

Neutralizing the Tendency to the Overvaluation of the Exchange Rate or Assuming a Foreign Constraint and Asking for Foreign Savings^{*}

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The objectives of these notes are two. The first objective is to analyze whether the strategy of growth with absorption of foreign savings leads to a trajectory of the economy that is sustainable in the long run. The second one is to evaluate the possibility of success of a policy of administered devaluation of the exchange rate in Brazil.

1- Introduction

An overvalued real exchange rate induces current account deficits, enabling a growth scenario marked by the absorption of foreign savings. When continued over time, this leads to a "sudden stop" of capital flows and a currency crisis.¹ The relevant issue, therefore, is to know if the external imbalance will be reversed in the future with or without the need of currency crises and/or contractionary macroeconomic policies to correct it. In other words, does assuming the balance-of-payments constraint to growth and the absorption of foreign savings, given an overvalued real exchange rate, lead to an economic trajectory sustainable in the long run?

According to the mainstream economics theory, current account deficits and the absorption of foreign savings lead to a rise in the investment rate beyond the level allowed by the domestic savings rate. A higher investment rate would lead to competitiveness gains and an improvement of the trade balance. This would make it possible to run current

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¹ On the "Sudden Stop" effect, see Calvo (1998).

account surpluses and, in the future, pay off the economy's net foreign debt. The country's economic trajectory would thus be sustainable in the long run. According to these models of neoclassical descent, there would also be a spontaneous spatial convergence of the *per capita* income, due to the uninhibited operation of market mechanisms and to the free flow of the factors of production. Discussing the relationship between developed and developing countries, Barro *et al.* (1992) and Simonsen and Cysne (1995), amongst others, argue that developing countries attract more capital flows due to the higher profitability capital enjoys in them. This is due to its relative scarcity when compared to developed countries. "Capital would thus naturally flow from rich to poor countries, contributing to the alleviation of international economic disparities" Simonsen and Cysne (1995, p. 91-92). The initial absorption of foreign savings would later be reversed via the improvement of the trade balance of developing countries. Furthermore, such an improvement is made possible by adequately using these foreign savings in the developing countries (using them for productive purposes). In other words, an increase of foreign savings is to be associated with an increase of investment.

Nevertheless, an overvalued real exchange rate does not necessarily help raising productivity in the long term. In such a case, there would arise a problem with the neoclassical-inspired argument, according to which the growth scenario with an influx of foreign savings would later be smoothly reversed, without recourse to currency crises or contractionary policies. The smooth reversion would happen due to the increase of competitiveness, which would entail a growth scenario with current account surpluses. As argued above, the initial absorption of foreign savings would be subsequently reversed as the trade balance improved – and, for the latter to happen, the foreign savings would need to be put to adequate uses (for productive purposes) in the economy facing current account deficits.

An overvalued real exchange rate does not necessarily contribute to raising productivity in the long term, for the rate of investment does not increase as a consequence of the country absorbing foreign savings. Bresser-Pereira and Nakano (2003) argue that an appreciated exchange rate leads to rising real wages and aggregate

consumption, to falling profits and domestic savings, and to current account deficits – i.e., absorption of foreign savings. There would be an *ex post* increase of foreign savings matched by a decrease of domestic savings, a result opposite to what the neoclassical-inspired models suggest.² Bresser-Pereira and Nakano (2003) thus argue that an appreciation of the real exchange rate entails the substitution of domestic for foreign savings, without affecting aggregate savings. In this process there would consequently be no greater investment associated to higher savings.

This process is compatible with the Keynesian approach, which considers that it is investment that brings forth savings. In an open economy, aggregate investment equals national plus foreign savings. However, the distribution of aggregate savings between its national and foreign aliquot parts depends on the level of the real exchange rate. Variations in the latter will thus lead to a substitution between national and foreign savings. Furthermore, the Keynesian conception remains valid – it is investment that brings about national and foreign savings, and not the other way around.

Why does the overvaluation of the real exchange rate increase foreign savings, which replace decreasing national savings? Bresser-Pereira and Nakano (2003) indicate that the appreciation of the real exchange rate corresponds to a shift in the relative prices of tradable and non-tradable goods, which increases real wages and reduces profits. Given that workers' propensity to consume is higher than capitalists', aggregate consumption rises as a percentage of aggregate income. This reduces national savings. Investment is then met by the absorption of foreign savings, which is reflected in current account deficits.

Bresser-Pereira & Nakano (2003) explain why national savings decline when the exchange rate appreciates. Their argument about the substitution of National for foreign savings can be strengthened if we can explain why foreign savings rise when there is an overvaluation of the exchange rate. This task can be done by assuming the post Keynesian argument that investment precedes savings.

² According to Bresser-Pereira and Nakano (2003), an overvalued exchange rate takes place in a context of rising foreign debt and domestic interest rates, as well as a worsening of the public debt to GDP ratio. This has got perverse results for investment, for the balance-of-payments equilibrium and for the public accounts. Hence, there is a lower *ex post* rate of investment associated to an increase of foreign savings and a decrease of domestic savings.

National savings are the amount of national income not spent on consumption, and in accounting terms are equal to the national output of capital goods (gross fixed capital formation). Proposing that, for a given aggregate income, an increase of consumption would, by symmetry, decrease savings, suggests that there is a substitution of supply of capital goods (investment goods) for consumption goods. It is necessary, therefore, to comprehend the mechanism through which an overvaluation of the exchange rate inhibits the domestic supply of capital goods, thereby reducing national savings and increasing foreign savings. This point will be developed in the next section.

2. Overvaluation of the real exchange rate and substitution of national for foreign savings

In a closed economy, the domestic potential output of capital goods at a given moment in time is determined by the capital stock of the economy. The relative rise in the price of non-tradable goods, as it reduces profits and raises aggregate consumption, cannot transform the capital goods necessary for the production of other capital goods into those necessary for the production of consumption goods. In this case, the internal availability of machinery and equipment required for investment to take place is not reduced by the shift of relative prices and the increase of aggregate consumption.

This argument, however, is only valid for closed economies. In an open economy, on the other hand, with shifts of relative prices the supply of investment goods will be altered, thus modifying the national savings. By undervaluing (overvaluing) the real exchange rate, national savings can be increased (reduced).

There are two separate effects associated to modifying the real exchange rate. According to Pastore & Pinotti (1995, p. 41), the relative rise in the price of tradable goods (TGs) stimulates consumption to substitute them for non-tradable goods (NTGs). Furthermore, it stimulates the production of the former, increasing the exportable surplus. Likewise, appreciating the exchange rate – i.e., an increase in the relative price of NTGs – negatively affects the trade balance.

A similar result obtains when using a model of mark-up pricing, in which the economy does not necessarily operate at full employment³. A rise in the relative price of the NTGs sector can eliminate the less efficient producers of TGs by squeezing their margins, insofar as it increases their production costs (given the rise in the prices of NTGs). Likewise, a decline in the relative price of NTGs enables the entrance of less efficient producers in the TGs sector, thereby increasing the exportable surplus.

A rise in the price of TGs relative to that of NTGs results, therefore, in an improvement of the trade balance. An increase of net exports corresponds, in accounting terms, to the growth of national savings. Consequently, despite the fact that consumption goods-producing machinery cannot transmute themselves into machines used in the production of investment goods, the exported consumption goods provide foreign currency that can be used to import capital goods.

An overvalued real exchange rate reduces net exports, curtailing the supply of investment goods (capital goods) that is made available by imports in a context of current account equilibrium. In order not to reduce this supply, it is necessary to sustain the imports of capital goods at the same level, in spite of a reduction of net exports. This worsens the current account balance. An overvalued exchange rate thus curbs national savings and stimulates the absorption of foreign savings. Supposing that the rate of investment does not change, appreciating the exchange rate leads to a substitution of national for foreign savings, while the sum of these two remains equal to aggregate investment. This can be associated to the Post-Keynesian argument that investment precedes saving, and not otherwise.

2.1. The exchange rate, investment and savings

The precedence of investment over savings is not a consensual issue in the economic literature. For the Post-Keynesian approach, savings (or a lack thereof) cannot somehow curtail investment, for the former does not necessarily precede investment. Moreover, in a closed economy investment is always equal to national savings, while in an open economy investment is always equal to national savings plus the absorption of foreign savings.

³ On the mark-up model, see, for example, Kandir (1989) or Pereira (1999).

What is, therefore, the relationship between an overvalued real exchange rate, investment and savings in open monetary economies? When the real exchange rate appreciates, part of the investment demand is shifted to the rest of the world, thereby affecting the national savings rate. A rise in the relative price of non-tradable goods leads to an increase of the domestic demand for tradable goods, as well as to reduced domestic output of the latter. Therefore, an overvaluation of the real exchange rate reduces the domestic availability of capital goods – this is defined as the domestic output of capital goods produced for the internal market, plus the imports of such goods up to the equilibrium of the current account. After the real exchange rate appreciates, it is necessary to increase the imports (of capital goods) in order to enable a given amount of investment, which worsens the current account balance. The parcel of total investment corresponding to the demand for capital goods met by purchases in the internal market, and by importing capital goods up to the equilibrium of the current account balance, is reduced after the appreciation of the real exchange rate. Consequently, national savings fall by a corresponding amount.

When the currency appreciates, there is, simultaneously, a worsening of the current account balance, a decrease of national savings, and a transference to the rest of the world of the inducement to save that investment brings forth. These three processes are sides of the same coin. When the real exchange rate appreciates, net exports fall. The parcel of investment corresponding to the imports of capital goods (KGs) that before the appreciation stimulated national savings through exports, then stimulates the formation of savings in the rest of the world. Let us have a better look at it.

Investment produces income and, via the expenditures multiplier, generates national savings in a closed economy (Keynes, 1988, Studart, 1995, chap. 4). In an open economy, exports also play this role associated to investment: exports produce income and, via the multiplier, savings arise.⁴ The receipts of exports are used to import KGs, so that everything is as if exports were domestic investment proper (i.e., as if they were the domestic

⁴ Exports produce income. Part of this income becomes consumption and the rest is saved. This saved portion can be exported. Exports are thus part of the national savings, whenever they are not offset by the imports of consumption goods.

production of KGs), since the receipts of exports are exchanged for the imports of KGs.⁵ Just as happens with investment, exports produce income, consumption and national savings. The difference lies in that instead of producing KGs to meet the investment demand, there will be the production of goods to be sold foreign markets; its receipts will be used to import KGs, thereby meeting the investment demand. Just as the production of KGs carried out to meet the investment demand produces income, consumption and national savings associated to the expenditures multiplier, exports produce income, consumption and national savings, the latter corresponding to exports net of the imports of consumption goods and of expenses with net factor payment abroad (NFPA).

When the real exchange rate appreciates, the current account balance declines while national savings simultaneously decrease. Both processes are associated to the decline of net exports. If, however, the volume of investment does not change, the expenditures with KGs will not be altered either. Since the net exports are reduced after the currency appreciation, the exchange of exported goods for the imports of KGs will be, at least partially, interrupted. In other words, a parcel of the imports of KGs – and, therefore, a parcel of the investment – will no longer have a corresponding part in the national savings.⁶ After the currency appreciation a parcel of the imports of KGs – and, therefore, a parcel of the investment – will have its counterpart in the absorption of foreign savings (a current account deficit). For the rest of the world (or the trade partners), net exports will have increased after the real exchange rate of the domestic country appreciates. This means that, after the overvaluation, a part of the investment (the imports of KGs) of the domestic country stimulates savings in the rest of the world, and not national savings in the domestic country.

It is not a matter, therefore, of insufficient savings for a given rate of investment, arising from an overvaluation of the real exchange rate. Starting with a certain level of domestic investment, when there is an appreciation of the real exchange rate current account

⁵ It must be borne in mind that the parcel of exports whose receipts are used to import consumption goods does not represent national savings.

⁶ To simplify the argument, suppose that before the currency appreciation the NFPA and the net exports were zero. After the appreciation, a trade deficit arises, i.e., exports become smaller than imports. The excess of imports over exports does not correspond to national savings, but, rather, to the absorption of foreign savings.

deficits arise, stimulating savings in the rest of the world due to domestic investment. The stimulus to domestic income and savings will likewise be reduced. At the end of the adjustment process initiated by the currency appreciation, there will be a rise in the relative price of non-tradable goods, in the share of wages and of aggregate consumption in national income, and a decline of the share of profits and of national savings in income, as Bresser-Pereira and Nakano (2003) argue.

This argument is thus compatible with that of Bresser-Pereira and Nakano (2003), who state that an overvalued exchange rate leads to an increase of real wages and of aggregate consumption, as well as to a decline of profits and of national savings. Although the latter is in accounting terms associated to the supply of capital goods, its decline is not brought about by a reduction of the domestic potential output of capital goods, but rather by a decline of net exports. This decline, in its turn, is associated to the larger share of aggregate consumption in national income.

Consequently, the Post-Keynesian approach rejects the argument that current account deficits, as they represent the absorption of foreign savings, lead to an increase of the rate of investment. On the one hand, the foreign deficit associated to an overvalued real exchange rate does not, *coeteris paribus*, increase the sum of national and foreign savings. It merely provokes a substitution of national for foreign savings. On the other hand, in the Post-Keynesian approach savings do not create investment, but are, rather, a consequence of the latter. In the context of an overvalued real exchange rate, therefore, the consecutive current account deficits do not necessarily imply a rise of aggregate investment and competitiveness gains. The situation may thus not correspond to a trajectory of the economy that is sustainable in the medium or long run.

Furthermore, on the relationship between the exchange rate and competitiveness, an appreciation of the real exchange rate can modify the sectoral distribution of investment in the economy, inhibiting the long term growth of competitiveness. The loss of competitiveness in the economy reduces the chances of reversing the cumulative current account deficits in ways other than currency crises and/or contractionary policies. This

argument is built upon the literature that deals with the relationship between the exchange rate and growth. It will be developed in the next section.

2.2 The real exchange rate and the performance of the foreign sector

An important part of the theoretical and empirical literature dealing with the relationship between the real exchange rate and economic growth suggests that an undervalued exchange rate stimulates long term growth (Bresser-Pereira and Nakano, 2003; Bresser-Pereira, 2010; Rodrik, 2007; Dollar, 1992; Razin and Collins, 1997; Acemoglu *et al.*, 2002; Bhaduri and Marglin, 1990; Kim and Ying, 2007; Gala 2008; Gala and Libânio, 2008; Kalyoncu *et al.*, 2008). This literature can also be used to relate the real exchange rate to competitiveness and to the performance of trade and current account balances in the long term.

Rodrik (2007) argues that, as the real exchange rate defines the relation between the prices of tradable and non-tradable goods, a currency devaluation would increase the relative profitability of tradable goods, thus stimulating aggregate investment. The author states two hypotheses for explaining this fact. The first would be valid when there are weak institutions in the country, a situation more likely in developing countries. The second hypothesis stems from market failures. In both cases, the rise in the relative price of tradable goods would compensate for the problems related to weak institutions and to market failures, stimulating investment in the tradable goods sector. On the other hand, a currency appreciation would not produce the same stimulus to investment in the non-tradable goods sector, for the latter does not suffer as much the problems caused by weak institutions and market failures.⁷

The depreciation of the real exchange rate thus produces a greater stimulus to aggregate investment than an appreciation does. The gross fixed capital formation, in its turn, is a necessary condition for technological progress, as shown by various authors associated to the Evolutionary Growth School, such as Nelson (2005) and Dosi *et al.*

⁷ “Lousy institutions therefore impose a higher ‘tax’ on tradables – specially modern tradables. This results in both a static misallocation of resources that penalizes tradables, and a dynamic distortion in the form of lower-than-socially optimal investment in tradables. An increase in the relative price of tradables can improve static efficiency and enhance growth in second-best fashion by eliciting more investment in tradables at the margin.” (Rodrik, 2007, p. 22).

(1994), amongst others. Currency devaluations, therefore, insofar as they induce aggregate investment, increase the possibilities of technological progress. Thereby, they also stimulate competitiveness gains for the economy in the long term.

As a matter of fact, the relationship between technological progress and the real exchange rate is studied in the literature that deals with the connections between the exchange rate and growth. According to Gala (2008) and Williamson (2003), given the difficulty natural resource-rich economies face in developing non-traditional sectors, a result of currency appreciation cycles caused by exports of commodities, a competitive real exchange rate is an industrial policy instrument. This is because such an exchange rate makes it easier to expand sectors that are not traditional and do not depend on commodities – especially those sectors connected to foreign commerce. On that account, a competitive exchange rate minimises the problems advanced by the theoretical traditions dealing with precocious deindustrialisation and the Dutch Disease. Regarding technology, the devaluation of the exchange rate thus helps countries reach higher positions in the "technological race", as it induces industrial output to orient itself to the international market (Gala, 2008).

The dynamics of the exchange rate, the growth of output and the performance of the foreign sector of the economy can also be seen in the perspective pioneered by Kaldor (1966). According to the author, in the manufacturing sector the law of increasing returns to scale holds true, in opposition to all other sectors, marked by decreasing returns. Therefore, an increase in the manufacturing output provides the sector with productivity gains. It will also absorb workers from all other sectors, which present decreasing returns to scale. Hence, the average productivity of the economy will be raised. These productivity gains, in their turn, provide new stimulus for an increase of output, since they make the manufacturing sector more competitive (via cost cuts) – and, as the output is directed to exports, the cycle is fed back⁸. From a Kaldorian viewpoint, economic activity thus presents a circular and cumulative character. Consequently, an undervalued currency

⁸ Verdoorn's Law describes the process. The law demonstrates the existence of a bi-causality between productivity and industrial output, which guarantees the principle of "Circular Cumulative Causation" in the Kaldorian model of economic growth. Gunnar Myrdal originally introduced this principal during the second half of the 20th century.

could represent a "start-up" shock on exports, initiating a virtuous cycle of growth and competitiveness gains (Gala and Libânio, 2008). On the other hand, an appreciation of the exchange rate would reduce the profitability of the tradable goods sector, leading to the opposite result.

Barbosa-Filho (2006) made a contribution to the debate showing that the exchange rate can, if at a competitive level, stimulate non-traditional industries. This would alter the income elasticity of demand for exports and for imports. The income elasticity of demand for exports would be increased, while the opposite would hold for imports. The balance-of-payments constraint to growth would thereby be relaxed.⁹ To put it another way, if the foundations of the national system of production are altered, concluding the transition from the production of traditional goods and commodities to that of exportable manufactured goods, with significant presence of imported technology, the country can modify its exports in a manner that increases their income elasticity of demand for exports. This affects the long term growth of the country, its trade balance and its current account balance.

Therefore, an overvalued real exchange rate worsens the current account balance in the short run, while also deterring the increase of the economy's competitiveness in the long run. Accordingly, after a period characterised by successive current account deficits, the probability of a currency crisis increases. In this case, assuming a scenario of growth with the absorption of foreign savings is not a viable alternative for economic policy. The policy to be followed, on the other hand, is a depreciation of the real exchange rate, as analysed in the following section.

3. The Brazilian case

The Brazilian current account balance has shown recurrent and increasing deficits since 2008. In 2010 the deficit was of 2.5% of the GDP, and for 2011 the estimates run around

⁹ Even with the possibility of the exchange rate being constant in the long term, as proposed by the neoclassical theory, Barbosa-Filho (2006) stresses that the short term may be "long enough" for structural changes to arise as consequence of a currency devaluation. In other words, it can be long enough for to alter the balance-of-payments constraints and, therefore, the long term growth rate of output.

2.9% of the GDP. The overvalued real exchange rate plays an important part in offsetting the current account equilibrium. In Brazil, the overvaluation results from the massive influx of foreign capital, owing to the large spread between domestic and foreign interest rates in a context of excessive international liquidity and low growth of the developed economies. This situation stimulates speculative operations in futures markets and dollar-based derivative markets, further increasing the currency overvaluation.

This scenario of successive and growing current account deficits has repeated itself many times in the history of the Brazilian economy. It has always ended with a currency crisis and a reversal of the growth cycle. The Central Bank currently holds more than US\$ 330 billion of foreign currency, which represent a defence against an eventual currency crisis. However, the currency reserves are not being accumulated due to current account surpluses, but rather through the influx of foreign capital – generally short term and volatile capital, at that. There is a speculative bubble constituted by arbitrage gains related to interest rates, which leads to the accumulation of foreign currency. It also increases the damage caused by a "sudden stop" and a speculative attack against the domestic currency. Besides this, the appreciation of the Brazilian Real led to an increase, in foreign currency, of the indebtedness of banks and companies. This makes private banks more sensible to a reversal of capital flows owing to a "currency mismatches", amplifying the effects of a currency crisis on output and growth.

The alternative policy in order to overcoming the balance of payments disequilibrium is an administered and gradual devaluation of the exchange rate. However, the success of the currency depreciation requires the adoption of controls over capital outflows – the expectation of an exchange rate devaluation can lead to a capital flight. Controls over capital inflows must also be adopted in order to confer greater autonomy to the monetary policy, as well as to prevent differences between the domestic and foreign interest rates from attracting capital flows and provoking a currency appreciation in the future. Furthermore, capital controls must be wide-ranging, i.e., they must affect all sub-accounts of the Capital and Financial Account of the balance-of-payments. This includes Foreign

Direct Investment, so as to frustrate the agents' attempts to bypass the Monetary Authority's controls.

After World War II a great number of developed countries adopted capital controls, except the USA and Germany, and they worked well. More recently, economies such as Japan (1970s), Spain (1992), Thailand (1995-97), Malaysia (1994 and 1998-99), Chile (1990s) and Colombia (1993-1998), amongst others, have successfully adopted capital controls (over outflows or inflows) in different moments and circumstances, showing the viability of this policy alternative.

The inflationary effect of a currency devaluation can be controlled by measures providing for the deindexation of contracts for administered prices, as well as by contractionary fiscal and monetary policies. Regarding the fiscal policy, it would be necessary to raise the primary surplus in order to control aggregate demand. Regarding the monetary policy, the Central Bank would have the freedom to raise the interest rate without attracting capital flows, due to the capital controls. Therefore, given the fiscal adjustment, the monetary policy would be tuned according to price movements. As soon as inflation came under control, there would be space for decreasing the domestic interest rate and loosening the fiscal policy.

4. Conclusion

The objectives of these notes were two. The first objective was to analyze whether the strategy of growth with absorption of foreign savings leads to a trajectory of the economy that is sustainable in the long run. The second one was to evaluate the possibility of success of a policy of administered devaluation of the exchange rate in Brazil

From the point of view of the Post-Keynesian approach one can reject the argument that absorption of foreign savings (current account deficits) leads to an increase of the rate of investment. The foreign deficit associated to an overvalued real exchange rate does not, *coeteris paribus*, increase the sum of national and foreign savings. It merely provokes a substitution of national for foreign savings. In addition to this, in the Post-Keynesian

literature savings do not create investment, but are, rather, a consequence of the latter. In the context of an overvalued real exchange rate, therefore, the consecutive current account deficits do not necessarily imply a rise of aggregate investment and competitiveness gains. Besides, using the literature that deal with the relationship between the real exchange rate and economic growth we showed that an overvalued real exchange rate damage the increase of the economy's competitiveness in the long run. So, the scenario of successive and growing current account deficits may not correspond to a trajectory of the economy that is sustainable in the medium or long run.

The Brazilian current account balance has shown recurrent and increasing deficits since 2008. The overvalued real exchange rate plays an important part in offsetting the current account equilibrium. This scenario has repeated itself many times in the history of the Brazilian economy. It has always ended with a currency crisis and a reversal of the growth cycle. The alternative policy for overcoming the foreign disequilibrium is an administered and gradual devaluation of the exchange rate. However, the success of the currency depreciation requires the adoption controls over capital outflows and inflows. The inflationary effect of a currency devaluation can be controlled by measures providing for the deindexation of contracts for administered prices, as well as by contractionary fiscal and monetary policies.

References

BARBOSA-FILHO, N. H. (2006) *Exchange rates, growth and inflation. Annual Conference on Development and Change ACDC*, Campos do Jordão, Brasil. Novembro.

BRESSER-PEREIRA, L.C.; NAKANO, Y. (2003) Crescimento Econômico com Poupança Externa? *Revista de Economia Política*, v. 23, n. 2 (90), abril-junho.

BRESSER-PEREIRA, L.C. (2010) *Globalização e Competição: por que alguns países emergentes têm sucesso e outros não*. São Paulo, ed. Elsevier.

CALVO, G. (1998) Capital flows and capital market crisis: the simple economics of sudden stops. *Journal of Applied Economics*, v. 1, n. 1.

CARVALHO, F.J.C. (1992a) *Mr Keynes and the post Keynesians: principles of macroeconomics for a monetary production economy*. Edward Elgar.

DOSI, G.; FREEMAN, C.; FABIANI, S. (1994) *The process of economic development: Introducing some stylized facts and theories on technologies, firms and institutions*. In.: *Industrial and Corporate Change*, vol. 3, p.1-45. Oxford University Press.

GALA, P.; LIBANIO, G. A. (2008) *Exchange rate policies, patterns of specialization and economic development*. In: *10th International Post Keynesian Conference*, Kansas City-EUA.

GALA, P. (2008) *Real exchange rate levels and economic development: theoretical analysis and econometric evidence*. *Cambridge Journal of Economics*, Vol. 32, p. 273-288.

KALDOR, N. (1966) *Causes of the slow rate of economic growth of the United Kingdom*. Cambridge University Press, Cambridge.

KANDIR, A. (1989) *A dinâmica da inflação: uma análise das relações entre inflação, fragilidade financeira do setor público, expectativas e margens de lucro*. São Paulo, ed. Nobel.

KEYNES, J.M. (1988) *The General Theory of employment, interest and money*. São Paulo, Nova Cultural.

NELSON, Richard. (2004) *Economic development from the perspective of evolutionary economic theory*. Columbia University. Setembro.

PEREIRA, T.R. (1999) Endividamento externo e o ajuste financeiro da grande empresa industrial nos anos noventa. Campinas, *Dissertação de mestrado/Instituto de Economia da Unicamp*.

RODRIG, D. (2007) The real exchange rate and economic growth: Theory and evidence. *Working Paper 2008-0141*, John F. Kennedy School of Government, Harvard University, Agosto.

SICSÚ, J.; CARVALHO, F.J.C. (2007). Experiências de Controles do Fluxo de Capitais: focando o caso da Malásia. In SICSÚ, J. Em prego, Juros e Câmbio: finanças globais e desemprego. Rio de Janeiro, Ed Elsevier.

WILLIAMSON, J. (2003) *Exchange rate policy and development*. In.: *Initiative for Policy Dialogue Task Force on Macroeconomics*, Columbia, NewYork.

WOO, W. (2004) *Some fundamental inadequacies of the Washington consensus: Misunderstanding the poor by the brightest*. *Development and Comp Systems*.