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Real exchange rate policies for economic development

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ABSTRACT

This paper analyzes the role of real exchange rate (RER) policies in promoting economic development. Markets provide a suboptimal amount of investment in sectors characterized by learning spillovers. We show that a stable and competitive RER policy may correct for this externality and other related market failures. The resulting development of these sectors leads to overall faster economic growth. A system of effectively multiple exchange rates is required when spillovers across different tradable sectors differ. The impact of RER policies is increased when they are complemented by traditional industrial policies that increase the elasticity of the aggregate supply to the RER. Among the instruments required to implement a stable and competitive RER are interventions in the foreign exchange market and regulation of capital flows. We also discuss the trade-offs associated with alternative stable and competitive RER policies and the relationship between the use of exchange rate policies for macro-stability and for development.

1. Introduction

The role of exchange rate policies for economic development is still largely debated. There are two central and interconnected issues regarding exchange rate policies in the macroeconomic literature on emerging economies in recent decades that relate to the links between the balance of payments and macro stability and growth: (i) the role that the exchange rate plays in facilitating or hindering economic growth, including through promoting diversification; and (ii) the extent to which the exchange rate regime and capital account management help manage cyclical swings in external financing and terms of trade fluctuations, especially in commodity-exporting countries, and open or limit the space for counter-cyclical macroeconomic policies. Both of these issues highlight the potential importance of exchange rate policies in open economies, alongside monetary and fiscal policies, and also the specific and somewhat contradictory links between exchange rate and monetary policies in emerging economies subject to strong boom-bust cycles in external financing.

The first of these issues focuses on exchange rates as an instrument of industrial policy, and underscores the central role that economic diversification plays in the long-term growth of emerging and developing countries (Ocampo, Rada, & Taylor, 2009; Rodrik, 2007, 2013; Stiglitz and Greenwald, 2014). In this view, scaling up toward activities with higher technological contents is the key to dynamic growth. These new activities can be found in natural resources, but are most commonly associated with the development of higher-tech manufacturing and modern services. The East Asian experiences, first of the Newly Industrializing Countries and most recently of China, are underscored as success stories of such diversification (Rodrik, 1994; Stiglitz, 1996; Lin, 2017). This contrasts with the difficulty faced by a large number of natural-resource dependent economies in diversifying their production and export structures, and even the "premature de-industrialization" that several of them have faced (Rodrik, 2016; Noman and Stiglitz, 2012).[1]

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[1] Note that changes in technology and the structure of the global economy mean that the pattern of growth for countries going forward may have to be markedly different from those that were successful in the past. Global employment in manufacturing is on the decrease, and those countries seeking to increase industrial employment will face increasing competition for a diminishing number of jobs. Moreover, there is likely to be some onshoring, with robotization. See Stiglitz and Greenwald (2014).

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The second issue—the management of cyclical swings in capital flows—emphasizes the importance of counter-cyclical macroeconomic policies for long-term growth. The essential problem in this regard is that capital flows, like finance in general, are pro-cyclical. In commodity-exporting economies, this means, moreover, that capital flows reinforce rather than mitigate the commodity price cycle. There is overwhelming evidence that capital flows to emerging and developing countries are pro-cyclical and have become one of the major determinants—and in many cases *the* major determinant—of business cycles.[2]

There have been two largely separate strands of literature, addressing these two issues—one focusing on macro-stability in open economies, the other on industrial policies, especially in (developing) economies for sectors with large learning externalities. Both of these literatures have explored a variety of instruments for achieving their goals, in one case stability, in the other, development. There is an instrument that they share in common: the exchange rate. While managing the exchange rate has been seen as central to macro-stability, it has been somewhat peripheral to industrial policy—and although there is a strand of the literature that argues that the policies for economic development must include a competitive and a stable real exchange rate (RER), it does not analyze with sufficient precision under what conditions a competitive RER is desirable.[3]

This paper, with its focus on the exchange rate, brings these two literatures together, and in doing so extends the precision and reach of each, arguing that (a) having a competitive and stable RER can be an important instrument for both macro-stability and development; (b) the effects are intertwined and complementary: a more competitive and stable RER leads to diversification, especially for resource-rich countries, which contributes to macro-stability; and macro-stability increases the power of a competitive and stable RER as a tool of industrial policy; (c) there are complementary policies that can increase the power of exchange rate policy, both in enhancing development and in promoting stability; in particular, complementary industrial policies such as the provision of credit and public investments can enhance the response of the economy to competitive and stable exchange rates, and while some macro policies, such as capital account management, have been seen as a substitute for direct intervention in exchange rate markets, they may as well be complementary; (d) what is required is a portfolio of instruments aimed at achieving both goals, and in deciding on the role of any particular instrument, and in particular of exchange rates, both impacts on macro-stability (directly and indirectly) and on development need to be analyzed.

While a full discussion of optimal interventions in open economies is beyond the scope of this paper, the paper establishes two important results (proven in the Appendix) that clarify under what conditions a competitive RER is a constrained optimal policy: while without any constraints on subsidies to the tradable sector, optimal intervention entails the appreciation of the RER, when subsidies are not allowed (as under WTO agreements), optimal policy entails a depreciation of the RER, and a set of taxes on tradable goods which generate low or no learning benefits, creating, in effect, a system of *effectively* multiple RER (by this last term we recognize the need to introduce other policy instruments that effectively lead to a less competitive exchange rate for sectors with negative spillovers, while maintaining the commitment of members of the International Monetary Fund to avoid multiple exchange rates). Optimal interventions entail both static and dynamic tradeoffs, balancing out the dynamic gains of learning with distortions in both intertemporal and contemporaneous consumption. The paper provides guidance on how limits on policymakers' information, market imperfections, and other constraints, such as those imposed by international agreements, determine the second best nature of the optimal planning problem.

Any policy that has the potential for reallocating the economy's factors of production towards the sector with learning spillovers could be welfare improving. In particular, if the government could identify the learning spillovers associated with each type of activity and if it could use subsidies and lump-sum taxes to finance the subsidies, then there would be a set of subsidies and transfers that would constitute the first best policy response. These policies would entail an appreciation of the real exchange rate (see Itskhoki and Moll, 2014 and the Appendix for the analytical development of this proposition). The reason is that if the planner could use non-distortionary transfers, it would allocate more resources to the production of the tradable good that features learning spillovers. Thus, the non-tradable good that do not feature learning spillovers would become more scarce, and its price would increase in relation to the price of the tradable good with learning spillovers. But if the implementation of these first-best policies is not possible (either because there are severe political economy problems or risks of rent seeking that impede an efficient allocation of subsidies, or there are international regulations that impede the implementation of subsidies in the first place), then there is a key role for real exchange rate policies as second-best solutions.

Under those circumstances, a competitive exchange rate will increase the profitability of tradable sectors (including "infant sectors" and new export activities). Implicitly, the competitive real exchange rate acts as a subsidy to the tradable sectors.[4] However, there may be multiple tradable sectors, including some that do not feature learning spillovers. Therefore, as a means to correct relative prices, optimality will require that the sectors with no learning spillovers that receive the implicit subsidy implied by the competitive real exchange rate are taxed, while sectors characterized by learning spillovers retain the implicit subsidy. The resulting system of effective multiple real exchange rates will help those sectors that must go through a learning process in order to be competitive. This implies that the exchange rate operates as a type of industrial policy, or in a broader sense, as a type of production sector policy[5].

This consideration of real exchange rate policies as a means for fostering the development of sectors that are associated with larger technological progress is backed up now by a growing literature that shows that long-term growth in developing countries is positively associated with the capacity to guarantee a competitive exchange rate (Rodrik, 2008; Rapetti, Skott, & Razmi, 2012; Razmi, Rapetti, & Skott, 2012; Rapetti, 2013; and for a review of the literature, Frenkel and Rapetti, 2014; Damill, Frenkel, & Rapetti, 2015; Missio, Jaime, Britto, & Oreiro, 2015).

The previous paragraphs have provided the intuition behind the use of RER as an instrument of industrial policy. A direct extension of these arguments can be used to establish the desirability of a

[2] This was well known before the global financial crisis (see, for example, Prasad, Rogoff, Wei, & Ayhan Rose, 2003, Ocampo, Spiegel, & Stiglitz, 2008), but has been reinforced by the effects of the September 2008 Lehman shock, the effects of developed countries' expansionary monetary policies on capital flows toward emerging economies, and the more recent swings associated with the gradual dismantling of U.S. expansionary monetary policy, the commodity price collapse and the turbulence in Chinese stock markets.

[3] Even though the real exchange rate is an endogenous variable and not a direct policy instrument, we still speak of *real exchange rate policies*, understanding that these policies rely on the management of a set of *actual* policy instruments.

[4] The intervention that makes the real exchange rate more competitive will be associated with static and dynamic losses but will also bring dynamic gains. In the margin, the dynamic gain will dominate (Korinek and Serven, 2016).

[5] It should be emphasized that modern industrial policy is not just concerned with expanding the manufacturing sector. Instead, it entails any policy directed at affecting the sectorial composition of the economy and the choice of technology. Modern industrial policies can be directed not only at promoting growth, but increasing employment, reducing inequality, promoting the environment, or any other societal objective. See Greenwald and Stiglitz (2014a), (2014b). To avoid the negative connotation and the narrow framing associated with the term industrial policy, below we refer to such policies simply as production sector policies.