

Exchange Rate Policy ^(*)

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Introduction

Exchange rate policy in Africa has undergone a radical change in the last decade. The widespread foreign exchange controls and heavy management of exchange rates that typified countries outside the CFA Franc zone and the Rand Monetary Area in the 1980s and which placed the exchange rate at the heart of the politics of economic policy-making have been progressively dismantled. In their place have emerged regimes built around floating exchange rates with money as the preferred anchor for inflation. From a textbook perspective, this shift away from heavily managed exchange rates is surprising. Conventional wisdom, to the extent that it exist, tends to suggest that for low-income and small open economies, especially those at relatively early stages of financial development, fixed or relatively rigid exchange rate regimes offer more attractive inflation stabilization properties without compromising growth objectives, and only as these economies mature are the gains from exchange rate flexibility likely to be exploited.¹

A central question in understanding the evolution in exchange rate policy in Africa is whether the shift from relatively fixed to relatively flexible exchange rate regimes reflects an efficient response to, or component of underlying processes of development? Or does it, rather, reflect an altogether more constrained choice, a recognition that structural weaknesses prevent the operation of an otherwise desirable fixed exchange rate regime? And what implications does the shift towards greater exchange rate flexibility have for the conduct of macroeconomic management?

Policy choices: theory and evidence

The exchange rate is a key relative price in all open economies, shaping incentives for both producers and consumers, in the short and the long run; it represents one of the principal channels of transmission of macroeconomic shocks and volatility to the domestic economy; and changes in exchange rates have powerful distributional effects. More precisely, what matters fundamentally for long-run growth is the *real* exchange rate. If there were no money illusion, so that resource allocation

¹ See Rogoff *et al* (2003).

decisions were unaffected by the level or growth in average prices, the choice of nominal anchor, and hence the exchange rate regime, would be irrelevant. But we know this neutrality does not prevail in practice, except perhaps in the very long run: over any meaningful horizon, the level and volatility of inflation matters enormously which, in turn, means policy towards the nominal exchange rate lies at the heart of the macroeconomic policy-making, either explicitly or by default. By determining the form of the nominal anchor for domestic prices it determines the scope and independence of monetary policy,² and by determining the rate of inflation, decisions over the nominal anchor also shape the feasible fiscal stance.³

Exchange rate policy operates at two levels. The first is in shaping the overall exchange rate *regime* (the basic rules by which a central bank intervenes in the foreign exchange market to influence the external price of the domestic currency) and the second is concerned with discretionary choices over the path of the nominal exchange rate, given the regime. Two non-discretionary cases define the range of possible regimes. At one extreme, a pure float (or a regime of strict non-intervention) passes responsibility for anchoring inflation to a domestic variable such as the money supply, nominal income or, under inflation targeting regimes, inflation expectations themselves. At the other extreme, the authorities' intervention in the foreign exchange market is entirely focused on hitting a specific target level (or rate of crawl) for the exchange rate which itself becomes the nominal anchor, tying domestic inflation rate to that of the anchor currency or currencies (and domestic monetary policy to that of the anchor country depending on the operations of the capital account). Under a fixed exchange rate, macroeconomic compatibility requires monetary policy to be subordinated to the objective of hitting the exchange rate target, at least in the long run.⁴

² A nominal anchor is required to eliminate the indeterminacy of the price level. General equilibrium forces determine relative prices and real resource allocations, but to anchor the average price level, the authorities must fix one price (or the value of one quantity) in terms of the domestic unit of account. All other prices are then valued in terms of the anchor. In the long-run, all nominal prices will grow at the same rate of growth as the nominal anchor.

³ The inter-temporal budget constraint of government requires that the fiscal accounts are consistent with the long-run inflation rate. Given revenue and expenditure and the long-run growth rate of the economy, for example, this defines the sustainable level of public debt.

⁴ In the limit, the discipline of the fixed exchange rate leads to a currency board – in which the credibility of the exchange rate peg is enforced by curtailing central bank discretion altogether, through statute or practice – or full-blown monetary union where the domestic currency itself is abandoned in favour of the external anchor

In these polar cases there is, in effect, no exchange rate policy to speak of beyond the commitments entailed by the regime. In reality, with the exceptions in Africa of the CFA Franc Zone and the Rand Monetary Area, institutionally hard pegs are uncommon, while few, if any, countries have the institutional mechanisms to commit to a pure float. Rather, for the vast majority of countries, the domain of exchange rate policy is more extensive and is essentially concerned about where to locate on the continuum between full flexibility and a hard peg. This, in turn, entails navigating the constraint of the *impossible trinity*. In an open economy, policymakers face three desirable yet incompatible objectives: to target the exchange rate so as to stabilize the external value of the currency and hence stabilize relative prices; to engage in activist monetary policy with a view to stabilizing domestic output in the face of shocks; and to allow for the free flow of capital across international borders, in pursuit of efficiency in resource allocation. Beyond the short-run, however, it is not possible to simultaneously satisfy all three. Policy maker must choose which objective to abandon. Experience suggests it is hard to limit cross-border private capital flows: the resolution of the *impossible trinity* therefore boils down to the strength of policymakers' commitment to a pure float.

In striking this balance, policymakers must evaluate four broad characteristics: the extent to which the regime offers a credible anchor for inflation; how well it insulates the domestic economy from potentially destabilizing balance of payments shocks ; its ability to lower transactions costs and foster international trade and investment; and finally its credibility in disciplining policymakers and protecting the economy against time-inconsistent behaviour. The problem is that these objectives are often in conflict. Thus for a small open economy with a large traded goods share in expenditure , an exchange rate peg is likely to anchor domestic prices to world inflation more robustly than a floating rate with a domestic anchor. However, a floating rate may be better suited to ensuring the efficient adjustment of the real economy to external shocks arising from commodity price movements or shocks to global inflation, thereby avoiding prolonged, growth-retarding real exchange rate

currency or a supranational currency. In these cases, the institutional arrangement seek to offer protection against policy errors arising from discretionary or otherwise time-inconsistent behaviour but at the cost of a complete lack of policy flexibility to protect the economy against short-run volatility in the face of shocks.

misalignment. Similarly, while fixed exchange rates may help reduce transactions costs in international trade, obviating the need for expensive hedging of exchange risks when domestic markets are thin or absent, flexible regimes may better foster financial market development. Different regimes may again have different properties when it comes to fostering discipline and policy credibility.

There is a vast literature on these questions assessing the properties of alternative exchange rate regimes, spanning the entire waterfront from the effects of exchange rate regimes on inflation and inflation volatility, through their impact on output stabilization, trade flows, financial sector development, fiscal performance and credibility.⁵ It would be nice if this literature could be summarized in the form of a simple checklist relating structural characteristics to the optimal choice of regime. But in reality this is impossible: despite the vastness of the research program, the literature is surprisingly short of robust, unambiguous results. This reflects a range of difficulties, from problems in accurately measuring exchange rate regimes – the distinction in the jargon between a *de jure* classification based on countries' self-reported regimes and a *de facto* classification reflecting an assessment of how countries actually do – through to problems of identifying causality as opposed to statistical correlation. It is difficult, for example, to determine whether fixed exchange rate regimes promote lower inflation and greater fiscal discipline or whether countries with strong institutions capable of delivering fiscal discipline also choose to adopt fixed exchange rates. What this means is that consideration of the 'optimal' exchange rate is highly country- and context-specific. But, as noted earlier, one strong message that does emerge from the sea of evidence, and which is highly relevant to contemporary Africa, comes from the work of is that made by Rogoff *et al* (2003) suggesting that for countries at relatively early stages of financial development, fixed or relatively rigid exchange rate regimes appear to offer a degree of anti-inflation credibility (internal stability) without compromising growth objectives, but as such economies mature and develop not only are the

⁵ See for example, Corden (2002), Ghosh, Gulde and Wolfe (2003), Rogoff *et al* (2003) and Masson and Pattillo (2005) for general surveys; Frankel and Rose (2002) and Adam and Cobham (2007) on exchange rates and trade; Adam, Bevan and Chambas (2001) on exchange rates and fiscal performance; and Tornell and Lane (1995) and Sun (2003) on fiscal discipline.

gains from exchange rate flexibility greater but this flexibility in turn appears to promote more rapid financial sector development which, in turn further strengthens the gains to exchange rate flexibility.

Exchange rate choices in Africa

At Independence, many African countries inherited formal currency-board arrangements from the colonial powers. Whilst this legacy has persisted with the CFA Franc Zone arrangements⁶, for most countries the notion that full sovereignty required monetary autonomy saw them move away from these arrangements, initially only symbolically by issuing their own currency but retaining the peg, but eventually by switching pegs and abandoning altogether the fiscal discipline of the currency board. The exchange rate quickly came to be seen as an additional policy instrument, so that by the late 1970s and throughout the 1980s exchange rate policy had moved centre stage. Unfortunately, this was also a time when, as Honohan and O'Connell (2008) argue, the prevailing economic orthodoxy on the continent asked both monetary and exchange rate policy to do 'too much', at least viewed from the perspective of today. Much of the incoherence in macroeconomic policy through this period can be traced back to attempts to defy the logic of the impossible trinity. Countries sought to manage their exchange rates, but weak fiscal institutions meant monetary policy was dominated by deficit-financing pressures so that compatibility with the exchange rate target was impossible without recourse to progressively more distortionary trade and exchange controls. By the late 1980s, most countries outside the CFA and Rand areas operated under heavily managed, highly distorted and fundamentally non-credible exchange rate regimes. Growth and macroeconomic stability duly suffered.

A critical turning point was reached in the mid-1990s when, with significant external assistance, many countries began to roll back the chronic fiscal dominance of the previous decade, dismantle the web of

⁶ The CFA-zone is partly a monetary union and partly a hybrid currency board. Monetary union prevails within the zone, but the two central banks lend to member governments and non-governments so that the money base is not fully backed. But because both can access overdraft facilities at the French Treasury, the external value of the CFA Franc is guaranteed. This has conferred huge advantages on the zone – most notably in anchoring inflation – but has come at the price of a chronic lack of real exchange rate flexibility, so that with the result that growth rates have been significantly below potential.

exchange controls and move away from pegged or heavily managed regimes to intermediate and floating regimes.⁷ Most African countries formally adopted Article VIII of the IMF's *Articles of Agreement*, obliging them to remove restrictions on current account transactions and many moved to liberalize controls on the capital account. As a result, black markets in foreign exchange all but disappeared. Today, three-quarters of African countries outside the CFA zone operate under a monetary anchor or with some form of inflation targeting regime, supported by a *de jure* freely floating exchange rate.

Emerging Challenges

The shift towards greater exchange rate flexibility raises two related challenges. The first concerns capital flows and the second the conduct of monetary policy. Even though many countries had liberalized their capital accounts *de jure*, private capital flows to Africa were small through much of the 1990s and early 2000s. As long as African countries remained off the radar of portfolio investors, the authorities could dodge the bullet of the impossible trinity for extended periods and enjoy many of the benefits of (heavily) managed exchange rates without losing control of monetary policy as a result of interest rate differentials triggering destabilizing private portfolio flows. The excess savings glut of the early 20th century, which presaged the financial crisis of 2008, put an end to this: global risk premia were compressed, investors sought ever-more exotic investment opportunities, and by the mid-2000s, private short-term capital flows to Africa have become more responsive to arbitrage opportunities between world and African bond markets. In many countries, surging private capital flows exposed weaknesses in small domestic financial markets and triggered sharply increased exchange rate and interest rate volatility, forcing central banks to recognize that the impossible trinity now constrains their actions more tightly than before. As a result, *de facto* policy has shifted away from the *de jure* commitment to full exchange rate flexibility and the emergence of a generalized 'fear of floating'. Countries have shown a greater willingness to intervene to target the nominal exchange rate and, at the same time, the debate on the merits or otherwise of the taxation of short-run capital

⁷ Morris (1995) and Henstridge and Kasekende (2001) describe Uganda's pioneering moves to legalize the foreign exchange black market and unify it with the official rate, through progressive devaluation of the latter, and show how unification underpinned the successful fiscal and inflation stabilization of the early 1990s.

flows has re-surfaced. And in the background, countries across the continent are re-engaging in discussions about monetary union, at the regional level (for example in the East Africa Community) and even at the pan-African level (for example, the African Union's commitment to a single African currency by 2023).

This partial retreat from full flexibility exposes a second challenge for exchange rate policy. A number of countries in Africa have, or are considering, adopting formal inflation targeting (IT) as their monetary framework. This immediately raises questions about the degree to which exchange rate objectives can be accommodated in the conduct of macroeconomic policy. Conventional IT regimes require exchange rate objectives to be fully subordinated to the inflation objective. Whether this is required amongst African countries depends first, on whether despite the *de facto* capital account integration of recent years capital markets are sufficiently imperfect sluggish that there is scope to intervene in the foreign exchange market in the short run, and second, whether there exists sufficient institutional capacity that the limits to exchange rate intervention can credibly be signalled to the private sector. Private agents need to know that if exchange rate and inflation objectives are in potential conflict, the latter will take precedence, so that expectations can credibly be formed on the basis of the authorities' pursuit of their inflation target.

References

- Adam, C. D. Bevan and G. Chambas (2001) "Exchange rate regimes and revenue performance in Sub-Saharan Africa" *Journal of Development Economics* vol 64, pp 173-213
- Adam. C. and D. Cobham (2007) 'Exchange Rate Regimes and Trade' *Manchester School* vol 75(s1) pp 44-63
- Corden, W.M. (2002). *Too Sensational: On the choice of Exchange Rate Regimes*, Cambridge, MA: MIT Press.
- Frankel, J., and Rose, A. (2002) 'An estimate of the effect of common currencies on trade and income', *Quarterly Journal of Economics*, vol 117, pp 437-66.
- Ghosh, A., Gulde, A., and Wolf, H. (2003), *Exchange Rate Regimes: Choices and Consequences*, Cambridge, MA: MIT Press.
- Henstridge, M. and L. Kasekende (2001) "Exchange Reforms, Stabilization and Fiscal Management" in P. Collier and R. Reinikka (eds) *Uganda's Recovery: The role of farms, firms and Government* Washington, D.C.: World Bank.
- Honohan, P. and S.. O'Connell (2008) "Contrasting Monetary Regimes in Sub-Saharan Africa" in M. Ncube (ed) *Financial Systems and Monetary Policy in Africa* Nairobi: AERC.
- Masson, P and C. Pattillo, (2005), *The Monetary Geography of Africa* Washington DC.: Brookings Institution.
- Morris, S. (1995) "Inflation dynamics and the parallel market for foreign exchange" *Journal of Development Economics* vol 46: 295-316.
- Rogoff, K. A. Husain, A. Mody, R. Brooks and N. Oomes (2003) "Evolution and Performance of Exchange Rate Regimes" *IMF Working Paper* 03/243.
- Sun, Y. (2003) "Do Fixed Exchange Rates Induce More Fiscal Discipline" *IMF Working Paper* 03/078.
- Tornell, A. And P. Lane (1995) "Fiscal Discipline and the choice of exchange rate regime" *European Economic Review* vol 39, pp 759-770.