

IMF Lending in the Wake of the Global Crisis

Andrea F. Presbitero — Alberto Zazzaro

¹Università Politecnica delle Marche

²Money and Finance Research group (MoFiR)

THE ADRIATIC-BALKAN AREA FROM TRANSITION TO INTEGRATION
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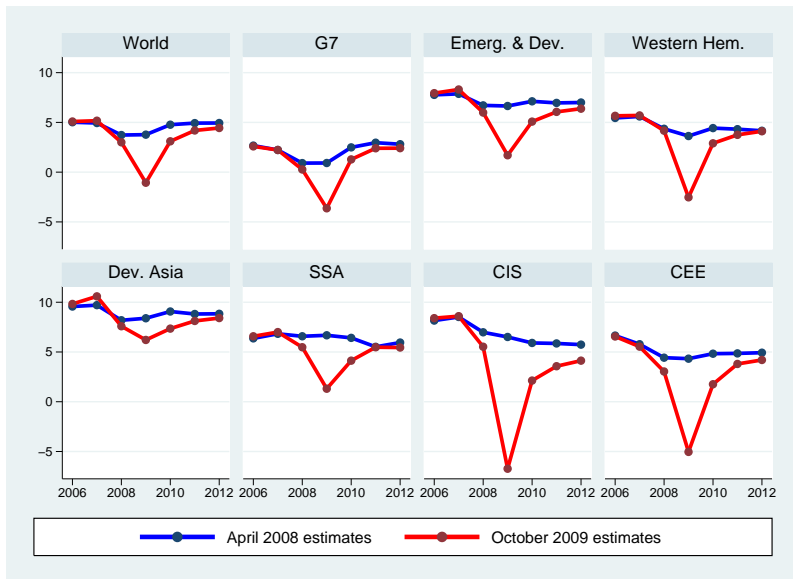
"I feel cheated as I wonder how economic problems somewhere in America can make my cash crop suffer here in Malawi. It's a shame that I cannot boil and eat it."

A Malawian cotton farmer

" little of the money given to the IMF was likely to get to the poorest countries [. . . and that] one of the impetuses for the Western European governments providing funds was that they hoped that the IMF would help Eastern Europe".

Joseph Stiglitz, *Freefall* (2010)

The global crisis



The research question

- The global financial crisis puts the Fund back at center stage.
- The IMF lending policy has been harshly criticized by left-wingers, for imposing on borrower countries uniform, intrusive, ineffective and ideological austerity programs, and by right-wingers, for encouraging moral hazard (Bird 2007).
- The common blame on the Fund is that its lending decisions are sensitive not only to the fundamental imbalances in the economic conditions of borrowers, but also to their lobbying capacity and to political-economy interests of the IMF's major shareholders, i.e., the USA and G-7 countries.
- The empirical evidence indicates that IMF members economically and politically closer to G-7 countries receive larger loans with fewer conditions (Bird and Rowlands 2001; Barro and Lee 2005).
- Our objective is to assess whether the IMF lending to low- and middle-income countries during the crisis has been driven by the severity of the crisis and/or by the strategic interests of its major shareholders.

The Financing Gap and the Government Response

- Developing countries are going to face a financing gap of around \$ 140-700 bn.
- The poorest people in the poorest countries, the least responsible for the crisis, end up being the most exposed to the global recession.
- The severity of the crisis in poor countries is harshened by the lack of safety nets and by national governments' lack of appropriate tools to tackle the crisis:
 - 1 **limited fiscal space** (Reinhart and Reinhart 2009);
 - 2 **small fiscal multipliers** (Ilzetzki and Vegh 2008);
 - 3 **limited access to international capital markets** and thin domestic financial markets might crowd-out private investment (Berg *et al.* 2009);
 - 4 a fiscal expansion could result in:
 - ★ vulnerability of **debt crisis** (HIPC countries)
 - ★ financing deficits with money creation, losing the central bank hard-gained credibility (**price stability**).

The International Community Response

- Given the limited room for counter cyclical policies, the role of donors and of the international community in poor countries becomes fundamental:
 - ▶ Between July 2008 and June 2009, the **World Bank** committed USD 58.8 billion to finance spending in basic infrastructure, health, schooling and social safety net programs.
 - ▶ The World Bank is supporting a “Vulnerability Fund”: industrialized countries should contribute the 0.7% of their economic stimulus packages to a fund providing financial assistance to LDC.
 - ▶ **UNCTAD** calls for a temporary debt moratorium on all official debt of low income countries.
 - ▶ The **IMF** undertook a substantial revision of its lending instruments to poor countries and doubled its borrowing limits, in order to meet the increased needs of LIC.

The IMF response to the crisis

New lending facilities

- for emerging markets:
 - 1 establishment of the *Flexible Credit Line* (FCL), based on *ex-ante* conditionality, and
 - 2 more flexible *Stand-By Arrangements* (SBA) with fewer structural conditions.
- for low income countries:
 - 1 faster and easier (fewer conditionalities) access to the *Exogenous Shock Facility* (ESF) and
 - 2 establishment of the *Poverty Reduction and Growth Trust* (PRGT).

Increased lending capacity

- August 2009: an SDR allocation equivalent to USD 283 bn (110 for EM and LIC) increasing the Fund's lending capacity to USD 750 bn.
- Only the 2.5% of the USD 172 bn agreed since 2008 goes to poor (PRGF-eligible) countries (but they account for 6% of GDP and 40% of population).
- The average loan is equal to 7.3% of GDP for the SBA, 4.4% for the FCL, 2.9% for the ECF and 1.4% for ESF.

The determinants of IMF loan arrangements

- There is a vast literature examining the motivations of the Fund and member countries for entering into a lending arrangement (Joyce 2004; Bird 2007; Steinwand and Stone 2008; Ghosh *et al.* 2008).
- Among the **macroeconomic variables**, the probability of participating in an IMF lending arrangement and the size of the loan are greater in countries with low levels of international reserves and income, past IMF loan programs, and overvalued exchange rates (Bird 2003).
- Current account deficit, large external debt and terms of trade shocks are not always significant.
- Economic variables alone, apart from providing weak results, have a limited explanatory power.
- Among **political-economy variables**, the strategic closeness to the US and EU countries (measured by the voting in UN General Assembly and by bilateral aid) and the economic ties with the IMF major shareholders (proxied by trade flows and the presence of foreign-owned banks) are correlated with the participation in IMF loan programs (Thacker 1999; Barro and Lee 2005; Broz and Hawes 2006; Eichengreen *et al.* 2006; Dreher 2006).

IMF lending arrangements since 2008

Country	Loan size (mil \$)	(% GDP)	Country	Loan size (mil \$)	(% GDP)
Stand-By Arrangements (SBA)					
Honduras	60	0.4%	Armenia, Republic of	829	7.0%
Georgia	1161	9.0%	Mongolia	238	4.5%
Ukraine	17096	9.5%	Costa Rica	765	2.6%
Hungary	16377	10.5%	Guatemala	980	2.5%
Seychelles	27	3.3%	Romania	17785	8.9%
Iceland	2176	13.0%	Bosnia and Herzegovina	1577	8.5%
Pakistan	11246	6.8%	Sri Lanka	2570	6.5%
Latvia, Republic of	2365	7.0%	Dominican Republic	1701	3.8%
Belarus, Republic of	3527	5.8%	Angola	1335	1.6%
El Salvador	799	3.6%	Maldives	76	6.1%
Serbia, Republic of	4071	8.1%	Total	86702	7.3%
Extended Fund Facility (EFF)					
Liberia	533	62.7%	Moldova, Republic of	287	4.7%
Seychelles	31	3.8%	Total	318	4.1%
Flexible Credit Line (FCL)					
Mexico	49001	4.5%	Colombia	10826	4.5%
Poland, Republic of	21277	4.0%	Total	81104	4.4%
Extended Credit Facility (ECF) - formerly PRGF					
Liberia	371	43.7%	Sao Tome & Principe	4	2.2%
Togo	131	4.5%	Cote d'Ivoire	581	2.5%
Mali	44	0.5%	Tajikistan, Republic of	122	2.4%
Niger	36	0.7%	Ghana	602	3.6%
Zambia	342	2.3%	Comoros	21	4.0%
Burundi	72	6.5%	Congo, Democratic Republic of	538	4.6%
Djibouti	20	2.0%	Moldova, Republic of	287	4.7%
Congo, Republic of	13	0.1%	Total	3185	2.9%
Exogenous Shocks Facility - (ESF)					
Malawi	81	1.9%	Mozambique	177	1.8%
Kyrgyz Republic	104	2.0%	Ethiopia	239	0.9%
Senegal	189	1.4%	Maldives	13	1.0%
Tanzania	340	1.6%	Total	1141	1.4%

The empirical strategy

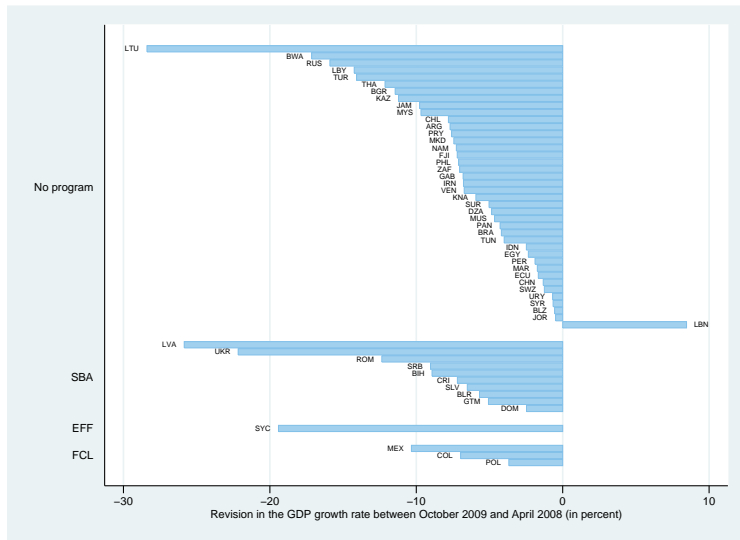
	Income	LIC	LMIC	UMIC	Total
PRFG-eligible					
No		0	17	37	54
Yes		37	31	4	72
Total		37	48	41	126

- From the sub-sample of 45 IMF loan recipients, Iceland and Hungary are excluded as high income countries and Liberia as an outlier. Countries (Moldova, Seychelles and Maldives) receiving more than one loan are treated as one observation.
- The IMF lending decision can be modeled as a two-step process (Heckman 1979), the first being the choice whether to lend or not (selection equation) and the second concerning the amount of resources to lend (outcome equation).
- In the non-treated group we control for the presence of IMF loan arrangement already in place at the end of 2007 using a dummy.
- The key variable – *CRISIS* – is the difference in the cumulated GDP growth over the period 2008-2011 between the April 2008 and the October 2009 World Economic Outlook estimates.

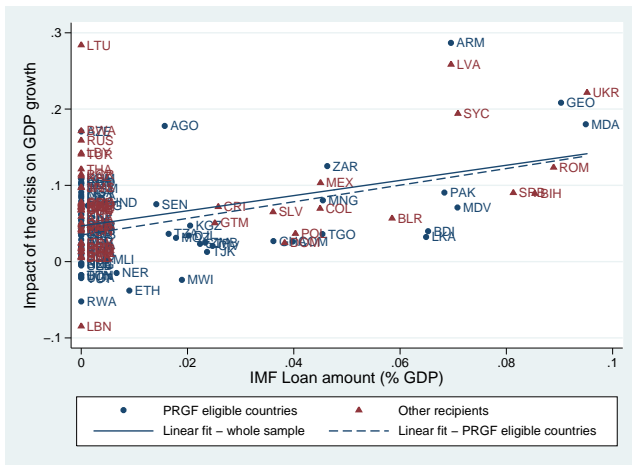
Variables and sources

VARIABLE	DESCRIPTION	SAMPLE MEANS	
		No Pr	IMF pr
<i>IMF LOAN</i> _{2008–2009}	Dummy equal to one whether the country agreed on an IMF loan in 2008 and 2009. Source: IMF	Whole sample: 0.333	
<i>LOAN SIZE</i>	Amount of IMF credit (% GDP). Source: IMF	0.043	0.000
<i>CRISIS</i>	The difference in the cumulated GDP growth over the period 2008-2011, between the April 2008 and the October 2009 estimates. Source: WEO	0.053	0.077*
<i>GDP</i> ₂₀₀₇	Log of GDP in 2007 (current USD). Source: WDI	23.332	23.245
<i>GDP PC</i> ₂₀₀₇	Log of GDP per capita in 2007 (current USD). Source: WDI	7.640	7.331
<i>CAB</i> ₂₀₀₇	Current account balance (% GDP) in 2007. Source: WDI	-0.035	-0.092*
<i>RESERVE</i> ₂₀₀₇	Total reserves in months of imports in 2007. Source: WDI	6.368	3.551*
<i>TDS</i> ₂₀₀₇	Total debt service (% GNI) in 2007. Source: WDI	0.049	0.045
<i>INFLATION</i> ₂₀₀₇	Inflation, average consumer prices in 2007. Source: WEO	0.064	0.077*
<i>IMF LOANS</i> _{90–05}	# of years during which the country was under an IMF loan program for at least 5 months between 1990 and 2005. Source: Dreher (2006)	6.047	8.595*
<i>AID G7</i> ₂₀₀₇	Official development assistance by G7 countries in 2007 (% GDP). Source: OECD-DAC and WDI	0.018	0.025*
<i>TRADE G7</i> ₂₀₀₆	Exports plus imports from G7 countries in 2006 (%GDP). Source: Barbieri et al (2009) and WDI	0.207	0.216
<i>DEBT PRIVATE</i> ₂₀₀₇	PPG debt to private creditors (% GDP) in 2007. Source: GDF	0.066	0.045
<i>QUOTA</i>	The share of the IMF quota. Source: Barro and Lee (2006)	0.003	0.002*
<i>NON COMPLIANCE</i>	Share of years (1990-2003) when the country was non-compliant with its IMF program (at least 25% of the amount agreed remained undrawn at program expiration). Source: Dreher and Walter (2010)	0.219	0.352*
<i>UN VOTING G7</i> _{90–05}	Percentage of votes at the UNGA inline with G-7 countries, votes with > 80% of the countries agreed discarded, average over 1990-2005. Definition according to Thacker (1999). Source: Dreher & Sturm (2006)	0.469	0.499*
<i>US AFFINITY</i>	Voting similarity in the UNGA with the USA. Source: Gartzke (2007)	0.068	0.188*

Global crisis and IMF lending, middle-income countries

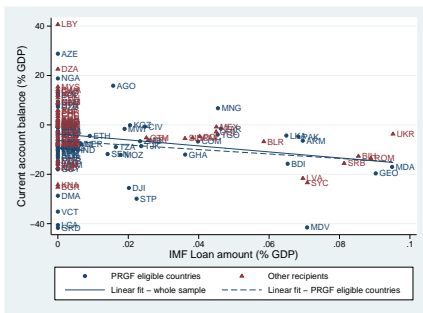
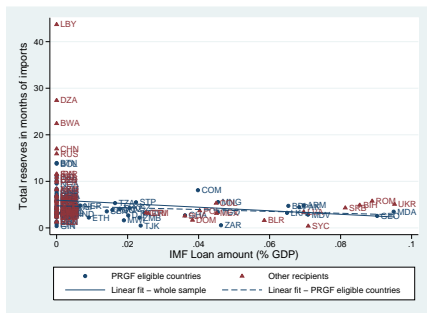


IMF lending and the severity of the crisis



(a) Revision in GDP growth rates

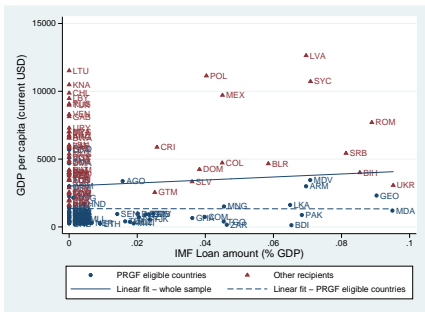
IMF lending and balance of payment problems



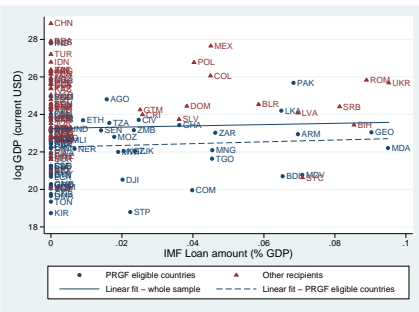
(b) Reserves (months of imports), 2007

(c) Current account (% GDP), 2007

IMF lending and income

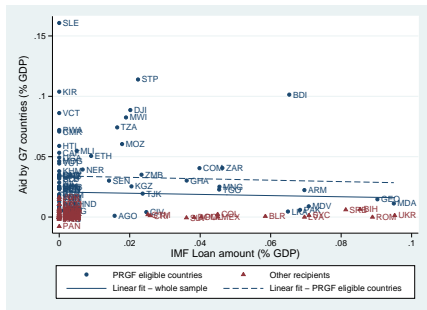


(d) per capita GDP (USD), 2007

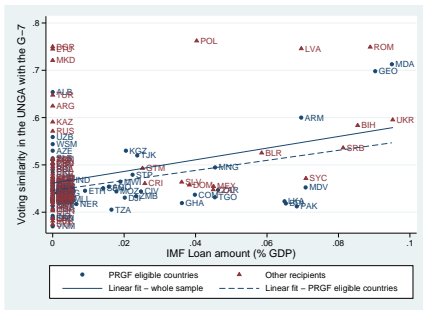


(e) log GDP (USD), 2007

IMF lending and political ties with G7 countries

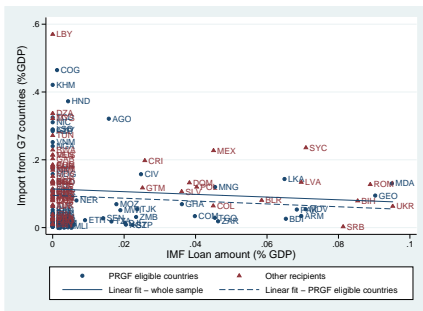
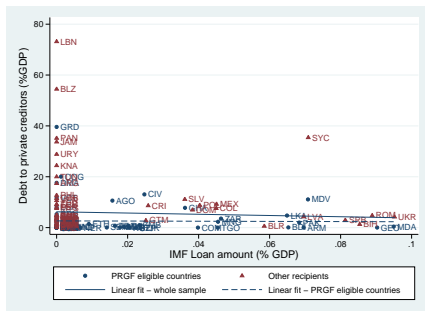


(f) ODA from G7 (% GDP), 2007



(g) Share of votes at the UNGA inline with G7, 1990-2005

IMF lending and economic ties with G7 countries



(h) Debt to the private sector (% GDP), 2006, 2007

(i) Import from G7 (% GDP), 2006

The determinants of IMF lending, whole sample (1)

	Outcome equation			Selection equation		
	Dep Var: <i>LOAN SIZE</i>			Dep Var: <i>IMF LOAN</i> _{2008–2009}		
	(1)	(2)	(3)	(1)	(2)	(3)
<i>CRISIS</i>	0.208*** (0.074)		0.222** (0.088)	6.509** (2.687)		9.033*** (3.329)
<i>SBA/EFF/FCL</i> (0,1)	0.032*** (0.010)	0.034*** (0.010)	0.033*** (0.011)			
<i>GDP</i> ₂₀₀₇	0.005* (0.003)	0.003 (0.003)	0.005* (0.003)	0.111 (0.092)	0.118 (0.095)	0.092 (0.096)
<i>GDP PC</i> ₂₀₀₇	-0.015** (0.007)	-0.019*** (0.006)	-0.015** (0.007)	-0.443** (0.178)	-0.505** (0.248)	-0.395** (0.194)
<i>CAB</i> ₂₀₀₇	-0.146*** (0.047)	-0.122*** (0.045)	-0.144*** (0.046)	-2.783* (1.476)	-3.529** (1.610)	-2.751* (1.539)
<i>RESERVE</i> ₂₀₀₇	0.000 (0.002)	0.001 (0.002)	0.000 (0.003)	-0.226*** (0.078)	-0.228*** (0.081)	-0.229*** (0.081)
<i>CRISIS</i> × <i>LLMIC</i>		0.226*** (0.074)			11.093*** (4.150)	
<i>CRISIS</i> × <i>UMIC</i>		0.162* (0.083)			0.926 (4.069)	
<i>LLMIC</i>		-0.028** (0.013)			-0.814 (0.691)	
<i>TDS</i> ₂₀₀₇			0.000 (0.071)			-2.002 (3.170)
<i>INFLATION</i> ₂₀₀₇			-0.009 (0.074)			0.495 (3.421)
<i>EXISTING LOAN</i> (0,1)	-0.009 (0.027)	0.003 (0.023)	-0.009 (0.026)	-2.254*** (0.639)	-2.569*** (0.729)	-2.397*** (0.677)
<i>IMF LOANS</i> _{1990–2005}				0.073** (0.032)	0.081** (0.033)	0.076** (0.033)

The determinants of IMF lending, whole sample (2)

	Outcome equation				Selection equation			
	Dep Var: <i>LOAN SIZE</i>				Dep Var: <i>IMF LOAN</i> _{2008–2009}			
	(1)	(2)	(3)	(4)	(1)	(2)	(3)	(4)
<i>CRISIS</i>	0.163** (0.077)	0.182*** (0.062)	0.133* (0.071)	0.156* (0.087)	9.104** (3.749)	9.202*** (3.441)	6.827** (2.750)	7.932* (4.253)
<i>SBA/EFF/FCL</i> (0,1)	0.029*** (0.010)	0.035*** (0.009)	0.029*** (0.009)	0.036*** (0.011)				
<i>GDP</i> ₂₀₀₇	0.004 (0.003)	0.003 (0.002)	0.000 (0.003)	-0.001 (0.004)	0.129 (0.104)	0.083 (0.097)	0.124 (0.097)	0.105 (0.139)
<i>GDP PC</i> ₂₀₀₇	-0.017*** (0.007)	-0.010* (0.005)	-0.010 (0.006)	-0.013** (0.006)	-0.506** (0.225)	-0.352* (0.207)	-0.505** (0.208)	-0.374* (0.200)
<i>CAB</i> ₂₀₀₇	-0.142*** (0.045)	-0.088** (0.037)	-0.036 (0.050)	-0.151*** (0.050)	-2.993* (1.619)	-2.279 (1.591)	-2.130 (1.584)	0.183 (1.989)
<i>RESERVE</i> ₂₀₀₇	0.001 (0.002)	0.001 (0.002)	0.003 (0.003)	0.000 (0.003)	-0.236*** (0.087)	-0.261*** (0.086)	-0.266*** (0.091)	-0.287*** (0.101)
<i>UN VOTE G7</i> _{90–05}	0.122** (0.061)				2.617 (2.590)			
<i>AID G7</i> ₂₀₀₇	-0.122 (0.166)				6.869 (7.671)			
<i>IMPORT G7</i> ₂₀₀₆		-0.124*** (0.030)				-1.250 (1.522)		
<i>DEBT PRIV</i> ₂₀₀₇		0.086* (0.051)				-1.682 (2.126)		
<i>NON COMPLIANCE</i>			-0.048*** (0.015)				0.013 (0.805)	
<i>IMF QUOTA</i>				3.567* (2.153)				-21.320 (95.012)
<i>EXISTING LOAN</i> (0,1)	-0.026 (0.026)	0.014 (0.021)	0.027 (0.027)		-2.636*** (0.730)	-2.429*** (0.685)	-2.273*** (0.649)	-7.782 (0.000)
<i>IMF LOANS</i> _{90–05}					0.075** (0.034)	0.080** (0.033)	0.064 (0.040)	0.100*** (0.038)

Concluding remarks

- Preliminary analysis of the 2008 and 2009 IMF arrangements shows that the **severity of the economic crisis** in developing countries appears to influence the Fund's lending policies.
- A decisive role is played also the **political affinity** between the borrower and the IMF major shareholders and by their strategic interests.
- As in past experiences, “recidivism”, balance of payments problems and low levels of income matter.
- As for now, the confidence in global financial markets is partly restored, limiting the prospects for future uses of IMF assistance. Nonetheless, large deficits in many low-income countries and burgeoning public debts are a source of concern for future debt sustainability (Presbitero 2009).