A model of currency crises with heterogeneous market beliefs

Pompeo Della Posta

Department of Economics and Management, Università di Pisa, Via Risolfi 10, 56124 Pisa, Italy

ARTICLE INFO

JEL classification:
E58
F31
F41

Keywords:
Currency crises
Speculative attacks
Fixed exchange rates
Heterogeneous market beliefs

ABSTRACT

This paper shows that the approach followed by Tamborini (2015) in analyzing and interpreting the euro area public debt crisis, based on the role played by agents characterized by heterogeneous market beliefs, can be applied also to the case of currency crises. By doing so, rather than considering the private sector as an atomistic player endowed with perfect information, and by considering a central bank that optimizes the amount of unsterilized inflow of foreign reserves in a Mundell-Fleming type speculative attack model, allows to explain the interest rates convex non-linearity that characterized, for example, a country like Italy during the 1992–93 EMS crisis.

1. Introduction

Tamborini (2015) explains the recent euro area public debt crisis by considering the private sector as populated by agents characterized by heterogeneous market beliefs. He departs, then, from the assumption of a private sector characterized by perfect information and homogeneous beliefs and therefore acting like an atomistic player. He concludes that the larger is the primary surplus which is required for debt stabilization, the lower the degree of heterogeneity of agents’ beliefs becomes, because the larger will be the fraction of market participants who will share the belief that the primary surplus required for stability is approaching its upper feasibility constraint, above which the stability of public debt cannot be assured anymore. In turn, such a shared belief of a more likely default increases the risk premium on public debt and, as a result, the interest rate to service it. This implies, then, that the closer the primary surplus gets to the expected upper limit, the more the interest rate will increase, so as to provide an explanation for the interest rate convex non-linearity identified – but not explained – by De Grauwe and Ji (2013a, 2013b).

This paper shows that the same approach can be applied also to currency crises, and in particular to the fundamentals-driven crisis that in 1992–93 affected some EMS countries, the most significant example of them being Italy, on which I will focus in this paper.1 I do this by considering an optimizing central bank, which is assumed to decide what is the level of unsterilized inflow of foreign reserves to be let into the country in order to minimize its loss function.

1 I gratefully acknowledge financial support from the PRA program of Pisa University. I would like to thank also two anonymous referees for their helpful comments. Of course, I am the sole responsible for any remaining mistake.

E-mail address: pompeo.della.posta@unipi.it.

1 The crisis hitting France in July 1993 has been interpreted by Eichengreen, Wyploix, Branson, and Dornbusch (1993) as having been caused by negative self-fulfilling expectations that would have been driven by the prescriptions contained in the Maastricht Treaty, rather than by diverging economic fundamentals. However, in spite of the good condition of the inflation rate and public finance variables, France was characterized by a high unemployment rate and – as it will be argued more in detail below – by a negative business cycle, that did not allow that country to accept the higher interest rates decided by the Bundesbank after German reunification.
As a matter of fact, the data show clearly that the period 1987-1992 was characterized by an inflow of only partially sterilized foreign reserves in Italy that on one hand supported the Italian economy and GDP (being directed mostly to finance the Italian public debt), but on the other hand determined a growth of the Italian monetary base. In turn, the latter induced a divergent core inflation rate with respect to the EMS monetary leader, namely Germany, that appreciated in real terms the Italian lira and increased the Italian current account deficit, thereby making necessary at some point an exchange rate adjustment that re-established the initial conditions of country competitiveness.

The 1992–93 EMS speculative attack against the Italian lira, then, appears as related to a significant and clear divergence in the state of economic fundamentals.

The destabilizing effect of an increase of the foreign interest rate, like the one decided by the Bundesbank after the German shadowing of the DM, and the Sveriges Riksbank had been trying to resist its devaluation (in order to do that the overnight interest rate was even allowed to reach for a while the clearly unsustainable level of 500%!).

In the case of Ireland and Finland, the violence of the crisis was also due to the previous devaluation of the currencies of their commercial competitors, namely the UK and the former Soviet Union, that had just broken up.

The first of those additional causes is the destabilizing effect on partner countries resulting from the German refusal to honor the Basel-Nyborg agreement.

The destabilizing effects of an increase of the foreign interest rate, like the one decided by the Bundesbank after the German reunification because of the need to avoid the risk of inflation resulting from the adoption of the excessively expansionary 1-to-1

---

Fig. 1. Monetary base components: Foreign reserves, long term and temporary holdings of government bonds.

Source: BDS, Bank of Italy.
دریافت فوری متن کامل مقاله

امکان دانلود نسخه تمام متن مقالات انگلیسی
امکان دانلود نسخه ترجمه شده مقالات
پذیرش سفارش ترجمه تخصصی
امکان جستجو در آرشیو جامعی از صدها موضوع و هزاران مقاله
امکان دانلود رایگان ۲ صفحه اول هر مقاله
امکان پرداخت اینترنتی با کلیه کارت های عضو شتاب
دانلود فوری مقاله پس از پرداخت آنلاین
پشتیبانی کامل خرید با بهره مندی از سیستم هوشمند رهگیری سفارشات