# For Economic Development Does the Real Exchange Rate Matter?

By Martín Rapetti

## Introduction: the mainstream approach

The level and volatility of the real exchange rate[1] affects the rate of economic growth in developing countries, so yes, the real exchange rate matters for economic development.

However, the mainstream approach – to conduct free floating and inflation targeting policies – typically neglects this fact. Central banks tend to focus narrowly on inflation and execute domestic demand-management through monetary policy, using a reference interest rate as the main instrument, while leaving aside other policy objectives like the level and stability of the real exchange rate. Since credit markets in developing countries are small relative to international capital flows, and the exchange rate pass-through is still significant, international shocks can strongly affect domestic prices. Monetary policy narrowly focused on standard inflation targeting is more tolerant with currency appreciation than depreciation and, as a result, ends up having an appreciation-bias that can impede economic development.

This policy brief makes the case for an alternative approach.

I would argue that a stable and competitive level for the real exchange rate has a positive effect on the rate of growth of output and real wages, especially in the medium run.

Many specialists in this area have found substantial evidence showing that competitive and stable real exchange rates are associated with higher GDP per capita growth rates[2]. There is also strong evidence that the real exchange rate and growth rates are strongly related in both developing and emerging-market countries.[3] Most of this evidence comes from econometric analysis, but there are also studies on specific countries and regions that support the same conclusion.[4]

Targeting a competitive and stable exchange rate seems to enhance growth because it minimizes the risks of currency and financial crises and sudden-stops; it relaxes the

---

[1] The real exchange rate (RER) compares the relative price of two countries' official consumption baskets, which are representation of what their average consumer populations buy.

[2] There are many examples, including Rapetti (2016), Razin and Collins (1999), Aguirre and Calderón (2005), Rodrik (2008), Rapetti et al. (2012), Béreau et al. (2012), MacDonald and Vieira (2010), Razmi et al. (2012), Hausmann et al. (2005), Cottani et al (1990), Eichengreen (2008).

[3] See examples including Rodrik (2008), Rapetti et al. (2012), Cottani et al. (1990), and Gala (2008).

[4] See Bhalla (2012) for the case of China and other Asian economies, Frenkel and Rapetti (2012) for Latin American countries, Bresser Pereira et al (2014) for Brazil and Di Nino et al. (2011) for the case of Italy.

foreign exchange constraint on sustained economic growth; and more importantly, it stimulates modern tradable activities that are key for economic development.

# An alternative approach

Attaining the standard macro-policy objectives – inflation and employment – is a complex endeavor in itself. The proposed alternative approach is more complex because it requires the coordination of monetary, fiscal, exchange rate, and income policies. Exchange rate policy must be conducted in order to signal a stable trajectory for the real exchange rate, which in a managed floating regime is compatible with day-to-day nominal exchange rate volatility. In the context of capital mobility, an active exchange rate policy limits the ability of monetary policy to manage the pace of aggregate demand.

This does not mean that monetary policy is passive, but rather that it is not completely independent. For this reason, in a consistent macroeconomic framework, fiscal and income policies should have roles in managing aggregate demand and achieving price stability. This is a key difference to the standard inflation-targeting policy in which monetary policy carries virtually the whole burden of managing the pace of aggregate demand and price stability.

Under a stable and competitive real exchange rate policy framework, both monetary and exchange rate policies are active. Their near-simultaneous conduct requires sterilized interventions[5] and capital controls. Because domestic and foreign assets are imperfect substitutes, sterilized foreign exchange interventions are effective to simultaneously manage both the nominal exchange rate and the interest rate.

These interventions can be thought of as two instruments implemented sequentially. First, intervention in the foreign exchange markets is used to set the exchange rate to the desired level. Then, sterilization is used to absorb the excess liquidity created in the first step and thus to maintain the interest rate in the desired level.

A potential concern is whether these interventions are sustainable over time, because of the possibility that they could create explosive quasi-fiscal cost dynamics. However, in a context in which the domestic interest rate is low enough, buying sterilized interventions is effective and sustainable.

The degree to which we can coordinate monetary and exchange rate policies via sterilized interventions depends on the magnitude of capital inflows. Capital controls can be used to make these interventions more effective, especially when inflows are large. Several countries have had successful experiences with capital controls, with reduced short-term inflows and lower exchange rate volatility. Many scholars have highlighted the benefits of capital management techniques for macroeconomic management, especially in developing countries (Gallagher et al., 2012). Even the IMF,

[5] A “sterilized intervention” is “the purchase or sale of foreign currency by a central bank to influence the exchange value of the domestic currency, without changing the monetary base.” https://www.investopedia.com/terms/s/sterilizedintervention.asp.

which had fiercely opposed them in the past, now sees a role for them in the macroeconomic policy toolkit (IMF, 2010).

Managing aggregate demand under this framework also requires the coordination of exchange rate, monetary, capital account and fiscal policies. If correctly coordinated, macroeconomic policy can properly respond to shocks and manage aggregate demand to attain internal equilibrium. It is important to bear in mind, however, that this approach can have an inflationary bias, even if macroeconomic policy is adequately coordinated.

A competitive or undervalued real exchange rate implies that real wages, or, more specifically, wages in terms of tradable prices, are lower than they would be if the real exchange rate were at equilibrium. Thus, even if aggregate demand is not generating inflationary pressures in the goods markets (demand-push inflation), inflation may still accelerate due to wage inflation pressures that arise from workers' perception that wages are too low (cost-push inflation). Wage aspirations are not only influenced by the degree of unemployment but also by history and the social norms and institutions of each country. Thus, keeping a real exchange rate competitive beyond the short run may ultimately depend on developing some instrument that makes workers' wage aspirations compatible with the modern tradable sector's profitability.

Authorities would need to convince workers and their leaders that their cooperation in terms of prudent wage aspirations are beneficial, not only for modern tradable activities, but also for workers themselves. This is because, with proper cooperation, real wages would be higher in the medium run. Governments and firms, in turn, should provide benefits and incentives for workers' cooperation. Social pacts or agreements between governments, firms and workers that link real wages to productivity in key tradable activities, on the one hand, and welfare and sound working conditions schemes, on the other hand, may be the key elements for this development strategy to succeed.

## Possible instruments

One key question that arises is: what is the underlying mechanism explaining why undervalued real exchange rate levels would favor economic growth and overvalued levels would hurt economic growth? Two main approaches can be seen in the expert literature.

One takes off from the observation that – in many cases – growth accelerates with an increase of investment and a simultaneous improvement in the current account of the balance of payments. How does this relate to the link observed in the literature between real exchange rate and growth? The likely explanation is that a higher real exchange rate level improves exports and reduces imports in the country's domestic economy.

The improvement in the trade balance implies a reduction in the need for foreign finance and also a build-up of foreign reserves at the central bank. Higher stocks, foreign assets, and improved current accounts (higher surpluses or lower deficits) reduce the economy's vulnerability to sudden stops in capital inflows and the resultant crises. The conclusion is that a sound macroeconomic environment and reduced volatility favors capital accumulation – i.e., investment – and growth.

The imperfections in international capital markets that strongly affect emerging-market and developing countries – sudden stops of capital flows and boom-and-bust cycles – can jeopardize their pace of economic performance. Consequently, these countries need to establish safe linkages with international markets to minimize their reliance on foreign savings. A stable and competitive real exchange rate level is therefore an important instrument for macro-prudential policy.

The second issue to consider is the key role that tradable activities play in the process of economic development. Economic development is a process characterized by a rapid and intense structural transformation from lower-productivity to higher-productivity sectors with exporting potential. These activities have usually been associated with manufactures, but they also encompass some "tradable" services (e.g., software) and knowledge-intensive agricultural activities or the bio-economy. Consider three broad elements:

1. Tradable activities are intrinsically very productive and prone to innovation because they are subject to international trade and competition.
2. The reallocation of (current and future) resources from traditional activities to high-productivity tradable activities —i.e. structural change— accelerates GDP per capita growth.
3. Investment in these activities depends on their profitability, which in turn depends on the level and volatility of the real exchange rate. A sufficiently high and stable level of this key variable is an instrument that compensates for domestic market failures (including lack of adequate infrastructure and logistics) and favors sustained capital accumulation.

Recently, research in this matter has motivated further study of the association between the real exchange rate and tradable sector development: a transitory currency undervaluation may spur a virtuous dynamic of investment in tradable sectors and growth acceleration (Rodrik, 2008; Rapetti, 2013; Korinek and Serven, 2016). A key advantage of this activity is the presence of positive effects on the rest of the economy related to employment, higher wages and job quality. Therefore, policies reallocating resources to export industries – like a competitive level of real exchange rate – promote higher growth and can be seen as an effective instrument of industrial policy.

# Conclusion

Both the availability of compelling explanations and significant evidence should encourage belief in the ability for stable and competitive real exchange rate levels to favor economic growth in developing countries. The potential benefits associated with a policy targeting a stable and competitive real exchange rate are many. On the one hand, by accelerating economic growth, such a policy supports a sustained generation of decent and productive jobs. This is given by the fact that the competitive exchange rate also impacts on the composition of GDP growth and – through it – employment. Since it enhances the profitability of labor-intensive tradable activities, this policy leads to more labor-intensive economic growth. On the other hand, from a macro-prudential perspective, a stable and competitive real exchange rate promotes financial stability through foreign asset accumulation that protects emerging economies from international capital market failures. It should therefore be in the toolkit and policy recommendations of the international financial institutions.

**References**

Aguirre, A., & Calderón, C. (2005). *Real exchange rate misalignments and economic performance.* Documentos de Trabajo (Banco Central de Chile), (315), 1–49.

Béreau, S., Villavicencio, A. L., & Mignon, V. (2012). *Currency misalignments and growth: a new look using nonlinear panel data methods*. Applied Economics, 44(27), 3503–3511.

Bhalla, S. S. (2012). *Devaluing to prosperity: misaligned currencies and their growth consequence*. Peterson Institute.

Bresser-Pereira, L. C., Oreiro, J. L., & Marconi, N. (2014). *Developmental Macroeconomics: new developmentalism as a growth strategy.* Routledge.

Cottani, J. A., Cavallo, D. F., & Khan, M. S. (1990). *Real exchange rate behavior and economic performance in LDCs.* Economic Development and Cultural Change, 39(1), 61–76.

Di Nino, V., Eichengreen, B., & Sbracia, M. (2011). *Real Exchange Rates, Trade, and Growth: Italy 1861-2011.* Bank of Italy Economic History Working Paper, (10).

Eichengreen, B. (2008). *The real exchange rate and economic growth.* Social and Economic Studies, 7–20.

Frenkel, R., & Rapetti, M. (2012). *Exchange rate regimes in the major Latin American countries since the 1950s: lessons from history*. Revista de Historia Económica-Journal of Iberian and Latin American Economic History, 30(1), 157–188.

Gala, P. (2008). *Real exchange rate levels and economic development: theoretical analysis and econometric evidence.* Cambridge Journal of Economics, 32(2), 273–288.

Gallagher, K., Griffith-Jones, S., & Ocampo, J. (2012). *Regulating global capital flows for long-run development*. Pardee Center Task Force Report, Boston, Mass., Fredrick S. Pardee Center for the Study of the Longer Range Future.

Hausmann, R., Panizza, U., & Rigobon, R. (2005). *The long-run volatility puzzle of the real exchange rate.* Journal of International Money and Finance, 25(1), 93–124.

Korinek, A., & Serven, L. (2016). *Undervaluation through foreign reserve accumulation: Static losses, dynamic gains*. Journal of International Money and Finance, 64, 104–136.

MacDonald, R., & Vieira, F. V. (2010). *A panel data investigation of real exchange rate misalignment and growth.*

Ostry, J. D., Ghosh, A. R., Habermeier, K., Chamon, M., Qureshi, M. S., & Reinhardt, D. (2010). *Capital inflows: The role of controls*. IMF Staff Position Note. International Monetary Fund, Washington, DC.

Rapetti, Martín. (2013). *Macroeconomic Policy Coordination in a Competitive Real Exchange Rate Strategy for Development.* Journal of Globalization and Development, Vol. 3, p. 1. https://doi.org/10.1515/jgd-2012-0009

Rapetti, Martín. (2016). *The Real Exchange Rate and Economic Growth: A Survey.* Working Paper-Mimeo.

Rapetti, Martin, Skott, P., & Razmi, A. (2012). *The real exchange rate and economic growth: are developing countries different?.* International Review of Applied Economics, 26(6), 735–753.

Razin, O., & Collins, S. M. (1999). *Real exchange rate misalignments and growth.* National Bureau of Economic Research.

Razmi, A., Rapetti, M., & Skott, P. (2012). *The real exchange rate and economic development.* Structural Change and Economic Dynamics, 23(2), 151–169.

Rodrik, D. (2008). *The real exchange rate and economic growth.* Brookings Papers on Economic Activity, 2008(2), 365–412.