



Macro policy, infrastructure and debt

WORKSHOP ON IMPLICATIONS OF RESEARCH FOR THE BANK'S AFRICA STRATEGY
SEPTEMBER 21, 2018

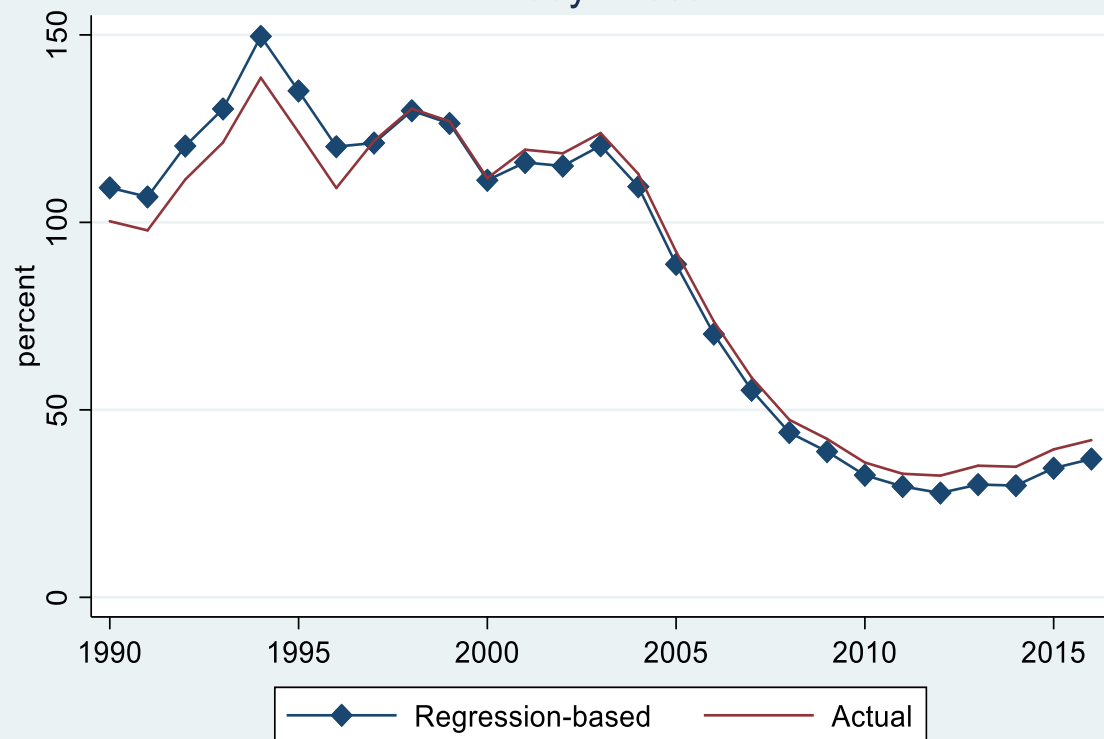
Steve O'Connell
Gil and Frank Mustin Professor
Chair, Department of Economics
Swarthmore College USA

Themes

- Favorable LR story but turbulent macro ahead for heavy borrowers in SSA
- Productivity of infrastructure investments and revenue mobilization is key
- Distributional objectives: want fiscal incidence plus indirect policy channels

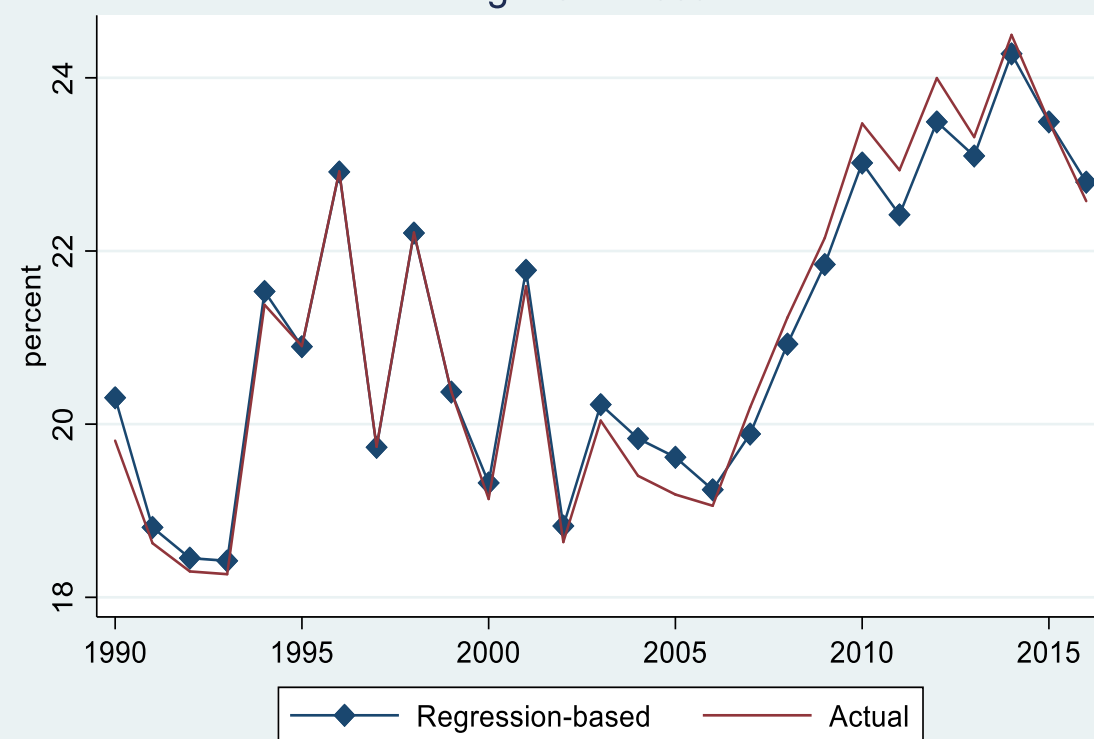
Debt relief, room to borrow, room to grow

wbdy in ssa



Sample: 44 countries, 27 years, 95.5% complete.

gfkfsh in ssa



Sample: 47 countries, 27 years, 88.4% complete.

given improved policy fundamentals in general

Median macro indicators by exposure to debt distress, 2010-14 and 2018	33 SSA at Low/Moderate risk		12 SSA in Distress/at High risk	
	2010-14	2018	2010-14	2018
Total investment (% GDP)	24.8	21.7	25.0	21.0
Growth of real GDP (%)	4.9	4.3	5.9	4.0
Fiscal deficit (% GDP)	3.9	3.7	1.4	1.9
CA deficit (% GDP)	7.9	6.9	5.4	4.2
Inflation (%)	5.3	4.8	5.8	6.3

But deteriorating debt sustainability indicators

LIC DSA transitions in SSA, 2013-2018		2018		
		<i>Moderate</i>	<i>High</i>	<i>Distress</i>
2013	<i>Low</i>	Liberia, Madagascar, Benin	Cameroon, Ethiopia Zambia	Congo
	<i>Moderate</i>		CAR, Gambia, Ghana , Mauritania	South Sudan
	<i>High</i>			Chad
	<i>Distress</i>			Eritrea, Somalia, Sudan, Zimbabwe
	<i>N/A</i>			Mozambique

With major compositional changes in PPG debt

Total PPG Debt by Creditor, 2007 and 2016 (% GDP)	All 37 LIDCs w/ data		8 SSA Post-HIPC LIDCs in Debt Difficulties	
	2007	2016	2007	2016
Total	47.1	52.7	44.7	72.1
External, o/w	36.5	37.3	32.8	53.4
Bilateral Paris Club	7.4	2.2	8.0	2.8
Bilateral China	0.3	4.2	0.2	11.6
Commercial	2.7	5.6	4.9	15.3
Domestic, o/w	10.5	15.3	12.0	18.7
Marketable	3.1	7.0	5.9	9.1
Nonmarketable	7.4	8.3	6.1	9.6

Debt dynamics and vulnerability

Define money base and debt ratios: $h \equiv \frac{H}{Y}$, $d \equiv \frac{D^{LC}}{Y} + \frac{E \cdot D^{\$}}{Y} \equiv d^D + d^E$.

Then the consolidated public sector budget constraint reads:

$$\Delta d = [pdef - grants - \pi \cdot h] + (i^E + \hat{E} - \pi) \cdot d^E + (i^D - \pi) \cdot d^D - g \cdot (h + d) - \Delta h + s.f.adj.$$

falling

less concessional &
exposed to tapering

important

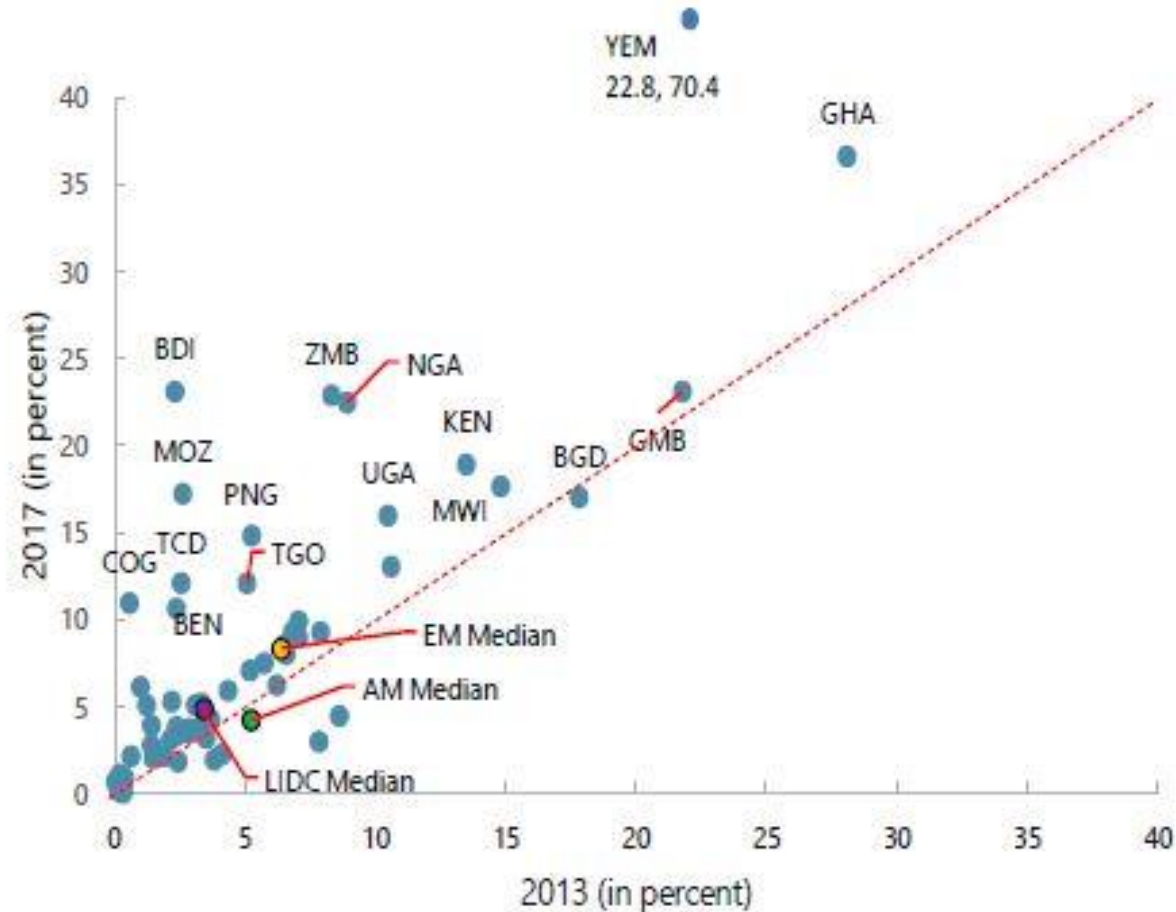
interest rate defense

rising

tempting

Growing
(nominal)
interest
burden as a
share of
budgetary
revenue

Figure 29. Interest Expense to Revenue
(2013 vs 2017)



Sources: WEO and IMF staff calculations.

Source: IMF (2018) *Macro
Developments and
Prospects in Low-Income
Developing Countries –
2018 (March)*

A high investment strategy in *some* key cases

Macro indicators, 2010-14 and 2018	Ethiopia		Ghana		Mozambique	
	2010-14	2018	2010-14	2018	2010-14	2018
Total investment (% GDP)	33.4	37.7	17.6	14.2	40.2	54.7
Growth of real GDP (%)	10.2	8.5	8.5	6.3	7.1	3.0
Fiscal deficit (% GDP)	3.3	9.3	9.1	3.2	2.5	2.2
CA deficit (% GDP)	4.6	6.5	10.2	4.1	33.4	16.9
Inflation (%)	16.2	11.2	9.7	8.7	6.3	6.7
Gross public debt (% GDP)	42.6	58.3	52.8	69.1	47.4	110.1

Focus points for effective partnering

$$\Delta d = [pdef - grants - \pi \cdot h] + (i^E + \hat{E} - \pi) \cdot d^E + (i^D - \pi) \cdot d^D$$
$$-g \cdot (h + d) - \Delta h + s.f.adj. + data\ surprises$$

[2] G/Y vulnerable:
Fiscal policy
for *redistribution*
with *growth*
and for *social*
protection

[1] Rate and efficiency of investment
in human capital and public
infrastructure (crowds in private K)

Data

[1] Public investment and debt sustainability

Buffie, Berg, Pattillo, Portillo, Zanna (2012) “Public Investment, Growth, and Debt Sustainability: Putting Together the Pieces” IMFWP WP/12/144

Issoufou, Buffie, Diop, Thiaw (2014) “Efficient Energy Investment and Fiscal Adjustment in Senegal” IMFWP WP/14/44

- Calibrated dynamic general equilibrium model of a public investment surge not fully financed on concessional terms.
- Returns can be high even when fiscal institutions are not strong.
- Returns to strengthening fiscal institutions (“investing in investing”) can be extremely high.
- Foreign borrowing can ease transition problems associated with feasibility/advisability of tax increases, spending cuts, domestic borrowing – but at risk of debt sustainability problems.

[2] Distributional incidence of fiscal policy

Nora Lustig (2018) “Fiscal Policy, Income Redistribution, and Poverty Reduction in Low- and Middle-Income Countries

Nora Lustig, ed (2017) *Commitment to Equity Handbook*

CEQ case studies include Ghana, Tanzania, Uganda, South Sudan, Sudan

- Economic incidence (who pays or receives), not general-equilibrium impact.
- Public health and education crucial to progressivity of the fiscal system.
- The poor barely break even overall, and may lose due to indirect taxes, though VAT not nearly as regressive as often thought due to exemptions. Fuel subsidies highly regressive.
- Basis for improved targeting and improved protection during fiscal consolidations.
- BUT: Does not cover public infrastructure spending, does not cover, financing does not do dynamics or general-equilibrium. May miss key indirect channels from fiscal policy to extreme poverty and shared prosperity, like impact of fiscal policy on connecting the poor to the economy and encouraging formalization and job creation.