
Monetary and Fiscal Policies for the Crisis: Lessons from History

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Plan of the talk

- A brief discussion on the 'New Consensus' monetary and fiscal policy prescriptions;
- Discussion of the Consensus on the causes and solutions for the Great Depression;
- A brief comparison of Argentinean and Brazilian economic performance;
- A brief overview of fiscal policies after the so-called Great Contraction
- Final reflections.

The New Policy Consensus

- The policy consensus suggested that monetary policy should focus on the use of the basic interest rate, to maintain price stability;
- Fiscal policy took a backseat to monetary policy, because of skepticism about its effects. Also, if monetary policy could maintain a stable output gap, there was little reason to use another instrument. In the center, the priority was to stabilize and decrease typically high debt levels; in the periphery, the lack of depth of the domestic bond market limited the scope for countercyclical policy;
- One exception that would call for more reliance on fiscal policy and for larger deficits is the case of a binding zero interest rate constraint;
- Also, in the presence of bubbles if leverage in the financial sector appears excessive, regulatory capital ratios can be increased.

The Great Depression

- The conventional wisdom suggests that monetary contraction (Friedman & Schwartz, 1963) and a banking panic (Bernanke, 1983) in the United States were the initial shocks that caused the crisis that was propagated to the rest of the world by the international monetary system (Temin, 1989);
- Eichengreen (1992) argues that the monetary contraction was fundamentally associated to the Gold Standard;
- If the Gold Standard is central for understanding the causes of the Great Depression, then recovery, by the same token, would be associated to the abandonment of that particular international monetary arrangement. Eichengreen & Sachs (1985) show that the countries that depreciated first were the first to recover, supporting the view that the Gold Standard was to blame for the depth of the global slump;
- Friedman & Schwartz (1963) argue that the increase in money supply from 1933 onwards spearheaded the recovery. Romer (1992) suggests that monetary policy indeed was central for the recovery, more so than fiscal policy and that the main cause of the monetary expansion was the gold inflows associated with the European political instability.

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- The role of fiscal policy has been misrepresented in the conventional literature, and that in fact fiscal policy was central for the recovery in the Depression and it is crucial for the current global crisis;
- According to Romer (1992), the changes in output can be decomposed as follows:

$$\Delta Y_t = \alpha_1 \Delta M_{t-1} + \alpha_2 \Delta \left[\frac{(T - G)}{Y} \right]_{t-1} + \varepsilon_t$$

- In other words, changes in income result from lagged changes in the money supply, lagged changes in the fiscal surplus to GDP ratio, and by a residual that encompasses all other effects (e.g. supply shocks) that may affect output.

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- Romer's estimated coefficients are 0.82 and **-0.23** respectively for the monetary and fiscal multipliers;
- Romer's estimations seem to be derived from two different identities. The first, based on the equation of exchange, says that the amount of money in circulation must be sufficient for allowing all the transactions associated with the production of output in a given year to take place. The second identity comes from the National Accounts, and implies that output is decomposed into its expenditure components. From that relation a fiscal policy multiplier can be derived, presuming causality in Keynesian fashion from expenditure to income. Taxes are not usually part of the autonomous component, as in Romer's decomposition, and are incorporated in the multiplier itself;
- In the monetarist tradition an increase in money supply would lead to an increase in the level of output. However, in the Keynesian story money affects output indirectly through its effects on spending. In particular, as noted by Romer (1992) in her discussion of the transmission mechanism, it is the changes in the rate of interest that are essential to understand the effects of money on income. Hence, the decomposition presented in Romer's equation tends to confuse the effects of money on income;
- It would be more reasonable to accept the Keynesian logic and quantify the size of the spending multiplier, and assess the effect of monetary policy by measuring the effects of the reduction the rate of interest on spending.

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- The first model is a simple linear regression using the log of GDP as the dependent variable and the log of government spending and exports as the independent variables, respectively. Both exports and government spending are assumed to be exogenous. Exports are largely exogenous because the demand for U.S. goods is tied to international demand for products. Using the time period 1929 through 1945, the results show a coefficient of .0895, which translates to a government spending multiplier of **1.098**. Changing the time period from 1929-1945 to 1933 to 1945 in order to capture the governments real use of fiscal policy yields a coefficient of .12103 in this case, implying a multiplier of **1.1376**;
- In order to capture the endogeneity that exists between government spending and GDP, a simple VAR model was used to measure the fiscal multiplier. The model assumes that GDP and government spending are endogenous, and exports are exogenous; The results suggest a multiplier of **1.0729**;
- A third set of models was used to calculate the fiscal multiplier, this time avoiding the endogeneity problem completely by using defense spending in place of government spending. Defense spending avoids the endogeneity problem because it is completely autonomous from GDP. Defense spending and exports are two highly exogenous variables, eliminating any questions as to the endogenous nature of multiplier calculations. The coefficient from the simple regression for defense spending is .84733. This implies a multiplier of **6.55**.

Argentina and Brazil Compared

Fiscal Policy (% GDP)

Year	Argentina		Brazil	
	Primary Result	Global Result	Primary Result	Global Result
2002	1.8	-0.3	2.4	-6.4
2003	2.1	0.2	2.5	-2.5
2004	3.2	2.0	2.8	-1.3
2005	2.3	0.4	2.5	-3.6
2006	2.7	1.0	2.1	-2.9
2007	2.7	0.6	2.3	-1.9
2008	2.8	0.7	2.5	-1.3
2009	1.4	-0.8	0.9	-2.9

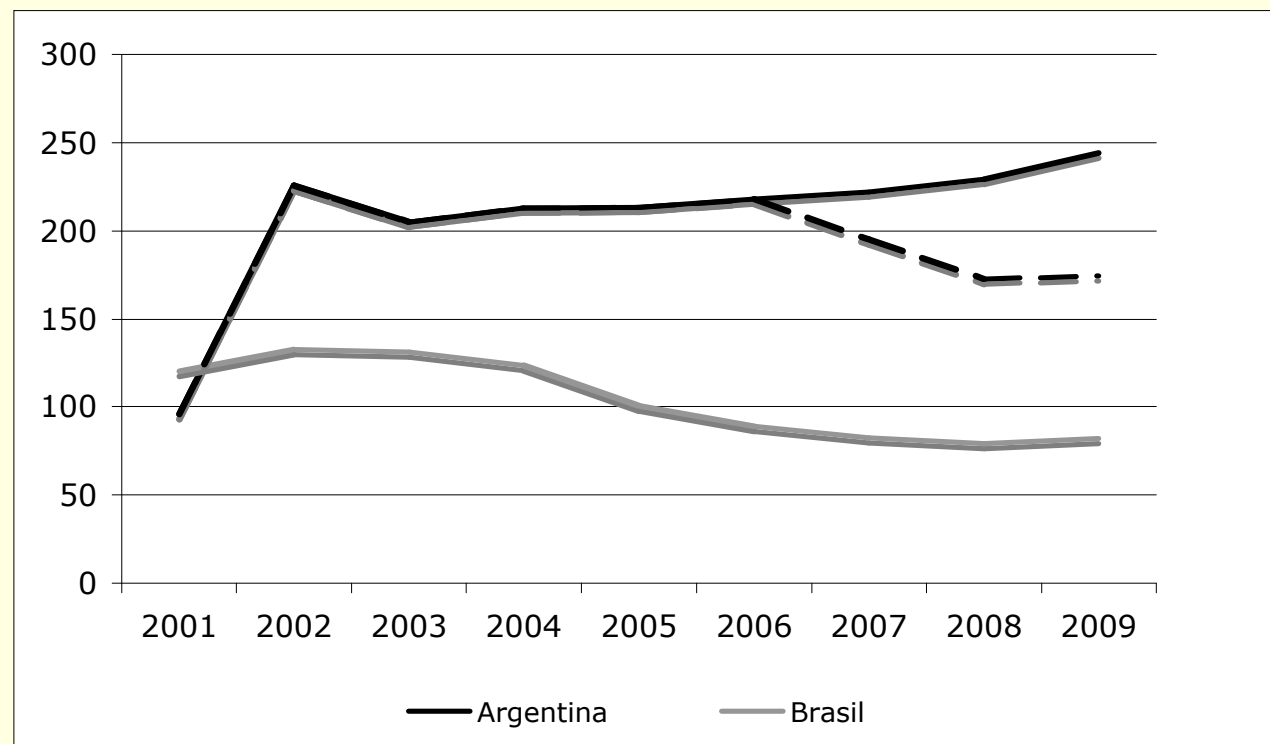
Source: ECLAC

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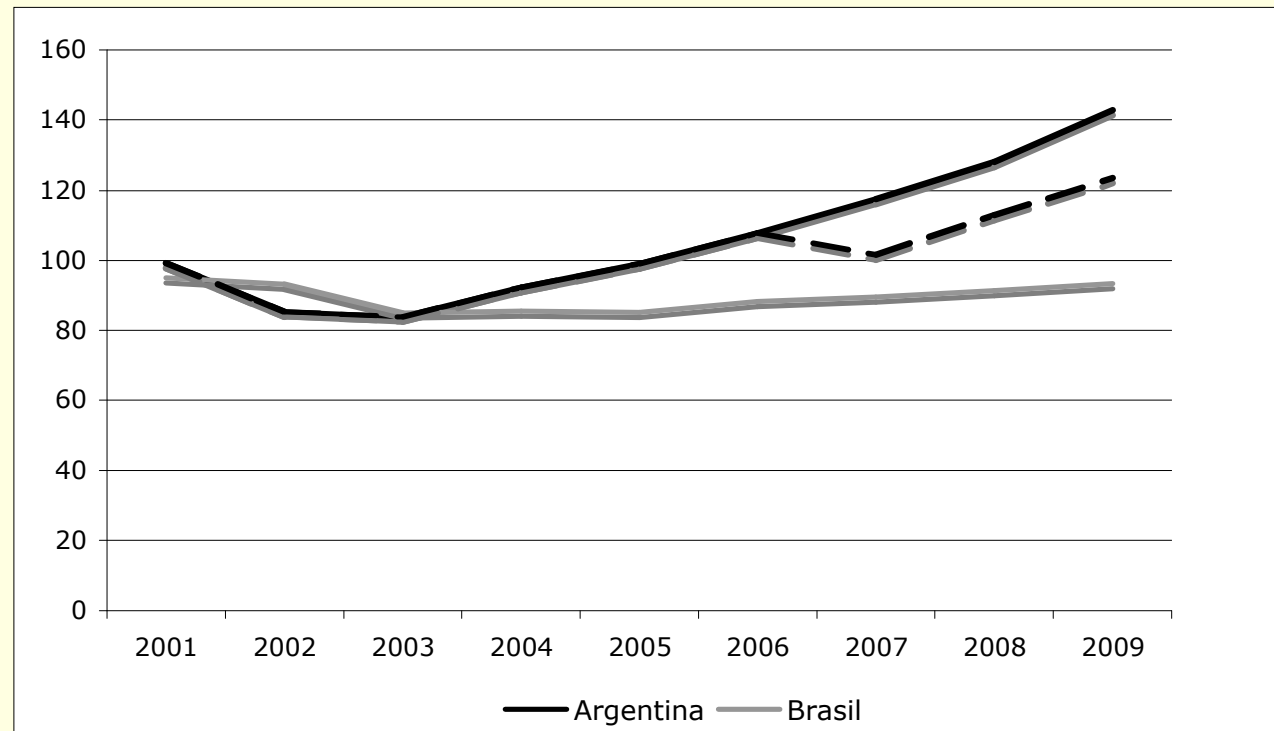
Current Account (% GDP)		
	Argentina	Brazil
2002	9.3	-1.7
2003	6.3	0.8
2004	2.1	1.9
2005	3.0	1.8
2006	3.7	1.4
2007	2.8	0.2
2008	2.3	-1.7
2009	3.2	-1.5

Source: IMF and ECLAC

Cont.: Exchange Rate



Cont.: Real Wages



The Great Contraction

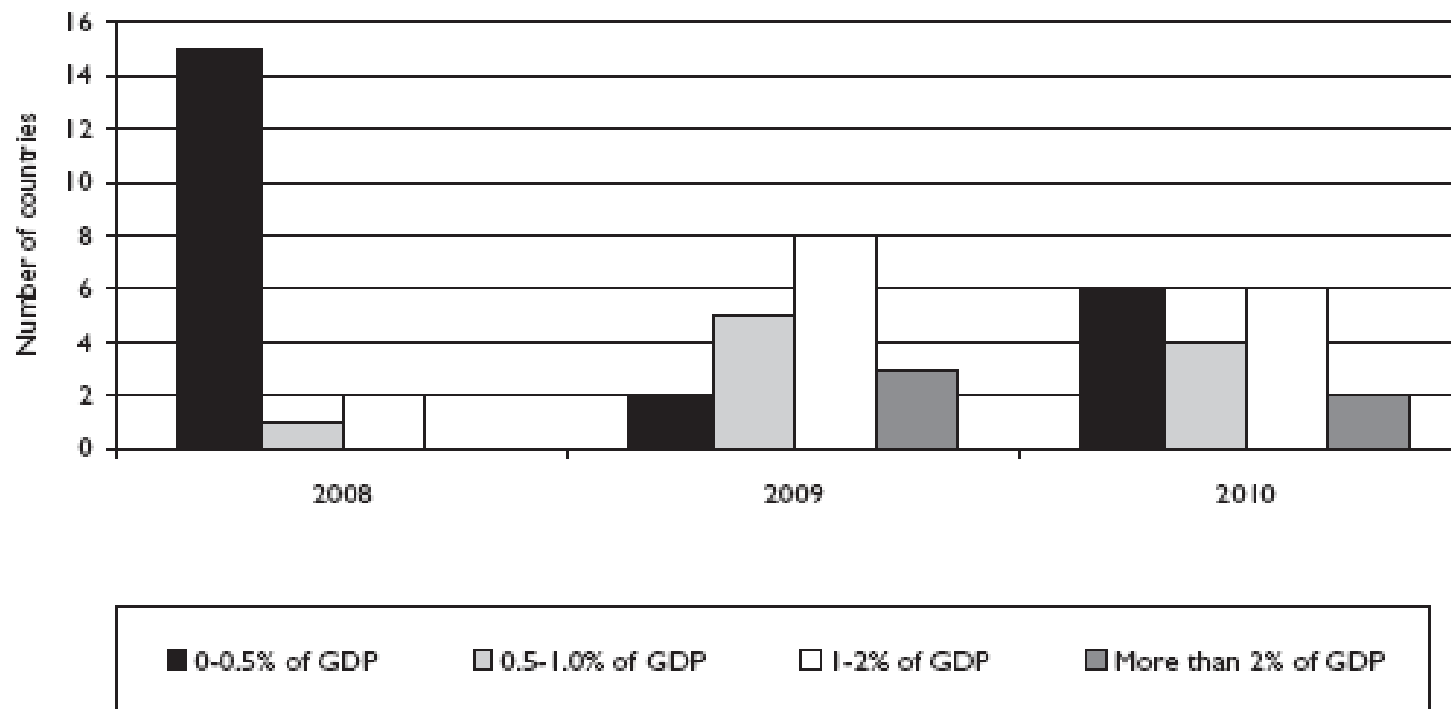


Figure 1. Fiscal Stimulus Packages Announced by Developed Countries and Classified by Number of Countries and Their Importance in Terms of GDP (2009)

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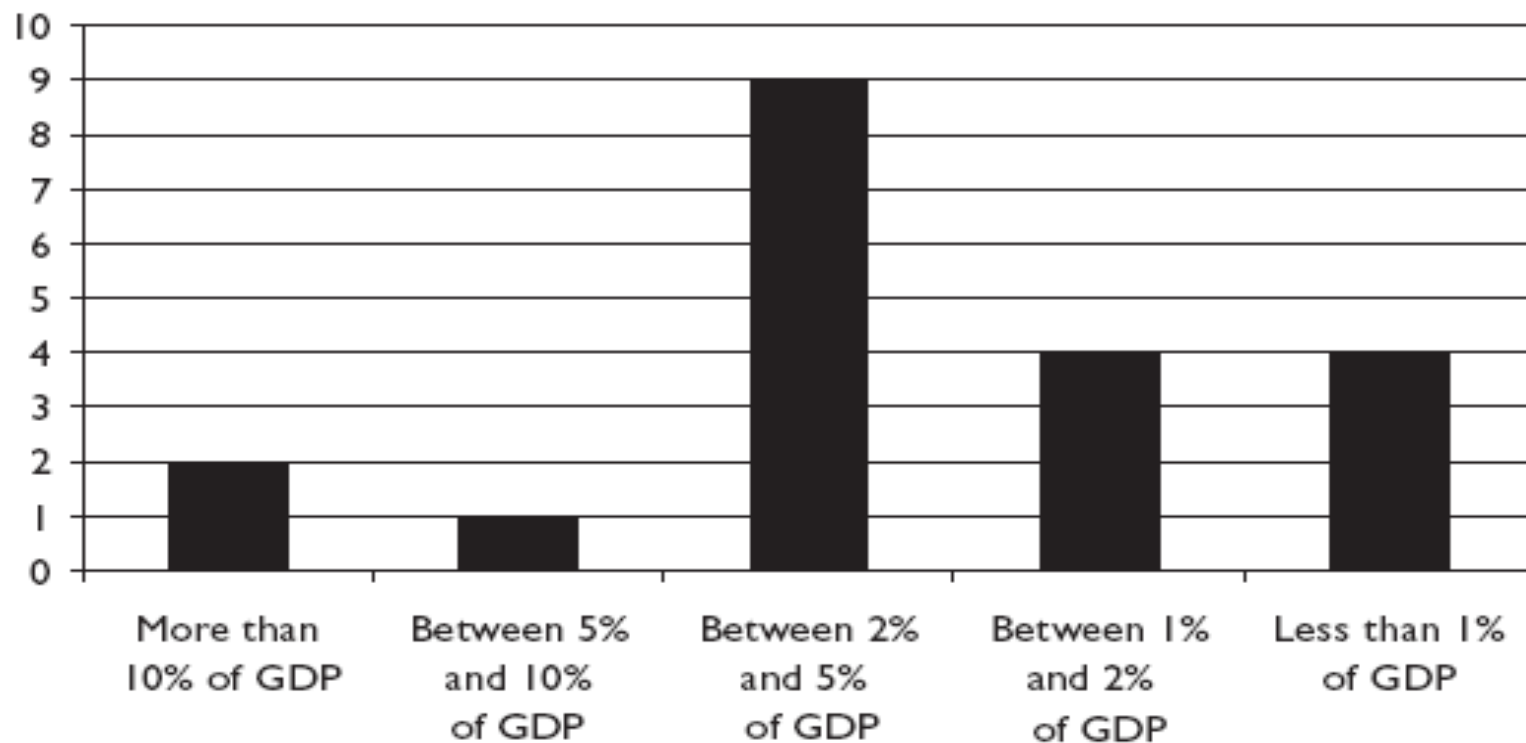


Figure 3. Fiscal Stimulus Packages Announced by Developing Countries and Classified by Number of Countries and Their Importance in Terms of GDP (2009).

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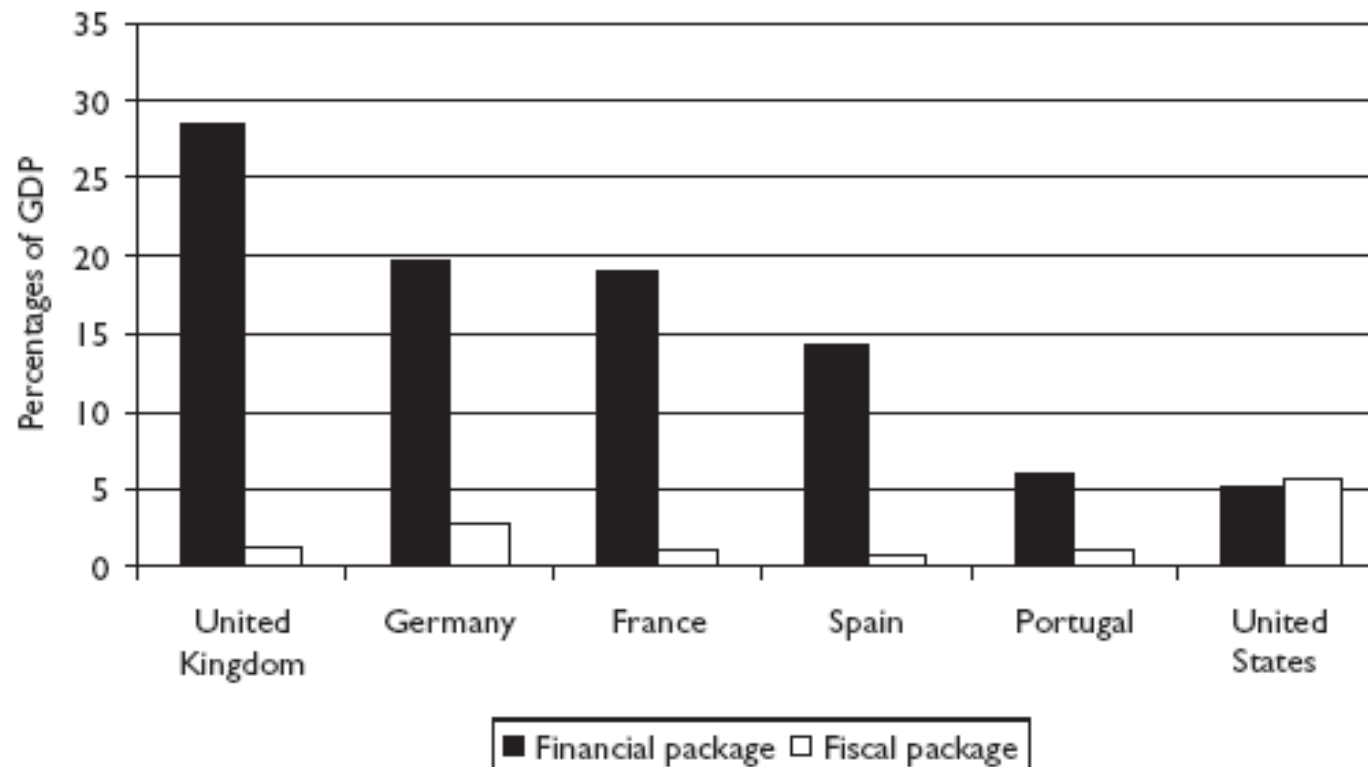


Figure 2. Comparison of the Size of the Fiscal Stimulus and Financial Rescue Packages (% GDP) for Developed Countries (2009)

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Range of Multiplier Values for Selected Developed Countries

Country	Tax measures		Expenditure measures	
	One year	Two years	One year	Two years
Australia	(-0.6; 0.4)	(-1.7; -1.2)	(-0.3; 0.6)	(0.0; -1.4)
Canada	(-0.4; 0.4)	(-0.2; 1.6)	(-0.3; 1.0)	(-1.1; 0.7)
France	(0.1; 0.3)	(0.1; 0.4)	0.5	
Germany	(-0.3; 0.7)	(-0.6; 0.7)	(0.4; 0.6)	(-1.1; -0.8)
Japan	(1.7; 2.6)	(0.9; 1.9)	0.5	0.3
Netherlands	0.1		0.4	
Spain	(0.1; 0.2)	(0.1; 0.2)		
Sweden	0.3		0.4	
United Kingdom	(-0.4; 0.2)	(-0.7; 0.2)	(-0.3; 0.5)	(-0.9; 0.0)
United States	(0.3; 1.3)	(0.5; 2.8)	(0.5; 2.0)	(0.3; 1.9)

Source: Spilimbergo (2009) and official sources.

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Fiscal Deficits, Public Debt, and Increase in Public Debt for Selected Developed Countries, 2008–2010

Country	Fiscal deficit resulting from discretionary measures (% of GDP)	Public debt (% of GDP)			Increase in public debt (% of GDP)
	Accumulated 2008–10	2007	2008	2010	2010–2008
Australia	-4.6	15.4	14.2	20.7	6.5
Austria	-1.1	59.5	61.7	75.4	13.7
Belgium	-1.6	84.0	92.7	103.0	10.3
Canada	-4.1	64.2	62.7	75.4	12.7
Denmark	-2.6	26.8	27.4	32.7	5.3
Finland	-3.2	35.7	36.3	41.0	4.7
France	-0.6	63.8	72.2	88.0	15.8
Germany	-3.0	65.0	64.8	80.4	15.6
Japan	-2.0	167.1	172.1	197.3	25.2
Luxembourg	-3.6	4.7	16.5	20.7	4.2
Netherlands	-1.5	44.9	55.3	64.6	9.3
New Zealand	-4.3	20.6	23.6	35.1	11.5
Spain	-3.5	36.2	45.9	64.1	18.2
Sweden	-2.7	41.7	43.6	46.6	3.0
Switzerland	-0.1	43.5	48.0	52.8	4.8
United Kingdom	-1.5	44.2	54.1	90.5	36.4
United States	-5.6		71.9	100.0	28.1
Average	-2.6	50.2	56.6	69.9	13.3
Average ^a		40.4	47.9	59.4	11.5

Sources: ILO (2009), Khatiwada (2009), OECD (2009b, 2009c), Watt (2009).

a. Excluding Japan and the United States.

Final Thoughts

- The empirical consensus on the Great Depression has reinforced the New Consensus anti-fiscal bias;
- Fiscal stimulus has been, for the most part, small and, in the case of developed countries concentrated in the rescuing of financial markets;
- Larger fiscal packages will be needed in order to bring the economy to reasonable unemployment levels, and that will NOT imply an excessive accumulation of debt;
- The most important measure of how much more fiscal stimulus can be provided in the case of developing countries is the current account position.