

Exchange Rate Regimes in the COMESA Region: Implications for Macroeconomic and External Stability



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Executive Summary

The choice of exchange rate regimes in the COMESA block has varied across space and time among the member countries, but the credibility of each regime in ensuring macroeconomic and external stability remains contentious. This report analyzes the performance of various exchange rate regimes in force in the region in the context of the stability of the currency and ultimately price stability—the key primary objective of any one exchange rate regime.

Our exploration of data reveals that countries operating stabilized arrangements suffered high inflationary pressures in the post-Covid period relative to the pre-covid era, reflecting ineffectiveness in absorbing advance shocks which amplify inflationary pressures. On the other hand, save for currency board arrangement (which is far less common), floating exchange rate arrangement dwarfs other exchange rate arrangements in delivering stable currency around any normalization whether in the pre- or in the post-advance shock periods. Similarly, countries operating floating regimes generally sustained one of the lowest inflation outturns in both pre- and post-Covid period, despite the relatively high pass-through of nominal exchange rate to domestic inflation and modest pass-through of the nominal effective exchange rate to import prices. Thanks be to the sterilized intervention undertaken by the authorities with the aim to dampen short term disruptive volatility when such movements are not driven solely by economic fundamentals in an environment where capital mobility is far from perfect.

The results have implications for the COMESA member countries in their pursuit of macroeconomic stability. Countries pursuing floating arrangements must consider that the amplification of nominal exchange rate and nominal effective exchange rate do build into domestic and import prices. To this end, continued interventions in the foreign exchange interbank market to smooth exchange rate volatility, but not to resist fundamentals-based movements as this comes at a significant cost, providing reserve buffers permit is desirable particularly for countries with shallow foreign exchange markets and large un-hedged balance sheet exposures.

I Introduction

To the beginners, the concept of exchange rate may not sound as obvious, an ambiguity that dictates the start of this short paper. By the exchange rate, we mean the price (call it rate) at which one country's currency will be exchanged for another country's currency. The logic is simple. In a world where people move and trade between and across countries, one would definitely need to convert own country's currency into the currency of the travel destination or import country. For simplicity, assume for example that you are in possession of Malagasy Ariary (MGA)—the local currency of Madagascar and that you are travelling from Madagascar to the United States. It is very likely that you will need to exchange the MGA for the US dollars. Now, if the exchange rate for MGA USD is 4348 MGA = 1 USD, this would mean that for every 1 MGA you exchange, you get about 0.00023 USD, and depending on how much USD you need, determines how much of the MGA you must have and vice versa. In sum, exchange rate tells us how much one currency costs in terms of another—which then makes it easy to compare the value of different currencies and make international transactions possible. The mechanism / rules and/or system that any one country uses to manage the value of its currency in relation to other country's currencies is what economists often call the exchange rate regime.

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The choice of exchange rate regimes in the COMESA block has varied across space and time among the member countries, but the credibility of each regime in ensuring macroeconomic and external stability remains contentious. The appropriate regime depends on country-specific factors such as trading arrangements, capital mobility, and the political-economic environment that may necessitate the use of exchange rate anchors in the absence of policy credibility and international support. Moreover, the size and type of the prevailing macroeconomic shocks and challenges facing the country may ultimately dictate the choice of the operating exchange rate regime (Ghosh et al, 2010).

Reflecting, largely, the degree of flexibility and the existence of formal or informal commitments to exchange rate paths, exchange rate regimes fall under the broad categories of crawl-like arrangement, floating regimes, conventional pegs, other managed arrangements, stabilized arrangement, free-floating and currency board. In crawl-like arrangement, the currency is adjusted periodically in small amounts at a fixed rate or in response to changes in selective quantitative indicators, such as past inflation differentials. In conventional pegs, the country pegs its currency at a fixed rate to another currency

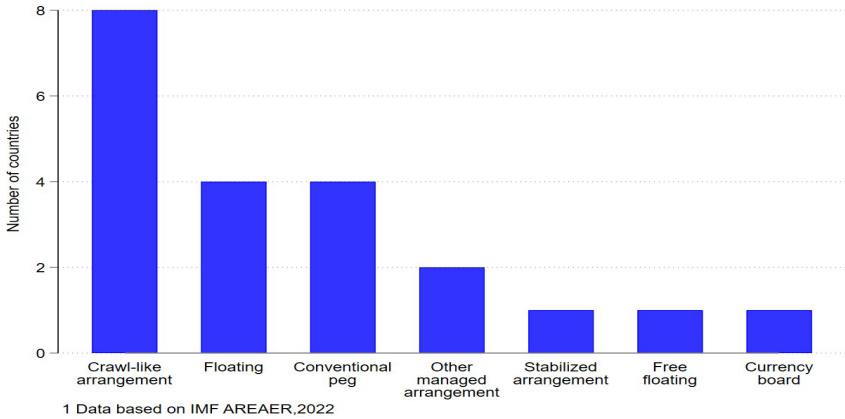
or a basket of currencies, with a commitment to maintain the parity and the monetary authority stands ready to intervene to maintain the fixed parity.

Free floating regime is where the exchange rate is market-determined, with no official intervention at all. Like free floating, the exchange rate under the floating regime is market-determined. However, under this arrangement, there may be official interventions in the foreign exchange market, with the aim to dampen disruptive volatility especially when such exchange rate movements are not driven solely by economic fundamentals. The intervention under this arrangement is not to determine the direction or level of the exchange rate which are necessary to maintain external balance. The exchange rate regime is classified in the category of 'other managed arrangements' on attempts of the monetary authority to influence the exchange rate without a specific exchange rate path or target, using broadly judgmental indicators.

Currency board arrangements is an exchange rate regime based on an explicit legislative commitment to exchange domestic currency for a specified foreign currency at a fixed exchange rate, with restrictions on the issuing authority to ensure the fulfillment of its legal obligation. And, while stabilization arrangements category is not explicitly defined by the International Monetary Fund (IMF), it relates to regimes that aim to stabilize the exchange rate through monetary and exchange rate policies within a framework that establishes floors for international reserves and ceilings for net domestic assets of the central bank.

The latest IMF Annual Report on Exchange Arrangements and Exchange Restrictions (AREAER, 2022) report the *de jure*, that is, the exchange rate regimes as declared by the authorities in the AREAER. The IMF also classifies the *de facto*, i.e., the exchange rate regime according to the behavior of the exchange rate or the behavior of the central bank based on statistical methods alongside qualitative judgment drawing on its country team analyses and consultations with the respective central bank authorities. According to the *de jure* classification, also neatly summarized in **Fig.1**, eight of the COMESA member countries report operating a crawl-like arrangement, four countries report floating regimes, another four member countries report conventional pegs, two of the member countries report other managed arrangements while other member countries report other mechanisms.

Figure 1: Exchange rate regimes



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II Exchange rate regime performance

1.1 Regime evaluation.

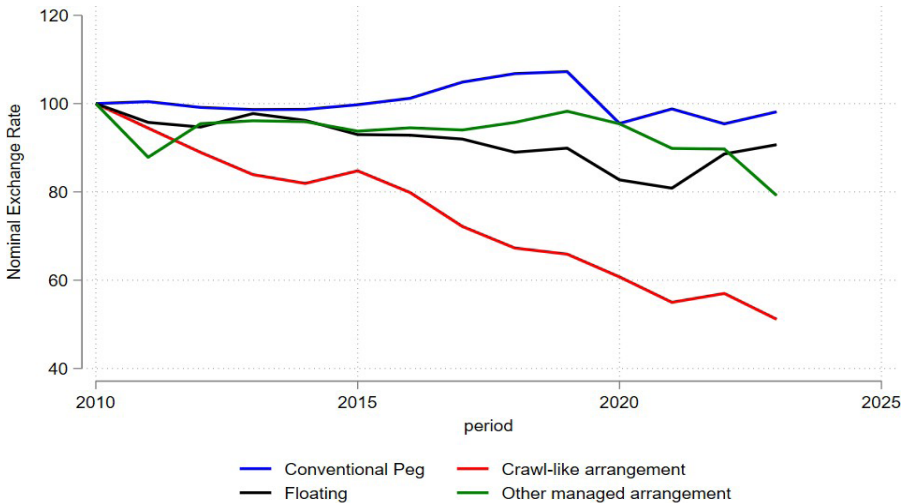
The primary objective of any exchange rate regime is the stability of the currency and this should consequently account for price stability. A starting point for assessing the strength of a country's currency is the current account balance, which measures the extent to which an economy is a net borrower or net lender vis-à-vis the rest of the world over a particular period. A deficit on the current account implies that a country is spending more on foreign trade than it is earning and is in effect borrowing from foreign sources to make up the deficit. Put simply, a country with a current account deficit receives less foreign exchange from the sale of its domestic output than it requires, and it supplies more of its own currency than foreigners demand for its products. The result is a natural depreciation of the domestic currency. One important fact is that our economies continue to grow and as many of our people become middle class, their demand for imports increase, thus causing exchange rate depreciation.

As we show here, we evaluate the stability of the currency under various exchange rate regimes—crawl-like arrangement, floating, conventional pegs and other managed

arrangements — by normalizing the exchange rate series (all converted to the US dollar) to the 2010 baseline from which we consider how currencies have deviated (**Fig. 2**). As can be seen from the graph, since 2010, COMESA member countries operating conventional pegs and other managed arrangements have held stable currency outturns with minimal regime switching in the post-COVID era. Countries that have operated crawl-like arrangements have experienced considerable deviation from the 2010 baseline with an overall appreciation of the nominal currencies.

Countries operating a floating arrangement have remained much more stable around the 2010 benchmark, which suggests that floating regimes can achieve currency stability with no intervention or minimal intervention in the case of managed floats. This stability of the currency under the floating regimes is not surprising, particularly from the point view that currency movement is an automatic stabilizer for any one open economy, ensuring that the balance of payments is sustainable. Such economies, otherwise, would squander international reserves in trying to stop the depreciation. A key merit of a floating regime is that it helps deflect or absorb the impact of adverse external and domestic shocks, and avoid large costs to the real economy. From the backdrop that the nominal exchange rate has an important influence on inflation, while the real exchange rate matters for the competitiveness of traded goods industries, which is crucial for long run development, and in the lenses of small open economies where capital mobility is far from perfect, authorities may not be and indeed should not be indifferent to movements in the exchange rate when short-term fluctuations jeopardize its orderly operations.

Figure 2: Exchange rate developments



1 Data based on IMF, International Financial Statistics 2024

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Thus, whereas the *de jure* exchange rate regime may be floating, the *de facto* is managed float, whereof, the authorities undertake sterilized intervention, i.e., buy or sell the foreign currency in the interbank market for three objectives. The first, is to dampen short term exchange rate volatility especially when such movements are not driven solely by economic fundamentals—but not to determine the direction or level of the exchange rate which are necessary to maintain external balance. The second reason is to avert sustained real appreciation, i.e., a situation where a country's currency becomes stronger and more valuable, adjusted for inflation over time or more technically, misalignment beyond what is estimated to be the long-term equilibrium real effective exchange rate (EREER)— which is generally defined as the rate that is consistent with the internal and external balance of the economy and it is consistent with high economic growth, low levels of inflation and current account sustainability. It is important to note that exchange rate misalignments constitute a serious problem because it may highlight a country's economic vulnerability that signals domestic policy inconsistency or adverse macroeconomic shocks. Thus, maintaining EREER is crucial to central banks' objectives of maintaining price stability and a sound financial system.

The downside, however, is that sterilization may turn out problematic especially if

the appreciation pressure is strong such that there is need for repeated interventions. It may contribute to the accumulation of structural liquidity and instead create potential problems for the implementation of monetary policy. In fact, given the allocative and competitive functions of the REER, the IMF typically advocate for developing and emerging economies to maintain the actual REER in close proximity to the equilibrium real exchange rate (EREER). The third reason is purchases for reserve build up as and when conditions in the interbank foreign exchange market allow.

1.2 Exchange rate regimes, output and inflation out-turns

The implications of the choice of exchange rate regimes for output and inflation remain debatable. Regarding the effect on output, proponents of conventional pegs and currency boards argue that these regimes would experience lower and more stable interest rates that may propel investment and improve growth outcomes. Moreover, pegging a domestic currency to an anchor country may increase trade with the anchor country due to normalization of production and mobility costs (Frankel and Rose, 2002). Increased trade undoubtedly is growth enhancing for the pegging country. Pegs, however, may be inefficient in absorbing real shocks. Calvo (1999) argues that periodic interventions in pegged systems may translate into higher real rates that may constrain output— a weakness that floating regimes address because of its ability to optimally allocate resources in the short run providing efficient means of shock absorption.

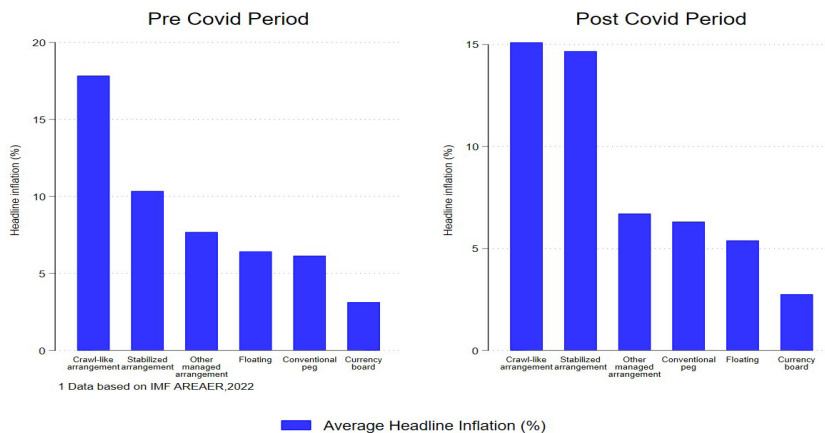
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As already demonstrated above, the choice of exchange rate regime bears profound implications on the way advance shocks, which are the key drivers of inflationary tendencies in the world economies, without exception. It also has implications for capital flows. The general literature distinguishes between direct and indirect channels through which changes in the exchange rate may be transmitted to consumer prices (Goldberg and Knetter, 1997); McCarthy, 2000; Gagnon & Ihrig, 2001; Campa & Goldberg, 2001; Choudhri & Hakura, 2006; Ito and Sato, 2007; among others). The direct channel is through prices of imported consumer goods or through domestically produced goods priced in foreign currency— the effect being very pronounced for international price takers. Indirectly, the effect is through the price of imported intermediate capital goods— changes in the exchange rate may influence costs of production which then broadly alters the pricing mechanisms of final consumer goods.

In the conduct of monetary policy, one of the key hurdles to enhancing the monetary policy transmission mechanism is the ability of monetary policy to respond adequately to different shocks, particularly in small open economies such as those of COMESA. One of such shocks is the exchange rate shock, which, in addition to the standard aggregate demand channel, provides an important transmission channel for monetary policy. Policy makers are therefore concerned with the extent to which the local currency domestic prices would change as a result of a 100-basis point (bp) change in the exchange rate—in what central bankers technically call the exchange rate pass-through (ERPT hereafter). As alluded to earlier, the concern with the ERPT stems from the understanding that the nominal exchange rate, i.e., the price of one currency in terms of the other—has an important influence on inflation, while the real exchange rate, i.e., the price of one currency in terms of another, adjusted for differences in price levels between the two countries—matters for the competitiveness of traded goods industries, which is crucial for long run development. Moreover, IMF (2006) strengthens these concerns, adding that ERPT has implications for external adjustment, i.e., the larger the ERPT, the larger will be the response of trade balance to nominal exchange rate fluctuations.

Since the extent of the ERPT may vary with the exchange rate regime, it's clear, overall, that the exchange rate regimes matter for inflation. Across the different regimes operated by COMESA member countries (excl. Zimbabwe due to its peculiar macroeconomic conditions) we observe significant variation in inflation out-turns (**Fig.3**). Countries operating floating regimes generally sustained one of the lowest inflation outturns in both pre- and post-Covid period. Inflation has persistently remained high in countries that operate in crawl-like arrangements. This trend is consistent across different episodes such as the pre- and post-covid era.

Figure 3: Inflation Developments



Conversely, countries operating stabilized arrangements suffered high inflationary pressures in the post-Covid period relative to the pre-covid era, reflecting ineffectiveness in absorbing advance shocks which amplify inflationary pressures. Consistent with the policy credibility models (Barro and Gordon, 1983)—which show that pegged exchange rates are associated with lower inflation, countries that operate conventional pegs and currency boards have experienced the low incidences of inflation. The aforementioned models assume that pegging the exchange rate provides a pre-commitment device, allowing the central banks to import the credibility of the anchor currency (*ibid*). This notwithstanding, comparing inflation out-turn in the two episodes (pre-and post-Covid), inflation was somewhat elevated in the post-Covid relative to the pre-Covid period which is consistent with constrained ability of the pegged arrangements in absorbing advance shocks alluded to earlier. Moreover, hard pegs naturally are a recipe for the co-existence of parallel and official exchange rate, the premium of which generates large costs to the real economy. To shrink these spreads, there would be need to allow for a sufficient degree of flexibility in the official rate—in the form of frequent sizeable but costly devaluations of the local currency. This, in the end, gives rise to an arrangement where the parallel market becomes retail while the interbank becomes wholesale, mirroring the arrangements under the floating regime.

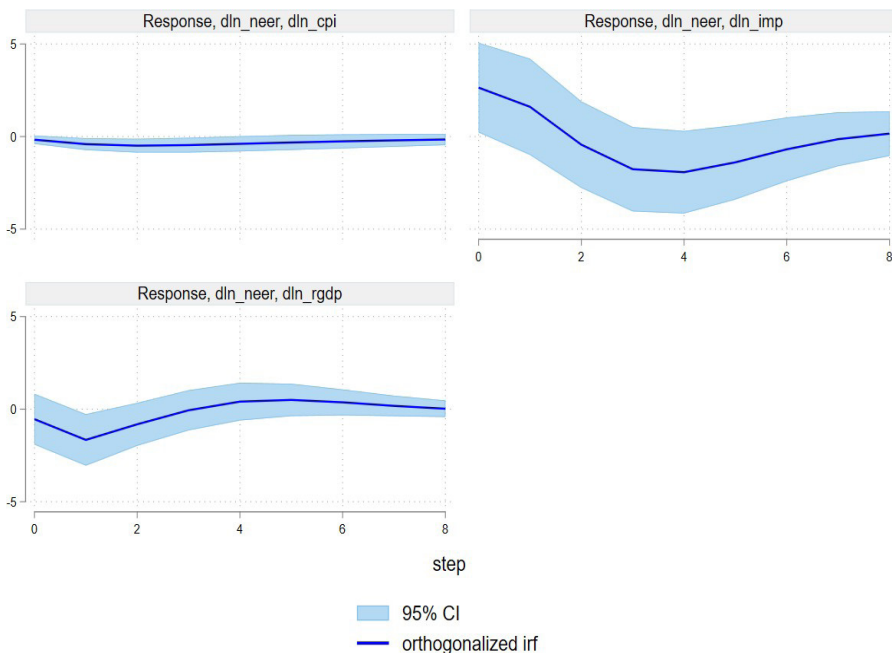
The passthrough of the nominal exchange to domestic prices has been estimated, on average, at 0.48 in the COMESA region (Bwire, 2023), reaching as high as 0.82

in some of the jurisdictions. What this means is that for every 100 bp depreciation in the nominal exchange rate, about 0.48 of that, on average, and/or 0.82 in the extreme case, gets priced into domestic inflation and therefore the faster the depreciation, the higher domestic inflation will be. Noteworthy however is that inflation out-turns may broadly vary on idiosyncratic characteristics in addition to the exchange rate regime.

Furthermore, riding on the notion that the real exchange rate matters for the competitiveness of traded goods industries, we estimate the magnitude of changes in the consumer prices and in the import prices in response to a shock to the nominal effective exchange rate (NEER), i.e., a measure of a currency's value against a weighted average of several foreign currencies for one open island country in the COMESA region (**Fig. 4**). The nice blue coloured figure consists of three charts for the three variables that are assumed would react to 100 bp (1 percentage point) shock in the NEER. These variables are the consumer price inflation, import prices and real Gross Domestic Product (GDP). Specifically, the figure shows the impact of a one standard deviation shock, defined as an exogenous, one-time positive shock to the NEER. The solid dark blue line in each graph is the estimated response of the variable in question while the light blue painted area denotes a two standard error confidence band around the estimate.

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The pass-through of a shock to the NEER to imported prices is instantaneous and remains positive with a complete pass-through materializing after 4 quarters. Specifically, a 1% depreciation of the NEER leads to an increase in import prices by an average of about 3.4%, which as before, implies that for every 100 bp depreciation in the NEER, 0.034 of that gets priced into import prices. The impact, on the other hand, on domestic prices is zero at the onset and remains subdued over the horizon—a finding that is consistent with Ortega et al. [2020] who show that the co-movement of the NEER and prices are more amplified on imported goods and less noticeable for the domestic goods that are non-energy intensive.

Figure 4: Exchange rate pass-through (impulse response)

Output contracts sharply within one quarter given a rise in import prices following a positive shock to the NEER, but recovers steadily to its long-run path thereafter—this latter interpretation is on the basis that statistical significance is not necessarily economic significance. To the extent that COMESA countries are in many ways similar—small open import and agriculture dependent countries, and face similar economic challenges—volatile capital flows, limited financial infrastructure and vulnerable to external shocks, these results on the pass-through of a shock to the NEER in general mimic what one would get for any other COMESA jurisdiction.

III Conclusion

The choice of exchange rate regimes in the COMESA block has varied across space and time among the member countries, but the credibility of each regime in ensuring macroeconomic and external stability remains contentious. In this report, we have analyzed the performance of various exchange rate regimes in force in the region in the context of the stability of the currency and ultimately price stability—the key primary objective of any one exchange rate regime. According to the IMF's AREAER, 2022

categorization, eight of the COMESA member countries report operating a crawl-like arrangement, four countries report floating regimes, another four member countries report conventional pegs, two of the member countries report other managed arrangements while other member countries report other mechanisms.

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Finally, the results of our exploration should be treated with caution. We note that when analyzing the macroeconomic outcomes under various regimes, it's imperative to assess its position across various dimensions: The emphasis on the operating targets of a central bank should be put into consideration i.e., whether alternative targets exist given that some countries may operate under monetary targeting or inflation targeting. Moreover, while we have focused on the direct

channels of transmission, we acknowledge that significant sources of instability may be hidden in indirect channels, which is beyond the scope of this exploration.

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