

THE CRISIS AND FISCAL POLICY IN DEVELOPING COUNTRIES

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Abstract

Several years after its burst, the recent economic crisis still has remains on the global economy. Given its magnitude, many countries all over the world adopted measures in order to fight with its effects. Particularly in developed countries, the size of the fiscal stimulus generated an unprecedented effort in academia for assessing the sign and the magnitude of these important fiscal stimuli. Using content analysis, this paper is focusing on studies that are assessing fiscal multipliers in developing countries, principally in European countries and presents the main results. The main conclusion is that there is a very small number of studies that are assessing fiscal multiplier in developing countries and only three identified on countries from Central and Eastern Europe.

Key words: fiscal policy, developing countries, European Area, economic crisis, fiscal multipliers

Classification JEL : E62, E63, F62, O524

1.Introduction

The world economies still fight the perpetuation of the crisis that started in 2007 – 2008, generating considerable economic growth losses and major unemployment imbalances. The Great Recession, also called the “Second Great Contraction” (Reinhart and Rogoff, 2009), took governments, economists and people by surprise. According to Verick and Islam (2010), the four core factors of the crisis were: interest rates, global imbalances, perceptions of risk and regulation of the financial system. To be more precise, the crisis started as a crisis in the sub-prime mortgage market in the US. More exactly, it is the part of the market that assembles the people that have a higher risk of not being able to pay their loans.

In order to fight the crisis governments all over the world made use of fiscal policies measures to boost the demand, while central banks took the interest rate close to zero. For example, for the Euro Area, the ECB announced in January 2015 the Asset Purchase Program (APP) that pursues combined monthly purchases of 60 billion Euros until September 2016. Since the disposal income decreased, governments needed to take actions in order to replace private spending and investment by public spending and investment with the intention of sustaining the country economy. Thus, numerous countries implemented expansionary fiscal policies, namely fiscal stimulus packages. The structure of stimulus packages is different for each country, as shown for example by Saha and Weizsacker (2009) who analyzed the composition of announced stimulus packages for 13 EU countries. They conclude that the spending categories of the package are so different due to the initial state of the economy. For instance, countries like France and Spain announced major spending on investment, while all Poland stimulus consists of investment. Austria and Sweden choose to direct a major part of the stimulus to permanent cut taxes and transfers, while the United Kingdom (UK) and Netherlands to temporary cut taxes and transfers. The only country that has a more balanced structure of the stimulus package in terms of spending categories is Germany who tries to reach all categories: investment, permanent and temporary tax cuts and transfers, labour market measures and sector specific measures. The same variety in the composition of stimulus packages is found around the world, i.e. China spent a considerable part in rebuilding the region of Sichuan, while Brazil focused on the auto sector (ILLS, 2011). The

distribution on years of the fiscal stimulus also differs among countries. For example, France announced a 0.7% of GDP stimulus for 2009, while Germany announced 1.5% of GDP and UK 1.4% of GDP. Other countries did not announce the allocation on years, just the period of stimulus, i.e. Japan for 2009-2010, while other countries propose the stimulus packages just for one year, i.e. Mexico, 1.49% of GDP in 2009.

With the purpose of identifying the best way to allocate the stimulus package, to find out what type of fiscal instrument is more appropriate for each economy and also to assess the stimulus impact on the economy output, economists, policy-makers and academia made use of the fiscal multiplier concept. The fiscal multiplier is a cornerstone of the Keynesian paradigm, and Keynes' (1936) analysis awarded the multiplier the central role that it still has today in macroeconomics. The simple way to define it is as the impact of an exogenous change in a fiscal variable (i.e. public spending ΔG) on output (ΔY), with respect to their respective baselines. Through the literature, we can identify four major types of fiscal multipliers: impact multipliers, multipliers at a T horizon, peak multipliers and cumulative multipliers.

We started the investigation by searching studies that assess fiscal multipliers in developing and emerging European countries, but due to the fact that we only identified three papers, we extended our search to studies focusing on developing and emerging countries. The main conclusion is that there is a scarce literature aiming to assess multipliers in developing and emerging countries and it can be divided into studies that are analyzing a panel of countries or studies that are assessing multipliers at country level.

The remainder of the paper is organized as follows: section 2 discusses The Great Recession topic, section 3 reveals the main results of the recent literature regarding fiscal multipliers in developing and emerging countries, and section 4 concludes.

2. The Great Recession impact

Before approaching the recent crisis subject, it is necessary to shortly present the pre-crisis world situation. After the second oil price shock of 1979, the global growth started to stagnate and so the 1980s and 1990s gain the name of the “Lost Decades” for developing countries where the median real growth per capita rate was almost zero. Turning to developed countries, the decades previous to the crises are known as the “Great Moderation”. An interesting observation is made by Verick and Islam (2010), which argue that starting from 1979 until 2008 the world faced: “124 systemic banking crises, 208 currency crises, 63 sovereign debt crises, 42 twin crises, 10 triple crises, a global economic downturn every ten years and several price shocks.” Another important period prior to the crisis is the global boom of 2002-2007, characterized by a period of high growth rates (especially in developing countries), high consumption (especially in developed countries) and high investments and exports (especially in developing countries). This increase in consumption and investment was not accompanied by a commensurate increase in wages (income), and we can easily affirm that the risks were underestimated in the “boom” period. For example, when the 2001 crisis started FED (The Federal Reserve) reduced the interest rate at 1 percent and kept it at this point until the end of 2003. By so doing they stimulated the debt-financed consumption boom that influenced the global aggregate demand. In the boom years their policy was to maintain a loose monetary policy (not respecting the Taylor Rule).

Although the majority of economists were ready to call this boom period the beginning of a new era, namely the “platinum age”, Bezemer (2009) in his paper reveals 11 economists that predicted a recession before 2008, as presented in Table 1.

Table 1. Economists that anticipated the crisis.

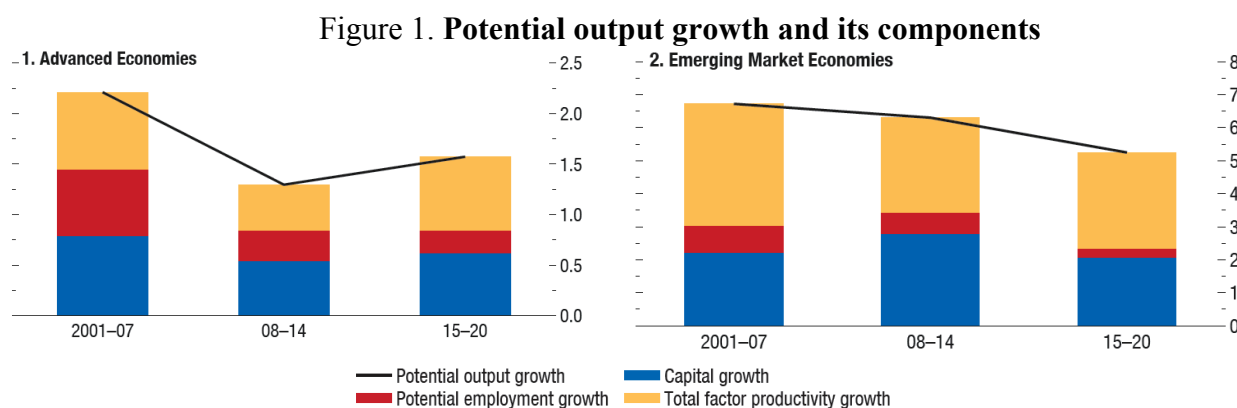
Researcher	Function	Date
Dean Baker, US	Co-director, Center for Economic and Policy Research	2006

Wynne Godley, US	Distinguished Scholar, Levy Economics Institute of Bard College	2006- and 2007
Fred Harrison, UK	Economic Commentator	2005
Michael Hudson, US	Professor, University of Missouri	2006
Eric Janszen, US	Investor and iTulip commentator	2006- and 2007
Stephen Keen, Australia	Associate Professor, University of Western Sydney	2006
Jakob Brochner Madsen and Jens Kjaer Sorensen, Denmark	Professor and Graduate Student, Copenhagen University	2006
Kurt Richenbacher, US	Private consultant and investment newsletter writer	2006
Nouriel Roubini, US	Professor, New York University	2005- and 2006
Peter Schiff, US	Stock broker, investment adviser and commentator	2006 and 2007
Robert Shiller, US	Professor, Yale University	2005

Source: adaptation of Bezemer (2009, p. 9) table.

Turning to The Great Recession, as mentioned above, the main factors that generated the crisis were: interest rates, global imbalances, perceptions of risk and regulation of the financial system Verick and Islam (2010). After 2000 due to the fact that interest rates were low, more people were tempted to borrow money in order to buy a house, so the house prices began to rise. The problem appeared when the house prices started to decrease and the money borrowed exceeded the “new” value of their house. If the borrowers think that they are not able to repay the loan, then they might decide to renounce and just to give the house to the bank. The other part of the problem consists in the fact that the US legislation allowed banks to have higher leverage ratios, so the higher the leverage run by the bank, the stronger was the hit in their capital when the loss in assets value appeared. Banks needed to start selling assets and loans, so the cost of borrowing increased and determined investments to decrease. Thus, what started as a small decrease in US house prices generated into a world recession. The overwhelming consequence can be observed at the global level, but the most affected countries were those which had a poor initial condition when the crisis struck in relation to the state of the economy, the labour market, fiscal space and institutional framework.

For a visual presentation on the state of the economy before, during and after the crisis, Figure 1 illustrates the potential output growth and its components as calculated by IMF in the April 2015 World Economic Outlook (WEO).

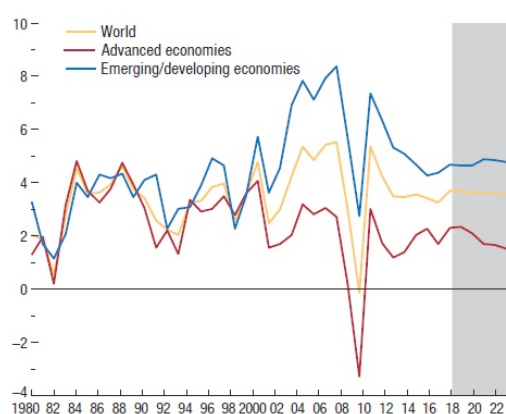


We can observe that in the pre-crisis period the emerging countries showed stronger output growth than developed countries. The second period, namely the crisis period, is associated with a

decrease in both types of economies, while in the next period the projections show a further decrease for emerging economies and a slight increase for advanced economies. The forecasts for the 2015-2020 period supports a faint increase for advanced economies to 1.6 percent than the average of 1.3 percent for the crisis period (2008-2014). For developing and emerging countries the forecasts predict a decrease in GDP growth for the 2014-2020 period of 1.3 percent for the crisis average of 6.5 percent.

A decade has passed since the outburst of The Great Recession, and the world economy is still trying to find the path back to prosperity. The 2018 October WEO reveals the GDP growth in advanced countries, developing and emerging countries and the world status. Figure 2 depicts that the measures adopted by governments after 2008, namely fiscal stimulus, lowering the interest to zero, unconventional monetary policies, have supported the increase in GDP growth starting with 2010 – 2011. Another important fact that can be observed is the descended growth trend of advanced economies and the growth acceleration of developing and emerging countries above the world and advanced economies trend. Moreover, the forecast 2019 – 2020 for advanced countries is below its trend, while the developing and emerging countries maintain an increasing trend.

Figure 2. Real GDP growth 1980-2022



Source: IMF *World Economic Outlook* October 2018

3.Recent evidence on fiscal multipliers in developing countries

The major part of the literature assessing fiscal multiplier is focusing on the United States of America (USA) economy, followed by studies on other developed countries (Japan, Euro Area, UK, Australia). If we are to consider the literature after the crisis burst for developed European countries, we can identify three major groups: at country level (Batini et al., 2012; Baum et al., 2012) or in panels like Euro Area (Combes et al., 2015; Batini et al., 2012), or OECD countries (Auerbach-Gorodnichenko, 2012) and just a few studies that are taking into consideration developing and emerging economies. To the best of our knowledge, Table 2 reveals the only studies on emerging and developing countries that are assessing fiscal multipliers, from which only three are focusing only on European countries.

The results presented in table 2 regarding the impact multiplier, can be grouped as follows: on the one hand, there are studies that are assessing the multiplier in a panel of countries and on the other hand two paper that assesses fiscal multipliers at country level.

If we refer to the first stand of literature, Ilzetzki and Végh (2008) reveal a 0.6 government spending multiplier for developing countries, while IMF (2008) reveals a 0.20 government spending multiplier and a 0.23 tax multiplier for emerging countries. In a more recent study, Ilzetzki, Mendoza and Végh (2013) analyzing 20 high income countries and 24 developing

countries in term of government investment and spending encountered a negative spending multiplier (-0.03) and a 0.39 investment multiplier for developing countries. Furthermore, Petrović, Arsić and Nojković 2014, investigating 10 CEEC countries reveal the following expenditure impact multipliers: 0.20 for the entire sample, 1.31 in fixed exchange rates, 0.03 in flexible exchange rates regimes, 0.10 in expansion periods and 1.15 in downturn periods.

The later stand of the literature reveals multiplier values at country level. Thus, Ambrisko and al. (2015) obtained a 0.6 government spending multiplier and 0.5 government investment multiplier after one year for the Czech Republic. Furthermore, Combes et al. (2016) assess government spending multipliers in 11 CEE countries and the impact multipliers are as follows: 0.02 for Bulgaria, 0.13 for Croatia, 0.21 for the Czech Republic, 0.10 for Estonia, 0.06 for Hungary, 0.03 for Latvia, 0.15 for Lithuania, 0.12 for Poland, -0.05 for Romania, 0.09 for Slovakia and 0.19 for Slovenia.

Table 2. Fiscal multipliers values

Author	Country	Economy	Fiscal Shock	Impact	One year	Long run
Ilzetzki and Végh 2008	High income		Government spending	0.4	0.7	0.8
	Developing		Government spending	0.6	0.4	-0.11
IMF 2008	Advanced		Taxes – elasticity		0.35	0.59
			Taxes – regression based		0.01	0.40
			Government spending – elasticity		-0.09	-0.26
			Government spending – regression based		0.15	0.52
	Emerging		Taxes – elasticity		0.23	0.23
			Taxes – regression based		0.13	0.17
			Government spending – elasticity		0.20	-0.18
			Government spending – regression based		0.08	-0.23
	20 High income countries		Government investment	0.39*		1.5
	24 Developing countries		Government investment	0.57*		1.6*
Ilzetzki, Mendoza and Végh 2013	20 High income countries		Government spending	0.39*		0.66*
	24 Developing countries		Government spending	-0.03		-0.63
	20 High income countries		Government investment	0.39*		1.5
	24 Developing countries		Government investment	0.57*		1.6*
Petrović, Arsić and Nojković 2014	10 emerging CEEC		Expenditure multipliers	0.20*	0.48*	0.20*
		Fixed exchange rates	Expenditure multipliers	1.31*	1.58*	0
		Flexible exchange rates	Expenditure multipliers	0.03	0.11	0
		Expansion	Expenditure multipliers	0.10*	0.32*	-0.37*
		Downturn	Expenditure multipliers	1.15*	1.51*	-0.42*
R Ambrisko, J Babecky, J Rysanek, V Valenta 2015	Czech Republic		Spending shock		0.6	

			Investment shock		0.5	
Combes et al. 2016	Bulgaria		Government spending	0,02		0,07
	Croatia		Government spending	0,13		0,07
	Czech Republic		Government spending	0,21		0,68
	Estonia		Government spending	0,10		0,29
	Hungary		Government spending	0,06		0,07
	Latvia		Government spending	0,03		-0,01
	Lithuania		Government spending	0,15		0,34
	Poland		Government spending	0,12		0,35
	Romania		Government spending	-0,05		-0,18
	Slovakia		Government spending	0,09		-0,01
	Slovenia		Government spending	0,19		0,29

Source: author compilation based on above - mentioned studies.

4. Conclusions

The recent crisis generated a strong decline in world economic growth and an increase in world unemployment. In order to ameliorate the situation, to boost the demand, governments around the world employed measures to fight the crisis. An important measure was the implementation of stimulus packages, thus recognizing the importance of the demand mechanism on the short and medium term. The intention was to replace the drop in the private investment and spending by public spending and investment in order to sustain the economy. The fiscal packages differ from one country to another due to the economic status before the crisis and to the sectors that needed more support in each country.

As pointed out by Verick and Islam (2010), the determinants factors of the crisis were: interest rates, global imbalances, perceptions of risk and regulation of the financial system. IMF WEO (2015) present the growth potential after the crisis, while WEO (2018) reveals the real GDP growth and forecasts until 2022. It is important to retain the fact that advanced economies are on a descendent path while developing and emerging economies maintain a small, but increasing trend.

The literature assessing fiscal multipliers granted more attention to developed countries, especially the USA and OECD countries, whether they are analyzed as a group or individually. We identified only six studies that are assessing fiscal multiplier in developing and emerging countries, from which four present the data from a panel estimation and two from country level estimation. The scarce literature in developing and emerging countries is caused especially by the lack of qualitative data and is leaving an opening for research.

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