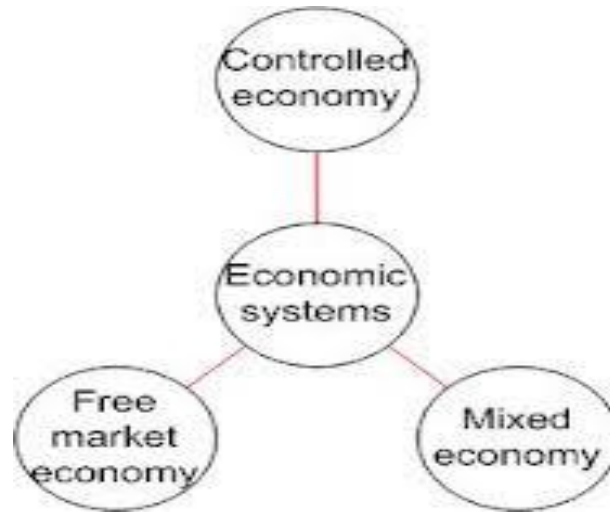


Understanding Macro

The 3 central questions

- Why do output and employment sometimes fall, and how can unemployment be reduced?
- What are the sources of price inflation and how can it be controlled?
- How can a nation increase its rate of economic growth?

- Distinguishing between business cycle and growth?



Economic Systems

How the Government influences how I make money.



Quick Review:

- Answer the following questions:
 - What are Goods?
 - What are Services?
 - What are Resources?
 - What is Scarcity?

Economic Systems

- Def. The method used by a society to produce and distribute goods and services.
- Or, How the government tells us what we can get and how to get it!

All Economic Systems Must Consider the Following Questions:

1. What goods and services to produce?
 2. How will they produce them?
 3. Who will get them?
 4. How much will they produce now, and how much later?
- Each economic system answers these questions in a **DIFFERENT WAY**.

Types of Economic Systems

There are 3 basic types of economic systems.

- Traditional
- Capitalist
- Socialist
- Mixed

1. Traditional Economy

- Economic questions are answered by habits and customs (the way it has always been done)
- Children work the same jobs parents worked, often farming or shepherds
- Fear Change!

2. Command Economy

- The government answers the basic economic questions
- Advantages: able to act quickly in emergencies, provide for all people equally
- Disadvantages: Inefficient, no incentive to work hard or be creative
- Ex. Communist Countries (China, Vietnam, North Korea, former Soviet Union, Cuba)

3. Free Market Economy

- Economic questions are answered by individual buyers and sellers.
- Supply and demand influence economy
- People act out of self interest; motive for profit (money) drives the economy
- Also known as FREE ENTERPRISE or CAPITALISM
- Ex. The United States, Western Europe, Japan

Features of Free Market Economy

1. Economic Freedom: individuals have the right to choose
2. Competition: more than one producer of good/services insures choice
3. Private Property: individuals have the right to own their own property, including business

Features of Free Market Economy



4. Self-Interest: individuals make decisions based on what is best for them
5. Voluntary Exchange: individuals may freely buy and sell goods
6. Profit Motive: individuals are driven by a desire to profit (make money)

4. Mixed Economy

Mixed Economy: No economy is pure market, pure command or pure traditional, elements of each appear in all economies, some have more elements of one economy than another.

Market

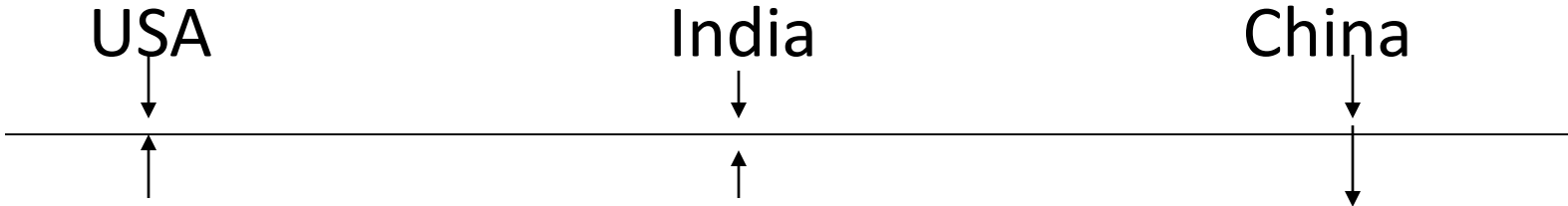
Mixed

Command

USA

India

China



Features of American Command Economy

1. Government regulation of some business practices

- Ex. Wages, labor hours, safety practice.



2. Government limits certain choices

- Ex. Cannot buy or produce certain goods/services

3. Government provides aid to the needy

- Ex. Medicare, Medicaid, welfare



Child Welfare
Services

My Pizza Hut

- How would my pizzeria function under different economic systems?

My Pizza Hut in a Free Market

- / answer the basic economic questions!
- / determine how much cheese and pepperoni goes on the pizza
- / determine the quality of the cheese and pepperoni
- / set my employees wages
- / set my business hours

My Pizza Hut in a Command Economy

- ***The government*** answers the basic economic questions
- ***The government*** sets the amount of cheese and pepperoni on each pizza
- ***The government*** determines quality of cheese and pepperoni
- ***The government*** sets employees wages
- ***The government*** sets business hours

My Pizza Hut in a Mixed Economy

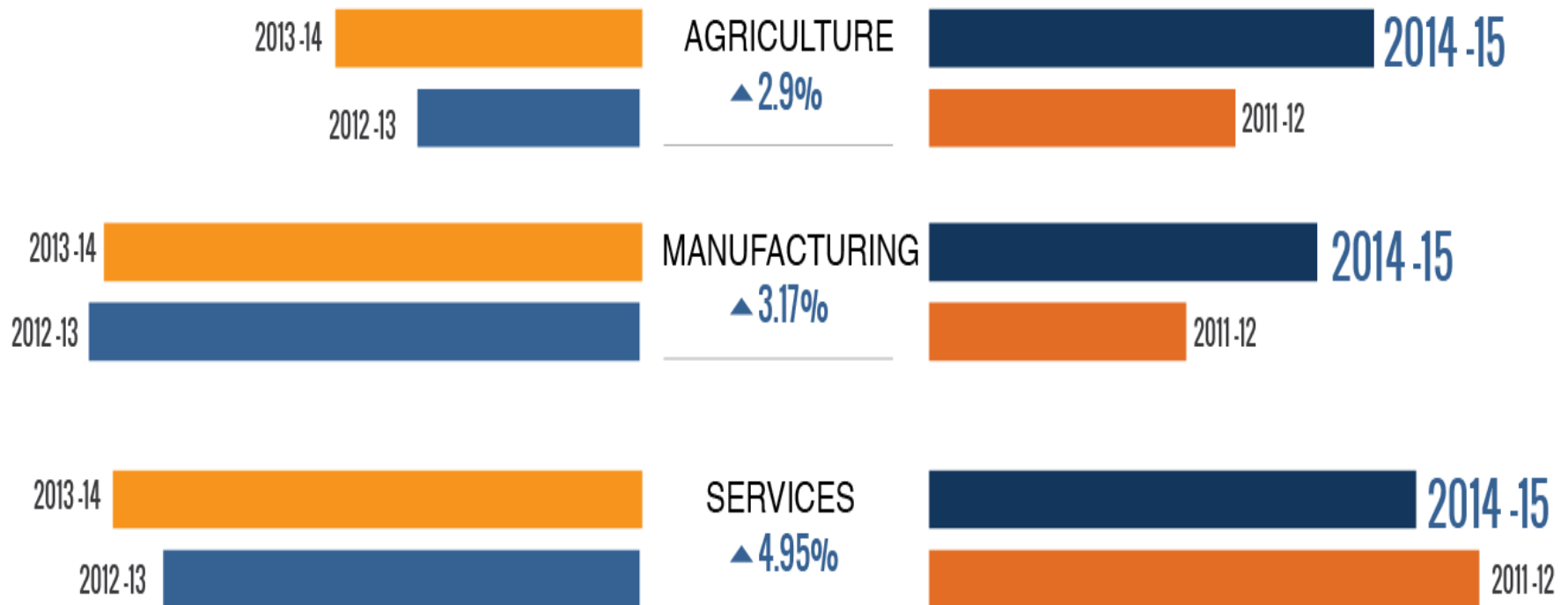
- ***The Government and I*** both answer the basic economic questions
- *I* determine the amount of cheese and pepperoni on the pizzas; ***government*** determines the quality of cheese and pizza
- *I* set employee wages; ***government*** sets minimum wage for employees
- *I* determine business hours; ***government*** determines whether I am safe to be open or not

What and How of Macro

- Objectives:
 - ☐ Economic growth
 - ☐ High level of employment
 - ☐ Stable prices
- Instruments:
 - ☐ Monetary policy
 - ☐ Fiscal Policy
 - ☐ Trade Policy

India's Sectoral growth

SECTOR GROWTH



Types of macroeconomic variables

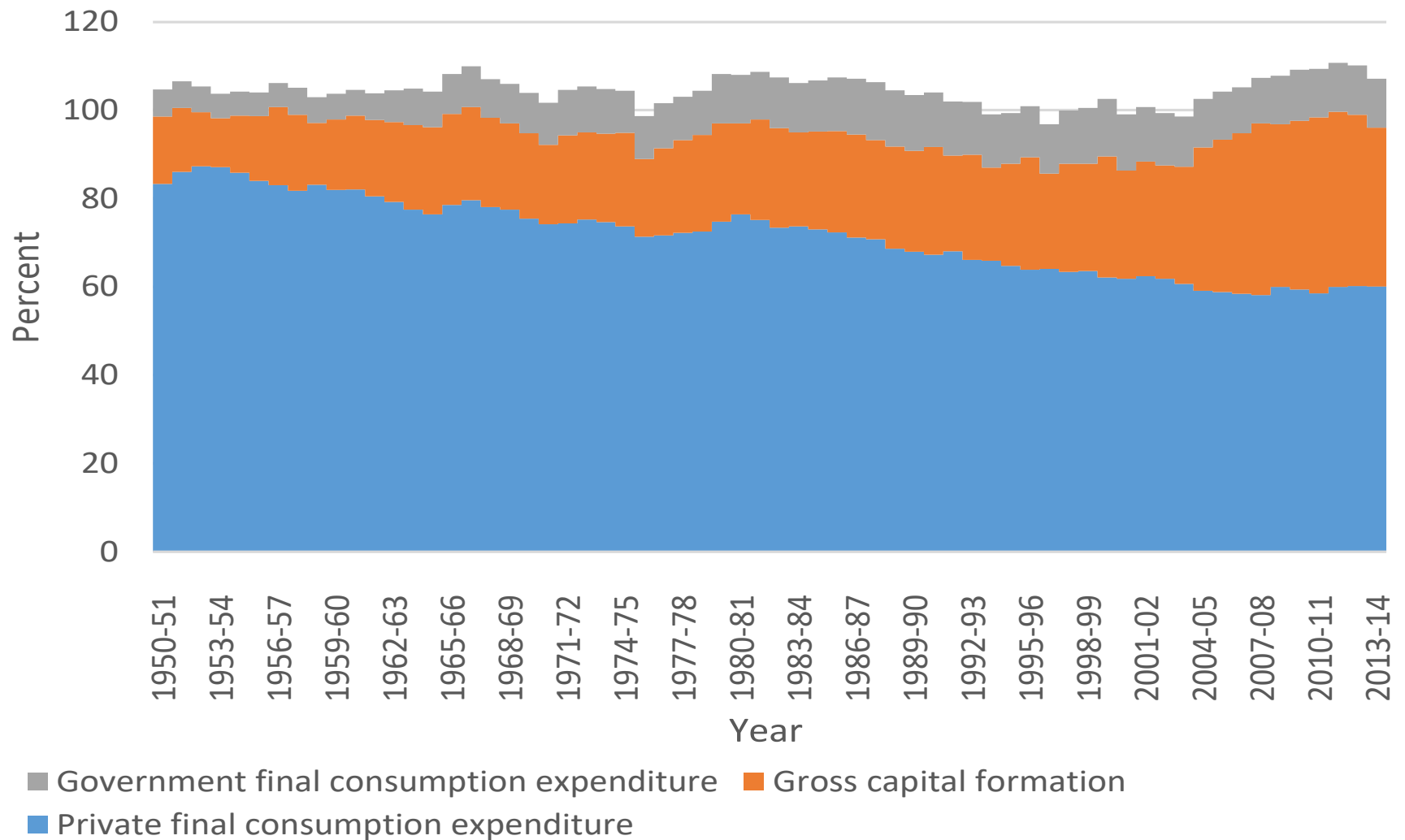
- Variables in current versus constant prices
- Current prices (“nominal”): variable measured in current rupees
- Constant prices (“real”): Corrected for inflation
- Important price indices in India
 - Wholesale Price Index (WPI)
 - Consumer Price Index (CPI)
 - Current WPI and CPI base year: 2012

Types of macroeconomic variables

- Output of the economy - GDP
- Inflation rate = growth rate of prices in terms of an appropriate price index
- WPI and CPI inflation rates: WPI reported weekly and monthly on a year-on-year basis
- *Core inflation*: Manufacturing sector WPI
- *Food inflation*: WPI/CPI for food articles

India: Components of GDP at market prices

Composition of GDP at Market Prices



Source: Reserve Bank of India, Data Base of the Indian Economy

EMPLOYMENT

Unemployment in India

- *Developed country unemployment: Frictional, Cyclical and Structural*
- *Unemployment: % of labour force not having jobs*
 - *Labour force: Persons looking for work*
 - *Discouraged worker effect: Persons dropping out of labour force.*
- *Anatomy of unemployment in India*
 - Cyclical unemployment of some concern for educated and white collar
 - Much more serious is **underemployment** and **disguised unemployment**
 - Open structural unemployment is much less serious in India

- Labour force participation rate of persons aged 15+: 52.5%
- Employment
 - Self employed: 51% rural, 34% urban, 48.6% overall
 - Regular wage/salary income: 11% rural, 42% urban, 19.7% overall
 - Casual labour (31.7%)
 - Unemployment rate: 4.9%

INTERNATIONAL FLOWS AND THE BALANCE OF PAYMENTS

Measuring international flows

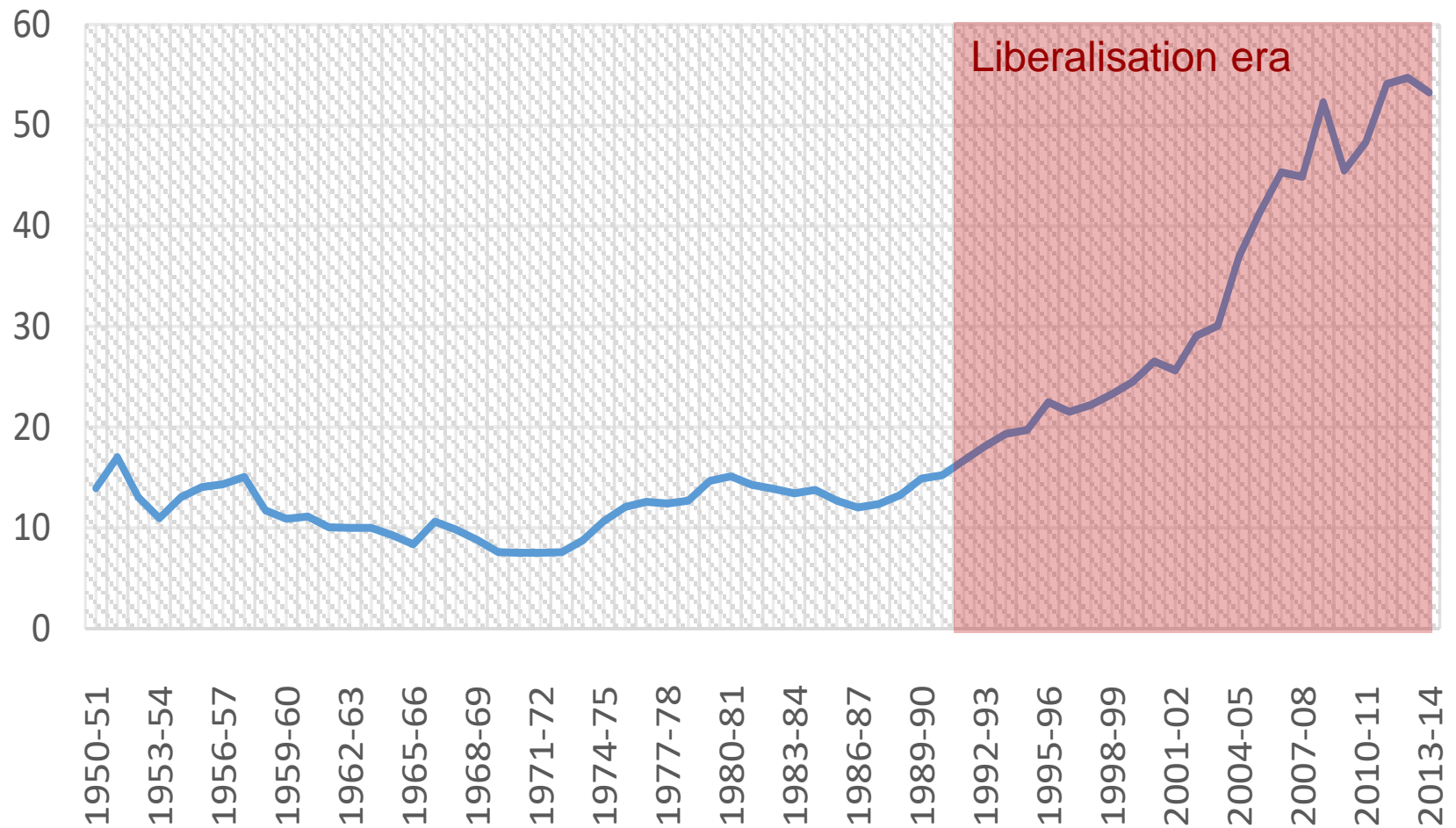
- **The Balance of Payments** (BOP) *is a complete record of a country's foreign transactions (including transactions in goods, services and assets).*
- In the BOP account, the Current Account Surplus is balanced *identically* by the *Capital Account Deficit or Net Capital Inflow*.
- A simplified equation for the BOP is
$$\text{Exports minus Imports} + \text{Net Capital Inflow} \equiv 0$$
- In practice, discrepancy is caused by missing data (errors & omissions).

Balance of Payments as a percentage of GDPmp

Item	2009-10	2010-11	2011-12 ^{PR}	2012-13 ^{PR}	2013-14 ^P
Current account					
Exports	13.35	15.00	16.48	16.49	16.98
Imports	22.01	22.45	26.57	27.02	24.84
Invisibles (Net)	5.86	4.64	5.94	5.78	6.14
Current account balance	-2.79	-2.81	-4.16	-4.74	-1.73
Capital account					
Foreign investment	3.69	2.47	2.09	2.51	1.41
of which FDI	1.32	0.69	1.17	1.07	1.15
Capital account balance	3.78	3.73	3.60	4.80	2.60
Overall balance = change in reserves	0.98	0.76	-0.68	0.21	0.83
Trade Openness	35.36	37.45	43.04	43.51	41.82

PR: Partially Revised. P: Preliminary. Source: Reserve Bank of India

Openness ($X+Im$ as a % of GDP)



Source: Reserve Bank of India, Data Base of the Indian Economy

Foreign Exchange Rates

- Rupees per foreign currency unit (e.g. USD)
 - Appreciation : Rate *decreases*
 - Depreciation: Rate *increases*
- Other policy rates
 - **Nominal Effective Exchange Rate** or NEER: Weighted average of exchange rates: Weights: Share in trade with India. RBI looks at 6-currency and 36 currency NEERS
 - 6 country NEER: US, Eurozone (12 countries), UK, Japan, China, Hong Kong
 - **Real Effective Exchange Rate** or REER: NEER multiplied by ratio of Price indices (WPI or CPI) in the two countries.

- *Purchasing Power Parity (PPP) exchange rate:*
“rate at which the currency of one country would have to be converted into that of another country to buy the same basket of goods and services in each country.” (IMF).
- *India’s rate compared to USD: 0.3. Rupee purchasing power is 3.33 times the normal exchange rate with the USD*

Rupee REER, NEER and USD rates

Average nominal and real effective exchange i			
	6-REER	6-NEER	Rs/US\$
	(Base: 2004-05=100)		
2009-10	102	87.1	47.4
2010-11	114.9	91.8	45.6
2011-12	111.5	84.4	47.9

High REER and NEER: Rupee is expensive or domestic inflation is high – bad for exports

Source: Reserve Bank of India

THE GOVERNMENT BUDGET

What is the budget

- *Record of the revenues and expenditures of a government during a given period of time.*
 - *Budget estimate*: what the govt intends to do during that period and how it intends to finance these activities.
 - *Revised estimate and actuals*: what the govt actually did, who had to pay for it and in what form.
- **Key features**
 - Budget is a legal document approved by the legislature or equivalent institution
- Budget is the key document outlining fiscal policy

The government budget identity

Expenditure less (non-debt) receipts \equiv Fiscal Deficit

or $G + TR - TI - TP - NTR - RA \equiv \text{Fiscal Deficit}$

1. Expenditure (G) +
2. Net Transfers (TR) –
3. TI (Net Indirect Taxes) –
4. TP (Personal Taxes) –
5. NTR (Non-Tax Revenue) –
6. RA (Receipts from Asset Sales) \equiv Fiscal Deficit

– Note: RA is not part of current income or production

Receipts and expenditure of the Central Government (% of GDPfc)

	2011-12	2012-13	2013-14 (B.E.)	2013-14 (P)
GDP at Factor Cost (Rs billion)	83917	93889	104728	104728
1 Revenue receipts (a+b)	8.95	9.35	10.09	9.69
(a) Tax revenue (net of States' share)	7.50	7.88	8.44	7.79
2 Revenue expenditure	13.65	13.24	13.71	13.13
of which:				
(a) Interest payments	3.26	3.34	3.54	3.60
(b) Major subsidies	2.52	2.64	2.11	2.36
(c) Defence expenditure	1.23	1.19	1.12	1.18
3 Revenue deficit	4.70	3.90	3.63	3.44
4 Capital receipts	6.59	5.67	5.81	5.23
of which:				
(b) Other receipt (mainly PSU disinvestment)	0.22	0.28	0.53	0.26
5 Capital expenditure	1.89	1.78	2.19	1.79
6 Total expenditure [2+5]	15.54	15.02	15.90	14.93
7 Fiscal deficit [6-1-recovery of loans-4(b)]	6.15	5.23	5.18	4.85
8 Primary deficit [7-2(a)]	2.89	1.89	1.64	1.25

Source : Union Budget documents and Controller General of Accounts as reported in Economic Survey, 2014.

BE : Budget Estimates P: Provisional Actuals (Unaudited)

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