

**GUARDIANS OF PROSPERITY OR OVERREACH?
A THEORETICAL AND EMPIRICAL ANALYSIS OF
CONSTITUTIONAL PROPERTY RIGHTS AND FOREIGN
DIRECT INVESTMENT**

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ABSTRACT

This research explores the impact of constitutional property rights on foreign direct investment inflows (FDI) in 186 countries from 1995 to 2022 by combining a regression analysis with a real options theoretical framework. FDI benefits a country's economy by providing stable investment into human and other capital inputs and spreading the best corporate governance practices, accounting rules, and legal traditions. These listed advantages have increased FDI's popularity across numerous countries in previous decades, motivating countries to pursue policies to attract such investment. By incorporating a real options theoretical model adapted from Dixit and Pindyck, the article clarifies why expropriation risk acts like an extra discount rate, thereby deterring foreign investment unless legal protections are sufficiently robust.¹ This study aims to derive the significance of an efficient legal system in attracting foreign investment with a geographical region analysis and a property rights index, which is employed to measure the risk of expropriation. When controlling for macroeconomic conditions, infrastructure quality, and openness to trade, the study finds a positive causal relationship in Sub-Saharan Africa and Middle East/North Africa (MENA) and a negative causal relationship in Europe. Given these findings, this study offers empirical and theoretical evidence for African and Middle Eastern countries to adjust their legal framework to offer stronger protection for property rights, while the same reforms may inadvertently discourage investment in Europe by creating an overregulated environment. Connecting with the current legal literature, the study finds that strong property rights protection may enhance the country's ability to attract international resources and stimulate domestic economic development only when effectively enforced.

¹ Avinash Dixit and Robert Pindyck, *Investment Under Uncertainty* (Princeton University Press, 1994).

INTRODUCTION

In economic development, the significance of property rights cannot be overstated. Scholars such as Hernando de Soto and Ronald Coase have extensively explored the pivotal role of a structured property rights system and how it fosters economic growth and prosperity in nations. However, while considerable attention has been devoted to understanding the internal dynamics between legal systems and domestic economic markets, there remains a gap in research concerning external economic factors that contribute toward a nation's economic prosperity, particularly foreign direct investment.

Foreign direct investment (FDI) emerged as a spur for economic development in recent decades, offering countries access to diverse financial resources, technology transfer, and market expansion opportunities. Despite recognizing the importance of foreign investment, empirical research that concretely quantifies the relationship between constitutional provisions safeguarding property rights and foreign direct investment inflows remains limited. While implementing robust property rights structures may bolster consumer confidence domestically, its implications on international investor sentiment remain less explored. This research aims to fill this gap by examining both empirically and theoretically the relationship between constitutional provisions of private property and foreign direct investment inflows.

This study advances the literature on foreign direct investment and property rights in two key aspects. First, this paper employs an instrumental variable regression model—using legal origin as an exogenous determinant of property rights protection—to identify the causal effect property rights protections have on FDI while controlling for macroeconomic conditions, infrastructure levels, and trade openness. Second, the study grounds the empirical findings in a real options theoretical framework, adapted from Dixit and Pindyck's work on investment under uncertainty.² This approach clarifies why expropriation risk acts like an extra discount rate, thereby depressing the value of future cash flows and discouraging firms from sinking capital unless property rights are sufficiently robust.

2 *Ibid.*

BACKGROUND INFORMATION*FOREIGN DIRECT INVESTMENT*

Foreign direct investment has grown in importance with the emergence of the global economy in recent decades. Studies have found that countries are shifting the composition of international capital inflows from bank loans to foreign direct investment and portfolio investment. From 1978 to 1981, 80% of inflows were loans but fell to 36% between 1990 and 1995; meanwhile, portfolio investment and FDI grew to 44% and 20% of capital inflows, respectively.³

Foreign direct investment often takes the form of investments in human and physical capital, which, due to contractual protections and the nature of these assets, cannot be withdrawn on short notice. This characteristic distinguishes FDI from other international cash flows, which tend to be more volatile.⁴ For instance, during the East Asian Financial Crisis of 1997–1998, the Mexican Crisis of 1994–1995, and the Latin American debt crisis of the 1980s, FDI demonstrated greater stability compared to portfolio equity and debt flows, which experienced large reversals.⁵ This stability underscores the relative resilience of FDI during financial crises.

Feldstein studied the economic intuition behind the free flow of private capital across international borders, revealing that this freedom enables capital to seek and earn the highest potential rate of return without restriction.⁶ For the investor, it provides diversification in lending and investment accounts, proving to hedge against risk. The global integration of these markets will also spread the best corporate governance practices, accounting rules, and legal traditions to help developing economies. Also, the incentive to attract investment limits the ability of governments to pursue suboptimal economic policies, which is an emphasis of this paper.

While these listed advantages apply to all private capital inflows, foreign direct investment offers unique advantages, including the transfer of technology and advanced capital inputs, enhanced competition in domestic input markets, the development of human capital through employee training, and potential increases in corporate tax revenue for the host country. FDI

3 Barry Bosworth and Susan Collins, “Capital Flows to Developing Economies: Implications for Saving and Investment,” *Brookings Papers on Economic Activity*, no. 1 (1999): 143–180.

4 Prakash Loungani and Assaf Razin, “How Beneficial Is Foreign Direct Investment for Developing Countries?” *Finance and Development* 38, no. 2 (2001): 6–9, <https://search.proquest.com/docview/57009389>.

5 Loungani and Razin, “How Beneficial is Foreign Direct Investment for Developing Countries?”; Uri Dadush et al., “The Role of Short-Term Debt in Recent Crises,” *Finance & Development* 37, no. 4 (2000): 54–57.

6 Martin Feldstein, “Aspects of Global Economic Integration: Outlook for the Future,” *NBER Working Paper*, no. 7899 (2000): 1–15, <https://www.nber.org/papers/w7899>.

facilitates the transfer of technology, introducing a diverse range of high-quality capital inputs that domestic financial investment in goods and services cannot achieve alone. This infusion of advanced resources fosters productivity and breeds competition in the domestic input market. Also, employee training implemented through necessary business operation develops human capital within the host country. Additionally, in theory, the profits generated from FDI will benefit the host country and its corporate tax revenue. However, historical evidence concludes that countries have chosen to bypass this corporate tax revenue when they decrease corporate tax rates to attract foreign direct investment. Studies show that members of the Organization for Economic Cooperation and Development have lowered their corporate tax rates because of the competition.⁷

PROPERTY RIGHTS

Defining, allocating, and protecting property rights are recognized among the most challenging issues faced by nations.⁸ Property rights—commonly defined as exclusive ownership over resources and their use—represent a bundle of rights, which include rights to possess and transfer property.⁹ Demsetz was among the first to highlight the costliness of protecting this bundle of rights and the significant variance in outcomes across jurisdictions.¹⁰ For example, in many developing countries, property rights are illusory due to the absence of legal documentation; therefore, property protection is characterized by uncertainty, complex sales processes, and stringent regulations on adjustments.¹¹ In contrast, developed nations typically offer well-defined and legally enforceable property rights, streamlined property transfer processes, and robust institutional frameworks that minimize transaction costs and enhance investor confidence.

A primary component of property rights is the right of possession, which ensures the exclusion of others from seizing property. While this right is typically safeguarded by courts, police, and administrative institutions, protection often relies on self-defense in less-developed countries. Enforceable property rights foster efficiency by replacing violent competition with peaceful negotiation.¹² In a well-defined market for property rights, resorting to violence is unnecessary as exchange value matters more than an

7 *Ibid.*

8 “Property Rights,” *The Concise Encyclopedia of Economics*, <https://www.econlib.org/library/Enc1/PropertyRights.html>.

9 Robert Ellickson, “Property in Land,” *Yale Law Journal* 102, no. 6 (1993): 1315–1400.

10 Harold Demsetz, “Towards a Theory of Property Rights,” *American Economic Review* 57, no. 2 (1967): 347–59.

11 Simeon Djankov et al., “Measuring Property Rights Institutions,” *NBER Working Paper*, no. w27839 (2020): 1–49. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3696206.

12 The Concise Encyclopedia of Economics, “Property Rights.”

individual's personal status or dominance; consequently, any discrimination can be offset by an adjustment of the price.¹³ Yet, in many developing countries, formal rights of possession may offer an illusory sense of security, as weak judicial systems, elite capture, and predatory state actions can render them ineffective in practice—what Goldfinch critiques as a legal framework that exists on paper but fails to protect the poor in reality.¹⁴

Another crucial aspect of property rights is the ability to transfer these rights as exchange value, which promotes efficiency and facilitates access to capital. De Soto argues that formal property rights, including land titles and the legal recognition of real property ownership, are essential for economic growth because they provide assets as collateral for loans and an incentive for land development and investment.¹⁵ Without proper legal recognition, obstacles exist for people to access credit, investment, and other economic opportunities. Unlocking this “dead capital” is vital to stimulating economic growth and alleviating poverty.¹⁶ However, Goldfinch warns that mere formalization does not guarantee effective transfer if the institutions regulating sales or mortgages remain mired in corruption or excessive bureaucracy.¹⁷ Also, there can be an overabundance of legalistic constraints—an “anticommons” dynamic as identified by Heller—where overlapping regulations or fragmented entitlements inadvertently deter market transactions and discourage foreign investment.¹⁸ This proliferation of rules governing transfers, intended to protect various stakeholders, may, if overly fragmented, curtail the efficient use of property by creating barriers to entry for outsiders, including foreign investors.¹⁹ Thus, fully realizing the benefits of the right of transfer requires not only codified ownership and clarity of title but also a balanced regulatory framework that avoids stifling exchange and preserves investor confidence.

13 *Ibid.*

14 Shaun Goldfinch, “Property Rights and the Mystery of Capital: A Review of de Soto’s Simplistic Solution to Development,” *Progress in Development Studies* 15, no. 1 (2015): 87–96, <https://doi.org/10.1177/1464993414546971>.

15 Hernando de Soto, *The Mystery of Capital: Why Capitalism Triumphs in the West and Fails Everywhere Else* (Basic Books, 2000).

16 *Ibid.*

17 Goldfinch, “Property Rights and the Mystery of Capital: A Review of de Soto’s Simplistic Solution to Development.”

18 Michael Heller, “The Tragedy of the Anticommons: Property in the Transition from Marx to Markets,” *Harvard Law Review* 111, no. 3 (1998): 621–688, https://papers.ssrn.com/sol3/papers.cfm?abstract_id=57627.

19 *Ibid.*

LITERATURE REVIEW

SABIR ET AL. (2019) STUDY

Existing economic research captures the relationship between institutional quality and foreign direct investments. Sabir et al. explored this nexus using panel data from 1996–2016, measuring the relationship in 148 countries.²⁰ To measure institutional quality, Sabir et al. used data from six proxies of institutional quality: government effectiveness, voice and accountability, regulatory quality, rule of law, political stability, and control of corruption.²¹ The control variables in the study included infrastructure level, trade openness, GDP, and inflation. The infrastructure level serves as a proxy for “efficiency-seeking FDI,” as robust infrastructure garners more foreign direct investment because it reduces operational costs.²² The relationship between infrastructure and foreign direct investment exists because efficient investment targets countries with reduced costs of communication and transportation.²³ Infrastructure was measured by the number of mobile phone subscriptions per 100 people. Trade openness acts as a proxy to “market-seeking FDI;” foreign investors favor unrestricted trade because acting in countries with restricted trade increases the cost of conducting business, thus disincentivizing investment.²⁴ This theoretical relationship is confirmed by Kravis and Lipsey, Culem, and Shah and Khan.²⁵ GDP per capita measures the country’s level of development because it captures the population’s ability to purchase more goods and services, which will attract greater levels of foreign direct investment.²⁶ Inflation indicates domestic economic troubles and control of the central bank or

20 Samina Sabir et al., “Institutions and FDI: Evidence from Developed and Developing Countries,” *Financial Innovation* 5, no. 8 (2019): 1–20, <https://doi.org/10.1186/s40854-019-0123-7>.

21 Massimo Mastruzzi et al., “Governance Matters VI: Aggregate and Individual Governance Indicators,” *NBER Working Paper*, no. 4280 (2007): 1–93, <https://doi.org/10.1596/1813-9450-4280>.

22 Jameel Khadaro and Boopen Seetanah, “Transport Infrastructure and Foreign Direct Investment,” *Journal of International Development* 22, no. 1 (2010): 103–123, <https://doi.org/10.1002/jid.1506>.

23 John Dunning, “Towards a New Paradigm of Development: Implications for the Determinants of International Business Activity,” *Transnational Corporations* 15, no. 1 (2006): 173–227, <https://search.proquest.com/docview/20466157>.

24 Sabir et al., “Institutions and FDI: Evidence from Developed and Developing Countries.”

25 Irving Kravis and Robert Lipsey, “The Location of Overseas Production and Production for Export by U.S. Multinational Firms,” *Journal of International Economics* 12, no. 3 (1982): 201–223; Claudy Culem, “The Locational Determinants of Direct Investments Among Industrialized Countries,” *European Economic Review* 32, no. 4 (1988): 885–904; Mumtaz Shah and Yahya Khan, “Trade Liberalisation and FDI Inflows in Emerging Economies,” *Business & Economic Review* 8, no. 1 (2016): 35–52.

26 Sabir et al., “Institutions and FDI: Evidence from Developed and Developing Countries.”

government over the money supply, and therefore it is measured as a proxy for a country's macroeconomic stability.²⁷ Previous research has shown a theoretical negative relationship between inflation and economic growth.²⁸

Sabir et al. used the legal origins of the country as an instrument for the institutional quality index because the legal origin is a significant factor in institutional quality and financial market size.²⁹ This can be attributed to the level of law enforcement, which may determine the security of property rights and implementation of such legal rights; however, the degree of enforcement varies across countries, depending on its legal origins from the English, German, Scandinavian, or French legal systems.³⁰ For example, research shows institutions of French legal origin are inclined toward weak legal protection to investors, resulting in narrower capital markets, whereas countries based in English legal origin provide strong legal protection to investors, resulting in much larger capital markets.³¹ As a result, legal origin is included in the study as an instrument variable along with the lagged values of explanatory values.

The Sabir et al. study confirmed that institutional quality has a statistically significant positive relation with foreign direct investments; however, the size of coefficients and statistical significance of the controls varied depending on the income level of the country. Namely, the magnitude of the coefficients for the institutional quality index is greater in developed countries than in developing countries. Therefore, Sabir et al. concluded that institutional quality is a more significant determinant for foreign direct investments in developed countries than in developing countries.

27 Friedrich Schneider and Bruno Frey, "Economic and Political Determinants of Foreign Direct Investment," *World Development* 13, no. 2 (1985): 161–175; Bonnie Buchanan et al., "Foreign Direct Investment and Institutional Quality: Some Empirical Evidence," *International Review of Financial Analysis* 21, no. 1 (2012): 81–89.

28 Michael Bruno and William Easterly, "Inflation and Growth: In Search of a Stable Relationship," *Federal Reserve Bank of St. Louis* 78, no. 3 (1996): 139–151, <https://search.proquest.com/docview/38988374>.

29 Buchanan et al., "Foreign Direct Investment and Institutional Quality: Some Empirical Evidence."

30 Sabir et al., "Institutions and FDI: Evidence from Developed and Developing Countries."

31 Rafael La Porta et al., "The Economic Consequences of Legal Origins," *Journal of Economic Literature* 46, no. 2 (2008): 285–332, <https://doi.org/10.1257/jel.46.2.285>.

SAHA ET AL. (2022) STUDY

Saha et al. performed a similar study seeking to derive the empirical relationship between foreign direct investment inflows and institutional quality with an emphasis on countries with lower incomes.³² The researchers studied panel data from 28 lower-middle-income countries from six regions from 2002 to 2018 and implemented a dynamic panel estimation.³³ The six regions included in the study were South Asia, East Asia and Pacific, Europe and Central Asia, Middle East and North Africa, Sub-Saharan Africa, and Latin America and the Caribbean.

To measure institutional quality, the study relies on six proxies of good governance first employed by Kaufman et al.: voice and accountability, rule of law, regulatory quality, political stability and absence of violence, government effectiveness, and control of corruption.³⁴ The researchers control several variables that act as macroeconomic indicators. Trade openness measures the deregulation of trade, which is cited in Asian countries to enhance a country's production capacity and general economy, attracting more foreign investment.³⁵ GDP per capita serves as a measure of a country's market size and economic status, both of which can influence FDI.³⁶ Empirical studies out of South Africa indicate a degree of causality that areas with stable inflation experience enhanced foreign direct investment inflows, so the study included data on inflation rates.³⁷ The study incorporated population as a control, citing its ability to capture the effect of increased production because of a larger workforce.³⁸ The lagged variable of foreign direct investment inflow acted as a control to detect a dynamic relationship over time.³⁹

32 Sadhon Saha et al., "Effects of Institutional Quality on Foreign Direct Investment Inflow in Lower-Middle Income Countries," *Heliyon* 8 (2022): 1–13, <https://doi.org/10.1016/j.heliyon.2022.e10828>.

33 *Ibid.*

34 Daniel Kaufmann et al., "Governance Matters," *Policy Research Working Paper*, no. 2196 (1999): 1–61, <https://ssrn.com/abstract=188568>.

35 Qamar uz Zaman et al., "Trade Openness and FDI Inflows: A Comparative Study of Asian Countries," *European Online Journal of Natural and Social Sciences* 7, no. 2 (2018): 386–396, <https://european-science.com/eojnss/article/view/5289/pdf>.

36 Kazunobu Hayakawa et al., "How Does Country Risk Matter for Foreign Direct Investment?" *Developing Economies* 51, no. 1 (2012): 60–78, <https://doi.org/10.1111/deve.12002>.

37 Mohammed Valli and Mansur Masih, "Is There Any Causality Between Inflation and FDI in an 'Inflation Targeting' Regime? Evidence from South Africa," *MPRA Paper*, no. 60246 (2014): 1–42, https://mpr.ub.uni-muenchen.de/60246/1/MPRA_paper_60246.pdf.

38 Saha et al., "Effects of Institutional Quality on Foreign Direct Investment Inflow in Lower-Middle Income Countries."

39 *Ibid.*

Saha et al. found that certain indicators of institutional quality significantly impact foreign direct investment inflows.⁴⁰ The results conclude that regulatory quality and control of corruption positively impact foreign investment, while the voice and accountability and rule of law measures negatively impact foreign investment; the relationship between political stability and absence of violence and government effectiveness with foreign investment is not statistically significant.⁴¹ The study also derived a significant positive relationship with trade openness, previous foreign investment, population, and GDP per capita.⁴² Additionally, the regional analysis in the study found institutional quality to have statistical significance in the East Asia and Pacific region.⁴³

STATEMENT OF CONTRIBUTION

Unlike prior works, which employed composite measures of institutional quality encompassing multiple governance indicators, this study focuses on a single property rights index to isolate how enumerated protections for private property drive foreign investment. By drawing on updated data through 2022 and employing a regional analysis, this study provides more granular insights into how countries at different levels of development respond to shifts in property rights protections beyond the broad institutional quality proxies used previously.

Additionally, this study integrates a real options framework to explain why robust property rights reduce expropriation risk and incentivize foreign investors to commit funds earlier. Treating expropriation risk as an extra discount rate clarifies how even moderate property rights reforms can produce significant gains in high-risk regions, while the marginal benefit may dwindle or turn negative once a jurisdiction has already reached a high level of statutory protection. This approach refines and extends the empirical findings on property rights and FDI, offering a clearer picture of how legal safeguards intersect with global capital flows.

40 *Ibid.*

41 *Ibid.*

42 *Ibid.*

43 *Ibid.*

THEORETICAL FRAMEWORK:
A REAL OPTIONS MODEL OF PROPERTY RIGHTS & FDI

EXPROPRIATION AS AN EXTRA DISCOUNT

Legal scholars like Heller often debate whether enumerated property rights meaningfully constrain governmental authority or merely add formalities.⁴⁴ In an economic sense, property rights protections reduce the probability that a multinational enterprise's (MNE) assets will be seized or rendered worthless through government action. This expropriation risk acts as an extra discount rate on prospective cash flows because there is a risk the investor might lose everything before reaping returns, showcasing how government uncertainty can chill capital flows.

In corporate finance, “real options” refer to the choice an investor has to commit to or delay a costly, irreversible project. Dixit and Pindyck argue that uncertainty over future returns, combined with the irreversibility of investment, can lead investors to “wait and see” until conditions are favorable.⁴⁵ Adding expropriation risk—the likelihood that the government seizes assets—magnifies these dynamics.

This model builds on the framework developed by Dixit and Pindyck, particularly their application of real options theory to investment under uncertainty.⁴⁶ Their approach is adapted here to incorporate a probabilistic discount factor that reflects the impact of expropriation risk on MNE's investment valuations, providing a more tailored analysis of property rights and capital flows.

SETUP: AN MNE FACING UNCERTAINTY

Let V_t represent the net present value of the project's future cash flows operated at time, t . Under a deterministic assumption, the model assumes that these cash flows grow at a constant rate so that

$$V_t = V_0 e^{\mu t},$$

where $\mu > 0$ is the average growth rate and V_0 is the net present value today, or $t = 0$.⁴⁷

⁴⁴ Heller, “The Tragedy of the Anticommons: Property in the Transition from Marx to Markets.”

⁴⁵ *Dixit and Pindyck, Investment Under Uncertainty.*

⁴⁶ *Ibid.*

⁴⁷ This paper adopts a deterministic approach in which future cash flows grow at a constant rate. While a stochastic framework incorporating uncertainty (for example, a geometric Brownian motion) would be more realistic and would involve solving a second-order partial differential equation, the deterministic model is chosen here for its analytic simplicity and clarity. Importantly, both approaches yield the same qualitative insight that expropriation risk acts as an additional discount factor, reducing the net present value of the project.

Let $\theta \in [0,100]$ denote the property rights index and suppose expropriation hazard can occur at an instantaneous rate $\lambda(\theta)$, which decreases as θ increases.⁴⁸ This means stronger property rights reduce the chance of federal confiscation. The firm must also pay a sunk cost, I , to accept the project. Once invested, if the project is expropriated, the irreversible investment becomes worthless (i.e., $V_t = 0$).

REAL OPTIONS PROBLEM: CHOOSING WHEN TO INVEST

Incorporating real options logic, the firm can wait or invest immediately. Formally, it solves:

$$\max_{\tau > 0} E \left[e^{-r\tau} \left(V_\tau - I \right) 1_{\tau < T_{\text{exprop}}} \right],$$

where r is the discount rate, τ is the chosen time of investment, T_{exprop} is the random time expropriation may occur, and $1_{\tau < T_{\text{exprop}}}$ is an indicator function that takes a value of 1 if the firm invests before expropriation occurs or 0 otherwise. If expropriation precedes τ , the payoff is zero, but if the firm invests first, it obtains $(V\tau - I)$ discounted continuously back to time zero.

POST-INVESTMENT VALUE

Once the MNE invests, it holds an asset subject to expropriation denoted by the hazard function $\lambda(\theta)$. This post-investment value of the project, $\Pi(V)$, is calculated as the present value of a continuously growing cash flow under the deterministic assumption, where the effective discount rate is $r + \lambda(\theta)$. That is,

$$\Pi(V) = \int_0^\infty e^{-(r+\lambda(\theta))t} V e^{\mu t} dt.$$

To solve this integral, we first factor out the constant V and combine the exponents:

$$\Pi(V) = V \int_0^\infty e^{-(r+\lambda(\theta)-\mu)t} dt.$$

Solving the indefinite integral, we obtain

$$\Pi(V) = \frac{V}{(r + \lambda(\theta)) - \mu},$$

This expression makes clear that an increase in expropriation risk raises the effective discount rate, thereby lowering the project's net present value.

⁴⁸ Goldfinch underscores, however, that formal property rights alone might not suffice if enforcement or judicial mechanisms are absent, indicating that $\lambda(\theta)$ might not actually fall in practice.

PRE-INVESTMENT OPTION

Let $F(V)$ be the firm's pre-investment option. Before the firm commits funds, it simply holds a real option to invest. In a standard real-options model, $F(V)$ is governed by an ordinary differential equation. Since no expropriation can occur before investment, the pre-investment model does not consider the impact of expropriation risk, $\lambda(\theta)$.

$$rF(V) = \mu VF'(V)$$

To solve the differential equation, divide both sides by $F(V)$:

$$\frac{F'(V)}{F(V)} = \frac{r}{\mu} \frac{1}{V}.$$

Then, we integrate both sides with respect to V :

$$\int_0^{\infty} \frac{F'(V)}{F(V)} dV = \int_0^{\infty} \frac{r}{\mu} \frac{1}{V} dV.$$

After integrating and combining the constants to the right side, we obtain:

$$\ln \left| F(V) \right| = \frac{r}{\mu} \ln \left| V \right| + C.$$

Exponentiating both sides and simplifying the constant $A=e^C$, we obtain the general solution:

$$F(V) = AV^{\frac{r}{\mu}}.$$

The value of the project V reaches an optimal threshold V^* , where the firm is indifferent between waiting and investing. When the firm invests, it pays I but gains $\Pi(V^*)$. Following Dixit and Pindyck, this model imposes “value-matching” [$F(V^*) = \Pi(V^*) - I$] and “smooth pasting” [$F'(V^*) = \Pi'(V^*)$] to solve for V^* .⁴⁹ Formally,

$$V^* = I \frac{r(r + \lambda(\theta) - \mu)}{\mu}.$$

This result implies that as expropriation risk $\lambda(\theta)$ rises, the threshold V^* increases. This means that the firm will delay investment until the project's value is sufficiently high to offset the increased risk of expropriation.

LEGAL TRADITIONS IN THE HAZARD FUNCTION

An additional component of the theoretical model is the understanding that different legal origins shape expropriation risk's responsiveness to θ . Under this conjecture,

$$\lambda(\theta, l) = \lambda_0(l) - \phi(l)\theta,$$

where l is the legal tradition, $\lambda_0(l)$ is the baseline hazard under minimal

⁴⁹ Dixit and Pindyck, *Investment Under Uncertainty*.

property rights enforcement, and $\phi(l)$ is the responsiveness of hazards to improvements in θ . Empirically, this corresponds to the notion advanced by La Porta et al. that some legal structures offer more robust protection once statutory reforms are enacted, while others do not respond as strongly.⁵⁰ This paper’s empirical model leverages these cross-country differences in legal origin to identify exogenous variation in property rights θ .

DATA

DATA OVERVIEW

The unit of observation is 186 countries with data ranging from 1995 to 2022, a span of 28 years. **Table 1** describes the assigned labels for the data on variables studied in this research. Data for FDI inflows, GDP per capita, inflation rates, and mobile phone subscriptions per 100 people was gathered from The World Bank database. Categorical data denoting a country’s continent and an index determining the level of trade freedom across time for each country were accessed from The Heritage Foundation’s 2023 Index of Economic Freedom study.

Table 1: Variable Description

Variable Name	Description
ln FDI inflow	Natural logarithm of foreign direct investment inflow
Property rights	Property rights index (Scale: 0-100)
GDP per capita	Gross domestic product per capita
Inflation	Inflation rate
Mobile phones	Mobile phone subscriptions per 100 people
Trade freedom	Trade freedom index (Scale: 0-100)

DATA CLASSIFICATIONS

Countries are classified into five categories based on their geographic region: Asia-Pacific, Europe, Middle East/North Africa (MENA), Sub-Saharan Africa, and Americas, as labeled in **Figure 1**. Categorical data on the legal origins of a country is from a study performed by La Porta et al.⁵¹ Countries are assigned into one of five legal origin categories: English, French, German, Scandinavian, and Socialist.

⁵⁰ Rafael La Porta et al., “Legal Determinants of External Finance,” *Journal of Finance* 52, no. 3 (1997): 1131–1150, <https://doi.org/10.1111/j.1540-6261.1997.tb02727.x>.

⁵¹ La Porta et al., “The Economic Consequences of Legal Origins.”

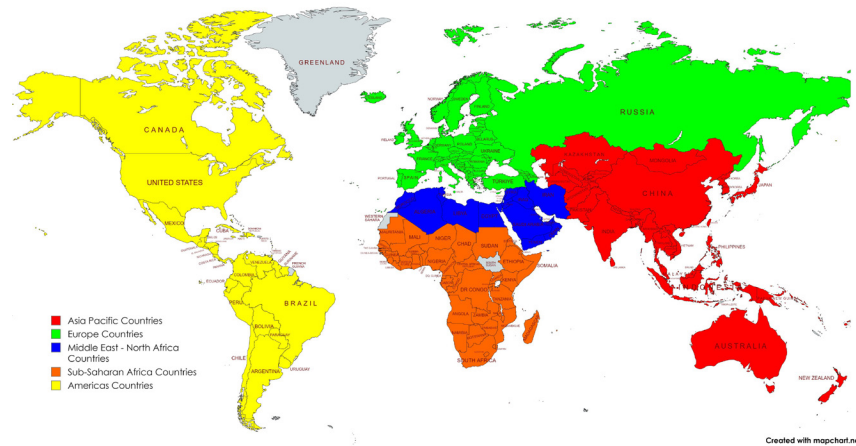


Figure 1: Map by Geographic Region

PROPERTY RIGHTS INDEX

A property rights index in each country is accessed from the 2023 Index of Economic Freedom published by The Heritage Foundation. The index draws upon survey data and assessments from reputable sources, including Credendo’s “Country Risk and Insights,” the United States Chamber of Commerce Global Innovation Policy Center’s “International IP Index,” and the World Bank’s “Worldwide Governance Indicators.” Using a range from 0 to 100, three subfactors evaluate 186 countries based on their capacity to establish an environment where individuals can secure and utilize private property protected by clearly outlined and enforced laws.

The first subfactor assesses the likelihood of expropriation by considering the judiciary’s independence and the level of corruption within the country. The second subfactor measures the degree of respect for intellectual property rights. The third subfactor evaluates the country’s statutes and constitution and measures the country’s capability to protect private property by enforcing the laws. Additionally, the third subfactor accounts for the country’s local court system’s ability to enforce contracts efficiently and measures the ability of the justice system to punish those who infringe on others’ right to property. A higher index score reflects an enhanced confidence in the country’s ability to protect property rights based on its historical actions, while a lower score reflects an enhanced risk of expropriation. The index score is determined by averaging standardized scores from the three equally weighted subfactors.

SUMMARY STATISTICS

Table 2 provides a summary statistics table comparing the mean and standard deviation of the data across geographic regions. The European region receives the largest quantity of foreign direct investment inflows, while the Sub-Saharan Africa region receives the least foreign investment. It follows that European countries boast the strongest property rights protections and Sub-Saharan African countries offer the least protected property rights. GDP per capita, infrastructure control, and trade freedom index are highest in European countries and lowest in Sub-Saharan African countries. The inflation rate is the highest in Sub-Saharan Africa, signifying this region contains the least stable economies. The Asia-Pacific region experiences the lowest inflation rates, denoting economic stability relative to the other geographic regions.

Table 2: Geographic Analysis Summary Statistics

	Asia-Pacific	Europe	Middle East/ North Africa	Sub-Saharan Africa	Americas
ln FDI inflow	20.1478 (3.03045)	21.93353 (2.025303)	20.80392 (1.826947)	18.68406 (2.184015)	20.65099 (2.348328)
Property rights	46.4879 (25.23525)	63.97221 (22.81077)	45.59473 (20.47459)	37.16408 (15.30982)	48.52139 (22.54377)
GDP per capita	9109.998 (15384.04)	25509.23 (28218.55)	13816.9 (17107.11)	1869.026 (2731.084)	9230.665 (11198.82)
Mobile phones	61.99294 (61.59009)	87.65045 (47.6111)	73.85161 (59.23866)	41.47754 (43.73923)	66.72534 (50.33142)
Inflation	5.730005 (9.506007)	8.893998 (43.26142)	7.309467 (22.62115)	17.84621 (148.4065)	7.208137 (15.54548)
Trade freedom	67.37245 (19.41252)	80.20762 (8.34239)	67.13028 (16.06479)	61.07538 (13.76295)	69.31833 (12.65173)
Observations	781	1073	368	969	717

HYPOTHESIS RELATING TO THE VARIABLE OF INTEREST AND CONTROLS

Numerous cross-country correlation studies, such as those conducted by Knack and Keefer, highlight the pivotal role of property rights in driving economic development.⁵² Establishing a robust property rights framework is consistently associated with economic advantages, such as enhancements in GDP per capita. These findings provide compelling empirical evidence for the benefits of enumerated property rights.⁵³ Relying on insights from Sabir et al. and Saha et al. regarding foreign investment, this study proposes a hypothesis of a positive statistical relationship between property rights and

52 Stephen Knack and Philip Keefer, "Institutions and Economic Performance: Cross-Country Tests Using Alternative Institutional Measures," *Economics and Politics* 7, no. 3 (1995): 207-227, <https://doi.org/10.1111/j.1468-0343.1995.tb00111.x>.

53 Joshua Lewer and Mariana Saenz, "Property Rights and Economic Growth: Panel Data Evidence," *Southwestern Economic Review* 32 (2005): 157-166, <https://swcr.wtamu.edu/sites/default/files/Data/157-166-91-346-1-PB.pdf>.

foreign direct investment.⁵⁴

The control for GDP per capita measures a country's development by gauging its population's purchasing power. As confirmed by Sabir et al., a theoretical positive relationship between development and foreign investment results from foreign investors looking to allocate a greater amount of resources towards larger financial markets.⁵⁵ Additionally, wealthier populations can support improved labor productivity through better education or technological advancement, attracting higher levels of foreign direct investment; therefore, a positive correlation is hypothesized between GDP per capita and foreign investment.

The inflation rate serves as a proxy for a country's macroeconomic stability by indicating domestic economic troubles and reflecting the control of the central bank or government over the money supply. Bruno et al. derive a negative relationship between inflation rates and economic growth.⁵⁶ Similarly, this study expects to derive a negative correlation between inflation rate and foreign direct investment, as countries are dissuaded from investing in a country with an unstable macroeconomic condition.

The mobile phones per 100 variables serves as a proxy for the level of infrastructure within a country. Dunning derives a positive relationship between infrastructure and what is labeled "efficiency seeking" foreign direct investment.⁵⁷ Robust infrastructure attracts more foreign investment by reducing operational costs from transportation and communication. The study hypothesizes a positive correlation between the infrastructure level and foreign investment, as countries with a more developed infrastructure are likely to have lower costs, attracting profit-driven multinational corporations.

The openness to trade index measures a country's relative standing towards free trade on a scale of 0 to 100. Shah and Khan find that the liberalization of the regime over trade and investment results in a significant positive effect that influences private foreign investment.⁵⁸ Again, these firms are motivated to maximize profits, and restricted trade increases business costs, discouraging investment. Therefore, since foreign investors prefer unrestricted trade, a positive correlation is predicted between the openness to trade index and foreign direct investment.

54 Sabir et al., "Institutions and FDI: Evidence from Developed and Developing Countries."

55 *Ibid.*

56 Bruno et al., "Inflation and Growth: In Search of a Stable Relationship."

57 Dunning, "Towards a New Paradigm of Development: Implications for the Determinants of International Business Activity."

58 Shah et al., "Trade Liberalisation and FDI Inflows in Emerging Economies."

METHODS

GEOGRAPHIC ANALYSIS

Every country is assigned one of five categorical variables denoting its geographical region. These regions include Sub-Saharan Africa, Asia-Pacific, the Americas, Europe, and MENA. A geographical analysis is performed to compare the effect of the geographic region on the relationship between foreign direct investment, the property rights index, and the control variables. The analysis compares the statistical and economic significance of the parameter estimates across different geographic regions to identify where the variations in foreign investment, property rights, and control variables are the most pronounced. This approach provides a comprehensive understanding of how geographical regions influence the observed patterns and deviations in the economic indicators, helping to identify regional-specific factors that may influence the relationship between FDI, property rights, and control variables.

INSTRUMENTAL VARIABLE REGRESSION

The study implements the legal origins of a country as an instrumental variable to model the property rights index to address potential endogeneity issues. The country's legal origin is an exogenous source of variation in property rights, reducing the risk of bias from reverse causality or omitted variables. A two-stage least squares regression is implemented to ensure the validity of the presented coefficients. First, this method estimates the effect of the instrumental variable on the endogenous regressor in a first-stage regression. With the predicted values from the first stage regression, the ordinary least squares regression model is estimated. By accounting for endogeneity concerns, the two-stage least squares regression aims to provide a credible estimate of the causal effect of property rights on foreign direct investment.

TESTING THE VALIDITY OF THE INSTRUMENTAL VARIABLE

To test instrumental validity, the variable must be relevant (i.e. $\text{corr}(Z, X) \neq 0$) and exogenous (i.e. $\text{corr}(Z, \varepsilon) = 0$). To first establish the exogeneity of legal origins on FDI, it is imperative to note that the legal origin of a nation is determined by historical factors, including colonial legacy and cultural influences. These attributes have persisted through time and remain unaffected by current economic conditions, including FDI. Legal origin, meaning whether a country's legal framework originated from a common law, civil law, or another system, has deep historical roots and is largely unaffected by contemporary economic conditions like foreign investment. Thus, the legal origin of the country acts as an exogenous source of variation in FDI.

To now consider the instrument's relevance, a review of previous studies confirms a nation's legal origin has significant implications on the system of property rights within a nation. A study published by La

Porta et al. finds that legal origins affect the size of capital markets across countries, citing that a sound legal system “protects potential financiers against expropriation . . . [and] raises their willingness to surrender funds in exchange for securities.”⁵⁹ The study concludes that countries with origins in French civil law offer the weakest protection to investors and the least developed capital markets; meanwhile, countries with origins in English common law offer greater protection and boast larger capital markets.⁶⁰

To statistically verify the relevance of the instrumental variable, the endogenous variable is regressed on the instrumental variable in the following first-stage regression model in which \hat{Y} is the endogenous property rights index, X is the instrumental legal origin dummy variables, and other control variables, including GDP per capita, annual inflation rates, infrastructure controls, and openness to trade are included.

$$\hat{Y} = \beta_0 + \beta_1 X + \beta_2 \text{GDP} + \beta_3 \text{Inflation} + \beta_4 \text{Phones} + \beta_5 \text{Trade} + \varepsilon$$

The results in **Table 3** indicate that the coefficients for the effect of legal origin on the property rights index are positive and statistically significant at the 99% confidence interval, except in the European region. This suggests the legal origin of a country influences its property rights framework, as different legal traditions lead to varying levels of property rights protection. The F-statistic to test joint significance is relatively high across all geographic regions, signifying the joint significance of the instrument variables in explaining the endogenous variable: property rights. The findings in **Table 3** suggest that the legal origin dummy variables are correlated with the property rights index, supporting its validity as an instrument for addressing endogeneity and enhancing the credibility of the econometric analysis in this study.

Table 3: First Stage Regression Results Across Geographic Regions

Region	Sub-Saharan Africa	Asia-Pacific	Europe	Americas	Middle East / North Africa
Positive coefficient	Yes	Yes	No	Yes	Yes
Statistically significant	Yes	Yes	Yes	Yes	Yes
F-statistic	40.71	179.32	200.37	116.86	46.75

⁵⁹ La Porta et al., “Legal Determinants of External Finance.”

⁶⁰ *Ibid.*

MODEL SPECIFICATION

The following instrumental regression equation derives the theoretical relationship between the presence of property rights and foreign direct investment inflows by isolating the effect of property rights using legal origin as an instrumental variable:

$$\ln(\text{FDI}) = \beta_0 + \beta_1 \widehat{Y} + \beta_2 \text{GDP} + \beta_3 \text{Inflation} + \beta_4 \text{Phones} + \beta_5 \text{Trade} + \varepsilon$$

INSTRUMENTAL VARIABLE REGRESSION OVERVIEW

This study aims to estimate the effect of property rights on foreign direct investment. A direct estimation may be unreliable due to unobserved factors that influence the model. Instead, an instrumental variable approach is utilized because it allows the study to focus on variations in property rights that are not directly affected by outside factors that may introduce bias into the empirical model.

The model works in two stages; in the first stage, property rights, \widehat{Y} , are predicted based on legal origin and the control variables. This step isolates the portion of property rights variations that can be attributed to legal origins and not to other economic influences. In the second stage, the predicted property rights \widehat{Y} from the first stage is implemented as a variable in a new regression to analyze its relationship with foreign investment. This process measures how property rights influence foreign investment, using only the exogenous variance in property rights.

By reducing the effects of endogeneity, the instrumental variable model enables this study to estimate the isolated impact of property rights on foreign investment using the coefficient β_1 . This approach strengthens the robustness of the study's findings, indicating not just a correlation but a likely causal effect between property rights and foreign investment.

RESULTS

Table 4 exhibits the instrumental variable regressions for each geographic region. Both African regions displayed a positive causal relationship between the property rights index and foreign direct investment when instrumented on the country's legal origin. A one-unit increase in the property rights index caused a 14.7% increase in foreign investment inflows in Sub-Saharan African countries and a 20% increase in foreign direct investment in MENA countries. No significant relationship between property rights and foreign direct investment exists in the Asia-Pacific and American countries, and a negative statistically significant relationship is demonstrated in the Europe region.

Table 4: Instrumental Variable Regressions by Geographic Region

Variables	(1) Sub-Saharan Africa	(2) Asia-Pacific	(3) Americas	(4) Europe	(5) Middle East/ North Africa
Property rights	0.147*** (0.0291)	-0.0126 (0.00979)	0.0121 (0.0144)	-0.182*** (0.0276)	0.200*** (0.0580)
GDP per capita	-6.70e-05 (4.30e-05)	3.43e-05*** (1.10e-05)	3.11e-05*** (9.29e-06)	0.000305*** (3.30e-05)	-5.06e-05*** (1.84e-05)
Inflation	0.00123** (0.000501)	-0.0406*** (0.0123)	-0.00215* (0.00119)	-0.103*** (0.0246)	0.0610** (0.0260)
Mobile phones	-0.0152*** (0.00567)	0.0204*** (0.00258)	0.0117*** (0.00319)	0.0539*** (0.00904)	-0.0142* (0.00813)
Trade freedom	-0.0440*** (0.0125)	0.0266*** (0.00703)	-0.00468 (0.0149)	0.0576*** (0.0111)	-0.0882*** (0.0295)
Constant	12.95*** (1.113)	19.99*** (0.841)	20.13*** (0.660)	26.70*** (2.074)	10.78*** (2.334)
Observations	969	781	1,073	717	368

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

The GDP per capita control is positive and statistically significant in the Asia-Pacific, Europe, and Americas regions, while it is negative and statistically significant in the MENA region and insignificant in Sub-Saharan Africa. The inflation rate control is negative and statistically significant in the Asia-Pacific, Europe, and Americas regions but positive and statistically significant in the Sub-Saharan Africa and MENA regions. The infrastructure control, measured by mobile phones per 100 people, is statistically significant across all regions; it is positive in the Asia-Pacific, Americas, and Europe regions but negative in Sub-Saharan Africa and the MENA regions. The openness to trade control is positive and statistically significant in the Asia-Pacific and Europe regions, negative and statistically significant in the Sub-Saharan Africa and MENA regions, and insignificant in the Americas.

DISCUSSION

This study utilizes legal origin as an instrumental variable to isolate the effect of property rights on foreign direct investment across different geographic regions. The findings, presented in Table 4, reveal relationships providing insights into how variations in property rights protection influence foreign direct investment inflows.

GEOGRAPHIC DISPARITIES AND CAUSAL RELATIONSHIPS

The results confirm that stronger property rights significantly raise FDI where baseline enforcement is weak, as we see a positive and statistically significant relationship between property rights and foreign direct investment in Sub-Saharan Africa and MENA. The coefficient of 0.147 for Sub-Saharan Africa and 0.200 for MENA suggests that improving property rights infrastructure in these regions could be a critical factor in enhancing their investment climate.

This finding supports de Soto's argument about the importance of well-defined property rights in unlocking "dead capital" and stimulating economic development.⁶¹ Additionally, the findings extend Saha et al.'s focus on lower-middle-income countries by affirming the positive impact of property rights in regions with lower institutional baselines, as displayed by the results in Sub-Saharan Africa.⁶² The MENA region similarly shows large gains, likely reflecting the real options principle that the expropriation hazard falls markedly once investors see credible constitutional guarantees.

Conversely, Europe exhibits a statistically significant negative relationship between property rights and foreign investment with a coefficient of -0.182. From the summary statistics, European countries boast the highest levels of property rights protection, GDP per capita, and infrastructure quality, yet they also experience a unique investment landscape. Europe's negative coefficient, though surprising, aligns with the notion of overregulation. As Heller warns, an "anticommons" arises when property entitlements become fragmented or cumbersome.⁶³ In advanced economies with stable institutions, incremental expansions in property rights might overburden investors, outweighing minimal additional security benefits. While Sabir et al. found a stronger nexus between foreign investment and institutional quality in developed countries, this study's results for Europe complicate that narrative, suggesting that overregulation or diminishing marginal returns to institutional quality may weaken the nexus.⁶⁴ This interpretation aligns with La Porta et al., who highlighted the complexity of capital market regulations in developed economies, particularly those influenced by the legal origins of their institutions.⁶⁵

The Americas region presents an ambiguous picture, with an insignificant coefficient for property rights, 0.0121. Despite relatively strong property rights and high GDP per capita, foreign direct investment inflows remain low compared to other regions, suggesting inefficiencies that limit foreign direct investment. This observation aligns with La Porta et al., who argue that many Latin American countries, influenced by French civil law, may offer weaker investor protections despite strong property rights, potentially deterring FDI.⁶⁶

61 de Soto, *The Mystery of Capital: Why Capitalism Triumphs in the West and Fails Everywhere Else*.

62 Sabir et al., "Institutions and FDI: Evidence from Developed and Developing Countries."

63 Heller, "The Tragedy of the Anticommons: Property in the Transition from Marx to Markets."

64 Sabir et al., "Institutions and FDI: Evidence from Developed and Developing Countries."

65 La Porta et al., "Legal Determinants of External Finance."

66 *Ibid.*

Similarly, in the Asia-Pacific region, the insignificant coefficient for property rights suggests that improvements in property rights alone may be insufficient to attract foreign direct investment. The insignificant coefficient is possibly due to individual countries acting as outliers in this study. For example, China features some of the lowest property rights index scores but consistently attracts some of the largest foreign investment inflows over time. This negative relationship appears counterintuitive and may have complicated the association between property rights and foreign investment in other Asia-Pacific countries. Taken together, findings in the Americas and Asia-Pacific suggest that while property rights are necessary, they may be insufficient to attract foreign direct investment in regions with complex institutional and economic environments.

MACROECONOMIC CONTROLS AND THEORETICAL CONSISTENCY

The coefficients for GDP per capita illustrate region-specific dynamics. In the Asia-Pacific and Americas regions, GDP per capita positively correlates with foreign direct investment, consistent with the expectation that economic development attracts foreign investment. However, Europe exhibits the largest positive coefficient for GDP per capita, indicating that higher levels of development significantly attract foreign direct investment in this region despite the negative property rights relation. The negative coefficient in the MENA countries further disrupts this narrative, suggesting that other institutional factors may override the benefits of economic development in attracting foreign direct investment.

Inflation demonstrates a significant and heterogeneous impact on foreign direct investment. Consistent with theoretical expectations, inflation negatively affects foreign direct investment in Asia-Pacific and Europe, signifying that economic instability deters investment. However, the significant positive relationship between inflation and foreign direct investment in Sub-Saharan Africa and MENA may indicate that moderate inflation in these regions is either associated with economic growth or reflects a higher risk tolerance among investors seeking new opportunities. These mixed findings align with Schneider and Frey's work on the role of inflation in investment decisions.⁶⁷

Infrastructure, proxied by mobile phones per 100 people, consistently shows a positive relationship with foreign direct investment in Asia-Pacific, the Americas, and Europe, supporting Dunning's efficiency-seeking foreign direct investment hypothesis.⁶⁸ However, the negative relationship in Sub-Saharan Africa suggests that, despite infrastructure improvements, other institutional barriers may still impede the full realization of foreign direct investment benefits. This finding supports the theory that infrastructure alone may be insufficient without comprehensive legal and institutional

⁶⁷ Schneider and Frey, "Economic and Political Determinants of Foreign Direct Investment."

⁶⁸ Dunning, "Towards a New Paradigm of Development: Implications for the Determinants of International Business Activity."

reforms.

The trade freedom index further reveals regional disparities. The significant positive relationship between trade freedom and foreign direct investment in Asia-Pacific and Europe corroborates the literature that emphasizes the importance of liberal trade policies.⁶⁹ However, the negative relationships in Sub-Saharan Africa and MENA suggest that trade liberalization without concurrent institutional reforms may fail to attract or even repel foreign investors. The relationship in these regions reflects the nuanced interaction between economic policies and institutional quality.

COMPARATIVE INSIGHTS WITH EXISTING LITERATURE

This study's findings add depth to the work of Sabir et al. and Saha et al. by providing a geographic perspective to view the relationship between institutional quality and foreign direct investment.⁷⁰ Sabir et al. identified a stronger link between foreign investment and institutional quality in developed countries; however, this study's findings in Europe challenge that view, hinting that overregulation or diminishing returns to institutional quality could be factors confirming Heller's theory.⁷¹ Similarly, Saha et al. focused on lower-middle-income countries, and this study expands on their work by showing that Sub-Saharan Africa also benefits positively from enhanced property rights, particularly in regions with historically weaker institutional foundations.⁷²

IMPLICATIONS FOR POLICY AND FUTURE RESEARCH

The policy implications of these findings are profound. For Sub-Saharan Africa and MENA, strengthening property rights should be a priority, as it will likely yield significant economic benefits through increased foreign direct investment. Though as Goldfinch warns, reforms must extend beyond constitutional language, as actual enforceability and anti-corruption measures are critical. Statutory or constitutional language is insufficient if local authorities fail to implement reforms. For Europe, Asia-Pacific, and the Americas, policymakers should consider whether further expansions of property rights legislation inadvertently discourage investment by creating an overregulated environment: Heller's anticommons.

Future research should continue to identify the specific property rights provisions that are most effective in enhancing domestic economic benefits. Potential studies could examine whether improved property rights indices correlate with reduced frequency or severity of expropriation disputes,

⁶⁹ Kravis and Lipsey, "The Location of Overseas Production and Production for Export by U.S. Multinational Firms."

⁷⁰ Sabir et al., "Institutions and FDI: Evidence from Developed and Developing Countries."

⁷¹ *Ibid.*

⁷² *Ibid.*

clarifying how hazard $\lambda(\theta)$ changes in response to policies that affect property rights protection, such as land titling, contract enforcement, and intellectual property protections.

This study highlights the heterogeneity of the property rights and foreign investment relationship across regions and underscores the importance of tailoring economic and legal reforms to the unique contexts of each geographic area. This work builds on prior research's theoretical and empirical foundations, contributing to a more nuanced understanding of how constitutional property rights shape global investment flows.

CONCLUSION

The empirical results demonstrate regional variation in the relationship between property rights and foreign investment. In the Sub-Saharan Africa and MENA regions, property rights exhibit a strong, positive, and statistically significant causal relationship with foreign direct investment inflows. This suggests these countries gain substantially from tighter expropriation safeguards, and moderate legal reforms yield large reductions in risk, thus boosting capital inflows. Specifically, a one-unit increase in the property rights index in Sub-Saharan Africa and MENA leads to a 14.7% and 20% rise in foreign investment. Conversely, Europe displays a significant negative relationship, where a one-unit increase in property rights is associated with an 18.2% decline in foreign direct investment. Europe's negative coefficient highlights the anticommons problem: once a market is well-secured, additional rules may stifle rather than attract foreign capital.

The macroeconomic controls yield varying impacts across regions. GDP per capita shows a significant positive relationship with foreign direct investment in the Asia-Pacific and Americas regions but a negative effect in MENA. Inflation rates are negatively related to foreign investment in Europe and the Asia-Pacific, whereas they exhibit a positive effect in Sub-Saharan Africa and MENA. Infrastructure, measured by mobile phones per 100 people, has a significant positive effect across most regions, with the strongest impact in Europe. Trade openness presents mixed effects, with a negative relationship in Sub-Saharan Africa and MENA but a positive relationship in Asia-Pacific and Europe.

The study's findings reveal compelling theoretical and empirical evidence supporting the reinforcement of property rights protections among countries in Sub-Saharan Africa and MENA. For emerging economies, enhancing constitutional property rights is a powerful lever for attracting foreign capital—provided reforms are genuinely enforced and not merely formal. Implementing such legislative measures would spur an increase in foreign direct investment inflows, facilitating the realization of domestic economic benefits. These advantages include technology transfer, domestic workforce development, and heightened corporate tax revenues. For already advanced nations, the challenge is to calibrate property regimes to avoid legislative clutter that imposes undue burdens on prospective investors. Ultimately, the interplay between constitutional reforms, enforcement

fidelity, regional dynamics, and investor perception underscores the complex and context-dependent nature of property rights as a mechanism for fostering economic security and attracting foreign investment.

Understanding the relationship between property rights and foreign direct investment is of paramount importance for policymakers and business leaders. The findings of this study aim to inform policy decisions directed at enhancing a country's investment climate and fostering sustainable economic development. By bridging the gap between theoretical insights and empirical evidence, this research contributes to a broader discourse on the role of legal frameworks in shaping economic outcomes in an interconnected global economy.

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