

Comment

Laurence Ball: Marc Hofstetter has performed a skillful and innovative analysis of a major policy question: Should Latin American countries retain independent monetary policy, form a currency union, or dollarize? Hofstetter uses technically advanced methods to measure the costs and benefits of a regime change in comparable units, using survey evidence on the determinants of life satisfaction. The paper reaches the provocative conclusion that both a currency union and dollarization would increase economic welfare in Latin America. While I admire Hofstetter's technical accomplishment, I disagree with his conclusions. I think a currency union is probably a bad idea for Latin America, and dollarization is *definitely* a bad idea. I held these views before I read Hofstetter's paper and have not changed my mind. First I discuss my prior opposition to dollarization and currency union, and then I give reasons I am not persuaded by the paper.

The history of the last twenty years shows that a hard currency peg—either dollarization or a currency board—is a dangerous policy. The emerging market economies that have adopted hard pegs have typically experienced periods of strong capital inflows that ended in a sudden stop. This capital flight has produced severe slumps because the economies have lacked the shock absorber of depreciation. We can determine the costs of a hard peg by comparing the effects of capital flight on countries with pegs and on neighboring countries with flexible exchange rates. As documented in Ball (2010), Hong Kong, with a currency board, was hit much harder than its neighbors during the East Asian financial crisis of 1997–98. Argentina, among all its South American neighbors, was the country hit hardest by the Tequila crisis of 1994 (with the exception of Mexico, where the crisis originated). The Baltic countries and Bulgaria suffered more than other countries in Eastern Europe during the world financial crisis of 2008–09. Hofstetter's position in the paper is ironical, given that he is one researcher who has documented the costs of hard pegs, as borne out in Ball, De Roux, and Hofstetter (2011), which finds that inflexible exchange

rates contribute to large, persistent increases in unemployment in Argentina, Panama, and Paraguay.

A common currency is not as obviously dangerous as dollarization. A regional currency union can allow its currency to depreciate if capital flight hits the region, dampening the effect on output. Hong Kong would have suffered less in 1997–98 if it had used an Asian currency, which would have depreciated, rather than pegging to the dollar. Argentina and Panama would have suffered less from capital flight if they had used a Latin American currency. Yet we have learned a lesson from the current Greek crisis: a sudden stop can occur for one country even within a currency union. When that happens, the country's plight is the same as under a hard peg. Greece's lack of competitiveness has produced steadily rising unemployment—rates of 11 percent in mid-2010 and 16 percent in mid-2011. Greece badly needs a devaluation against the currencies of other European countries, which is impossible as long as it retains the euro. A monetary union in Latin America could push one of its members to become the next Greece. Thus the history of hard pegs and currency unions makes me a skeptical reader of Hofstetter's paper.

Still, Hofstetter offers estimates of the costs and benefits of these regimes and finds that the benefits are higher. Why aren't these calculations persuasive? The answer is that, in my view, the estimates both overstate the benefits and understate the costs. The primary benefit of dollarization or a currency board is an increase in trade among the countries that share a currency. Thus a key parameter for Hofstetter's cost-benefit analysis is the proportion by which a common currency increases trade. As Hofstetter discusses, research on the euro suggests that it has increased intra-European trade by something on the order of 10 percent. This European precedent is the most reliable guide to the effects of new Latin American currencies. Some researchers find larger effects of common currencies, but their estimates are based on the less relevant experiences of tiny countries. Hofstetter argues that dollarization has substantial benefits even if we assume 10 percent for the trade effect. However, I believe there is an error in his calculations. In table 3, to estimate the effect on trade, he multiplies current trade with the United States by 1.1. He should multiply instead by 0.1, which gives the increase in trade resulting from dollarization, while multiplying by 1.1 gives total trade with the United States after dollarization. Hence if I am correct, all the benefits of dollarization in table 3 should be divided by 11 ($[1.1]/[0.1]$), and this adjustment makes the benefits very small.

A similar point applies to the costs of dollarization or currency union. My main concern is an issue that Hofstetter points out in his conclusion. The

paper's estimates of costs assume that a monetary regime can influence the variability of output but not its average level. In effect, Hofstetter assumes that any output loss that dollarization or currency union causes in one period is balanced by higher output in another period. If this assumption is wrong, the costs of a regime are likely to be much higher than Hofstetter estimates. In reality, it appears that hard pegs and currency unions cause output and employment losses that do not come with offsetting gains. In Argentina, over the decade from 1991 to 2001, the combination of capital flight and a hard peg raised unemployment by 12 percentage points—from 6 to 18 percent. Obviously an offsetting decrease in unemployment would be impossible: regardless of the monetary regime, no shock could push unemployment from 6 to -6 percent.

Summing up: Hofstetter has taken a promising first step in quantifying the costs and benefits of alternative monetary regimes. For the results to be plausible, however, he must address the problem with measuring trade effects that I have highlighted, and account for the effects of policies on average output and employment. These modifications of Hofstetter's analysis are likely to yield more negative results about dollarization and currency unions.

References

- Abiad, Abdul, and others. 2009. "What's the Damage? Medium-term Output Dynamics after Banking Crises." Working Paper 09/245. Washington: International Monetary Fund.
- Alesina, Alberto, and Vittorio Grilli. 1992. "The European Central Bank: Reshaping Monetary Politics in Europe." In *Establishing a Central Bank, Issues in Europe and Lessons from the US*, edited by Matthew Canzoneri, Vittorio Grilli, and Paul Masson, pp. 49–77. Cambridge University Press.
- Afonso, António, and Ana Sequeira. 2010. "Revisiting Business Cycle Synchronisation in the European Union." Working Paper 22/2010/DE/UECE. Technical University of Lisbon, Department of Economics.
- Baldwin, Richard. 2006. "The Euro's Trade Effects." Working Paper Series 594. Frankfurt: European Central Bank.
- Ball, Laurence. 2009. "Hysteresis in Unemployment." In *Understanding Inflation and the Implications for Monetary Policy: A Phillips Curve Retrospective*, edited by Jeff Fuhrer and others, pp. 361–81. MIT Press.
- . 2010 (forthcoming). "The Performance of Alternative Monetary Regimes." In *Handbook of Monetary Economics*, edition 1, vol. 3B, edited by Benjamin M. Friedman and Michael Woodford, pp. 1303–43. San Diego: North-Holland Publishing Co.
- Ball, Laurence, Nicolás De Roux, and Marc Hofstetter. 2011. "Unemployment in Latin America and the Caribbean." Working Paper 17274. Cambridge, Mass.: National Bureau of Economic Research.
- Ball, Laurence, and Niamh Sheridan. 2005. "Does Inflation Targeting Matter?" In *The Inflation Targeting Debate*, edited by Ben S. Bernanke and Michael Woodford, pp. 249–76. University of Chicago Press and National Bureau of Economic Research.
- Barro, Robert, and David Gordon. 1983. "Rules, Discretion and Reputation in a Model of Monetary Policy." *Journal of Monetary Economics* 12: 101–22.
- Blanchard, Olivier, and John Simon. 2001. "The Long and Large Decline in U.S. Output Volatility." *Brookings Papers on Economic Activity* 1: 135–64.
- Brito, Ricardo D., and Brianne Bystedt. 2010. "Inflation Targeting in Emerging Economies: Panel Evidence." *Journal of Development Economics* 91 (2): 198–210.
- Cerra, Valerie, and Sweta Chaman Saxena. 2008. "Growth Dynamics: The Myth of Economic Recovery." *American Economic Review* 98 (1): 439–57.
- Cukierman, Alex. 1992. *Central Bank Strategy, Credibility, and Independence: Theory and Evidence*. MIT Press.
- De Roux, Nicolás, and Marc Hofstetter. 2011. "On the Endogeneity of Inflation Targeting: Preferences over Inflation." Documento CEDE 2011–06. Bogotá: Universidad de los Andes.
- Di Tella, Rafael, Robert MacCulloch, and Andrew Oswald. 2001. "Preferences over Inflation and Unemployment: Evidence from Surveys of Happiness." *American Economic Review* 91 (1): 335–41.

- Dornbusch, Rudiger. 2001. "Fewer Monies, Better Monies." *American Economic Review* 91: 238–42.
- Frankel, Jeffrey, and Andrew Rose. 1997. "Is EMU More Justifiable Ex-Post Than Ex-Ante?" *European Economic Review* 41 (3–5): 753–60.
- . 2002. "An Estimate of the Effect of Common Currencies on Trade and Income." *Quarterly Journal of Economics* 117 (2): 437–66.
- Goldfajn, Ilan, and Gino Olivares. 2001. "Full Dollarization: The Case of Panama." *Economía* 1 (2): 101–40.
- Gonçalves, Carlos Eduardo S., and João M. Salles. 2008. "Inflation Targeting in Emerging Economies: What Do the Data Say?" *Journal of Development Economics* 85: 312–18.
- Grilli, Vittorio, Donato Masciandaro, and Guido Tabellini. 1991. "Political and Monetary Institutions and Public Financial Policies in the Industrial Countries." *Economic Policy: A European Forum* 6 (October): 342–91.
- International Monetary Fund. 1999. "IMF Economic Forum: Dollarization: Fad or Future for Latin America." Washington, 24 June.
- Inklaar, Robert, Richard Jong-A-Pin, and Jakob de Haan. 2008. "Trade and Business Cycle Synchronization in OECD Countries—A Re-Examination." *European Economic Review* 52 (4): 646–66.
- Jácome, Luis I., and Francisco Vázquez. 2005. "Any Link between Legal Central Bank Independence and Inflation? Evidence from Latin America and the Caribbean." Working Paper 05/75. Washington: International Monetary Fund.
- Krugman, Paul. 1990. "Policy Problems of a Monetary Union." In *The European Monetary System in the 1990s*, edited by Paul De Grauwe and Lucas D. Papademos. London: Longman.
- Lin, Shu, and Haichun Ye. 2007. "Does Inflation Targeting Really Make a Difference? Evaluating the Treatment Effect of Inflation Targeting in Seven Industrial Countries." *Journal of Monetary Economics* 54: 2521–33.
- . 2009. "Does Inflation Targeting Make a Difference in Developing Countries?" *Journal of Development Economics* 89: 118–23.
- Lucas, Robert. 1987. *Models of Business Cycles*. Oxford: Basil Blackwell.
- Panizza, Ugo, Ernesto Stein, and Ernesto Talvi. 2002. "Measuring Costs and Benefits of Dollarization: An Application to Central American and Caribbean Countries." In *Dollarization*, edited by Federico Sturzenegger and Eduardo Levy Yeyati. MIT Press.
- Rodríguez, Francisco, and Dani Rodrik. 2001. "Trade Policy and Economic Growth: A Skeptic's Guide to the Cross-National Evidence." In *NBER Macroeconomics Annual 2000*, edited by Ben S. Bernanke and Kenneth Rogoff, pp. 261–338. MIT Press.
- Rogoff, Kenneth. 1985. "The Optimal Degree of Commitment to an Intermediate Monetary Target." *Quarterly Journal of Economics* 100: 1169–90.
- Rose, Andrew. 2000. "One Money, One Market: Estimating the Effect of Common Currencies on Trade." *Economic Policy* 15: 7–45.

- . 2006. “A Stable International Monetary System Emerges: Inflation Targeting Is Bretton Woods, Reversed.” Working Paper 12711. Cambridge, Mass.: National Bureau of Economic Research.
- Rose, Andrew, and Tom D. Stanley. 2005. “A Meta Analysis of the Effect of Common Currencies on International Trade.” *Journal of Economic Surveys* 19: 389–420.
- Schmitt-Grohé, Stephanie, and Martín Uribe. 1999. “Dollarization and Seigniorage: How Much Is at Stake?” Mimeo. University of Pennsylvania.
- Svensson, Lars. 1997. “Inflation Forecast Targeting: Implementing and Monitoring Inflation Targets.” *European Economic Review* 41: 1111–46.
- . 2010 (forthcoming). “Inflation Targeting.” In *Handbook of Monetary Economics*, edition 1, vol. 3B, edited by Benjamin M. Friedman and Michael Woodford, pp. 1237–1302. San Diego: North-Holland Publishing Co.
- Wolfers, Justin. 2003. “Is Business Cycle Volatility Costly? Evidence from Surveys of Subjective Wellbeing.” *International Finance* 6 (1): 1–26.