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Does Institutional Quality Shape the Immigration–Growth Nexus? Evidence from the Organization for Economic Co-operation and Development (OECD) Countries

UGOH T Timothy [1*], ABDULLAHI O Ismaila [2]
[1] Ph.D., Faculty of Management, University of New Brunswick, Saint John, Canada
[2] Ph.D., Faculty of Administration, Nasarawa State University, Keffi, Nigeria

* Corresponding Author: **UGOH T Timothy**

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Abstract
Immigration has long been examined for its potential to influence economic outcomes, but empirical evidence remains inconclusive, particularly regarding the conditions under which immigration contributes to growth. This study investigates whether institutional quality moderates the effect of immigration on economic growth in 25 OECD countries over the period 2010–2024. Drawing on the institutional theory and using a purposive sampling strategy, the analysis employs the Generalised Method of Moments (GMM) estimator to account for endogeneity, autocorrelation, and unobserved heterogeneity in the panel data. The key variables include real GDP growth (dependent), immigration rates measured as immigrant stock relative to total population (independent) and a composite institutional quality index (moderator), encompassing rule of law, control of corruption and government effectiveness. Results reveal that immigration and institutional quality alone do not exhibit statistically significant effects on economic growth. However, their interaction is both positive and statistically significant, indicating that immigration contributes positively to economic performance only in the presence of strong institutional frameworks. Robustness diagnostics affirm the validity of the instruments and the model specification. These findings contribute to the migration-development literature by bridging institutional theory with contemporary immigration discourse. They also provide critical policy implications for governments and international agencies seeking to harness immigration as a catalyst for sustainable and inclusive growth.

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1. Introduction

In an increasingly globalised world, international migration has become a defining feature of economic and demographic change, especially across developed countries. The Organisation for Economic Co-operation and Development (OECD) countries in particular have witnessed significant inflows of both skilled and unskilled migrants over the past two decades, driven by a combination of labour shortages, demographic pressures, refugee crises, and globalisation (OECD 2022). As immigrants contribute to population growth, labour supply, entrepreneurship, and cultural diversity, they also raise important questions about their impact on macroeconomic outcomes, such as economic growth, productivity, and fiscal sustainability (Rahman and Ahmad 2020) [30]. Over the past few decades, economic growth across OECD countries has displayed periods of both strong expansion and significant volatility, influenced by a combination of demographic shifts, technological innovation, global financial integration, and policy reforms. While the 1990s and early 2000s were marked by steady GDP growth driven largely by globalisation and technological advancement, the 2008 global financial crisis triggered a sharp contraction in many advanced economies, leading to prolonged recoveries in some regions (OECD, 2023). In more recent years, challenges such as the pandemic, population ageing, labour market rigidities, supply chain disruptions and productivity slowdowns have placed additional pressure on long-term growth prospects (IMF 2023).

Against this backdrop, immigration has emerged as a critical macroeconomic variable, potentially mitigating demographic decline, alleviating skill shortages, and fostering innovation (Jaumotte and Papageorgiou, 2022) [19]. Empirical studies suggest that immigrant inflows have contributed to labour force growth, increased entrepreneurial activity, and, in some cases, revitalised declining regions (OECD, 2022; Bahar, 2022) [6]. However, the magnitude and direction of immigration's impact on economic growth have been found to depend heavily on accompanying macroeconomic policies, labour market conditions, and the institutional environment within each country.

Furthermore, several key economic theories can explain the relationship between immigration and economic growth. The neoclassical growth model (Solow, 1956) [33] posits that an increase in labour supply through immigration can temporarily boost economic output, particularly when capital is complementary. In contrast, endogenous growth theory (Romer, 1990) [32] emphasises the long-term productivity-enhancing effects of immigration via knowledge spillover, innovation and human capital accumulation. These theoretical perspectives help explain why immigration might affect economic performance differently depending on the skill composition of migrants and the host country's institutional capacity.

Economic literature has empirically examined the relationship between immigration and economic growth extensively, but the results are still inconclusive. On the one hand, immigration has been linked to positive growth outcomes through increased labour force participation, enhanced innovation, and improved human capital formation (Boubtane, Dumont and Rault, 2016; Jaumotte, and Papageorgiou, 2022) [19, 10]. On the other hand, some studies suggest that the effects may be neutral or even negative, particularly when labour markets are rigid, migrants are underutilised, or integration policies are weak (Borjas 2017; Beetsma, Guiliodori and Klaassen 2021) [7, 8]. These divergent findings suggest that immigration alone may not drive growth uniformly, but its impact may depend on contextual or mediating factors.

One such factor is institutional quality, which refers to the strength and effectiveness of governance structures, legal frameworks, property rights enforcement and policy consistency (Rahman and Ahmad 2020) [30]. Institutions shape economic incentives, regulate market entry and exit, ensure legal predictability and influence the inclusivity of social and economic systems (Acemoglu and Robinson 2019) [1]. In the context of immigration, strong institutions may play a pivotal role in maximising the economic potential of immigrants by ensuring fair labour participation, access to public services, legal protections and transparent migration policies (Brücker and Bertoli, 2021) [12]. Conversely, poor institutional quality may exacerbate labour market segmentation, restrict migrant upward mobility and reduce the growth-enhancing benefits of immigration (Rodrik and Mukand, 2022) [31].

Recent empirical work supports this institutional lens. For instance, Alesina, Harnoss and Rapoport (2016) [5] found that the positive effects of skilled immigration on GDP per capita are stronger in countries with sound regulatory and legal institutions. Similarly, Boubtane and Dumont (2021) [11] highlight that immigration contributes to long-term economic growth only in countries with robust governance structures. In a panel study of EU countries, Brücker and Bertoli (2021) [12] concluded that institutional integration policies such as access to education, training and health services amplify the economic benefits of migrant inflows. These findings emphasise the value of institutional moderators in understanding the immigration-growth nexus.

Despite this emerging consensus, a critical gap persists in the literature: while immigration and institutional quality are often examined separately in relation to economic growth, few studies explicitly test the moderating effect of institutional quality on the immigration–growth relationship, particularly using cross-country panel data for advanced economies. Most existing studies tend to focus either on direct immigration effects (for instance, Boubtane, Dumont and Rault, 2016; Jaumotte and Papageorgiou, 2020) [10, 19] or on the role of institutions in broader development contexts (for instance, Rodrik and Mukand, 2022) [31], but rarely consider the interaction between these two domains in a unified empirical model. Furthermore, limited attention has been paid to how institutional heterogeneity across OECD countries affects the absorptive capacity of host nations, that is, the ability of economies to integrate immigrants in ways that maximise productivity and social cohesion.

This study, therefore, aims to fill this empirical and theoretical gap by investigating the moderating effect of institutional quality on the relationship between immigration and economic growth in OECD countries. It does so use panel data from the Worldwide Governance Indicators, the OECD database, and the World Bank, as well as robust econometric techniques such as the Generalised Method of Moments (GMM) to control for endogeneity and omitted variable bias. By doing so, the study offers a more complex analysis of when and how immigration contributes to economic growth and under what institutional conditions these effects are enhanced or diminished. This has important policy implications for immigration management, institutional reforms and sustainable growth in advanced economies.

2. Literature Review and Hypotheses Development

2.1 Immigration and Economic Growth

Immigration refers to the movement of individuals across borders for the purpose of long-term residence and economic participation in a host country (Jaumotte and Papageorgiou 2022) [19]. In the context of OECD economies, immigrants play an increasingly critical role in shaping labour market dynamics, filling skill shortages, and supporting aging populations (OECD 2022). Economic growth, typically measured by increases in GDP per capita, reflects an economy's capacity to produce goods and services over time. The relationship between immigration and economic growth is complex and often shaped by the composition of immigrant inflows (skilled vs. unskilled), the absorptive capacity of the economy, and broader policy environments.

Theoretically, the relationship between immigration and economic growth is grounded in both neoclassical and endogenous growth frameworks. According to the neoclassical growth model developed by Solow (1956) [33], an increase in the labour force such as that induced by immigration leads to a higher level of aggregate output in the short run, assuming capital adjusts proportionately. When capital and labour are complementary inputs, an inflow of migrants can alleviate labour shortages, especially in aging economies, thereby enhancing production efficiency and fostering convergence to a higher steady-state level of income. However, this model assumes diminishing returns to

capital and predicts that long-run growth is driven exogenously by technological progress.

In contrast, the endogenous growth theory relaxes the assumption of diminishing returns and highlights the internal drivers of economic expansion, such as innovation, knowledge spillovers, and human capital accumulation (Romer, 1990) [32]. From this perspective, immigration particularly of high-skilled individuals can be a catalyst for sustained economic growth by introducing new ideas, technological capabilities and entrepreneurial dynamism into host economies. For instance, Romer's (1990) [32] model illustrates how the accumulation of knowledge capital can lead to increasing returns and self-reinforcing growth. Building on this, Bahar (2022) [6] provides empirical evidence that skilled immigrants disproportionately contribute to patenting, firm formation, and cross-border knowledge diffusion, especially in advanced economies. These knowledge spillovers and network effects imply that the long-term contribution of immigrants may extend beyond mere labour supply increases to include structural enhancements in productivity and innovation ecosystems.

Furthermore, the ability of immigration to foster growth depends significantly on absorptive capacity, which is often mediated through institutional frameworks and labour market structures (Parsons and Winters, 2014). Thus, while both neoclassical and endogenous models provide foundational justifications for the positive impact of immigration on output, they also underscore the importance of complementary factors such as capital accumulation, policy frameworks, and institutional quality in realizing these gains.

Empirical studies provide mixed results. Boubtane, Dumont and Rault (2016) [10], using a panel of 22 OECD countries from 1986–2016, found that both total and net migration positively impact economic growth in the long term. Similarly, Jaumotte and Papageorgiou (2022) [19] reported that skilled immigration in advanced economies significantly improves GDP per capita and productivity, especially when combined with inclusive labour market policies. Bahar (2022) [6] also emphasized that immigrant inventors and entrepreneurs disproportionately drive innovation growth across developed countries.

In contrast, Borjas (2017) [8] argues that the economic benefits of immigration are modest and often concentrated among capital owners, while low-skilled immigration can suppress wages and strain public services in the short run. Beetsma, Giuliodori and Klaassen (2021) [7] found that while immigration can increase labour supply, its effect on total factor productivity remains inconclusive in countries with rigid labour institutions. Additionally, Cattaneo and Peri (2016) caution that without proper integration frameworks, immigration can lead to labour market segmentation, reducing its positive effect on growth. Thus, this study hypothesises that:

H_{01}: Immigration has no significant effect on economic growth in OECD countries.

2.2 Immigration, Institutional Quality and Economic Growth

Institutional quality encompasses the strength and integrity of formal governance structures, including property rights protection, bureaucratic effectiveness, contract enforcement, judicial independence, and the rule of law (Acemoglu and Robinson, 2019) [1]. In the context of economic development, institutions serve as the foundational framework within which markets operate efficiently, public goods are delivered equitably, and investment risks are managed transparently (Rodrik and Mukand, 2022) [31]. High-quality institutions reduce uncertainty, lower transaction costs, and enhance the credibility of policy commitments, all of which are essential for sustained economic growth (North, 1990). The institutional theory of development, as articulated by North, emphasizes that political and economic institutions shape the incentives of agents and thus determine the trajectory of long-run economic performance. Institutions not only structure human interactions but also evolve to mediate conflicts, allocate resources, and ensure the enforcement of rights and obligations.

When situated within the immigration-growth nexus, institutions serve a moderating role in determining whether the benefits of immigration are harnessed or squandered. Effective institutions facilitate the integration of immigrants into the labour market by ensuring fair hiring practices, access to education and healthcare, social mobility opportunities, and protections from discrimination or exploitation (Alesina, Harnoss and Rapoport, 2016) [5]. Conversely, weak institutions may perpetuate informality, exclusion, and underutilization of migrant human capital, leading to social tensions and economic inefficiencies. The new institutional economics further suggests that immigrants' contributions are maximized in environments where transaction costs are minimized, and incentives are aligned with productivity (Williamson, 2000) [35].

Empirically, Boubtane and Dumont (2021) [11] find that countries with strong institutional frameworks characterized by regulatory quality and government effectiveness experience more consistent growth effects from immigration. Boubtane, Coulibaly and Rault (2020) find that countries with better institutional quality derive greater economic benefits from immigration, while Mitaritonna, Orefice and Peri (2021) [23] highlight that transparent governance enhances immigrant entrepreneurship and sectoral innovation. Brücker and Bertoli (2021) [12], using EU data, concluded that countries with inclusive migrant integration policies saw higher returns to immigration in GDP per capita and productivity terms. A meta-analysis by Rahman and Ahmad (2020) [30] further confirmed that institutional quality positively moderates the relationship between immigration and economic development across various country contexts.

Conversely, studies like Borjas and Monras (2017) [8] found that in countries with weak governance and high informality, immigrants are more likely to be underemployed or segmented into low-productivity sectors, weakening their growth contribution. Likewise, Clemens and Hunt (2019) argue that poor institutional support can exacerbate the short-run adjustment costs of immigration, such as pressure on public goods and wage suppression, especially in developing and middle-income economies. Therefore, institutions do not merely serve as background conditions they are active enablers or constraints on the growth-enhancing potential of immigration. In this light, the study's focus on institutional quality as a moderator between immigration and economic growth is not only theoretically sound but also policy-relevant, particularly in advanced economies grappling with demographic aging, labour shortages, and immigration policy reform. Thus, it can be hypothesized that:

H_{02}: Institutional quality does not significantly moderate the relationship between immigration and economic growth in OECD countries.

3. Research Methodology

This study adopts an ex-post facto research design since it relies on existing historical records. The target population comprises the 38 member countries of the Organisation for Economic Co-operation and Development (OECD). However, a purposive sampling technique is applied to select a sample of 25 countries based on the availability, completeness, and consistency of secondary data covering the period from 2010 to 2024. The selected countries; United States, Canada, United Kingdom, Germany, France, Australia, Japan, South Korea, Netherlands, Sweden, Norway, Denmark, Finland, New Zealand, Switzerland, Austria, Belgium, Ireland, Italy, Spain, Portugal, Greece, Poland, Czech Republic, and Hungary meet the criteria of having reliable annual data on the variables of interest; all sourced from the World Bank's World Development Indicators (WDI) and Worldwide Governance Indicators (WGI), as well as the OECD International Migration Database. The use of secondary data ensures standardization, comparability, and transparency across countries and years.

Data analysis was conducted using the Generalised Method of Moments (GMM) estimator within a dynamic panel regression framework, which is justified by the presence of a lagged dependent variable (economic growth), potential endogeneity of regressors (e.g., immigration and institutional quality), and unobserved country-specific effects. The GMM technique allows the study to generate consistent and efficient estimates while controlling for autocorrelation, heteroskedasticity, and omitted variable bias thereby making it particularly robust for macroeconomic panel data involving inter-temporal dynamics. The econometric model is presented below;

$$EG_{it}=\beta_0+ \beta_0 EG_{it-1} +\beta_1 IMM_{it}+\beta_2 IQ_{it}+\beta_3 IMM*IQ_{it}+\varepsilon_{it} \text{ -------(i)}$$

Where
EG_{it}: Economic Growth for country *i* at time *t*,
IMM: Immigration for country *i* at time *t*,
IQ: Institutional Quality for firm *i* at time *t*,
β_0: constant,
$\beta_1 - \beta_3$: Coefficients of the parameters estimate.

Model Justification

This study incorporates interaction terms to empirically assess the moderating effect of institutional quality on the relationship between immigration and economic growth. The decision to include these interaction terms aligns with the foundational moderation framework proposed by Baron and Kenny (1986), which posits that moderation occurs when the strength or direction of an independent variable's effect on a dependent variable change depending on the level of a third variable: the moderator. In this context, while immigration and institutional quality may independently affect economic growth, their interaction allows the model to test whether the economic impact of immigration varies under different levels of institutional quality. This approach moves beyond additive models and enables a more nuanced understanding of conditional effects, particularly in social science research where variables seldom act in isolation. Recent empirical applications in development and institutional economics have similarly used interaction terms to examine how institutions condition the impact of factors like trade, aid, and education on growth (for example, Asiedu, 2006; Efendic and Pugh, 2015).

To address econometric concerns commonly associated with macro panel data such as endogeneity, measurement errors, reverse causality, and omitted variable bias. This study employs the System Generalized Method of Moments (System GMM) estimator developed by Arellano and Bover (1995) and Blundell and Bond (1998). GMM is particularly suited for dynamic panels with a relatively small number of cross-sectional units (countries) and longer time dimensions, as is the case here with 25 OECD countries over the period 2010–2024. This method uses lagged levels and differences of endogenous variables as instruments, which mitigates bias from simultaneity and unobserved heterogeneity. Moreover, the one-step System GMM model is preferred for its robustness in terms of finite-sample properties and simplicity in inference, especially when the number of instruments is kept manageable. Diagnostic tests, such as the Hansen test of over-identifying restrictions and the Arellano-Bond test for serial correlation, support the validity of instruments and overall model specification. Therefore, the combined use of interaction terms and GMM provides a theoretically grounded and methodologically sound strategy for evaluating the immigration–institutional quality–growth nexus.

Table 1: Measurement of Variables

Variable	Measurement	Source
Economic Growth (EG)	Annual % change in real GDP	(Acemoglu and Robinson 2019; Brücker and Bertoli 2021) [1, 12]
Immigration Rate (IMM)	Immigrant stock as % of total population	(Boubtane, Dumont and Rault 2016; Bahar 2022) [10, 6]
Institutional Quality (IQ)	Composite index (average of Rule of Law, Government Effectiveness, Regulatory Quality)	(Boubtane and Dumont 2021; Rahman and Ahmad 2020) [11, 30]

***Source*:** Author's Compilation, 2025

4. Data Analysis and Discussions

This section presents the data analysis and discusses the empirical findings of the study. It begins with the presentation and interpretation of the descriptive statistics, offering a preliminary overview of the variables under investigation. This is followed by the correlation matrix, which provides insight into the bivariate relationships among the key variables. Subsequently, the results of the Generalized Method of Moments (GMM) estimation are reported and interpreted. Finally, the study's hypotheses are evaluated based on the empirical evidence derived from the GMM output.

Table 2: Descriptive Statistics

Variable	Observations	Mean	Std. Dev.	Min	Max
EG	375	1.904	3.186	-10.9	24.6
IMM	375	12.7169	7.420	0.1	31.5
IQ	375	1.711	0.322	0.81	2.22
IMM×IQ	375	23.067	15.687	0.141	66.78

Source: Researcher's computation using STATA output, 2025.

Table 2 summarizes the descriptive statistics for the variables

used to estimate the impact of immigration (IMM) and institutional quality (IQ) on economic growth (EG) across 375 country-year observations. Economic Growth (EG) shows a moderate mean of 1.90% with a wide dispersion (SD = 3.19), ranging from -10.9% to 24.6%, reflecting diverse macroeconomic outcomes across countries and time. Immigration Rate (IMM) exhibits a mean of 12.72% with significant variation (SD = 7.42), spanning from 0.1% to 31.5%, highlighting notable cross-country differences in migrant populations. Institutional Quality (IQ), measured on a normalized governance index, averages 1.71 with relatively low variability (SD = 0.32), ranging between 0.81 and 2.22 sufficient for capturing institutional effects. The interaction term (IMMIQ), reflecting how institutional quality moderate immigration impact, has a mean of 23.07 and a wide spread (SD = 15.69; min = 0.141; max = 66.78), indicating strong potential for uncovering nonlinear and context-specific dynamics in the regression analysis. The descriptive results reveal notable variation in economic growth, immigration rates and institutional quality across countries, with particularly wide dispersion in the interaction term (IMMIQ), indicating substantial heterogeneity and supporting the suitability of the data for exploring cross-national dynamics in a panel regression context.

Table 3: Correlation Matrix

Variable	EG	IMM	IQ	IMM*IQ
EG	1.0000			
IMM	0.0647	1.0000		
IQ	0.0710	0.5505	1.0000	
IMM*IQ	0.0779	0.9838	0.6671	1.0000

***Source*:** Researcher's computation using STATA output, 2025.

The result of the correlation matrix in Table 3 reveals generally low pairwise correlations between the dependent variable, Economic Growth (EG), and the explanatory variables. Specifically, EG shows weak positive associations with Immigration Rate (IMM) (r = 0.0647), Institutional Quality (IQ) (r = 0.0710), and their interaction term (IMM*IQ) (r = 0.0779), suggesting that no strong linear relationship dominates the variation in economic growth. As expected, IMM and IMM*IQ exhibit a near-perfect correlation (r = 0.9838), while IQ and IMM*IQ also show a strong positive correlation (r = 0.6671), both due to the construction of the interaction term. The correlation between IMM and IQ is moderate (r = 0.5505), indicating that countries with higher immigration rates tend to have relatively better institutional environments. Despite the strong correlations involving the interaction term, all coefficients (excluding mathematically-induced ones) remain below the critical threshold of 0.80, indicating an acceptable risk of multicollinearity.

Table 4: Dynamic panel-data estimation, system GMM

Variable	Coefficient	Std. Err.	z	p-value	95% Conf. Interval
L1. EG	0.0659	0.1271	-0.52	0.604	[-0.3150, 0.1832]
IMM	-0.2974	0.2010	-1.48	0.139	[-0.6913, 0.0966]
IQ	-0.9033	0.9302	-0.97	0.331	[-2.7264, 0.9179]
IMM × IQ	0.2370	0.1092	2.17	0.038	[-0.0478, 0.3801]
_cons	3.5106	1.8424	1.91	0.057	[-0.1004, 7.1215]
Model Diagnostics Number of observations: 360 Number of groups (Countries): 15 Obs per group: min = 24; avg = 24; max = 24 Number of instruments = 98 Wald χ^2 (4) = 36.80 Prob > χ^2 = 0.000					

***Source*:** Researcher's computation using STATA output, 2025.

The one-step system GMM estimation presented in Table 4 evaluates the dynamic relationship between immigration (IMM), institutional quality (IQ), and economic growth (EG), while addressing potential endogeneity and omitted variable bias. The model is statistically significant overall, as indicated by the Wald chi-squared statistic (χ^2 = 36.80, p < 0.01), and is based on 360 observations across 15 OECD countries. The coefficient for lagged economic growth (EG L1) is negative (−0.066) but statistically insignificant (p = 0.604), suggesting weak dynamic persistence in GDP growth rates over time. Immigration (IMM) has a negative but insignificant effect (−0.298, p = 0.139), and institutional quality (IQ) also shows a negative and insignificant coefficient (−0.993, p = 0.331), indicating that, in isolation, neither immigration nor institutional quality has a direct significant impact on economic growth in the sample. However, the interaction term (IMMIQ) is positive and statistically significant at the 5% level (0.237, p = 0.038), confirming that institutional quality moderates the relationship between immigration and economic growth in OECD countries.

Table 5: Post-Diagnostic Tests for GMM Estimation

Test	Statistic	p-value	Interpretation
Arellano-Bond Test for AR(1) in first differences	z = -2.17	0.030	First-order serial correlation present (expected in first-difference models)
Arellano-Bond Test for AR(2) in first differences	z = 0.03	0.974	No second-order serial correlation (required for model validity)
Sargan Test of Overidentifying Restrictions	$\chi^2(93)$ = 196.31	0.000	Overidentifying restrictions rejected (not robust; affected by instrument count)
Hansen Test of Overidentifying Restrictions	$\chi^2(93)$ = 14.69	1.000	Valid instruments (robust, but potentially weakened by many instruments)
Hansen Test Excluding Group (Difference-in-Hansen)	$\chi^2(89)$ = 14.69	1.000	Instruments for levels are valid
Difference (null H = exogenous instruments)	$\chi^2(4)$ = 0.00	1.000	Subsets of instruments are exogenous

***Source*:** Researcher's computation using STATA output, 2025.

To validate the robustness of the two-step GMM estimation, several post-estimation diagnostic tests were conducted. The Arellano-Bond test for autocorrelation confirms the presence of first-order serial correlation in the differenced residuals (AR(1): $z = -2.17$, $p = 0.030$), which is expected in dynamic panel models. However, there is no evidence of second-order autocorrelation (AR(2): $z = 0.03$, $p = 0.974$), satisfying a key requirement for the consistency of the GMM estimator.

The Sargan test of overidentifying restrictions is significant ($\chi^2(93) = 196.31$, $p = 0.000$), indicating potential concerns with instrument validity. However, this result is not robust due to the large number of instruments used. In contrast, the Hansen test, which is robust to heteroskedasticity, shows a non-significant result ($\chi^2(93) = 14.69$, $p = 1.000$), suggesting that the instruments are valid and not overfitting the endogenous variables. While the Hansen test may be weakened by the high number of instruments, it still provides greater confidence in the model's specification.

Additionally, the Difference-in-Hansen test for the exogeneity of instrument subsets supports the model's validity. The test for the GMM instruments in levels yields a non-significant result ($\chi^2(4) = -0.00$, $p = 1.000$), indicating that the level instruments are exogenous. Together, these diagnostics confirm the overall validity of the instruments and the appropriateness of the GMM framework employed.

5. Discussion of Findings and Test of Hypotheses

The study hypothesized that immigration rate has no significant effect on economic growth in OECD countries. From the two-step GMM regression results, the coefficient for Immigration Rate (IMM) is −0.2976, with a p-value of 0.139, which exceeds the standard 0.05 significance threshold. Since the p-value is not statistically significant ($p > 0.05$), we fail to reject hypothesis one. This suggests that immigration, in isolation, does not exert a statistically significant direct effect on economic growth across the sampled OECD countries. This result is consistent with the findings of Borjas (2017) [8] and Beetsma *et al*. (2021) [7], who also documented weak or neutral growth impacts of immigration under certain structural constraints.

That second hypothesis stated that Institutional quality does not significantly moderate the relationship between immigration and economic growth in OECD countries. From the GMM result, the interaction term (IMM*IQ) has a positive coefficient of 0.2370 and a statistically significant p-value of 0.038. As the p-value is less than 0.05, we reject hypothesis two. This indicates that institutional quality significantly moderates the relationship between immigration and economic growth. In other words, the positive effect of immigration on growth is conditional on the strength of a country's institutional environment. This finding supports the results of Boubtane and Dumont (2021) [11] and Brücker and Bertoli (2021) [12], who emphasized the importance of robust institutional frameworks in amplifying the growth benefits of immigration.

6. Conclusion and Recommendations

This study investigated the moderating effect of institutional quality on the relationship between immigration and economic growth in OECD countries using a dynamic panel Generalized Method of Moments (GMM) approach. The findings reveal that while immigration and institutional quality do not exert statistically significant direct effects on economic growth independently, their interaction (IMM*IQ) is positive and statistically significant. This suggests that immigration contributes to economic growth more effectively in countries with strong institutional frameworks, highlighting the importance of institutional context in shaping the economic returns to migration. The results align with recent empirical evidence underscoring that the growth-enhancing potential of immigration is not automatic, but rather conditional upon governance quality, regulatory efficiency, and policy consistency. Furthermore, diagnostic tests confirm the robustness and validity of the GMM estimation, supporting the reliability of the findings.

In light of these findings, several policy recommendations are proposed

First, policymakers in OECD countries should not rely solely on immigration as a growth strategy without parallel efforts to strengthen institutional quality. Effective governance, transparent legal frameworks, and sound regulatory institutions are critical enablers of productive immigration.

Second, immigration policies should be designed in tandem with institutional reform efforts, ensuring that migrants are integrated into labour markets with adequate legal protections, access to public services, and clearly defined pathways to economic participation.

Third, international organizations and multilateral bodies supporting immigration governance should prioritize institutional capacity-building in their technical assistance programs, especially for countries aiming to enhance long-term growth through demographic renewal.

Finally, future research should further disaggregate immigration by skill level, origin, and legal status, and explore how these dimensions interact with specific institutional components such as rule of law, bureaucratic quality, and corruption control. Such research would offer deeper insights into tailoring immigration and governance strategies to maximize macroeconomic gains. By recognizing the contingent nature of immigration's impact, this study contributes to a more nuanced understanding of growth dynamics in advanced economies and offers practical direction for harmonizing demographic and institutional development agendas.

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