

Comments to Diaz Cafferata and Fornero (2006)

Lucio Castro*♥

Diaz Cafferata and Fornero (2006) (DCF henceforth) provide an interesting analytical framework to simulate the behavior of a small open economy (SOE). To do so, they build a two-country, dynamic general stochastic model (DGCE) within the tradition of New Keynesian (NK) macroeconomics models with detailed modeling of the foreign sectors, the so-called New Open Economy Macroeconomic (NOEM) models.¹

DCF main contribution to the NOEM literature is modeling the effects of “perception errors” about the transient nature of terms of trade shocks on the dynamics of the current account (CA), and specifically the foreign bond accumulation (FBA). Put simply, in DCF theoretical framework agents borrow abroad to smooth consumption in the face of a real transitory income shock, increasing the current account (CA) deficit and debt to be repaid in later periods. However, external solvency is severely compromised when actual export prices remain lower than their expected value for longer periods of time. DCF argue that this analytical framework resembles the process of increasing debt accumulation that led to the 2001/02 crisis of Argentina.

My comments are mainly focused on the nature of the shock or counterfactual hypothesis pointed by DCF as the triggering cause of the 2001/2002 crises. I also address other issues later on.

The hypothesis that ‘overly optimistic expectations’ or “errors in perception” on the ‘true’ long-term growth prospects of the Argentine economy were one of the main causes behind of the 2002 collapse of the Argentine economy has been put forward by Galiani, Heymann and Tommasi (2003), amongst others². Although the DCF paper presents an interesting formalization of this argument, there are certain shortcomings and unanswered questions that need to be stressed.

* Senior Economist, Maxwell Stamp PLC. lcastro@maxwellstamp.plc

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¹ See Lane (2001) for a complete (albeit somewhat outdated survey) of the NOEM models literature.

² Though they emphasize more the role of the “policy reforms adopted in the 1990s” in the formation of these mistakenly expectations than the export performance as DCF do.

A first and important concern arises from DCF choice of a real shock as the main conduit of the dynamics of the Argentine current account (CA) in the second-half of the nineties. As Servén and Perry (2002) point, the fall in **the terms of trade** (ToT) of Argentina in that period was very modest compared to that suffered by other Latin-American economies. Indeed, its effective dimension was relatively small in real income. In terms of GDP, the ToT shock was +0.7% in 1996 and less than -0,5% for the 1997-1999 period. These figures are rather small compared to Chile, Ecuador, Venezuela, Peru and Colombia, which experienced negative shocks of up to 4-6% of GDP, especially during 1997 and 1998. Perhaps Brazil was the only country whose ToT in terms of GDP performed better. Indeed, this was due to the fact that both the Argentine and the Brazilian economies remained fairly closed to international trade.

Were really overly optimistic expectations about exports the main driver of both the Argentine government and the private sector behaviour? Evidence may suggest otherwise. Whilst increased volatility in world financial markets forced most of the Latin American (LA) economies in the mid-1990s, to face higher borrowing costs Argentina's sovereign debt spreads did not fare worse than the regions', at least until late 2000. This evidence seems hence to contradict one of the key assumptions of the DCF model: that "interests paid by the indebted economy are an increasing function of the net indebtedness' aggregate level".³ After the Tequila Crisis in 1995, capital inflows were steady, showing a **capital account surplus** that remained (as percentage of GDP) above the region's mean. The current account deficit likewise exceeded the LA average, and its adjustment after the Russian crisis in 1998 was rather small by regional standards. In a nutshell, Argentina did not fare worse than the other economies throughout the second part of the 90s. Only after late 2000, the capital account began to show a significant decline, whilst the other LAC countries, continued to receive on average capital inflows of 2-4 percentage points of GDP until 2002.

Another important point relies on the twin deficit identity. Households smooth consumption by borrowing in the presence of real income shocks. Indeed, DCF simulation results show that the debt stock increases after the shock, to be slowly repaid in subsequent periods. This result could very well fit the private sector savings adjustment during 1997-1998, where it became transitorily negative. During those two years, the CA deficit was driven by private borrowing (possibly to cope with the

1996's ToT shock). However, DCF fall short of explaining one of key features of the Argentine economy during the 1990s: the **continuous and spiraling rising dynamics of public sector debt**. Between 1994 and 2001, the public sector deficit increased from 2% to 7%, causing the total public debt to raise twofold, from 30% to 60% of GDP.⁴ This evidence, in turn, makes difficult accepting DFC assumption of a government sector “committed to a zero-deficit budget rule”.⁵

As mentioned, the DCF paper is a valuable formalization of an important argument in the discussion about the causes behind the collapse of the Argentine economy in 2002. However, their work leaves unanswered some key questions related to the nature and depth of the external shocks and the endogenous policy weaknesses affecting Argentina in the mid-1990s. In my view, an excessive emphasis is put on the importance of real shocks in the dynamics of the CA without sufficiently taking into account the role of financial flows ‘sudden stops’, the dynamics of public sector fiscal behaviour and the exchange rate regime⁶.

With a view in futures directions for research, the DCF investigation would surely benefit from considering alternative scenarios to the ones presented. For instance, the simulation of a “sudden stop” in the capital inflows could be modeled throughout an exogenous shock to the world interest rate facing the SOE. This scenario would permit to incorporate the real effects of ‘sudden stops’ within the framework of the DGCE.⁷ Likewise, and may be more interestingly, a counterfactual scenario with a floating exchange rate instead of the pegged of Convertibility would allow evaluating the debate surrounding the Argentine fixed exchange regime in the 1990s.⁸ Relaxing the Government’s “zero-budgeting rule” could also provide some interesting insights on the intertemporal dynamics of the CA and FBA in face of disequilibrium in the fiscal accounts of the Government. Finally, it would be also interesting to assess a scenario where the larger foreign economy experiences a substantial appreciation (depreciation) of its exchange rate, resembling the behavior of the U.S. dollar (or the devaluation of the Brazilian real) in the late 1990s.

³ See page 9.

⁴ Mussa (2002) provides a detailed account of Argentina’s fiscal behaviour in the late 1990s.

⁵ See page 12.

⁶ See on the latter more below.

⁷ See Izquierdo, Alejandro, Talvi, Ernesto and Calvo, Guillermo A (2002) for a narrative of the 2002 Argentine crisis from a ‘sudden stops’ perspective.

⁸ Escude (2006), for instance, uses a DGCE model similar to the one utilized by DCF to analyze the performance the Argentine economy under alternative exchange regimes, opening an interesting avenue for future research.

Referencias

Lane, Philip (2001), "The New Open Economy Macroeconomics: A Survey," Journal of International Economics, (August):(also mimeo at Trinity College Dublin and CEPR Discussion Paper #2115, March 1999)

Heymann, D., Galiani, S. and Tomassi, M. "Expectativas frustradas: el ciclo de la convertibilidad". En Desarrollo Económico n° 169 Abril-Junio 2003.

Perry, G., and Servén, L.. 2002. "The Anatomy of a Multiple Crisis: Why Was Argentina Special and What Can We Learn from It?" Background paper for the NBER Project on Exchange Rate Crises in Emerging Markets: The Argentina Crisis. Manuscript (May 10).

Escude, G. (2006) "Regímenes monetarios alternativos en un modelo DSGE de una economía pequeña y abierta con rigidez de precios y salarios", Documento de Trabajo 2006/11, BCRA, http://www.bcra.gov.ar/pdfs/investigaciones/WP11%2006_i.pdf

Izquierdo, A., Talvi, E. and Calvo, G. A (2002) "Sudden Stops, the Real Exchange Rate and Fiscal Sustainability: Argentina's Lessons", Research Department WP-469, IADB, Washington DC, <http://www.iadb.org/res/publications/pubfiles/pubWP-469.pdf>

Mussa, M. (2002) "Argentina and the Fund: From Triumph to Tragedy" Washington DC: Institute of International Economics, mimeo.