Jonung, Lars, and Martin Larch. 2004. "Improving Fiscal Policy in the EU: The Case for Independent Forecasts." European Commission Economic Paper no. 210.

Marinheiro, C. 2011. "Fiscal Sustainability and the Accuracy of Macroeconomic Forecasts: Do Supranational Forecasts Rather than Government Forecasts Make a Difference?" *Journal of Sustainable Economy* 3 (2): 185–209.

McNab, Robert M., Mark Rider, and Kent Wall. 2007. "Are Errors in Official US Budget Receipts Forecasts Just Noise?" Andrew Young School Research Paper Series Working Paper no. 07-22, April.

Mendoza, E., and P. M. Oviedo. 2004. "Public Debt, Fiscal Solvency and Macroeconomic Uncertainty in Latin America: The Cases of Brazil, Colombia, Costa Rica, and Mexico." NBER Working Paper no. 10637. Cambridge, MA: National Bureau of Economic Research, July.

Mühleisen, Martin, Stephan Danninger, David Hauner, Kornélia Krajnyák, and Bennett Sutton. 2005. "How Do Canadian Budget Forecasts Compare with Those of Other Industrial Countries?" IMF Working Papers no. 05/66, April. Washington, DC: International Monetary Fund.

Strauch, R., M. Hallerberg, and J. von Hagen. 2004. "Budgetary Forecasts in Europe—The Track Record of Stability and Convergence Programs." European Central Bank Working Paper no. 307.

Comment   Indira Rajaraman

This chapter by William Easterly explores the possible contribution of technocratic error in growth projections toward the entire range of modern-day debt crises, from those in Latin American and Highly Indebted Poor Countries (HIPC) in the 1980s and 1990s, to the debt-stressed countries of the Eurozone today. The chapter is not about unforeseen adverse growth shocks. It is about systematic upward bias in official growth forecasts over the medium to long run, and is essentially descriptive in its linking of that bias to the fiscally unsustainable debt outcome, normalized by the (lower) realized GDP denominator.

The chapter adds to what is by now a fairly extensive literature on growth forecast error covering the United States, Canada, Japan, and the Eurozone. Systematic upward bias is reported in these prior studies for Japan (Ashiya 2007), and more generally for a set of thirty Organization for Economic Cooperation and Development (OECD) countries, with higher bias at longer horizons, and for membership of the Eurozone (Frankel 2011). A recent interesting paper by Marinheiro (2010) finds national forecasts of Eurozone members to be more biased upwards than European Commission forecasts.

I have five comments on the chapter by Easterly.

Indira Rajaraman is honorary visiting professor at the Indian Statistical Institute and a member of the Central Board of Directors and of the Technical Advisory Committee on Monetary Policy of the Reserve Bank of India.

First, in arguing that optimistic growth projections were what precipitated fiscal failure to adjust to the growth slowdown, the author presumes a compressible margin in public expenditure. In every country, there is a basic noncompressible core of public expenditure that is growth invariant, comprising at a minimum the sum of interest on accumulated debt, pensions, and salaries. To this can be added other constituents underpinned by statute, in the form of guarantees and entitlements. The residual compressible expenditure, after deduction of this core, could be essentially nonexistent in poorly managed fiscal regimes, which are typically characterized by bloated statutory entitlements. These entitlements, if underpinned by law, are not easily reversed or reduced. The compressible residual could also be very low in well-managed fiscal regimes, where irreversible entitlements of this kind are cut to the bone.

That being the case, the margin of compressibility, which determines the extent of ex ante fiscal compression possible, had growth been more correctly forecast, is not possible to ascertain except through a country-specific examination of the legal underpinnings of public expenditure constituents. The chapter could have made a very interesting contribution if the compressible margin had been quantified in a long time series going back fifty years, even if only for the stressed members of the Eurozone (Portugal, Italy, Ireland, Greece, and Spain). Of specific interest would be the impact of Eurozone membership as an event in that time series.

Second, suppose a country has an ex ante compressibility margin of zero, because of public entitlements protected in their entirety by law. In that case, there would be no reward to a correct growth forecast, since no fiscal adjustment is possible ex ante anyway. It is only a crisis that can transform expenditures that are noncompressible ex ante into compressibility ex post. A 10 percent salary cut, for example, is possible after a crisis, not before, no matter how correct the forecast of low growth, and how persuasive the expectation of its fiscal consequences if left uncorrected. Therefore, optimistic growth forecasts may be a politically strategic move rather than a result of technical incompetence.

Third, the central problem in the present Eurozone crisis is the need for fiscal cuts at a time of slow growth, whatever be the nature (cyclical or otherwise) of that slowdown. Had growth been correctly forecast, there would have actually been a need to provide for an increase in unemployment compensation, which is the automatic cyclical stabilizer built into the fiscal structure of the OECD world. So the failure to do prior fiscal correction should actually be calculated net of this added provision needed in public expenditure, had the growth slowdown been correctly foreseen.

Going forward, one strategy by which to resolve the impossible confluence of a low-growth trough, fiscal unsustainability, and political turbulence over expenditure cuts, might be to cap the sum of salaries and unemployment compensation. That renders transparent the need for salary containment,

and calibrates the sacrifice required of those fortunate enough to have government jobs to the failure of the economy to provide jobs for all.

Fourth, within the compressible margin, the existence of which is what the chapter is predicated on, the growth impact of the different components amenable to compression would vary according to import content, and thereby the domestic multiplier specific to each, a critical consideration in a low-growth environment. At the same time, although this may be a consideration in emerging markets rather than in the Eurozone, spending on infrastructure, like transportation, for example, may simultaneously raise potential growth (Easterly and Rebelo 1993), and have a low domestic multiplier because of its high import content. So a composite scoring of components of compressible expenditure is needed, if the full benefit of accurate growth forecasts is to be reaped through ex ante fiscal containment with minimal growth costs.

My fifth and final point on the chapter has to do with the possible nature of the prior revenue side correction with an accurate forecast of a growth slowdown. The three possibilities here are higher tax rates to compensate for the decline in the taxable base; reduced avenues for tax avoidance, thus expanding the taxable base; and reduced avenues for evasion, thus expanding the reported taxable base. Of these, the first option of a rate increase could carry a high downward multiplier impact on growth, if the recent high estimates for the tax multiplier in the United States by Romer and Romer (2010) are generalizable to other countries. The second option of reduced avoidance, if attempted, for example, through elimination of investment incentives like accelerated depreciation, could carry a heavy growth cost. The third is the only option that carries a possible growth dividend, since evaded income usually flees out of the country.

References

Ashiya, Mashahiro. 2007. "Forecast Accuracy of the Japanese Government: Its Year-Ahead GDP Forecast is too Optimistic." *Japan and the World Economy* 19 (1): 68–85.

Easterly, William, and Sergio Rebelo. 1993. "Fiscal Policy and Economic Growth." *Journal of Monetary Economics* 32:417–58.

Frankel, Jeffrey. 2011. "Over-Optimism in Forecasts by Official Budget Agencies and Its Implications." NBER Working Paper no. 17239. Cambridge, MA: National Bureau of Economic Research, July.

Marinheiro, Carlos F. 2010. "Fiscal Sustainability and the Accuracy of Macroeconomic Forecasts: Do Supranational Forecasts Rather than Government Forecasts Make a Difference?" *Journal of Sustainable Economy* 3 (2): 185–209.

Romer, Christina D., and David H. Romer. 2010. "The Macroeconomic Effects of Tax Changes: Estimates Based on a New Measure of Fiscal Shocks." *American Economic Review* 100:763–801.