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The Capital Flow Management in the Global Economy During the COVID-19 Pandemic and After the Russian Invasion of Ukraine – A Comparative Analysis

Abstract: This article analyses the evolution of capital flows management (CFM) measures in the global economy between 2017 and 2023, with particular attention to the COVID-19 pandemic and Russia's invasion of Ukraine. Drawing on data from the IMF's Annual Report on Exchange Arrangements and Exchange Restrictions (IMF AREAER), the study evaluates how different groups of economies: advanced, emerging market, developing and low-income developing countries, used tightening and easing measures to manage capital inflows and outflows. The findings suggest a shift in the use of CFMs: from predominantly temporary, counter-cyclical

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instruments of liquidity management during the pandemic to more preventive and, in some cases, security-linked measures in the post-2022 geopolitical environment.

The analysis shows that emerging and developing economies displayed the highest policy intensity, while advanced economies increasingly integrated CFMs with investment screening and financial-security policies. The findings are consistent with the IMF's revised Institutional View in that they suggest a broader and more preventive role for CFMs within the macrofinancial policy toolkit, bridging monetary, prudential, and, in some cases, security-related objectives. By linking empirical evidence from the pandemic and wartime periods, this article contributes to the ongoing debate on the balance between financial openness and resilience. It argues that, in the context of geoeconomic fragmentation, capital flows management is increasingly being used not only as a stabilisation mechanism but also, in some cases, as a strategic instrument linked to national and systemic resilience.

Keywords: capital flow management, capital control, macroprudential measures, COVID-19 pandemic, Russia's invasion of Ukraine, International Monetary Fund, Institutional View

JEL: E44, F32, F33, F36, F41, G15

1. Introduction

In 2020, the SARS-CoV-2 virus spread rapidly across the globe, bringing economic activity to an almost complete standstill. The global pandemic crisis severely disrupted the international movement of people, goods, services, and capital. In 2022, Russia's invasion of Ukraine once again affected the functioning of the world economy, causing new disturbances in capital flows between countries.

The purpose of this article is to assess the use of capital flow control measures in international capital movements during 2017–2023, with particular emphasis on the COVID-19 pandemic and Russia's invasion of Ukraine. The analysis draws on IMF AREAER data concerning the application of measures tightening and easing capital flows, separately presented for inflows and outflows, and for economies at different levels of development.

The International Monetary Fund (IMF) first adopted its *Institutional View on the Liberalization and Management of Capital Flows* in 2012 (International Monetary Fund, 2012), later revised in 2022 (International Monetary Fund, 2022). The framework aimed to ensure a balanced and consistent approach to IMF advice on the liberalisation of capital accounts and the management of international capital flows, especially in the aftermath of the 2008–2011 Global Financial

Crisis. The 2012 Institutional View recognised that while capital flows are desirable, bringing benefits such as financing investment, risk diversification, and efficiency gains, they can also lead to macroeconomic imbalances and financial instability.

Two global events significantly shaped the use of capital flow management measures between 2019 and 2023: the outbreak of the COVID-19 pandemic in 2020 and Russia's invasion of Ukraine in February 2022. The economic impact of the pandemic and associated lockdowns led to a deep global recession. It particularly weakened growth in emerging market and developing economies and in low-income developing countries, mainly due to rising risks associated with servicing external debt amid expansionary fiscal policies aimed at mitigating pandemic effects. Exchange rate volatility and external financing costs for enterprises increased sharply, and foreign direct investments declined substantially. The global recession outlook caused multinational corporations to suspend new projects, while supply chain disruptions in critical sectors caused inflation worldwide.

On 22 March 2022, the IMF published a *Review of the Institutional View on the Liberalization and Management of Capital Flows*, updating the 2012 framework (International Monetary Fund, 2022). The review concluded that the preventive use of capital flow management measures during capital inflow surges could be justified even in the absence of immediate shocks, and that capital flow measures could also be appropriate in situations where growing external debt posed systemic financial risks. The revised framework thus recognised that preventive capital flow controls may be warranted even without sudden surges or reversals, emphasising their role in safeguarding macro-financial stability.

2. Literature Review

The theoretical and empirical research of capital flow management (CFM) has evolved significantly since the Global Financial Crisis (GFC), reflecting changing perceptions of the risks and benefits associated with international capital mobility. The Institutional View (IV) adopted in 2012 by the International Monetary Fund (International Monetary Fund, 2012) and revised in 2022 (International Monetary Fund, 2022) remains the central conceptual framework guiding policy advice on the liberalisation and management of capital flows. This seminal document established that while capital flows can deliver substantial benefits in terms of investment, technology transfer, and economic growth, they can also generate macroeconomic volatility, asset price bubbles, and financial instability. Crucially, the 2012 Institutional View acknowledged that "full liberalization of capital flows is not an appropriate goal for all countries at all times" (International Monetary Fund, 2012: 4). Instead, it promoted a balanced and context-dependent approach, allowing for temporary and well-targeted capital flow management measures (CFMs) in response to surges and reversals of cross-border capital movements.

Following the 2012 framework, subsequent empirical research strengthened the analytical foundations for the use of CFMs. Studies by Ostry, Ghosh, and Korinek (2012) as well as Klein and Shambaugh (2015) argued that selective liberalisation can support macroeconomic stability if accompanied by credible monetary and fiscal policies. These authors emphasised that CFMs should complement, not substitute macroeconomic adjustments. Their findings were echoed in the 2022 IMF Review of the Institutional View (International Monetary Fund, 2022), which expanded the scope for preventive CFMs and CFM/MPMs (macroprudential measures that also limit capital flows). This revision explicitly recognised that risks to financial stability can emerge even in the absence of large capital inflows, for instance, due to rising external debt vulnerabilities (International Monetary Fund, 2022). This conceptual shift marked a transition from a reactive to a contingent-preventive paradigm, aligning CFMs with the broader Integrated Policy Framework (International Monetary Fund, 2022; Arakelyan, Gersl, Schindler, 2023). Empirical assessments of the effectiveness of CFMs and macroprudential measures (MPMs) have yielded mixed but increasingly nuanced results. Forbes, Fratzscher, and Straub (2015) provided one of the earliest large-sample evaluations of CFMs, demonstrating that such measures can temporarily reduce capital inflows and appreciation pressures but often lose effectiveness when maintained for prolonged periods. Arakelyan, Gersl, and Schindler (2023) construct a large and granular dataset on prudential and capital flow management measures covering 53 countries during 1996–2016. If credit booms are accompanied by capital flow surges, in addition to macroprudential tools, capital controls on money market instruments including cross-border interbank lending tend to contribute to reducing the likelihood of a credit bust. Binici, Das, and Pugacheva, (2023) uses improved taxonomies and databases to analyse the incidence and outcomes of nearly 500 CFMs across 49 economies between 2008 and 2021. These studies conclude that CFMs are the most effective when coordinated with macroprudential tools and exchange rate flexibility, and when embedded in transparent, rules-based policy frameworks. Complementary evidence from the Bank for International Settlements (Behn et al., 2025) suggests that the interaction between macroprudential and monetary tightening shapes credit transmission, underscoring the need for policy calibration when external financial conditions become volatile.

The outbreak of the COVID-19 pandemic in 2020 provided an unprecedented natural experiment for assessing the role of CFMs during systemic global shocks. The IMF's Global Financial Stability Report – GFSR (International Monetary Fund, 2020–2023) and OECD (Organisation for Economic Co-operation and Development, 2020) documented the sharpest sudden stops in portfolio flows since the GFC, followed by widespread foreign exchange interventions and regulatory relaxations aimed at preserving foreign currency liquidity in emerging markets and developing economies (EMDEs). During this period, CFMs were used mainly to mitigate disorderly capital outflows, stabilise exchange rates, and maintain national liquidity. Many economies implemented temporary restrictions on cross-border transfers, relaxed reserve requirements, or introduced limits on foreign exchange purchases. These interventions were largely reversed in 2021 as global conditions stabilised, confirming their counter-cyclical and crisis-containment role (International Monetary Fund, 2020–2023:2021; National Bank of Poland, 2020–2023).

In contrast, the Russian invasion of Ukraine in February 2022 triggered a different pattern of capital control responses, characterised by structural and security-driven measures rather than short term liquidity interventions. The IMF (International Monetary Fund, 2023) and UNCTAD (United Nations Conference on Trade and Development, 2022) report that the war and ensuing sanctions caused a new wave of financial fragmentation, altering the geography of cross-border intermediation and the composition of capital flows. Russia imposed sweeping capital controls, including mandatory conversion of export revenues, restrictions on dividend payments, and limits on transactions with 'unfriendly' countries, while Ukraine temporarily re-pegged its currency and restricted foreign exchange transactions to preserve reserves. These cases illustrate the dual use of CFMs: as instruments of financial stability and as tools of economic statecraft under conditions of geopolitical conflict (International Monetary Fund, 2023; Benchimol, Palumbo, 2024). Apart from these crisis episodes, recent literature highlights the structural evolution of capital flow management in an increasingly fragmented global financial architecture. The concept of geoeconomic fragmentation, defined as persistent policy-induced barriers to trade, finance, and technology, has emerged as a dominant theme in the post-2022 debate (Okuda, Tsuruga, 2024). The Authors of Working Paper on Geoeconomic Fragmentation and International Risk-Sharing (Okuda, Tsuruga, 2024) models how reduced financial integration constrains international risk-sharing, amplifying country-specific shocks and increasing volatility of gross flows. Regional studies for Europe and Asia (ASEAN+3) emphasise that fragmentation heightens financing premia and reinforces the trend toward regionalisation of capital markets. This shift is particularly relevant for EMDEs and LIDCs, which face greater vulnerability to external shocks and debt distress (OECD, 2024; Behn et al., 2025). At the same time, new research investigates digitalisation, payment frictions, and capital mobility in the digital era. As cross-border payment systems become increasingly segmented by sanctions and digital currencies, capital mobility is influenced by new forms of transaction costs and jurisdictional barriers (Reuter, 2025). IMF (2022) and Behn et al. (2025) highlight that these 'payment frictions' can alter the transmission of both CFMs and monetary policy, reinforcing the importance of integrated, pre-emptive policy frameworks. This line of inquiry expands the traditional understanding of CFMs beyond physical capital movements to include regulatory and technological dimensions of cross-border finance.

The overview of literature provides not only a conceptual background but also a framework for interpreting the empirical material used in this article. First, the IMF's Institutional View and the work of Ostry, Ghosh, and Korinek (2012) suggest that CFMs should be understood as contingent instruments that complement rather than replace macroeconomic adjustment, especially under conditions of heightened external vulnerability. Second, Klein and Shambaugh's (2015) emphasis on context-dependent capital-account management implies that the form and intensity of CFM use are likely to differ across country groups depending on their institutional capacity, exchange-rate regimes, and exposure to external shocks. Third, the more recent literature associated with the IMF's 2022 revision and the debate on geoeconomic fragmentation suggests that the use of CFMs may increasingly extend beyond short-term crisis management toward more preventive and security-related policy purposes.

Accordingly, the present article does not treat the literature merely as a general legitimising backdrop. Instead, it serves to guide a descriptive-comparative reading of AREAER-based evidence across two shock episodes. In particular, the analysis is organised around three analytical expectations: first, that the COVID-19 period would be associated primarily with temporary and liquidity-oriented CFM responses; second, that the post-2022 period would display a greater incidence of preventive, structural, or security-linked measures; and third, that the intensity and configuration of such measures would vary systematically across AEs, EMDEs, and LIDCs.

3. Research Gap

Although the literature on capital flow management measures (CFMs) and macroprudential measures (MPMs) has expanded substantially over the past decade, two limitations remain relevant for the present article. First, much of the existing research focuses either on the effectiveness of CFMs in normal times or in the case of single-crisis episodes, such as the Global Financial Crisis or the COVID-19 pandemic, without comparing how these measures evolved across consecutive shocks of different origin. Second, although the IMF's AREAER database provides rich information on regulatory changes, it has been used less frequently to trace broad cross-country patterns in the reported use of CFMs across different groups of economies over time.

The article addresses this gap in a more modest and clearly delimited way than a country-level case-study design would allow. It offers a descriptive-comparative assessment of reported CFM measures in 2017–2023, covering both the COVID-19 pandemic and the period following Russia's invasion of Ukraine. Using AREAER data, the paper classifies measures by type (tightening, easing, neutral) and direction (inflow, outflow), and compares their incidence across advanced economies (AEs), emerging market and developing economies (EMDEs), and low-income developing countries (LIDCs).

The contribution of the article is therefore not to test the causal effectiveness of CFMs or to reconstruct national policy regimes in detail, but to examine whether broad patterns in the reported use of CFMs across the two shock episodes are consistent with the main analytical expectations derived from the literature. In this sense, the paper uses the IMF's Institutional View as its principal interpretative framework while remaining within the limits of a descriptive-comparative research design.

The IMF's Institutional View (International Monetary Fund, 2012) and its 2022 revision have laid the conceptual foundation for the preventive and rules-based application of CFMs. However, most empirical studies (Forbes, Fratzscher, Straub, 2015; Arakelyan, Gersl, Schindlerm 2023; Binici, Das, Pugacheva, 2024) analyse their effectiveness either in normal times or during financial crises, rather than in the hybrid environment combining financial volatility and geopolitical fragmentation. Moreover, while IMF databases such as the Annual Report on Exchange Arrangements and Exchange Restrictions (AREAER) provide valuable cross-country information, few studies use them to systematically compare the evolution of CFM policies across multiple shocks and economic groups (advanced, emerging, and low-income economies).

This article seeks to offer a descriptive analysis of capital flow management measures between 2017 and 2023, covering both the COVID-19 pandemic and the economic effects of Russia's invasion of Ukraine. Using AREAER data, the study classifies CFMs according to their type (tightening, easing, or neutral), direction (inflow or outflow), and macroeconomic context. It also evaluates policy responses by country group, enabling a cross-sectional assessment of policy heterogeneity.

By bridging theoretical insights from the IMF's Institutional View framework with empirical data on recent crises, this research contributes to ongoing debates. It tries to show evidence on the temporal transformation of CFMs from short term stabilisation tools during the pandemic to prevented instruments in the post-2022 period. It seeks to make a point to a convergence between CFMs and macroprudential measures, emphasising their dual role in ensuring both financial stability and national economic security. It also attempts to identify emerging policy trends including the use of preventive CFMs in response to external debt risks and the rise of capital controls linked to strategic sectors and geopolitical tensions. In doing so, the article adds descriptive empirical evidence to the growing literature on the macro financial policy toolkit in an era of recurrent global shocks and geoeconomic fragmentation. It positions capital flow management not merely as a temporary defensive mechanism, but as a permanent, flexible component of global financial architect, consistent with the evolving role envisioned in the IMF's revised Institutional View (International Monetary Fund, 2022).

4. Methodology and Data Sources

This study adopts a descriptive-comparative and data-driven methodological approach to examine the evolution of capital flows management (CFM) measures in the global economy between 2017 and 2023. The analysis combines descriptive statistics, policy classification, and cross-country comparison to assess how different groups of economies, advanced economies (AEs), emerging market and developing economies (EMDEs), and low-income developing countries (LIDCs), used reported capital flow measures in response to the COVID-19 pandemic and Russia's invasion of Ukraine.

Complementary data sources were employed to provide macroeconomic and institutional context. The IMF's Global Financial Stability Reports (International Monetary Fund, 2020–2023) were used to identify major global financial shocks, shifts in liquidity conditions, and country-specific vulnerabilities. The United Nations Conference on Trade and Development (UNCTAD) World Investment Report (United Nations Conference on Trade and Development, 2022) served to contextualise trends in foreign direct investment (FDI) flows, while the National Bank of Poland (NBP) Financial Stability Reports (National Bank of Poland, 2020–2023) were used to illustrate national-level financial responses and institutional adaptations.

The dataset covers the period 2017–2023 in order to capture two distinct global shock phases: the pandemic (2020–2021) and the geopolitical shock following Russia's invasion of Ukraine (2022–2023), while also including the pre-pandemic years (2017–2019) as a benchmark. This periodisation allows the article to compare broad patterns in the reported use of CFMs across different phases of global instability.

The methodological design follows a three-step procedure. First, CFM policy changes were extracted from the AREAER dataset for all reporting countries and coded according to type (tightening, easing, neutral) and direction (inflow, outflow). Second, measures were aggregated by country group using the IMF's World Economic Outlook classification to capture systematic differences in policy responses among AEs, EMDEs, and LIDCs. Third, the results were interpreted in comparative terms with reference to timing, direction, and broad policy orientation, while using complementary macroeconomic and institutional information only to contextualise selected patterns visible in the AREAER-based evidence.

The analytical framework is informed by the IMF's 2022 Institutional View, which recognises CFMs and macroprudential measures (MPMs) as components of the broader macrofinancial policy toolkit. Accordingly, the study interprets CFMs not as isolated interventions, but as measures that may form part of a broader policy mix under conditions of elevated global uncertainty. The emphasis on cross-sectional comparison and temporal sequencing enables the identification of broad patterns in policy evolution, but it does not by itself permit strong causal inference regarding policy motivations or effectiveness. Finally, data validation was conducted by cross-checking AREAER entries with IMF country reports, Global Financial Stability Reports, and, where available, national central bank publications. This triangulation enhances the reliability of the dataset and ensures that the analysis reflects officially reported and verifiable policy measures. Although the study primarily relies on secondary data, the structured classification and comparative design allow for a systematic descriptive overview of how reported capital flows management measures evolved during an era of overlapping global shocks. The article does not aim to provide formal hypothesis testing or a systematic country-by-country case-study analysis; rather, it uses the literature to formulate analytical expectations and to discipline the interpretation of AREAER-based evidence.

5. Typology and Significance of Capital Flow Control Instruments in the Global Economy

The inflow of capital into an economy can bring substantial benefits, contributing to higher consumption, investment financing, risk diversification, and more efficient resource allocation. Capital inflows may also promote economic growth by enabling the transfer of technology and know-how and the development of the financial system. However, increased capital inflows also carry risks such as currency appreciation, overheating of the economy, and the potential loss of financial stability through excessive credit expansion, balance sheet mismatches, or asset price bubbles. When the direction of flows reverses, sudden capital outflows can trigger

financial crises and deep recessions. As emphasised by Ostry, Ghosh, and Korinek (2012), capital flow control measures can be justified under conditions of heightened global macroeconomic risk. Similarly, Klein and Shambaugh (2015) argue for a selective and context-dependent approach to capital account liberalisation. Responding to these challenges, the International Monetary Fund (IMF) introduced in 2012 the concept of capital flow management measures (CFMs) and, in 2022, complemented it with macroprudential measures (MPMs). The latter are considered macroprudential tools (CFM/MPMs), specifying the circumstances under which they can be applied. Importantly, CFMs and MPMs are not intended to replace necessary macroeconomic adjustments but to complement them when market volatility threatens financial stability. Capital flow management measures are instruments used to regulate international capital movements. They include measures that tighten or ease the inflow or outflow of capital to and from an economy. Such actions are typically taken in response to major events such as the outbreak of the COVID-19 pandemic in 2020 or Russia's invasion of Ukraine in 2022. Macroprudential measures (MPMs), on the other hand, aim primarily to mitigate systemic financial risk and prevent uncontrolled or abrupt capital movements. Instruments that serve both functions are referred to as CFM/MPM measures. Examples of CFMs tightening capital inflows include for instance limits on the purchase of domestic securities (bonds, equities) by non-residents, prohibitions on foreign investment in specific sectors, and higher transaction taxes on purchases made by nonresidents. Examples of MPMs targeting capital outflows include limits on lending by commercial banks, higher reserve requirements for foreign currency liabilities compared to domestic liabilities, and minimum capital adequacy ratios for non-bank financial institutions. Hybrid CFM/MPM measures include limits on cross-border lending by banks to foreign entities and differentiated reserve requirements on liabilities to non-residents.

Despite the existence of extensive theoretical and empirical literature, a research gap remains in comparative analyses of CFM practices covering both the global pandemic (COVID-19) and the geopolitical crisis triggered by Russia's invasion of Ukraine. Most studies focus either on a single type of shock or on broader time horizons without examining the nature, duration, and policy objectives of measures across these two distinct crises. This article seeks to fill that gap by analysing AREAER data for 2017–2023, classifying CFMs into easing, neutral, and tightening categories, and comparing the motivations and outcomes of these policies across advanced, emerging, and low-income economies.

Based on data from the *Annual Report on Exchange Arrangements and Exchange Restrictions* (International Monetary Fund, 2017–2023), a substantial increase in the number of capital flow management instruments can be observed during the period 2020–2022. Figure 1 presents data on the capital flow control measures implemented worldwide between 2017 and 2023.[1]

1 The Annual Report on Exchange Arrangements and Exchange Restrictions 2023 (AREAER) provides a comprehensive inventory of exchange arrangements, exchange and trade systems, and capital control measures across all IMF member countries. The AREAER documents restrictions on current international payments and transfers, as well as multiple currency practices (MCPs) that fall under the IMF's jurisdiction pursuant to Article VIII, Sections 2(a) and 3, in addition to those maintained under Article XIV of the IMF's Articles of Agreement. The report also contains detailed information on the functioning of foreign exchange markets, international trade controls, capital transaction regulations, and measures implemented within the financial sector, including prudential instruments.

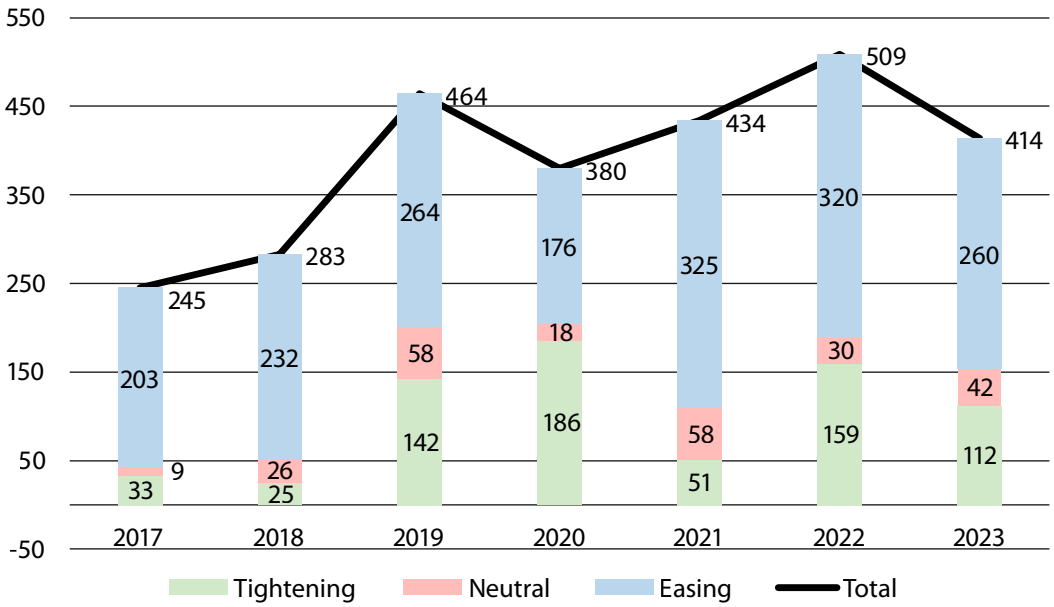


Figure 1. Number of capital flow management measures implemented in the global economy over the period 2017–2023

Source: Author's calculations based on IMF AREAER (International Monetary Fund, 2017–2023).

The data indicate that in 2019 the number of tightening measures increased to 142 (from 25 in 2018). By 2020, the number of restrictions reached 186, marking nearly a threefold year-on-year increase in measures limiting inflows and more than a twofold increase in those constraining outflows. A closer examination of the patterns illustrated in Figure 1 indicates that in 2021, as global pandemic-related restrictions were gradually lifted, the number of tightening measures declined markedly to 51 (from 186 in 2020), whereas the number of loosening measures increased to 325 (from 176 in 2020). Neutral measures reflect the continuation of previously implemented policies, regardless of their restrictive or expansionary effects on capital flows.

Despite the easing of restrictions, uncertainty related to renewed COVID-19 outbreaks and uneven progress in vaccination continued to affect global financial markets, particularly in the second half of 2021. Inflationary pressures, driven largely by elevated energy prices, combined with persistent supply chain disruptions and heightened macroeconomic uncertainty, resulted in substantial currency depreciations across emerging market and developing economies, including low-income countries. Significant depreciations were observed in Chile, Ethiopia, Haiti, Laos, Pakistan, Turkey, and Zimbabwe, with similar pressures arising in Egypt, Ghana, and Sri Lanka in early 2022.

Moreover, the AREAER reports on foreign exchange measures imposed by member states exclusively for reasons of national and/or international security, including those notified to the IMF in accordance with the relevant Executive Board decisions. The 2023 edition of the AREAER, consistent with previous reports, provides an overview of exchange and trade systems as of at least 30 June 2023 for all member countries. Approximately 18 per cent of members' reporting periods end in the third quarter of 2023, with a similar proportion concluding in the fourth quarter of 2023.

The macroeconomic shocks of 2021–2022 had important implications for the behaviour and direction of international capital flows. Uncertainty regarding the pandemic's evolution, the emergence of new variants, and delays in the reopening of major economies contributed to a slowdown in cross-border capital movements. The global spread of the Omicron variant led several countries to reinstate capital flow management (CFM) measures. Concurrently, repeated lockdowns in China under the Zero-COVID policy, coupled with a significant slowdown in the property sector, contributed to a deceleration of Chinese GDP growth. Given China's central role in global production networks, these developments generated notable spillovers to international trade and capital flows. Elevated energy prices and supply bottlenecks further intensified global inflation in 2022, prompting a rapid and synchronised tightening of monetary policy across both advanced and emerging economies.

A second major shock shaping the use of CFMs was Russia's invasion of Ukraine on 24 February 2022 (International Monetary Fund, 2022). The invasion triggered a renewed surge in global energy and food prices, contributing to a persistent rise in living costs and exacerbating macroeconomic stress across many economies. As a result, global GDP growth declined sharply from 6.5% in 2021 to 3.5% in 2022. Following the invasion, EMDEs experienced substantial capital outflows (Figure 5), tightening external financing conditions for sovereigns and commodity-importing economies and exerting downward pressure on exchange rates. The acceleration of global monetary tightening in 2022, particularly in the United States, led to a marked appreciation of the US dollar. This development amplified inflationary pressures in many countries and heightened debt sustainability risks in low-income developing economies with large external financing needs.

In the case of advanced economies, significant fluctuations in capital flows were observed between 2017 and 2023. Based on the data presented in Figures 2 and 3, two distinct trends can be identified: an upward trend in capital movements between 2018 and 2021, followed by a sharp decline during 2022–2023. Between 2018 and 2021, total capital inflows to advanced economies increased markedly, both in terms of inflows and outflows. Inflows rose from approximately USD 2.4 trillion in 2018 to around USD 7 trillion in 2021. Growth occurred across all three categories of capital flows: other investment, portfolio investment, and foreign direct investments (FDI). Portfolio investments showed the largest increase, tripling from USD 0.9 trillion to USD 2.7 trillion, while other investment (loans, credits, deposits) more than doubled from USD 1.4 trillion to USD 3.2 trillion. On the outflow side, portfolio investment from AEs reached USD 3 trillion in 2021, compared with USD 1.3 trillion in 2018. Interestingly, unlike in EMDEs and LIDCs, FDI outflows from AEs increased significantly, from USD 0.1 trillion to USD 1.8 trillion, supported by improved macroeconomic indicators and extensive fiscal stimulus packages, as well as faster vaccine rollout.

Figure 2 presents Portfolio, FDI, Other, and Reserve flows from 2017 to 2023.

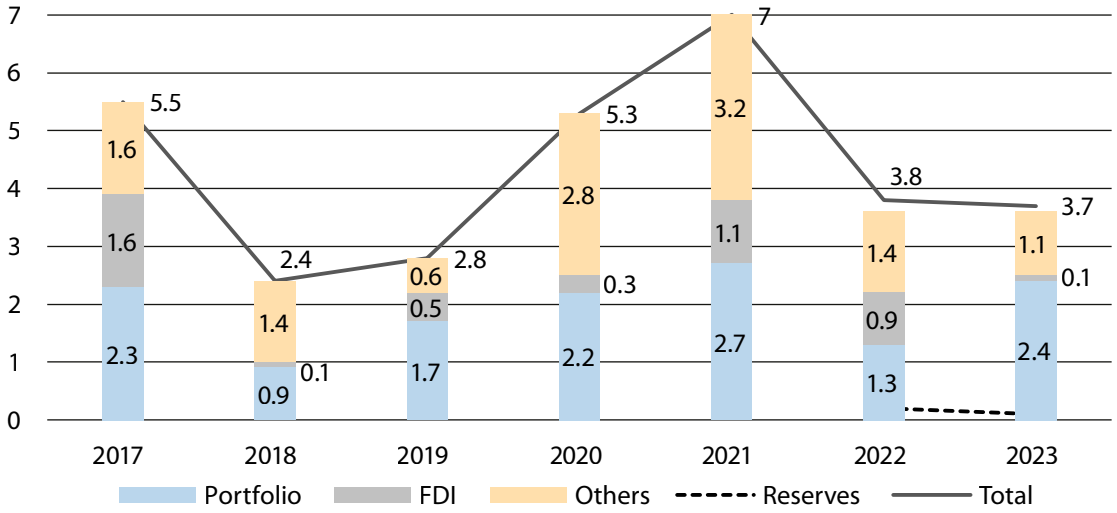


Figure 2. Gross capital inflows to AEs, 2017–2023 (USD trillion)
Source: as in Figure 1.

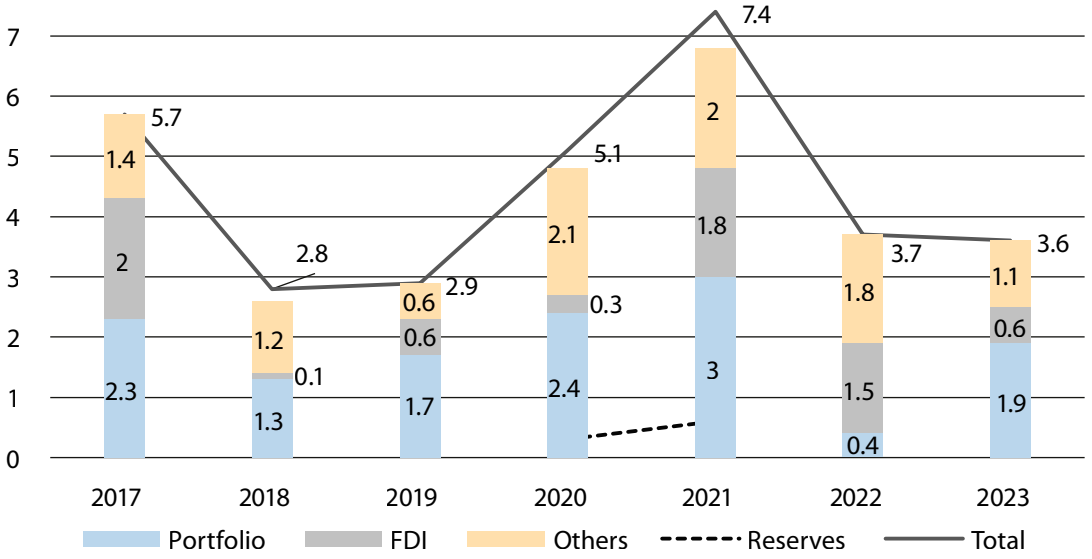


Figure 3. Gross capital outflows from AEs, 2017–2023 (USD trillion)
Source: as in Figure 1.

In AEs, in contrast, the volume of international capital flows declined sharply during 2022–2023. Gross inflows decreased from USD 7 trillion in 2022 to USD 3.7 trillion in 2023, while outflows fell from USD 7.4 trillion to approximately USD 3.6 trillion (reduction of about 50 percent). Both inflow and outflow activity was largely concentrated in portfolio investment, reflecting high market volatility. Russia's invasion of Ukraine in early 2022 created renewed uncertainty about global growth prospects, disrupted supply chains, and increased risk aversion across global financial markets.

In emerging market and developing economies and in low-income developing countries, international capital flows also rose sharply, both in inflows and outflows (Figures 4 and 5). The recovery in portfolio inflows in 2021 was uneven - some countries experienced strong inflows, while others faced persistent outflows. The moderate rebound in FDI to developing economies reflected ongoing uncertainty over vaccine access, new virus variants, and delayed reopening of several economic sectors. Other investment flows such as loans, deposits, and trade credits – also expanded notably. A key change in 2021 was the rise in gross foreign reserve outflows, which reached approximately USD 0.5 trillion, compared with USD 0.1 trillion in 2020. The use of foreign exchange reserves in EMDEs and LIDCs aimed to prevent abrupt capital flow, defend exchange rates, and avoid financial and economic crises.

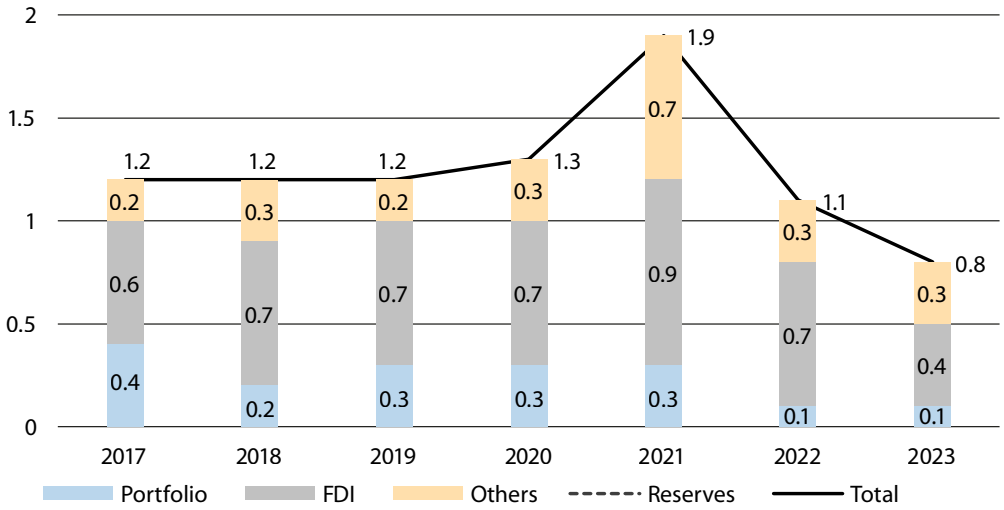


Figure 4. Gross capital inflows to EMDEs and LIDCs, 2017–2023 (USD trillion)
Source: author's calculations based on IMF AREAER (International Monetary Fund, 2017–2023).

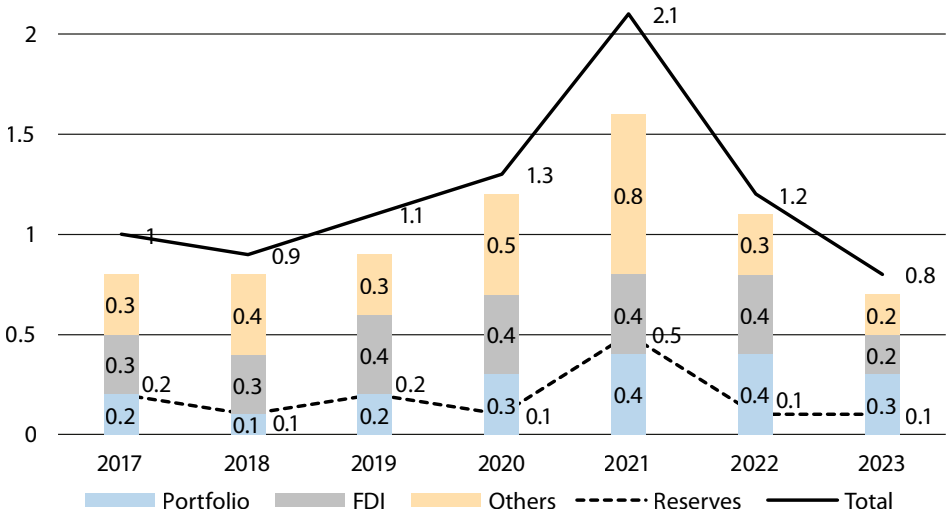


Figure 5. Gross capital outflows from EMDEs and LIDCs, 2017–2023 (USD trillion)
Source: as in Figure 4.

As we can see in Figures 4 and 5, the gross inflow of capital to EMDEs and LIDCs reached USD 1.9 trillion, mainly driven by FDI (USD 0.9 trillion) and other investment flows (USD 0.7 trillion). The increase in FDI from developed to emerging markets was motivated by expectations of a global recovery in investment activity following the pandemic (United Nations Conference on Trade and Development, 2022), as well as by rising external credit demand in developing economies (National Bank of Poland, 2022). The accumulation and subsequent drawdown of foreign exchange reserves, especially in EMDEs, played a stabilising role. Many developing countries used reserves strategically to contain capital outflows and protect exchange rate stability during the peak of the COVID-19 crisis in 2021.

In summary, capital flows during 2017–2023 reflected the dual impact of global shocks. The pandemic period was dominated by liquidity-driven and precautionary measures, while the war in Ukraine introduced structural and geopolitical drivers of capital control. Together, these developments reinforced the growing role of Capital Flow Management measures (CFMs) as active instruments of macrofinancial policy coordination and crisis prevention in the global economy.

6. Capital Flow Management Measures Introduced in Connection with COVID-19 and Russia's Invasion of Ukraine

Between 2020 and 2023, the global economy was subjected to two major systemic shocks that fundamentally altered the landscape of international financial flows: the outbreak of the COVID-19 pandemic and Russia's invasion of Ukraine. Both events generated an exceptionally high degree of uncertainty, disrupted international production and supply chains, heightened volatility in foreign exchange markets, and triggered substantial capital outflows from emerging market economies. Against this backdrop, many governments resorted to a broad set of Capital Flow Management Measures (CFMs) and Macroprudential Measures (MPMs), implemented either on a temporary basis or as part of more structural regulatory adjustments. These measures sought to safeguard financial stability, preserve banking-sector liquidity, contain capital flow, stabilise exchange rates and foreign-reserve positions, and prevent excessive speculative inflows into safe-haven markets (International Monetary Fund, 2020–2023; National Bank of Poland, 2020–2023).

The use of capital controls increased significantly throughout the period, reflecting shifting macroeconomic conditions and evolving policy priorities (Table 1). The number of CFMs peaked in 2022, when 509 measures were introduced (up from 434 in 2021 and representing the highest level since 2017). Of these (520 measures), 320 were easing actions and 159 were tightening measures. The expansion of CFMs in 2020 was primarily driven by the abrupt collapse in global capital flows following the onset of the pandemic. With investors rapidly withdrawing from emerging markets, many countries faced acute balance-of-payments pressures, prompting swift

and often aggressive policy responses.[2] Although many of the measures introduced in 2020 were temporary and subsequently relaxed during 2021, the experience underscored the importance of maintaining a regulatory toolkit capable of managing episodes of heightened capital flow volatility. Importantly, the number of economies implementing such measures also rose. 27 advanced economies, 19 emerging and developing economies, and two low-income developing countries adopted tightening measures in response to the deteriorating external environment.

AREAER data reveal clear differences in the distribution of actions across country groups. During 2020–2023, the majority of capital transaction measures were introduced by emerging market and developing economies (EMDEs), followed by advanced economies (AEs) and low-income developing countries (LIDCs). Average annual counts for 2019–2023 were as follows: EMDEs: 10.3, 8.7, 15.3, 20.2, 19.2; AEs: 12.8, 2.1, 3.4, 2.7, 2.6; and LIDCs: 7.8, 2.0, 3.0, 4.3, 4.0. These figures point to a marked increase in regulatory activity among EMDEs, reflecting their greater vulnerability to external shocks and their more frequent use of CFMs as part of crisis-response frameworks.[3]

In 2021, of the 434 changes introduced, 51 were tightening measures, 325 were easing measures, and 58 were neutral or unspecified.[4] As the pandemic subsided, the number of tightening actions in 2021 declined markedly compared with 2020 for both inflows and outflows by more than a factor of three in each category, primarily due to the reduced use of COVID-19-related tightening measures. In 2021, changes in capital transactions were no longer dominated by pandemic-related instruments. 11 of the 51 tightening measures and 111 of the 325 easing measures were adopted in response to COVID-19, while the remaining capital flow restrictions stemmed from other factors.

The year 2022 was a turning point in terms of the number of capital flow management measures implemented worldwide. Of the 509 capital control changes introduced in 2022, 159 constituted tightening actions, 320 were easing measures (including 116 reported by Ecuador), and 30 were neutral or unspecified.[5] In 2022, there was a sharp increase in tightening mea-

2 For example, Argentina, Sri Lanka, Jamaica, and the Bahamas implemented tighter controls on capital outflows, whereas China, India, and Brazil introduced easing measures aimed at facilitating capital inflows and encouraging investment.

3 In this context, restrictions on the acquisition of domestic assets by non-residents (including limitations on the repatriation of such assets) are classified as inflow controls, whereas restrictions on the acquisition of foreign assets by residents (including repatriation constraints) are classified as outflow controls.

4 The 18 neutral changes recorded in 2020 and the 55 in 2021 cannot be classified as either easing or tightening measures. Most of them were either non-discriminatory with respect to residency or currency, or consisted of regulatory adjustments that were neither explicitly liberalising nor restrictive. To avoid double-counting individual measures, pandemic-related extensions were, where possible, categorised as neutral (a substantial share of which can be attributed to Sri Lanka, with 13 and 36 neutral changes in 2020 and 2021, respectively).

5 The 30 neutral changes introduced in 2022 and the 42 implemented in 2023 cannot be classified as either easing or tightening measures. Most of these actions were either non-discriminatory with respect to residency or currency, or involved regulatory amendments that did not clearly specify whether they constituted liberalisation or tightening. To avoid counting the same measure more than once, measures that were extensions of existing regulations were, where possible, categorised as neutral (for example, those related to the pandemic).

sures compared with 2021, encompassing almost a threefold rise in outflow-tightening actions and more than a threefold increase in inflow-tightening measures.[6] This development was driven primarily by Russia's invasion of Ukraine on 24 February 2022 (Table 1).

Table 1. Capital Flow Management Measures Introduced in Connection with COVID-19 and Russia's Invasion of Ukraine (2020–2023)

	2020		2021		2022			2023	
Capital Flow Measures	COVID-19	Others	COVID-19	Others	COVID-19	R-U	Others	R-U	Others
Easing	30	146	111	214	3	31	286	5	255
Neutral	13	5	43	15	19	1	10	4	38
Tightening	161	25	11	40	4	52	103	7	105
Total	204	176	165	269	26	84	399	16	398
Overall		380		434			509		414

Note: COVID-19 – measures explicitly linked to the COVID-19 pandemic. R-U – measures associated with Russia's invasion of Ukraine. Totals represent the sum of easing, neutral, and tightening measures in each category. Overall values reflect annual totals across all classifications. The categorisation of measures follows the IMF's *Annual Report on Exchange Arrangements and Exchange Restrictions* (AREAER) methodology. Each regulatory change is recorded as a distinct observation, even when countries modify multiple aspects of a single instrument. To avoid double-counting, extended or repeated measures particularly those linked to the COVID-19 pandemic are classified as neutral where the original regulatory intent cannot be clearly identified as easing or tightening. The 'R-U' category captures measures explicitly linked to Russia's invasion of Ukraine; however, the true extent of such actions may be understated, as not all jurisdictions label geopolitical responses explicitly. Similarly, COVID-19 measures may be under-reported if authorities do not specify the pandemic as their direct motivation. Consequently, the data should be interpreted with caution, particularly in cross-category comparisons. Ecuador reported 116 easing measures, as a modification of its tax regime is recorded across multiple categories in the AREAER, thereby increasing the number of entries attributed to the country.

Source: Author's compilation based on IMF AREAER (International Monetary Fund, 2017–2023).

An analysis of statistical data contained in Table 1 reveals pronounced heterogeneity in both the intensity and direction of capital flow management measures (CFMs) adopted over the 2020–2023 period. The pattern is broadly consistent with empirical findings in the literature on crisis-induced regulation (e.g., the IMF's AREAER series; Ghosh, Ostry, Qureshi, 2017; Forbes, Warnock, 2020). In 2020, widely characterised as a global *risk-off* episode triggered by the COVID-19 shock, policy interventions were overwhelmingly restrictive, with 161 tightening measures implemented. These actions reflect what the IMF categorises as *emergency CFMs*, deployed to contain acute balance-of-payments pressures, stabilise exchange rates, and mitigate the risk of sudden-stop dynamics in an environment of heightened global uncertainty. In contrast, 2021 saw a marked reorientation towards regulatory easing, with

6 In this context, restrictions on the acquisition of domestic assets by non-residents (including limitations on the repatriation of such assets) are referred to as 'capital inflow controls;' restrictions on the acquisition of foreign assets by residents (including limitations on the repatriation of those assets) are referred to as 'capital outflow controls.'

111 liberalising measures (only 11 tightening) introduced as macrofinancial conditions normalised and economies began to reopen. This shift mirrors the broader post-pandemic recovery in cross-border capital movements noted by the BIS and OECD, as jurisdictions gradually withdrew the temporary constraints imposed during the initial phase of the crisis. The transition also aligns with the literature documenting the countercyclical nature of CFMs during global financial stress episodes.

By 2022, the number of measures explicitly associated with the pandemic had diminished sharply. The remaining interventions were primarily technical adjustments, either the unwinding of pre-existing restrictions or the extension of time-bound provisions. However, the broader regulatory landscape in 2022 exhibited two notable structural shifts. First, the total number of interventions increased relative to 2021, and the number of reporting jurisdictions expanded, driven in large part by the growing involvement of advanced economies, an evolution consistent with the recent literature highlighting the diffusion of CFM usage beyond emerging markets (e.g., Bank for International Settlements, 2023).

Second, geopolitical tensions emerged as a salient driver of capital-account policy. Almost one third of all tightening actions implemented in 2022 (52 out of 159) were directly linked to Russia's invasion of Ukraine. These measures form part of a rapidly expanding category of *geopolitically motivated CFMs*, adopted to curb capital outflows, protect strategically sensitive domestic assets, and reinforce compliance with sanctions and counter-sanctions regimes. Canada, Germany and Japan, among others, introduced targeted outflow controls, illustrating the growing intersection between capital-account regulation and the literature on geo-financial fragmentation.

Although the total number of easing measures remained broadly similar to 2021, their composition shifted in a manner consistent with the IMF's Integrated Policy Framework (IPF). Measures facilitating capital inflows increased, likely reflecting policymakers' desire to sustain external financing and support domestic financial deepening, whereas easing measures related to capital outflows declined. This asymmetric adjustment suggests heightened precautionary behaviour on the part of authorities, consistent with empirical work showing that outward liberalisation becomes more constrained during periods of geopolitical uncertainty and tightening global financial conditions.

In 2022, Russia introduced a series of far-reaching capital flow controls, including a temporary prohibition on the sale of foreign currency cash and a ban on the purchase of foreign exchange on the domestic market by legal entities originating from 'unfriendly' jurisdictions, namely those that had imposed sanctions on Russia. Following the imposition of international financial sanctions, the authorities enacted an extensive package of tightening measures. These included mandatory conversion requirements obliging exporters to surrender a share of their foreign currency earnings, a prohibition on dividend payments and profit transfers related to foreign direct investment, as well as restrictions on the servicing of external debt denominated in foreign currencies. Collectively, these measures were intended to stem capital outflows and stabilise the rouble in the aftermath of Russia's exclusion from the SWIFT financial messaging system.

During the same period, Russia undertook selective easing actions concerning the sale of foreign exchange, although such liberalisation was restricted to currencies acquired after 9 April 2022.[7] Banks were also permitted to sell foreign currency to domestic residents, with the notable exception of US dollars and euros, unless these banknotes had been purchased after the same date. In addition, price restrictions were imposed on the sale and purchase of foreign currency by nonresident banks originating from 'unfriendly' countries, further tightening the regulatory perimeter surrounding cross-border monetary operations.

In February 2022, following Russia's invasion of the country and after several years of gradual capital-account liberalisation, Ukraine introduced a series of tightening measures on its foreign exchange market. These measures included, among others, the pegging of the hryvnia to the US dollar and stringent restrictions on foreign currency purchase transactions conducted by banks, non-bank financial institutions and postal service providers, permitting them only to purchase foreign currency from clients (the sale of foreign currency in cash to customers was prohibited).

The National Bank of Ukraine (NBU) subsequently eased certain cash related foreign exchange restrictions within specified quantitative limits on the spot market in April 2022 and authorised financial institutions to sell foreign currency to retail clients, again subject to defined thresholds. In summary, Table 2 presents a comparative assessment of capital flow management instruments across multiple criteria during the COVID-19 pandemic and in the aftermath of Russia's invasion of Ukraine, drawing on data from the IMF for the period 2020–2023.

The year 2022 marked a structural shift in the global deployment of CFMs. While the measures adopted in 2020–2021 were primarily cyclical and defensive in nature, those introduced during 2022–2023 increasingly reflected geopolitical and strategic considerations. Governments employed CFMs not only to stabilise domestic markets but also to enforce sanctions, protect critical industries, and mitigate capital flow associated with geopolitical risk.

Table 2. Comparison of capital flow management instruments during COVID-19 and Russia's invasion of Ukraine

Criterion	COVID-19 pandemic (2020–2021)	Russia's invasion of Ukraine (2022–2023)
Main Trigger	Global health and economic shock; trade and mobility collapse	Geopolitical crisis; sanctions; commodity-price surges; inflation

7 On 9 April 2022, the European Union's so-called fifth package of sanctions against Russia and Belarus entered into force. Among other measures, the package expanded the prohibition on the provision of deposit services for crypto-asset wallets and introduced a ban on the sale of banknotes and transferable securities denominated in any official EU Member State currency to Russia and Belarus, as well as to natural persons, legal entities, bodies or agencies established in either country. The full list of prohibited goods and financial instruments is set out in Council Regulation (EU) 2022/576 of 8 April 2022, amending Regulation (EU) No. 833/2014 concerning restrictive measures in view of Russia's actions destabilising the situation in Ukraine, and in Council Regulation (EU) 2022/577 of 8 April 2022, amending Regulation (EC) No. 765/2006 regarding restrictive measures in view of the situation in Belarus and its involvement in the Russian aggression against Ukraine.

Criterion	COVID-19 pandemic (2020–2021)	Russia's invasion of Ukraine (2022–2023)
Nature	Temporary, stabilisation oriented	Structural, security linked
Dominant Direction	Tightening (2020), Easing (2021)	Predominantly easing (tightening in strategic sectors)
Objectives	FX-rate stabilisation; liquidity support; crisis containment	FX-reserve protection; outflow limitation; sanction enforcement
Instruments	FX-purchase limits; reserve-requirement cuts; payment restrictions	Asset freezes; surrender requirements; sector-specific controls
AREAER measures	380 (2020); 434 (2021)	509 (2022); 414 (2023)
Affected flows	Mainly outflows from EMDEs	Inflows and outflows; investment in strategic sectors
Effects	Short term stabilisation	Financial fragmentation; protectionism
Policy role	Crisis management toolkit	Integration with national security
Instrument type	Ad hoc, crisis-response	Strategic, preventive

Source: author's own elaboration.

Table 2 shows a comparative perspective on the capital flow management (CFM) responses adopted during the COVID-19 pandemic (2020–2021) and in the aftermath of Russia's invasion of Ukraine (2022–2023). The juxtaposition highlights a fundamental shift in both the rationale and operational design of CFMs across the two episodes. During the pandemic, capital controls functioned primarily as short term stabilisation tools designed to cushion the abrupt macroeconomic disruptions triggered by the global health crisis. Governments relied on temporary, liquidity-enhancing interventions aimed at mitigating exchange-rate pressures, safeguarding banking-sector liquidity and preventing disorderly capital outflows. The initial tightening phase in 2020 was followed by a measurable easing in 2021, consistent with the gradual normalisation of macro-financial conditions and the partial resumption of international capital mobility. The instruments employed such as foreign currency purchase restrictions, adjustments to reserve requirements and temporary payment limitations, correspond closely to those documented in the IMF's crisis-response framework for emerging markets and developing economies.

By contrast, the regulatory environment during the 2022–2023 period reflects a structurally different policy orientation. Russia's invasion of Ukraine and the resulting international sanctions regime shifted the use of CFMs from crisis-management tools towards instruments of geopolitical and financial security. The post-invasion measures were predominantly restrictive, targeting both inflows and outflows, and concentrated in sectors deemed strategically sensitive, including energy, real estate and advanced technologies. Many of these interventions, such as asset freezes, mandatory surrender requirements and prohibitions on cross-border transfers, serve purposes beyond macroeconomic stabilisation, including sanction enforcement, reserve preservation and the protection of critical national assets.

The geographical distribution of measures also diverged significantly across the two periods. While pandemic-era controls were implemented mainly by emerging markets and developing economies, the post-invasion environment saw a pronounced increase in the use of CFMs by advanced economies, reflecting the broader geo-financial implications of the conflict and the intensification of sanction regimes.

Taken together, the evidence suggests that the role of CFMs has evolved from a predominantly countercyclical crisis response instrument during the pandemic to a more permanent component of geopolitical risk management and financial stability strategy in the post-invasion period. This transition underscores the increasing intersection between macroeconomic policy, financial regulation and national security considerations in the contemporary international monetary system.

7. Results

The results of the analysis based on the IMF's Annual Report on Exchange Arrangements and Exchange Restrictions (International Monetary Fund, 2017–2023) reveal a marked increase in the number and complexity of capital flow management (CFM) measures implemented worldwide between 2020 and 2022. These years correspond to the dual global crises of the COVID-19 pandemic and the Russian invasion of Ukraine: each triggering distinct, yet interrelated, policy responses across different groups of economies. The findings demonstrate both cyclical and structural transformations in the design and objectives of CFMs, reflecting the evolution of international financial governance under heightened uncertainty.

During the pandemic period (2020–2021), the number of reported capital flow measures increased sharply from 223 in 2019 to 380 in 2020 and 434 in 2021. Of these, 204 actions in 2020 and 165 in 2021 were directly related to the COVID-19 crisis. The data show that tightening measures dominated in 2020:161 tightening actions versus 30 easing measures reflecting governments' immediate attempts to curb capital flow, stabilise exchange rates, and preserve foreign-currency liquidity. By 2021, as global conditions improved, easing measures became predominant (325 cases), signalling the relaxation of emergency restrictions and a shift toward normalisation. This pattern underscores the counter-cyclical use of CFMs as temporary tools of financial stabilisation.

In contrast, the post 2022 phase introduced a qualitatively different policy landscape. The number of global CFM actions reached 509 in 2022, the highest in the 2017–2023 sample with 159 tightening and 320 easing measures. A significant portion of tightening actions (52 measures) was directly associated with the war in Ukraine, while others reflected defensive responses to energy price shocks, sanctions, and monetary tightening in advanced economies. These developments suggest a shift in the reported use of CFMs -from predominantly cyclical and liquidity-driven measures toward more preventive and, in some cases, security-oriented instruments. Notably, the persistence of capital controls in 2023 (414 reported actions) may

indicate that these measures were not used solely as short-term crisis responses, although the descriptive nature of the evidence does not allow stronger conclusions about their long-term institutional embedding.

Cross-country analysis reveals important differences in policy intensity between countries. Advanced economies experienced strong swings in both inflows and outflows between 2018 and 2021, driven primarily by portfolio investment and short-term credit. EMDEs showed the greatest policy intensity, accounting for the majority of both tightening and easing actions reported in AREAER (averaging 10–20 measures annually per economy). LIDCs, though smaller in volume, relied more heavily on direct restrictions and reserve requirements to counter volatility. This heterogeneity underscores how institutional capacity, exchange rate regime, and access to external financing shape the form and timing of CFM responses.

The comparative assessment between the pandemic and war periods highlights a clear redefinition of CFM objectives. During COVID-19, most interventions were temporary, liquidity-oriented, and focused on preventing financial contagion. By contrast, post–2022 measures were often structural and politically motivated, targeting foreign ownership in strategic sectors, limiting dividend transfers, and reinforcing national security considerations in investment screening. For instance, Russia implemented comprehensive capital controls, including mandatory conversion of export revenues and prohibitions on certain foreign exchange operations, while Ukraine introduced currency market restrictions to defend reserves and maintain exchange rate stability. Advanced economies, such as Germany, Japan, and Canada, strengthened investment screening mechanisms, illustrating a convergence between CFMs and security policy instruments.

The findings also suggest a closer association between CFM frameworks and broader macroprudential and monetary policy settings. The coordinated tightening observed in 2022–2023, especially among central banks in advanced and emerging markets, reinforced the preventive function of CFMs and their integration within broader macro-financial policy mixes. This alignment is consistent with the IMF's 2022 Institutional View, which legitimised the pre-emptive use of CFMs to mitigate systemic risks even in the absence of immediate crises. Taken together, these patterns are consistent with a broader movement from reactive crisis management toward more preventive forms of risk mitigation.

From a longer-term perspective, the empirical evidence may be read as pointing toward an emerging reorientation in the governance of capital flows. The coexistence of pandemic-era liquidity management and war-induced financial fragmentation may have contributed to a broader policy role for CFMs and CFM/MPMs, although the present evidence remains descriptive rather than causal. This trend reflects a broader geoeconomic transition, where cross-border finance is increasingly influenced by geopolitical alignments, sanctions, and payment-system segmentation. Such structural factors imply that future CFM research should account not only for macroeconomic variables but also for political-economy determinants of financial openness and resilience.

In summary, the results suggest that the role of capital flows management has expanded beyond ad hoc crisis response and increasingly intersects with broader concerns of macro-financial stability, institutional prudence, and, in some cases, national security. The comparative findings

across 2017–2023 highlight both the adaptive flexibility and the growing permanence of CFMs in global financial governance, consistent with the IMF's evolving framework. This transformation underscores the ongoing rebalancing between financial openness and resilience that defines the post–2022 international monetary order.

8. Conclusions and Policy Implications

The experience of 2020–2023 suggests that CFMs have assumed a more prominent place in the policy debate and practice than in the pre-pandemic period. Their frequency, coverage, and institutional legitimacy have increased notably compared with the pre-pandemic period. The IMF's 2022 Review of the Institutional View formalised this evolution, recognising that CFMs can be used not only as short term crisis-response tools but also as preventive, rule-based instruments to strengthen financial resilience in an era of recurring shocks.

The analysis of capital flow management measures during 2017–2023 demonstrates a clear structural evolution in how countries design and implement policies governing cross-border financial movements. Drawing on IMF AREAER data and complementary sources, the study suggests that CFMs were used in ways that extend beyond temporary crisis containment and increasingly overlap with preventive and, in some cases, security-related dimensions of macro-financial management. This shift reflects broader transformations in the international monetary system, characterised by recurrent global shocks, financial fragmentation, and the reassertion of national policy space.

The evidence shows that during the COVID-19 pandemic, most CFMs served short term stabilisation objectives protecting liquidity, preventing disorderly capital flow, and maintaining exchange-rate stability. By contrast, the post–2022 period, marked by Russia's invasion of Ukraine, introduced a more strategic use of CFMs that integrated economic security and geopolitical considerations. Capital controls were employed not only to mitigate financial volatility but also to enforce sanctions, protect strategic sectors, and safeguard national financial sovereignty. The persistence of these measures through 2023 suggests that CFMs may be assuming a more durable place in policy design in both emerging and advanced economies, although the present analysis does not allow definitive conclusions on permanence.

From a theoretical perspective, these findings are broadly consistent with the revised IMF Institutional View (International Monetary Fund, 2022), which allows a more flexible and pre-emptive use of CFMs and macroprudential measures (MPMs) within the broader Integrated Policy Framework. The comparative evidence discussed in the article is consistent with the view that the use of CFMs should be interpreted in relation to macroprudential, fiscal, and monetary policies, as well as to broader institutional conditions but this paper study does not directly test policy effectiveness. Countries with well-developed financial systems and transparent regulatory frameworks have been more successful in implementing CFMs without distorting market expectations or deterring productive investment.

The policy implications of this study are threefold. First, capital flow management should be integrated into a broader macrofinancial policy mix, emphasising consistency and transparency rather than ad hoc interventions. Second, policymakers should distinguish between temporary, cyclical CFMs used to smooth capital volatility and structural, strategic CFMs designed to manage systemic and geopolitical risks. Third, international coordination, particularly through the IMF and regional institutions, remains critical to preventing policy spillovers, reducing the risk of protectionist escalation, and maintaining financial stability across borders.

For emerging and low-income economies, strengthening institutional capacity is essential to ensure that CFMs complement, rather than substitute, fundamental macroeconomic adjustments. This requires building reliable monitoring frameworks, improving financial data transparency, and enhancing the ability to calibrate policy responses dynamically. In advanced economies, the growing overlap between CFMs, investment screening, and sanctions policy calls for renewed dialogue on global capital governance and the boundaries between economic openness and national security.

In conclusion, the period 2017–2023 appears to mark an important shift in the governance of capital flows. The dual shocks of the pandemic and the war in Ukraine have broadened the policy roles associated with CFMs within international macroeconomic management. Rather than being viewed exclusively as exceptional or temporary interventions, CFMs are increasingly discussed and used as part of a wider macrofinancial policy toolkit serving both stabilisation and resilience objectives. At the same time, the descriptive nature of the evidence used in this article calls for caution: further research is needed to assess more rigorously the -effectiveness, durability, and institutional embedding of these measures across countries and over time.

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Środki zarządzania przepływami kapitału w gospodarce światowej podczas pandemii COVID-19 i po inwazji Rosji na Ukrainę – analiza porównawcza

Streszczenie: Celem artykułu jest analiza ewolucji środków zarządzania przepływami kapitału (CFM) w gospodarce światowej w latach 2017–2023, ze szczególnym uwzględnieniem pandemii COVID-19 oraz okresu po inwazji Rosji na Ukrainę. Badanie ma charakter opisowo-porównawczy i opiera się na danych z raportów Międzynarodowego Funduszu Walutowego *Annual Report on Exchange Arrangements and Exchange Restrictions* (AREAER). Analizie poddano zgłaszane środki CFM w trzech grupach gospodarek: rozwiniętych, wschodzących i rozwijających się oraz w krajach o niskich dochodach. Środki te sklasyfikowano według rodzaju (zaostrzenie, złagodzenie, neutralne) oraz kierunku oddziaływania (napływ i odpływ kapitału). Wyniki przeprowadzonej analizy danych wskazują, że w okresie pandemii dominowały działania związane głównie ze stabilizacją płynności i ograniczaniem krótkookresowych napięć finansowych, natomiast po 2022 roku częściej pojawiały się środki powiązane z podatnością zewnętrzną, fragmentacją geoekonomiczną oraz bezpieczeństwem gospodarczym. Artykuł koncentruje się na danych zaczerpniętych z bazy IMF AREAER, a uzyskane wyniki obrazują zmiany w raportowanym wykorzystaniu i ukierunkowaniu środków CFM przez badane grupy państw, a nie jako pełną ocenę ich skuteczności.

Słowa kluczowe: zarządzanie przepływami kapitału, kontrola kapitału, środki makroostrożnościowe, COVID-19, inwazja Rosji na Ukrainę, Międzynarodowy Fundusz Walutowy, podejście instytucjonalne MFW