



CENTRE for AEROSPACE & SECURITY STUDIES

**Global Interest Rate Shock:
Implications for Economic Growth in
Developing Countries & Emerging Markets**

Zahra Niazi

Research Assistant, Economic Affairs & National Development

Working Paper

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Abstract

In recent years, global economies have been confronted with multiple challenges, including but not limited to the COVID-19 Pandemic, natural disasters, and the Russia-Ukraine War. The impact of these events has been stronger for developing countries and emerging markets. While struggling to grapple with the stronger impact of these challenges, the implementation of tight monetary policies by the United States' Federal Reserve System (or the Fed) and other major advanced economies has given rise to concerns about economic stability in developing countries. In view of this, the present Working Paper aims to explore the channels through which the interest rate hike, by the US and central banks of the major advanced economies, impacts key determinants of economic growth in developing countries and emerging market economies. The findings of the study suggest that rising interest rates in advanced nations have multiple adverse impacts. First, rising interest rates in advanced nations increase debt levels in the debtor countries, which can stifle their level of capital formation and productivity growth. Second, they stimulate capital outflows from developing countries, which can adversely affect their capital formation and productivity growth. Third, these interest rate hikes are followed by similar policy moves in developing countries, which can have a negative impact on the cost of domestic borrowing and investment, while also affecting productivity growth. Fourth, a lower appetite for foreign goods and services due to sluggish growth in major economies can have an adverse impact on emerging markets and developing economies by dampening foreign demand for their manufactured goods and commodities. The paper concludes by offering recommendations for developing countries to grapple with such adverse monetary conditions, and for the developed economies on how to help mitigate these.

Keywords: Interest Rates, Capital Formation, Investment, Technological Progress.

1. Introduction

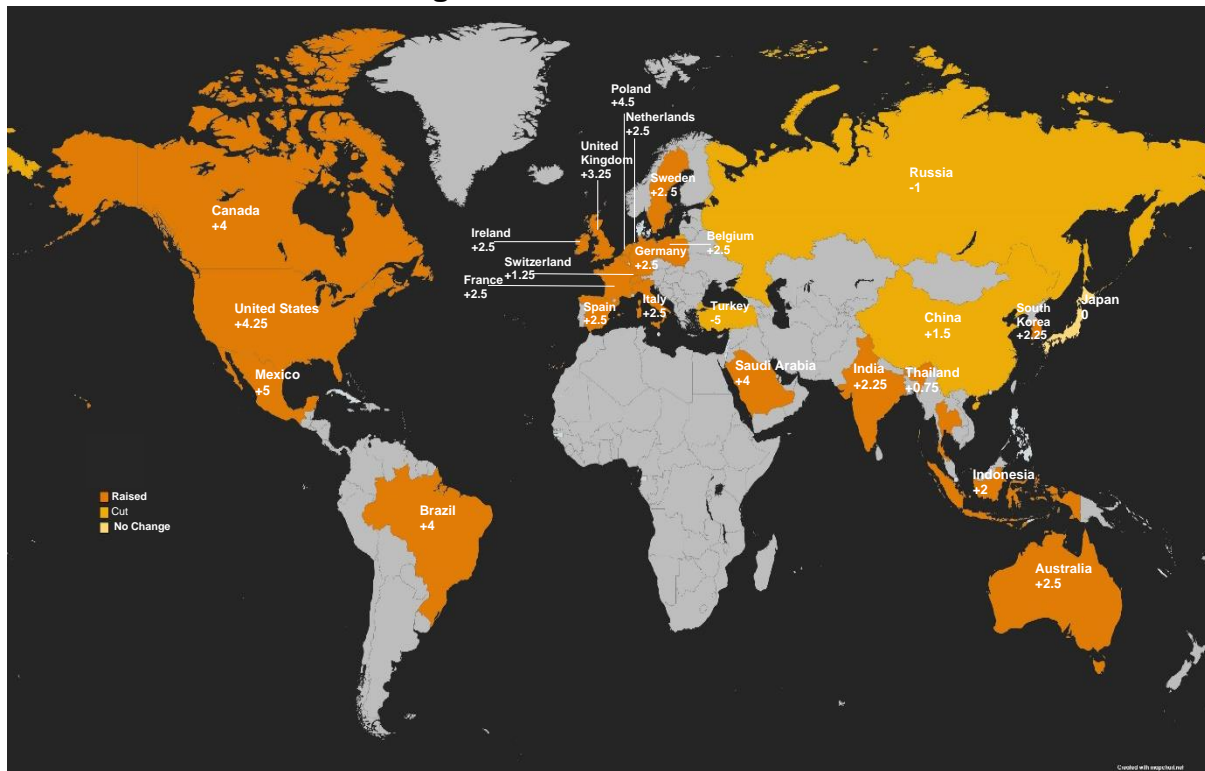
The year 2022 witnessed one of the largest and fastest round of hikes in global interest rates in many decades. Confronted with a stubbornly high inflation rate, the United States Federal Reserve System (better known as the 'Fed') increased rates seven times in 2022, bringing it from 0.25% in February to 4.5% by the end of December. This represented a total hike of more than 4 percentage points and was the Fed's fastest and most aggressive interest rate hike cycle since 1988 (Table 1). In response and in a bid to clamp down on inflation, central banks in most advanced economies also adopted similar tighter monetary policies by increasing interest rates, with 21 of the 24 largest economies after the US seeing an increase in interest rate by more than or equal to 0.75 percentage points, and the majority witnessing a hike of more than or equal to two percentage points (Figure 1). The European Central Bank (ECB), i.e., the central bank of the 19 European Union countries, including seven of the 25 largest economies, increased the interest rate by 2.5 percentage points, bringing it from 0% in June to 2.5% by the end of December. Figure 1 shows the aggregate interest rate change (in percentage points) in 2022 in the 25 largest economies of the world.

Table 1: Duration and Severity of Interest Rate Hike Cycles by the Fed since 1988

Time Period	Duration (Months)	Aggregate Change in Effective Federal Funds Rate
Mar 1988 – May 1989	14	3.23
Feb 1994 – Feb 1995	12	2.67
Jun 1999 – May 2000	11	1.51
Jun 2004 – Jun 2006	24	3.96
Dec 2015 – Dec 2018	36	2.03
Mar 2022 – Dec 2022	10	4.25

Source: World Economic Forum (updated by the author).

**Figure 1: Aggregate Interest Rate Change (in Percentage Points) 2022:
25 Largest Economies of the World**



Source: Author's compilation from Trading Economics.

The global interest rate shock has not been without its share of spillover consequences for the developing world. History bears a testament to the fact that the previous aggressive interest rate hikes by the Fed and central banks in other advanced economies triggered capital outflows from developing and emerging markets, led to a surge in their dollar-denominated debts, and destabilised their currencies.¹ Likewise, the 2022 global interest rate hike cycle has accompanied capital flight from developing countries and emerging market economies. Evidence suggests that between March and July 2022 alone, the total capital outflow from developing and emerging markets amounted to approximately USD 39.3 billion.² Moreover, scholars and economists warn that the environment of rising interest rates will make it more challenging for developing economies to repay debts denominated in foreign currencies – especially the US dollar. Similar events in the past bear testimony to this. For example, in the 1980s, the aggressive rate hikes in the US led to a rise in global interest rates, which caused several developing countries, specifically those in Latin America, to default on

¹ Voice of America, "As US Federal Reserve Raises Rates, Emerging Markets Brace for Impact," May 6, 2022, <https://www.voanews.com/a/as-us-federal-reserve-raises-rates-emerging-markets-brace-for-impact/6560242.html>.

² Reuters, "Emerging Market Portfolios Post Longest Streak of Monthly Outflows on Record - IIF," *US News*, August 3, 2022, <https://money.usnews.com/investing/news/articles/2022-08-03/>.

their debts.³ Arguably, the current round of hikes could have a much greater impact given that the aggregate debt levels of developing countries are much higher than they were in the 1980s. Additionally, central banks in many developing countries have been compelled to increase their interest rates, making domestic borrowing more expensive and less appealing.

Bank executives believe that global interest rates will not peak until the first half of 2023,⁴ which suggests that its repercussions will continue for a longer time. The present study is aimed at understanding the consequences of the current round of interest rate hikes in advanced economies on the economic growth of developing countries. The remainder of the paper is structured as follows. First, it disentangles the channels through which interest rate hikes in advanced nations can affect the key determinants of economic growth in developing countries and emerging markets⁵. Second, it highlights policy options for countries confronted with these challenges as well as policy recommendations for the global community as a whole.

³ Voice of America, "As US Federal Reserve Raises Rates, Emerging Markets Brace for Impact."

⁴ ABA Banking Journal, "Bankers anticipate further Interest Rate Hikes in 2023," October 31, 2022, <https://bankingjournal.aba.com/2022/10/bankers-anticipate-further-interest-rate-hikes-in-2023/>.

⁵ Editor's Note:

While the terms "developing countries" and "emerging markets" are used interchangeably in this Working Paper by the author, they have slightly different meanings. "Developing countries" typically refers to nations that are in the process of industrialisation and have lower levels of economic development, income per capita, and human development indicators compared to developed countries. This term is often used by international organisations like the United Nations. "Emerging markets," on the other hand, typically refers to economies that are becoming more integrated with the global economy and are experiencing rapid growth and development. These countries often have a higher level of economic development compared to developing countries but are not yet considered fully developed economies. While there is some overlap between the two terms, "developing countries" tend to be more focused on economic and social development indicators, while "emerging markets" tend to be more focused on the growth potential of an economy in the global marketplace.

2. Disentangling the Channels

The section below disentangles the channels through which interest rate hikes in advanced nations can affect both short- and long-run economic stability and growth in developing countries and emerging markets.

2.1. Interest Rate Hikes in Advanced Economies – Mounting External Debt in Developing Countries and Emerging Markets

A report released in early 2022 revealed that 54 countries globally were facing debt distress,⁶ and the current round of interest rate hikes is expected to deepen this crisis and make debt servicing more challenging for the debtor countries. Research has already highlighted that low-income countries are paying excessive interest on their debts denominated in foreign currencies – particularly the US dollar – amid the global interest rate shocks.⁷ Another report by UNCTAD released in October 2022 revealed that the debt servicing costs of low- and middle-income countries had risen well above 20% of their yearly government revenues due to the monetary policy moves in the advanced nations.⁸ In May 2022, Sri Lanka announced to have defaulted on its debt, while many other developing nations face high default risk such as Tunisia, El Salvador, Ghana, Pakistan, the Maldives, and Ethiopia.⁹

Based on historical experiences, scholars and economists warn that this rising debt distress can even translate into a full-fledged debt crisis in developing regions. It remains well-established that the interest rate hikes by the Fed were behind the Asian financial crisis of 1997 or the Latin American debt crisis of the 1980s. As a case in point, in 1979, global oil prices skyrocketed, which led to a sharp increase in interest rates by the Fed. Consequently, foreign debt as a proportion of GDP increased by nearly 20% in Latin American countries in 1982 compared to 1979.¹⁰ Given this, Mexico ended up defaulting on its debt in the same year, followed by other countries

⁶ Time Jones, “Growing Global Debt Crisis to worsen With Interest Rate Rises,” *Debt Justice*, January 23, 2022, <https://debtjustice.org.uk/press-release/growing-debt-crisis-to-worsen-with-interest-rate-rises>.

⁷ Larry Elliott, “High Interest Rates paid by Poorer Nations sparks fears of a Global Debt Crisis,” *Guardian*, October 2, 2022, <https://www.theguardian.com/business/2022/oct/02/high-interest-rates-paid-by-poorer-nations-spark-fears-of-global-debt-crisis>.

⁸ Jiyeong Go, “Developing Countries face Severe Debt Distress,” *FDI Intelligence*, October 18, 2022, <https://www.fdiintelligence.com/content/news/developing-countries-face-severe-debt-distress-81579>.

⁹ Stuart Culverhouse and Patrick Curran, “Trade to Watch: Sovereign Default Risks,” *Tellimer Insights*, December 20, 2022, <https://tellimer.com/article/trade-to-watch-sovereign-default-risks>.

¹⁰ Maria A. Arias and Paulina Restrepo Echavarría, “Sovereign Debt Crisis in Europe Recalls the Lost Decade in Latin America,” *Federal Reserve Bank of St. Louis*, n.d., <https://www.stlouisfed.org/publications/regional-economist/january-2015/sovereign-debt-crisis>.

in the region.¹¹ This contributed to a sharp slowdown in per capita income growth in Latin America in the 1980s. In fact, the severe impact of the crisis was felt throughout the whole period of 1980-2000.

The following sections highlight the transmission pathways through which mounting external debt due to the current round of interest rate hikes can affect growth and stability in developing countries and emerging markets.

2.1.1. Interest Rate Hikes in Advanced Economies – Mounting External Debt – Reduced Capital Formation in Developing Countries

As already highlighted, the global interest rate shock has caused debt levels to significantly rise in developing countries and emerging markets. Excessive or unsustainable levels of foreign debt adversely impact developing countries' national output and growth by hampering investment and constraining capital formation. More specifically, one of the most widely cited relationships between excessive foreign debt and reduced investment is the crowding-out effect of foreign debt on private investment. First, the debtor countries struggling to pay their accumulated debts increase tax rates on the private sector, discouraging private sector investment.¹² In other words, high public debt acts as a tax on private investment. Excessive foreign debt can also indirectly affect the private sector's incentives to hold domestic assets by discouraging governments from introducing and implementing adjustment policies,¹³ or leading to a lack of confidence on the part of private economic agents in government-issued securities or financial bonds.¹⁴ The latter can result in private investors being less willing to subscribe to government-issued financial bonds, which function as investment vehicles. Furthermore, mounting external debt generates fiscal imbalances and increases countries' sovereign risk, i.e., the risk of the government defaulting on its debt. This can contribute to capital outflow and the transfer of assets abroad to circumvent any spill over repercussions. A country's increased sovereign risk also reduces the inflow of foreign direct investment (FDI) as foreign investors tend to be pulled towards relatively safer environments. Additionally, unsustainable or

¹¹ Ibid.

¹² Minhaj-ud-Din, Muhammad Azam Khan, and Muhammad Tariq, "External Debt – Blessing or Curse: Empirical Evidence from Pakistan," *International Journal of Economics and Financial Issues* 10, no. 4 (2020): 235-246.

¹³ Eduardo Borensztein, "The Effect of External Debt on Investment," *Finance and Development*, September, 1989, <https://www.elibrary.imf.org/downloadpdf/journals/022/0026/003/article-A006-en.pdf>.

¹⁴ Lionel Effiom, Emmanuel Uche, Otegi Asuquo Otegi, and Francis Archibong Effiong, "Asymmetric Effects of Capital Flight on Domestic Investment in Nigeria: Evidence from Non-Linear Autoregressive Distributed Lag Model," *Research Square*, November 25, 2020, https://assets.researchsquare.com/files/rs-113386/v1_covered.pdf?c=1631847418.

excessive levels of foreign debt reduce public investment as foreign aid and income generated from exports and other foreign exchange resources are utilised to meet debt obligations.

Moreover, high external debt leads to rising concerns on the part of lenders, making it challenging for the debtor countries to acquire new loans¹⁵ that can be diverted toward investment. This is also known as the 'Credit Rationing Effect.' Under the circumstances of credit rationing, debtor countries are sometimes forced to increase their interest rates to achieve an equilibrium between savings and investments, which can adversely impact their ability to invest.¹⁶ These factors altogether depress the growth process in the debtor countries.

Numerous empirical investigations have confirmed the presence of a negative association between high external debt and investment. For instance, a study using data from 55 low-income countries concluded that with every one percentage point rise in debt service as a share of GDP, public investment is reduced by 0.2 percentage points.¹⁷ Another study conducted using the data from 1978 to 2015 showed that public debt crowded out private investment in Sri Lanka in the long-run.¹⁸ Similarly, research focusing on the association between low investment and debt in least developed countries in the 1980s confirmed the crowding out effects of high public debt on domestic investment. The study found that with every 1% of GDP paid abroad, domestic investment is reduced by 0.3% of GDP.¹⁹ Numerous other empirical investigations have reported similar results. Figure 2 sums up the above-mentioned discussion by showing a schematic illustration of the transmission channel.

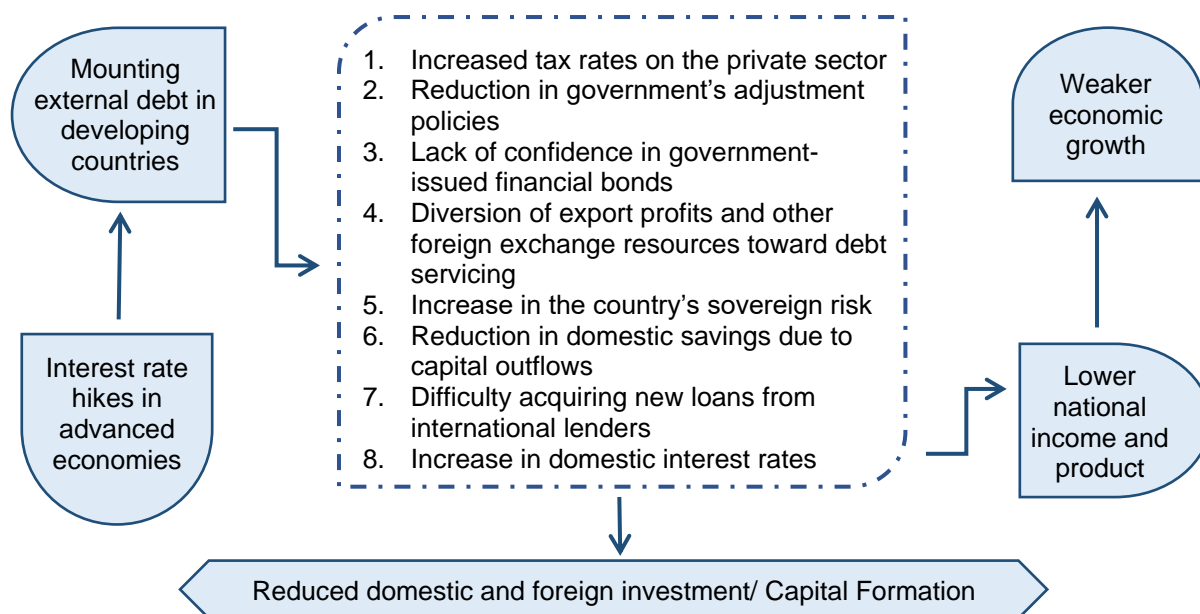
¹⁵ Courage Mlambo and Muhammad Tariq, "China in Africa: An Examination of the Impact of China's Loans on Growth in Selected African Nations," *Economies* 10, no. 154 (2022).

¹⁶ Borensztein, "The Effect of External Debt on Investment."

¹⁷ Benedict Clements, Rina Bhattacharya and Toan Quoc Nguyen, "External Debt, Public Investment, and Growth in Low-Income Countries," (paper, International Monetary Fund, Washington, D.C., 2003), <https://www.elibrary.imf.org/view/journals/001/2003/249/article-A001-en.xml>.

¹⁸ H.R.A.C. Thilanka and J.G Sri Ranjith, "The Impact of Public Debt on Private Investment," *International Journal of Economics and Financial Issues* 10, no. 4 (2020): 235-246.

¹⁹ Daniel Cohen, "Low Investment and Large LDC Debt in the 1980s," *The American Economic Review* 83, no. 3 (1993): 437-449.

Figure 2: Schematic Illustration of the Transmission Channel

Source: Author's own.

2.1.2. Interest Rate Hikes in Advanced Economies – Mounting External Debt – Slowdown in Total Factor Productivity (TFP) Growth in Developing Countries

The capacity of a country to sustain high Total Factor Productivity (TFP) – the measure of the impact of changes in worker knowledge and technological advancements – is considered an essential driver of economic growth. However, high levels of external debt due to global interest rate shocks can constrain TFP growth in debtor countries by impeding technological progress and investment in human capital development or more productive sectors.

First, large debt service payments can reduce a government's ability to generate sufficient revenue and drastically squeeze its already vulnerable fiscal space. This can constitute a major constraint to technological progress and human capital development by reducing the available resources for research and development (R&D), the development and purchase of new and modern technology, and investment in the education and training of human capital. Second, large debt service payments can deter private sector investment (*read* Section 2.1.1). This can hinder technological advances as the private sector, and its resources remain indispensable for catalyzing innovation and technological progress in an economy.

Additionally, excessive public debt leads to macroeconomic uncertainty and increases a country's sovereign risk (*read* Section 2.1.1), which can negatively impact the inflow of FDI. Evidence in literature has increasingly shown that FDI is a major conduit for

the transmission of technology as well as technical knowledge in the host countries, as local actors can establish linkages with foreign enterprises and investors.²⁰ This can allow the local enterprises in the host countries to carry out technological upgrading. Hence, a reduced FDI can be a major constraint to technological progress.

Moreover, a high-uncertainty environment may cause the investment to be misallocated to activities that can generate quicker returns, rather than irreversible and higher-risk investments that can generate productivity growth.²¹ In other words, macroeconomic uncertainty can hinder investment for more productive purposes and in more productive sectors.

A study investigating the pathways through which external debt affects growth by using a panel dataset from 1969 to 1998 for 61 developing countries found that two-thirds of the effect of debt on growth is explained via the channel of the slowdown in TFP.²² Another study exploring the role of macroeconomic factors in explaining TFP in a sample of 34 countries in sub-Saharan Africa by using data from 1980 to 2002 found a statistically significant and negative impact of high external debt on TFP.²³ Similarly, research focusing on the influence of external debt on TFP in highly indebted poor countries (HIPCs) concluded that external debt significantly reduces TFP as well as growth.²⁴ Numerous other empirical investigations have reported similar results. Figure 3 sums up the above-mentioned discussion by showing a schematic illustration of the transmission channel.

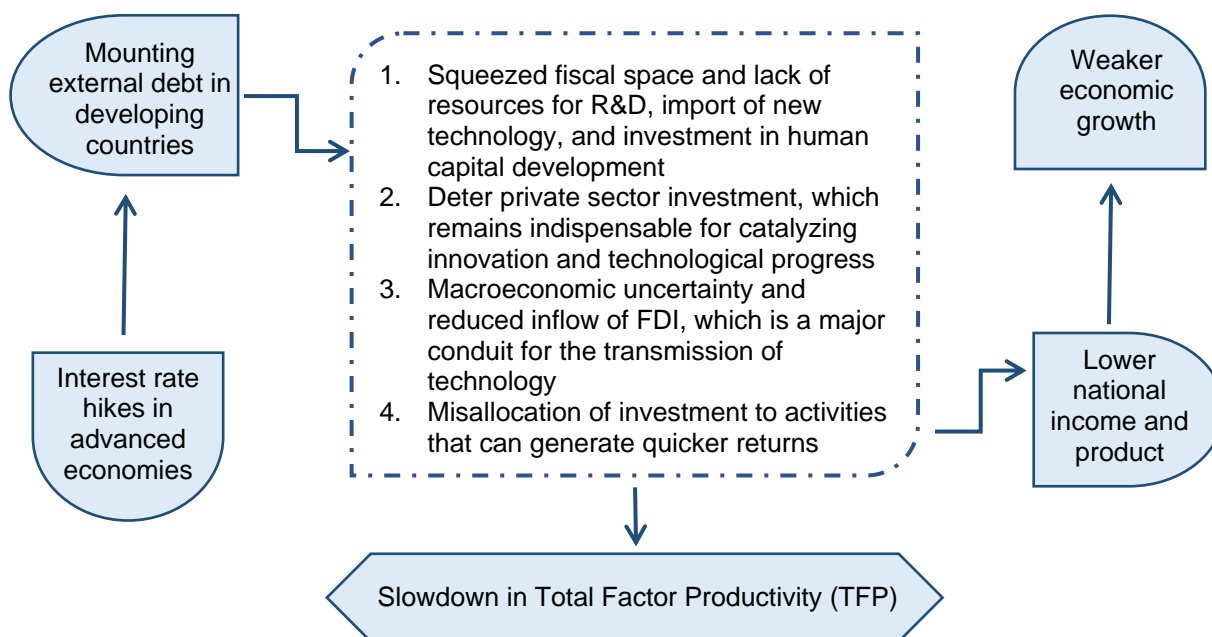
²⁰ Hezron M. Osano and Pauline W. Koine, "Role of Foreign Direct Investment on Technology Transfer and Economic Growth in Kenya: A Case of Energy Sector," *Journal of Innovation and Entrepreneurship* 5, no. 31 (2016).

²¹ Catherine Pattillo, Hélène Poirson, and Luca Ricci, "What Are the Channels Through Which External Debt Affects Growth," (paper, International Monetary Fund, Washington, D.C., 2004), <https://www.imf.org/external/pubs/ft/wp/2004/wp0415.pdf>.

²² Ibid.

²³ Anthony Enisan Akinlo, "Impact of Macroeconomic Factors on Total Factor Productivity in Sub-Saharan African Countries," (paper, UNU World Institute for Development Economics Research, Helsinki, 2005), https://www.researchgate.net/publication/23566079_Impact_of_Macroeconomic_Factors_on_Total_Factor_Productivity_in_Sub-Saharan_African_Countries?

²⁴ Sisay Demissew Beyene and Balázs Kotosz, "The Impact of External Debt on Total Factor Productivity and Growth in HIPCs: Non-Linear Regression Approaches," *International Journal of Development Issues* 21, no. 2 (2021): 173-194.

Figure 3: Schematic Illustration of the Transmission Channel

Source: Author's own.

2.2. Interest Rate Hikes in Advanced Economies – Capital Flight from Developing Countries and Emerging Markets

The current round of rate hikes has accompanied capital flight from developing countries and emerging market economies due to the depreciation of their currencies against foreign currencies. For reference, the Institute of International Finance (IIF) reported that between March and July 2022 alone, the total capital outflow from developing and emerging markets amounted to approximately USD 39.3 billion.²⁵ It also revealed that this capital outflow was the largest streak of outflows recorded since 2005. Its major contributing factor was the reversal of years of very low-interest rates by the developed economies.²⁶ The influence of capital flight on growth in developing countries and emerging markets can be explained through multiple pathways.

2.2.1. Interest Rate Hikes in Advanced Economies – Capital Flight – Reduced Capital Formation in Developing Countries

As highlighted, the global interest rate shock has accompanied capital flight from developing countries and emerging market economies. The first and most widely cited pathway is that the outflow of capital leads to the diversion of both public and private

²⁵ Reuters, "Emerging Market Portfolios Post Longest Streak of Monthly Outflows on Record – IIF."

²⁶ Ibid.

savings away from productive activities, including domestic investment.²⁷ In other words, capital flight amounts to the depletion of scarce domestic savings, which widens the domestic savings gap and results in lost opportunities vis-à-vis domestic investment. Second, investors can perceive high capital flight as a manifestation of the failure of the country's institutions and macroeconomic policies, leading to reduced private domestic investment.²⁸ From another perspective, the flight of private wealth amounts to tax base erosion. This can propel apprehensions on the part of private agents about forthcoming tax burdens and depreciation of the value of assets, causing more capital flight and reduced investment.²⁹

Moreover, since capital outflow makes domestic resource mobilisation challenging for governments, it can compel them to increase seigniorage,³⁰ i.e., the difference between the worth of money and the cost to produce it. This leads to an increase in the inflation tax, i.e., an implicit tax on the nominal assets, and can encourage domestic and foreign investors to transfer their savings and assets abroad in order to prevent the real value of those assets from depreciating.³¹ Additionally, capital outflows can generate speculative bubbles, i.e., spikes in the value of assets caused by speculation rather than any underlying factor, which can cause macroeconomic uncertainty.³² Macroeconomic uncertainty can fuel more capital flight while reducing the prospects of future FDI.

Furthermore, capital flight generates apprehensions about the government's ability to fund its budget deficit. Persistent budget deficits increase the government's financing requirements and result in inflationary tensions, which can potentially erode the value of domestic assets possessed by private economic agents.³³ Second, persistent budget deficits make the levels of debt unsustainable.³⁴ Debt distress hampers capital formation by crowding out private investment, constraining public investment, and reducing the prospects of foreign capital inflows (*read* Section 2.1.1).

²⁷ Fentaw Leykun Fisseha and David McMillan, "Effect of Capital Flight on Domestic Investment: Evidence from Africa," *Cogent Economics and Finance* 10, (2020).

²⁸ Ibid.

²⁹ Ibid.

³⁰ Ameth Saloum Ndiaye, "Impact of Capital Flight on Domestic Investment in the Franc Zone," African Development Bank, October 20, 2009, https://www.afdb.org/fileadmin/uploads/afdb/Documents/Knowledge/Conference_2007_anglais_13-part-III-1.pdf.

³¹ Ibid.

³² Ndiaye, "Impact of Capital Flight on Domestic Investment in the Franc Zone."

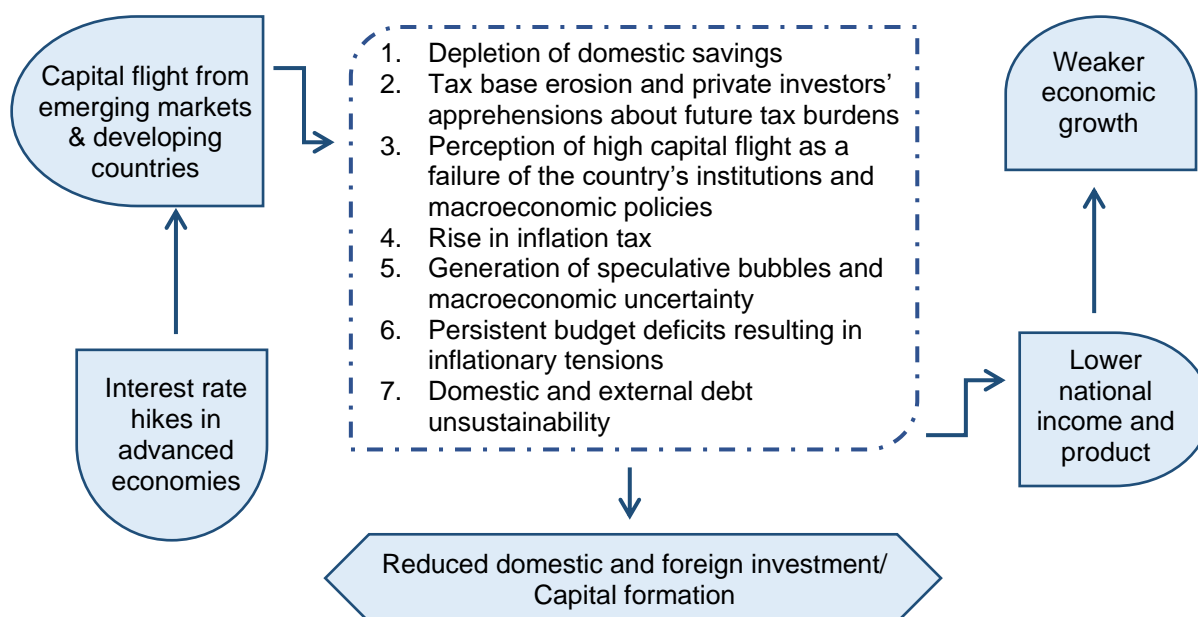
³³ Ibid.

³⁴ Ibid.

Empirical estimates have confirmed the existence of a negative association between capital flight and domestic investment. For example, a study examining the effects of financial liberalisation and capital flight on domestic investment by using data from 30 African countries between 2000 and 2019 found that capital flight severely constraints domestic investment financing in Africa.³⁵

Another study conducted by using data for Nigeria between 1980 and 2017 found a negative and statistically significant impact of capital flight on domestic investment. This effect was found to be more severe in the long run (coefficient=0.57) than in the short run (coefficient=0.27).³⁶ Similarly, another research using data from 1970 to 2010 and focusing on a sample of 39 African countries found a robust and negative effect of capital flight on total domestic investment.³⁷ Similar results have been reported by numerous other empirical investigations. Figure 4 sums up the aforementioned discussion by showing a schematic illustration of the transmission channel.

Figure 4: Schematic Illustration of the Transmission Channel



Source: Author's own.

³⁵ Fisseha and McMillan, "Effect of Capital Flight on Domestic Investment: Evidence from Africa."

³⁶ Lionel Effiom, Alfa Charles Achu and Samuel Etim Edet, "Capital Flight and Domestic Investment in Nigeria: Evidence from ARDL Methodology," *International Journal of Financial Research* 11, no. 1 (2020): 348-360.

³⁷ Leonce Ndikumana, "Capital Flight and Tax Havens: Impact of Investment and Growth in Africa," *Revue d'économie du développement* 22, no. 2 (2014): 99-124.

2.2.2. Interest Rate Hikes in Advanced Economies – Capital Flight – Slowdown in Total Factor Productivity (TFP) Growth in Developing Countries

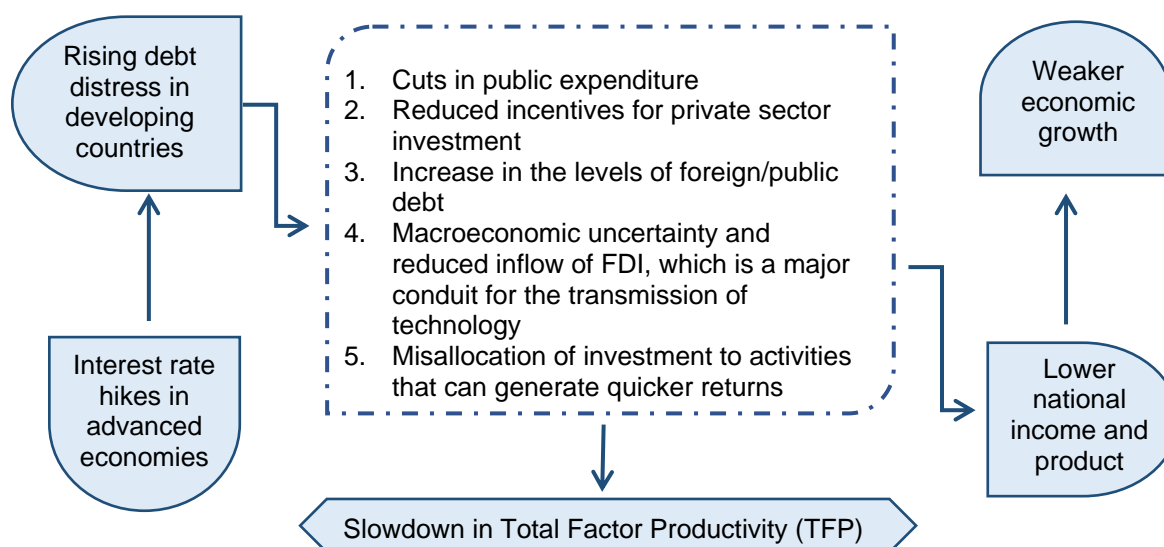
A high capital flight due to global interest rate shock can constrain TFP growth in developing countries by impeding technological progress, human capital development, and an efficient allocation of resources. First, capital flight leads to the depletion of domestic savings and lowers taxable income, making domestic resource mobilisation challenging for governments in developing nations and widening their fiscal deficits. As a result, they find themselves with fewer resources for investment in productive sectors and activities (e.g., R&D, education, purchase of modern technology). Second, capital flight can distort the private sector's incentives for investment (read Section 2.2.1). This can also, in turn, reduce investment in productive activities, entrepreneurship and innovation, and efficient allocation of resources.

Moreover, since the capital flight can lead to debt distress, it can expectedly have an adverse effect on TFP growth in view of the negative relationship between debt unsustainability and TFP growth. Additionally, capital flight can generate macroeconomic uncertainty due to the generation of speculative bubbles or an increase in the levels of public debt (read Section 2.1.1). This can hinder the efficient allocation of resources as governments in a high-uncertainty environment tend to be attracted to activities that can generate quicker returns.³⁸ A high-uncertainty environment can also reduce the inflow of FDI, which remains a vital force for technological progress in developing countries.

A study using a dataset on savings for 118 countries from 1960 to 2000 found a strong effect of lagged average savings (to which capital flight is one of the contributors) on the growth in productivity for poor countries due to the important role of savings for importing R&D-intensive equipment and attracting FDI. However, this effect was found to be small for rich countries.³⁹ Figure 5 sums up the aforementioned discussion by showing a schematic illustration of the transmission channel.

³⁸ Pattillo, Poirson, and Ricci, "What are the Channels through Which External Debt Affects Growth."

³⁹ Philippe Aghion, Diego Comin and Peter Howitt, "When Does Domestic Saving Matter for Economic Growth," *Harvard University*, August 2, 2006, https://wcfia.harvard.edu/files/wcfia/files/2007_7_aghion.pdf.

Figure 5: Schematic Illustration of the Transmission Channel

Source: Author's compilation.

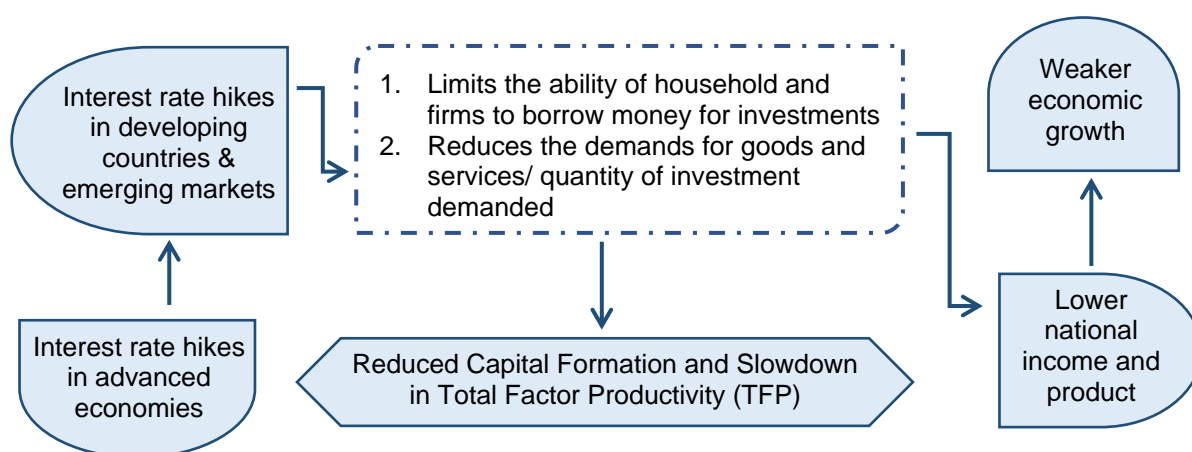
2.3. Interest Rate Hikes in Advanced Nations – Interest Rate Hikes in Developing Countries – Reduced Capital Formation and Slowdown in Total Factor Productivity (TFP) Growth in Developing Countries

In order to combat inflation and prevent their national currencies from depreciating, central banks in many developing countries and emerging markets have had to raise their policy rates. In fact, some developing countries remained ahead of a few advanced nations in terms of monetary policy tightening, which reflected their apprehensions of exchange rate depreciation against the US dollar. An increase in domestic interest rates in developing countries can further deteriorate their domestic capital formation and growth process.

It remains well-established that a higher interest rate limits the ability of households and firms to afford the amount of money that can be borrowed. This can make investments in the real economy less attractive and more expensive as loans remain an important source of financing investments and business projects. Reduced incentives for investment can also hinder TFP growth given the positive association between investment and TFP growth. Second, when the central banks increase interest rates, it reduces demand for services and goods, which can hurt the quantity of investment demanded. In other words, the rise in interest rates has an adverse and negative impact on investment demand by increasing the cost of borrowing and doing business.

A study focusing on the impact of the rise in the interest rate on investment level in Jordan by using data from 1990-2005 found that with every 1% increase in interest rate, the investment level is reduced by 44%.⁴⁰ Likewise, another research studying the relationship between the rate of interest and investment in Pakistan by utilising data from 1964 to 2012 confirmed an inverse association of investment with interest rate.⁴¹ Figure 6 sums up the aforementioned discussion by showing a schematic illustration of the transmission channel.

Figure 6: Schematic Illustration of Transmission Channel



Source: Author's compilation.

2.4. Interest Rate Hikes and Economic Slowdown in Advanced Economies – Reduced Demand for Developing Countries' Goods and Services

For advanced nations, monetary policy tightening, majorly driven by the interest rate hikes in the US has not been without its fair share of consequences. Reports have shown that the major economies, such as the US and the Eurozone, have recorded a sharp economic slowdown in 2022, with interest rate hikes and the subsequent reduction in business investment being one of the contributing factors.⁴² Economists increasingly warn that a further slowdown in GDP growth in these countries is likely in the upcoming months. This poses immense challenges for developing countries and emerging markets as nearly two-thirds of the EMDEs depend on the export of

⁴⁰ Majed Bader and Ahmad Ibrahim Malawi, "The Impact of Interest Rate on Investment in Jordan: A Cointegration Analysis," *Journal of King Abdulaziz University, Economics and Administration* 24, no. 1 (2010).

⁴¹ Sulaiman D. Muhammad, "Rate of Interest and its Impact on Investment to the Extent of Pakistan," *Pakistan Journal of Commercial and Social Sciences* 7, no. 1 (2013): 91-99.

⁴² Paul Hannon and David Harrison, "U.S., European Economies Slow Sharply as Recession Risks Loom," *Wall Street Journal*, June 23, 2022, <https://www.wsj.com/articles/europes-economy-slows-sharply-as-recession-risks-grow-11655979342>.

commodities for national growth and development.⁴³ Weaker economic growth in the major markets such as Europe and the US, among others, significantly softens demand for goods and services from developing countries and emerging markets, hurting the manufacturers and exporters in the latter while widening their current account deficits.

⁴³ The World Bank, "As Global Growth, Developing Economies Face Risk of 'Hard Landing'," January 11, 2022, <https://www.worldbank.org/en/news/feature/2022/01/11/developing-economies-face-risk-of-hard-landing-as-global-growth-slows>.

3. Recommendations

The section highlights policy options for developing countries confronted with spill over challenges as well as policy recommendations for the global community as a whole:

3.1. Developing Countries & Emerging Markets

The developing countries and emerging market economies confronted with the spill over impacts of interest rate hikes in advanced nations can:

- **Preserve vital foreign reserves:** According to the IMF, countries can preserve their vital foreign reserves by reinstating currency swap lines with advanced economies, utilising IMF's precautionary lines, and adopting macro-prudential policies and capital-flow management measures.⁴⁴ *Currency swap lines* allow central banks to exchange their domestic currency for a certain amount of foreign currency and redistribute it locally to the domestic banks without utilising their own reserves.⁴⁵ *IMF's precautionary lines* are extended to countries with sound economic fundamentals but some remaining vulnerabilities to help them meet their liquidity needs.⁴⁶ *Macro-prudential policies* are aimed at ensuring the financial system's stability to avoid significant financial disruptions and involve measures such as requiring financial institutions to set aside extra capital to deal with a potential shock or an unforeseen event in the future.⁴⁷ *Capital flow management measures* are aimed at limiting capital flows and can include measures such as limits or outright bans on cross-border transactions.⁴⁸
- **Seek external debt relief:** Developing countries and emerging market economies can increasingly negotiate debt relief, including debt cancellation

⁴⁴ Gita Gopinath and Pierre-Olivier Gourinchas, "How Countries Should Respond to the Strong Dollar," International Monetary Fund, October 14, 2022, <https://www.imf.org/en/Blogs/Articles/2022/10/14/how-countries-should-respond-to-the-strong-dollar>.

⁴⁵ Rosalind Z. Wiggins, "Central Banks Use Swap Lines to Maintain the Flow of US Dollar," Yale School of Management, March 26, 2020, <https://som.yale.edu/blog/central-banks-use-swap-lines-to-maintain-the-flow-of-us-dollar>.

⁴⁶ International Monetary Fund, "The Precautionary and Liquidity Line (PLL)," <https://www.imf.org/en/About/Factsheets/Sheets/2023/Precautionary-Liquidity-Line-PLL>.

⁴⁷ European Central Bank, "A Quick Guide to Macro-Prudential Policies," <https://www.ecb.europa.eu/ecb/educational/explainers/tell-me-more/html/macprudentialpolicies.en.html>.

⁴⁸ Dong He, Annamaria Kokenyne Ivanics, Xavier Lavayssi re, Inutu Lukonga, Nadine Schwarz, Nobuyasu Sugimoto, and Jeanne Vierrier, *Capital Flow Management Measures in the Digital Age: Challenges of Crypto Assets*, report (Washington, D.C.: International Monetary Fund, 2022), <https://www.imf.org/en/Publications/fintech-notes/Issues/2022/05/09/Capital-Flow-Management-Measures-in-the-Digital-Age-516671>.

(partial or complete relief on the principal amount or/and interest); debt service suspension (partial or complete pausing of debt service); and debt rescheduling (payments – principal amount or/and interest – delayed to a later date), with creditors, or seek debt relief through multilateral programmes such as the Multilateral Debt Relief Initiative (MDRI).

Group of 77 (G-77) can be used as a forum by these countries to collectively champion the cause of debt relief provision and strengthening or renewal of multilateral programmes for debt relief, supported by the assertion that the global interest rate shock has had a collateral effect on the debt levels of the indebted countries and must be compensated.

- **Mobilise domestic financial resources:** Countries can mobilise domestic financial resources by improving tax revenue collection by broadening the tax base; improving the administration of taxes; simplifying tax structures; raising tobacco taxes, or introducing innovative tax types where possible; tackling the illicit financial flows; and rationalising government spending by improving budget management practices through proper planning and spending and a thorough audit; reforming subsidy provisions; holding broad-based inquiries into projects that have been utilising an excessive amount of foreign funding; reducing cost-escalation on ongoing projects, or using Public-Private Partnerships (PPPs) to finance development projects, among other measures.
- **Address other factors that inhibit domestic and foreign investment or stimulate capital flight:** Several other factors adversely influence the prospects of domestic and foreign investment and stimulate capital outflows, such as burdensome and complex regulations; weak intellectual and material property rights; information asymmetries; lack of policy continuity; or political instability. These factors need to be tackled head-on to prevent capital flight and reduction in investment due to interest rate changes.
- **Push regional forums/organisations to establish reserve pooling mechanisms:** Developing countries and emerging market economies can push regional forums/organisations to establish intra-regional reserve pooling arrangements, such as financial safety nets, to which all regional countries can contribute according to their financial capacities. Countries within the region should be able to access those foreign exchange reserves if confronted with a substantial economic crisis.

3.2. International Community

- **Facilitate the provision of debt relief to countries with high debt servicing burdens:** As an interest rate compensation tool, orderly and timely provision of debt relief to countries with a high stock of external debt should be facilitated. For instance, the Debt Service Suspension Initiative (DSSI) – a programme that was introduced in 2020 following the sharp increase in debt due to the COVID-19 Pandemic and led to the suspension of debt service payments from a number of countries⁴⁹ – can be revived. Similarly, the Global Common Framework was introduced in 2020 and allows eligible countries to request debt relief but none of the countries has been able to achieve debt restructuring under this programme yet.⁵⁰ In order to strengthen the programme, the timelines and steps in the Common Framework should be made clearer; private creditors encouraged to participate in the debt restructuring agreements; and eligibility for support revised and expanded.⁵¹
- **Extend technical assistance:** International institutions should offer support to developing countries and emerging market economies through policy advice to help them manage the effects of global interest rate shocks and implement sound monetary policies. This can be delivered in the form of direct consultation with the governments and central banks in those countries or the provision of resident specialists for a stipulated time period.
- **Mobilise resources for the Aid-for-Trade (AfT) Initiative:** Resources (Official Development Assistance or ODA) should be mobilised for the AfT initiative that aims to provide support to least-developed and developing countries to help them enhance their trading capacities.⁵² This can help in making developing countries' exports competitive in the international markets and counteract some of the adverse effects of interest rate changes on the export sector.

⁴⁹ The World Bank, "Debt Service Suspension Initiative," March 10, 2022, <https://www.worldbank.org/en/topic/debt/brief/debt-service-suspension-initiative-qas>.

⁵⁰ José Siaba Serrate, "How to Improve the G-20 Framework for Debt Treatment," DandC, January 1, 2023, <https://www.dandc.eu/en/article/all-countries-become-able-rise-challenges-current-polycrisis-debt-restructuring-needed>.

⁵¹ Masood Ahmed and Hannah Brown, "Fix the Common Framework for Debt before It Is Too Late," Centre for Global Development, January 18, 2022, <https://www.cgdev.org/blog/fix-common-framework-debt-it-too-late>.

⁵² Sheila Page, "The Potential Impact of the Aid for Trade Initiative," (paper, Intergovernmental Group of Twenty-Four, Washington, D.C., 2007), https://unctad.org/system/files/official-document/gdsmdpbg2420073_en.pdf.

- **Collectively deliberate on the strategy of interest rate hikes and its global repercussions:** Central banks in advanced economies need to coordinate to collectively deliberate on the cost-effectiveness and global repercussions of the strategy of interest rate hikes and agree to alter the current trajectory of interest rate changes (e.g., implement them gradually) in a coordinated manner.
- **Expand the provision of currency swap lines:** Central banks in advanced economies, particularly the US Fed, should increasingly extend currency swap lines (*read* preserve vital foreign reserves) to developing countries and emerging market economies to help them mitigate the spillover effect of interest rate hikes in advanced economies, such as the shortage of foreign currency or currency depreciation. These reciprocal currency arrangements were extended to developing-country central banks in response to the Asian financial crisis of 1997, the 9/11 terrorist attacks, the global financial crisis of 2007-08, and the COVID-19 Pandemic in 2020,⁵³ and played an important role in economic recovery. For example, the Federal Reserve currency swap lines in 2020 played a vital role in limiting currency depreciations and capital outflows from emerging markets and developing countries that were triggered by the disruptions caused by the Pandemic's initial phase.⁵⁴

⁵³ Rosalind Z. Wiggins, "Central Banks Use Swap Lines to Maintain the Flow of US Dollar," Yale School of Management, March 26, 2020, <https://som.yale.edu/blog/central-banks-use-swap-lines-to-maintain-the-flow-of-us-dollar>.

⁵⁴ Maurice Obstfeld, "Emerging-Market and Developing Economies Need Support amid Rising Interest Rates," Peterson Institute for International Economics, October 6, 2022, <https://www.piie.com/blogs/realtime-economics/emerging-market-and-developing-economies-need-support-amid-rising-interest>.

4. Conclusion

As the major advanced economies of the world focus on monetary policy tightening in a high-inflation environment, there is considerable speculation that this would affect both the short and long-term growth in developing countries and emerging market economies. In light of this, the present study has explored four major transmission channels to explain this effect. First, rising interest rates in advanced nations increase debt levels in the debtor countries, which can stifle their level of capital formation and productivity growth. Likewise, rising interest rates in advanced economies stimulate capital outflows from developing countries, which can adversely affect their capital formation and productivity growth. Third, interest rate hikes in advanced economies are followed by similar policy moves in developing countries, which can have a negative impact on the cost of domestic borrowing and investment, while also affecting productivity growth. Fourth, a lower appetite for foreign goods and services due to sluggish growth in the major economies can have an adverse impact on emerging markets and developing economies by dampening foreign demand for their manufactured goods and commodities. It is important to highlight that while the transmission channels could be similar, the degree of the spill over impact of global monetary shocks could be heterogeneous across the entire spectrum of developing countries and emerging markets depending on their vulnerability, i.e., a product of their existing fiscal space, growth rate, levels of debt, and refinancing risks.

In light of the aforementioned, policymakers in advanced economies, particularly the US, need to rethink the policy of aggressive interest rate hikes and deliberate on its short and long-term consequences for not only their domestic economies but also the global economy and the world's developing regions, which are already grappling with a series of challenges. It remains beyond question that Washington will have to take the first step given the centrality of the US dollar. On the other hand, policymakers in developing countries and emerging markets will have to steer a deliberated and well-calculated path and find a careful mix of policies for their domestic economies. Moreover, developing economies need to navigate the crisis as an opportunity and find ways to reduce their reliance on foreign capital and escape foreign dependency while also introducing structural changes in order to reduce adverse impacts in the face of external shocks.

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