

## FISCAL POLICY

- It is the primary level of economic stabilization policy by influencing aggregate demand in the economy to achieve higher economic growth, full employment and price stability.
- The major difference b/w monetary & fiscal policy is the govt. body which executes the policy.  
Fiscal policy is implemented by the govt. whereas monetary policy is implemented by the apex bank of a country.
- Fiscal policy is the manipulation of govt. spending and taxation.
- Balanced :  $G = T$   
Expansionary :  $G > T$   
Contractionary :  $G < T$
- Fiscal policy is a measure directed towards increasing the aggregate demand.
- Deficit budget shows the implementation of expansionary fiscal policy.  
Surplus budget  $\Rightarrow$  Contractionary fiscal policy  
Balanced budget  $\Rightarrow$  Balanced policy.

## Procylical v/s countercyclical

### Pro-cyclical

- Keeps cycle going: Spending goes up (taxes go down) in booms & spending goes down (taxes go up) in recessions. It keeps the cycle moving & does not change the direction of cycle.
- Private sector "damage control" actions  
In times of recession, govt. cannot do much to improve the cond. as demand is low, ∴ private sector plays the central role.

### Countercyclical

- Changes cycle's direction  
This type of fiscal policy changes the direction in which business cycle was going. It pulls out the economy from recession and goes to boom and vice-versa.
- Public sector actions  
In this type of policy, govt. is responsible for the actions.
- Fiscal policy is generally procyclical in emerging market economies (EMEs), as

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against being countercyclical in advanced economies. (ATs).

- Unlike developed countries, fiscal policy in developing countries is procyclical even during (moderate) recessions; in "good times", however, fiscal policy is actually more procyclical in developed economies.
- Therefore, there is no thumb rule for implementing fiscal policies, different policy measures should be adopted in different situations.

### \* Why is Fiscal Policy often ~~Procyclical~~ Procylical?

- We explain this policy failure with a political agency problem. Procyclicality is driven by voters who seek to "starve the Leviathan" to reduce political rents. Voters observe the state of the economy but not the rents appropriated by corrupt governments. When they observe a boom, voters optimally demand more public goods or lower taxes, and this induces a procyclical bias in fiscal policy. The empirical evidence is consistent ~~with~~ with this explanation: procyclicality of fiscal policy is more pronounced in more corrupt democracies.
- More public action or more govt. spending

leads to more corruption.

when the public demand lower taxes & more govt. expenditure at the same time then it is contradictory.

Public actions generally lead to more corruption whereas if some facilities are provided by the private sector then they are more effective and transparent in nature.

If there is more govt. expenditure, then there is a greater possibility that a huge amount will be sucked up by the govt. individuals directly involved in the implementation of the policy.

There is evidence that fiscal policy is expansionary - a channel disregarded by the existing literature - lending empirical support to the notion that when "it rains, it pours".

Apart from adverse political consequences, there can be other effects like high inflation rates due to increased demand.

In the first half of the 20<sup>th</sup> century, fiscal policy attributed to Keynesian policy - deficiency of AD can be overcome by expansionary fiscal policy - through higher

govt. spending..

It was adopted during Great Depression 1930s and rebuilding the war-managed economies of Europe and Japan after World War II.

Keynesian policy was challenged in early 1970 due to -

- i) Breakdown of the Bretton Woods agreement.  
It was an agreement b/w 44 countries.  
~~It~~ The exchange rate and the currency that any country will hold will depend upon the gold possessed by the country. This agreement was based on Keynesian policy but in 1970s it was found to be inappropriate and hence it was dropped.
- ii) OPEC oil shock of 1973.  
This led to huge inflation in the countries which imported oil from OPEC countries.
- iii) Mounting inflationary pressure in USA.  
By 1970s, there was huge inflation in the USA.

All this resulted in challenging the Keynesian ~~exp~~ presumption of expansionary fiscal ~~measure~~ measure.

Economists came with new classical persuasion  
- Discretionary fiscal policy leads to market distortions.

~~Expo~~ Expansionary fiscal policies which are discretionary in nature lead to distortions in market.

The allocation of resources happen a/c to relative prices but there is a distortion in this case due to expansionary fiscal policy.

With rising debt and debt problems, fiscal policy lost its importance to being mere demand shock to be addressed through monetary policy, and monetary policy became dominant as a stabilisation policy in 1990s.

Monetary policy supplanted the fiscal policy in 1990s.

Adaptation of the Inflation Targeting (IT) framework by many central banks and easing of inflation pressures - known as 'Great Moderation' - provided credible evidence and intellectual support for dominance of monetary policy until the Global financial crisis in 2008.

Despite best efforts of major central banks

in reducing interest rates by adoption of quantity easing (QE) measures, credit conditions remained tight resulting in large scale unemployment in many countries.

Monetary policy became ineffective, and once again fiscal policy gained attention.

However, the effectiveness of fiscal stimulus gets negated in EMFs since policy credibility in these countries is weaker than in AEs.

### Discretionary policy

legislated changes: Discretionary fiscal policy refers to changes in taxes or spending that are the result of deliberate changes in government policy.

(Changes in taxes, spending, etc in response to economic events).

E.g. National Food Security Act, MNREGA, etc.  
∴ These are some legislative acts passed in order to spend money in some particular sectors.

### Automatic stabilizers

Programs that act counter-cyclically

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Automatic stabilizers are revenue and expenditure items in the budget that automatically change ~~not~~ with the state of the economy in such a way as to stabilize GDP.

In case of progressive tax system, when income of the economy rises, people move to higher tax bracket and tax collected by the govt. rises whereas when income falls, people move to lower income bracket & tax collected by the govt. falls. This is an automatic system, there will be automatic stabilization.

Automatic stabilizers are:

- Programs for unemployed
- Progressive tax system

$$Y = C + I + G$$

Adding Net Taxes ( $T$ ) and Government purchases ( $G$ ) to the circular flow of Income when govt. enters the picture, the aggregate income identity gets cut into three pieces:

$$Y_d = Y - T$$

$$Y_d = C + S$$

$$Y - T = C + S$$

$$Y = C + S + T$$

$$AE = C + I + G$$

Date / /

Adding taxes to the consumption function with taxes a part of the picture, the aggregate consumption func' is a func' of disposable, or after-tax, income.

$$C = a + bY$$

$$C = a + bY_d$$

$$Y_d \equiv Y - T$$

$$C = a + b(Y - T).$$

### The leakages/injections approach

Taxes ( $T$ ) are a leakage from the flow of income. saving ( $S$ ) is also a leakage.

In eq., aggregate output (income) ( $Y$ ) equals planned aggregate expenditure ( $AE$ ), and leakages ( $S + T$ ) must equal planned injections ( $I + G$ ). Algebraically,

$$AE \equiv C + I + G$$

$$Y \equiv C + S + T$$

$$C + S + T = C + I + G$$

$$S + T = I + G$$

### Countering recession

- AE increases via
- $G$  increase
- $C$  increase and/or
- $I$  increase

AE change  $\times$  multiplier = Eq. change.

In case of expansionary fiscal policy, G rises or T falls.

G change = AE change

G up \$100 = AE up \$100.

assume multiplier = 4

\$100  $\times$  4 = \$400 change in eq.

If govt expenditure goes up by 1 unit, this translates to a more than one unit increase in aggregate demand.

Under closed economy,  $y(1-C) = I + G$

If  $\Delta G$  is the increase in govt expenditure, marginal propensity to consume is  $C$ , the change in output is  $\Delta Y$  is  $k$  times  $\Delta G$ , where  $k$  is the fiscal multiplier

$$k = \frac{1}{1-C}$$

In an open economy,  $y = C\{y - t(y)\} + I + G + X - M(y)$

$$\text{Then } \frac{\Delta y}{\Delta G} = \frac{1}{\{C(1-t) + m\}} = k$$

$m$  is the marginal propensity to import &  $t$  is the rate of tax on income. Leakages of imports reduce the power of govt. expenditure in an open economy.

## The tax multiplier

A tax cut increases disposable income, which is likely to lead to added consumption spending. Income ~~will~~ will increase by a multiple of the decrease in taxes.

However, a tax cut has no direct impact on spending.

$$\Delta Y = (\text{initial increase in aggregate expenditure}) \times \left( \frac{1}{MPS} \right)$$

$$\Delta Y = (-\Delta T \times MPC) \times \left( \frac{1}{MPS} \right) = -\Delta T \times \left( \frac{MPC}{MPS} \right)$$

$$\frac{\Delta Y}{\Delta T} = -\frac{MPC}{MPS} = \text{Tax Multiplier}$$

The tax multiplier for a change in taxes is smaller than the multiplier for a change in government spending.

## The Balanced-Budget Multiplier

The balanced-budget multiplier is the ratio of change in the ~~aggregate~~ eq. level of output to a change in government spending where the change in government spending is balanced by a change in taxes so as not to create any deficit.

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Policy stimulus Multiplier  $\Delta Y$

Govt. spending multiplier	Inc. or dec. in the level of govt. purchases	$\frac{1}{MPS}$	$\frac{\Delta G}{MPS}$
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Tax multiplier Inc. or dec. in the level of net taxes  $\frac{-MPC}{MPS}$   $\frac{-\Delta T \cdot MPC}{MPS}$

Balanced - Simultaneous balanced - budget inc. or dec. in multiplier the level of govt. purchase and net taxes.

If we combine the effects of the govt. spending multiplier and the tax multiplier, we obtain:

$$\frac{\Delta Y}{\Delta G} = \frac{1}{MPS} \quad \frac{\Delta Y}{\Delta T} = \frac{-MPC}{MPS}$$

$$\frac{1}{MPS} + \frac{-MPC}{MPS} = \frac{MPS}{MPS} = 1$$

A simultaneous increase in govt. spending by \$1 and lumpsome taxes by \$1 will increase eq. income by \$1.

$$Y = C + I + G$$

$$C = a + b(Y - T)$$

$$Y_d = Y - T$$

$$T = T_0 + tY$$

$$I = I_0$$

$$G = G_0$$

$$Y = a + bY - bT_0 - btY + I_0 + G_0 \quad Y - bY + btY = a - bT_0 + I_0 + G_0$$

$$Y(1 - b + bt) = a - bT_0 + I + G_1$$

$$Y = \frac{1}{1 - b + bt} (a - bT_0 + I + G_1)$$

The lumpsum tax affects the autonomous expenditure or the numerator value whereas the proportional tax affects the multiplier or denominator value.

$$Y = C + I + G_1 \quad Y = a + b(Y - T) + I + G_1$$

$$C = a + b(Y - T) \quad Y = a + bY - bT + I + G_1$$

$$Y_d = Y - T \quad Y - bY = a - bT + I + G_1$$

$$T = T_0 \quad Y(1 - b) = a - bT + I + G_1$$

$$I = I_0 \quad Y = \frac{1}{1 - b} (a - bT + I + G_1)$$

$$G = G_0$$

## \* Countering Inflation

AE decrease via

- G<sub>1</sub> decrease
- C decrease
- I decrease

AE change × multiplier = Eq. change.

For countering inflation, contractionary fiscal policy is used which aims at decreasing aggregate expenditure. which in turn leads to fall in income via multiplier effect.

$G_I \text{ change} = AE \text{ change}$

$$G_I - \$100 = AE - \$100$$

assume multiplier = 4

$$-\$100 \times 4 = -\$400 \text{ in eq.}$$

## Effects of Fiscal Policy.

Recession  $\Rightarrow$  Expansionary fiscal measure

Inflation  $\Rightarrow$  Contractionary fiscal measure

- \* An increase in Govt. purchase

Effects:

leads to increase in demand.

$C$  is unchanged as  $Y-T$  is not affected, supply remaining unchanged. This must be met by a decrease in investment. This requires interest to rise.

$$Y = C + I + G_I$$

~~I~~  $\rightarrow$  in  $G_I \Rightarrow$  increase

$I \Rightarrow$  decrease. ( $\&$  increase).

Because tax has not increased, increased govt purchase is financed by borrowing (Reducing public savings).

With private savings unchanged, national savings fall. Interest rates rise to bring about eq. b/w  $S$  &  $I$ . Rise in interest may create crowding out.

## \* A decrease in Taxes Effects

A rise in disposable income by  $\Delta T$ . C rises by  $\Delta T \times MPC$ . Higher MPC leads to higher C. Given production and govt. purchases, there is decrease in investment, thus interest must rise.

Goods market is affected by the fiscal policy i.e. IS curve is affected.

Govt. purchase multiplier, taxation multiplier, increase income, increase interest.

## Some basic Definitions

**Revenue Receipts:** Tax + Revenue + Non-tax  
 Revenue (Direct taxes + indirect taxes + interest receipts + total profit).

**Capital Receipts:** Recoveries of ~~loans~~ loans + other capital receipts + borrowing and other liabilities.

**Revenue Expenditure:** Non plan exp on revenue a/c + plan exp on revenue a/c.

**Capital Expenditure:** Non plan. exp on capital a/c + plan exp on capital a/c.

Capital expenditure is ~~pay~~ on capital assets like buildings & other infrastructure while revenue expenditure is ~~on~~ payment of salary to govt. employees, etc.

Plan Expenditure: Current Development and Investment outlays (both revenue a/c and capital a/c).

Non-plan Expenditure: Interest payments + subsidies + defense exp (both revenue a/c and capital a/c).

Non-plan expenditure are the payments that govt. has to make every year. They are the necessary payments.

Plan expenditure is the expenditure which the govt. plans to make for development of the economy in the current year. It may vary from year to year a/c to diff. conditions.

Plan expenditure is not used nowadays. The old planning commission has now been replaced by Niti dayog. Recurring & Non-recurring expenditure are used these days.

Revenue deficit: Revenue exp - revenue receipts

Fiscal Deficit :

total exp - (revenue receipts + recoveries of loan + of other capital receipts)  
= borrowing and other liabilities

In order to fulfill the fiscal deficit, the govt. has to borrow from some sources :-

fiscal deficit = borrowing & other liabilities

Primary Deficit : fiscal deficit - interest payments

Interest payments are unavoidable as the govt. has borrowed and interest payment corresponds to a year.

Primary deficit, in a sense relates to the current year.

## \* Fiscal Policy in India

India is one of the emerging market economies which is semi-open and growing very fast. India's fiscal system has reformed significantly since early 1990s, with several ups and downs.

2<sup>nd</sup> half of 1980s : Govt pursued expansionary fiscal policy  
Average fiscal deficits ran about 8% of GDP

## gross fiscal deficit (centre and states)

1990-91: 9.1% (centre: 6.42%; states: 3.17%)

2009-10: 9.43% (centre: 6.46%; states: 3.01%)

2020-21: 9.2% (centre: 5.27%; states: 4%)

Targeted central fiscal deficit: 6.8%

Expansionary fiscal policies should be implemented by the central fiscal deficit should not go beyond a particular targeted value otherwise the economy becomes less sustainable.

Fiscal Deficit of a select comparable countries in Dec 2020:

China: 6.5%

Brazil: 14%

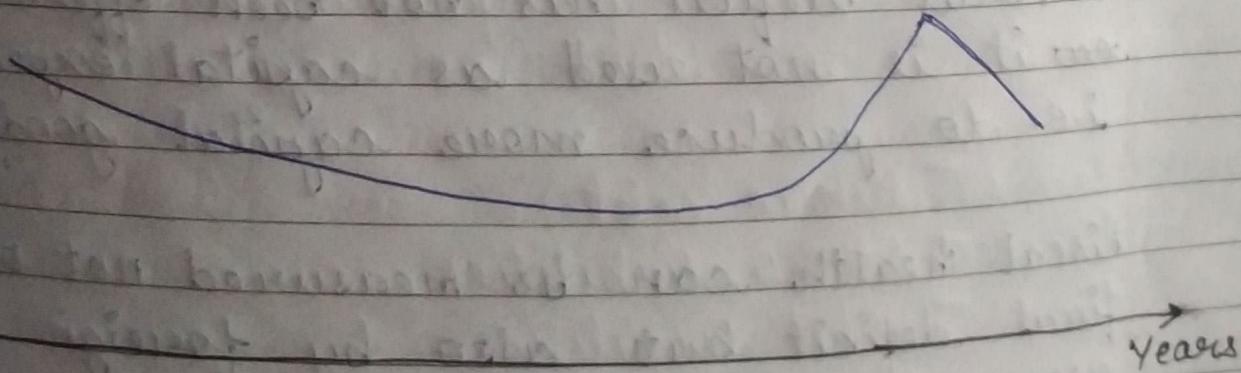
USA: 15.2%

Numbers are high; one of the main reasons is Covid-19.

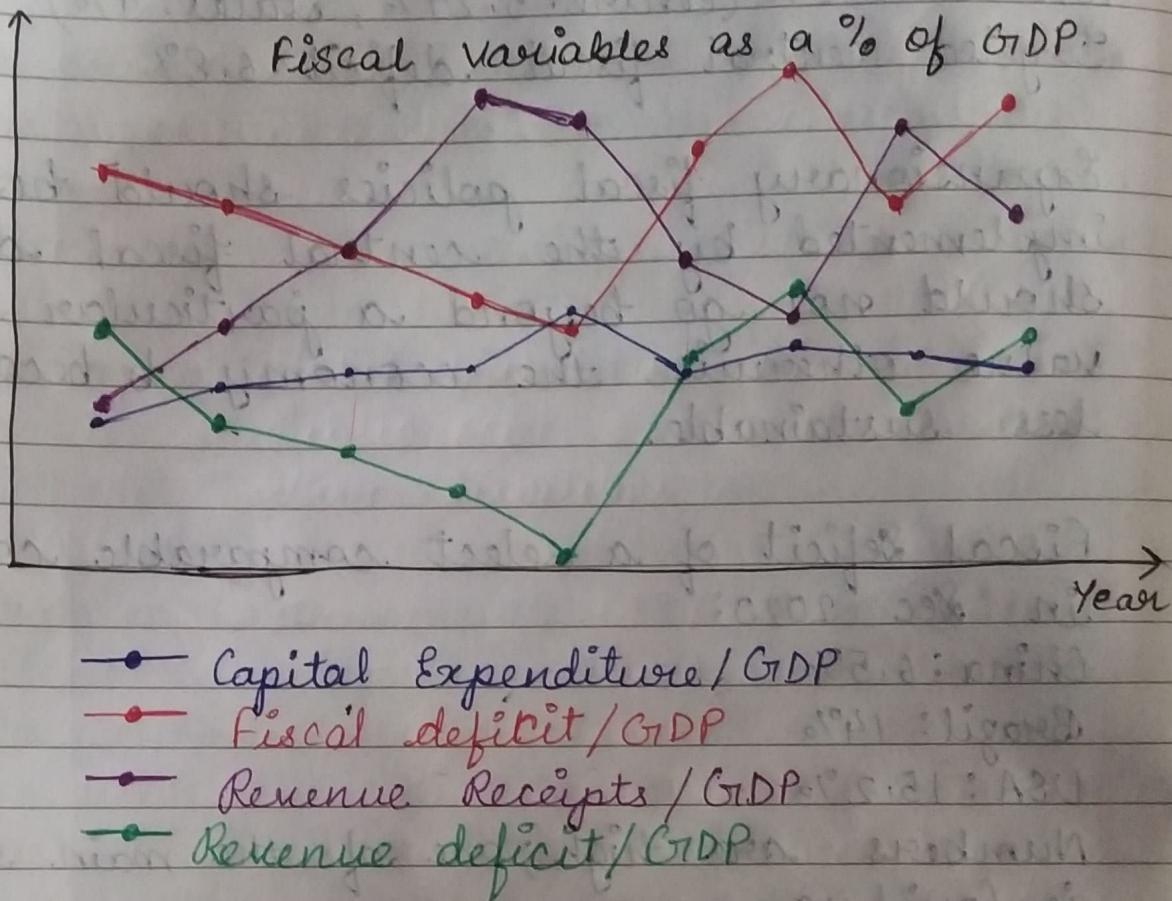
fiscal deficit

(% of GDP)

Jump due  
to Covid 19.



The ratio of revenue receipts-GDP rose steadily b/w 2003-04 and 2007-08 and then declined - one of the reasons being tax concessions.



In many years, even with high fiscal deficit, capital expenditure is low.  
 $\therefore$  Fiscal deficit has not been efficient as it is not used as capital expenditure i.e. to produce more capital goods.

Fiscal health can be measured not only by fiscal deficit but also by foreign exchange reserve.

\$1.2 bl in January 1991  
above \$582 bl in 2020

India's general govt debt as a % of GDP.  
1991: 75.33%

2020-21: 76% (Central share: 66.6%)

Central govt debt: Internal: 71.6%  
External: 5.6%

Internal govt debt is much higher than the external debt for any economy.

Swing 2020 general govt debt as a % of GDP  
in

Japan: 234.18%

Greece: 181.60%

Italy: 127.50%

Portugal: 137.4%

USA: 82%

China: 61.7%

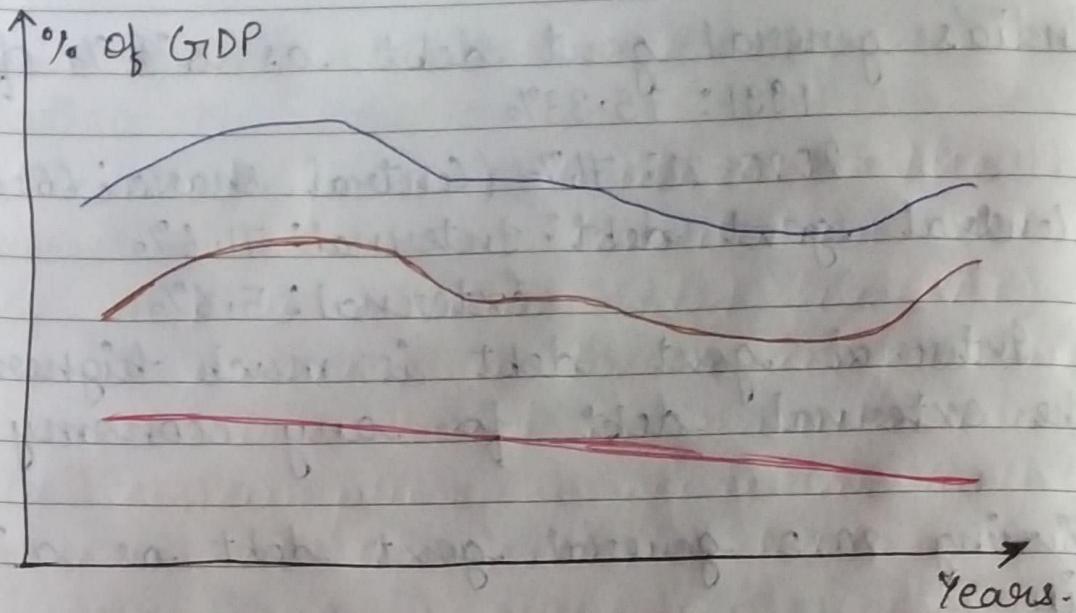
Indonesia: 40%

### External Debt

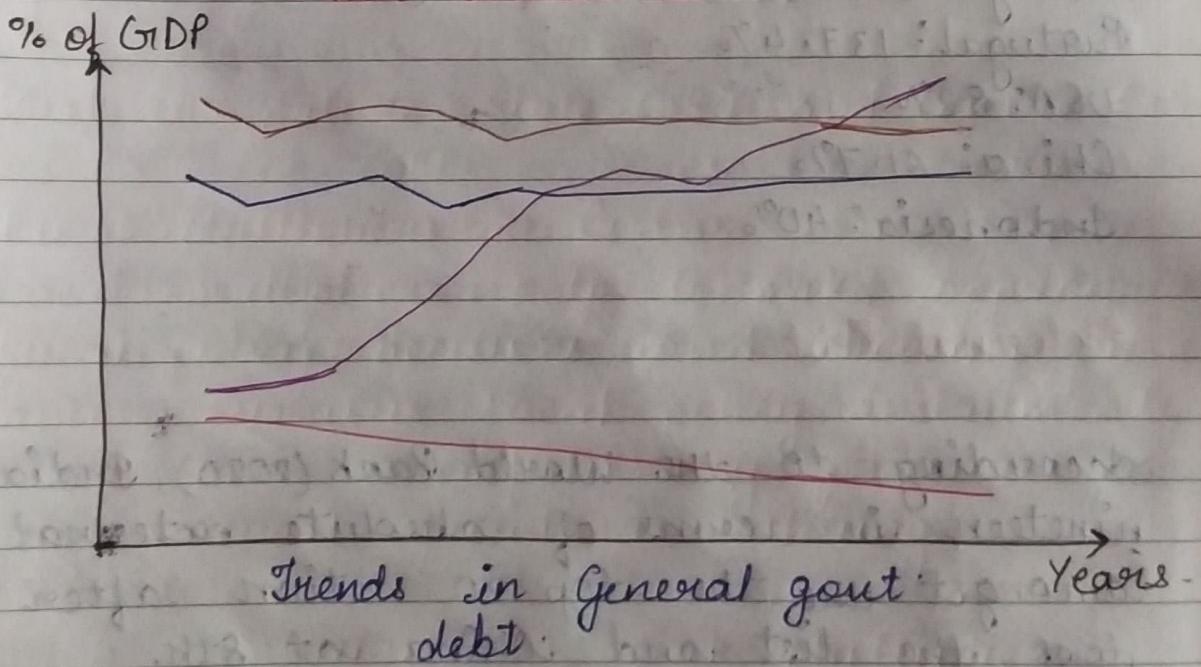
According to the World Bank (2020), India ranks nineteen in terms of absolute external debt amongst the top 20 nations after US tops the list and China at 8th.

Among Brics countries, in terms of indebtedness, India is at fourth position after China, Brazil and Russian Federation.

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- Total Liabilities
- Public Debt
- Other Liabilities



- Public Debt
- Other Liabilities
- Total Liabilities
- Public Debt as % of Total Liabilities

Short-term Debt of the general Government  
Short-term debt of the General Government comprises short-term debt of Central Government and states after meeting out inter-governmental debt.

### Tax structure in India

Since early 1990s, India's tax system has undergone a change from highly interventionist system towards more neutrality.

Direct and Indirect tax, with later dominating

Direct taxes: 95% total direct taxes are collections of corporate taxes and taxes on personal income.

Indirect taxes: Consolidated under a goods and services' tax (GST). The imp taxes under GST are:

General sales tax

Union excise duties

Special addition duty

Customs duty

Service tax.

Date \_\_\_\_\_

## \* GST

Introduced from 1 April, 2017 - The Constitution Act, 2016

The GST is a Value Added Tax (VAT) and is proposed to be a comprehensive indirect tax levied on manufacture, sale and consumption of goods as well as services at the national level.

It replaces all indirect taxes levied on goods and services. But still it does not include petrol, oil, diesel, etc.

Dual in nature - State GST and Centre GST.

### Fiscal Multipliers in India

Fiscal multipliers help to make appropriate fiscal policy decisions and choosing from among various fiscal policy instruments when there is inflationary pressures or when overall growth is faltering.

	Variable Multiplier	Peak Multiplier
Revenue Expenditure (Central Govt)	0.45	
Revenue Expenditure (State Government)	0.82	
Capital Expenditure (Central Government)	3.25	
Capital Expenditure (State government)	2.00	

Estimated revenue expenditure multipliers (center and states) are less than unity.

A value of 3.25 for the capital expenditure multiplier implies that an increase of Rs 10 million in capital expenditure by the government would raise GDP by Rs 32.5 million, by the end of the year.

### Govt debt externally financed

Relatively small

On concessional term

The spending of the borrowed money should be made on productive heads such that borrowing becomes sustainable.

If the borrowing is utilized for infrastructure building then it will create employment which will lead to increase in income & ultimately increase in consumption.

### Domestic Debt

Long maturity structure

Low long term rates.

Certain Major Concerns needing attention

Quality of public expenditure (Unproductive spending)

Capital expenditure must rise significantly (Infrastructure)

Revenues used for servicing public debt is a concern.

Revenues may be used for paying back public debts which is not a ~~not~~ productive spending.

Current (revenue) expenditures of the states as a % of GDP outpaces the centre's. Revenue expenditure is generally unproductive spending and it is larger than capital expenditure. ∴ Revenue expenditure must be decreased & capital expenditure should rise.

Expenditure on health and education is much lower than required.

Government borrowing is more responsive to revenue expenditure than capital outlay

state-specific factors affecting fiscal performance play an important role in government borrowing.

Mounting wage and pension costs (impact of pay revision)

Populist measures (states ~~to~~ play a significant role).

Both tiers offset pressures by a compromise on capital expenditure.

Agriculture outside the tax net.

Tax concessions and tax holidays.

E.g. in North-eastern states, ~~not~~ if some new firm is setup, it is often given tax holiday for some few initial years i.e. it is free from paying taxes. Some states are also given tax concession.

Not much is done with monetary policy.

India's growth is below potential

As long as output is below potential, public spending can be financed through borrowing from RBI.

Fiscal adjustment required at centre & states

The most important factor is that the govt spending should be targeted to more productive heads.