

The macroeconomic prices – what is the
equilibrium level?
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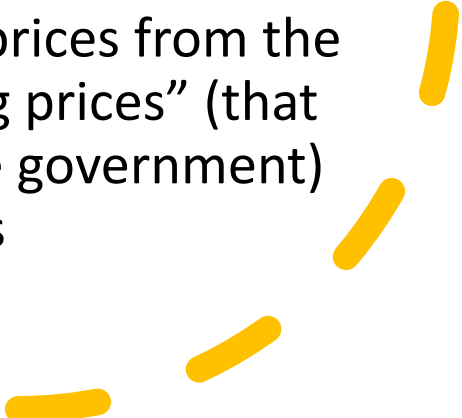


Micro x macro prices

Markets are fundamental to the process of economic development and excellent institutions of coordination in competitive environments, being efficient in defining prices and quantities produced for private goods and services when there is sufficient competition.

However, regarding to the so-called macroeconomic prices (so called because they affect, without exception, all sectors and investment decisions in an economy), the predominance of a value defined by market equilibria will not necessarily imply greater economic growth with equity.

The “right prices” of the market are wrong prices from the macroeconomic perspective and the “wrong prices” (that is, followed and sometimes managed by the government) are the right level for macroeconomic prices



Why “wrong prices”?

Why the level of macroeconomic prices must be followed or managed by the government?

Because when defined by markets, macroeconomic prices are not necessarily at the level that stimulate the sectors more sophisticated and complex

This statement is true specially in developing countries where the profit margins is narrow in these sectors



Which are
the macro
prices?

The New Developmentalist theory classifies five prices in this category:

- exchange rate
- interest rate
- wage rate
- inflation rate
- profit rate,

the latter being strongly influenced by the previous ones.



Which is the level of “equilibrium” of these macro prices?

1. Exchange rate

The equilibrium exchange rate must guarantee the current account balance

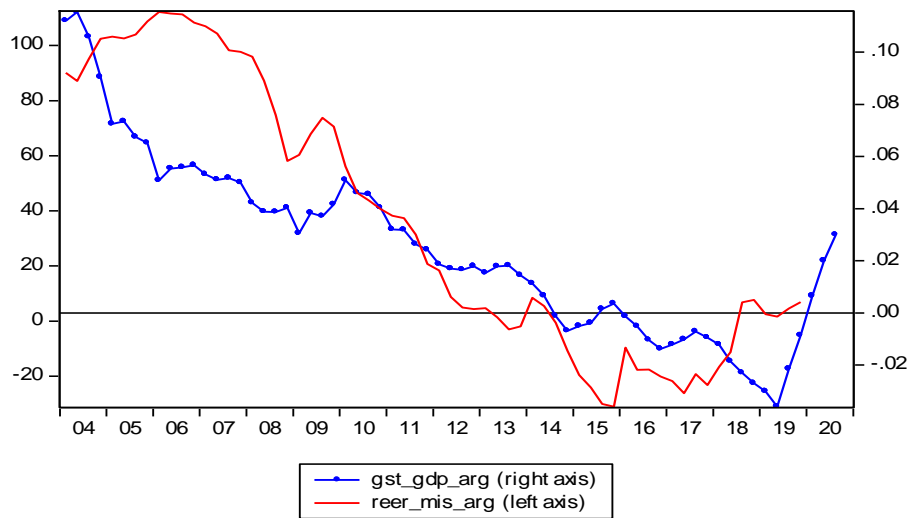
We estimated a model of determinants of exchange rate (including a proxy for current account balance, which is the trade balance of goods and services)

then we calculated which would be the level of exchange rate compatible with the equilibrium in the trade balance of goods and services)

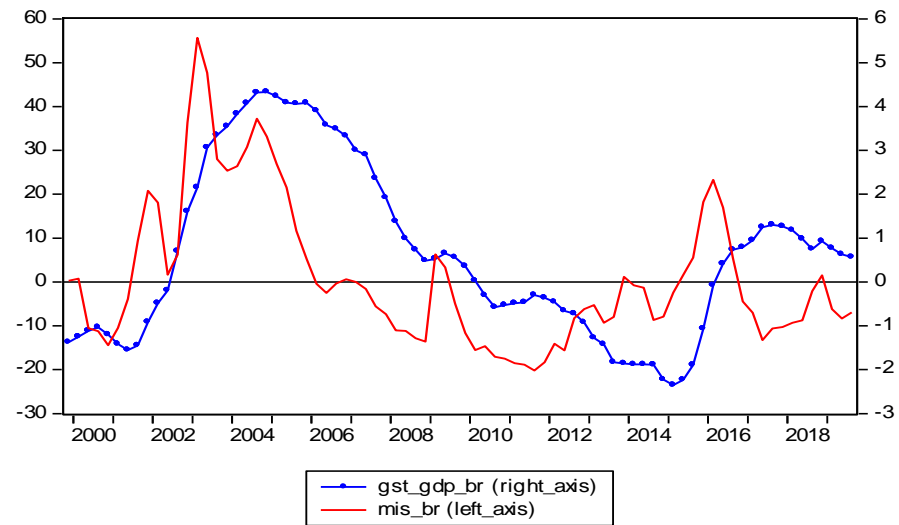
Vector Error Correction estimates for Selected Latin American countries

Variables	(1) Argentina	(2) Brazil	(3) Chile	(4) Colombia
Ln of Terms of Trade	-4.21 [2.648]	-0.66 [2.581]	-1.06 [8.326]	-2.03 [3.992]
Ln of Trade of Goods and Services Net as % of GDP	10.67 [-2.708]	7.53 [-5.451]	1.03 [-8.462]	6.65 [-1.930]
Ln of Interest Rate Differential	0.22 [3.826]	-0.21 [3.642]	-0.03 [1.968]	-0.61 [5.995]
Ln of EMBI+	0.4 [-3.400]	0.24 [-2.497]	0.12 [-3.640]	0.79 [-4.654]
Ln of GDP per capita	1.66 [-2.711]	0.19 [-1.879]	1.70 [-8.348]	1.15 [-4.819]
C	-6.16	5.59	-15.86	3.15
Included observations:	64	80	78	70
LM test	26.51	36.62	38.39	39.69
Prob	0.87	0.43	0.36	0.3
White test (Chi-sq)	824.64	1089.02	1282.2	1076.25
Prob	0.24	0.19	0.64	0.28

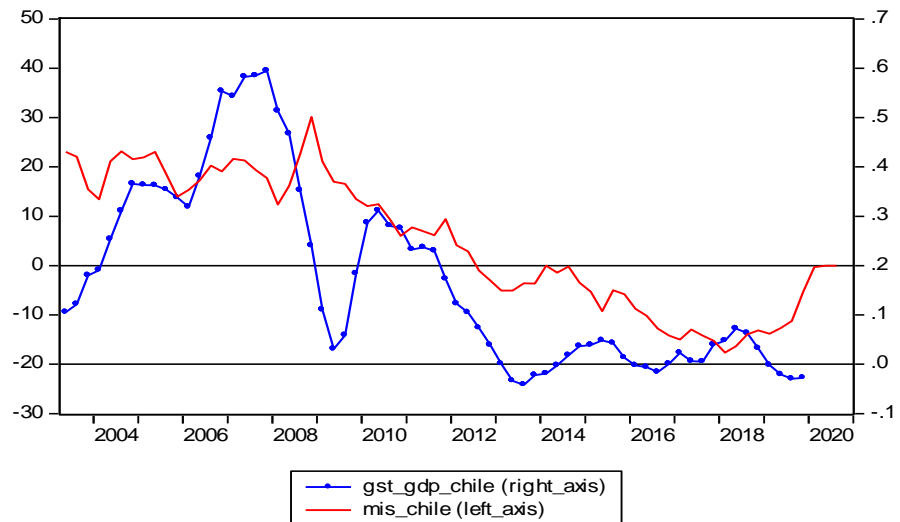
Argentina



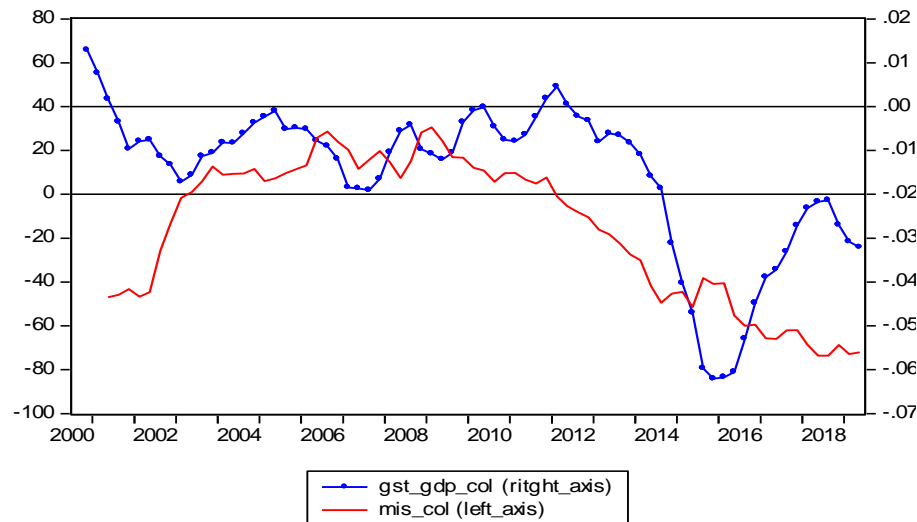
Brazil



Chile



Colombia

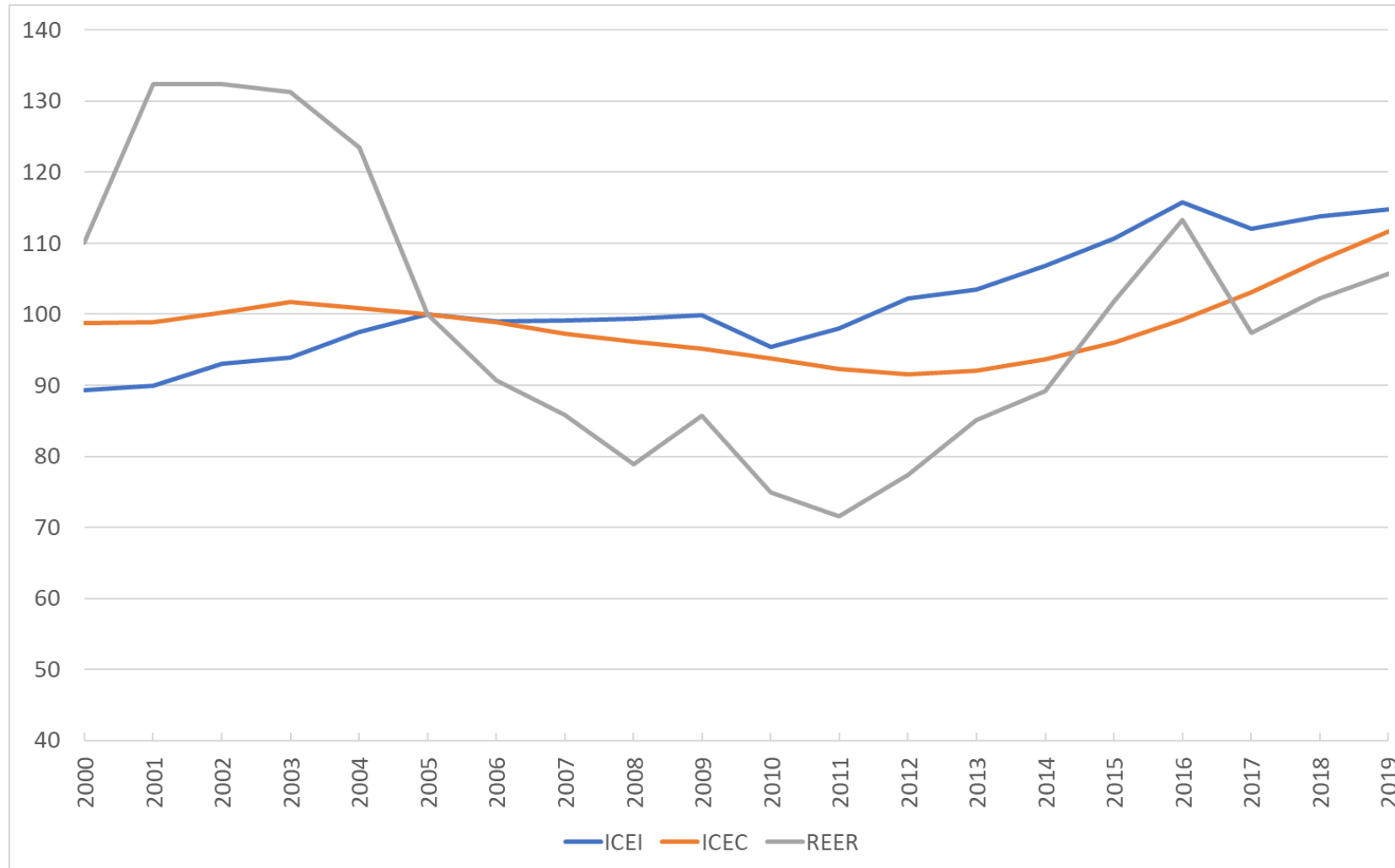


Which is the level of “equilibrium” of these macro prices?

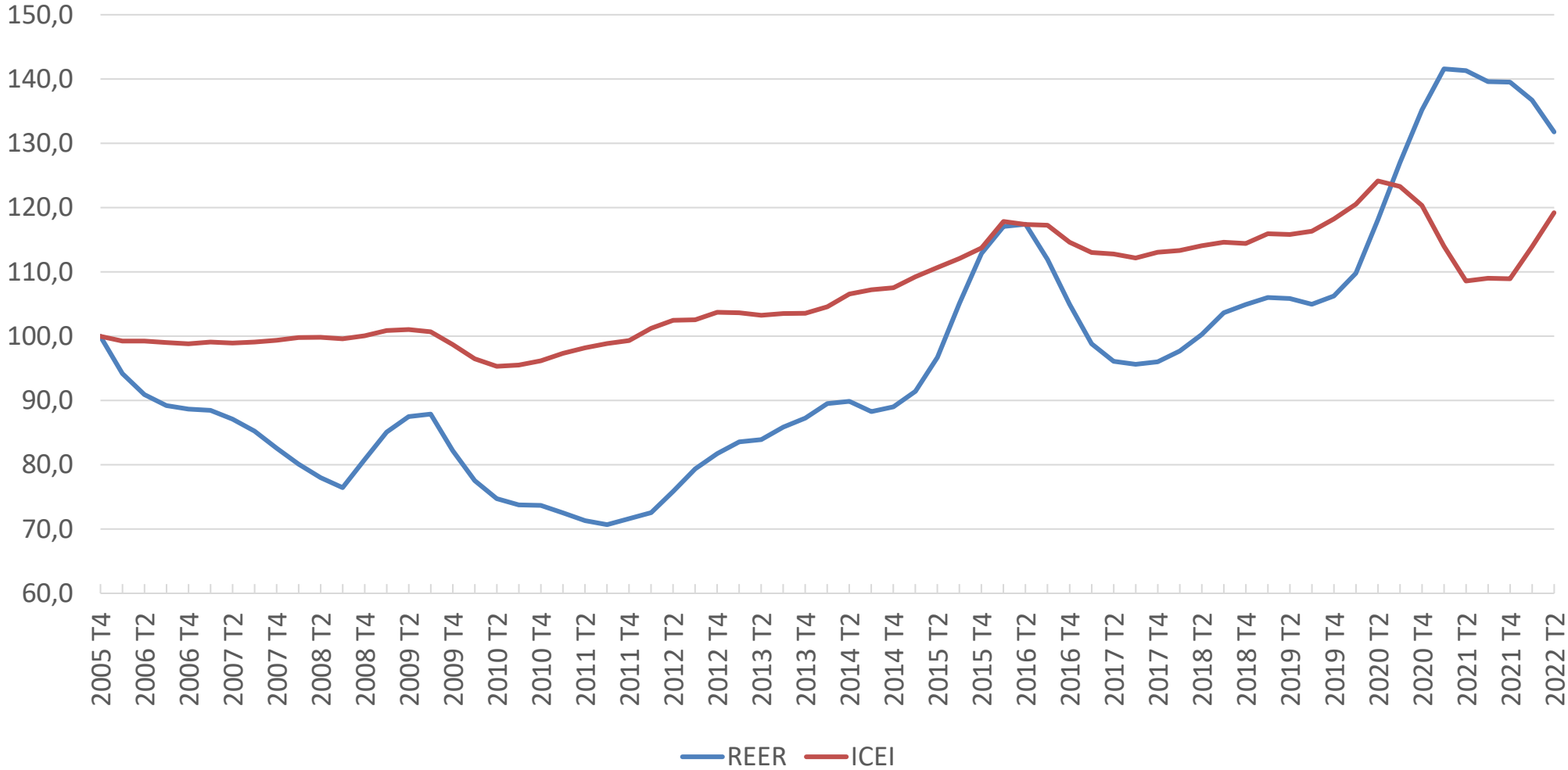
- If a country suffers a Dutch Disease process, the industrial equilibrium exchange rate will be distinct from the one that guarantees the current account equilibrium
- The industrial equilibrium exchange rate is the one that compensates differentials among unit labor costs among competing nations in the global trade



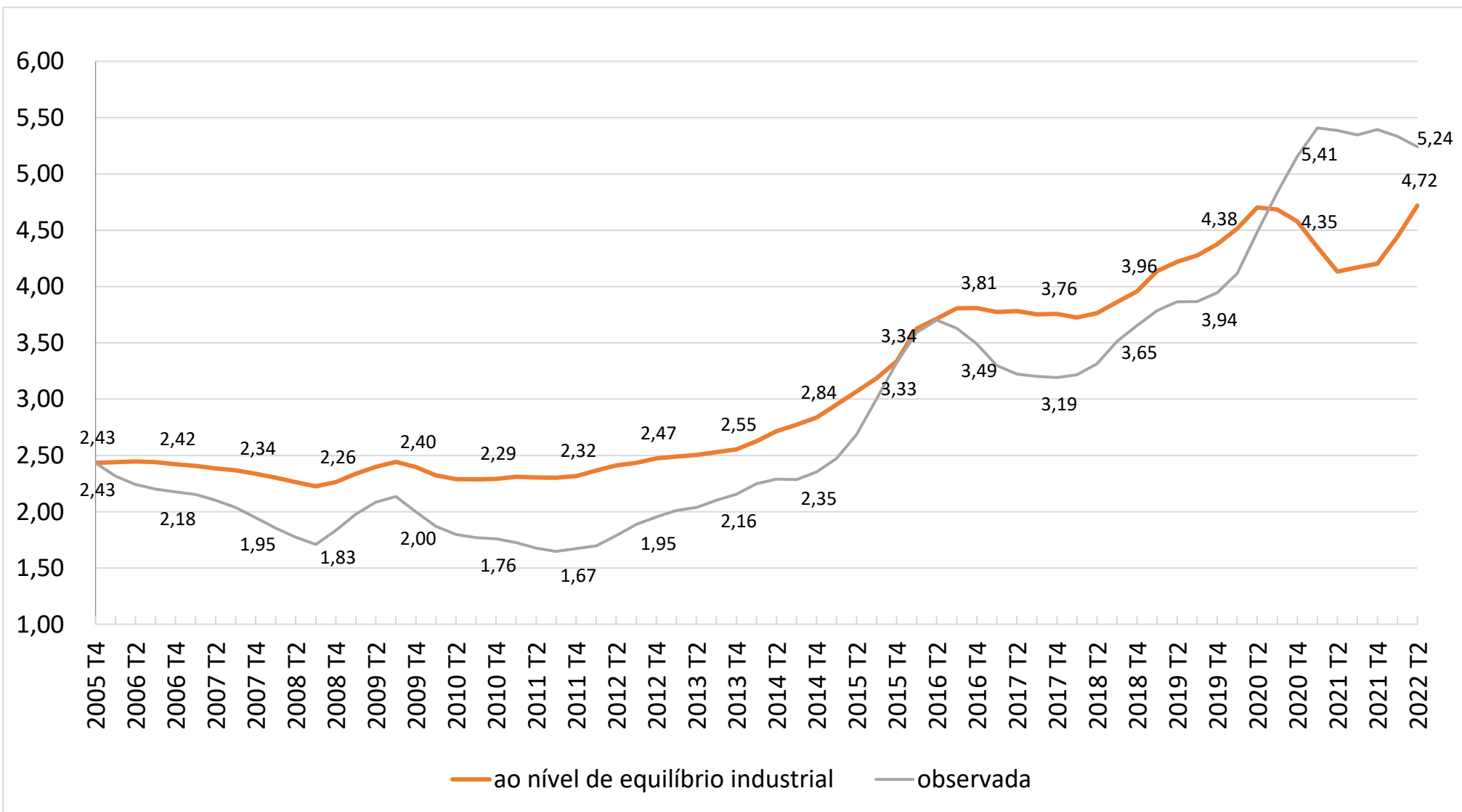
Industrial Equilibrium Exchange Rate, Current Account Equilibrium Exchange Rate, and Real Equilibrium Exchange Rate for Brazil (12 months - moving average)



Industrial Equilibrium Exchange Rate and Real Equilibrium Exchange Rate for Brazil (12 months - moving average)



Industrial Equilibrium Exchange Rate and Real Equilibrium Exchange Rate for Brazil (12 months - moving average)




Which is the level of “equilibrium” of these macro prices?

2. Interest rate

The equilibrium interest rate must be equivalent to the external interest rate in the most relevant competing nations plus the country–risk (for example, the EMBI)

Which interest rate? Basic rate, lending rate.....

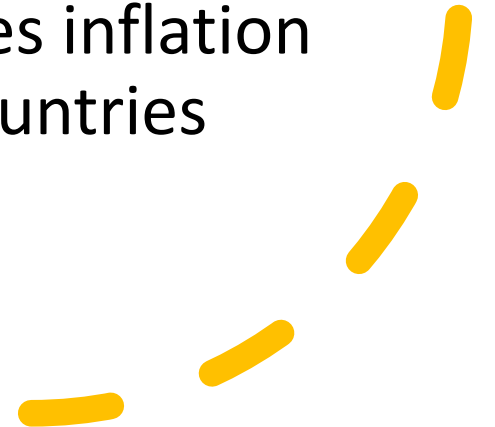


Which is the level of “equilibrium” of these macro prices?

3. Inflation

The inflation must be similar to the level observed in developing economies and it must consider the need for *catching up* of these countries

One possible way to estimate this level is the adoption of a model that correlates inflation and growth rates in developing countries



Which is the level of “equilibrium” of these macro prices?

4. Profit rate

The profit rate must be similar to the one observed in the most relevant competing nations

$$\pi = \left(1 - \left[\frac{ULC + \alpha \cdot P_m \cdot E + \delta \cdot P_d}{\beta \cdot P_n + (1 - \beta) \cdot P_x \cdot E} \right] \right) \cdot \frac{Y}{K}$$

Which is the level of “equilibrium” of these macro prices?

5. Wage rate

The wage rate is the most conflicting macroeconomic price

While it pushes aggregate demand and increases well-being, it is also cost for enterprises

Therefore, wage growth rate must follow productivity increases



Which is the level of “equilibrium” of these macro prices?

5. Wage rate

But this rule does not allow for increases in wage share

Therefore, we propose a rule that allows for such increases but has a constraint – the necessary level of profit to compete with other nations in the global market

Which is the level of “equilibrium” of these macro prices?

5. Wage rate

$$\frac{P}{K} = \frac{P}{Y} \times \frac{Y}{K}$$

$$\frac{P}{K} = \left(1 - \frac{W}{Y} - \frac{T}{Y} \right) \times \frac{Y}{K}$$