

Indian Institute of Public Administration

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*41st Advanced
Programme in Public Administration*

**Public Finance and
Macroeconomic Management**

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* Views are personal and do not reflect those of the Government of Kerala

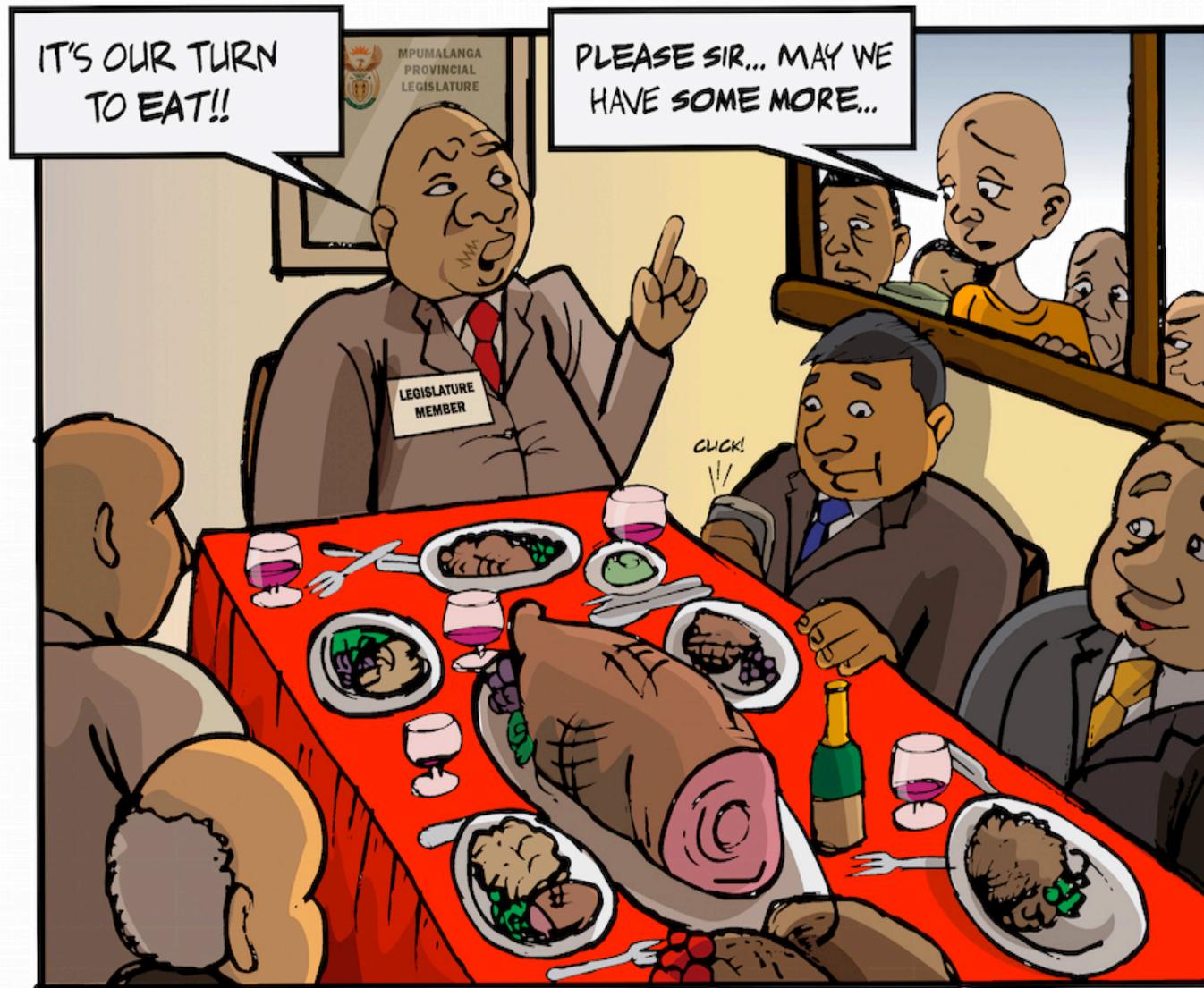
Public Finance in Textbooks

- A dull subject in college: soporific opening line – public finance is the finance of the public.
- **Wikipedia definition:** *Public finance is the study of the role of the government in the economy. It is the branch of economics which assesses the government revenue and government expenditure of the public authorities and the adjustment of one or the other to achieve desirable effects and avoid undesirable ones.*

Public Finance in Real Life

- Such Textbook definitions are not merely dull but misleading.
- It was only several years into government service that I began to find the subject increasingly fascinating.
- This came with the realization that there is no such thing as government money.
- What is usually called “government funds” is actually money collected from the taxpaying public.
- Even non-tax revenue is income from assets created from taxpayer money or through ownership of assets that belong to the people.
- Public finance is about how this taxpayer money is collected and spent.
- Since demands on public expenditure always exceeds resources by a long way, public finance should interest everybody.....

Public Finance: 'what happens to your money'



Overview

- General concepts
- Indian Public Finance and Macroeconomic Management, including the role of Centre-State relations.
- Global Public Finance and Macroeconomic Management, including the role of the Global Financial Crisis.

Revenue and Capital Accounts

- Public finance accounting consists of the revenue and capital accounts.
- Important to remember this distinction.
- The revenue account is the **flow** (usually annual) of income and consumption expenditures.
- The capital account is about **changes in the stock** of government assets, physical and financial: a revenue surplus increases the stock, and a deficit reduces it.

Government Revenue

- Tax revenue
 - Direct Taxes
 - Indirect Taxes
- Non Tax revenue
 - All other income, including **earnings** from assets, such as interest, user charges, natural resources.
 - A common mistake is to include **sales** of assets, such as disinvestment, as revenue, when it is a capital account transaction. Disinvestment impacts the fiscal deficit and not the revenue deficit
- Capital receipts: borrowings, sale of assets

Government Expenditure

- Revenue Expenditure
- Capital expenditure
 - Repayment of debt
 - Creation of physical assets.
- Plan expenditure
 - Capital expenditure
 - Revenue Expenditure

Annual Budget

- Annual financial statement of the government.
- Statement of accounts of the year gone by, with projections for the coming year. May also have medium to long term projections, such as the Medium Term Fiscal Policy Statement of GOI and Five year Plans
- Main budget documents
 - Receipt budget, both revenue and capital
 - Expenditure Budget, both revenue and capital
 - Annual Plan Budget, both revenue and capital

Different kinds of budget

- Flow basis
 - Can understate both revenue (due not collected) and expenditure (contracted but not incurred) during the year.
 - Since window dressing is possible, one needs to go behind the budget figures – off balance sheet
- Accrual basis
- Zero-based
- India follows the flow based system, which is also the most widely prevalent.

Measures of Public deficits/surplus

- Revenue deficit
- Fiscal deficit
- Primary deficit (excluding interest on debt)
 - Revenue
 - Fiscal
- Cyclically adjusted structural deficits
 - Revenue is very sensitive to growth
 - Expenditure is sticky
 - Fiscal rules should be counter cyclical

Cyclically Adjusted Balances

(IMF Fiscal Monitor Nov. 2009)

	Change 2010-2007			
	Cyclically-adjusted 1/			
	Structural primary balance 1/	Primary revenue	Primary spending	Temporary factors 1/
G-20 Countries (GDP PPP weighted)	-3.6	-1.4	2.5	-0.3
<i>excluding United States</i>	-2.4	-0.7	1.8	-0.1
Advanced G-20 economies	-4.0	-1.7	2.7	-0.3
<i>excluding United States</i>	-2.0	-0.5	1.5	0.0
Emerging G-20 economies	-3.0	-1.0	2.2	-0.2

1/ The cyclical adjustment to revenues and expenditures corrects for the effect of the economic cycle (see <http://www.imf.org/external/np/pp/eng/2009/030609a.pdf> for details on the cyclical adjustment methodology). Structural balances correct for effects of the economic cycle and for one-off, or temporary, factors not attributable to the cycle, where applicable. All series refer to primary aggregates, i.e. before interest expenditures and revenues.

Public Debt

- The **gross** public debt is the accumulated **stock** of government borrowings. It is the lagged effect of past fiscal deficits.
- The **net** public debt is gross debt minus assets.
- **Contingent liabilities**: guarantees given by government for debt incurred by others. Some of this could turn into public debt.
- It is possible, but unlikely, for governments to be debt free, except for very brief periods.

Domestic Public Debt and External

- Domestic debt is what is repayable in your own currency
- External debt is what is to be repaid in foreign currency, usually in the five reserve currencies – dollar, euro, pound, yen, swiss francs
- External borrowing is necessary to finance external deficits, although governments frequently make the error of borrowing to cover domestic deficits as well.

Public Finances 2014/15 (% of GDP)

- Central
 - Fiscal Deficit : 4%
 - Revenue Deficit: 2.9%
 - Primary Revenue Deficit: - 0.4%%
 - Public Debt: 50.3%
- States
 - Fiscal Deficit: 2.9%
 - Revenue Deficit: 0.1%
 - Primary Revenue Deficit: - 1.4%
 - Public Debt: 21.8%

Consolidated 2014/15 (% of GDP)

- Fiscal Deficit : 6.3%
- Revenue Deficit: 3%
- Primary Revenue Deficit: -1.7%

- Public Debt: 67% (incl. publicly held external debt)

- Total External Debt: 23.8%

What are sustainable levels of deficit and debt?

- The EU Maastricht Treaty set prudential ceilings of 3% and 60% of GDP respectively for the fiscal deficit and debt. These have been used by Indian Finance Commissions.
- Recent study by Reinhart and Rogoff:
 - Public debt over 90% of GDP damages growth
 - For developing countries, external debt of over 60% of GDP exposes them to crises.
- Domar debt sustainability equation: **$\text{nomGDPgr} < \text{nomRrate}$ or $\text{PD} = 0$**
- Debt dynamics: if trend growth goes down and/or real borrowing cost goes up, ceteris paribus, the sustainable debt threshold also goes down.
- Bottomline: sustainable levels of deficits and debt ultimately depend on the real growth rate of the economy, the interest paid on public debt and the stock of debt.

Extra Caution on External Debt

- Sustainable levels of external debt depend on the country's ability to earn hard currency (*its balance of payments*).
- Large volatilities in cross border capital flows and exchange rates mean that developing countries' external payments situation can change sharply & suddenly, including loss of access to market funding.
- Developing countries therefore have a more prudent policy in respect of external debt, hold large amounts of foreign currency reserves as insurance, and depend on the IMF as lender of last resort.

What drives deficits and Debt

- Cyclical deficits widen and public debt typically rises after deep recessions.
- Effective macroeconomic management entails growing out of cyclical deficits and debt as the economy recovers.
- IMF: sharp rise in fiscal deficits in downturns more on account of revenue declines consequent on falling growth than because of stimulus.
- If two countries have similar deficits, but different growth rates, Debt/GDP ratios will rise faster in the country growing slower
- Contrast India and US:
 - both have seen sharp rise in fiscal deficits
 - Debt/GDP in India improved US dramatically worsened.
 - 13th FC debt/GDP targets achieved comfortably ahead of schedule, despite continuing fiscal slippages.

India – US: Deficit and Debt

Percentage of GDP								
	India						United States	
	<i>Gross Fiscal Deficit</i>			<i>Debt</i>			<i>GFD</i>	<i>Debt</i>
Year	Centre	State	Comb	Centre	State	Comb	Federal	
2002-03	6.0	3.9	9.7	61.1	32.0	77.6	-1.5	58.8
2003-04	4.6	4.3	8.7	61.4	32.8	79.2	-3.4	61.6
2004-05	3.9	3.1	7.3	59.6	31.3	76.2	-3.5	63.0
2005-06	4.7	2.3	7.3	58.6	31.1	73.8	-2.6	63.6
2006-07	4.3	1.8	6.3	56.7	28.9	70.0	-1.9	64.0
2007-08	3.1	1.5	4.7	54.6	26.6	67.2	-1.2	64.6
2008-09	8.1	2.4	10.5	53.9	26.1	67.5	-3.2	69.7
2009-10	6.7	2.9	9.6	52.4	25.5	66.8	-10.1	85.1
2010-11	4.8	2.1	6.9	48.5	23.5	61.5	-9.0	94.3
2011-12	5.8	2.3	8.1	47.9	22.3	61.4	-8.7	98.9
2012-13	5.2	2.4	7.6	48.3	22.2	63.9	-7.0	103.2
Source :	for India : Data Base on Indian Economy, Reserve Bank of India							
	for US : Office of Management of Budget, US ,							
	Link: http://www.whitehouse.gov/omb/budget/Historicals							

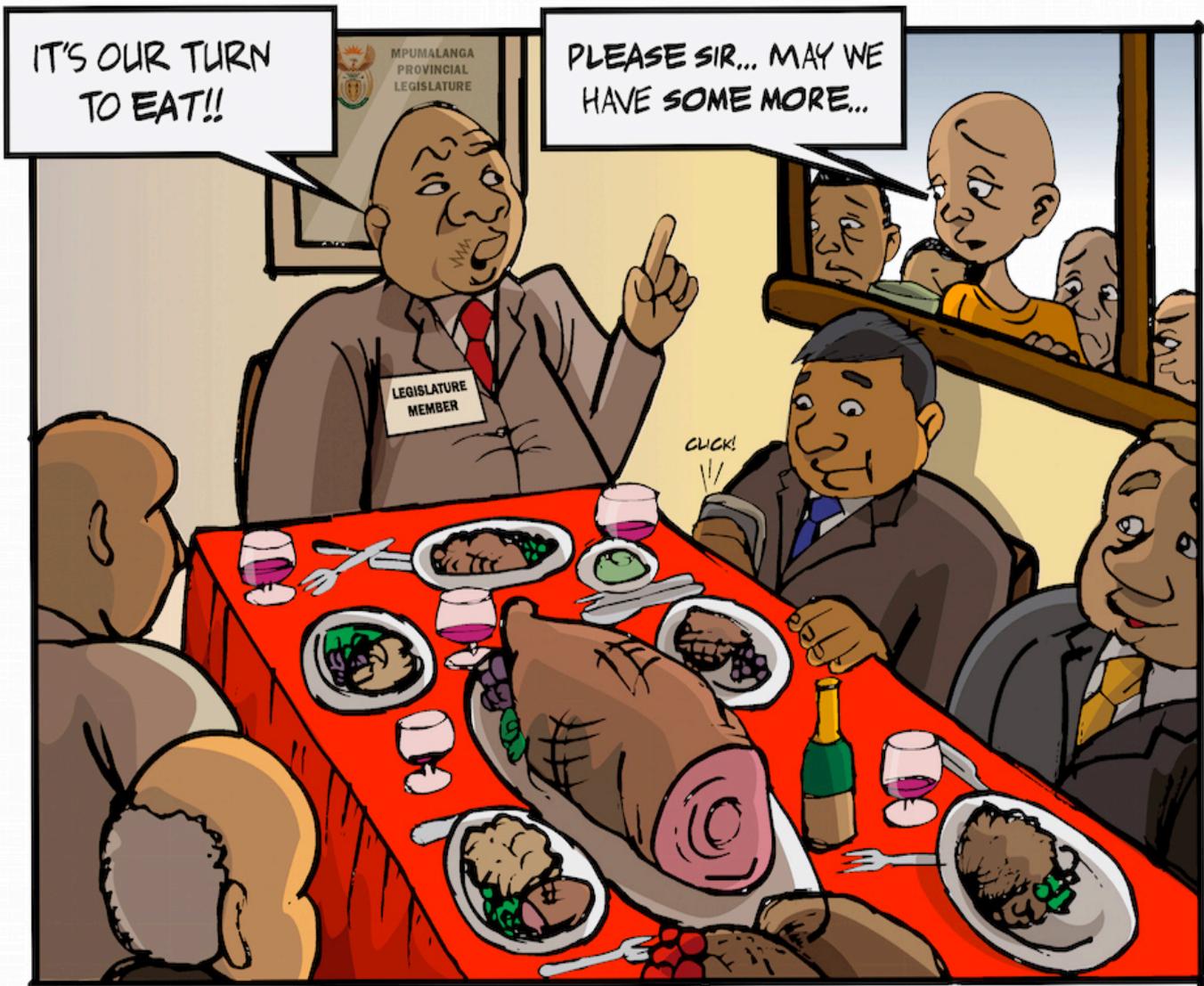
Default on Public Debt

- Domestic debt
 - Sovereign ***nominal*** default on domestic debt can only be wilful as they have the power to mint their own currency. Debate over US Congressional debt ceiling.
 - Most common sovereign default on domestic debt is through the ***inflation*** tax. In earlier times through debasement of currency.
- Foreign debt
 - Sovereigns can and do default
 - Since markets treat default of private foreign debt as national default, governments usually regulate external borrowing by private parties.

Fiscal policy

- Merit goods (infrastructure) and redistribution through subsidies for the very poor.
- Keynes and macroeconomic stabilization
 - Monetary policy
 - Fiscal policy
- Automatic and discretionary stabilizers: entry and exit issues; ‘pork barrel’ politics.
- Fiscal multipliers: vary across space and time
- Ricardian equivalence: tax cuts and debt as deferred tax.

Non-merit Subsidy



Pork Barrel Politics



Fiscal Dominance

- Large fiscal deficits put upward pressure on interest rates and prices.
- This can crowd out private investment and lower investment and growth.
- Central banks need to respond by keeping real interest rates lower than they might have otherwise done.
- Failure to do so would only magnify the problem: “unpleasant arithmetic” : if fiscal policy is lax, monetary policy must accommodate it.
- Fiscal dominance leads to macroeconomic imbalances such as inflation, negative real rates and excessive leverage.
- Till recently fiscal dominance mostly a developing country phenomenon.

Indian Constitution and Fiscal Structure

- India is a Union of States.
- In fiscal matters India functions like a federation and not a unitary state.
- The Union and States have separate fiscal powers that they draw from the Constitution.
- State, Union and Concurrent lists of subjects.
- Taxation powers of Centre and States clearly defined.
- 73rd constitutional amendment bestowed Local Bodies with authority and responsibility to perform functions entrusted to them by the Act. However, the Act has not provided them with any powers directly, leaving it to state government discretion.

Fiscal Federalism mimics Monetary Union

- Constituent States do not have monetary autonomy
- So they cannot print their way out of default on debt.
- So Monetary unions have a mechanism for fiscal transfers from the Centre to the States
- So hard budget constraints need to be imposed on constituent States: Article 293 of the Indian Constitution.
- The US has a similar fiscal structure: fiscal transfers, and States cannot run budget deficits.
- The Eurozone crisis continues to fester because there is no mechanism for fiscal transfers and no hard budget constraint.

Finance Commissions

- Two fundamental imbalances
 - Vertical: revenue skewed towards centre and expenditure towards States
 - Horizontal: Fiscal capacities of States vastly different.
- The Constitution mandated five yearly Finance Commissions to address both these imbalances: 14 Commissions so far.
- The Finance Commission divides the Centre's tax revenues (the divisible pool) between the Centre and the States – vertical devolution.
- It also decides how the State's share is to be allocated between different States

XIV Finance Commission Award

- Funds transferred from divisible pool of taxes to States averaged 66.9% between 2007/08 and RE 2013/14.
- XIV FC projects 63.44% (actuals will depend on actual tax receipts) over the next five years.
- Of this tax devolution from pool was 32%. XIV FC raises this to 42%.
- Share of discretionary transfers (including those of FC) reduced from 34.9% to 21.44%
- Changes in Budget 2015-16 on account of XIV FC Award:
 - Central support to some centrally sponsored schemes reduced, and some delinked altogether.
 - Normal and Special Central Assistance for State Plans discontinued.

Union and State Budgets

- Prepared by finance departments and passed by Parliament and State legislatures before each financial year, with supplementaries during the year.
- Make projections of revenue likely to be available, projected expenditures, and how the deficit is to be financed.
- The accounts of the Union and the States are audited by the Comptroller and Accountant General, another constitutional body, and presented to Parliament and State legislatures
- For historic reasons India also has a separate Railway Budget

Annual Plans

- Passed along with the budget.
- Resources finalized through consultations between Finance Departments and Planning Departments/ Commission/Boards.
- Outlays finalized by Planning Departments/ Commission/ Boards in consultation with line departments
- Major change from 2015-16 because of abolition of the Planning Commission and central support for State Plans. Central Plan now coordinated by Union Finance Ministry.
- Current (12th) Plan ends in FY 2016-17. Uncertainty regarding the Planning process beyond that.

Budgeting exercise

- Revenue
 - Tax revenues estimates on the basis of past growth trends, and/or estimated economic growth and tax buoyancy.
 - Estimates of non-tax revenues
 - States estimate devolutions from Centre, both mandatory (FC Award) and discretionary – central/centrally sponsored schemes.
- Department wise expenditure allocations: revenue, capital, plan.
- How to financing the deficit

Union Revenues

	2014-15 RE	2015-16 BE
Income Tax	19%	20%
Corporation Tax	29%	28%
Custom	13%	12%
Union Excise	13%	14%
Service Tax	11%	13%
Others	0%	0%
<i>Total Tax</i>	85%	87%
<i>Total Non-Tax</i>	15%	13%

Central Expenditure

	2014-15	2015-16
Transfer to States	36	37
Interest payments	20	20
Central Plan	11	11
Subsidies	12	10
Defence	10	11
Other Non-plan	11	11

Central Expenditure Rigidities

- Over over 90 % of central non-plan expenditure, accounted for by 6 items where expenditure cannot be easily reduced: interest, defence, pension, salaries, subsidy and grants to States.
- Almost 70% of central government expenditure is non-plan.
- Plan *Capital* Expenditure as a percentage of total Plan expenditure is less than 10%.
- Gross capital formation out of central budgetary resources has remained around 2.5% of GDP

Nominal and Repressed Deficits

- While running unsustainable deficits is imprudent, the reverse could also be true.
- It is possible that deficits and debt are kept very low while public investment deficits accumulate.
- Lawrence Summers has called this ‘repressed fiscal’ or ‘repressed infrastructure’ deficit.
- Despite overshooting deficit targets, India might well be guilty of this sin.

India's Repressed Deficits

- High levels of investment in physical and social infrastructure a necessary condition for the East Asian Miracle (World Bank).
- Indian infrastructure levels still at around East Asian levels of the 1960s.
- Too great a reliance on private investment in infrastructure than what historical experience warranted.
- As a result India has accumulated a huge and growing infrastructure deficit, with a negative fallout on productivity.
- Fiscal targets achieved at the cost of infra investment.
- States set their deficit targets below 13FC targets which adversely impacted both social and physical infrastructure investments.

Infrastructure and Public Finance

- Biggest challenge for Indian public finance
- India has a huge infrastructure deficit: the biggest drag on sustaining high growth.
- Much of this investment has to come from budgetary sources
- fiscal space for structural transformation through infrastructure investment created by growth spurt.
- This would mean using fiscal space available and reorienting expenditure away from subsidies: fuel and fertilizer in particular.
- Much hinges on how States use the fiscal flexibility given to them under the 14FC Award.
- Infra investment pays for itself through higher growth.

The Global Financial Crisis

- Fiscal crisis brewing in advanced economies because of ageing, declining trend growth and generous social protection programs.
- Crisis accelerated by the policy response to the GFC: Aggressive use of fiscal policy over an extended period to bail out the financial sector (conversion of private debt to public?) and to stimulate demand to restore growth.
- Rapid worsening of fiscal parameters and steep rise in public debt in AEs

Biggest Peacetime Increase in US Public Debt

Federal Debt Held by the Public, 1790 to 2011

(Percentage of gross domestic product)



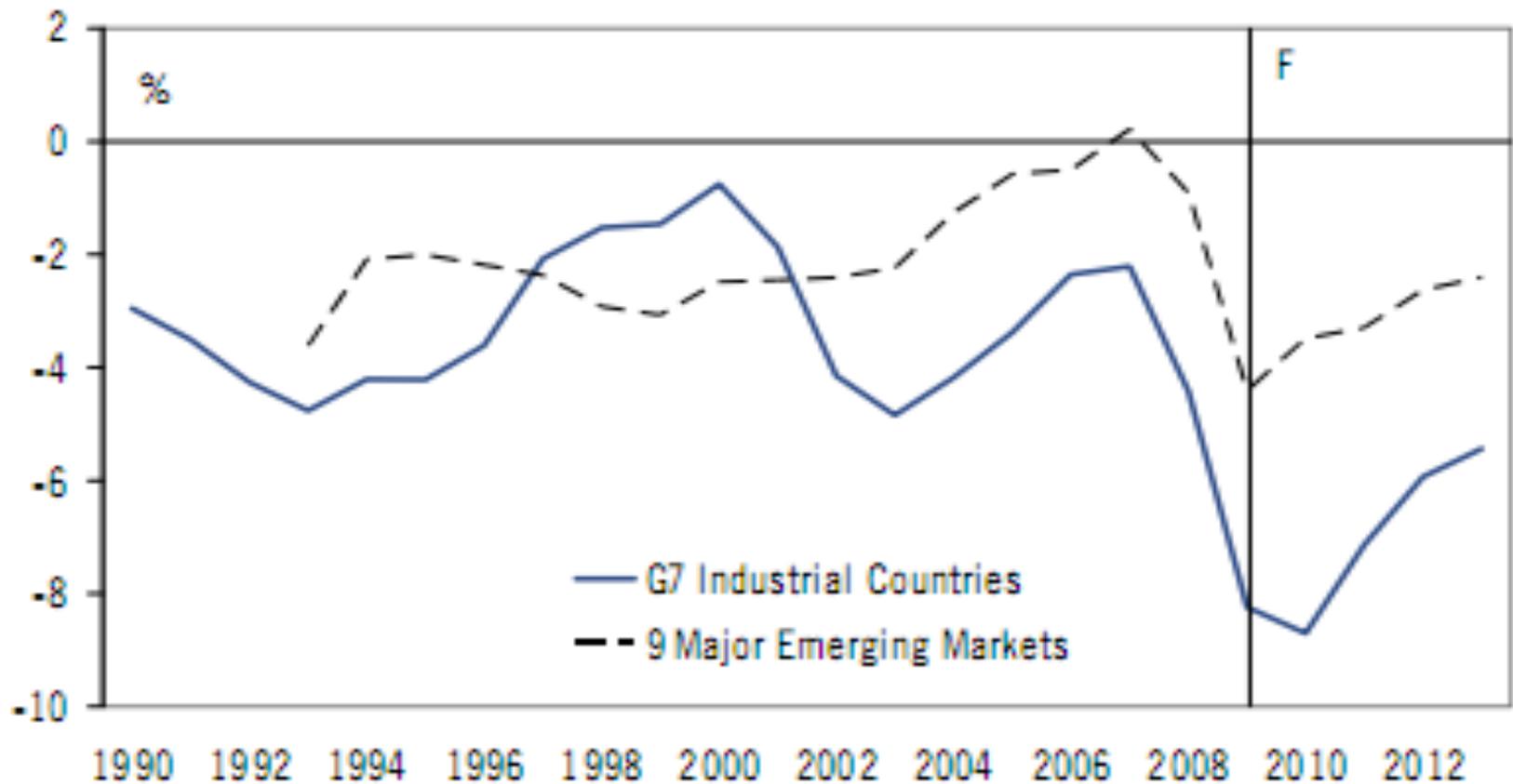
Sources: Congressional Budget Office; Office of Management and Budget.

Fiscal Response: Deficits and Gross Debt

% of GDP	2007		2008		2009		2010		2011		2012*		2013*	
	Bal	Debt	Bal	Debt	Bal	Debt	Bal	Debt	Bal	Debt	Bal	Debt	Bal	Debt
Advanced	-2.7		-3.5	81.3	-9.0	94.9	-7.8	101.5	-6.6	105.5	-5.9	110.2	-4.7	109.3
France	-2.8	64.2	-3.3	68.2	-7.6	79.2	-7.1	82.3	-5.2	86.0	-4.6	90.3	-3.7	92.7
Germany	0.2	65.4	-0.1	66.8	-3.1	74.5	-4.1	82.5	-0.8	80.5	0.2	82.0	-0.3	80.4
Greece	-6.8	107.3	-9.9	112.5	-15.6	129.3	-10.7	147.9	-9.4	170.6	-6.4	158.5	-4.6	179.5
Iceland	5.4	29.1	-0.5	70.4	-8.6	88.0	-6.4	90.6	-5.0	102.3	-3.0	99.1	-1.3	91.9
Ireland	0.1	25.0	-7.4	44.5	-13.9	64.9	-30.9	92.2	-13.4	106.5	-7.7	117.1	-7.5	122.0
Italy	-1.6	103.3	-2.7	106.1	-5.4	116.4	-4.3	119.3	-3.7	120.8	-3.0	127.0	-2.6	130.6
Japan	-2.1	183.0	-4.1	191.8	-10.4	210.2	-9.3	216.0	-9.9	230.3	-10.2	237.9	-9.8	245.4
Portugal	-3.2	68.3	-3.7	71.6	-10.2	83.1	-9.8	93.2	-4.4	108.0	-4.9	123.0	-5.5	122.3
Spain	1.9	36.3	-4.5	40.2	-11.2	53.9	-9.7	61.3	-9.4	69.1	-10.3	84.1	-6.6	91.8
United Kingdom	-2.9	43.7	-5.1	52.2	-11.4	68.1	-10.1	79.4	-7.9	85.4	-8.3	90.3	-7.0	93.6
United States	-2.7	66.5	-6.7	75.5	-13.3	89.1	-11.1	98.2	-10.0	102.5	-8.5	106.5	-6.5	108.1
BRICS	0.3	39.3	-1.2	37.9	-5.6	40.4	-4.3	42.8	-2.9	41.6	-3.5	42.3	-3.3	41.6
Brazil	-2.7	65.2	-1.4	63.5	-3.1	66.9	-2.7	65.2	-2.5	64.9	-2.8	68.5	-1.2	67.2
Russia	6.8	8.5	4.9	7.9	-6.3	11.0	-3.4	11.0	1.5	11.7	0.4	10.9	-0.3	10.4
India	-4.8	75.0	-8.6	73.3	-10.1	75.0	-8.7	68.5	-8.4	66.4	-8.3	66.8	-8.3	66.4
China	0.9	19.6	-0.7	17.0	-3.1	17.7	-1.5	33.5	-1.3	25.5	-2.2	22.8	-2.1	21.3
South Africa	1.4	28.3	-0.4	27.8	-5.5	31.3	-5.1	35.8	-4.0	39.6	-4.8	42.3	-4.8	42.7

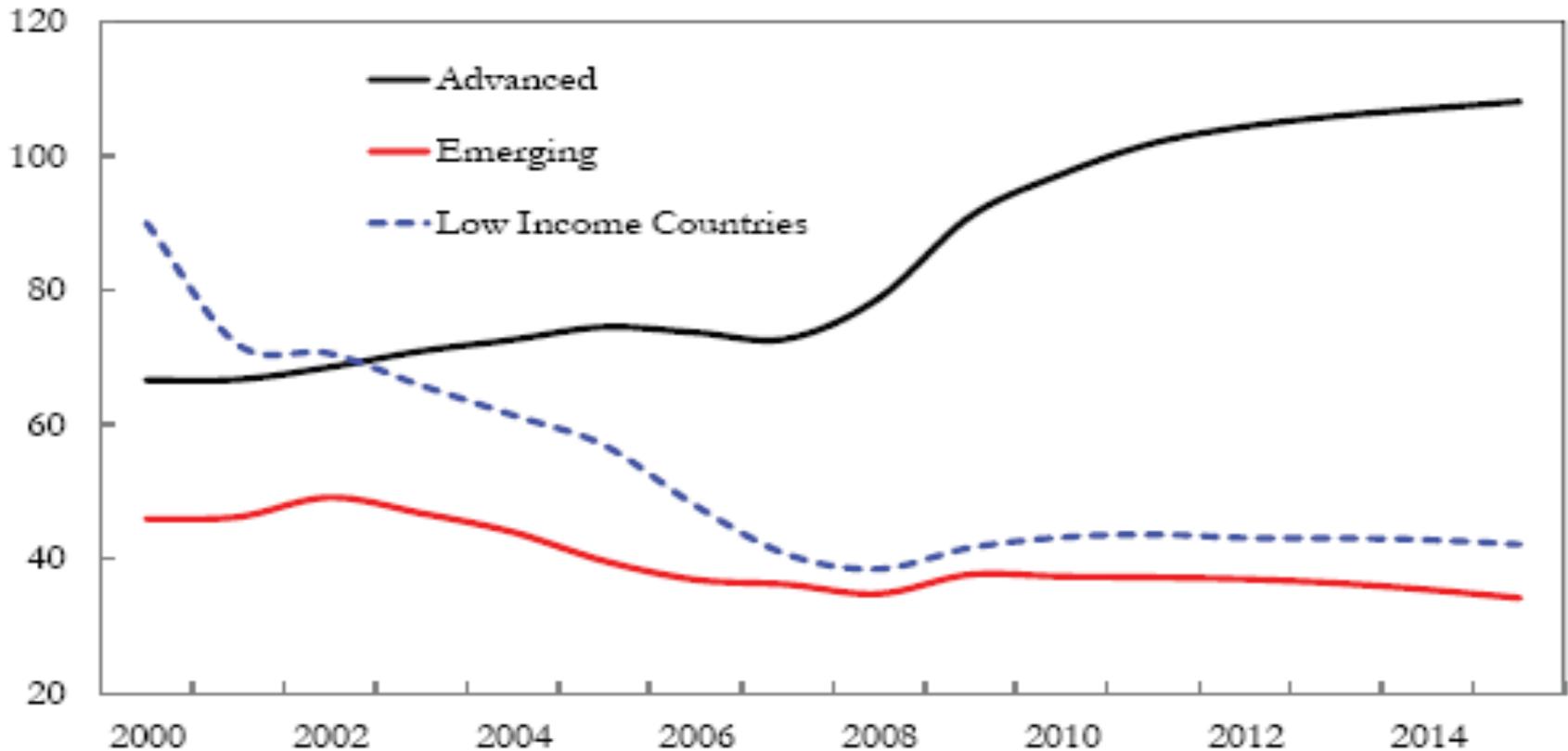
Reversal of Roles I

Figure 4. Global — Fiscal Deficits in Industrial Countries and Emerging Markets, (% of GDP), 1990-2013F



Reversal of Roles II

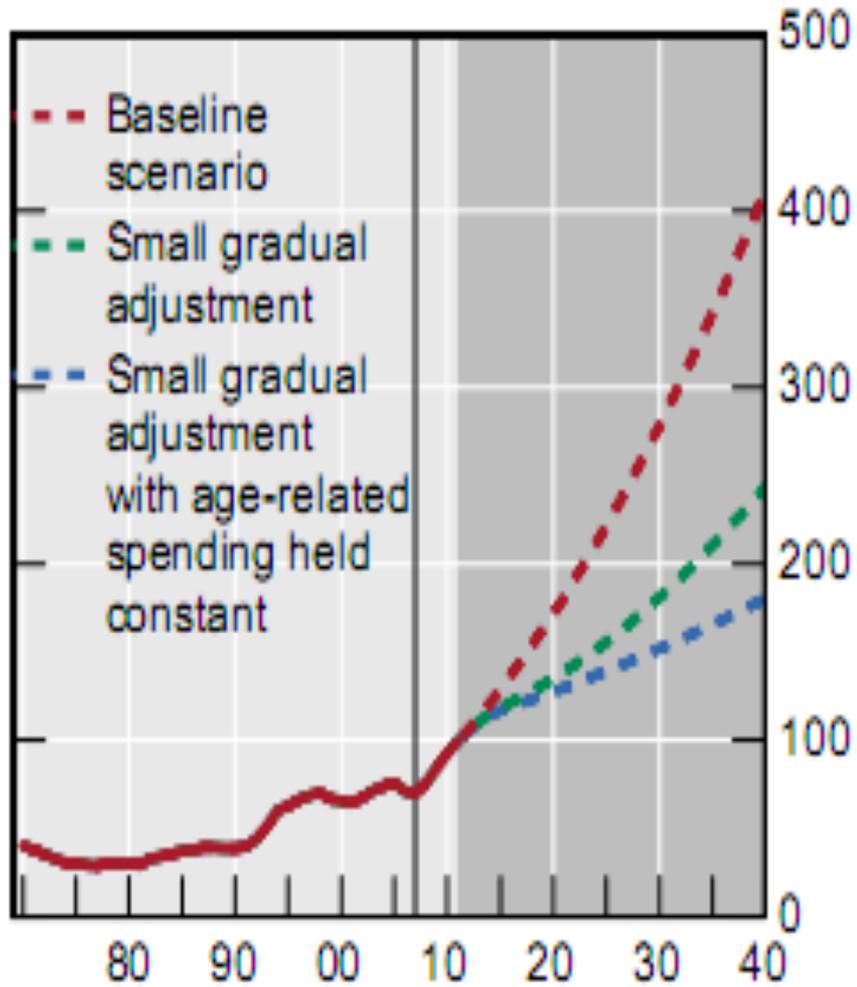
Figure 1.6. General Government Gross Debt Ratios
(Percent of GDP; 2009 PPP-GDP weighted average)



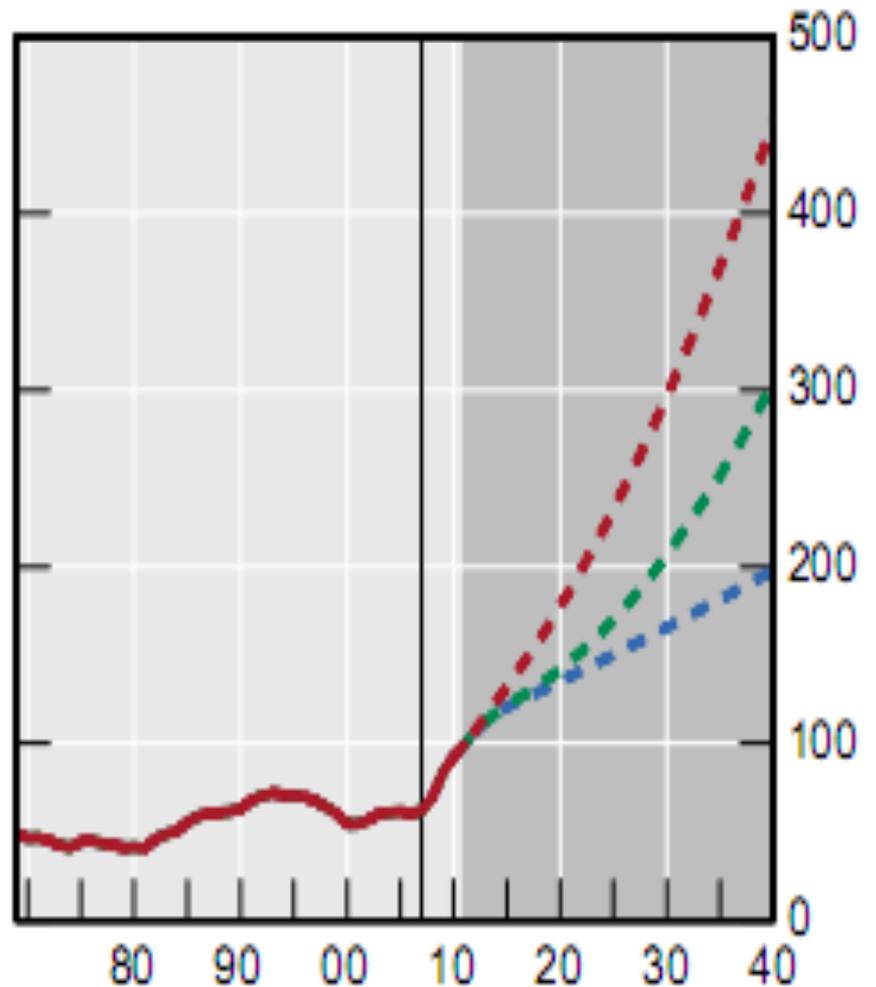
Source: IMF staff estimates based on October 2010 WEO projections.

Debt Projections

France



United States



So what has happened?

- Adverse fiscal dynamics:
 - Demographics: rising welfare expenditures and falling trend growth
 - Social compacts became unsustainable
 - No serious attempts to deal with the problem
 - Above trend growth during the ‘Great Moderation’ limited impact of deficits on Debt/GDP ratios
 - Rising deficits meant that there was little fiscal space to deal with cyclical downturns
- Adverse fiscal dynamics accelerated by the Global Financial Crisis may have permanently damaged growth (‘New Normal’)

Fiscal Aftermath of the Global Economic Crisis

- Cyclical deficits widen and public debt typically rises after deep recessions.
- Effective macroeconomic management entails growing out of cyclical deficits and debt.
- Present crisis not just another cyclical downturn: structural impediments to fiscal health need structural reforms
- If debt levels reach explosive levels there may be little alternative but to partly inflate it away (‘inflation tax’)
- Sovereign debt sustainability problems compounded by market response in peripheral Euro Zone countries (PIGS): existing level of debt can become unsustainable if borrowing costs rise sharply
- Fears of debt trap and inflationary outcomes extend beyond PIGS.

US, Japan, Italy & Euro Periphery

- Large fiscal deficits and low borrowing costs
 - Collapse of private demand
 - reserve currency advantage: Big external demand for US Treasuries
- Japan running huge government deficits, with public debt of over 200% to GDP with no impact on borrowing costs.
 - public deficits lower than private savings
- Italy: High debt but low borrowing costs:
 - balanced budget
- Peripheral European countries like developing countries:
 - borrowing costs suddenly dropped after joining Euro
 - ran up high deficits and debt
 - Market revolt

When growth & private demand revive

- High fiscal deficits would have to be reduced to prevent crowding out of private demand
- Might be difficult to reduce fiscal deficits because of sharp rise in debt servicing as interest rates rise : fiscal dominance
- QE tapering shock: Will central banks be forced to keep interest rates low (below inflation rate) for a longer period than necessary to protect sovereign balance sheets? Return of financial repression = insidious tax.
- Would need to keep inflationary expectations well anchored
- Could sovereign debt lose its risk free status? For brief periods yields on top rated Corporate paper fell below that of US Treasuries. Sovereign bonds the new sub-prime? New safe havens: gold; prime Corporates; Oil/commodities?

Fiscal Lessons for India

- Fiscal rules should be counter cyclical: difference between structural and cyclical balance.
- Sustainability of debt is linked to trend growth: fiscal space for structural transformation (infrastructure) available at a critical stage of growth. Needs to be used wisely
- Long term sustainability of social compacts an issue.