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

Volume Title: NBER Macroeconomics Annual 2007, Volume 22

Volume Author/Editor: Daron Acemoglu, Kenneth Rogoff and Michael Woodford, editors

Volume Publisher: University of Chicago Press

Volume ISBN: 978-0-226-00202-6

Volume URL: http://www.nber.org/books/acem07-1

Conference Date: March 30-31, 2007

Publication Date: June 2008

Chapter Title: Comment on "Cyclical Budgetary Policy and Economic Growth: What Do We Learn from OECD Panel Data?"

Chapter Author: Ricardo J. Caballero

Chapter URL: http://www.nber.org/chapters/c4082

Chapter pages in book: (p. 279 - 286)

# Comment

## Ricardo J. Caballero, MIT and NBER

## 1 Introduction

The Aghion-Marinescu paper begins by stating a view I share: Good macroeconomic policy helps growth (by which I mean growth in the near term). I do not think this view is in any dispute in the applied and policy world, but once in a while we academics manage to create our own puzzles. Credit goes to Aghion-Marinescu for avoiding this trap.

Of course, it is one thing to claim that there is a link between macroeconomic policy and growth, and another to measure the extent of the impact of the former on the latter. This paper sets out to do this measurement. In particular, it uses OECD panel data to measure the degree of countercyclicality of fiscal policy in different countries at different points in time, and, more importantly, to measure the growth benefit of having a more countercyclicality fiscal policy. The authors find that there is a large benefit, particularly when financial markets are less developed (even within the OECD). They also point out that EMU countries have not followed the rest of the OECD countries in becoming more countercyclical over time, and that their financial markets are less sophisticated than those of the United States and United Kingdom; hence, they would benefit significantly from catching up on countercyclicality.

Unfortunately, while I'm receptive to their conclusions, I do not think they have been successful in providing solid evidence for their sensible case. Their method is not convincing. For example, the main equation has variables with a different order of integration on the right and left hand sides, and there is no specific discussion of causality, of the economic factors behind the time-varying nature of their countercyclicality measure, of why the frequency of their data is the right frequency for the question at hand, of the source of identification, and so on.

Since I am not persuaded by their evidence, and since Anil Kashyap,

the other discussant, will focus on their procedures and data, I will turn to something else. I will briefly address three sets of questions that naturally arise when reading the Aghion-Marinescu paper:

• Are recessions particularly bad for growth? How?

• Why is fiscal policy procyclical (or less countercyclical than in the preferred model) in practice? Does procyclicality increase aggregate volatility?

• Is the European problem one of excess volatility? Would the adoption of a more flexible fiscal rule give a significant boost to growth? If so, what is the channel?

## 2 Are Recessions Bad for Growth? How?

There are two polar views about the effect of recessions on economic growth. At one end, there is the *liquidationist* view, which sees a benefit in recessions. The following quote from Schumpeter (1934) exemplifies this perspective: "depressions are not simply evils, which we might attempt to suppress, but . . . forms of something which has to be done, namely, adjustment to . . . change."

At the other end of the spectrum is the *inefficient private separations* view, which focuses on the fact that liquidations are concentrated during recessions. The argument is that these large-scale job losses and associated financial distress cause significant economic waste, which we should find a way to avoid.

Who is right? In my work with Mohamad Hammour we have argued that probably neither—or both, to some extent.<sup>1</sup> Instead, we advocate a *reverse-liquidationist* perspective, which states that a recession is costly (as the inefficient private separations view has it) because it *depresses* restructuring (i.e., a Schumpeterian mechanism).

Figure 4C1.1 presents one piece of evidence for this reverseliquidationist perspective. It shows the impulse response to a recessionary shock of minus-employment (panel a), job creation and destruction (panel b), and the cumulative creation and destruction (panel c), for U.S. manufacturing.<sup>2</sup> The first panel reflects the path of unemployment (minus-employment) during the recession and recovery phases. The second panel shows the rise in liquidations (job destruction) at the onset of the recession. It is this rise that has led people to conclude that restructuring rises in recessions. But we argue that this interpretation is misleading since there is no commensurate rise in creation. Instead, one should look at the whole recession-recovery episode and study whether



Figure 4C1.1 Impulse Response to Recessionary Shocks

the initial spike in destruction is indeed followed by a rise in creation. The bottom panel does exactly this. It shows the cumulative creation (and destruction) from the onset of the recession to the time indicated in the horizontal axis. The evidence in this case clearly points against the increased-restructuring hypothesis. Quite the opposite, there is significant evidence that recessions depress restructuring.

The evidence on depressed restructuring during recessions extends beyond U.S. manufacturing jobs. In fact, it is even more pronounced for asset restructuring. See, for example, the evidence for merger waves in Golbe and White (1987) and for physical capital in Eisfeldt and Rampini (2006).

Sometimes depressed restructuring results from financial and other frictions within the private sectors. In others, it is the result of an inadequate policy response to recessionary shocks, such as that which followed the burst in the Japanese bubble in the early 1990s (see Caballero, Kashyap, and Hoshi 2006) and the tightening in dismissal laws in Europe following the oil shocks of the 1970s (see, e.g., Caballero and Hammour 1998).

Depressed restructuring is important because there is plenty of evidence that restructuring is a central mechanism behind productivity growth (e.g., Baily et al. 1992, Bartelsman and Dhrymes 1994, and Bartelsman, Haltiwanger, and Scarpetta 2004). For example, the evidence in Foster, Haltiwanger, and Krizen et al. (2001) shows that reallocation can account for over 50 percent of the 10-year productivity gains in U.S. manufacturing between 1977 and 1987. Building on this evidence, which we combined with a model of creative-destruction, we concluded in Caballero and Hammour (2005) that depressed restructuring accounts for about a third of the cost of a recession in the United States.<sup>3</sup>

## 3 Why Is Fiscal Policy Procyclical in Practice? Does It Increase Volatility?

The authors study OECD countries, but most of the patterns they describe are even more pronounced in emerging-market economies. In particular, fiscal policy is less countercyclical and more related to financial development in emerging markets than in advanced economies.

Table 4C1.1 illustrates the correlation between GDP growth and different measures of fiscal policy for a few examples and the medians of each group (emerging and advanced economies). The pattern is evident: in the typical emerging-market economy, fiscal policy is either procyclical or mildly countercyclical, at best. In contrast, advanced economies exhibit much stronger evidence of countercyclicality.

### Table 4C1.1

Procyclicality of Fiscal Policy

	Public Deficit, GDP (%)	Government Expenditures, GDP (%)		
Argentina	1.96	83.03		
Brazil	28.37	50.83		
Italy	-52.69	-37.94		
Emerging (median)	-4.41	45.60		
Advanced (median)	-47.09	9.08		

#### Table 4C1.2

Procyclicality of Fiscal Variables and Financial Development

Dependent Variable: Correlation of:	Expenditures and GDP	Public Deficit and GDP			
Private credit					
OLS	-0.093	-0.098			
	(0.007)	(0.027)			
IV	-0.290	-0.374			
	(0.048)	(0.004)			
Number of countries	90	90			
Liquid liabilities					
OLS	-0.157	-0.100			
	(0.003)	(0.073)			
IV	-0.505	-0.439			
	(0.019)	(0.008)			
Number of countries	85	85			

Note: Robust standard errors are reported in parentheses.

Table 4C1.2 uses different measures of financial development to show that the correlation between GDP and fiscal policy decreases with financial development.

Why is fiscal policy procyclical in emerging markets? I believe there are two main types of factors. One of them is political; the other is financial constraints. The political economy literature has elaborated extensively on the former, and some of this discussion is reviewed in the Aghion-Marinescu paper. However, in many instances bad policies are just that. There are plenty of bad economic ideas floating around and countries in more dire circumstances are more likely to adopt them.

One of the distinctive features of emerging-market recessions is that they often come together with a sudden stop of capital inflows, which creates great financial distress in both the private and public sectors. In this context, crowding out becomes a much more serious issue with which to be concerned. Table 4C1.3 estimates the extent of crowding out in emerging and advanced economies. It shows the result of running a regression of private investment on public debt, episodes of crises/recessions, and the interaction between these two. The most interesting coefficient is the interaction, as it shows that during crises in emerging markets crowding out is very extreme. The absolute value of the sum of the coefficients associated to public debt exceeds 1 during crises. In contrast, crises have no effect on crowding out in advanced economies, and the degree of crowding out overall is much smaller.

The point, then, is that depending on the nature of the shocks and constraints faced by a country, there are times when procyclical fiscal policy is the optimal response. When this is the case, a procyclical policy dampens rather than exacerbates volatility.

## 4 Is the European Problem One of Excess Volatility?

The paper argues that if EMU economies were to adopt more countercyclical policies they would reduce aggregate volatility, which in turn would increase growth. While I am in favor of more countercyclical policies in the EMU economies, I am not persuaded that their main problem is one of excess volatility. Table 4C1.4 shows that aggregate volatility in the EMU economies, and particularly in its main economies, is actually *lower* than that of the United States.

Lack of flexibility of *microeconomic* policy is probably a much more serious problem behind weak European growth. Having said this, I also believe that at this juncture there is a connection between these two forms of flexibility (macro and micro). The reason is that the political momentum for reforms, which was initially boosted by bad macroeconomic outcomes, may be lost in the absence of a short-run improvement in aggregate conditions. To the extent that a better macromanagement facilitates this improvement, it may well have a first order effect on growth if it buys the time needed for microeconomic reforms to consolidate and deepen.

### Endnotes

1. See Caballero and Hammour (2005), and chapter 2 in Caballero (2007).

2. Gross job flows in the U.S. manufacturing sector for the period 1972:1–1993:4 are from Davis, Haltiwanger, and Schuh (1996). See Caballero and Hammour (2005) for a detailed description of the data used to generate the figures.

Table 4C1.3
Private Investment

	Emerging Coun	tries	
I <sub>it-1</sub>	0.475	0.535	0.439
	(0.000)	(0.000)	(0.000)
D <sub>it</sub>	-0.739	-0.662	-0.793
	(0.000)	(0.000)	(0.000)
$D_{it}C_{it}$	-0.664	-0.159	-0.681
	(0.043)	(0.502)	(0.023)
C <sub>it</sub>	-2.009	-3.403	-0.291
	(0.043)	(0.000)	(0.780)
Obs./Countries	106/13	106/13	106/13
Time Period	1990s	1990s	1990s
Crisis indicator	Growth	CA	Country Risk
Long-Run Crowding-Out			
Tranquil	-1.408	-1.424	-1.414
Crisis	-2.672	-1.766	-2.627
	Advanced Coun	tries	
I <sub>it-1</sub>	0.482	0.488	0.472
	(0.000)	(0.000)	(0.000)
$D_{it}$	-0.178	-0.170	-0.229
	(0.000)	(0.000)	(0.000)
$D_{it}C_{it}$	0.101	0.177	0.057
	(0.346)	(0.029)	(0.223)
$C_{it}$	-1.357	-2.155	-0.332
	(0.064)	(0.001)	(0.373)
Obs./Countries	297/18	297/18	297/18
Time Period	1980–1990s	1980–1990s	1980–1990s
Crisis indicator	Growth	CA	Country Risk
Long-Run Crowding-Out			
Tranquil	-0.344	-0.332	-0.434

*Notes: P*-values are presented in parentheses. Covariates include the (log of) relative price of capital and interactions of this variable with the crisis indicator.

## Table 4C1.4

Aggregate Volatility in the United States and Selected EMU Economies

	USA	EMU (Median)	Germany	France	Italy
σ (1980–2005)	1.77	1.63	1.62	1.15	1.16

*Note:* Growth rate of GDP in constant local currency units. *Source:* World Development Indicators (WDI).

3. Of course, sometimes recessions help growth. For example, a sharp decline in the price of oil may well free some oil-producing countries from populist regimes. But these are the exceptions rather than the rule.

## References

Baily, Martin N., Sukkyun Chung, and Mark J. Roberts. 2003. Productivity dynamics in manufacturing establishments. *Brookings Papers on Economic Activity, Microeconomics:* 187–249.

Bartelsman, Eric J., and Phoebus Dhrymes. 1994. Productivity dynamics: U.S. manufacturing plants, 1972–1986. *Finance and Economics Discussion Series* 94-1. Washington, DC: Board of Governors of the Federal Reserve System.

Bartelsman, Eric J., John Haltiwanger, and Stefano Scarpetta. 2004. Microeconomic evidence of creative destruction in industrial and developing countries. IZA Discussion Paper no. 1374. College Park: University of Maryland.

Caballero, Ricardo J. 2007. Specificity and the macroeconomics of restructuring. Cambridge, MA: MIT Press.

Caballero, Ricardo J., and Mohamad Hammour. 1998. Jobless growth: Appropriability, factor substitution and unemployment. *Carnegie-Rochester Conference Series on Public Policy* 48:51–94.

-------. 2005. The cost of recessions revisited: A reverse-liquidationist view. *Review of Economic Studies* 72:313–41.

Caballero, Ricardo J., and Arvind Krishnamurthy. 2005. Fiscal policy and financial depth. Mimeograph. Cambridge: MIT Press.

Caballero, Ricardo J., Anil K. Kashyap, and Takeo Hoshi. 2006. Zombie lending and depressed restructuring in Japan. MIT Economics Working Paper no. 06-06. Cambridge: MIT Press.

Davis, Stephen J., John C. Haltiwanger, and Scott Schuh. 1996. *Job creation and destruction*. Cambridge: MIT Press.

Eisfeldt, Andrea L., and Adriano Rampini. 2006. Capital recallocation and liquidity. Journal of Monetary Economics 53 (3): 369–99.

Foster, Lucia, John C. Haltiwanger, and C. J. Krizan. 2001. Aggregate productivity growth: Lessons from microeconomic evidence. In *New developments in productivity analysis*, ed. E. Dean, M. Harper, and C. Hulten, 303–72. Chicago: University of Chicago Press.

Golbe, Devra, and Lawrence White. 1987. A time series analysis of mergers and acquisitions in the U.S. economy. In *Corporate takeovers: Causes and consequences*, ed. Alan Auerbach, 265–310. Chicago: University of Chicago Press.

Schumpeter, Joseph. 1934. Depressions. In *Economics of the recovery program*, ed. D. Brown, E. Chamberlin, S. Harris, W. Leontief, E. Mason, J. Schumpeter, and O. Taylor, 3–21. New York: McGraw-Hill.