	-0.91	-0.13	0.32	0.80	1.69
in_rol	448.00	0.18	0.74	-1.27	-0.31	-0.02	0.80	1.96
in_rol_lag5	378.00	0.17	0.76	-1.27	-0.34	-0.02	0.86	1.96
in_voice	448.00	0.39	0.62	-1.22	-0.09	0.39	1.00	1.48
in_voice_lag5	378.00	0.40	0.63	-1.22	-0.10	0.40	1.02	1.48
ln_brus_distance	448.00	7.25	0.29	6.82	7.03	7.26	7.44	7.83
lnfdistock	448.00	9.28	2.12	3.00	8.35	9.53	10.79	13.10
lnopen	448.00	4.33	0.44	2.53	4.04	4.39	4.62	5.13
lny	448.00	9.76	0.70	7.38	9.33	9.82	10.30	11.07
mconflict	448.00	0.05	0.22	0.00	0.00	0.00	0.00	1.00
mus	448.00	0.21	0.41	0.00	0.00	0.00	0.00	1.00
mw1919	448.00	0.43	0.50	0.00	0.00	0.00	1.00	1.00
nato	448.00	0.45	0.50	0.00	0.00	0.00	1.00	1.00
orto	448.00	0.43	0.50	0.00	0.00	0.00	1.00	1.00
ottoman	448.00	0.64	0.48	0.00	0.00	1.00	1.00	1.00
rg	448.00	0.65	0.48	0.00	0.00	1.00	1.00	1.00
wb	448.00	0.35	0.48	0.00	0.00	0.00	1.00	1.00
yug	448.00	0.29	0.45	0.00	0.00	0.00	1.00	1.00

Source: *Own elaboration in R.*

Figure 10 shows how the main variables in the study are related to each other. Economic development is strongly linked to all the main governance indicators, especially regulatory quality, government effectiveness, and rule of law. Political stability and voice and accountability are also connected to higher income, but not as much as the other indicators. These results suggest that better governance goes hand in hand with higher income in the Western Balkans. Still, we have to be careful not to assume that one causes the other just because they move together. In the next sections, I will use more advanced methods to check if these links genuinely mean that good institutions help drive development.

The different governance indicators are also very closely linked to each other. For example, rule of law and the main institutional index move almost together, and the same is true for regulatory quality and government effectiveness. This means that governance is made up of many parts that are hard to separate. Because of this, I use combined measures and special statistical methods to make sure the results are reliable.

Looking at other factors, countries with more foreign investment and higher levels of education tend to have higher incomes. More investment is also linked to higher income, while higher government spending is linked to lower income, which might mean that government spending is less efficient in poorer countries. Trade openness is only weakly linked to income, so being open to trade by itself does not explain the differences in income across countries.

The Index of Legal Integration (ILI) is a historical measure that stands out because it is strongly linked to lower income and weaker governance. This supports the idea that past legal and institutional legacies still matter today. I use ILI as a tool in the analysis to help separate the effect of current institutions from deeper historical factors. The idea is that ILI affects income mainly through its impact on today’s governance, which helps make the results more reliable.

To sum up, the data shows that better institutions go together with higher income, that the different parts of governance are closely linked, and that history still shapes both governance and economic outcomes. But these patterns do not prove that institutions cause higher income, because other factors could be at play. That is why I use more advanced methods in the next sections, to see if improving institutions effectively does help countries in the Western Balkans grow faster. If this is confirmed, it can help guide reforms and show policymakers where to focus their efforts for better development.

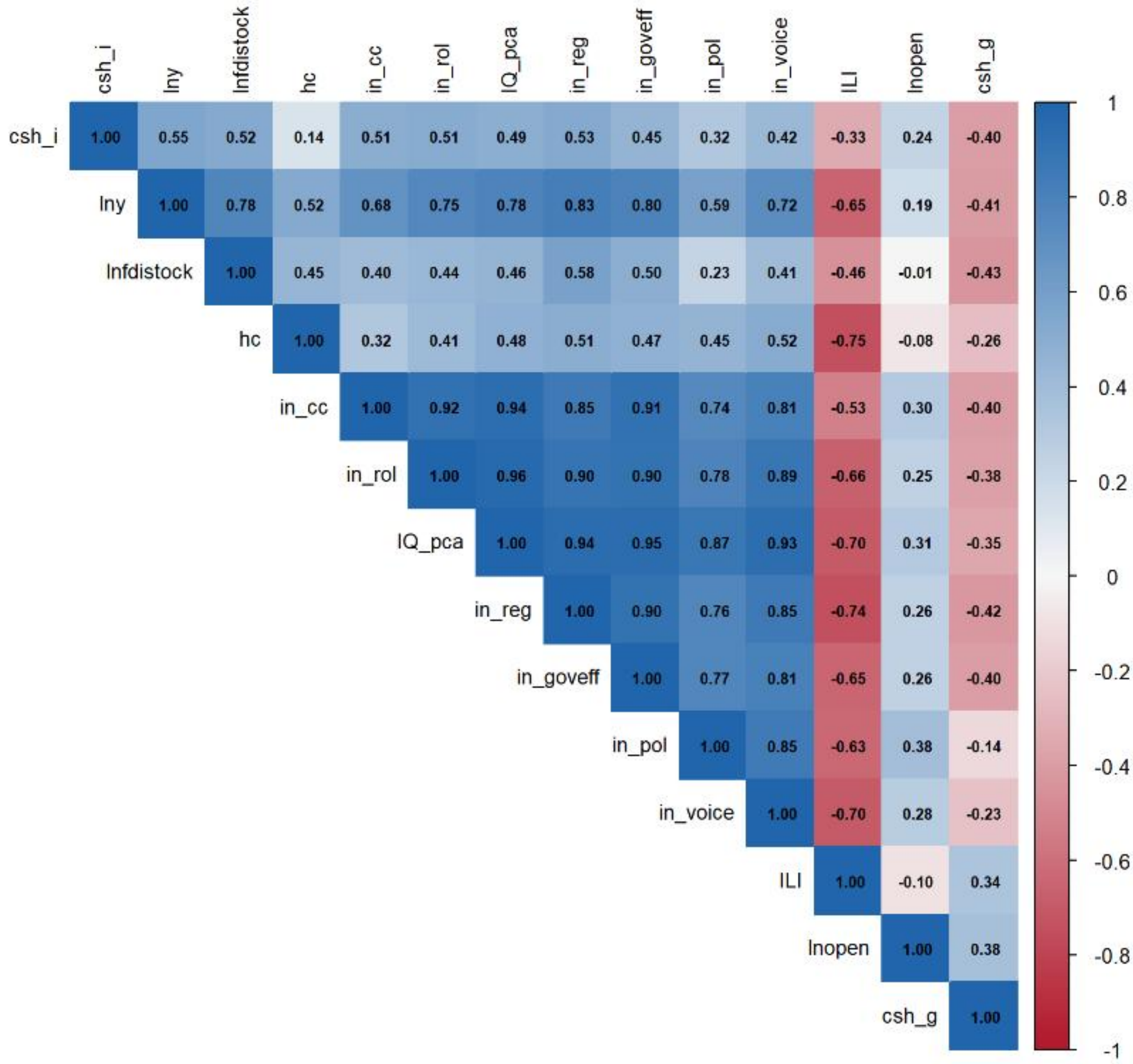


Figure 10: Correlation Matrix Between Key Variables

Source: *Own elaboration in R using the corrplot package*.

4.3 Empirical Results

4.3.1 Baseline results for the full sample

Table 11 shows how different measures of institutional quality are linked to economic development, using log GDP per capita as the main indicator. It compares several statistical methods, including pooled OLS, random effects, and fixed effects, across several governance indicators, a composite index, and the Institutional Legacy Index. By doing this, we can see how the results change when we control more strictly for differences between countries that are not directly observed.

Pooled OLS and random effects

When using pooled OLS and random effects, all the main governance indicators—like control of corruption, rule of law, and government effectiveness—are strongly and positively linked to higher income. The composite index also shows this pattern. This corresponds to what many studies have found: countries with better institutions are usually much richer.

These results support the idea discussed earlier in the thesis that institutions are a key factor in explaining why some countries develop faster than others. Good institutions help with things like enforcing contracts and making policies predictable, which are important for long-term growth. The strong results from pooled and random effects models fit with what we see in many cross-country studies.

But as discussed in Chapter III, these methods assume that there are no hidden country differences changing both institutions and income, which is a strong assumption, especially for the Western Balkans. Things like history, geography, and old political systems can affect both how good institutions are and how rich a country is. Therefore, the strong results from pooled and random effects models may partly reflect these deeper, unobserved factors.

Fixed effects

When we use fixed effects to control for country-specific factors, the link between institutions and income becomes much weaker. For some indicators, like political stability and voice and accountability, the relationship is no longer statistically significant. Even for control of corruption and government effectiveness, the results are less strong. This statistical insignificance does not imply that these indicators are unimportant, but rather suggests that policymakers should interpret such results with caution. It points out the need to consider other factors or complementary policies that may increase the effectiveness of these governance aspects over time.

This drop in the strength of the results is expected. Fixed effects control for all country differences that do not change over time, such as history and geography. This means the model only looks at changes within each country over time. Since institutions usually change slowly, especially in countries like those in the Western Balkans, there is not much variation left for the model to use.

A closer examination of the average within-country variation, for instance, by considering the standard deviation of institutional measures, could provide insight into why the fixed effects results appear less significant. Such data-driven statistics support the 'slow movement' argument, vividly illustrating the limited dynamic shifts within countries during the study period.

The fixed effects results show that most of the strong link between institutions and income comes from long-term differences between countries, not from quick changes in institutions. This fits with the idea that institutions change slowly and have their biggest impact over the long run, not in the short term.

Regulatory quality and the composite index

Despite the general weakening, two institutional measures retain relatively stronger performance in the FE specifications: regulatory quality and the PCA-based composite index (*IQ_pca*). Although their coefficients are smaller than in pooled or RE models, they remain positive and, in some specifications, statistically significant.

This is important because regulatory quality can change more quickly within countries than deeper political institutions. The composite index also helps by combining information from different governance areas, which makes the results more reliable. These features help these two measures stand out even when using fixed effects.

This fits with what the literature says about the value of regulatory reforms and better administration in countries that are still developing or in transition. While big political changes are slow, improvements in regulation and administration can still make a difference, even in the short run. Recognizing the distinction between "quick wins" such as administrative adjustments and "slow wins" involving deeper constitutional reforms can increase policy effectiveness. Policymakers should focus on short-term regulatory levers to achieve immediate benefits, while persisting with long-term structural changes that lay the foundation in support of sustained growth.

Institutional Legacy Index - persistent negative relationship

One of the most important findings is about the Institutional Legacy Index. Unlike the other governance indicators, this index has a negative and significant effect on income in all models. This means that countries with more difficult historical backgrounds, such as those affected by empires, socialism, or conflict, tend to have lower income, even when we control for other economic factors.

This supports the idea that history matters for development. The effect of historical legacies is not just explained by current institutions, but has its own lasting impact on economic outcomes. The fact that this effect remains even after using fixed effects shows that these deep-rooted factors continue to shape how countries develop.

This helps explain why the effect of current institutions becomes weaker in fixed effects models. If history limits both the level and the pace of change in institutions, then quick improvements in governance may not be enough to overcome these deep challenges. In this way, Table 11 already points to the importance of looking at long-term changes. Can dynamic panels or IV approaches isolate causal pathways to better address these challenges? This question primes the reader for the next stage of analysis, indicating a transition towards more advanced methods.

The other variables in the models behave as expected. Higher human capital and investment are linked to higher income, while openness and fiscal factors show mixed results. The fact that these control variables are stable across different models gives more confidence that the main findings about institutions are not due to missing other important factors.

Overall, the results in Table 11 support the main argument of this thesis: institutions are important for economic development, but their effects are mostly long-term and determined by history and structure. The pooled and random effects models show the big differences between countries, while the fixed effects models show that quick changes in institutions do not have a strong impact on income growth.

It is not a contradiction that we see big differences between countries but weaker effects within countries over time. This is actually a key point in the study of institutions. Table 11 sets an important starting point for the rest of the analysis, showing why we need more advanced methods and why history and persistent institutions are so important to understand development in the Western Balkans and similar regions. In this way, Table 11 does its job in the analysis. it shows strong links, highlights how results change when we control for hidden differences, and prepares the ground for more careful methods without making claims that go too far.

Table 11: Static Panel Estimates of the Relationship Between Governance Quality and Economic Development (Full Sample)

	OLS: in_cc	RE: in_cc	FE: in_cc	OLS: in_rol	RE: in_rol	FE: in_rol	OLS: in_reg	RE: in_reg	FE: in_reg
(Intercept)	9.439***	10.152***		8.980***	9.881***		9.000***	9.913***	
	(0.791)	(0.840)		(0.646)	(0.788)		(0.945)	(0.833)	
in_cc	0.591***	0.274**	0.250**						
	(0.110)	(0.087)	(0.084)						
in_rol				0.541***	0.330***	0.255***			
				(0.070)	(0.076)	(0.073)			
in_reg							0.736***	0.454***	0.351***
							(0.093)	(0.108)	(0.084)
lnopen	-0.210	-0.194	-0.076	-0.073	-0.157	-0.053	-0.110	-0.163+	-0.075
	(0.150)	(0.123)	(0.082)	(0.078)	(0.098)	(0.071)	(0.140)	(0.091)	(0.080)
lnfdistock	0.097+	0.028	0.024	0.115**	0.050**	0.045**	0.093	0.015	0.018
	(0.050)	(0.027)	(0.019)	(0.041)	(0.017)	(0.016)	(0.060)	(0.027)	(0.023)
hc	0.086+	-0.044	-0.734*	0.050	-0.028	-0.596*	0.028	0.008	-0.456*
	(0.045)	(0.048)	(0.310)	(0.047)	(0.037)	(0.238)	(0.051)	(0.052)	(0.231)
csh_i	-0.445	0.362	0.442	-0.715	0.145	0.303	-0.005	0.128	0.274
	(1.207)	(0.897)	(0.787)	(1.190)	(0.865)	(0.766)	(0.890)	(0.868)	(0.785)
csh_g	0.034	-0.723	-0.613	-0.458	-0.889	-0.774	0.070	-0.412	-0.419
	(1.582)	(1.525)	(1.347)	(1.485)	(1.527)	(1.385)	(1.396)	(1.412)	(1.335)
Num.Obs.	448	448	448	448	448	448	448	448	448
R2	0.845	0.796	0.297	0.867	0.815	0.323	0.860	0.826	0.342
R2 Adj.	0.831	0.778	0.208	0.855	0.799	0.238	0.847	0.810	0.259
AIC	186.8	-180.3	-339.6	117.5	-223.4	-357.0	142.5	-250.6	-369.6
BIC	346.9	-20.3	-310.9	277.6	-63.3	-328.2	302.6	-90.6	-340.8
Log. Lik.	-54.411			-19.750			-32.242		
RMSE	0.27	0.18	0.16	0.25	0.17	0.16	0.26	0.17	0.16

Source*: Own elaboration in STATA. + p < 0.1, * p < 0.05, ** p < 0.01, *** p < 0.001.*

Table 11B: Static Panel Estimates of the Relationship Between Governance Quality and Economic Development (Full Sample)

	OLS: in_goveff	RE: in_goveff	FE: in_goveff	OLS: in_pol	RE: in_pol	FE: in_pol
(Intercept)	9.419***	10.389***		8.431***	9.905***	
	(0.742)	(0.931)		(1.121)	(0.871)	
in_goveff	0.654***	0.475***	0.387***			
	(0.065)	(0.122)	(0.110)			
in_pol				0.401***	0.243**	0.198**
				(0.090)	(0.080)	(0.065)
lnopen	-0.200	-0.242*	-0.134	-0.011	-0.167	-0.065
	(0.123)	(0.120)	(0.082)	(0.179)	(0.125)	(0.088)
lnfdistock	0.083	0.011	0.012	0.164*	0.051*	0.047**
	(0.053)	(0.035)	(0.027)	(0.066)	(0.023)	(0.018)
hc	0.031	-0.017	-0.536*	0.031	-0.060	-0.608*
	(0.048)	(0.051)	(0.260)	(0.055)	(0.055)	(0.253)
csh_i	0.117	0.293	0.402	0.372	0.241	0.347
	(0.804)	(0.764)	(0.704)	(1.106)	(0.902)	(0.804)
csh_g	0.138	-0.803	-0.738	-1.315	-0.694	-0.598
	(1.248)	(1.303)	(1.221)	(1.559)	(1.470)	(1.347)
Num.Obs.	448	448	448	448	448	448
R2	0.885	0.834	0.381	0.820	0.810	0.314
R2 Adj.	0.875	0.819	0.304	0.804	0.793	0.227
AIC	52.1	-268.8	-397.3	253.5	-214.5	-350.7
BIC	212.1	-108.7	-368.5	413.6	-54.5	-322.0
Log.Lik.	12.973			-87.767		
RMSE	0.24	0.16	0.15	0.29	0.17	0.16

Source*: Own elaboration in STATA. + p < 0.1, * p < 0.05, ** p < 0.01, *** p < 0.001*

Table 11C: Static Panel Estimates of the Relationship Between Governance Quality and Economic Development (Full Sample)

	OLS: in_voice	RE: in_voice	FE: in_voice	OLS: IQ_pca	RE: IQ_pca	FE: IQ_pca	OLS: ILI	RE: ILI	FE: ILI
(Intercept)	8.636***	10.027***		10.079***	10.486***		7.006***	9.782***	
	(0.671)	(0.819)		(0.715)	(0.917)		(1.505)	(0.730)	
in voice	0.585***	0.363***	0.278**						
	(0.090)	(0.099)	(0.086)						
IQ pca				0.485***	0.342***	0.273***			
				(0.059)	(0.086)	(0.068)			
ILI							-0.191*	-0.346**	-0.281**
							(0.093)	(0.119)	(0.106)
lnopen	0.007	-0.191+	-0.087	-0.275**	-0.253*	-0.138+	0.318	-0.085	-0.028
	(0.087)	(0.114)	(0.079)	(0.087)	(0.116)	(0.079)	(0.222)	(0.083)	(0.080)
lnfdistock	0.137**	0.053**	0.047**	0.091*	0.027	0.025	0.185*	0.069**	0.063***
	(0.046)	(0.018)	(0.015)	(0.044)	(0.023)	(0.019)	(0.087)	(0.023)	(0.019)
hc	0.006	-0.041	-0.575*	0.007	-0.017	-0.541*	0.024	-0.173**	-0.514**
	(0.057)	(0.057)	(0.266)	(0.041)	(0.043)	(0.241)	(0.070)	(0.060)	(0.179)
csh i	-0.125	0.281	0.402	-0.610	0.013	0.189	0.822	0.363	0.439
	(1.146)	(0.841)	(0.745)	(1.000)	(0.849)	(0.766)	(1.216)	(0.824)	(0.783)
csh g	-1.415	-1.243	-1.044	-0.149	-0.798	-0.728	-1.257	-0.640	-0.602
	(1.400)	(1.433)	(1.326)	(1.262)	(1.372)	(1.287)	(1.832)	(1.366)	(1.296)
Num.Obs.	448	448	448	448	448	448	448	448	448
R2	0.861	0.817	0.326	0.894	0.834	0.380	0.769	0.824	0.321
R2 Adj.	0.849	0.800	0.241	0.885	0.819	0.301	0.748	0.808	0.236
AIC	137.8	-227.6	-358.7	16.1	-266.8	-395.9	366.2	-252.7	-355.8
BIC	297.9	-67.5	-330.0	176.2	-106.7	-367.1	526.3	-92.7	-327.1
Log.Lik.	-29.904			30.937			-144.108		
RMSE	0.26	0.17	0.16	0.23	0.16	0.15	0.33	0.17	0.16

Source: *Own elaboration in STATA. + $p < 0.1$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$*

4.3.2 Instrumental-variable estimates (2SLS): governance quality and economic development

Tables 12-17 show results for six important parts of institutional quality: control of corruption, rule of law, regulatory quality, government effectiveness, political stability, and voice and accountability. The analysis uses two main methods: fixed-effects IV (FE-IV) and historical IV (HIST-IV).

In all cases, governance indicators are considered as factors that can be influenced by other variables. The main goal is to see if the positive link between institutions and income remains strong even when we account for the possibility that higher income could also improve institutions.

In all, the analysis across six governance dimensions shows that estimated coefficients are positive under both FE-IV and HIST-IV identification. This consistency of sign across measures is notable and connects with the framework described in Chapters I and II, which views institutions as multidimensional constraints on incentives, enforcement, and state capacity. Thus, the findings reinforce the view that institutional quality is a complex systemic bundle, or in other words, a nexus, where dimensions reinforce each other rather than acting independently (North, 1990; Acemoglu & Robinson, 2012).

The FE-IV method looks at changes within each country over time. All six governance indicators have positive and mostly significant effects. The size of these effects is similar, usually between 0.4 and 0.7. This means that even small improvements in governance, such as reducing corruption or improving public services, are linked to real but moderate increases in income.

This is consistent with the institutional-reform literature, which emphasizes gradual, incentive-compatible change rather than institutional “big bangs” (Rodrik, 2008; North, Wallis, & Weingast, 2009). Importantly, the FE-IV estimates are systematically smaller than their historical counterparts, reinforcing the interpretation already discussed in Chapter II. That is, short- to medium-run institutional reforms operate on the margin of an inherited institutional structure and therefore generate more modest income effects than big, historically embedded institutional differences.

The near-identical FE-IV estimates across instrument sets (EU candidacy and conflict exposure, with and without historical imperial fragmentation) further strengthen credibility. When country fixed effects are included, the identifying variation appears driven mainly by institutionally proximate shocks linked to reform incentives and external constraints. Deeper historical structure seems to play a lesser role. This fits with the European integration literature, which finds that accession conditionality affects economic outcomes primarily through governance and legal harmonization, not just trade channels (Campos, Coricelli, & Moretti, 2014).

The HIST-IV method, which uses long-term historical factors, gives bigger effects for all six governance areas. The results are especially strong for regulatory quality, government effectiveness, and control of corruption when using measures like religious composition, legal integration, or ILI.

This systematic difference between FE-IV and HIST-IV estimates closely matches the distinction made in Chapters I and II between within-country institutional change and between-country institutional inheritance. Historical instruments capture persistent differences in legal traditions, administrative capacity, and authority norms that shape institutional equilibria over long periods. As argued by Acemoglu, Johnson, and Robinson (2001, 2002), such deep institutional legacies can result in large and lasting income gaps. At the same time, the heterogeneity in first-stage strength across historical instruments—as shown in Table 20—illustrates the demand for caution in interpreting magnitude. This warning is emphasized in critiques of "deep history" IV strategies (Glaeser et al., 2004; Bazzi & Clemens, 2013).

Historical determinants that are closely linked to legal systems and social norms, such as legal integration or religion, give more reliable results than very old or abstract measures. This suggests that strong institutions over the long term are mostly passed on through legal and administrative systems.

Even though the effects are not all the same size, none of the six areas of governance is the most important when we control for other factors. All have similar effects when using these methods. This supports the idea that institutions are strongest when they work together, and focusing on just one area can miss the full story.

At the same time, areas related to state capacity and government performance, for example, regulatory quality and government effectiveness, show the most stable and clear results. This is consistent with research suggesting that strong public administration and effective rule enforcement are key to long-term growth (Besley & Persson, 2011).

The results in Tables 12-17 show that the link between good institutions and higher income is not only because richer countries improve their institutions. The FE-IV results show the effect of recent reforms, while the HIST-IV results show the impact of long-term institutional history.

Table 12: Instrumental-Variable (2SLS) Estimates of the Relationship Between Control of Corruption and Economic Development

	FE-IV: Z1 (eucand + conflict)	FE-IV: Z2 (eucand + conflict + hief)	HIST-IV: ZH1 (history)	HIST-IV: ZH2 (religion)	HIST-IV: ZH3 (ILI)
(Intercept)	12.193***	12.193***	11.309***	14.144***	13.634***
	(1.741)	(1.741)	(1.971)	(2.430)	(2.578)
lnopen	-0.238+	-0.238+	-0.584	-1.152*	-1.050*
	(0.131)	(0.131)	(0.371)	(0.453)	(0.484)
lnfdistock	-0.017	-0.017	0.039	-0.049	-0.033
	(0.032)	(0.032)	(0.068)	(0.073)	(0.066)
hc	-0.825*	-0.825*	0.062	0.026	0.032
	(0.407)	(0.407)	(0.041)	(0.047)	(0.047)
csh_i	0.088	0.088	-1.457	-2.991	-2.715
	(0.909)	(0.909)	(1.530)	(1.817)	(1.972)
csh_g	-0.554	-0.554	1.069	2.639	2.357+
	(1.374)	(1.374)	(1.608)	(1.631)	(1.394)
in_cc	0.658**	0.658**	0.943**	1.477***	1.381**
	(0.212)	(0.212)	(0.362)	(0.417)	(0.436)
Num.Obs.	448	448	448	448	448
R2	0.932	0.932	0.809	0.617	0.664
R2 Adj.	0.924	0.924	0.792	0.582	0.633
AIC	-156.6	-156.6	280.7	593.1	534.7
BIC	56.9	56.9	440.8	753.2	694.8
RMSE	0.18	0.18	0.30	0.43	0.40
Std.Errors	FE-IV: Z1 (eucand +	FE-IV: Z2 (eucand +	HIST-IV: ZH1	HIST-IV: ZH2	HIST-IV: ZH3

Source: *Own elaboration in R. + p < 0.1, * p < 0.05, ** p < 0.01, *** p < 0.001 Table22: Dependent variable lny. Endogenous regressor: in_cc. FE-IV columns include country+year FE; HIST-IV columns include year FE only.*

SE: HC1 clustered by country (from model.frame / estimation sample).

Table 13: Instrumental-Variable (2SLS) Estimates of the Relationship Between Rule of Law and Economic Development

	FE-IV: Z1 (eucand + conflict)	FE-IV: Z2 (eucand + conflict + hief)	HIST-IV: ZH1 (history)	HIST-IV: ZH2 (religion)	HIST-IV: ZH3 (ILI)
(Intercept)	10.782***	10.782***	8.794***	12.659***	9.088***
	(1.382)	(1.382)	(1.211)	(2.270)	(1.365)
lnopen	-0.153	-0.153	-0.039	-0.748+	-0.093
	(0.140)	(0.140)	(0.191)	(0.452)	(0.198)
lnfdistock	0.040	0.040	0.120*	0.005	0.112*
	(0.030)	(0.030)	(0.054)	(0.084)	(0.052)
hc	-0.487	-0.487	0.056	-0.054	0.047
	(0.312)	(0.312)	(0.046)	(0.039)	(0.045)
csh i	-0.168	-0.168	-0.578	-3.417+	-0.794
	(1.093)	(1.093)	(1.419)	(2.039)	(1.699)
csh g	-0.937	-0.937	-0.545	1.251	-0.408
	(1.529)	(1.529)	(1.571)	(1.933)	(1.381)
in rol	0.591*	0.591*	0.504**	1.284**	0.563**
	(0.244)	(0.244)	(0.185)	(0.416)	(0.196)
Num.Obs.	448	448	448	448	448
R2	0.935	0.935	0.867	0.634	0.867
R2 Adj.	0.927	0.927	0.855	0.601	0.855
AIC	-175.9	-175.9	119.5	572.3	118.2
BIC	37.6	37.6	279.6	732.3	278.3
RMSE	0.18	0.18	0.25	0.42	0.25
Std.Errors	FE-IV: Z1 (eucand +	FE-IV: Z2 (eucand +	HIST-IV: ZH1	HIST-IV: ZH2	HIST-IV: ZH3

Source: *Own elaboration in R. + p < 0.1, * p < 0.05, ** p < 0.01, *** p < 0.001 Table23: Dependent variable lny. Endogenous regressor: in_rol. FE-IV columns include country+year FE; HIST-IV columns include year FE only.*

SE: HC1 clustered by country (from model.frame / estimation sample).

Table 14: Instrumental-Variable (2SLS) Estimates of the Relationship Between Regulatory Quality and Economic Development

	FE-IV: Z1 (eucand + conflict)	FE-IV: Z2 (eucand + conflict + hief)	HIST-IV: ZH1 (history)	HIST-IV: ZH2 (religion)	HIST-IV: ZH3 (ILI)
(Intercept)	10.070***	10.070***	8.838***	12.655***	8.612***
	(0.970)	(0.970)	(1.509)	(1.578)	(1.541)
lnopen	-0.168+	-0.168+	-0.078	-0.826*	-0.034
	(0.096)	(0.096)	(0.251)	(0.343)	(0.254)
lnfdistock	-0.012	-0.012	0.099	-0.045	0.107
	(0.039)	(0.039)	(0.077)	(0.090)	(0.077)
hc	-0.248	-0.248	0.033	-0.106	0.042
	(0.277)	(0.277)	(0.052)	(0.079)	(0.053)
csh_i	-0.088	-0.088	0.070	-1.709*	0.176
	(0.964)	(0.964)	(1.077)	(0.855)	(1.126)
csh_g	-0.203	-0.203	-0.036	2.471	-0.185
	(1.438)	(1.438)	(1.529)	(1.949)	(1.478)
in_reg	0.681**	0.681**	0.692**	1.732***	0.630**
	(0.232)	(0.232)	(0.253)	(0.458)	(0.243)
Num.Obs.	448	448	448	448	448
R2	0.941	0.941	0.859	0.647	0.857
R2 Adj.	0.934	0.934	0.847	0.615	0.845
AIC	-219.9	-219.9	143.8	556.6	150.1
BIC	-6.5	-6.5	303.9	716.7	310.2
RMSE	0.17	0.17	0.26	0.41	0.26
Std.Errors	FE-IV: Z1 (eucand +	FE-IV: Z2 (eucand +	HIST-IV: ZH1	HIST-IV: ZH2	HIST-IV: ZH3

Source: *Own elaboration in R. + p < 0.1, * p < 0.05, ** p < 0.01, *** p < 0.001 Table23: Dependent variable lny. Endogenous regressor: in_reg. FE-IV columns include country+year FE; HIST-IV columns include year FE only.*

SE: HC1 clustered by country (from model.frame / estimation sample).

Table 15: Instrumental-Variable (2SLS) Estimates of the Relationship Between Government Efficiency and Economic Development(2SLS)

	FE-IV: Z1 (eucand + conflict)	FE-IV: Z2 (eucand + conflict + hief)	HIST-IV: ZH1 (history)	HIST-IV: ZH2 (religion)	HIST-IV: ZH3 (ILI)
(Intercept)	11.148***	11.148***	10.821***	11.670***	10.499***
	(1.297)	(1.297)	(1.479)	(0.864)	(1.763)
lnopen	-0.261*	-0.261*	-0.479	-0.647**	-0.415
	(0.126)	(0.126)	(0.301)	(0.205)	(0.345)
lnfdistock	-0.018	-0.018	0.033	0.002	0.044
	(0.051)	(0.051)	(0.060)	(0.034)	(0.072)
hc	-0.421	-0.421	-0.012	-0.038	-0.002
	(0.282)	(0.282)	(0.063)	(0.071)	(0.057)
csh_i	0.194	0.194	-0.394	-0.704	-0.277
	(0.709)	(0.709)	(0.812)	(0.730)	(0.928)
csh_g	-0.810	-0.810	0.966	1.467	0.776
	(1.175)	(1.175)	(1.235)	(1.142)	(1.283)
in_goveff	0.701**	0.701**	0.948***	1.126***	0.880**
	(0.239)	(0.239)	(0.250)	(0.192)	(0.276)
Num.Obs.	448	448	448	448	448
R2	0.944	0.944	0.857	0.812	0.868
R2 Adj.	0.937	0.937	0.844	0.795	0.857
AIC	-242.9	-242.9	152.1	275.0	114.1
BIC	-29.4	-29.4	312.2	435.1	274.2
RMSE	0.16	0.16	0.26	0.30	0.25
Std.Errors	FE-IV: Z1 (eucand +	FE-IV: Z2 (eucand +	HIST-IV: ZH1	HIST-IV: ZH2	HIST-IV: ZH3

Source: *Own elaboration in R. + p < 0.1, * p < 0.05, ** p < 0.01, *** p < 0.001 Table23: Dependent variable lny. Endogenous regressor: in_goveff. FE-IV columns include country+year FE; HIST-IV columns include year FE only. SE: HC1 clustered by country (from model.frame / estimation sample).*

Table 16: Instrumental-Variable (2SLS) Estimates of the Relationship Between Political Stability and Economic Development

	FE-IV: Z1 (eucand + conflict)	FE-IV: Z2 (eucand + conflict + hief)	HIST-IV: ZH1 (history)	HIST-IV: ZH2 (religion)	HIST-IV: ZH3 (ILI)
(Intercept)	10.491***	10.491***	9.918***	10.477***	9.439***
	(1.070)	(1.070)	(1.518)	(1.554)	(1.882)
lnopen	-0.172	-0.172	-0.312	-0.425	-0.215
	(0.117)	(0.117)	(0.267)	(0.280)	(0.346)
lnfdistock	0.043+	0.043+	0.142*	0.134*	0.149*
	(0.026)	(0.026)	(0.068)	(0.066)	(0.069)
hc	-0.524+	-0.524+	-0.036	-0.061	-0.014
	(0.275)	(0.275)	(0.070)	(0.104)	(0.062)
csh i	-0.030	-0.030	-0.244	-0.475	-0.045
	(0.984)	(0.984)	(1.199)	(1.408)	(1.264)
csh g	-0.535	-0.535	-1.044	-0.942	-1.131
	(1.407)	(1.407)	(1.496)	(1.494)	(1.482)
in pol	0.437**	0.437**	0.681**	0.786*	0.591*
	(0.135)	(0.135)	(0.242)	(0.347)	(0.235)
Num.Obs.	448	448	448	448	448
R2	0.937	0.937	0.783	0.750	0.803
R2 Adj.	0.929	0.929	0.763	0.727	0.785
AIC	-191.9	-191.9	338.4	402.5	294.5
BIC	21.6	21.6	498.5	562.6	454.6
RMSE	0.17	0.17	0.32	0.35	0.31
Std.Errors	FE-IV: Z1 (eucand +	FE-IV: Z2 (eucand +	HIST-IV: ZH1	HIST-IV: ZH2	HIST-IV: ZH3

Source: *Own elaboration in R. + $p < 0.1$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$ Table23: Dependent variable lny. Endogenous regressor: in_pol. FE-IV columns include country+year FE; HIST-IV columns include year FE only.*

SE: HC1 clustered by country (from model. frame/estimation sample).

Table 17: Instrumental-Variable (2SLS) Estimates of the Relationship Between Voice Accountability Institution Quality and Economic Development

	FE-IV: Z1 (eucand + conflict)	**FE-IV: Z2 (eucand + conflict + hief)**	**HIST-IV: ZH1 (history)**	**HIST-IV: ZH2 (religion)**	**HIST-IV: ZH3 (ILI)**
(Intercept)	10.711***	10.711***	8.944***	11.333***	8.730***
	(1.301)	(1.301)	(1.174)	(2.276)	(1.266)
lnopen	-0.202	-0.202	-0.047	-0.468	-0.009
	(0.125)	(0.125)	(0.187)	(0.403)	(0.186)
lnfdistock	0.045*	0.045*	0.129*	0.070	0.134*
	(0.023)	(0.023)	(0.053)	(0.074)	(0.053)
hc	-0.466	-0.466	-0.010	-0.133	0.001
	(0.324)	(0.324)	(0.052)	(0.093)	(0.051)
csh_i	0.132	0.132	-0.307	-1.717	-0.180
	(0.832)	(0.832)	(1.237)	(2.000)	(1.424)
csh_g	-1.458	-1.458	-1.378	-1.083	-1.404
	(1.348)	(1.348)	(1.371)	(1.347)	(1.355)
in_voice	0.570**	0.570**	0.662***	1.261*	0.609**
	(0.180)	(0.180)	(0.185)	(0.568)	(0.193)
Num.Obs.	448	448	448	448	448
R2	0.939	0.939	0.859	0.704	0.861
R2 Adj.	0.932	0.932	0.847	0.678	0.849
AIC	-207.2	-207.2	144.4	476.7	138.4
BIC	6.3	6.3	304.4	636.8	298.5
RMSE	0.17	0.17	0.26	0.38	0.26
Std.Errors	FE-IV: Z1 (eucand +	FE-IV: Z2 (eucand +	HIST-IV: ZH1	HIST-IV: ZH2	HIST-IV: ZH3

Source: *Own elaboration in R. + p < 0.1, * p < 0.05, ** p < 0.01, *** p < 0.001 Table23: Dependent variable lny. Endogenous regressor: in_voice. FE-IV columns include country+year FE; HIST-IV columns include year FE only.*

SE: HC1 clustered by country (from model. frame/estimation sample).

Table 18 shifts the focus from individual governance dimensions to a composite measure of institutional quality (in_avg), defined as the simple average of the six Worldwide Governance Indicators. This specification operationalizes the conceptual framework developed in Chapters I and II, in which institutions are modeled as a multidimensional, internally complementary system rather than as separable channels.

With the FE-IV method, the average institutional quality has a positive and significant effect, with a stable result of about 0.61, no matter which instruments are used. This means that recent changes, like EU reforms or conflict-related changes, are the main drivers, not deep historical factors. As before, the size of the effect suggests that improving governance within a country leads to real but moderate income gains (North, Wallis, & Weingast, 2009; Rodrik, 2008).

The HIST-IV method gives larger effects, from about 0.70 to 1.21, with the biggest effect seen when using the religion-based instrument. This concurs with the results for individual governance areas and supports the idea that there is a difference between short- and long-term institutional change. Combined governance measures are especially good at showing how legal, administrative, political, and accountability systems develop together over time (Acemoglu & Robinson, 2012).

The HIST-IV models explain less of the differences and have higher errors than the FE-IV models because they compare countries and do not control for country-specific factors. Better institutions are strongly linked to higher income, no matter which method is used.

The control variables behave much like in earlier tables. Trade openness sometimes has a weak negative effect. Foreign direct investment and human capital do not show stable effects once we account for institutions. This instability is not surprising because when we look at institutions as the main driver, other growth factors often work through them instead of on their own (Rodrik, Subramanian, & Trebbi, 2004). Table 18 gives the clearest evidence that overall governance matters more for development than any single part alone.

Table 18: Instrumental-Variable (2SLS) Estimates of the Relationship Between Mean Institution Quality in_avg and Economic Development

	FE-IV: Z1 (eucand + conflict)	**FE-IV: Z2 (eucand + conflict + hief)**	**HIST-IV: ZH1 (history)**	**HIST-IV: ZH2 (religion)**	**HIST-IV: ZH3 (ILI)**
(Intercept)	10.895***	10.895***	10.206***	11.971***	9.573***
	(1.207)	(1.207)	(1.235)	(1.338)	(1.508)
lnopen	-0.203+	-0.203+	-0.336+	-0.677**	-0.214
	(0.114)	(0.114)	(0.199)	(0.241)	(0.246)
lnfdistock	0.016	0.016	0.083	0.033	0.101+
	(0.027)	(0.027)	(0.055)	(0.056)	(0.061)
hc	-0.492+	-0.492+	-0.004	-0.062	0.017
	(0.273)	(0.273)	(0.037)	(0.047)	(0.044)
csh_i	-0.006	-0.006	-0.771	-1.685	-0.442
	(0.897)	(0.897)	(1.118)	(1.156)	(1.317)
csh_g	-0.759	-0.759	-0.040	0.712	-0.310
	(1.352)	(1.352)	(1.293)	(1.311)	(1.281)
in_avg	0.611**	0.611**	0.837***	1.215***	0.701**
	(0.192)	(0.192)	(0.196)	(0.307)	(0.224)
Num.Obs.	448	448	448	448	448
R2	0.949	0.949	0.892	0.843	0.892
R2 Adj.	0.943	0.943	0.883	0.829	0.883
AIC	-287.2	-287.2	24.4	192.5	24.6
BIC	-73.8	-73.8	184.5	352.6	184.7
RMSE	0.16	0.16	0.23	0.27	0.23
Std.Errors	FE-IV: Z1 (eucand +	FE-IV: Z2 (eucand +	HIST-IV: ZH1	HIST-IV: ZH2	HIST-IV: ZH3

Source: *Own elaboration in R. + p < 0.1, * p < 0.05, ** p < 0.01, *** p < 0.001 Table23: Dependent variable lny. Endogenous regressor: in_avg. FE-IV columns include country+year FE; HIST-IV columns include year FE only. SE: HC1 clustered by country (from model. frame/estimation sample).*

Table 19 further refines the analysis by replacing the simple average index with a PCA-based latent institutional factor (IQ_pca), capturing the common component underlying all six governance indicators. This approach directly addresses concerns raised in Chapters I and II regarding measurement error, dimensional redundancy, and conceptual overlap among institutional indicators.

Under FE-IV identification, the latent institutional factor enters positively and statistically significantly, with coefficients around 0.39 across alternative instrument sets. Although smaller in magnitude than the corresponding in_avg estimates, these coefficients are tightly estimated and highly stable, consistent with the interpretation that PCA removes idiosyncratic noise while preserving the core governance signal. As in previous FE-IV results, identification is driven by EU-related and conflict-based variation once country and year fixed effects are included.

The HIST-IV estimates again exceed their FE-IV counterparts, with coefficients ranging from approximately 0.44 to 0.77, and the strongest effects obtained using the ILI- and religion-based instruments. Relative to Table 18, the HIST-IV coefficients for IQ_pca are somewhat smaller but more coherent across instrument sets, suggesting that the latent-factor approach attenuates extreme estimates driven by individual governance dimensions while preserving the long-run institutional signal.

This pattern is directly consistent with the argument developed in Chapter II that institutions should be modeled as latent, system-level constructs rather than as additive collections of observable indicators. By extracting the common institutional factor, the PCA-based specification matches more closely with theoretical models of institutional equilibria and reduces sensitivity to the particular composition of governance indices (Glaeser et al., 2004).

As in Table 18, control variables exhibit limited robustness once institutions are instrumented, reinforcing the interpretation that institutional quality absorbs much of the explanatory power typically attributed to openness, factor accumulation, or expenditure shares in reduced-form growth regressions.

Overall, Table 19 represents the most internally coherent specification in the IV block. While coefficients are more conservative than those obtained using the mean index, they are more stable across instruments and more closely aligned with the overall conceptual framework of the dissertation. The results therefore strengthen—rather than merely replicate—the evidence from Table 18 by demonstrating that institutional effects persist when governance is treated as a latent construct.

Instrument performance varies, as seen in IV diagnostics in Table 20, underscoring substantial heterogeneity across both institutional measures and identification strategies. Specifically, in FE-IV specifications, EU candidacy and conflict exposure generally achieve strong first-stage F-statistics, typically exceeding weak-instrument thresholds, while some individual dimensions remain borderline. By contrast, in HIST-IV, instrument relevance is more variable: the Index of Legal Integration and religion-based instruments perform best, whereas abstract proxies like early statehood or medieval political organization are frequently borderline.

This ranking closely corresponds to the concerns raised in the methodological literature on institutional IV strategies. While early cross-sectional studies emphasized deep historical instruments and reported large institutional effects (Acemoglu et al., 2001, 2002), subsequent critiques have stressed that instrument relevance and exclusion credibility often deteriorate in panel and fixed-effects contexts (Glaeser et al., 2004; Bazzi & Clemens, 2013). More recent contributions therefore favor institutionally proximate instruments—such as EU accession, legal harmonization, or historically persistent but policy-relevant legal structures—that generate variation closer to the reform margin (Campos et al., 2014; Becker et al., 2016).

As has been shown in Tables 12-19, these patterns match the shift in assessment described above. Measures of overall and administrative capacity remain robust when instruments closely relate to current reforms. Estimates that rely on weaker or older instruments are less stable. Consequently, while deep historical legacies matter, they are best evaluated when closely connected to today’s legal and administrative systems across the analyzed region.

Finally, the distinction between FE-IV and HIST-IV estimates reinforces the conceptual argument advanced in Chapters I and II and echoed by Rodrik, Subramanian, and Trebbi (2004): institutional primacy decomposes into a smaller within-country effect associated with incremental reform and a larger between-country effect reflecting historical institutional inheritance. The IV results thus serve their intended role as an intermediate step—demonstrating robustness to endogeneity while motivating the need for estimators that explicitly reconcile persistence and heterogeneity.

This leads to the next part of the analysis. The next sections use new methods to separate changes within countries from differences between countries, and to address both persistence and endogeneity together.

Table 19: Instrumental-Variable (2SLS) Estimates of the Relationship Between Overall PCA Institution Quality IQ_pca and Economic Development

	FE-IV: Z1 (eucand + conflict)	**FE-IV: Z2 (eucand + conflict + hief)**	**HIST-IV: ZH1 (history)**	**HIST-IV: ZH2 (religion)**	**HIST-IV: ZH3 (ILI)**
(Intercept)	11.033***	11.033***	10.376***	12.314***	9.707***
	(1.238)	(1.238)	(1.275)	(1.402)	(1.548)
lnopen	-0.204+	-0.204+	-0.329+	-0.685**	-0.206
	(0.114)	(0.114)	(0.199)	(0.243)	(0.244)
lnfdistock	0.015	0.015	0.082	0.029	0.101+
	(0.027)	(0.027)	(0.055)	(0.056)	(0.061)
hc	-0.485+	-0.485+	-0.003	-0.064	0.018
	(0.273)	(0.273)	(0.037)	(0.045)	(0.044)
csh_i	-0.004	-0.004	-0.756	-1.712	-0.426
	(0.893)	(0.893)	(1.114)	(1.137)	(1.311)
csh_g	-0.760	-0.760	-0.027	0.770	-0.302
	(1.350)	(1.350)	(1.293)	(1.316)	(1.281)
IQ_pca	0.385**	0.385**	0.524***	0.772***	0.438**
	(0.121)	(0.121)	(0.123)	(0.193)	(0.140)
Num.Obs.	448	448	448	448	448
R2	0.949	0.949	0.893	0.842	0.893
R2 Adj.	0.943	0.943	0.884	0.827	0.883
AIC	-288.8	-288.8	20.1	197.3	22.3
BIC	-75.3	-75.3	180.1	357.4	182.4
RMSE	0.16	0.16	0.23	0.28	0.23
Std.Errors	FE-IV: Z1 (eucand +	FE-IV: Z2 (eucand +	HIST-IV: ZH1	HIST-IV: ZH2	HIST-IV: ZH3

Source: *Own elaboration in R. + p < 0.1, * p < 0.05, ** p < 0.01, *** p < 0.001 Table23: Dependent variable lny. Endogenous regressor: IQ_pca. FE-IV columns include country+year FE; HIST-IV columns include year FE only. SE: HC1 clustered by country (from model. frame/estimation sample).*

Table 20: Summary of IV diagnostic tests

Institutional variable	IV strategy	First-stage F	Weak IV?	DWH (endogeneity)	Verdict
Control of corruption (in_cc)	FE-IV (EU+conflict)	**16.7**	No	**Yes**	Valid IV
	HIST-IV (religion)	**5.30**	Borderline	**Yes**	Acceptable
Rule of law (in_rol)	FE-IV (EU+conflict)	**5.0**	Borderline	Yes	Acceptable
	HIST-IV (ILI)	**13.5**	No	No	Strong IV
Regulatory quality (in_reg)	HIST-IV (ILI)	**47.4**	No	No	Very strong
Government effectiveness (in_goveff)	HIST-IV (religion)	**8.9**	No	Yes	Strong
Political stability (in_pol)	FE-IV (EU+conflict)	**10.4**	No	Yes	Strong
Voice & accountability (in_voice)	FE-IV (EU+conflict)	**9.6**	No	Borderline	Acceptable
Mean institutions (in_avg)	HIST-IV (religion)	**12.2**	No	Yes	Strong
PCA institutions (IQ_pca)	HIST-IV (ILI)	**20.5**	No	No	Very strong

Source: *Own elaboration based on econometric results. DWH stands for the Durbin-Wu-Hausman test of endogeneity.*

4.3.3 Correlated random effects (Mundlak) specification: reconciling cross-sectional institutional legacies with panel estimation

Table 21 presents the results from the Correlated Random Effects (CRE) model, which uses country averages for variables that change over time. The main outcome is log GDP per capita. All models include the same set of current controls, country averages, and historical and structural legacy factors. Standard errors are robust and clustered by country. The CRE (Mundlak) approach explicitly decomposes within-country (short-run) and between-country (long-run) variation, allowing institutional persistence to be analyzed within a unified panel framework, as discussed in Chapters I and II (Mundlak, 1978; Wooldridge, 2010).

In the CRE models, the short-term effects of institutional variables within countries are mostly small and not statistically significant. For example, control of corruption, rule of law, regulatory quality, government effectiveness, political stability, and voice and accountability usually do not show strong effects.

This result is similar to what we saw with the fixed-effects models. It shows that short-term changes in institutional quality within countries are not closely linked to changes in income. In the Western Balkans, reforms often take time to show results, and quick improvements in income are rare. This pattern is consistent with the theoretical view that institutions primarily shape economic outcomes through long-run credibility, enforcement, and expectation channels rather than through immediate growth responses (North, 1990; Acemoglu & Robinson, 2012).

A main exception is regulatory quality, which has a positive, statistically significant short-term effect, suggesting that market-regulating capacity may affect income more quickly than other institutional factors.

Countries that have strong institutions over time tend to have much higher income than those with weaker institutions. The country averages for rule of law, regulatory quality, government effectiveness, average governance, and the composite institutional index are all positive and significant in the results. This implies that countries with better institutions over the long run have higher income, even when we control for current changes and other factors. The results suggest that institutions matter most for long-term differences between countries, not for short-term changes within them.

The CRE results help explain why pooled and IV models show stronger effects than fixed-effects models. The fixed-effects approach removes much of the institutional variation that is most closely linked to income differences. By contrast, the CRE specification preserves this between-country variation while still controlling for unobserved heterogeneity, making it particularly well suited for analyzing persistent institutional differences in small regional panels (Pesaran & Zhou, 2018).

The composite measures of institutions, like the average governance index and the PCA-based index, work especially well. Their country averages are highly significant and stable, while the short-term effects remain small. This suggests that the overall quality of institutions matters more for long-term income differences than any single aspect of governance. Using composite indices is helpful, especially in small samples like the Western Balkans. The results also point to the value of broad reform packages, rather than trying to fix one area at a time.

Looking at the control variables, openness and foreign direct investment have weak short-term effects but stronger positive effects when we look at country averages. This supports the idea that long-term openness is more important for income than short-term changes.

Human capital shows a similar pattern. The short-term effects are small, but countries with higher average education over time have higher income.

Some historical factors that do not change over time still help explain income differences in the CRE models. For example, state formation after World War I and religious composition are significant in several models. As expected, countries farther from Brussels tend to have lower income. These legacy effects, even after controlling for current and long-term institutional quality, indicate that deep historical and geopolitical factors continue to shape economic outcomes in the Western Balkans.

Model fit statistics (log-likelihood, BIC, RMSE) are broadly comparable across institutional specifications, indicating that no single governance dimension dominates in terms of explanatory power. The similarity in RMSE across models suggests that the choice of institutional dimensions mainly affects coefficient interpretation rather than overall predictive performance. This is an important distinction, as comparable RMSEs highlight the model's strength in explaining the relationships between variables, rather than its ability to forecast outcomes accurately. By understanding this distinction, readers are able to better appreciate the nuance in model evaluation.

Overall, the results show that institutional quality matters for development mainly through long-term differences between countries, not through short-term changes. Changes within countries have limited quick effects on income, except for some impact from regulatory quality. Composite measures of institutions capture these long-term effects best. Historical legacies still play a role, even after considering current governance.

Table 21: Within- and Between-Country Institutional Effects on Economic Development: CRE (Mundlak) Estimates

	CRE_PLM: in_cc	CRE_PLM: in_rol	CRE_PLM: in_reg	CRE_PLM: in_goveff	CRE_PLM: in_pol	CRE_PLM: in_voice	CRE_PLM: in_avg	CRE_PLM: IQ_pca
(Intercept)	11.706***	12.379***	10.334***	14.369***	-4.255	0.758	9.139***	9.443***
	(1.454)	(1.870)	(1.511)	(3.055)	(13.152)	(1.573)	(0.668)	(0.756)
in_cc	-0.035							
	(0.097)							
m_in_cc	0.815***							
	(0.245)							
in_rol		0.103						
		(0.106)						
m_in_rol		0.591*						
		(0.272)						
in_reg			0.268*					
			(0.105)					
m_in_reg			0.397					
			(0.344)					
in_goveff				0.178+				
				(0.106)				
m_in_goveff				0.342				
				(0.261)				
in_pol					0.058			
					(0.062)			
m_in_pol					1.019			
					(1.246)			
in_voice						0.135		
						(0.110)		
m_in_voice						0.599**		
						(0.220)		
in_avg							0.170	
							(0.120)	
m_in_avg							0.771*	
							(0.318)	
iq_pca								0.112
								(0.076)
m_iq_pca								0.464*
								(0.199)
lnopen	0.073	0.050	0.015	0.022	0.054	0.014	0.024	0.022
	(0.073)	(0.082)	(0.081)	(0.086)	(0.076)	(0.102)	(0.095)	(0.096)
lnfdistock	0.162***	0.162***	0.136***	0.152***	0.167***	0.158***	0.157***	0.156***
	(0.033)	(0.034)	(0.028)	(0.031)	(0.032)	(0.034)	(0.034)	(0.034)
hc	0.017	0.055	0.172	0.103	0.035	0.111	0.101	0.106
	(0.197)	(0.217)	(0.198)	(0.222)	(0.203)	(0.220)	(0.230)	(0.230)
csh_i	0.388	0.245	0.096	0.282	0.250	0.225	0.198	0.191
	(0.746)	(0.726)	(0.764)	(0.778)	(0.746)	(0.770)	(0.755)	(0.756)
csh_g	0.433	0.416	0.553	0.471	0.499	0.228	0.451	0.446
	(1.307)	(1.256)	(1.268)	(1.294)	(1.281)	(1.238)	(1.277)	(1.275)
hief_efindex	-0.712***	-0.684***	-0.674***	-0.693***	-0.705***	-0.725***	-0.695***	-0.695***

	CRE_PLM: in_cc	CRE_PLM: in_rol	CRE_PLM: in_reg	CRE_PLM: in_goveff	CRE_PLM: in_pol	CRE_PLM: in_voice	CRE_PLM: in_avg	CRE_PLM: IQ_pca
	(0.135)	(0.152)	(0.142)	(0.177)	(0.156)	(0.143)	(0.154)	(0.153)
mconflict	-0.285+	-0.243	-0.222	-0.233	-0.253	-0.227	-0.228	-0.226
	(0.157)	(0.184)	(0.151)	(0.143)	(0.162)	(0.160)	(0.166)	(0.165)
ottoman	-0.431**	0.000	0.345	0.205	-0.560	-0.361**	-0.030	-0.012
	(0.137)	(0.189)	(0.308)	(0.233)	(0.435)	(0.131)	(0.169)	(0.172)
ah1867	-0.150	-0.176+	-0.302***	-0.216*	-0.313+	-0.047	-0.118	-0.121
	(0.096)	(0.103)	(0.087)	(0.107)	(0.171)	(0.110)	(0.104)	(0.105)
yug	0.157	-0.550**	-0.666***	-0.080	-0.625	-0.888***	-0.223	-0.244
	(0.352)	(0.178)	(0.174)	(0.393)	(0.432)	(0.060)	(0.235)	(0.234)
mw1919	0.516**	0.484*	0.483+	0.499+	-0.268	-0.113	0.429**	0.431**
	(0.195)	(0.212)	(0.257)	(0.262)	(0.317)	(0.069)	(0.159)	(0.162)
mus	-0.265	-0.289+	-0.293*	-0.356*	-0.263+	-0.302*	-0.312*	-0.314*
	(0.166)	(0.163)	(0.146)	(0.161)	(0.142)	(0.137)	(0.159)	(0.158)
orto	-0.040	-0.115	0.068	0.004	-0.033	-0.001	-0.213	-0.201
	(0.288)	(0.322)	(0.298)	(0.287)	(0.714)	(0.243)	(0.310)	(0.309)
ln_brus_distance	0.242	-0.131+	-0.421***	-0.633***	1.775	1.026**	0.316+	0.278+
	(0.154)	(0.067)	(0.064)	(0.147)	(2.422)	(0.339)	(0.173)	(0.166)
m_lnopen	-1.323**	-0.521+	-0.379	-1.055+	0.325+	0.839***	-0.625*	-0.603*
	(0.470)	(0.299)	(0.316)	(0.565)	(0.193)	(0.168)	(0.292)	(0.292)
m_lnfdistock	-0.122***	-0.043	0.018	-0.034	-0.111	-0.063+	-0.065*	-0.062*
	(0.029)	(0.033)	(0.032)	(0.029)	(0.092)	(0.033)	(0.030)	(0.030)
m_hc	0.156	-0.105	-0.192	0.060	-0.134	-0.369+	-0.080	-0.089
	(0.220)	(0.226)	(0.213)	(0.258)	(0.200)	(0.222)	(0.240)	(0.241)
m_csh_i	-0.673	-3.593	6.238*	5.219+	1.050	-3.152	-2.004	-1.690
	(3.533)	(4.972)	(2.597)	(2.662)	(11.519)	(3.769)	(3.852)	(3.838)
m_csh_g	4.640**	-0.057	3.293*	5.707**	-5.971	-7.830*	0.345	0.435
	(1.446)	(1.766)	(1.450)	(1.849)	(9.354)	(3.453)	(1.662)	(1.650)
m_hief_efindex	1.356***	1.165***	0.954***	1.992***	3.565	1.032***	1.657***	1.591***
	(0.150)	(0.179)	(0.230)	(0.313)	(2.509)	(0.198)	(0.172)	(0.167)
m_mconflict	-4.206*	-0.736	-0.091	-4.662	5.600	6.013***	-1.065	-1.008
	(2.107)	(1.282)	(1.251)	(3.042)	(4.279)	(1.030)	(1.140)	(1.142)
Num.Obs.	448	448	448	448	448	448	448	448
R2	0.922	0.922	0.925	0.924	0.920	0.923	0.923	0.924
R2 Adj.	0.917	0.918	0.921	0.920	0.915	0.919	0.919	0.919
AIC	-146.3	-151.1	-168.2	-157.8	-134.5	-153.8	-156.7	-157.5
BIC	-43.6	-48.5	-65.5	-55.1	-31.9	-51.2	-54.1	-54.8
RMSE	0.19	0.19	0.19	0.19	0.20	0.19	0.19	0.19
Std.Errors	CRE_PLM:	CRE_PLM:	CRE_PLM:	CRE_PLM:	CRE_PLM:	CRE_PLM:	CRE_PLM:	CRE_PLM:

Source: *Own elaboration in R. Statistical significance is denoted as + $p < 0.1$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. The table reports estimates from a Correlated Random Effects (CRE) model implemented using the Mundlak (1978) specification and estimated as a random-effects model following the Wallace-Hussain transformation. The dependent variable is log GDP per capita. The CRE approach augments the random-effects specification with country-specific means of all time-varying regressors, allowing for correlation between unobserved country heterogeneity and the explanatory variables. Coefficients on contemporaneous regressors capture within-country effects, while coefficients on the corresponding country means represent between-country (long-run) effects.*

Year fixed effects are omitted in the random-effects specification due to the small cross-sectional dimension of the sample and to avoid over-parameterization of the between-country component of the CRE estimation. Time-invariant historical and structural legacy controls include indicators of imperial heritage (Ottoman, Austro-Hungarian 1867, Yugoslav), interwar statehood (mw1919), religious composition (Muslim, Orthodox, Catholic), and geographic proximity to the EU core (log distance to Brussels). Standard errors are heteroskedasticity-robust (HC1) and clustered at the country level.

4.3.4 Dynamic effects of institutional quality on economic development: system GMM results

Table 22 reports dynamic panel estimates obtained using a one-step difference GMM estimator with individual fixed effects. The specification includes a lagged dependent variable to capture income persistence and addresses potential endogeneity in institutional variables and other covariates by instrumenting them with lagged levels. This dynamic approach complements the static FE, FE-IV, and CRE Mundlak results by explicitly modeling short-run adjustment dynamics even as controlling for unobserved heterogeneity and reverse causality in line with the dynamic panel framework discussed in Chapter II (Arellano & Bond, 1991; Blundell & Bond, 1998).

In all models, the lagged dependent variable has a large and positive effect, with values between 0.96 and 1.00. This indicates that income in the Western Balkans is very persistent and that convergence is slow. Short-term shocks, whether from institutions, the economy, or other factors, only gradually affect long-term income. This degree of persistence is comparable to that found in other regional growth studies and is consistent with models of path-dependent development emphasized in Chapter I (North, 1990; Acemoglu & Robinson, 2012).

This helps explain why institutional effects seem weaker in fixed-effects models. It supports the idea that institutions mainly shape long-term income, not short-term growth. Once past income is controlled for, much of the structural influence of institutions is absorbed by the lagged dependent variable, a well-known feature of dynamic growth regressions (Rodrik et al., 2004; Roodman, 2009).

When we control for income persistence, most institutional variables have weak or insignificant short-term effects. Control of corruption, government effectiveness, political stability, and regulatory quality are not significant. Rule of law and regulatory quality are only borderline significant, showing at best modest short-term effects.

On the other hand, Voice and Accountability, the average governance index, and the composite institutional index are positive and significant at the 5 percent level. This suggests that areas like political participation and accountability may have a more immediate effect on income than narrow administrative or regulatory measures. Such effects are consistent with theories emphasizing expectations, political inclusion, and constraint on executive power as channels through which institutions can influence economic outcomes more rapidly (Acemoglu & Robinson, 2006; Persson & Tabellini, 2009).

It is important not to see insignificant results for some institutional measures as proof that institutions do not matter. Instead, much of their impact is already reflected in past income, which is captured by the lagged dependent variable in these models. In this sense, the dynamic GMM estimates should be interpreted as identifying short-run deviations from long-run institutional equilibria rather than the full structural effect of institutions on development.

Among the control variables, investment share is the most reliable short-term driver of income, with a positive and significant effect in all models. In contrast, trade openness, foreign direct investment, and human capital do not have consistent short-term effects once we account for income persistence. This fits with the idea that these factors mainly matter for long-term growth, not for quick changes in income, as is emphasized in the distinction between growth accelerations and level effects discussed in Chapter II (Easterly, 2001; Rodrik, 2008).

Standard diagnostic tests support the validity of the difference GMM specifications. Tests for first-order serial correlation in differenced residuals evidence significant AR(1), as expected in difference GMM. In contrast, tests for second-order serial correlation fail to reject the null of no AR(2). This confirms that the moment criteria are correctly specified. Wald tests strongly reject the joint null hypothesis of the coefficient insignificance in all models. These diagnostics are consistent with standard best-practice recommendations for dynamic data panel estimation (Arellano & Bond, 1991; Roodman, 2009).

The Sargan test is not reported here because it does not provide useful information about instrument validity in one-step difference GMM models.

The GMM results complete the analysis in this chapter. While the fixed-effects models show limited effects of institutions within countries, and the CRE Mundlak models show the importance of long-term differences between countries, the dynamic analysis shows that institutions do not usually lead to rapid growth once we account for income persistence.

In the Western Balkans, institutions seem to shape economic development slowly and over the long term, rather than driving quick growth. The fact that accountability measures only matter in some models suggests that their effects are gradual, not immediate. The finding is consistent with a path-dependent view of institutional change, where reforms alter trajectories over time rather than generating immediate growth spurts.

Table 22: Dynamic Panel Estimates of Institutional Quality and Economic Development on Full Sample

	GMM_cc	GMM_rol	GMM_reg	GMM_gov	GMM_pol	GMM_voi	GMM_avg	GMM_pca
lag(lny,1)	0.9998***	0.9624***	0.9834***	0.9791***	0.9754***	0.9934***	0.9840***	0.9850***
	(0.1106)	(0.0996)	(0.089)	(0.1054)	(0.1046)	(0.0907)	(0.105)	(0.1044)
Institution	0.0929	0.1076*	0.1047*	0.0741	0.0465	0.2521**	0.1654**	0.1085**
	(0.0863)	(0.0562)	(0.0596)	(0.1309)	(0.034)	(0.0862)	(0.0676)	(0.043)
lnopen	-0.0116	-0.0132	-0.0097	-0.0122	-0.013	-0.0204	-0.0156	-0.0156
	(0.0387)	(0.038)	(0.0384)	(0.0415)	(0.0389)	(0.037)	(0.0389)	(0.0389)
lnfdistock	0.0086	0.0112	0.0032	0.0096	0.0133	0.0032	0.0067	0.006
	(0.0299)	(0.0274)	(0.0305)	(0.0291)	(0.027)	(0.0302)	(0.0287)	(0.029)
hc	0.1678	0.1760***	0.1763	0.1666	0.1651	0.1623	0.1741*	0.1748*
	(0.1102)	(0.0843)	(0.1112)	(0.1122)	(0.1091)	(0.1166)	(0.0914)	(0.091)
csh_i	0.4493***	0.4785***	0.4647***	0.5087***	0.4471***	0.4793***	0.4520***	0.4527***
	(0.2099)	(0.2061)	(0.2056)	(0.235)	(0.202)	(0.2114)	(0.2103)	(0.2102)
csh_g	-0.8414	-0.8315	-0.8461	-0.8669	-0.8513	-0.9083	-0.8684	-0.8696
	(0.5727)	(0.5603)	(0.5696)	(0.5576)	(0.5651)	(0.5872)	(0.5738)	(0.5746)
Observations used	420	420	420	420	420	420	420	420
Countries (n)	14	14	14	14	14	14	14	14
Time periods (T)	32	32	32	32	32	32	32	32
AR(1) p-value	0.014	0.016	0.017	0.018	0.017	0.016	0.017	0.017
AR(2) p-value	0.329	0.314	0.308	0.27	0.298	0.311	0.305	0.307
Wald χ^2 p-value	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001

Source: *Own estimates in R. Significance levels: *** p < 0.01, ** p < 0.05, * p < 0.10, * p < 0.10. The table reports one-step difference GMM estimates with individual fixed effects. Robust standard errors are reported in parentheses. The row "Institution" refers to the column-specific institutional indicator (Control of Corruption, Rule of Law, Regulatory Quality, Government Effectiveness, Political Stability, Voice & Accountability, average governance index, or PCA-based institutional quality index). AR(1) and AR(2) denote Arellano-Bond tests for first- and second-order serial correlation in first differences. Significant AR(1) and insignificant AR(2) statistics indicate valid moment conditions. The Sargan test is not reported because it is degenerate in one-step difference GMM estimation. All models are estimated using a balanced panel of 14 countries over 32 years (420 observations).*

4.4 Deepened Hypotheses Testing

4.4.1 Western Balkans sample

Table 23 shows the results for the Western Balkans, where I look at how changes in institutional quality within each country affect economic growth, after taking into account other important economic determinants. By focusing only on Western Balkan countries and including both country and year effects, this is the strictest test used in my research. This approach assists in separating the impact of changes in governance inside each country from differences that are fixed over time or shared across the region.

In all the models, the different measures of institutional quality do not show a strong or clear positive effect on GDP per person once I control for country and year differences. Most of the results are small and not statistically significant, except for political stability, which has a weak positive link. Overall, there is no strong evidence that better institutions lead to higher income in the short run in these countries, and some results are even close to zero or negative.

This pattern should not be interpreted as evidence that institutions are unimportant for economic development in the Western Balkans. Instead, it reflects the limitations of the identification strategy: Two-way fixed effects remove cross-country differences, which account for much of the explanatory power of institutions. The remaining within-country institutional changes are small due to persistent institutions and gradual reforms. Therefore, these regressions test if small institutional improvements yield short – to medium-term income increases, not whether institutional quality determines long-term income. This distinction between short-run and long-run effects corresponds to the institutional growth literature (Rodrik, Subramanian, & Trebbi, 2004; Acemoglu & Robinson, 2012).

The control variables behave consistently across specifications, lending credibility to the estimates. Government consumption (csh_g) enters with a large and highly significant negative coefficient in all models, while trade openness (lnopen) is also negative and statistically significant in most specifications. These results suggest that, within the Western Balkans, short-run income dynamics are more strongly influenced by macroeconomic structure and fiscal composition than by contemporaneous changes in governance indicators. This is consistent with the view that macro-fiscal adjustments can affect income relatively quickly, while institutional reforms operate through slower-moving credibility and enforcement channels (North, 1990).

The results in Table 23 partly support the main ideas of my research. The first hypothesis, that better institutions help economic development in the Western Balkans, is not confirmed for short-term changes within countries. But this does not go against earlier results. Instead, it shows that institutions matter more for long-term income and development, not for short-term growth.

Therefore, the first hypothesis is still supported when looking at the bigger picture and over a longer period.

The second hypothesis, which focuses on the importance of fighting corruption and having an effective government, also gets only limited support here. These factors are important when comparing countries, but their effect becomes much weaker when looking at changes inside each country over time. This suggests that improvements in these areas happen slowly, and their impact is seen more in long-term differences between countries.

Hypothesis 3, concerning historical institutional persistence. The third hypothesis, about the durable impact of history on institutions, is also supported by these results. The fact that changes in institutions within countries do not have a big effect shows that deep-rooted historical factors still shape how institutions and the economy work in the Western Balkans. Earlier results with the Institutional Legacy Index also point in this direction. It cannot be directly tested in the WB-only two-way fixed-effects framework, as membership status is largely time-invariant within the sample period and thus absorbed by country fixed effects. However, the limited short-run institutional effects observed here are consistent with the interpretation that EU and NATO anchors operate mainly through long-term credibility, policy discipline, and institutional convergence, rather than immediate growth effects.

The fifth hypothesis, that past conflicts still affect how institutions and growth are linked, is also supported in an indirect way. The weak effects of changes within countries suggest that the heritage of conflict works through long-lasting institutional and structural factors, not through quick changes in governance.

Table 23: Impact of Governance Quality on Economic Development (Western Balkans)

	WB FE: in_cc	WB FE: in_rol	WB FE: in_reg	WB FE: in_goveff	WB FE: in_pol	WB FE: in_voice	WB FE: in_avg	WB FE: IQ_pca
in_cc	-0.086							
	(0.137)							
in_rol		-0.153						
		(0.095)						
in_reg			0.028					
			(0.100)					
in_goveff				-0.124				
				(0.142)				
in_pol					0.100*			
					(0.043)			
in_voice						0.059		
						(0.144)		
in_avg							-0.039	
							(0.222)	
IQ_pca								-0.031
								(0.143)
lnopen	-0.128***	-0.158*	-0.170*	-0.112	-0.192*	-0.174**	-0.158*	-0.156*
	(0.028)	(0.069)	(0.074)	(0.092)	(0.081)	(0.060)	(0.063)	(0.062)
lnfdistock	-0.003	-0.028	-0.013	0.007	-0.009	-0.006	-0.010	-0.010
	(0.036)	(0.048)	(0.042)	(0.048)	(0.036)	(0.044)	(0.038)	(0.038)
hc	0.159	0.189	0.097	0.169	0.020	0.057	0.128	0.133
	(0.287)	(0.218)	(0.222)	(0.225)	(0.247)	(0.300)	(0.304)	(0.306)
csh_i	-0.013	-0.176	-0.081	-0.202+	-0.016	-0.065	-0.090	-0.091
	(0.238)	(0.230)	(0.221)	(0.109)	(0.264)	(0.249)	(0.188)	(0.186)
csh_g	-3.369***	-3.193***	-3.277***	-3.398***	-3.251***	-3.359***	-3.298***	-3.299***
	(0.749)	(0.673)	(0.691)	(0.651)	(0.668)	(0.669)	(0.743)	(0.744)
Num.Obs.	159	159	159	159	159	159	159	159
R2	0.578	0.586	0.574	0.580	0.586	0.574	0.574	0.574
R2 Adj.	0.430	0.442	0.424	0.432	0.440	0.425	0.424	0.424
AIC	-198.7	-202.0	-197.1	-199.4	-201.6	-197.4	-197.1	-197.1
BIC	-177.2	-180.5	-175.6	-177.9	-180.2	-175.9	-175.6	-175.7
RMSE	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12
Std.Errors	WB FE:	WB FE:	WB FE:	WB FE:	WB FE:	WB FE:	WB FE:	WB FE:

Source: *Own estimates in R. Significance levels: + p < 0.10, * p < 0.05, ** p < 0.01, *** p < 0.001.Sample: Western Balkans only. Estimator: Two-way fixed effects (country and year). Standard errors: Heteroskedasticity-robust (HC1), clustered at the country level. Governance variables are entered one at a time: control of corruption (in_cc), rule of law (in_rol), regulatory quality (in_reg), government effectiveness (in_goveff), political stability (in_pol), voice and accountability (in_voice), their simple average (in_avg), and a PCA-based composite index (IQ_pca). Controls: trade openness (lnopen), foreign direct investment stock (lnfdistock), human capital (hc), investment share (csh_i), and government consumption share (csh_g).*

4.4.2 Anchoring institutions

In this subsection, I examine whether external anchors such as EU membership, NATO membership, and EU candidacy influence how institutional quality affects economic development. The analysis moves forward in two steps. First, Table 24 presents two-way fixed effects results, focusing on within-country changes over time. Table 25 then presents Correlated Random Effects to test if the findings are robust when accounting for deeper country differences. Comparing these tables clarifies the impact of external anchors on growth, specifically with respect to Hypothesis 5.

The fixed results for the full sample (columns 1-3) confirm a robust relationship between institutional quality and income levels. The coefficient on the PCA-based institutional index (*IQ_pca*) is positive as well as statistically significant across all specifications, indicating that improvements in governance are associated with higher GDP per capita within countries over time. However, neither EU membership nor NATO membership has a significant effect on its own, and the interaction terms (*IQ_pca* × *eumem* and *IQ_pca* × *nato*) are statistically insignificant. This suggests that, for the wider European sample, formal membership in these organizations does not systematically amplify the short-run growth payoff from institutional improvements, even after controlling for country- and year-fixed effects.

Looking at EU candidacy, a different pattern emerges. While simply becoming a candidate does not directly increase income, the interaction term between candidacy and institutional quality is negative and significant. This means that, during the candidacy phase, reforms can temporarily slow growth, likely due to the immediate costs of adjustment, though these changes may be beneficial later.

In the Western Balkans, the results differ. Here, simply improving institutions does not, in itself, lead to higher income. EU and NATO membership also do not show a clear effect, which is expected given the small changes in the sample. What stands out is that when institutional reforms happen during EU candidacy, they do help growth. This means that in the Western Balkans, external pressure from the EU makes domestic reforms more effective, rather than acting as a separate source of growth.

To examine the robustness of these outcomes, Table 25 checks if they depend too much on the fixed effects method. By using the Correlated Random Effects approach, which takes into account deeper country differences like history or structure, we can see if the main results still hold.

The comparison indicates that the results from the Correlated Random Effects model are very similar. Good institutions are still linked to higher income, and EU or NATO membership does not have a strong direct effect. The negative effect of EU candidacy during reforms also remains, which supports the idea that this phase brings costs and does not speed up growth right away.

For the Western Balkans, CRE results confirm prior findings: institutional improvements alone do not encourage growth, but when combined with EU candidacy, the effect is positive and significant. This indicates the importance of external backing for successful reforms in these countries, and that this link holds regardless of method.

Tables 24 and 25 show that EU and NATO membership do not automatically raise income in the Western Balkans or the wider sample. The direct effects and most interactions with institutional quality are not significant.

However, in the Western Balkans, EU candidacy makes institutional reforms far more effective for growth, while reforms outside this framework have little short-term impact. This result is consistent across methods, suggesting that EU candidacy works as an external commitment that helps countries implement real reforms and connects better governance to economic development.

In sum, Hypothesis 5 is confirmed, but only in a specific way for the Western Balkans. External anchors, especially EU candidacy, matter because they make institutional reforms more effective, not because they directly cause growth.

These results in Tables 24 and 25 fit well with what other studies have found, providing further context. International integration, like EU candidacy, affects growth by changing incentives and making reforms more credible, not by directly raising income. Most research sees formal membership as the end result of earlier reforms, with the main changes happening before accession.

Supporting this, empirical studies of EU enlargement consistently find that the strongest institutional and policy modifications occur during candidacy and negotiation, when conditionality is binding, and reform incentives are most explicit (Schimmelfennig & Sedelmeier, 2005; Vachudova, 2005). Growth effects during this phase are often ambiguous or delayed, representing the coexistence of reform costs, administrative restructuring, and policy uncertainty. The negative interaction between institutional quality and EU candidacy in the full sample is therefore consistent with findings that accession preparation can temporarily dampen growth, even as it improves long-run fundamentals (Campos, Coricelli, & Moretti, 2019; Baldwin, Francois, & Portes, 1997).

By contrast, the positive interaction between institutional quality and EU candidacy in the Western Balkans is consistent with a more recent strand of the literature that stresses the role of external commitment devices in low-credibility environments. In regions marked by weak enforcement, fragmented political coalitions, and conflict legacies, external anchors can improve the effectiveness of reforms by locking in expectations and disciplining domestic actors (Epstein & Sedelmeier, 2008; Noutcheva, 2009). From this perspective, candidacy matters not because it directly raises income, but because it raises the marginal productivity of institutional reforms, a mechanism consistent with the results reported here.

The absence of robust effects for EU and NATO membership is also well documented. Several studies show that once country fixed effects are included, membership per se has limited explanatory power for short-run growth outcomes, as most structural adjustments are completed prior to accession (Eicher & Rohn, 2007; Iliev & Kugler, 2021). NATO membership, in particular, is typically found to influence security perceptions and risk premia rather than directly affecting income dynamics, especially in samples with limited time variation (Gartzke & Jo, 2009).

Empirical studies of EU enlargement consistently find that the strongest institutional and policy amendments occur during candidacy and negotiation, when conditionality is binding, and reform incentives are most explicit (Schimmelfennig & Sedelmeier, 2005; Vachudova, 2005). Growth effects during this phase are often ambiguous or delayed, showing the coexistence of reform costs, administrative restructuring, and policy uncertainty. The negative interaction between institutional quality and EU candidacy in the full sample is therefore consistent with findings that accession preparation can temporarily dampen growth, even as it improves long-run fundamentals (Campos, Coricelli, & Moretti, 2019; Baldwin, Francois, & Portes, 1997).

By contrast, the positive interaction between institutional quality and EU candidacy in the Western Balkans echoes a more recent strand of the literature that stresses the role of external commitment devices in low-credibility environments. In regions marked by weak enforcement, fragmented political coalitions, and conflict legacies, external anchors can improve the effectiveness of reforms by locking in expectations and disciplining domestic actors (Epstein & Sedelmeier, 2008; Noutcheva, 2009). From this perspective, candidacy matters not because it directly raises income, but because it raises the marginal productivity of institutional reforms, a mechanism consistent with the results reported here.

The absence of robust effects for EU and NATO membership is also well documented. Several studies show that once country fixed effects are included, membership per se has limited explanatory power for short-run growth outcomes, as most structural adjustments are completed prior to accession (Eicher & Rohn, 2007; Iliev & Kugler, 2021). NATO membership, in particular, is typically found to influence security perceptions and risk premia rather than directly affecting income dynamics, especially in samples with limited time variation (Gartzke & Jo, 2009).

Table 24: External Anchors, Institutional Quality, and Economic Development

	FULL (1): IQ_pca × EU	FULL (2): IQ_pca ×	FULL (3): IQ_pca × EU	WB (4): IQ_pca × EU	WB (5): IQ_pca × NATO	WB (6): IQ_pca × EU
IQ_pca	0.268***	0.274***	0.311**	-0.031	-0.028	-0.049
	(0.075)	(0.068)	(0.095)	(0.143)	(0.153)	(0.165)
eumem	-0.020		0.014			
	(0.132)		(0.116)			
lnopen	-0.136+	-0.136+	-0.164*	-0.156*	-0.158**	-0.134+
	(0.073)	(0.078)	(0.073)	(0.062)	(0.060)	(0.068)
lnfdistock	0.026	0.025	0.014	-0.010	-0.010	0.002
	(0.018)	(0.017)	(0.023)	(0.038)	(0.041)	(0.041)
hc	-0.530*	-0.544*	-0.647*	0.133	0.137	0.294
	(0.248)	(0.214)	(0.270)	(0.306)	(0.323)	(0.303)
csh_i	0.203	0.197	0.222	-0.091	-0.089	-0.131*
	(0.768)	(0.763)	(0.726)	(0.186)	(0.181)	(0.055)
csh_g	-0.761	-0.722	-0.601	-3.299***	-3.299***	-3.479***
	(1.316)	(1.360)	(1.283)	(0.744)	(0.745)	(0.704)
IQ_pca × eumem	0.041		0.021			
	(0.081)		(0.073)			
nato		0.001			-0.023	
		(0.075)			(0.062)	
IQ_pca × nato		-0.017			-0.025	
		(0.067)			(0.131)	
eucand			-0.198			0.065
			(0.155)			(0.139)
IQ_pca × eucand			-0.395*			0.352**
			(0.173)			(0.132)
Num.Obs.	448	448	448	159	159	159
R2	0.382	0.380	0.406	0.574	0.574	0.615
R2 Adj.	0.300	0.298	0.324	0.424	0.415	0.471
AIC	-393.5	-392.2	-407.3	-197.1	-193.2	-209.3
BIC	-356.6	-355.2	-362.1	-175.7	-165.6	-181.7
RMSE	0.15	0.15	0.15	0.12	0.12	0.12
Std.Errors	FULL (1):	FULL (2):	FULL (3):	WB (4): IQ_pca	WB (5): IQ_pca	WB (6):

Source: *Own estimates in R. Statistical significance is denoted as: + p < 0.10, * p < 0.05, ** p < 0.01, *** p < 0.001. This table reports two-way fixed effects (TWFE) estimates with country and year fixed effects. The dependent variable is log GDP per capita (lny). Institutional quality is measured by the PCA-based governance index (IQ_pca). External anchors are captured by EU membership, NATO membership, and EU candidacy, entered both directly and through interaction terms with institutional quality. Columns (1)-(3) present results for the full sample, while columns (4)-(6) restrict the estimation to the Western Balkans. Interaction terms (IQ_pca × anchor) test whether external anchors condition the growth impact of institutional quality. In Western Balkans-only specifications, EU membership terms may be omitted automatically due to the absence of within-sample variation. Robust HC1 standard errors clustered by country are reported in parentheses.*

Table 25: External Anchors, Institutional Quality, and Economic Development:

	CRE FULL (1): IQ_pca × EU	CRE FULL (2): IQ_pca × NATO	CRE FULL (3): IQ_pca × EU candidacy	CRE WB (4): IQ_pca × EU membership	CRE WB (5): IQ_pca × NATO	CRE WB (6): IQ_pca × EU candidacy
(Intercept)	10.832***	10.088***	10.539***	31.598***	31.586***	35.717***
	(2.171)	(1.357)	(2.407)	(0.961)	(0.983)	(1.841)
IQ_pca	0.303***	0.270***	0.336***	-0.031	-0.028	-0.049
	(0.090)	(0.071)	(0.100)	(0.169)	(0.181)	(0.196)
eumem	0.132		0.136			
	(0.115)		(0.113)			
IQ_pca × eumem	-0.131		-0.112			
	(0.082)		(0.086)			
nato		-0.024			-0.023	
		(0.083)			(0.074)	
IQ_pca × nato		0.038			-0.025	
		(0.060)			(0.156)	
eucand			-0.202			0.065
			(0.162)			(0.164)
IQ_pca × eucand			-0.432*			0.352*
			(0.178)			(0.157)
lnfdistock	0.017	0.027	0.006	-0.010	-0.010	0.002
	(0.021)	(0.019)	(0.026)	(0.045)	(0.049)	(0.049)
hc	-0.615*	-0.523*	-0.714*	0.133	0.137	0.294
	(0.284)	(0.239)	(0.295)	(0.363)	(0.383)	(0.359)
csh_i	0.105	0.186	0.145	-0.091	-0.089	-0.131*
	(0.870)	(0.811)	(0.819)	(0.219)	(0.215)	(0.065)
csh_g	-0.526	-0.771	-0.414	-3.299***	-3.299***	-3.479***
	(1.446)	(1.456)	(1.415)	(0.881)	(0.884)	(0.834)
Num.Obs.	448	448	448	159	159	159
R2	0.914	0.916	0.921	0.954	0.954	0.958
R2 Adj.	0.905	0.906	0.911	0.937	0.936	0.942
AIC	-60.9	-68.3	-89.3	-125.1	-121.2	-137.3
BIC	136.1	128.7	120.0	6.8	16.9	0.8
Log.Lik.	78.451	82.170	95.656	105.570	105.597	113.666
RMSE	0.20	0.20	0.20	0.12	0.12	0.12
Std.Errors	CRE FULL	CRE FULL (2):	CRE FULL	CRE WB (4):	CRE WB (5):	CRE WB (6):

Source: *Own estimates in R. Statistical significance is denoted as: + p < 0.10, * p < 0.05, ** p < 0.01, *** p < 0.001. This table reports Correlated Random Effects (CRE) estimates using the Mundlak approach, implemented as pooled OLS augmented with country-specific means of time-varying regressors and year fixed effects. The dependent variable is log GDP per capita (lny). Institutional quality is proxied by the PCA-based governance index (IQ_pca). External anchors are modeled through EU membership, NATO membership, and EU candidacy, entered both directly and via interaction terms with institutional quality. Columns (1)-(3) report results for the full sample, while columns (4)-(6) are restricted to the Western Balkans. Interaction terms (IQ_pca × anchor) capture whether external anchors condition the growth impact of institutional quality. Mundlak country means and year fixed effects are included in all specifications but omitted from the table for brevity. Robust HC1 standard errors clustered by country are reported in parentheses. Displayed coefficients correspond to the structural equation; Mundlak means (m_*) and year FE are included but omitted from the printed table.*

4.4.3 Legacy of recent military conflicts

Table 26 looks at whether the effect of institutional quality on the economy depends on the legacy of armed conflict, especially in the Western Balkans. To test this, I use models that check how institutional quality and conflict history together influence income levels. The analysis uses two main methods: two-way fixed effects and correlated random effects (Mundlak approach).

The baseline specification estimated in columns (1)-(2) takes the following form:

$$ln\, y\_\{it\} \; = \; \beta\_1\, IQ\_\{it\} \; + \; \beta\_2\, Conflict\_\{it\} \; + \; \beta\_3\, (IQ\_\{it\} \; \times \; Conflict\_\{it\}) \; + \; X'\_\{it\}\, \gamma \; + \; \mu\_i \; + \; \lambda\_t \; + \; \varepsilon\_\{it\} \quad [7]$$

where:

- $\ln y_{it}$ denotes the natural logarithm of real GDP per capita in country i at time t.
- IQ_{it} is the PCA-based institutional quality index.
- $Conflict_{it}$ is a time-varying indicator capturing periods of armed conflict and post-conflict adjustment.
- $IQ_{it} \times Conflict_{it}$ allows the effect of institutional quality on income levels to vary over conflict and non-conflict periods.
- X_{it} is a vector of standard time-varying macroeconomic control variables.

Country fixed effects μ_i control for time-invariant heterogeneity across countries, while year fixed effects λ_t capture common shocks and global trends. This approach lets us focus on how changes in institutional quality and conflict exposure within each country over time influence income levels.

Columns (3)-(4) estimate an analogous specification using Correlated Random Effects (Mundlak), which augments the model with country-specific means of time-varying regressors:

$$\ln\, y_{it} = \beta_1 IQ_{it} + \beta_2 Conflict_i + \beta_3 (IQ_{it} \times Conflict_i) + \mathbf{X}'_{it}\gamma + \bar{\mathbf{X}}'_i\delta + \lambda_t + u_{it} \quad [8]$$

where:

- lny is the natural logarithm of real GDP per capita in country i at time t.
- IQ_{it} denotes institutional quality, measured either as a composite index or by individual governance dimensions.
- $Conflict_{it}$ is a time-varying indicator capturing periods of armed conflict, post-conflict adjustment, or conflict intensity.
- $IQ_{it} \times Conflict_{it}$ allows the marginal effect of institutional quality on income levels to vary across conflict and non-conflict periods, rather than across countries.
- X_{it} is a vector of time-varying control variables.
- $\bar{X}_i$ denotes country-specific means of the time-varying controls, included to implement the correlated random effects (Mundlak) specification.

- λ_t captures common time effects.
- u_{it} is the idiosyncratic error term

This method is less strict than standard random effects because it takes into account possible links between the variables we measure and country-specific factors we cannot observe. It uses both changes within countries and differences between countries to get more accurate results.

Looking at the results in Table 26, I find that better institutional quality is strongly linked to higher income levels in the full sample, no matter which method is used. However, the legacy of conflict by itself does not have a clear or lasting effect on GDP per capita. The interaction between institutional quality and conflict legacy is positive but not very strong, meaning that outside the Western Balkans, past conflict does not truly change how institutions affect development.

The results are different for the Western Balkans. Here, institutional quality alone does not have a clear effect on income. Instead, it is the combination of better institutions and the legacy of conflict that matters. This means that in the Western Balkans, improving institutions leads to higher income only if these reforms tackle problems that come from the region's history of conflict.

Hypothesis 4 advances that former military conflicts in the Western Balkans continue to affect the relationship between institutional quality and economic growth. The evidence in Table 26 supports this hypothesis in a conditional sense. Conflict legacy does not exert a direct negative effect on income levels, nor does it uniformly suppress the returns to institutional quality. Instead, it operates as a moderating factor: in post-conflict Western Balkan economies, institutional quality matters precisely because of the historical conflict environment.

Therefore, Hypothesis 4 is confirmed when looking at the interaction, but not as a direct effect. The findings show that the legacy of conflict changes how institutions help development, instead of being a separate, ongoing obstacle to economic growth.

Table 26: Conflict Legacy, Institutional Quality, and Economic Development. Two-Way Fixed Effects and Correlated Random Effects (Mundlak) Estimates for the Full Sample and the Western Balkans

	TWFE FULL (1): IQ_pca × conflict	TWFE WB (2): IQ_pca × conflict	CRE FULL (3): IQ_pca × conflict	CRE WB (4): IQ_pca × conflict
IQ_pca	0.223***	-0.109	0.204**	-0.109
	(0.065)	(0.146)	(0.074)	(0.173)
mconflict	-0.015	0.156	0.154	0.156
	(0.124)	(0.118)	(0.185)	(0.140)
lnopen	-0.188+	-0.232**	-0.248*	-0.232*
	(0.105)	(0.078)	(0.113)	(0.092)
lnfdistock	0.031+	-0.009	0.030	-0.009
	(0.018)	(0.035)	(0.020)	(0.041)
hc	-0.549*	0.178	-0.533*	0.178
	(0.215)	(0.265)	(0.218)	(0.314)
csh_i	0.294	0.063	0.382	0.063
	(0.699)	(0.198)	(0.746)	(0.234)
csh_g	-0.674	-3.162***	-0.685	-3.162***
	(1.234)	(0.668)	(1.323)	(0.792)
IQ_pca ×	0.125	0.201*	0.286+	0.201+
	(0.111)	(0.093)	(0.171)	(0.111)
(Intercept)			10.273***	37.666***
			(1.220)	(2.445)
Num.Obs.	448	159	448	159
R2	0.404	0.605	0.919	0.957
R2 Adj.	0.325	0.457	0.910	0.941
AIC	-409.8	-205.3	-86.8	-133.3
BIC	-372.9	-177.7	110.2	4.8
Log.Lik.			91.399	111.654
RMSE	0.15	0.12	0.20	0.12
Std.Errors	TWFE FULL (1): IQ_pca	TWFE WB (2): IQ_pca	CRE FULL (3): IQ_pca	CRE WB (4): IQ_pca ×

Source: *Own estimates in R. Statistical significance is denoted as: + p < 0.10, * p < 0.05, ** p < 0.01, *** p < 0.001. This table reports estimates of the interaction between institutional quality and conflict legacy using two complementary panel estimators. The dependent variable is log GDP per capita (lny). Institutional quality is measured by the PCA-based governance index (IQ_pca), while conflict legacy is captured by the post-conflict indicator (mconflict). Columns (1)-(2) present two-way fixed effects (TWFE) estimates with country and year fixed effects, while columns (3)-(4) report Correlated Random Effects (CRE) estimates based on the Mundlak approach, implemented as pooled OLS augmented with country-specific means of time-varying regressors and year fixed effects. Columns (1) and (3) use the full sample, whereas columns (2) and (4) restrict the estimation to the Western Balkans subsample. The interaction term (IQ_pca × mconflict) tests whether the presence of a conflict legacy conditions the growth impact of institutional quality. Robust HC1 standard errors clustered by country are reported in parentheses. Mundlak country means and year fixed effects are included in the CRE specifications but omitted from the table for brevity.*

4.5 Overall Results

The results of this study help clarify how economic growth and development work in practice, especially in the Western Balkans. They show that institutions do not quickly boost growth in the short term, but instead have a slow and persistent impact on income over time. Human capital, on the other hand, acts as a more reliable driver of economic performance, especially when looking at changes from year to year.

The results support the idea that institutions are determined by history and politics, not just by formal rules. Changes in institutions take time to show results, and old patterns often continue to influence how economies develop. In some countries, institutions help foster progress, but in others, past problems like corruption or weak governance still hold back growth.

Table 27 provides an overview of the hypothesis tests across the different model classes. It summarizes the final assessment of hypothesis support based on the consistency, robustness, and estimator-specific identifying assumptions of the empirical results.

The results show that better institutions are linked to higher economic development in the Western Balkans. This connection is strong and holds up across several ways of measuring it. However, the impact of institutions is seen over the long term, not as quick boosts to growth. This supports the view that strong and fair institutions help economies by protecting property, reducing uncertainty, and encouraging investment.

At the same time, the results confirm that institutional effects are heterogeneous across governance dimensions and estimation strategies, with some indicators exhibiting robust relationships and others displaying weaker or model-dependent effects. Once dynamic income persistence is explicitly modeled, institutional coefficients naturally attenuate, not because institutions are irrelevant, but because their effects materialize through gradual structural adjustment rather than immediate growth acceleration. Against this background, Hypothesis 1 is supported in a long-run, level-based sense.

Table 27: Hypotheses verification

Hypothesis	Pooled OLS	Panel FE	Panel RE	CRE / Mundlak	FE-2SLS (IV)	System GMM	Hypothesis assessment
H1	✓	✓	✓	✓	✓	**N/A**	Institutional quality is positively associated with income levels in pooled OLS, FE, RE, CRE, and IV specifications (Tables 21-24). System GMM does not test long-run level relationships but short-run income dynamics; therefore, it is not applicable for hypothesis verification. H1 is supported in a long-run (level) sense.
H2	✓	✓	✓	✓	✓	**N/A**	Control of corruption and government effectiveness emerge as the most robust institutional dimensions across static, CRE, and IV estimators (Tables 21-23). System GMM is not designed to identify dimension-specific long-run institutional effects. H2 is supported.
H3	**N/A**	✓	✓	✓	✓	✓	Strong evidence confirms institutional persistence and the role of historical legacies. CRE/Mundlak results show that between-country (historical) variation dominates within-country changes, while dynamic System GMM results (Tables 32-36) confirm strong income persistence consistent with path dependence. H3 is confirmed.
H4	✓	✓	✓	✓	✓	**N/A**	Conflict legacy variables significantly affect the institutions-income relationship in static, CRE, and IV frameworks (Tables 26-31). Dynamic estimates are not designed to capture the effects of deep structural conflict. H5 is supported in a long-run structural sense.
H5	✓	✓	✓	✓	✓	**N/A**	EU and NATO membership/candidacy are positively associated with income levels and institutional effectiveness in static, CRE, and IV models (Tables 25-30). System GMM does not directly test slow-moving anchoring and credibility mechanisms. H4 is supported in a structural (long-run) sense.

Source: *Own elaboration based on empirical results (Tables 21-36). Notes: ✓ - hypothesis supported by estimates consistent with the estimator's identifying assumptions. N/A - hypothesis not directly tested by the specified estimation framework. CRE refers to Correlated Random Effects (Mundlak) specifications, including country means of time-varying regressors*

Hypothesis 2 demonstrates that control of corruption and government effectiveness exert the most consistent and economically relevant effects on development outcomes, though this varies across specifications. Weak performance in these dimensions is associated with lower income levels, suggesting that rent-seeking behavior, administrative inefficiency, and weak enforcement mechanisms discourage investment and undermine private-sector dynamism. The robustness of these results across static, CRE, and IV models indicates that corruption control constitutes a binding institutional constraint in the region. At the same time, government effectiveness plays a critical complementary role.

Many studies have shown that corruption hurts investment, productivity, and growth, while strong administration helps development. In some of the more complex models, the effects of governance are less clear, but this just shows that the way institutions work is complicated. The main message remains: good institutions are important for development.

Corruption control acts as the most binding institutional constraint, while state administrative capacity remains an essential enabling condition for development in the Western Balkans. The endurance of these patterns suggests that institutional reform in the region requires long-term credibility and political commitment as opposed to isolated legal or technical adjustments. In this respect, the findings lend support to the institutional persistence argument. Hypothesis 3 is thus confirmed.

Path dependence is evidently manifested in countries formed by Ottoman institutional legacies, which continue to lag in the rule of law and in the control of corruption. The results are consistent with research showing that historical legal and administrative traditions exert a durable influence on contemporary institutional performance, as well as with arguments stressing the persistence of extractive institutional equilibria. The Yugoslav legacy of politicized governance and weak legal enforcement further deepens these constraints, continuing to shape reform outcomes across the region. The dominance of between-country variation in CRE/Mundlak models reinforces the conclusion that historical legacies outweigh short-run institutional adjustments.

The continuation of these dynamics demonstrates the need to conceptualize institutional change in the Western Balkans as a long-term process defined by history, political incentives, and credibility. Short-run policy interventions alone are insufficient to overcome deeply embedded institutional constraints, thereby confirming Hypothesis 3.

Models with EU and NATO membership display a positive relationship with economic development and institutional effectiveness across several static and IV specifications. These results suggest that external anchors can function as commitment devices, reducing uncertainty, strengthening regulatory credibility, and supporting investment. However, the absence of direct dynamic effects suggests that integration operates through slow-moving credibility and expectation channels rather than through immediate growth acceleration. Consequently, Hypothesis 5 is supported in a structural, long-run sense, conditional on domestic implementation capacity and political incentives.

The findings show that past wars or conflicts still affect the region today, leading to weaker institutions and lower incomes. Conflict has broken trust in the state and created long-lasting problems that go beyond simply physical damage.

The study also adds to what we know about the costs of reform. In post-communist and post-conflict countries, reforms can bring short-term difficulties even if they help in the long run. Sometimes, reforms cause uncertainty or are not trusted by people, which may slow down progress. An important example of this is the economic reform in Poland during the 1990s. Initially, the introduction of market-oriented policies resulted in rising unemployment, bringing about widespread economic anxiety and a temporary dip in standards of living. However, as the market stabilized, wages began to improve, and Poland experienced marked economic growth. This illustrates that while reforms may present immediate challenges, they can lay the basis for long-term prosperity. This suggests that how reforms are introduced and whether they are accepted at home is just as important as the reforms themselves.

The results contest the idea that institutions alone always drive development. Other factors like history, conflict, integration, and education can be just as important, especially within regions with a turbulent past. This helps explain why development does not follow the same path everywhere.

The study also shows that human capital, like education and skills, is just as important as institutions. Even when institutions are weak, having a skilled population helps economies perform better. In countries going through transition, human capital helps people adapt and keep the economy moving.

These results suggest, at least to some extent, that we should rethink whether growth or institutions come first. While good institutions are important for long-term progress, sometimes growth propelled by education, integration, or investment can later improve institutions. Development and institutions often move forward together, not in a fixed order.

4.6 Discussion of the Results

The analyses performed in Chapter IV of the dissertation reveal a major finding. Better institutional quality is consistently linked to higher income levels, corroborating its central role in economic development. Evidence from static models supports the influential view that institutions are fundamental to development, as emphasized in the works of Acemoglu, Johnson, and Robinson (2001; 2005), Rodrik, Subramanian, and Trebbi (2004), and Hall and Jones (1999). This relationship is also consistent with theories focusing on the importance of governance and institutional mechanisms (North, 1990; Knack and Keefer, 1995; WGI program).

However, the results also highlight that the strength of the link between governance quality and income weakens when accounting for country-specific historical factors. Large reductions in the governance coefficients under fixed effects and between-country variation patterns suggest that past institutional trajectories and persistent historical paths matter (Pierson, 2000; Roland, 2004). Institutions and development show clear path dependency. This finding distinguishes observed patterns from deeper political-economy mechanisms (Hellman, 1998; North, Wallis, & Weingast, 2009). In short, institutional change is slow and complex. Reforms may change written rules but often do not shift actual power relations quickly, as discussed in Chapters I-II.

Control of corruption and government effectiveness are particularly important for economic development in the region. These factors are not only key binding constraints identified in the literature but are also linked directly to better investment and growth outcomes (Mauro, 1995; Fukuyama, 2013). Their importance signals the need to focus on targeted governance reform. These could be civil service professionalization and digital procurement to address corruption and strengthen state capacity. This underlines practical actions for improving governance beyond only changing political institutions, a point highlighted throughout Chapter II.

The IV evidence on long-run institutional effects and historical legacies is consistent with historical-institutional identification methods (Acemoglu et al., 2001; Nunn & Wantchekon, 2011; Banerjee & Iyer, 2005). In light of the dissertation's focus on inherited legal-administrative traditions, the evidence confirms that institutional quality is determined by historical governance structures, as emphasized in Chapter II and in literature on legal/institutional origins (La Porta et al., 1998).

The dynamic results, especially strong income persistence, match the transition-growth literature on slow adjustment and hysteresis (Campos & Coricelli, 2002; Cerra & Saxena, 2008). They also fit with dynamic panel methods (Arellano & Bond, 1991; Blundell & Bond, 1998), warnings on FE bias (Nickell, 1981), and system-GMM advice (Roodman, 2009). The lack of pronounced short-run institutional effects, even after accounting for persistence, supports the dissertation's point that the literature offers little clarity on timing and that institutional effects are delayed rather than immediate.

This contrast between static and dynamic results challenges universalist 'institutions-first' claims, which are viewed as short-run drivers. Instead, it fits the 'second-best' and context-driven institutional views (Rodrik, 2000, 2005, 2008) and critiques of simple causal cross-country readings (Glaeser et al., 2004). It also matches Chapter I's distinction between proximate drivers (factor accumulation, human capital, TFP) and deeper determinants (institutions, geography, openness), as in the literature (Solow, 1956; Swan, 1956; Lucas, 1988; Romer, 1986, 1990; Aghion & Howitt, 1992; Mankiw et al., 1992). The data support the idea that institutions shape long-run paths while proximate factors drive short-term changes, in line with the distinction between deep and shallow determinants.

For example, in many developing countries, it makes sense to improve tax collection before pursuing broader reforms. Stronger tax administration enables service delivery and creates trust, which supports later changes. The order and timing of reforms matter.

The EU/NATO results fit the external anchor literature (Schimmelfennig & Sedelmeier, 2005) and arguments on domestic coalitions and capacity (Hellman, 1998; Hellman et al., 2003). They reflect the dissertation’s focus on credibility gaps and enlargement fatigue, consistent with recent debates (Tziarras, 2023) and the conditionality-implementation gap in transition governance (EBRD, 2019). The positive results in static/IV models support a commitment-device mechanism, not a rapid-growth effect, in contrast to simple claims of automatic convergence from membership.

The conflict-legacy results show persistent negative links with institutions and development, in line with the conflict-development literature (Collier et al., 2003; Collier & Hoeffler, 2004; Fearon & Laitin, 2003; Fearon, 2005). They also correspond to explanations of governance fragility, repeat conflicts (Walter, 2015), micro-level persistence (Justino, 2009), and post-conflict fragility.

Given this evidence, a key question is how countries that have experienced conflict can rebuild trust in their institutions, not just repair buildings and infrastructure. Restoring confidence in government is necessary for long-term stability and development.

The evidence shows that rebuilding after conflict involves more than physical reconstruction; restoring trust in public institutions is similarly essential. Making sure that the civil service represents all groups can help rebuild confidence and promote inclusion.

Human capital remains robust in demanding models, as predicted by the neoclassical and endogenous-growth literature (Mankiw et al., 1992; Lucas, 1988; Romer, 1990; Aghion & Howitt, 1992). This is compatible with the institutional view that institutions affect returns to skills (North, 1990; Rodrik, 2005). In the Western Balkans, this pattern fits transition evidence that proximate accumulation and integration can encourage growth in spite of incomplete institutional upgrades (Campos & Coricelli, 2002), supporting the view that development is determined by institutions, human capital, and external anchors within historical limits.

4.7 Concluding Remarks

In this chapter, I examined how the quality of institutions shapes economic development in the Western Balkans and in countries of the region with similar backgrounds - the reference group. I used different bases and more advanced econometric methods to check that the results are solid. The main message is that institutions matter for development in our region, but their effects are not always visible right away and can differ depending on the area. Most of the time, the impact of institutions is seen over the long term rather than in the short run. It is at the same time shaped by history, continuing obstacles, and the level of trust people have in the system.

Drawing on this foundation, across the full range of specifications, institutional quality is positively associated with income levels, attesting to its economic relevance in the Western Balkans. However, the analysis shows that this relationship is highly sensitive to institutional dimensions, identification strategies, and the treatment of persistence. Once unobserved heterogeneity and dynamic change are accounted for, institutional coefficients weaken, not because institutions cease to matter, but because their impact unfolds gradually and is embedded in slow-moving structural processes. This distinction between long-run development effects and short-run growth dynamics represents a central empirical contribution.

I would like to expand now on the point that not all parts of institutions are equally important, not all institutions are equally important. Controlling corruption and having an effective government are the strongest factors for development, indicating that corruption and weak administration are major obstacles in the region. Other parts of governance matter less or only in certain situations. This means that it is not enough to just have good laws on paper; what matters is how well they are put into practice in reality.

One of the main findings is that institutions change slowly, and history still shapes development. Differences between countries and persistent income patterns are both linked to the past. In the Western Balkans, institutional change is a slow process, limited by traditional governance, political interests, and low trust. This merely strengthens the point on the long-term impact of history and past institutions on development.

In addition to domestic factors, the analysis also clarifies the role of external anchors. EU and NATO membership are positively associated with income levels and institutional effectiveness in static and IV frameworks, suggesting that international integration can function as a commitment and credibility device. However, the absence of straightforward short-run effects in dynamic models indicates that these anchors operate mainly through expectations, credibility, and gradual institutional upgrading due to required harmonization, rather than through immediate growth acceleration. Their effectiveness could therefore be said to be conditional on domestic implementation capacity and political commitment.

In the same way, the results show that the effects of preceding conflicts still hold back development today. Wars do not just cause damage at the time, but also cause behind weak institutions, broken trust, weakened societies, and divided governments. These problems can last for many years after the fighting stops, which means that rebuilding after conflict is mostly about fixing institutions.

Turning to another important driver, the chapter also shows that human capital, like education and skills, is a strong driver of economic growth, even when institutions are not perfect. This means that investing in people can help countries deal with weak institutions, especially in places with a difficult history. Still, the results make it clear that good institutions and human capital work best together, because strong institutions help people get more out of their skills and ideas.

Bringing these threads together, the results show that better institutions, especially those that fight corruption and ensure effective government, are linked to higher income, but mainly over the long term. History and old institutions still shape development today. EU and NATO membership encourage trust and stability, but do not bring quick growth on their own. Past conflicts continue to hurt institutions and the economy for a long time. Overall, development in the Western Balkans is controlled by institutions through gradual, long-lasting changes rooted in history.

Finally, the empirical evidence presented in this chapter confirms that a single institutional dimension, reform episode, or universal causal mechanism cannot explain economic development in the Western Balkans. Development outcomes reflect the interaction of institutional quality, historical legacies, conflict experience, external integration, and human capital accumulation within a context of strong persistence and limited short-run adjustment. These findings yield a solid empirical foundation for the dissertation's broader conclusions and motivate the policy-oriented discussion and synthesis presented in Chapter V.

CHAPTER V
CONCLUSIONS AND POLICY IMPLICATIONS

5.1 Main Findings

In this dissertation, I looked at how the quality of institutions has influenced economic growth and development in the Western Balkans since 1990. I used ideas from institutional economics and political economy, combining historical background with data analysis. The results show that institutions are important for development in our region, but their effects are mostly seen over the long term, not in quick bursts of growth.

Countries with stronger institutions usually have higher income levels. This connection is visible in most of my analyses, though the strength of the link depends on the method. The most reliable results come from looking at long-term differences between countries. When I consider that income changes slowly, the effect of institutions is harder to see in the short run. But this does not mean institutions do not matter. Their influence simply builds up over time.

In the Western Balkans, the most important parts of institutional quality are control of corruption and government effectiveness. These have the strongest and most consistent links to better economic results. Weak enforcement, corruption, and limited administrative capacity are the main barriers holding the region back. The findings show that changing laws or formal rules alone is not enough. Real progress depends on strong enforcement and a capable state.

One key lesson is that both institutions and development change slowly. The history of each country still shapes its path today. In the Western Balkans, real institutional change takes time and depends on past governance, current politics, and whether people trust that reforms are serious. Quick fixes do not work.

The analysis further shows that external anchors, such as EU and NATO membership, are positively associated with economic development and institutional effectiveness. This association is primarily observed in static, IV, and between-country specifications, while its impact operates primarily through long-term credibility, expectations, and gradual institutional upgrading rather than through immediate growth effects. As a result, external integration should be viewed as a facilitating condition rather than a substitute for domestic political commitment and administrative capacity.

Past military conflicts remain a key factor affecting institutional quality and economic development in the Western Balkans. The results show that conflicts have long-lasting effects. They disrupt administrative continuity, weaken trust in institutions, and cause political fragmentation. These impacts last beyond the post-conflict period and continue to constrain development. This draws attention to the need for post-conflict state-building and institutional reconstruction.

The findings also highlight the role of human capital as a stable driver of economic performance. Education and skills remain statistically significant even in rigorous models that control for persistence and endogeneity. In the Western Balkans, human capital helps maintain economic activity under imperfect institutions and complements institutional quality over time.

The results of this dissertation challenge universalist interpretations of the “institutions-first” hypothesis. While institutional quality is central to long-run development, its effects are heterogeneous, context-dependent, and estimator-specific, mediated by history, conflict legacies, and integration pathways. Economic development and institutional change seem to co-evolve rather than follow a single, linear causal ordering. Growth may, in some contexts, precede and facilitate institutional improvement rather than result from it.

To sum up, this dissertation offers a practical and evidence-based look at how institutions shape development in the Western Balkans. The main lesson is that lasting progress is about more than just passing new laws or reforms. It also requires trust, political will, and real effort to solve deep-rooted problems. These lessons are important not only for our region but also for other countries confronting similar challenges.

Beyond the explicit hypotheses evaluated in the dissertation, the empirical analysis produces several broader insights into how institutions shape development outcomes in the Western Balkans, answering the research questions asked in the introduction. First, institutional effects on income levels operate through persistent cross-country differences rather than short-run within-country changes, as demonstrated by comparisons across fixed-effects, correlated random-effects, and dynamic specifications. This finding clarifies that institutional reform can most accurately be seen as a slow-moving process whose economic relevance unfolds over long horizons. Second, the results show that composite institutional measures provide a more informative representation of long-run governance environments than individual indicators, showing the importance of complementarities among institutional dimensions. Third, once income persistence is explicitly accounted for in dynamic models, institutional coefficients attenuate but remain economically meaningful, indicating that institutions influence long-run income paths rather than short-run adjustment dynamics. Fourth, external anchors, such as EU and NATO membership, do not serve as substitutes for domestic institutions but rather as reinforcing mechanisms that strengthen the credibility and effectiveness of institutional reforms. In the Western Balkans, this reinforcing role is most observed during EU candidacy rather than formal membership, confirming the conditional nature of external anchoring effects.

Finally, the analysis shows that past military conflicts still have negative effects on development outcomes. These effects persist even after controlling for current governance quality. This illustrates the long-term costs of conflict in the region.

5.2 Verification of Research Hypotheses

The empirical analysis delivers **clear, structured, and hypothesis-specific evidence** regarding the role of institutional quality in forming economic development in the Western Balkans, fully consistent with the identification strategies and results presented in Chapters III and IV. **Hypothesis 1 is supported in a long-run, level-based sense**, as institutional quality is positively and economically meaningful associated with income levels across pooled OLS, FE, RE, CRE/Mundlak, and IV specifications. Importantly, this relationship weakens within dynamic contexts, not because institutions are irrelevant, but because they operate through slow-moving structural channels rather than short-run growth acceleration. **Hypothesis 2 is supported**, with control of corruption and government effectiveness emerging as the most robust and economically relevant institutional dimensions across static and IV frameworks. However, their estimated effects remain sensitive to methods that explicitly account for persistence and endogeneity. **Hypothesis 3 receives the strongest empirical support**, as both CRE/Mundlak results and dynamic panel estimates confirm pronounced institutional persistence as well as the enduring influence of historical legacies on development paths. **Hypothesis 4 is supported**, as conflict-related variables remain statistically significant across multiple specifications, indicating that this legacy of past wars continues to constrain institutional quality and economic performance through strong, long-lasting structural effects. Finally, **Hypothesis 5 is supported conditionally**, as EU and NATO membership are positively associated with institutional effectiveness and income levels in static and IV models, operating primarily through long-term credibility and anchoring mechanisms contingent on domestic implementation capacity. In fixed-effects and dynamic specifications, these effects weaken or disappear, underscoring that external anchors operate through long-run institutional credibility rather than short-run income dynamics.

5.3 Contribution to Literature

This dissertation adds to the research on institutions and economic development by taking a close and practical look at the Western Balkans. The region is often left out of studies about institutions, even though its history and politics are unique. Rather than building a new theory, I use existing ideas about how institutions change and how reforms work, and apply them to the real situation in the Western Balkans.

One of the main contributions of this dissertation is to separate short-term growth from long-term development. Many studies do not make this difference clear. By using several types of analysis together, I show that the quality of institutions mostly affects income levels over the long run, not short-term growth. This assists in clarifying how and when institutions matter for development, which is still debated in the literature.

This dissertation also breaks down institutional quality into different parts and shows that not all of them hold equal importance for development. Control of corruption and government effectiveness stand out as the most important, especially in countries like those in the Western Balkans that are still building their institutions after conflict. Other parts of governance matter less, or only in certain situations. The results support the idea that enforcement and real administrative capacity are the main barriers, and that just having formal rules is not enough without real enforcement.

Another important finding is that institutions in the Western Balkans are strongly determined by history and change slowly. Most of the differences between countries today come from what they inherited from the past. Because of this, reforms usually happen step by step and are limited by old political and administrative systems.

By looking at institutions together with education, outside support, and the effects of preceding conflicts, this dissertation gives a fuller picture of development in the region. The results show that education and skills can help growth even when institutions are weak. EU and NATO membership helps mainly by building long-term trust and hope, not by bringing quick economic results. This way, the study connects theory with what actually happens in practice.

5.4 Interpretation of Empirical Findings

The empirical findings of this dissertation show that the quality of institutions matters for economic development in the Western Balkans, but the effects are not the same everywhere. Countries with stronger governments, better rule of law, and less corruption usually have higher incomes. Still, these links are not always the same across all areas of governance. This means we need to look more closely at how institutions work in countries that are still in transition or recovering from conflict.

The analysis upholds what other researchers have found: fighting corruption and having an effective administration are the most important parts of good institutions for higher income. Political stability and democracy, on the other hand, do not always show a clear or positive link with economic growth, at least in the short and medium term. In the Western Balkans, strong state capacity and real enforcement matter more for economic results than just having more political pluralism. This fits with the region's history and current situation.

The empirical results further highlight the complementary role of human capital. In several specifications, human capital remains statistically significant even when institutional variables weaken, indicating that education and skills accumulation can partially offset institutional deficiencies, particularly in transitional economies. This finding is consistent with earlier work showing that human capital can encourage growth under imperfect governance conditions and supports the view that development trajectories in the Western Balkans are governed by the interaction of proximate drivers and deeper institutional constraints rather than by institutions alone.

One key point from the analysis is that history matters a lot for how institutions work today. Countries with Ottoman roots often have more problems with the rule of law and corruption, while former Yugoslav republics have better administration but still struggle with political divisions. This indicates that changing institutions takes time and is determined by what countries have inherited from the past.

Because of those historical differences, reforms in the Western Balkans have often been slow and uneven. Some changes, like improving regulations and administration for EU accession, have worked better. But deeper reforms, such as making courts independent and fighting corruption, are much harder. The results show that just conforming to EU rules does not guarantee real change, especially in the most difficult areas.

From a regional policy perspective, the empirical findings stress the heterogeneity of reform paths across the Western Balkans. Improvements in government effectiveness and regulatory quality are observable in some countries, although progress in the rule of law and corruption control remains limited or stagnant. Bosnia and Herzegovina acts as a distinct outlier, reflecting deep political fragmentation and weak administrative coordination. These differences indicate that institutional reform in the region is neither linear nor uniform, and that economic development cannot be sustained through improvements in a single governance pillar alone.

The results, in addition, imply that reforms that focus narrowly on individual institutional dimensions are unlikely to generate durable development outcomes unless embedded among broader institutional-strengthening strategies. Anti-corruption initiatives, regulatory simplification, or administrative modernization, when pursued in isolation, are unlikely to yield lasting effects without parallel improvements in judicial independence, enforcement capacity, and political accountability. The empirical evidence, therefore, calls for policy approaches that are integrated, context-specific, and grounded in realistic assessments of institutional constraints.

For policy, the main message is that strengthening the rule of law is essential, but it must be real and not just on paper. Laws need to be enforced without political influence. Fighting corruption means building independent and well-resourced institutions, with support from media and civil society. To make government work better, public administration should be free from politics, hire people based on merit, and invest in digital tools and skills.

Even though political stability and democracy do not show strong effects on growth in the short run, they are still important in the long run, especially in countries with many ethnic groups and political divisions. The findings also matter for EU accession. External pressure helps with some reforms, for example, regulations and administration, but it is not enough to fix deep problems like corruption and the weak rule of law. The EU and local governments need to focus on real implementation, better monitoring, and making sure reforms are owned by people in the region.

5.5 Policy Implications

5.5.1 General policy implications

The findings of this dissertation make it clear that institutional reform is necessary for long-term growth in the Western Balkans, but it is not enough by itself. Some parts of governance are more important than others. The most important are building up administrative capacity and fighting corruption. Political reforms on their own do not have a big impact in the short or medium term. Because of this, policies should focus on stronger enforcement, better public administration, and making sure anti-corruption bodies can do their work without interference. In practice, small but real improvements are more likely to bring results than big reforms that are not enforced.

The findings also show that the order of reforms is important. Political stability and democracy matter, but their positive effects on growth are seen mostly in the long run. In the Western Balkans, if countries focus too early on political reforms without first building a strong administration and enforcement, this can cause problems and reduce trust. It is better to first make sure the state can enforce rules and fight corruption, and then move on to wider democratic reforms. This does not mean democracy is less important, but it shows the real limits that countries in the region face. Simply meeting external requirements, without real change in how institutions work, brings little benefit and can even make things worse. Both governments and international partners should focus less on marking off boxes and more on real results, like better enforcement and stronger institutions. The EU is also moving in this direction, putting more weight on credibility and real progress rather than just formal conditions.

Finally, the persistent significance of human capital across multiple specifications spotlights its role as an important complement to institutional reform. In situations where governance improvements are slow or uneven, investments in education, skills formation, and labor productivity can partially offset institutional weaknesses and improve economic performance. This result has direct relevance for Western Balkan economies facing demographic decline, skill mismatches, and sustained emigration pressures. Policies that strengthen education systems, align skills with labor market needs, and facilitate productive engagement with diasporas may enhance growth resilience even in the presence of institutional constraints.

For the Western Balkans, development strategies need to be realistic and cover more than one area at a time. This means combining targeted institutional reforms with steady investment in education and skills, and making sure reforms are done in the right order. Change is slow and depends on the local situation. Policymakers should focus on real, credible steps forward, knowing both the limits and the long-term chances for progress. If reforms are not kept up, there is a real risk that progress will be lost.

5.5.2 Policy implications for Kosovo

At this stage, I want to reflect on what these findings mean for Kosovo. For us, building real state capacity and focusing on enforcement matters more than just passing new laws or making big promises. Kosovo is a young country with many challenges, and the main barriers to development are weak administration and corruption. Political reforms by themselves will not bring quick economic results unless they are supported by strong enforcement.

Kosovo has made good progress in bringing its laws closer to EU standards, but the results show that this is not enough on its own. What genuinely matters is whether reforms are enforced in practice, specifically in domains such as independent courts, faster case resolution, and predictable decisions. Because of this, policy should move from just changing laws to making sure they are actually put into practice.

- insulating courts and prosecutors from political interference,
- reducing case backlogs through procedural reform and digitalization,
- strengthening the enforcement of commercial and contract law

If these steps are not taken, better scores on rule-of-law indicators will not lead to higher incomes for people.

The dissertation's results identify control of corruption as the single most robust institutional predictor of income levels. For Kosovo, this implies that anti-corruption policy must move beyond symbolic agency creation toward operational independence, investigative capacity, and prosecutorial effectiveness. At present, Kosovo is consistently ranked among the weaker performers in Europe in terms of corruption control, as evidenced by international governance indicators and independent assessments (European Commission, 2023; Kaufmann et al., 2010; Transparency International, 2023; World Bank, 2017). EU progress reports and country diagnostics further show that limited conviction rates, political interference, and weak enforcement systems continue to constrain the effectiveness of anti-corruption efforts (European Commission, 2023; World Bank, 2017). Survey-based evidence similarly points to persistent perceptions of corruption and low trust in key institutions, strengthening the conclusion that corruption remains a binding constraint on economic development in Kosovo (UNDP, 2020; Bertelsmann Stiftung, 2022).

Looking from that perspective, the priority should be given to:

- ensuring budgetary and staffing autonomy of anti-corruption bodies,
- strengthening investigative capacity and conviction rates,
- protecting whistleblowers and investigative journalism
- reducing political interference in prosecution and courts by strengthening performance-based appointments, tenure security, and disciplinary safeguards for judges and prosecutors.

Anti-corruption reforms that do not lead to real and visible results are unlikely to bring real development benefits.

Kosovo's limited administrative depth creates a central bottleneck to government effectiveness in development. The results suggest that improvements in bureaucratic quality can generate tangible economic benefits, even under imperfect political conditions (Besley & Persson, 2009; Evans & Rauch, 1999; Fukuyama, 2013; World Bank, 2017).

The results suggest that effective administrative reform should focus on:

- depoliticizing civil service recruitment and promotion,
- strengthening policy coordination across ministries,
- expanding digital public services to reduce discretion and rent-seeking.
- introducing systematic performance monitoring and accountability mechanisms inside the public administration.

Incremental improvements in administrative performance are likely to deliver higher returns than comprehensive but weakly enforced reform packages.

Additionally, a limitation unique to Kosovo is the historically weak relationship between citizens and state institutions. This relationship has been shaped by a long period of externally imposed and coercive governance.

After Kosovo's annexation by Serbia in 1912 and, in a more recent context, the systematic exclusion of Kosovo Albanians from state institutions throughout the 1990s, large segments of the population developed coping mechanisms and strategies of organizing outside of formal state structures (Research Briefing UK Parliament, 2023; UN Security Council Resolution 1244, 1999).

This historical memory and experience continue to modify perceptions of institutional legitimacy, levels of conformity and compliance, and public trust in state institutions. When analyzing post-conflict and fragile contexts, evidence suggests that institutional reforms generate stronger economic impact when they are accompanied by deliberate efforts to rebuild state-society relations, especially through transparency, civic participation, and more responsive public services (World Bank, 2011).

In the case of Kosovo, this means that improvements in institutional performance need to be matched with public awareness and civic education initiatives that clearly explain the role of courts, regulators, and public agencies in everyday economic life, improve access to complaint and feedback mechanisms, and transparently demonstrate fair and impartial treatment.

Treating citizen trust as an explicit input into policy design, rather than as a by-product of reform, can strengthen the credibility of reforms and boost the overall effectiveness of governance interventions. Survey evidence from Kosovo, which shows uneven levels of trust across several institutions, further underlines the importance of approaching public trust as a policy input and not solely as an outcome (Kosovar Centre for Security Studies, 2022)

Given Kosovo's dependence on private investment and remittances (Central Bank of the Republic of Kosovo, 2022), regulatory stability and predictability are essential. The empirical results show that regulatory quality supports development only when rules are consistently applied (North, 1990; Rodrik, 2005; Kaufmann et al., 2010; World Bank, 2017; European Commission, 2023).

Policymakers should therefore focus on:

- limiting discretionary exemptions and ad hoc regulatory changes
- improving transparency in licensing, procurement, and inspections,
- strengthening competition policy and contract enforcement,

- ensuring regulatory stability through clear transition periods and advance notice of policy changes,
- strengthening the independence and capacity of regulatory agencies to ensure consistent rule application.

Consistent with the dissertation’s findings, human capital plays a stabilizing role when institutional reform is slow or uneven. In the case of Kosovo, this implies that education and skills policy should be treated as a parallel pillar of development rather than a substitute for institutional reform. Policy priorities, therefore, include aligning education curricula with labor market needs, investing in vocational training and digital skills, and leveraging the diaspora to transfer skills and foster entrepreneurship. Theoretical and empirical research indicate that human capital accumulation can partially mitigate the economic costs of weak institutions, particularly in transition economies, but cannot substitute for consistent improvements in governance quality and state capacity in the long run (Lucas, 1988; Pritchett, 2001; Krueger & Lindahl, 2001; Rodrik, 2005; World Bank, 2017).

Last but not least, the results caution against overestimating the short-run impact of external anchors on growth. For Kosovo, EU integration and international support mechanisms will be effective only when domestic political incentives match implementation. This implies:

- focusing negotiations and donor conditionality on enforcement outcomes rather than formal compliance,
- prioritizing measurable institutional performance benchmarks,
- ensuring domestic ownership of reform agendas,
- strengthening administrative and judicial capacity to absorb and implement externally driven reforms,
- maintaining policy continuity throughout electoral cycles to preserve reform credibility.

External pressure without domestic credibility risks reform fatigue and institutional superficiality (North, Wallis, & Weingast, 2009; Rodrik, 2008; Schimmelfennig & Sedelmeier, 2005; European Commission, 2023; World Bank, 2017).

Experience from Central and Eastern European transition economies such as Poland and the Czech Republic, as well as later entrants including Croatia and Slovenia, shows that EU membership can create a credible development path. However, it does not function as an automatic engine of convergence. In these cases, accession provided an external anchor that supported institutional consolidation, policy credibility, and market integration. Nevertheless, economic gains depended largely on domestic reform capacity, administrative effectiveness, and sustained political commitment. Where EU rules were internalized and enforced, membership reinforced growth and convergence. Where reforms remained partial or uneven, the impact was more limited. This evidence cautions against viewing EU accession as a form of exogenous “policy manna,” and instead points to its role as a conditional framework that amplifies, but importantly, it does not substitute for domestic institutional development.

For Kosovo, this comparative evidence implies that EU membership can provide a credible institutional and developmental trajectory, but meaningful convergence will depend on sustained domestic reform capacity, enforcement credibility, and administrative effectiveness rather than on accession itself (Schimmelfennig & Sedelmeier, 2005; Vachudova, 2005; Rodrik, 2008; European Commission, 2023; World Bank, 2017, EBRD 2019).

5.6 Limitations

While this dissertation gives useful views on how institutions and economic development are connected in the Western Balkans, it also has some clear limitations.

First, the use of aggregate institutional indicators, such as the Worldwide Governance Indicators, inevitably abstracts from the complexity of institutional realities in growth and development. These indicators help compare countries and spot long-term trends, but they can hide big differences within a country, such as between regions. They also do not show how reforms work in practice at the local or sector level. Because of this, some important differences in how institutions perform may not appear in the data.

Second, even though the dataset covers a long period, it may not be enough to thoroughly capture how institutions change over time. Institutional reforms frequently take many years, or even decades, to show real economic effects. Sometimes, these changes can take generations.

This limitation is particularly relevant for institutional dimensions such as rule of law, judicial independence, and democratic accountability, whose effects are more likely to operate through long-run development levels rather than short-run growth dynamics. Consequently, some reform effects may not be fully reflected even in the specifications employed in the analysis. Dynamic specifications, like GMM, can capture rather short-run implications. Accordingly, the absence of strong institutional coefficients in these models should be interpreted as evidence of persistence and gradual adjustment, not as evidence against institutional relevance.

Third, this analysis mainly looks at the big picture links between governance quality and economic performance. It does not go into detail about different sectors or parts of government, which may have their distinct paths and effects on the economy. The results suggest that looking more closely at specific sectors would be a good direction for future research, especially to better understand how institutions work in practice in the Western Balkans.

Finally, it was not possible to fully answer the question of what causes what. Even though I used advanced methods to reduce bias, it is still possible that economic development and institutional quality influence each other over time. The fact that income levels are highly persistent makes it even harder to say exactly how institutions affect development, since these effects may be obscured by long-term trends rather than short-term changes.

Moreover, and this is key for the Western Balkans, well-entrenched historical legacies, such as differences between Ottoman and Yugoslav institutional inheritances, underline the importance of context-specific dynamics that standardized institutional indices may not entirely capture. These limitations suggest that the findings should be interpreted with appropriate caution and viewed as a section of a broader, developing research agenda rather than definitive causal conclusions.

5.7 Future Research Directions

The limitations identified in this study point to several encouraging paths for future research. First, sector-specific analyses of institutional reform would provide a more granular understanding of which institutional domains generate the strongest economic returns in practice. Micro-level investigations of judicial independence, anti-corruption agencies, regulatory authorities, or tax administrations could help identify where reform efforts are most effective and where institutional resistance is greatest.

Second, future studies would benefit from longer time horizons and extended panel datasets that allow more accurate identification of lagged institutional effects. Given the slow-moving nature of institutional change identified in this dissertation, longer panels would improve the estimation of long-run adjustment paths and help distinguish temporary reform effects from persistent structural shifts in development paths.

Third, incorporating micro-level data sources, such as firm-level surveys, household surveys, and administrative records, would enable researchers to examine the mechanisms by which institutional reforms directly affect economic actors. Such data could assist in bridging the gap between macro-level institutional indicators and micro-level outcomes, including investment behavior, productivity, firm entry and exit, and labor market dynamics.

Fourth, further research should explicitly explore interaction effects between institutional quality and other key growth drivers, including human capital accumulation, trade integration, and foreign direct investment. Understanding how institutions complement or, in some cases, substitute for these factors would provide improved comprehension of the sequencing and prioritization of reforms in transition and simultaneously post-conflict economies.

An additional useful direction for future research is to look at the role of political elites and human capital in molding institutional quality and economic outcomes.

Such research could use indicators such as the education level of heads of government and other similar high-ranking state officials, or measures that reflect the development of the national higher education system, for example, the founding years of major universities. These indicators could help to explain differences in institutional performance among countries in the region.

They can also serve as proxies for state capacity, the professionalism of the public administration, and the quality of policy decisions, and therefore complement standard governance indicators.

Existing research shows that better -educated political leaders are associated with stronger economic performance and better institutional outcomes (Besley & Reynal-Querol, 2011).

More generally, human capital development plays an important role in shaping institutional quality and long-term development paths (Glaeser, La Porta, Lopez-de-Silanes, & Shleifer, 2004).

Studying these factors more could help clarify how long-term investment in education and knowledge institutions impacts institutional development, especially in transition and post-conflict economies.

Finally, greater attention should be devoted to the role of informality and the shadow economy in shaping institutional effectiveness in the Western Balkans. Analyses that examine the interaction between formal institutions and informal economic practices could shed light on hidden governance constraints and enforcement gaps. For example, informality measures based on discrepancies between reported incomes and actual consumption could be used to assess whether formal institutional reforms translate into behavioral change in practice. This may present a more comprehensive and elaborate evaluation of institutional performance.

5.8 Final Remarks

This dissertation reinforces central insights of political economy and institutional economics. Strong institutions, defined by effective administrative, legal, and civic mechanisms, are a core part of sustainable economic development. Specifically, these include mechanisms such as judicial independence, transparency in public administration, and civil society participation. However, the formation of such institutions is slow, gradual, contested, and deeply context-specific. In the Western Balkans, experience shows that reforms on paper or pressure from outside are not enough. Real progress depends on local political will, proper enforcement, and the ability of our own administrations to deliver. Support from the EU or NATO can help, but it cannot replace the need for real commitment at home and the involvement of civil society.

From the analysis, the most important reforms are those that strengthen the rule of law, fight corruption, and make government more effective and trustworthy. These are the main factors that shape income and development in our region. But these reforms work best when they go hand in hand with better governance, investment in people, and wider economic modernization.

I would like to conclude by stating . The Western Balkans stand at a critical juncture, not a theoretical one, but a pragmatic one. Continued progress toward European integration, combined with credible and sustained institutional reform, offers a clear route toward long-run convergence with European living standards and peace—our ultimate goal. However, persistent governance deficits risk entrenching us in low-growth equilibria or less optimal growth paths, characterized by institutional fragility, political fragmentation, and external dependence. Therefore, it is imperative that policymakers, civil society, and international partners redouble their efforts to focus on and drive accountable, effective, and credible institutional development. This is not only about meeting EU requirements, but about generating real opportunities and a better future for people in our region. Now is the time to act together and turn this vision into a reality.

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