Kathmandu University School of Management

Balkumari, Lalitpur

Paper Review on

Why Doesn't Capital Flow from Rich to Poor Countries?

Submitted by:

Nimesh Mani Risal (23916)

Submitted to:

Dipesh Karki

Asst. Professor, KUSOM

14th January, 2025

Introduction

Robert E. Lucas Jr. in his 1990 paper, **"Why Doesn't Capital Flow from Rich to Poor Countries?"**, tackles one of the most important issues in development economics. According to neoclassical growth theory, capital should naturally flow from wealthier countries, where it is abundant, to poorer countries, where it is scarce. This flow would equalize the **marginal productivity of capital (MPK)** globally and help narrow the economic gap between nations. However, the real-world data contradicts this prediction. Instead of flowing to poor countries with higher potential returns, capital tends to circulate primarily among rich nations, leaving many developing countries underfunded.

This discrepancy, famously known as the **"Lucas Paradox,"** challenges the standard assumptions of economic theory. Lucas's analysis sheds light on the limitations of traditional models and explores the deeper factors—such as institutional weaknesses, human capital deficiencies, and investment risks—that discourage capital from flowing into developing nations. By blending theoretical insights with empirical evidence, Lucas's work has become a foundational piece in international economics, sparking ongoing research into what drives global capital flows.

This review delves into Lucas's key arguments, evaluates the evidence supporting his claims, and discusses their implications for economic policy and development strategies.

Key Concepts and Theoretical Foundations

Neoclassical Predictions

The neoclassical growth model predicts that capital should flow from rich to poor countries where marginal productivity is higher, leading to economic convergence. This prediction relies on the Cobb-Douglas production function:

$$Y=AK^{\alpha}L^{1-\alpha}$$

Where:

- Y: Total output (GDP)
- A: Total factor productivity (TFP)
- K: Capital stock
- L: Labor
- α: Capital share in income (typically around 0.3–0.4)

The marginal product of capital (MPK) is derived as:

$$MPK=\frac{\partial Y}{\partial K}=\alpha A\, K^{\alpha-1}\, L^{1-\alpha}$$

According to this, lower levels of K (capital stock) in developing countries should yield significantly higher MPK, making them attractive for investment. However, Lucas demonstrates empirically that capital flows to these countries remain disproportionately low.

Lucas's Explanations for the Paradox

Differences in Human Capital Lucas extends the production function to include human capital (H):

$$Y=AK^{\alpha}(HL)^{1-\alpha}$$

Here, H represents the quality of labour, such as education and skills. Poor countries often exhibit lower human capital levels, which diminishes the productivity of physical capital (K) and reduces expected returns.

Externalities of Human Capital: Lucas argues that human capital generates positive externalities, such as knowledge spillovers and technological innovation, which are localized in richer economies. These spillovers increase the effective productivity of capital in developed countries, even when MPK appears equalized.

Capital Market Imperfections: Imperfections such as political risk, asymmetric information, and weak enforcement of property rights create uncertainty about investment returns in poor countries. These factors effectively raise the perceived cost of investing, introducing a wedge between theoretical MPK and actual returns.

Institutional and Historical Factors: Lucas highlights the legacy of colonial institutions and monopoly power that restricted capital flows historically. While these constraints have diminished, the persistence of weak institutions in many developing nations continues to deter investment.

Empirical Evidence Supporting the Lucas Paradox

Subsequent studies have reinforced and expanded upon Lucas's hypotheses. Some notable contributions include:

Institutional Quality

Alfaro, Kalemli-Ozcan, and Volosovych (2005) empirically validate that institutional quality is the primary determinant of capital flows. Using regression models, they establish that countries with better governance, stronger property rights, and political stability attract significantly higher levels of foreign direct investment (FDI). Their findings can be expressed as:

$$FDI_i=\beta 0+\beta 1\textbf{Institutional Quality}_i+\beta 2\textbf{Human Capital}_i+\varepsilon_i$$

Where:

- FDI_i: Foreign direct investment inflows to country iii
- ***Institutional Quality***: A composite index of governance and legal frameworks

For example, raising Peru's institutional quality to Australia's level could quadruple its FDI inflows.

Home Bias and Savings-Investment Correlations

The Feldstein-Horioka puzzle explains that domestic savings and investment are highly correlated, implying limited international capital mobility. The relationship is expressed as:

$$I/Y = \alpha(S/Y) + \varepsilon$$

Where:

- I/Y: Investment as a fraction of GDP
- S/Y: Savings as a fraction of GDP

This correlation suggests that capital is often reinvested domestically rather than flowing abroad, even to high-MPK countries.

Sovereign Risk

Reinhart and Rogoff's studies on sovereign defaults demonstrate that the risk of expropriation or default deters foreign investors. Capital flow constraints arise not only from institutional weaknesses but also from macroeconomic instability.

Critical Evaluation of Lucas's Paper

Strengths

- **Foundational Contribution**: Lucas's paper reframed the discussion on capital flows, challenging simplistic neoclassical assumptions and inspiring decades of research.
- **Policy Relevance**: By identifying human capital and institutional reforms as critical drivers of investment, Lucas provides actionable insights for policymakers.
- **Interdisciplinary Approach**: The paper bridges economic growth theory, institutional economics, and development studies, offering a holistic perspective.

Limitations

- **Underestimation of Informal Economies**: Lucas's analysis overlooks the role of informal sectors, which dominate labor markets in many developing countries.
- **Simplistic Risk Models**: While the paper acknowledges political risk, it does not fully explore mechanisms like sovereign debt restructuring or international guarantees that mitigate these risks.
- **Dynamic Factors**: The paper does not account for the rise of technology and globalization, which have altered the dynamics of capital mobility since 1990.

Modern Implications

Lucas's insights remain relevant but require updating to address contemporary trends, such as:

- The role of digital infrastructure in shaping capital flows.
- Environmental, social, and governance (ESG) considerations influencing global investment decisions.

- Regional disparities within developing countries, where certain regions may exhibit characteristics closer to developed markets.

Policy Recommendations

Based on Lucas's findings and subsequent research, the following policy recommendations can address the Lucas Paradox:

Invest in Human Capital

- Enhance education systems and skill development programs to improve labour productivity and attract capital.

Strengthen Institutions

- Reform governance and legal frameworks to ensure property rights, reduce corruption, and improve investor confidence.

Facilitate Financial Integration

- Reduce barriers to foreign capital inflows through transparent regulations and open financial markets.

Promote Regional Cooperation

- Develop regional trade and investment agreements to stabilize cross-border capital flows.

Incentivize Green Investments

- Leverage ESG-friendly policies to attract sustainable and ethical foreign investments.

Conclusion

Robert E. Lucas Jr.'s paper, **"Why Doesn't Capital Flow from Rich to Poor Countries?"**, stands as a pivotal work in economic theory and policy. By examining factors like disparities in human capital, institutional weaknesses, and market imperfections, Lucas challenges conventional views on how global capital is allocated. His insights remain highly relevant as developing nations continue to struggle to attract foreign investment, despite their significant growth potential.

The **Lucas Paradox** highlights the need for key structural reforms in poorer countries. Improving institutions, strengthening governance, and investing in education are critical steps to promote economic growth and creating environments that are more appealing to foreign investors. It also emphasizes how factors like externalities, market dynamics, and perceptions of risk influence investment flows globally.

Since the publication of Lucas's work, researchers have built on his ideas, particularly by focusing on the role of institutional quality in shaping capital flows and exploring the complex realities of the international financial system. As globalization accelerates, and with new considerations such as technological advances and **environmental, social, and governance (ESG)** priorities shaping investment decisions, the Lucas Paradox continues to offer valuable lessons.

For policymakers in developing nations, Lucas's findings provide a roadmap for creating conditions that attract capital while addressing structural barriers. In today's interconnected world, removing these obstacles is not just vital for individual countries but also essential for reducing global economic inequalities.

References

Lucas, R. E. Jr. (1990). "Why Doesn't Capital Flow from Rich to Poor Countries?" The *American Economic Review, 80(2), 92–96.*

Alfaro, L., Kalemli-Ozcan, S., & Volosovych, V. (2005). "Why Doesn't Capital Flow from Rich to Poor Countries? An Empirical Investigation." *Review of Economics and Statistics, 90(2), 347–368.*

Acemoglu, D., Johnson, S., & Robinson, J. A. (2001). "The Colonial Origins of Comparative Development: An Empirical Investigation*." American Economic Review, 91(5), 1369–1401*.

Prasad, E. S., Rajan, R. G., & Subramanian, A. (2007). "Foreign Capital and Economic Growth." *Brookings Papers on Economic Activity, 2007(1), 153–230.*

Feldstein, M., & Horioka, C. (1980). "Domestic Saving and International Capital Flows." *The Economic Journal, 90(358), 314–329.*

Schularick, M., & Steger, T. (2010). "Financial Integration, Capital Mobility, and Income Convergence." *Economic Journal, 120(543), 296–317.*

Wei, S. J. (2000). "Local Corruption and Global Capital Flows." *Brookings Papers on Economic Activity, 2000(2), 303–346.*