This PDF is a selection from a published volume from the National Bureau of Economic Research

Volume Title: International Dimensions of Monetary Policy

Volume Author/Editor: Jordi Gali and Mark J. Gertler, editors

Volume Publisher: University of Chicago Press

Volume ISBN: 0-226-27886-7

Volume URL: http://www.nber.org/books/gert07-1

Conference Date: June 11-13, 2007

Publication Date: February 2010

Chapter Title: Comment on "Current Account Dynamics and Monetary Policy"

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Chapter URL: http://www.nber.org/chapters/c0522

Chapter pages in book: (244 - 250)

- Mendoza, E., V. Quadrini, and V. Rios-Rull. 2007. Financial integration, financial deepness and global imbalances. University of Maryland. Unpublished Manuscript.
- Monacelli, T. 2005. Monetary policy in a low pass-through environment. *Journal of Money Credit and Banking* 37 (December): 1047–66.
- Obstfeld, M., and K. Rogoff. 2002. Global implications of self-oriented national monetary rules. *Quarterly Journal of Economics* 117 (2): 503–36.
  - ——. 2005. The unsustainable U.S. current account position revisited. In *G7 cur*rent account imbalances: Sustainability and adjustment, ed. Richard Clarida, 339–376. Chicago: University of Chicago Press.
- Rogoff, K. 2007. Impact of globalization on monetary policy. In *The new economic geography: Effects and policy implications*, ed. Federal Reserve Bank of Kansas City, Kansas City: Federal Reserve Bank of Kansas City.
- Svensson, L. E. O. 1999. Inflation targeting as a monetary policy rule. *Journal of Monetary Economics* 43 (3): 607–54.
- Svensson, L. E. O., and M. Woodford. 2005. Implementing optimal policy through inflation-forecast targeting. In *The inflation-targeting debate*, ed. B. S. Bernanke and M. Woodford, 19–83. Chicago: University of Chicago Press.
- Uzawa, H. 1968. Time preference, the consumption function and optimum asset holdings. In *Value, capital and growth: Papers in honor of Sir John Hicks*, ed. James Wolfe, Edinburgh, Scotland: University of Edinburgh Press.
- Woodford, M. 2003. Interest and prices. Princeton, NJ: Princeton University Press.

## Comment Paolo Pesenti

Arguably, the interaction between interest rate stance and current account imbalances is nowadays—and has been for quite a while—the key international dimension of monetary policy from the vantage point of the United States and its main trading partners. The point is not whether monetary policy can contribute significantly to closing the imbalances. The relevant question is rather what is the most suitable monetary response to sizable movements in global net saving. In the recent past, when U.S. interest rates were raised at the moderate and predictable pace of 25 basis points every Federal Open Market Committee (FOMC) cycle, a hotly debated issue among policy analysts was whether the path for the policy rate—other things equal—could have been steeper or looser because of considerations related to trade imbalances. Today, in light of highly differentiated patterns of net saving in the global economy, it remains highly relevant to investigate whether monetary policy in the United States and abroad is appropriately designed to deal with the macroeconomic implications of trade imbalances.

The answers to these broad questions, and to their more nuanced variants, are not obvious. In fact, it is possible to articulate a number of antithetical

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yet reasonable positions on these issues. A "dovish" take, for instance, would stress that, to the extent that net exports' contribution to gross domestic product (GDP) growth remains in negative territory and the current account deficit represents a persistent drag, a more stimulative policy action may be deemed as appropriate. Among other things, it would contribute to depreciate the exchange rate and support foreign demand for domestic goods and services. The alternative "hawkish" position would point out that, as the current account deficit reflects excess domestic demand, a tightening bias may be appropriate to preempt a build-up of inflationary pressures. This would help skewing incentives toward higher net saving by raising real rates. Then again, an "agnostic" view would argue that trade considerations are already accounted for in the central bank forecast, and there is no need to modify the policy path to account *specifically* for current account imbalances.

Against the backdrop of this debate, the chapter by Ferrero, Gertler, and Svensson (hereinafter FGS) draws a logically impeccable conclusion: "the current account imbalance may have implications for the natural rate of interest that have to factor into central bank policy, one way or another." Specifically, "a conventional Taylor rule does not perform well in this environment [because] it does not directly respond to the movement in the short term natural rate of interest rate induced by the current account imbalance. At zero inflation, the rule fixes the nominal rate at its steady-state value. However, the current imbalance pushes up the short term real rate, implying a monetary policy that is too expansionary in this instance."

Given the theme of this conference volume, and in the broader context of the current policy debate, these are important and compelling conclusions. It is important to understand carefully how we get there.

The chapter focuses on what I would define as a transfer problem on steroids. By this I mean that once we dig under the surface and the complexities of the dynamic stochastic general equilibrium (DSGE)-model apparatus, what we find is something Keynes and Ohlin would feel very familiar with. The current account adjustment process is substantially seen as a large-scale repayment from the debtor country (the United States) to the rest of the world. To support the transfer of real wealth and purchasing power, what is needed is that resources in the United States move from the nontradables sector to the tradable sector, and from the import-competing firms to the exporters. This requires changes in relative prices and the terms of trade.

The actual exercise can be summarized as follows. We know where we start from: a two-country world economy in which the home country runs a current account deficit in the order of 5 percent of GDP against the rest of the world. We know where we are going to end up: a steady state with zero net asset positions worldwide. To go from here to there, the authors suitably calibrate the dynamics of productivity and preferences and let the propagation mechanism of the model deliver the intertemporal details of the adjustment. It is worth emphasizing that, for the purpose of the exer-

cise, global rebalancing is bound to take place even if its macroeconomic characteristics can differ across scenarios. In other words, adjustment can be smooth and easy (the slow burn scenario) or it can be fast and bumpy (the fast burn scenario), but it is in the cards and will happen no matter what. Foreigners want to be repaid. The U.S. residents will do whatever it takes to repay them. I will return to this point in a short time. Before, let me briefly comment on some of the more technical aspects of the exercise.

First, in terms of scale and detail, the FGS model occupies a somewhat intermediate position between the static framework of Obstfeld and Rogoff (2005, 2007)—in which sectoral outputs are fixed—and simulation exercises with large DSGE models, such as General Equilibrium Model (GEM).<sup>1</sup> With no capital, no investment, and no budget deficits for reasons of theoretical parsimony, a current account improvement in FGS can be achieved exclusively through a contraction of consumption relative to output. In reality, of course, current account dynamics are heavily affected by fluctuations in relative investment and ideally one would like to see the model extended to encompass this dimension. Nevertheless, I find interesting that the main results of FGS substantially confirm the findings of analogous exercises regardless of model size and characteristics (similar half-life for current account adjustment, similar cumulative size of real exchange rate adjustment, etc.). Is this cross-model similarity a sign of reliability and robustness of the underlying approach? Or rather, have the building blocks of recent open economy macro models become so similar in substance that their details can hardly make any difference?

Second, there is a potential issue of country size. The United States in the model represents 50 percent of the world economy. As a matter of fact the correct figure is somewhere between 25 and 30 percent. In the context of a general-equilibrium two-country model this asymmetry in country size may have important quantitative implications. Then again, one could argue that the relevant "rest of the world" for the purpose of this analysis is, in practice, heavily skewed toward emerging Asia and oil exporters (with third countries such as Europe approximately balanced vis-à-vis the United States). In this case, the United States may actually represent more than 50 percent of such "world" economy. It would be straightforward to carry out sensitivity analysis with respect to country size, and it is worth checking whether this element matters or not in practice.

Third, the world economy of the model approaches over time a steady state with a zero net asset position worldwide (as in Obstfeld and Rogoff [2005, 2007] and similar stylized "transfer problem" exercises such as Corsetti, Martin, and Pesenti [2008]). However, the model allows for steady-state growth, so that it would be possible for the home country to run a sustainable current account deficit even in the steady-state equilibrium. This of course

<sup>1.</sup> See, for example, IMF (2006, box 1.3).

would have implications for the overall size of the real depreciation associated with adjustment: the dollar correction required to close a trend deficit of 5 percent is potentially larger than the depreciation required to reduce the deficit from 5 to, say, only 2 percent of GDP.

Fourth, the FGS model (and, unfortunately, most models in the literature) assumes no loss of policy credibility no matter what course of action the policymakers take. Inflation converges to target at a relatively fast pace, and bygones are bygones. This may be especially relevant for the fast-burn scenario. The appropriate model-based monetary stance implies some shortterm tolerance for higher consumer price index (CPI) inflation, which in "real-life" situations could be misperceived by markets as a sign that policymakers are dangerously falling behind the curve. As a result, inflation expectations may persistently deviate from the policy target if agents become concerned with the inability of the monetary authority to achieve price stability. By ignoring credibility issues *tout-court*, the model's potential for realistic policy evaluation ends up being severely curtailed.

Finally, the model abstracts from valuation effects (capital gains and losses related to exchange rate movements when gross assets and liabilities are denominated in different currencies), thus ignoring a potentially crucial aspect of the adjustment process.

Moving to the message of the chapter, there are two important lessons that require some discussion. First, domestic price (producer price index [PPI]) targeting turns out to be a better policy strategy than CPI targeting. Second, as far as the behavior of foreign authorities is concerned, a regime of limited exchange rate flexibility abroad turns out to be an inferior monetary strategy: in a nutshell, better dead than peg. Let's analyze these two results in some detail.

As the authors write, "within our framework, a domestic inflation target may be preferable to consumer price inflation target." Why? One could use a core inflation targeting argument here (a good starting point for any analysis of optimal monetary policy in closed and/or open economies). To make a long story short, optimal policies are expected to stabilize a weighted average of markups in labor and product markets, where the weights assigned to the different markups reflect to some extent the degree of nominal inertia associated with the underlying prices. In other words, the appropriate monetary stance pays more attention to sectors with more persistent nominal distortions, while it does not react to changes in sectors where adjustment is driven by flexible prices.

Now, if import prices are sufficiently flexible while domestic prices are sticky, it makes sense to target a basket of domestic prices only. In the context of the model (until section 4.5) PPI targeting is more appropriate than CPI targeting. This is because the law of one price holds and exchange rate pass-through is high, making import prices relatively close to the flexible benchmark.

The problem of course is that exchange rate pass-through is high in the model *by assumption*, not because it matches a stylized fact. In reality, pass-through to U.S. import prices is relatively low, even at the border level. Because of extensive invoicing of world exports in dollars, import prices in the United States have low sensitivity to exchange rate fluctuations. In a (realistic) "dollar pricing" world, terms of trade and import prices move much less than conventional wisdom would suggest in response to exchange rate fluctuations.

Some sensitivity analysis on this point is presented in section 4.5, and these new results provide a more reliable guideline for policy evaluation. In short, PPI targeting remains reasonably effective but CPI targeting yields substantially similar outcomes. In the future, it would be interesting to bring this analysis to the next step and provide a full account of optimal monetary policy according to the model, instead of restricting the analysis to the comparison between "simple" targeting rules.

Let us consider now the appropriate monetary behavior of the rest of the world. As the authors write, "by not letting its nominal exchange rate appreciate, the foreign country encourages excess demand in its tradable sector which spills over to its nontradable sector. The end product is rapid domestic inflation, which provides the source of the exchange rate depreciation and the current-account adjustment. In addition to the current account and the real exchange rate, the home country economy is also not much affected by the foreign-country peg. Indeed, it is the foreign country economy that largely bears the brunt."

Recall: the rest of the world pegs its *nominal* exchange rate to the home currency, but adjustment through the *real* exchange rate occurs no matter what. Because the rest of the world is unable or unwilling to prevent adjustment, the choice of the peg simply means that all the action goes through inflation differentials.<sup>2</sup>

As a feature of the process of global adjustment, these results are insightful and absolutely right. But they may overlook a few important elements that have contributed to the unfolding of global imbalances in the first place.

To make my point as simply as possible, think of a government in the rest of the world that is willing to accumulate official reserves for unexplained or extra-economic reasons (for instance, in order to maintain comfortable exchange rate levels for its exporters, protect market shares in the home market, and absorb excess labor force in the tradable sector as considered by the advocates of the so-called "Bretton Woods II" view<sup>3</sup>). Also assume that such a government is very successful at sterilizing its foreign exchange intervention. It is irrelevant to observe that this behavior may be suboptimal. Everything we need to know is simply that some agents somewhere in

<sup>2.</sup> Similar considerations hold in the case of GEM simulations. See Farugee et al. (2007).

<sup>3.</sup> See, for example, Dooley, Folkerts-Landau, and Garber (2007).

the world economy are willing to support persistent capital inflows to the United States.

Under this scenario, the logic of the transfer problem is no longer valid. The rest of the world does not want to be repaid (at least for now). Its fixed exchange rate regime is not just a bad policy choice *given* the dynamics of adjustment. It is a policy that *changes* the dynamics of adjustment itself, and substantially prevents the rebalancing from taking place.

An analysis of the implications of this behavior requires a drastically different kind of simulation exercise, one in which the rest of the world is assumed to take the other side of the transaction and persistently provide the home country with the funds needed to finance its trade deficit. From the vantage point of the United States the policy implications can be severely different relative to the aforementioned ones, in fact different enough to reopen the question of whether the natural rate in the United States must actually increase if the rest of the world pegs its currency to the dollar.

Moving beyond academic speculation, concerns of this kind have been expressed in recent years by several policymakers. It seems appropriate to close with the following representative quote (my italics):

"Insufficiently flexible exchange rate regimes have the potential to alter the pattern of capital flows and the price of financial assets [...] The fact that official purchases of financial assets are determined by different factors than those influencing private investors suggests that we would probably see a somewhat different combination of capital flows, exchange rates and interest rates in the absence of official intervention. To the extent that the factors affecting capital flows act to raise asset prices, lower interest rates and reduce risk premiums, it is harder for the markets to assess how much of the currently very favorable conditions are likely to reflect fundamentals and prove more durable. If the prevailing patterns of capital flows were to exert downward pressure on interest rates and upward pressure on other asset prices, they would contribute to more expansionary financial conditions than would otherwise be the case. Among other things, this outcome complicates our ability to assess the present stance of monetary policy. It can change how monetary policy affects overall financial conditions and the economy as a whole" (Geithner 2006).

## References

- Corsetti, G., P. Martin, and P. Pesenti. 2008. Varieties and the transfer problem: The extensive margin of current account adjustment. NBER Working Paper no. 13795. Cambridge, MA: National Bureau of Economic Research, February.
- Dooley, M. P., D. Folkerts-Landau, and P. Garber. 2007. Direct investment, rising real wages, and the absorption of excess labor in the periphery. In G7 current account imbalances: Sustainability and adjustment, ed. R. Clarida, 103–30. Chicago: University of Chicago Press.

Faruqee, H., D. Laxton, D. Muir, and P. Pesenti. 2007. Smooth landing or crash?

Model-based scenarios of global current account rebalancing. In *G7 current account imbalances: Sustainability and adjustment*, ed. R. Clarida, 377–456. Chicago: University of Chicago Press.

- Geithner, T. 2006. Global economic and financial integration: Some implications for central banking. Remarks at the Columbia Business School Center on Japanese Economy and Business' 20th Anniversary Conference, Columbia University. 26 October, New York City.
- International Monetary Fund. 2006. *World economic outlook. Financial systems and economic cycles.* Washington, DC: IMF, September.
- Obstfeld, M., and K. Rogoff. 2005. Global current account imbalances and exchange rate adjustments. *Brookings Papers on Economic Activity* 1: 67–123. Washington, DC: Brookings Institution.

——. 2007. The unsustainable U.S. current account position revisited. In *G7 current account imbalances: Sustainability and adjustment*, ed. R. Clarida, 339–76. Chicago: University of Chicago Press.