

MARKET INTEGRATION IN THE GOLDEN PERIPHERY: THE LISBON/LONDON EXCHANGE, 1854-1891, Rui Pedro Esteves, Jaime Reis and Fabiano Ferramosca, **Explorations in Economic History**: 46, 3 (July 2009), pp. 324-345.

In comparative terms, Portugal's experience with this monetary regime was unusual. While on the surface it was a "well-behaved" member of the club, in fact it failed two crucial criteria. It suffered from persistent deficits both on its budget and on its balance of trade. Thanks to vigorous borrowing in the market, it avoided monetizing the first, though relative to GDP the long-term debt almost doubled between the early 1860s and the late 1880s (Reis 2002). The solution for the second problem was to rely on the private and public capital inflows, as well as a growing stream of remittances by emigrants residing in Brazil. The combined effect of all this was that monetary growth did not generate inflationary pressure and the exchange rate was stable. Thus, outwardly the country satisfied the prerequisites for wearing the international 'seal of approval' conferred by gold standard adherence, whilst in fact it deviated significantly from the basic norms followed by the majority of countries that earned this distinction (Bordo and Rockoff 1996). Portugal was not, however, a case of a 'deficit without tears', as Peter Lindert (1969) has put it. The market looked behind appearances, at the fundamentals, and, as a result, the yield on Portuguese bonds was always considerably higher than that of consols.

The gold standard ended on the day that the government found itself with no other recourse than to borrow heavily from the Bank of Portugal, after foreign and domestic capital markets had closed their doors to it. In order to satisfy this pressing financial need, the Bank was forced to over-issue and the inevitable run ensued, draining most of its reserves and making a legally-sanctioned suspension of payments inevitable. The country remained inconvertible thereafter, and in 1892 the final nail was driven into the coffin of Portugal international financial reputation, when the government also defaulted partially on the service of the Public Debt.

There are several interpretations for this course of events. For Valerio and Mata (1994), the long term survival of the gold standard was impossible given the persistent worsening of the two deficits mentioned above and in 1891, a chance conjunction of highly adverse exogenous circumstances precipitated the demise of gold. The Baring crisis in 1890 made financial markets nervous about lending to South-American type countries. Following the abolition of slavery and the fall of the monarchy, the Brazilian exchange rate dropped 60% during 1890-1 and set off a steep decline in emigrant remittances to Portugal. In southern Africa, Britain clashed with Portugal over disputed territories, which led to doubts in London over Portugal's political stability and its financial capacity to sustain such an unequal military conflict. Fundamentally, however, this view argues that a fall could not have been avoided by the end of a decade during which the service of the foreign debt rose from 21 to 47% of exports and the foreign debt increased from 34 to 43% of GDP. As Salazar was to comment in 1916, "the falsity of the situation was too great for it to be maintained indefinitely" (1997: 54).

A second view, which is also based on the notion of the long term non-sustainability of the gold standard, focuses instead on the rigidity of internal prices as the fundamental cause of its demise (Llona Rodriguez 1997). In this "dependent economy" model, it is claimed that one of its structural features was that the price of non-tradables was excessively rigid relative to that of tradables. Thus, during the 1880s, the fall of the latter was not accompanied by that of non-tradables, and this generated a pressure on the balance of trade, which already was in the customary deficit. Under these circumstances, a return to equilibrium would require either a nominal devaluation (which was impossible under the gold standard) or an increased inflow of capital and/or remittances (which actually happened in some years). These flows, however, helped to further sustain the rigidity of the price of non-tradables and therefore delayed the adjustment. On the other hand, sooner or later external financial resources were likely to run out. If non-tradable prices continued to resist the downward pressure, as they did owing to presumed market imperfections, the economy would start to lose external reserves, and this is what happened. In the event, it was very sudden and brutal, in the manner already described, but such an outcome

was inescapable, unless the structure of the Portuguese market for goods was to become more flexible.

While recognizing these adverse trends, a different reading of the facts, would stress the resilience of the Portuguese gold standard over 37 years helped by the international reputation that this conferred on the country. In this perspective, strong, austere domestic policies to fight the crisis, as happened after the suspension of convertibility in 1846, could have built on such an obvious commitment to gold (Bordo and Kydland 1995) and restored the standard in a few years, as indeed happened in some Latin American countries, once the storm was over. This was a short term problem caused by a momentary shock but what was lacking in Portugal at this time was the political resolve to curb public expenditure, withdraw the subsidies that were propping up certain large, quasi-bankrupt companies, increase fiscal revenue, and create conditions that would attract fleeing capital back to the country.

The sample period runs between June 2nd, 1854, and May 23, 1891, coinciding with the Portuguese adherence to the gold standard.

we chose the failure of the Banco Lusitano, one of the largest deposit banks, in September 1890, to start the period of financial and monetary instability that would lead to the abandon of gold in June 1891.

The conventional arbitrage model is too simplistic to describe the real workings of the Portuguese exchange rate mechanism. The fact that other macro variables (balance of trade, crisis, expectations, hoarding) have an explanatory power over and above the measure of gold points violations seems to warrant such interpretation. In particular, one should stress the margin available to the monetary authorities to influence the exchange, even in a peripheral country, with no central bank in the modern sense, and with severe legal constraints as to the use of the bank rate as a monetary policy instrument.

Indeed, it seems notable, if not remarkable, that such a peripheral country as Portugal could have enjoyed some 37 years of relatively unproblematic adherence to gold. During this period, the Portuguese exchange fluctuated very moderately against the central currency of the system, in 90% of cases within a band of +/-1.8% of parity. Admittedly, by some measures of the gold points, the record on market inefficiencies (in terms of the number, size, and persistence, of exchange rate "violations" of those points) does not compare favorably with the results obtained for two of the core currencies of the system - the franc, and the dollar. Still, this should not be surprising, given the apparently uncontroversial fact that the Portuguese currency had a much less liquid market worldwide (especially forward) and that Portuguese arbitrageurs could not compete in technology or access to information with their counterparts in New York, London, or Paris. Alternatively, the high proportion of "violations" might only be a consequence of our excessively conservative estimates, compared to other similar studies.

Finally, the increase in measured "inefficiency" in the last years of the Portuguese gold standard could also be ascribed to the mounting pressures of an unsustainable foreign position, which would unfold into a simultaneous banking, debt, and currency crisis in the years 1890-91. The data on gold flows, flawed as they may be, raise some doubts as to the wisdom of this line of interpretation, especially in the case of gold imports.

Our second set of messages emphasizes a point, which should have been obvious to contemporaries, and which has been raised elsewhere in the literature (Reis 2000, 2002), i.e., the incompleteness of characterizing an exchange rate regime without fully taking into account its institutional underpinnings, especially the banking structure. The Bank of Portugal, although a private corporation, was bound by the rule of convertibility. Moreover, the Bank was, by far, the largest banking house, the principal banknote issuer, and the holder of the largest gold reserve in the banking system. It also tended to enjoy a close relation with the government, a fact often resented by other banks. All these circumstances combined to make the Bank the leading player

in the foreign exchange market, with a vested, albeit unwilling, interest in the maintenance of stability. The Bank directors knew that an exchange excessively depreciated would translate into a run on its reserve, an event which they actively tried to discourage with a number of "gold devices". As mentioned in the sub-section on gold flows, a substantial share of total gold imports can actually be traced to the shipments of sovereigns from London, which the Bank used as a window-dressing strategy, or to replenish its reserves in periods of larger internal demand for gold.

The Bank also intervened by selling short bills on London at a cheaper rate, in an attempt to prevent the exchange from reaching the GX point, and forcing it to buy sovereigns. For the end part of our period, we could confirm the influence of such devices on the course of the exchange, despite the increasing costs to the Bank (see Figure 10).

In one important respect, though, the position of the Bank of Portugal differed from that of other central banks of the time, namely, its control over its discount rate. Contrary to the Bank of England, the Bank faced serious legal limitations to its autonomy to conduct a bank rate policy, and consequently had to resort to alternative "devices" sooner than other banks. Although thwarted in its freedom of action, it is significant that the Bank of Portugal deviated as frequently and persistently from the so-called "rules of the game", as any other monetary authorities of the time. This leads to the topic of the credibility of the Portuguese exchange as a target zone (TZ).

Recovering a point made by Keynes (1930), the TZ literature demonstrates the considerable leeway for an independent monetary policy even in the context of a narrow fluctuation band, providing that the TZ is credible. But the classical gold standard is supposed to have been a credible regime *par excellence*. In fact, when we apply the credibility tests available in the literature, we come to the conclusion more often than not that the Portuguese parity lacked credibility (Figures 8 and 9). Taken literally, this implies that the Bank of Portugal could not benefit from the *honeymoon effect* to set a lower interest rate in the economy, and, in fact, the reverse was the case. The discount rate of the Bank of Portugal stood above the British bank rate in 79% of our period of study. On a more fundamental level, it would be interesting to inquire into the factors that determined this credibility, and understand how it was possible to sustain a non-credible parity for so long. Our incomplete data set only allows a preliminary answer to these questions, but the results in Table 12 point again to the relevance of the behavior of the Bank of Portugal in this respect.

Finally, a suggestion. Canjels *et al.* (2004) conclude their article by stressing the relevance of the estimation of the gold points as the "*key ingredient in a fundamental method of market integration analysis*", while offering their methodology as a promising approach to any study of market integration, namely among currencies. We are prepared to accept both of these as valid points, but if a broader lesson can be drawn from our Portuguese tale it would be that "the forest should not be missed for the trees". To our mind, an equally important research agenda would be to integrate the detailed data gathering involved in reconstructing (Officer 1996) or estimating (Canjels *et al.* 2004) gold points into a broader picture of the classical gold standard. The latter would of necessity combine pure "market efficiency" with credibility, speculation, and the autonomy of monetary policy, not to mention the institutional arrangements particular to each country in the system.

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