The value of exchange rate and the Dutch disease

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The fundamental macroeconomic imbalance faced by Brazil since the early 1990s is the exchange rate overvaluation that discourages investments and gradually deindustrializes the country. They are not definitely discouraged in the industrial sector because the Dutch disease is not serious in Brazil. Today the current equilibrium exchange rate, the one that balances intertemporally the country's current account, must be close to R$ 2.20 per dollar, and the industrial equilibrium exchange rate – necessary for companies producing internationally tradable goods and using worldwide state-of-the-art technology to be competitive, and for the domestic market to be no longer captured by imports – must be close to R$ 2.80 per dollar. Brazilian Dutch disease is, therefore, a moderate one, just R$ 0.60 per dollar; it is a structural overvaluation that could be solved by a devaluation of approximately 20%.

I have been saying that this devaluation may and should be accomplished through an export tax on the commodities giving rise to the Dutch disease, corresponding to the overvaluation caused by it. A tax on these commodities, of 20% of their value in reais, or of R$ 0.60 per dollar exported, would solve the problem. This tax should be variable, in order to reflect significant changes in the international price, and should be different from one commodity to the other, depending on how much the commodity benefits from “Ricardian rents”. Once the tax adopted, it will shift the supply curve of the corresponding commodity to the left in relation to the exchange rate (not in relation to its price), so that, given the price and the international demand, its producers will only continue to produce the same amount if the exchange rate depreciates proportionately to the

tax. Since I am supposing a reasonably free market, this devaluation will happen and the producer will lose nothing.

But when I say that an export tax will neutralize the exchange rate, people, including the best economists, have difficulty understanding and accepting what I am saying, because they do not see the relationship between this tax and the supply and demand of foreign currency, which, they presume, determines the exchange rate.

I had no clear answer to this question. Recently I arrived at it, and I share it with the readers of *Valor.* In fact, in the analysis of the determination of the exchange rate, we should make a distinction between its *value* and its market price, just as it happens to goods and services. The value of a merchandise is equal to its cost plus a reasonable profit margin that encourages entrepreneurs to keep investing. The price of the merchandise floats around this value, depending on the variations in its supply and demand. The same thing happens to the exchange rate: its value is determined by the cost plus the reasonable profit margin of the efficient companies existing in each national economy. In an economy without the Dutch disease there is only one value, because the current equilibrium and the industrial equilibrium are identical. Yet in an economy with the Dutch disease we have two values: the value of exchange rate for the commodity-producing companies corresponds to the current equilibrium exchange rate, and the value related to the production of the other tradables corresponds to the industrial equilibrium exchange rate. When the Dutch disease is not neutralized, the "dominant" value is the one determined by the lower cost; it is, therefore, the most appreciated one, and, therefore, given currency supply and demand, including net capital flows, the market exchange rate will float around the current equilibrium exchange rate, not around the industrial equilibrium exchange rate.

In this setting, the export tax acts on the value of the exchange rate, that is, on the current equilibrium exchange rate, raising it to the level of the industrial equilibrium exchange rate. From then on, the exchange rate policy should try to

reduce its fluctuations or its volatility through the well-known exchange rate policies: the purchase and sale of reserves and the capital controls.

Despite the fact that commodity exporters tend to oppose the tax, I think I have made it clear that, in the end, they receive it back through the exchange rate depreciation. The tax is paid by the consumers and investors who, in the short run, see prices increase. But this is a transitory cost, and soon everyone will benefit from the increase in investments and from the growth acceleration that the neutralization of the Dutch disease will provide.