NOTA ECONÓMICAS

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AGGREGATE AND SECTOR-SPECIFIC EXCHANGE RATE INDEXES FOR THE PORTUGUESE ECONOMY

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MARXISMO E ECONOMIA POLÍTICA: “O CASO CARAÇA”

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Aggregate and Sector-Specific Exchange Rate Indexes for the Portuguese Economy*

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resumo

In this paper, we compute and compare aggregate and sector-specific exchange rate indexes for the Portuguese economy. We find that alternative effective exchange rate indexes are very similar between them. We also find that sector-specific effective exchange rates are strongly correlated with aggregate indexes. Nevertheless, we show that sector-specific exchange rates are more informative than aggregate exchange rates in explaining changes in employment: whereas aggregate indexes are statistically insignificant in employment equations, regressions using sector-specific exchange rate indexes show a statistically significant and economically large effect of exchange rates on employment.

résumé / abstract

Dans ce texte on présente des indices de taux de change effectif, agrégés et sectoriels, pour l'économie portugaise. Les indices sont semblables entre eux, de façon que la corrélation entre les indices sectoriels et les indices agrégés est très forte. Cependant, les indices sectoriels sont plus informatifs que les indices agrégés: tandis que les indices agrégés ne sont pas significatifs dans les régressions pour l'emploi, les indices sectoriels sont significatifs et, en plus, leurs coefficients montrent que la taux de change a un effet important sur l'emploi.

Classificação JEL: F15, F16, F41.

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Aggregate and sector-specific exchange rate indexes for the Portuguese economy

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The exchange rate is commonly viewed as a policy instrument that governments (or monetary authorities) could use to improve domestic economic conditions. The fierce discussion in recent years about the possible undervaluation of the Chinese Yuan is a prominent example of the importance attached to such matters. The same sort of discussion occurred within euro area countries before they agreed to give up their national currencies and adopt a common currency.

Despite the usual focus, namely in the popular press, on bilateral nominal exchange rates, what should be a cause for concern is the evolution of the effective exchange rate, and particularly of the real effective exchange rate, i.e., a weighted index of relative prices, with weights reflecting the relevance of the trade partners. In fact, upon abandoning their national currencies, countries lose their ability to use nominal devaluations to counteract the loss of international competitiveness stemming from high domestic inflation relative to foreign competitors, and their ability to lower with a stroke of the pen the foreign prices of those domestic goods that compete on price rather than on quality. Indeed, there is evidence that fluctuations in real exchange rates may have strong inter- and within-sector reallocation effects, as they imply changes in the international relative price of goods – see, e.g., Campa and Goldberg (2001) and Klein et al. (2003).

Portugal provides an example of a country that, in the 1970s and in the 1980s, actively tried to manage the exchange rate. Prior to the accession to the European Economic Community (EEC) in 1986, Portugal adopted a crawling peg in an effort not to lose competitiveness with regard to similar Spanish products. Joining the Exchange Rate Mechanism (ERM) in 1992, and then the European Monetary Union in 1999, therefore implied a drastic change in the behaviour of Portugal’s effective exchange rate, not only because its nominal value with respect to other euro area countries could no longer be adjusted, but also because the evolution of the European Single Market, alongside the common currency, biased Portuguese trade towards European countries, especially Spain.

This change in trade patterns in turn implies that effective exchange rates should be computed on the basis of time-varying weights – see, for example, Bayoumi et al. (2005). One difficulty with the computation of effective exchange rates is that the choice of the trade weights is not unique. In this paper we shall make use of the four basic sets of weights employed in the literature: bilateral export shares, bilateral import shares, bilateral trade shares (exports plus imports) and double-weighting schemes that account for competition from third countries. This and other issues in the computation of effective exchange rates have been the subject of a vast literature – see, e.g., Turner and Van’t dack (1993), Buldorini et al. (2002), Bennett and Zarnic (2008) and references therein. Another important issue is whether one can use an aggregate exchange rate index to discuss the economic performance, or whether one should use sectoral indexes. Several papers have shown that when the importance of the trading partners varies across sectors, sector-specific exchange rates may be more informative as indicators of industries’ competitiveness than aggregate exchange rate indexes – see, among others, Campa and Goldberg (2001) and Gourinchas (1999).

According to our computations, between 1988 and 2006, the Portuguese aggregate real effective exchange rate appreciated more than 20%. This appreciation may have had a significant impact on the Portuguese labour market, similarly to what happened in other countries. For example, Gourinchas (1999) estimated that a 1% real appreciation of the French franc eliminated 0.95% of jobs in the tradable sectors in the following two years. Can this sort of result be found in Portuguese data? Studies of Portuguese exports – e.g., Cabral (2004) and Cabral and Esteves (2006) – have found evidence that declining competitiveness of Portuguese firms has contributed to the weak performance of Portuguese exports in recent years. Although other, qualitative,