



Does Social Capital Drive Economic Performance? Empirical Evidence from Southeast Asia

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10.24269/ekulibrium.v21i2.2026.pp542-556

ARTICLE INFO

Article history

Received:

05-06-2026

Revised:

27-07-2026

Accepted:

22-08-2026

Keywords

Social capital

Economic performance

Panel data

Southeast asia

ABSTRACT

This study examines the relationship between social capital and economic performance in ASEAN countries, with particular attention to the possibility of a nonlinear effect. While previous studies have generally emphasized the linear contribution of social capital to economic outcomes, empirical evidence regarding its nonlinear influence remains limited, especially in the ASEAN context. Using panel data from nine ASEAN member countries over the period 2012–2024, this study employs panel data regression analysis to investigate the effect of social capital on GDP per capita. Social capital is measured using the social support index from the World Happiness Report, while government effectiveness, military expenditure, female authority, leader age, and the COVID-19 pandemic are included as control variables. The model selection procedure indicates that the Random Effect Model is the most appropriate specification. The empirical findings reveal that social capital has a significant nonlinear effect on economic performance. Specifically, the coefficient of social capital is negative, whereas its squared term is positive and significant, indicating a U-shaped relationship. The estimated turning point is 77.95, suggesting that the economic benefits of social capital emerge only after a sufficiently high level of social support is achieved. In addition, female authority is found to be significantly associated with GDP per capita, while government effectiveness, military expenditure, leader age, and COVID-19 do not exhibit significant effects. These findings suggest that the contribution of social capital to economic performance depends on its level of accumulation and inclusiveness. Strengthening social trust, cooperation, and broader social networks may therefore support sustainable economic development in ASEAN countries.

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1. Introduction

Economic performance is widely regarded as a key indicator for evaluating a country's development achievements, as it reflects an economy's capacity to generate income and improve the welfare of its population (Rahmawati & Intan, 2020). GDP per capita is therefore commonly employed as a proxy for economic welfare because it represents the average income available to individuals within a country (Aitken, 2019; Dědeček & Dudzich, 2022; Jones & Klenow, 2016). Although ASEAN has experienced remarkable economic growth over recent decades, substantial disparities remain among member countries. According to World Bank (2026), GDP per capita ranged from USD 1,158 to USD 90,674 during the 2012–2024 period, suggesting that differences in economic performance are influenced not only by economic fundamentals but also by broader social and institutional factors.

Among these factors, social capital has received increasing attention as a potential driver of economic development. Social capital broadly refers to the networks, trust, and social norms that facilitate cooperation and collective action within society (Putnam, 2000; Woolcock & Narayan, 2000). By reducing transaction costs, facilitating information exchange, and strengthening coordination among economic actors, social capital is expected to enhance productivity and economic performance (Muringani et al., 2021; D. Narayan & Pritchett, 1999).

Empirical evidence generally supports a positive association between social capital and economic performance (Fadli, 2017; Muringani et al., 2021; D. Narayan & Pritchett, 1999; Whiteley, 2000). More recent studies further suggest that inclusive social networks can improve economic mobility and broaden access to economic opportunities (Kazmina et al., 2025). However, the magnitude of this relationship varies considerably across countries, and several studies argue that its effectiveness depends on institutional quality and the level of economic development. These mixed findings indicate that the relationship between social capital and economic performance may be more complex than the linear relationship commonly assumed in previous studies.

In the ASEAN context, the quality of institutions, including government effectiveness, control of corruption, and the strength of regulatory frameworks, matters in shaping the economic structure by influencing the scale of the shadow economy, which subsequently influences formal economic performance (Wibowo & Indrayanti, 2020). At the same time, these institutional factors evolve within an increasingly integrated regional landscape, where economic, social, and political interconnectedness continually affects productivity and economic growth across member states (Sardiyo & Dhasman, 2019). Taken together, these findings suggest that the association between social capital and economic performance is likely to be more complex than the linear pattern commonly assumed in earlier empirical studies.

Despite the growing literature, empirical studies have predominantly adopted linear specifications, implicitly assuming that the economic returns to social capital remain constant across different levels of social capital. However, this assumption may not hold in practice, as the contribution of social capital to economic performance could diminish or strengthen beyond certain thresholds. Empirical evidence examining such nonlinear effects remains limited, particularly in the ASEAN context, where countries differ considerably in their socioeconomic characteristics and institutional environments. Addressing this gap, the present study investigates both the linear and nonlinear effects of social capital on GDP per capita using balanced panel data from nine ASEAN member countries over the period 2012–2024. The

analysis further incorporates government effectiveness, military expenditure, female leadership, leader age, and the COVID-19 pandemic as control variables.

The inclusion of these controls is empirically grounded in the ASEAN economic literature. For instance, government effectiveness and political stability are critical institutional determinants that not only suppress informal economic activities (Wibowo & Indrayanti, 2020), but also serve as primary drivers for attracting Foreign Direct Investment (FDI) and boosting GDP growth (Nafi'ah Maulidiyah & Fuddin, 2024). Additionally, accounting for demographic and gender dimensions, such as female leadership, aligns with evidence showing that female labor participation in industrial sectors significantly enhances regional economic competitiveness and productive capacity (Nafi'ah Maulidiyah & Fuddin, 2024). By controlling for these institutional, macroeconomic, and inclusive development factors, this study isolates the distinct impact of social capital on ASEAN's economic performance.

The 2012–2024 period was selected because it provides a balanced panel consisting of nine ASEAN member countries observed consistently over thirteen years, yielding a total of 117 country-year observations. A balanced panel offers sufficient variation across both the cross-sectional and time dimensions, enabling the analysis to exploit the advantages of panel econometric techniques over conventional cross-sectional or time-series approaches (Baltagi, 2021; Hsiao, 2007; Wooldridge, 2010). Moreover, maintaining a balanced dataset minimizes complications arising from missing observations and facilitates consistent estimation and comparison across countries and over time. The thirteen-year observation window also provides adequate temporal variation to capture medium-term economic dynamics and to identify both the linear and potential nonlinear relationship between social capital and GDP per capita. The findings are expected to enrich the existing literature while providing empirical insights that may support the formulation of sustainable development policies in Southeast Asia.

2. Literature Review

Economic Performance and GDP per Capita

Economic performance serves as a fundamental indicator for assessing a country's level of development and overall prosperity. Within the development economics literature, GDP per capita is widely adopted as a proxy for economic performance because it reflects the average income available to individuals within a nation (Aitken, 2019; Jones & Klenow, 2016). Although this measure does not fully capture the broader dimensions of human well-being, it remains one of the most commonly utilized indicators in cross-country analyses due to its extensive data availability and its ability to represent the economic capacity of a given economy (Dědeček & Dudzich, 2022). Accordingly, this study employs GDP per capita as the principal measure of economic performance across ASEAN countries.

Social Capital and Economic Performance

Among the factors increasingly recognized as determinants of economic performance is social capital. The concept of social capital encompasses social networks, norms, trust, and interpersonal relationships that facilitate collective action and cooperation within society (Putnam, 2000; Woolcock & Narayan, 2000). From an economic perspective, social capital is generally expected to reduce transaction costs, mitigate information asymmetry, strengthen trust among economic actors, and improve coordination in productive activities (Durlauf &

Fafchamps, 2005; D. Narayan & Pritchett, 1999). Consequently, numerous studies have reported that higher levels of social capital are associated with increased income, greater productivity, and stronger economic performance (Fadli, 2017; Muringani et al., 2021; Whiteley, 2000), while more recent evidence indicates that inclusive social networks can enhance economic mobility and broaden access to economic opportunities (Kazmina et al., 2025). Nevertheless, these beneficial effects are not universal. The literature also recognizes a potential "dark side" of social capital, whereby excessively strong or exclusive social ties may encourage favoritism, nepotism, rent-seeking behavior, exclusion of outsiders, and resistance to innovation, thereby reducing market efficiency and constraining economic performance (Durlauf & Fafchamps, 2005; Portes, 1998). This theoretical ambiguity suggests that the relationship between social capital and economic performance may not be strictly linear, providing a key motivation for the present study to investigate the existence of a nonlinear relationship.

Nonlinear Relationship between Social Capital and Economic Performance

Despite its recognized importance, the relationship between social capital and economic performance remains far from conclusive. Existing literature suggests that social capital may generate both economic benefits and economic costs, depending on the nature and structure of the social networks involved. Granovetter (1973) highlighted the value of weak ties in expanding access to information and economic opportunities, while Putnam (2000) and Beugelsdijk & Smulders (2003) distinguished between bonding social capital, which tends to be more exclusive, and bridging social capital, which is generally more open and economically productive. These perspectives imply that the effects of social capital may not follow a simple linear pattern. Therefore, social capital may initially generate limited economic benefits when social networks remain fragmented or exclusive. However, as social capital accumulates and becomes increasingly inclusive, its capacity to facilitate trust, information exchange, and collective action may strengthen substantially. This theoretical reasoning suggests the possibility of a nonlinear relationship between social capital and economic performance.

Control Variables and Research Gap

Beyond social capital, economic outcomes are also shaped by institutional, political, and external factors. Institutional quality, often reflected in government effectiveness, contributes to a favorable economic environment through efficient policy implementation and the provision of high-quality public services (Basuki & Pinjaman, 2025; Haini, 2020; Kharisma et al., 2025). The impact of military expenditure remains debated, as it may stimulate innovation and economic activity while simultaneously diverting resources away from productive sectors such as education, healthcare, and infrastructure (Alptekin & Levine, 2012; Dunne & Tian, 2013). Leadership characteristics, including female authority and leader age, have also attracted scholarly attention due to their potential influence on policy orientation and economic decision-making processes (Baskaran et al., 2024; Orozco Collazos & Botero, 2024). Furthermore, most previous studies have primarily examined the direct and linear effect of social capital on economic outcomes (Muringani et al., 2021; Whiteley, 2000). Empirical investigations exploring whether social capital exerts diminishing, threshold, or nonlinear effects remain relatively limited. This limitation is particularly evident in the ASEAN context, where substantial heterogeneity in institutional quality, economic development, and social

structures may cause the economic impact of social capital to vary across different levels of social support.

Conceptual Framework and Hypothesis Development

This study investigates the potential nonlinear relationship between social capital and GDP per capita (GDPpc) as a measure of economic development performance within ASEAN countries. Building on previous studies, social capital is expected to exert a positive influence on economic performance at lower levels (Fadli, 2017; D. Narayan & Pritchett, 1999; Whiteley, 2000). However, its marginal benefits may diminish or even become adverse once it exceeds a certain threshold. To improve the robustness of the empirical model, several strategic control variables are incorporated. These include government effectiveness, which is theoretically expected to enhance economic performance (Alam et al., 2017; Awan et al., 2018; Bah & Kpognon, 2021; Widjanarko, 2021), and female leadership authority, which has likewise been associated with favorable economic outcomes (Baskaran et al., 2024; Orozco Collazos & Botero, 2024). In addition, the model controls for military expenditure (Deger & Sen, 1983; Smith, 1980), leader age (Jong-A-Pin & Mierau, 2022), and the COVID-19 pandemic (Apergis & Apergis, 2021; Gagnon et al., 2023; P. K. Narayan, 2020), all of which are anticipated to exhibit a negative association with GDPpc growth because of their potential structural and external effects on economic performance. Figure 1 displays conceptual framework of this study.

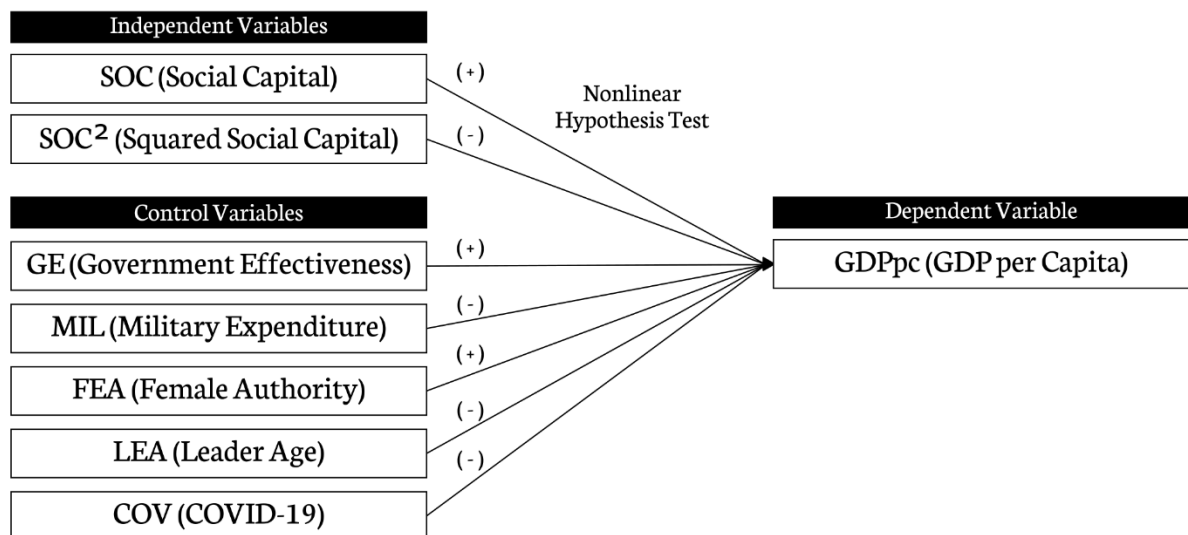


Figure 1. Conceptual Framework

Building upon these theoretical and empirical foundations, the proposed framework posits that the impact of social capital on economic performance is not strictly linear. To capture these potential nonlinear dynamics, a squared term of social capital (SOC²) is incorporated into the analytical model. Consequently, the primary hypothesis of this study proposes an inverted U-shaped (or nonlinear) relationship between social capital and GDPpc. Furthermore, this study evaluates the simultaneous effects of the designated institutional, demographic, and external control variables to ensure an unbiased estimation of economic performance across the region.

3. Research Method

This study employed a quantitative approach utilizing panel data regression analysis. The analysis was based on secondary data obtained from the World Bank and the World Happiness Report. Annual data spanning the period from 2012 to 2024 were collected from nine ASEAN member countries, namely Indonesia, Cambodia, Laos, Malaysia, Myanmar, the Philippines, Singapore, Thailand, and Vietnam. Consequently, the study employed a balanced panel dataset consisting of 117 observations derived from nine ASEAN countries over the 2012–2024 period. Data processing and analysis were conducted between March and May 2026.

Economic performance was proxied by GDP per capita (current USD) as the dependent variable in this research framework. Meanwhile, the model included six explanatory variables and one nonlinear term, namely Social Capital (SOC), Social Capital Squared (SOC²), Government Effectiveness (GE), Military Expenditure (MIL), Female Authority (FEA), Leader Age (LEA), and COVID-19 (COV). The operational measurements of each variable used in this study are presented as follows:

Table 1. Variable Operations

Variable	Operational Definition	Source
GDP per Capita (GDPpc)	The annual Gross Domestic Product per capita of a country, using the GDP per capita (current USD) indicator.	World Bank
Social Capital (SOC)	The national average score for Social Support, defined as the perceived availability of someone to count on in times of trouble, is employed as a proxy for social capital.	World Happiness Report
Government Effectiveness (GE)	The Government Effectiveness Score measures public perception of the quality of public services, the formulation and implementation of policies, and the credibility of government decisions.	World Bank
Military Expenditure (MIL)	Military expenditure expressed as a percentage of GDP.	World Bank
Female Authority (FEA)	A dummy variable equal to 1 if the head of state is female, and 0 if male.	Various
Leader Age (LEA)	The age of the head of state, expressed as a ratio scale in years, is measured at the beginning of each calendar year.	Various
COVID-19 (COV)	A dummy variable equal to 1 for the years 2020 onward to capture the period affected by the COVID-19 pandemic and its aftermath, and 0 for the pre-pandemic period (before 2020).	Various

Source: World Bank, 2026; World Happiness Report, 2026, processed

This study uses the national average score of Social Support, defined as individuals' perceived availability of someone they can rely on during difficult times, as a proxy for social capital (SOC). This indicator captures the presence of supportive interpersonal relationships and social networks, which are widely recognized as core components of social capital within the existing literature (Helliwell & Putnam, 2004; Putnam, 2000). Moreover, Social Support has been extensively adopted in cross-country empirical research because it reflects the degree to which individuals are connected through social networks that promote trust, cooperation, and mutual assistance. To further explore the potential nonlinear effect of social capital on economic performance, a squared term of social capital (SOC²) was incorporated into the

regression model. The inclusion of this term allows the analysis to identify whether the impact of social capital changes at different levels of social support, thereby capturing relationships that may not be adequately represented by a purely linear specification.

The model selection process in this study was conducted in accordance with established panel estimation procedures, including the Chow test, Hausman test, and Lagrange Multiplier (LM) test. Initially, the Chow test was performed to assess whether the Common Effect Model (CEM) or the Fixed Effect Model (FEM) provided a more suitable specification for the dataset. When the results of the Chow test supported the use of the FEM, the Hausman test was subsequently carried out to compare the FEM and the Random Effect Model (REM) in order to determine the most appropriate estimation model. On the other hand, if the Chow test indicated that the CEM was preferable, the analysis continued with the LM test. This test was used to evaluate whether the REM offered a better fit than the CEM, thereby enabling the selection of the model that most accurately represented the characteristics of the panel data.

The panel data regression model employed in this study is specified as follows:

$$\ln \text{GDPpc}_{it} = \beta_0 + \beta_1 \text{SOC}_{it} + \beta_2 \text{SOC}^2_{it} + \beta_3 \text{GE}_{it} + \beta_4 \text{MIL}_{it} + \beta_5 \text{FEA}_{it} + \beta_6 \text{LEA}_{it} + \beta_7 \text{COV}_{it} + \varepsilon_{it} \quad \dots (1)$$

Description:

$\ln \text{GDPpc}$	: Natural logarithm of GDP per Capita
β_0	: Constant or intercept
β_1 to β_7	: Coefficients of Independent Variables
SOC	: Social Capital
SOC^2	: Social Capital squared (used to examine a non-linear)
GE	: Government Effectiveness
MIL	: Military Expenditure
FEA	: Female Authority
LEA	: Leader Age
COV	: COVID-19
ε_{it}	: Error term
i	: Country (cross-section)
t	: Year (time series)

4. Results and Discussion

Descriptive Statistics

This section presents descriptive statistics to show the characteristics and distribution of the variables analyzed prior to conducting panel data regression estimates. Through these summary statistics, the trends in central tendency and variance of each variable can be identified, thereby facilitating an understanding of the dynamics and variations in the data across ASEAN countries during the observation period. Table 2 presents the statistical summaries for the variables across 117 observations. The GDP per capita and Social Capital score exhibit substantial differences in their central tendencies, with a mean of 11,244.77 USD and an average of 80.21, respectively. On average, the sample demonstrates a Government Effectiveness score of 53.46 and a Military Expenditure of 1.63% of GDP, while the mean value for the Female Authority is 0.06, and the average Leader Age is 68.32. Across all variables, the wide dispersion between the minimum and maximum values highlights substantial variation across observations in economic and demographic indicators.

Table 2. Descriptive Statistics

Variable	Obs.	Mean	Std. Dev.	Min	Max
GDP per capita (USD)	117	11244.77	20826.45	1158.05	90674.07
Social Capital	117	80.21	7.23	60.60	93.30
Government Effectiveness	117	53.46	18.88	19.36	95.67
Military Expenditure (% of GDP)	117	1.63	1.12	0.18	6.79
Female Authority	117	0.06	0.24	0	1
Leader Age	117	68.32	9.64	47	89
COVID-19	117	0.38	0.49	0	1

Source: Data Processed, 2026

Model Selection

The appropriate panel data specification should be identified to ensure consistent and efficient parameter estimation before estimating a regression model. In panel data analysis, the Common Effects Model (CEM), the Fixed Effects Model (FEM), and the Random Effects Model (REM) are alternative estimation approaches, each based on different assumptions regarding individual heterogeneity. Therefore, a series of specification tests, including the Chow, Hausman, and Lagrange Multiplier (LM) tests, are conducted to determine the most appropriate model for the dataset. Table 3 displays the CEM, FEM, and REM estimate findings. Based on the panel data model selection results, the Chow test produced a probability value below the 5% significance level. Consequently, the null hypothesis stating that the Common Effect Model (CEM) was the more appropriate specification was rejected, indicating that the Fixed Effect Model (FEM) provided a better fit than the CEM. Subsequently, the Hausman test yielded a probability value of 0.938, which exceeded the 0.05 threshold. As a result, the null hypothesis could not be rejected, suggesting that the Random Effect Model (REM) was more suitable than the FEM. This finding implies that the differences in coefficient estimates between the FEM and REM are not systematic, thereby supporting the validity of the Random Effect assumption. Therefore, the Random Effect Model (REM) was retained as the preferred specification for subsequent estimation and hypothesis testing.

Table 3. Estimated Coefficients for CEM, FEM, and REM

Dependent variable: ln(GDP per capita)	Common Effect	Fixed Effect	Random Effect
Social Capital	0.340 (0.491)	-0.810*** (0.261)	-0.794*** (0.256)
(Social Capital) ²	-0.004 (0.003)	0.005*** (0.002)	0.005*** (0.002)
Government Effectiveness	0.055*** (0.016)	-0.007 (0.037)	-0.002 (0.030)
Military Expenditure	0.195 (0.185)	-0.096 (0.242)	-0.079 (0.230)
Female Authority	-1.026 (1.097)	-1.983*** (0.582)	-1.929*** (0.576)
Leader Age	-0.017 (0.021)	-0.003 (0.012)	-0.004 (0.012)
COVID-19	-0.558 (0.407)	-0.085 (0.194)	-0.099 (0.193)
Constant	1.460 (19.476)	39.285*** (9.865)	38.678*** (9.818)
Observations	117	117	117
R-squared	0.282	0.176	
Number of countries		9	9

Dependent variable: ln(GDP per capita)	Common Effect	Fixed Effect	Random Effect
Chow test (F-statistic)		52.26	
Prob.		0.0000	
Hausman test (Chi-square)			2.35
Prob.			0.9380

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

Source: Data Processed, 2026

The empirical findings of this study reveal that social capital exerts a nonlinear influence on economic performance, as measured by GDP per capita. The negative coefficient associated with the social capital variable (SOC), combined with the positive coefficient of SOC^2 , provides evidence of a U-shaped relationship as seen in Figure 1. This pattern suggests that, at relatively low levels of social capital, further increases in social capital tend to be associated with weaker economic performance. However, once a certain threshold is surpassed, the direction of the relationship changes and becomes positive. The estimated turning point at 77.95 indicates that most ASEAN countries included in the sample have already reached the stage where social capital contributes positively to economic performance. These results imply that the role of social capital in economic development cannot be adequately explained through a simple linear framework; rather, its impact depends on the level of social capital accumulated within a country.

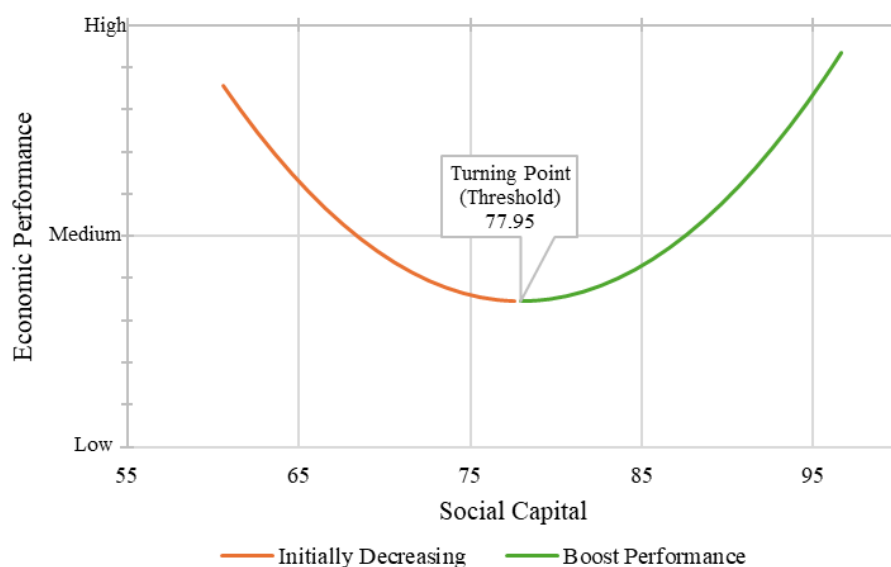


Figure 1. The U-Shaped Relationship Between Social Capital and Economic Performance

Source: Data Processed, 2026

From a theoretical standpoint, these findings can be interpreted through the lens of the transformation of social capital from bonding to bridging capital (Putnam, 2000). In its early stages, social capital is often characterized by strong ties within relatively homogeneous groups. While such relationships may strengthen internal cohesion, they can also contribute to social exclusion, patronage practices, and restricted access to economic information (Woolcock & Narayan, 2000). As a consequence, transaction costs may rise, and market efficiency can be adversely affected. Over time, however, as social capital evolves into a broader form, namely bridging social capital, social networks begin to extend across different groups and communities. This expansion facilitates the flow of information, strengthens trust, and

enhances economic cooperation (Granovetter, 1973). The shift from closed networks to more open and interconnected social structures ultimately promotes greater economic efficiency and contributes significantly to growth in per capita income (Beugelsdijk & Smulders, 2003).

The findings of this study are consistent with the work of Muringani et al. (2021), who reported that social capital contributes positively to regional economic performance in Europe, particularly through the channels of trust and civic engagement (Muringani et al., 2021). Similarly, Kazmina et al. (2025) demonstrated that bridging social capital plays a significant role in enhancing economic mobility, especially among lower-income populations. Collectively, these studies reinforce the view that the economic benefits generated by social capital are closely associated with the quality, inclusiveness, and configuration of social networks within a society.

Within the ASEAN region, the observed nonlinear relationship is particularly relevant given the substantial disparities in economic development among member states. Countries such as Singapore possess more advanced institutional frameworks and stronger stocks of social capital than nations including Cambodia, Laos, and Myanmar. As a result, the economic effects of social capital are unlikely to be uniform across the region. In light of these differences, the present study contributes to the existing body of literature by suggesting that, in heterogeneous developing-country settings, the relationship between social capital and economic performance is more appropriately represented by a nonlinear specification rather than a linear one.

The empirical results indicate that Female Authority is negatively and significantly associated with GDP per capita. Nevertheless, this finding should be interpreted with caution, as it does not necessarily imply that female leadership leads to weaker economic performance. Rather, the observed relationship is better understood as a statistical association reflecting broader political, institutional, and socioeconomic conditions across countries. Previous studies suggest that the economic consequences of female leadership are highly context-dependent and influenced by institutional arrangements and political environments rather than gender alone (Baskaran et al., 2024; Orozco Collazos & Botero, 2024). In the ASEAN context, where female heads of government remain relatively rare, the estimated coefficient may also reflect the unique characteristics of a limited number of countries. Accordingly, the findings should not be interpreted as evidence that female leadership directly reduces economic performance.

In contrast, Government Effectiveness, Military Expenditure, Leader Age, and COVID-19 do not exhibit statistically significant effects on GDP per capita. These findings suggest that their influence on economic performance may operate through indirect, long-term, or context-specific mechanisms that are not fully captured by the present empirical specification. For example, the economic benefits of government effectiveness often materialize gradually through improvements in institutional quality and investment conditions (Haini, 2020), while the effects of military expenditure depend on the balance between productive and non-productive public spending. Likewise, the influence of leader age is likely to be mediated by institutional capacity rather than demographic characteristics alone, and the insignificant COVID-19 coefficient may reflect the inclusion of both the pandemic and post-pandemic recovery periods within the sample. Therefore, the lack of statistical significance for these control variables should not be interpreted as evidence of their irrelevance but rather as an

indication that their effects are conditional on broader institutional and macroeconomic contexts.

Overall, the control variables primarily serve to account for differences in institutional quality, political leadership, public expenditure, and external shocks, thereby enabling a more robust assessment of the relationship between social capital and economic performance. The findings reinforce the central conclusion of this study that the role of social capital remains the primary empirical focus, while the effects of other explanatory factors appear to be secondary and context dependent.

An important policy implication emerging from the identified turning point is that ASEAN countries whose social capital remains below the estimated threshold of 77.95 should not expect immediate economic gains from incremental improvements in social capital alone. At lower levels, social capital is more likely to be dominated by bonding social capital, characterized by dense relationships within families, ethnic groups, or local communities (Putnam, 2000; Woolcock & Narayan, 2000). Although these close-knit networks strengthen social cohesion and mutual support, they may also restrict the diffusion of new information, reduce access to broader economic opportunities, and reinforce exclusive social structures that constrain innovation and productivity (Granovetter, 1973; Woolcock & Narayan, 2000). Consequently, policymakers should prioritize the transformation of bonding social capital into bridging social capital, which promotes interactions across different communities, socioeconomic groups, and institutions, thereby facilitating knowledge exchange and economic collaboration (Beugelsdijk & Smulders, 2003; Putnam, 2000).

To facilitate this transition, governments can implement policies that strengthen civic participation, improve institutional trust, enhance transparency, and encourage collaboration among public institutions, businesses, and civil society organizations. Previous studies suggest that higher levels of institutional trust and civic engagement improve policy effectiveness, strengthen collective action, and create conditions that support long-term economic development (OECD, 2017, 2024). Investments in inclusive education, digital connectivity, community-based organizations, and participatory governance can further expand social networks beyond traditional social boundaries while fostering more diverse and inclusive patterns of social interaction. Such policies are particularly relevant for several ASEAN developing economies, where institutional capacity and generalized trust remain relatively limited. By fostering more inclusive and interconnected social relationships, these countries can accelerate the accumulation of productive social capital and eventually surpass the estimated threshold at which social capital begins to generate positive and sustained effects on economic performance. This interpretation is also consistent with recent evidence showing that bridging social capital enhances economic mobility and generates greater benefits for disadvantaged populations by expanding access to heterogeneous social networks and economic opportunities (Kazmina et al., 2025). Therefore, policies aimed at strengthening social capital should emphasize not only increasing its quantity but also improving its quality, inclusiveness, and institutional embeddedness.

From a regional perspective, ASEAN cooperation programs that promote cross-border educational exchanges, digital inclusion, institutional capacity building, and regional civic networks may also contribute to strengthening bridging social capital across member states. Regional initiatives that facilitate cross-country collaboration and knowledge exchange can

expand intergroup trust and strengthen institutional cooperation, thereby reducing disparities in social capital accumulation across ASEAN economies. Such collaborative efforts are expected to support more balanced, resilient, and inclusive economic development throughout the region by creating broader opportunities for social and economic integration (OECD, 2024; Putnam, 2000).

5. Conclusion

This study examines the relationship between social capital and economic performance in nine ASEAN countries during the 2012–2024 period, with particular attention to its nonlinear effect. The results reveal a significant U-shaped relationship between social capital and GDP per capita, indicating that social capital does not automatically generate economic benefits at lower levels. Instead, its positive contribution emerges only after reaching an estimated turning point of approximately 77.95. These findings suggest that the economic value of social capital depends not only on its existence but also on its level of accumulation and development within society.

This study contributes to the literature by demonstrating that the relationship between social capital and economic performance is better understood as nonlinear rather than uniformly positive. In the ASEAN context, the findings imply that policies should focus on strengthening trust, civic participation, and inclusive institutions that facilitate the transition from bonding to bridging social capital, enabling countries with relatively low social capital to realize its long-term economic benefits.

This study is limited by the use of a single proxy for social capital and a relatively small sample of ASEAN countries. Future research should employ broader measures of social capital, include a wider set of countries, and apply advanced nonlinear or dynamic panel approaches to further explore the mechanisms through which social capital contributes to sustainable economic development.

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