Social Spending, Fiscal Space and Governance: Patterns over the Business Cycle

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Introduction

- Public spending and investment in the social sector are critical for long-term human and economic development of an economy (Baldacci and others, 2008; Fan, 2009; Moreno-Dodson and Wodon, 2008).

- During periods of economic volatility, countercyclical social spending is of crucial importance for mitigating the shocks to income assuring social justice through protecting children, women and poor families, and preserving human capital and thus the long-run growth and development prospects of an economy.

  - *Protecting the poor:* Crises are the periods when many households switch from private to public education, health and other services, which places a greater strain on public social services. These are periods when pre-existing resources are likely not to be enough.

  - *Preserving human capital:* Crises tend to undermine human capital accumulation, which has long-term consequences. Countercyclical social spending can help boosting up recovery simultaneously with promote long-run economic growth. It has been shown that countercyclical social spending is more efficient in doing this than government spending in general (Furceri, 2009). Thus it is the perfect candidate for policy response to crises.
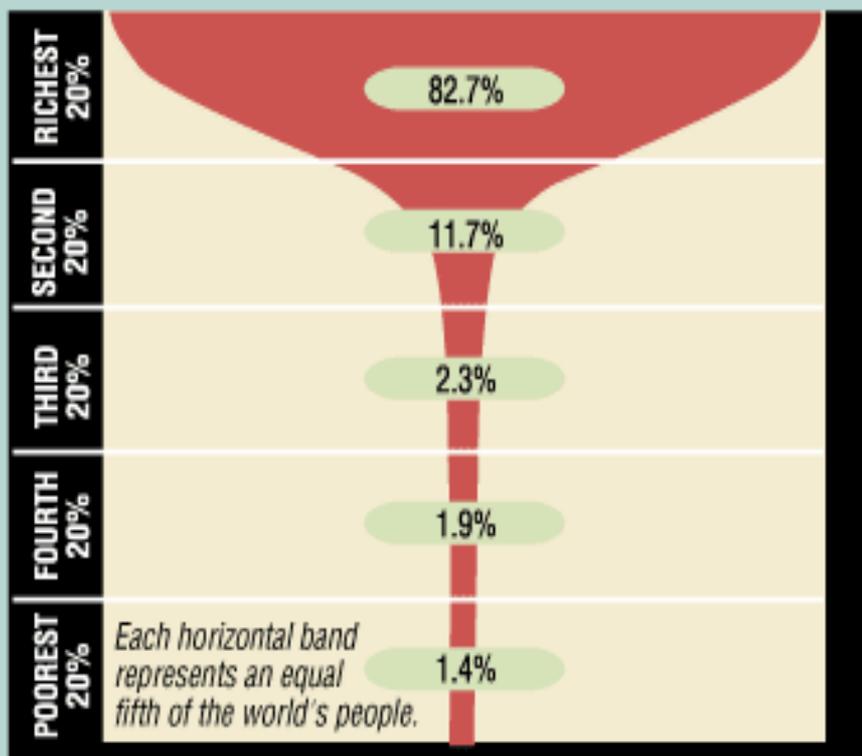
Evidence of pro-cyclical public spending, Ronald U. Mendoza and Gabriel Vergara, UNICEF, 2010

- Evidence from developing countries suggests that crises are accompanied by public spending cuts that skewed toward cuts in social spending and more particularly pro-poor social spending.

➢ During the Asian crisis, the 1998 Thai public health and education budgets declined by 9 and 6 percent respectively.

➢ Indonesian public health expenditures fell by 7 percent during the first year of the Asian crisis, and another 12 percent the year after.

➢ Government health spending per capita in US dollar terms declined during the Argentine debt crisis from $399 mln. in 1999 to $121 mln. in 2002.

➢ During the Mexican Tequila crisis, the 4.9% fall in GDP per capita between 1994 and 1996 was mirrored by a 23.7% fall in targeted spending per poor person. Per capita public health expenditures in Mexico fell by about 15 percent during the period 1994-1996.

➢ During the present current crisis, Bosnia, Bulgaria, Lithuania, Mozambique, Nicaragua and Zambia are among the countries experiencing/anticipating cuts in some social sector allocations (UNICEF Crisis Recovery Database).

Distribution of World Income: The financial crisis comes on top of an existing social crisis (Isabel Ortiz, UNICEF, 2010)

Distribution of world GDP, 1989
(percent of total, with quintiles of population ranked by income)

RICHEST 20%	82.7%
SECOND 20%	11.7%
THIRD 20%	2.3%
FOURTH 20%	1.9%
POOREST 20%	1.4%

Each horizontal band represents an equal fifth of the world's people.

Source: United Nations Development Program, 1992, Human Development Report 1992 (New York: Oxford University Press for the United Nations Development Program).
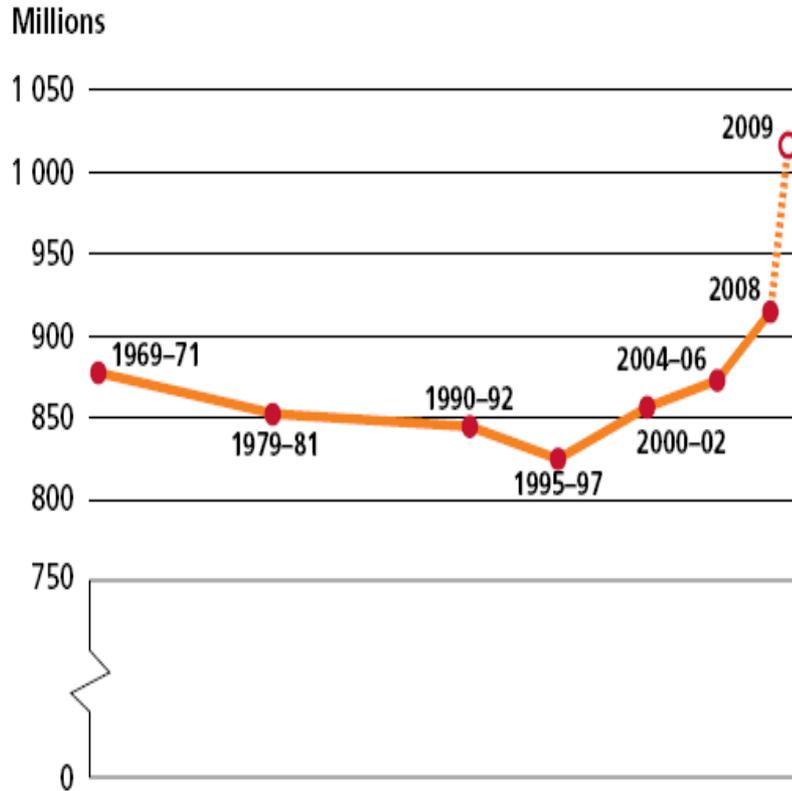
Distribution of world GDP, 2000
(by quintiles, richest 20% top, poorest 20% bottom)

Richest

Poorest

Per capita Income
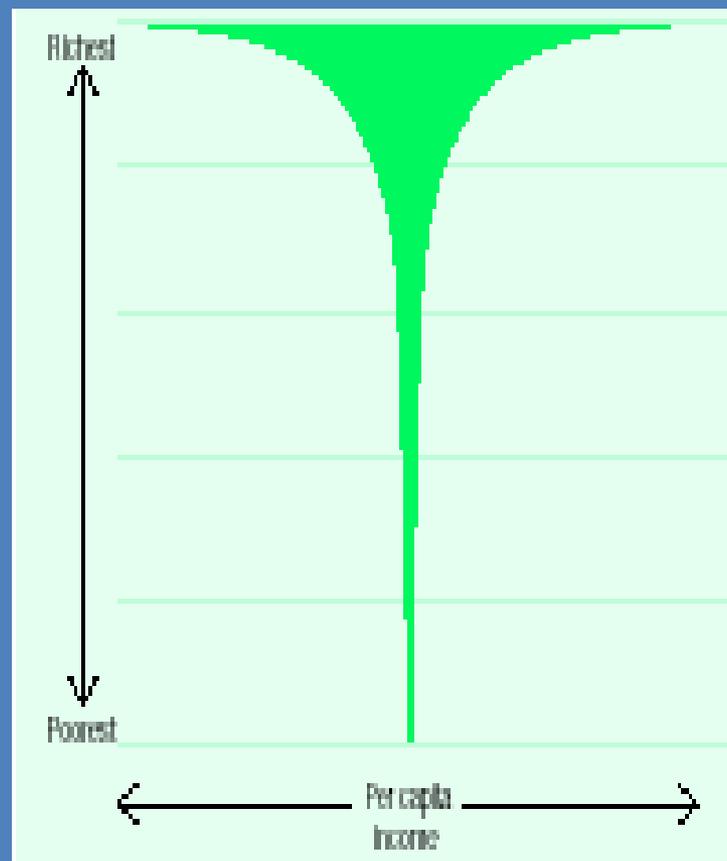
Source: UNDP Development Report 2005

A sad milestone for 2009:
1 billion people starving

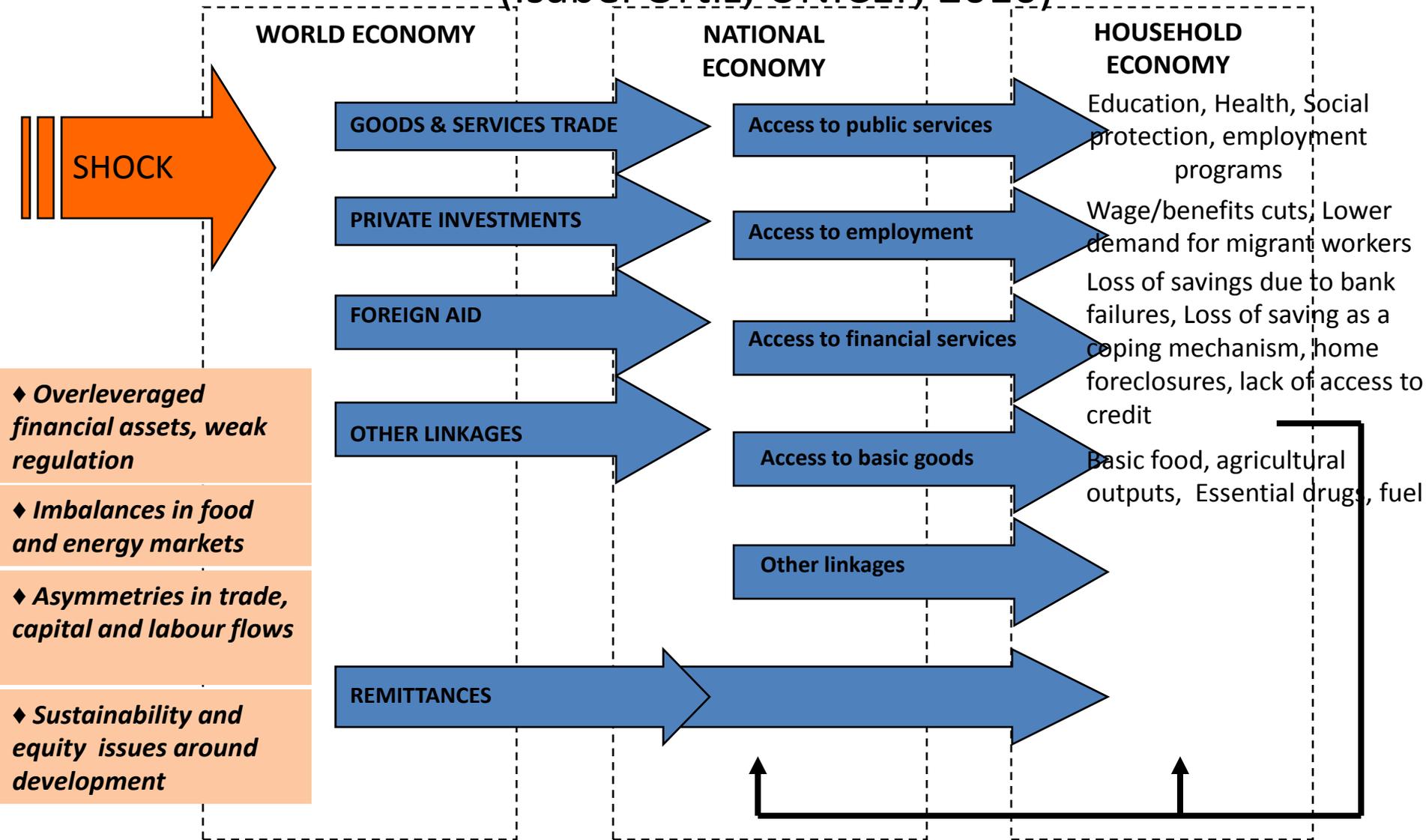**Millions**

Source: FAO (2009).

Human cost of the crisis:

- Additional 90 million people pushed into poverty in 2009, over 64 million more excepted in 2010 (World Bank, 2010).

- Unemployment increase from 190 million in 2007 to 210 million in 2009 (ILO, 2009).

- Tens of thousands of infants and children at risk of dying, notably in Sub-Saharan Africa, many of them girls (UNICEF, 2010).

Global economic crisis: transmission channels
(Isabel Ortiz, UNICEF, 2010)

WORLD ECONOMY

NATIONAL ECONOMY

HOUSEHOLD ECONOMY

SHOCK

GOODS & SERVICES TRADE

PRIVATE INVESTMENTS

FOREIGN AID

OTHER LINKAGES

REMITTANCES

Access to public services

Access to employment

Access to financial services

Access to basic goods

Other linkages

Education, Health, Social protection, employment programs

Wage/benefits cuts, Lower demand for migrant workers

Loss of savings due to bank failures, Loss of saving as a coping mechanism, home foreclosures, lack of access to credit

Basic food, agricultural outputs, Essential drugs, fuel

♦ *Overleveraged financial assets, weak regulation*

♦ *Imbalances in food and energy markets*

♦ *Asymmetries in trade, capital and labour flows*

♦ *Sustainability and equity issues around development*

Compounding factors: governance and institutions, culture and geography, climate change, technological change, demographic change etc.

Literature on fiscal policy in general

- In industrial countries, fiscal policy is countercyclical, while in developing countries, it is pro-cyclical or a-cyclical (e.g. Alesina and Tabellini, 2005; Gavin and Perotti, 1997; Talvi and Vegh, 2005). These finding are explained with: a) imperfections of international credit markets that prevent countries from borrowing in bad times; and b) with political economy issues that amplify the tendency for fiscal profligacy and rent-seeking activities.

- Ilzetski and Vegh, 2008 address possible reverse causality and endogeneity problems of the earlier studies. They correct them with empirical tests and identification techniques, instrumental variables, GMM, simultaneous equations and time series methods (e.g. Granger causality and impulse response methods) using quarterly data for 49 (27 developing and 22 industrial) countries. Their finding is that developing countries do indeed exhibit pro-cyclical fiscal policies instead of countercyclical ones and that for industrial countries, the evidence is mixed.

Literature on social spending

- Darby and Melitz (2008) formally analyze the pattern of government spending over the business cycle with aggregated and disaggregated government social spending data for OECD countries. They find that age- and health- related social expenditures react to the business cycle in a stabilizing manner.

- Furceri (2009) uses data on 23 industrialized countries from 1980-2003 in order to examine the extent to which social spending could help absorb shocks to GDP. He finds that social spending could be used to smooth anywhere from 12 percent to 23 percent of a shock to GDP. It also finds the stabilizing effect of social spending is larger in countries with more extensive social spending.

- Ravallion (2002) examined Argentina's budget trends in the 1980s and 1990s—periods which were marked with economic volatility—and he found evidence that non-social sector spending tended to be better protected against cuts during downturns, when compared with social spending.

Objectives of the paper

- The current paper has two goals:

    - to conduct an empirical analysis of cyclicality of social spending using a data set with 209 countries and 29 years of data, classifying the data according to level of development;

    - to examine the role of various indicators of fiscal space (e.g. reserves, tax base, access to external finance and foreign aid, etc.), as well as quality of governance indicators as determinants of social spending.

Model

- Empirical model:

$$s_{it}^k = \beta_0 + \beta_1 g_{i,t-1} + \beta_2 g_{i,t-1} q^j{}_{it-1} + \beta_3 x_{it} + \beta_4 D^t + \mu_i + \varepsilon_{it}$$

$$\mu_i \sim i.i.d(0, \sigma_{\mu_i}) \quad \varepsilon_{it} \sim i.i.d.(0, \sigma_\varepsilon) \quad E[\mu_i \varepsilon_{it}] = 0$$

- s_{it} is public social expend, *k*=public spending on education and healthcare, *i= 1,..,209* and *t= 1,..,29*

- $g_{i,t-1}$ is the lagged growth rate of $_{it}$ income per capita in constant year 2000 prices

- $g_{i,t-1} q^j{}_{it-1}$ cross term of lagged GDP per capita growth rate and quality of governance variable

- x_{it} vector of controls, such as quality of governance variable; foreign aid as a share of GDP; net transfers from abroad as a share of GDP, foreign portfolio investment (an aggregate for equity and bond investment) as a share of GDP and tax revenue as a share of GDP.

Data

- World Development Indicators (World Bank 2008)

- Economic Commission for Latin America and the Caribbean (ECLAC 2009)

- International Country Risk Guide data (Political Risk Group 2009).

- **Quality of Bureaucracy and Control of Corruption.** In countries with weak institutions, there is no guarantee that all the allocated resources will be channelled most effectively through the government bureaucracy and into social investment items such as textbooks, school construction, medical supplies, etc.

- **Government Stability.** The government stability index has three components: government unit, legislative strength and popular support. The higher the index, the stronger is the ability of a government to implement programs and stay in office. We expect that a government will be more willing to invest more public resources on social services if it expects to stay in office in future. In fact, previous empirical studies have found evidence to support the argument that political conditions such as legislative stability and voter volatility significantly affect taxing and public spending (Crain and Oakley 1995; Cadot et al 2006).

Table No 4: The Impact of Business Cycles on Public Education Spending: Fixed Effects Results

Dependent variable: Public Healthcare Expenditures			All Countries	Low income countries	Lower Middle Income Countries	Upper Middle income Countries	High Income Countries
FE	Model with bureaucracy quality	growth rate	-0.019	-0.036	**0.079****	**-0.052****	0.014
		growth rate	**0.094****	0.102	**0.144****	-0.038	**0.363****
		interaction term of growth and bureaucracy quality	**-0.056****	**-0.078***	-0.043	-0.005	**-0.099****
	Model with control of corruption	growth rate	-0.02	-0.051	**0.079****	**-0.047****	0.015
		growth rate	**0.067***	-0.1	**0.141***	-0.02	0.019
		interaction term of growth and control of corruption	**-0.028****	0.02	-0.021	-0.008	-0.001
	Model with government stability	growth rate	-0.015	**-0.148***	**0.085****	**-0.04****	0.013
		growth rate	-0.023	**-0.191***	0.047	-0.027	-0.039
		interaction term of growth and government stability	0.001	0.006	0.006	-0.001	0.006
	Model with religion in politics	growth rate	-0.019	-0.059	**0.089****	**-0.044****	0.017
		growth rate	-0.021	-0.038	**0.11****	**-0.039****	-0.007
		interaction term of growth and religion in politics	0.001	**-0.028****	**-0.003****	**-0.002****	0.005

Table No 6: The Impact of Business Cycles on Public Healthcare Spending: Fixed Effects Results

Dependent variable: Public Healthcare Expenditures			All Countries	Low income countries	Lower Middle Income Countries	Upper Middle income Countries	High Income Countries
FE	Model with bureaucracy quality	growth rate	**-0.024***	0.003	0.013	0.006	**-0.109****
		growth rate	**0.04***	0.001	0.002	-0.021	-0.106
		interaction term of growth and bureaucracy quality	**-0.033****	0.001	0.009	0.014	0.000
	Model with control of corruption	growth rate	**-0.025***	0.022	0.011	-0.001	**-0.114****
		growth rate	0.008	0.033	-0.023	0.039	**-0.192****
		interaction term of growth and control of corruption	-0.011	-0.005	**0.013***	-0.013	0.019
	Model with government stability	growth rate	**-0.022***	-0.008	0.018	0.007	**-0.118****
		growth rate	-0.032	**-0.067***	0.008	-0.016	**-0.4***
		interaction term of growth and government stability	0.001	0.007	0.001	0.003	**0.033****
	Model with religion in politics	growth rate	**-0.025***	0.011	0.015	0.006	**-0.112****
		growth rate	-0.017	0.014	-0.003	0.008	**-0.103****
		interaction term of growth and religion in politics	-0.002	-0.005	**0.002***	-0.002	-0.002

Policy implications and Conclusion

- The evidence points out that there is no one-way answer to the question whether social spending is countercyclical world-wide or not. The answer depends on the level of development of the country. Whereas high income economies and lowest income economies are able to implement the policies of counter-cyclical social spending, the countries of the lower middle income group are not.

- One potential explanation for that is the lack of sufficient fiscal space for countercyclical social spending. The evidence from the quality of governance indicators shows that bureaucracy quality, control of corruption, and government stability work in favour of promoting counter-cyclical spending.

- The message from of paper, therefore, is a message advocating for increased fiscal space for public social spending for the countries, classified as lower middle income by the World Bank and promoting quality of governance across all country-groups.