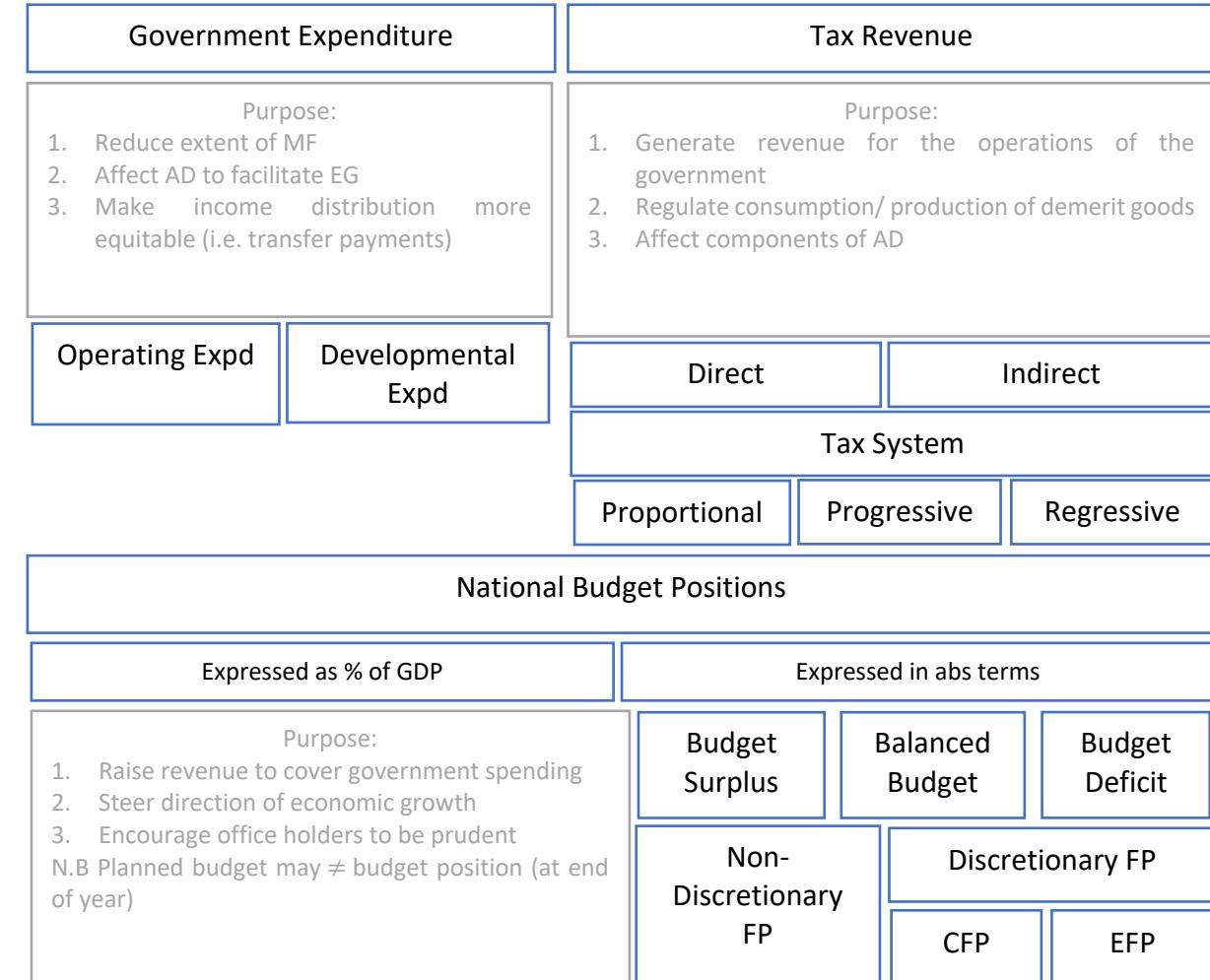


## Fiscal Policy

DD mgmt policies	MP	ExΔ rate P	FP
Tools	Money Supply i/r	ExΔ rate Foreign Reserve	Govt Expd Taxes
Governing Body	CB	CB	Govt
Main Obj	AD	AD	AD + AS

Taxes	Direct Tax	Indirect Tax
Imposed on	Income and Wealth	Expd or pdtn of g/s
Burden	Borne by person/ company paying the taxes	Borne by Pr; depending on PED, Cr will be made to pay part of the burden
Affects	<b>AD</b>	<b>SRAS</b>

Tax System	Proportional Tax	Progressive Tax	Regressive Tax
Definition	A tax is proportional if it takes away the <u>same proportion of income from taxpayers</u> , regardless of the level of total income.	A tax is progressive if it takes away a <u>larger proportion of income from those with higher income than those with lower income</u> .	A tax is regressive if it takes away a <u>decreasing proportion of income from those with higher income than those with lower income</u> .
Example	Corporate tax (17% in SG)	PIT/ Property Tax	GST



#### Characteristics of SG FP:

- Uses surpluses to fund any budget deficit
- Net investment returns contribution (NRIC) is a major source of income for SG govt.
- Defense (geopolitical cond) and education take up large proportion of budget (increase LT competitiveness of SG)
- Ageing popn → healthcare spending will increase
- Overall progressive tax system that serves redistributive goal of SG FP
- Shifting away from direct to indirect taxes (regressive- mitigate by giving GST credit, rebate on conservancy charges)
- Purpose:
  - (1) Broaden and diversify tax base  
Taxation is spread more broadly → reduce future pressure to raise income taxes → maintain incentive for people to work and strive for higher Y
  - (2) Ensure sustainable tax revenue flow  
Ageing popn → Y tax base will shrink, healthcare related expd will increase → heavier tax burden for young SGreans
  - (3) Create more incentive to work and earn higher income to maintain global competitiveness  
High CIT, PIT relative to other ctries → deter investors from investing and deter individuals

#### Goal of SG FP:

Promote LT EG, instead of ST DD management

There is limited scope for active DD mgmt in SG.

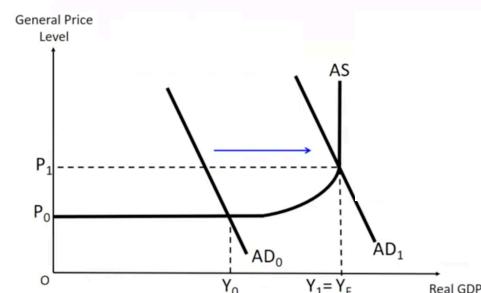
1. Relatively small dom eco
2. High m/p leakages
3. Relatively small k

FP is still relevant

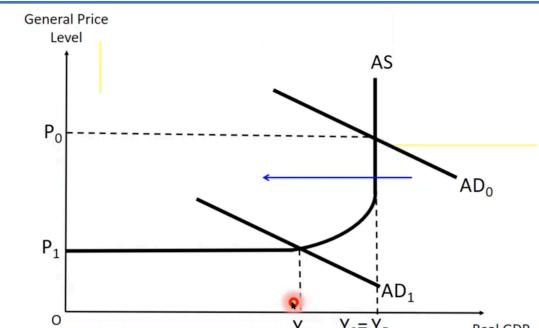
1. Multiplier or discretionary fiscal measures not insignificant
2. Relatively short implementation lags
3. Limited crowding out effects

#### Discretionary FP

##### EFP



##### CFP



#### Consequences:

- Affect SOL by affecting  $Y_d$**
- Affect income and wealth distribution owing to transfer payments and type of tax system**
- Affect level of investment** due to crowding out effect
- Affect cop** due to competing effects; income and substitution effect
- Affect level of inflation** due to wage-price spiral and trade unions
- Affect potential growth**
- Affect resource allocation** due to firms not being able to distinguish rise in px caused by rise in DD or rise in indirect taxes and pattern of production of country

#### Limitations:

1. Time Lag
2. Inflexibility of govt expdt
3. Unpredictability of market sentiments
4. Size of multiplier
5. Policy conflicts
6. Crowding out effect

## Definitions:

- Fiscal Policy refers to the deliberate attempt to regulate AD and the economy through changes in the fiscal tools, namely, government expenditure<sup>1</sup> and taxes.
- An EFP involves raising govt expd and/ or reducing taxes.
- A CFP involves cutting govt expd and/ or raising taxes.
- Taxes are compulsory payments made by individuals or producers in the private sector to the government.
- Direct Taxes are taxes on income and wealth paid direct to the Tax Department.
- Indirect Taxes are taxes on expd or pdtn of g/s.
- Automatic stabilisers are features of government expd and taxation that change automatically to dampen fluctuations in economic activity.
- Discretionary FP refers to deliberate changes in government spending and/or taxes to affect AD.

## Budget:

- Government incurs a budget deficit → need to borrow to finance this deficit/ use reserves accumulated from past budget surpluses/ resort to printing more money → **increases country's national debt/ reduce reserves** the country can tap on in the future/ **inflationary pressure** (due to increase Ms, decrease i/r, C,I increase, increase GPL)

Factors which determine whether budget deficit is a concern:

- Ability to finance deficits<sup>2</sup>
  - Government has surplus to fall back on → not a concern
  - If government borrows to finance deficit → concern
    - a. Increase taxes in future to finance debt → disincentive to work and invest → decrease future SOL
    - b. Borrow from other country → interest rate has to be paid abroad → transfer of wealth from domestic citizens to foreigner → able to import less due to repayment of debts
    - c. Borrow from domestic economy → crowding out effect
- How to deficit is used
  - Government spends on infrastructure → increase future investment → increase NY → generate tax revenue for govt → not a concern
  - Government spends on unproductive uses (e.g. UnE benefit) → concern

To deal with budget deficit, better to cut spending rather than increase taxes:

- Increase tax → (summary table exp) → decrease C/ I, coupled with bleak economic outlook → decrease C/I by greater extent → further weaken economy → may require EFP → larger budget deficit
- In contrast, decrease G in unproductive areas (i.e. transfer payment and postpone non-essential infrastructure projects) → smaller -ve impact on economy, although decrease G in infrastructure projects affect potential growth

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<sup>1</sup> Government purchases (G) and transfer payment. The latter isn't included in GDP as it does not represent any currently produced g/s.

<sup>2</sup> Debt as proportion of GDP and whether the debt is largely internal or external

## Non-Discretionary FP: Automatic Stabilisers

- Purpose
  - Boost AD** during periods of recession
  - Dampen AD** during periods of expansion

- Example: In context of economic expansion

	Income taxes due	UnE Ben
Lvl of change	Increase	Decrease
Explanation	Total Y increase → proportion of income paid out in taxes will increase in a progressive income tax sys	Workers less likely to be UnE → decrease in amt of UnE Ben paid out
Overall impact on C	Dampen growth in C during economic expansion → relief inflationary pressure OR Cushion the fall in Yd and hence fall in consumption and NY during economic contraction → NY decrease less than it otherwise would	

## Discretionary FP

	Expansionary FP	Contractionary FP
Purpose	<b>Increase AD</b> to reduce the amount of UnE resources in the eco → stimulate NY and employment	<b>Reduce AD</b> to dampen inflationary pressures
Implemented when	Recession/ when economy is operating below full E level/ budget surplus	Inflationary situation caused by excessive demand/ when eco is operating beyond full E lvl/ budget deficit
Affect AD (C, I, G)	Refer to summary sheet for DD mgmt policies  Extent of impact on NY will depend on <u>extent of increase in C/I, size of multiplier, state of economy (e.g. budget position)</u> .	
Diagram	<p>The graph shows the AD-AS model. The vertical axis is 'General Price Level' and the horizontal axis is 'Real GDP'. An upward-sloping 'AS' curve intersects a downward-sloping 'AD<sub>0</sub>' curve at a point corresponding to output <math>Y_0</math> and price level <math>P_0</math>. A second, steeper downward-sloping curve, 'AD<sub>1</sub>', represents an increase in aggregate demand. The new equilibrium is at the intersection of 'AD<sub>1</sub>' and 'AS', corresponding to a higher output <math>Y_F</math> and a higher price level <math>P_1</math>. A blue arrow points from <math>AD_0</math> to <math>AD_1</math>, indicating the shift.</p> <p>N.B. AD need not increase so much as to go to <math>Y_F</math>. Also, EFP too strong → <b>fuel inflation</b> as AD increases further than <math>AD_1</math>. Ctries may have difference in EPE due to <u>size of k, budget positions, sustainability of initiatives</u><sup>3</sup>.</p>	<p>The graph shows the AD-AS model. The vertical axis is 'General Price Level' and the horizontal axis is 'Real GDP'. An upward-sloping 'AS' curve intersects a downward-sloping 'AD<sub>0</sub>' curve at a point corresponding to output <math>Y_F</math> and price level <math>P_0</math>. A second, flatter downward-sloping curve, 'AD<sub>1</sub>', represents a decrease in aggregate demand. The new equilibrium is at the intersection of 'AD<sub>1</sub>' and 'AS', corresponding to a lower output <math>Y_1</math> and a lower price level <math>P_1</math>. A blue arrow points from <math>AD_0</math> to <math>AD_1</math>, indicating the shift.</p>

<sup>3</sup> Govt spending on public infrastructure project likely to be more sustainable than giving out gift vouchers and will have ST and LT effects. **ST:** Increase AD via k process, **LT:** Increase Qty/ Qly of FOP → LRAS shift right  
Rise in govt expd will raise NY more than decrease in taxes, as it is **more direct**.  
**Balanced budget (G=T) can be expansionary.**

Potential Consequences of FP:

SOL	Affect cost of production	Affect level of investment	Inflation
EPE → increase G and/ or decrease in T → increase in AD → increase NY by multiple times → reduce level of UnE → <b>Yd increase → purchasing power increase → consumers able to consume more g/s → mat SOL increase</b>	<b>Income Effect</b> Higher taxes → people c/n afford to have the same amt of leisure and g/s as before → cut consumption and leisure by working more → income effect states that the more they work the less they have to cut down on their consumption → <b>encourage people to work more → large pool of employable workers → competitive wages → lower cop</b>	Insufficient tax revenue to fund EPE → government has to resort to borrowing from private sector → increase DD for money → increase i/r → increase COB → discourage private borrowing → reduce private investment → <b>increase G comes at expense of fall in private investment</b> → public investment is crowded out → uncertain effect on AD → <u>depends on extent of fall in I and increase in G</u>	Increase direct taxes → increase cop → increase GPL → increase COL → decrease real income → trade union demand higher wage increases → if successful, increase cop further → further inflation → wages and prices chase each other upward → <b>wage-price spiral</b>
Income Distribution			
Govt expd on health, educational svcs, social welfare, old age pension <b>mainly benefit lower income → given progressive tax system</b> → revenue from taxing rich goes to <b>reducing Y inequality and improve wealth distribution</b>	<b>Substitution Effect</b> Higher taxes → create disincentive to work → encourage absenteeism and discourage overtime work → extra hour taken in leisure now involves smaller sacrifice in C → <b>higher taxes encourage people to work less → pr need to offer higher wages to attract employable workers → increase cop</b>	Heavy progressive direct taxes → <b>reduces savers ability to save → reduces funds deposited in banks → reduce funds available for I</b>	Increase direct taxes → reduce Yd → reduce AD → reduce GPL → unions may press for wage increase → if successful, inflation may result
			Resource allocation
Government issues bonds to raise money → interest payment on bonds redistribute income from taxpayer to holders of government bond → <u>rich are more likely to be able to afford to buy government bonds</u> → rich more likely to receive interest payment → may worsen <b>income inequality</b>	N.B. Depends on which effect dominates. <b>For lower income workers/ workers with fixed commitment to meet, higher income taxes may lead to more labour supply.</b>	<b>Potential growth</b>  Increase G on <b>pdtv uses</b> like infrastructure → improves firms connectivity and accessibility to int mkt → reduce cop → increase I → increase Qty/ Qly of capital in eco → productive capacity increase → achieve potential growth G to <b>non-pdtv</b> uses (e.g. UnE benefit) → do not add to productive capacity → future generation may be worse off	Different rates of indirect taxes on different g/s → price will change → producers <u>unable to distinguish between a rise in price cause by rise in DD/ rise in indirect taxes</u> → wrong decisions can be made if firms allocate too much resources to producing g/s society do not really desire → <b>inefficient resource allocation</b>
			Depending on allocation of government grants and subsidies (e.g. capital/ labour intensive industries) → diversion of resources → <b>affect pattern of pdtn of country</b>

### Limitations of FP:

Time lag (recognition, decision, implementation, impact lag)	Crowding out effect (as explained in consequences of FP)	Direct tax Indirect tax	Equitable (heavier burden falls on those who can pay more tax) Discourages work and investment Tax avoidance
Shorter impact lag than MP <ul style="list-style-type: none"> <li>Don't require that investors and consumers have to <b>borrow to make use of changes in i/r</b></li> <li>I/C takes time to change, <b>increase in G can be immediate</b>, although there's still time lag for transfer payment</li> </ul>	Policy Conflicts		More flexible (can be imposed on demerit gds/ M) Regressive Gds with relatively price inelastic DD → check consumption → high tax → inflation → these goods tend to be necessities → aggravate income inequality
Longer implementation lag than MP <ul style="list-style-type: none"> <li><u>Need economic data of 2 months</u> to recognise recession</li> <li>Change in FP need to be <u>passed in parliament</u> and govt projects need to be <u>evaluated for cost effectiveness</u></li> </ul>	EPE meant to increase employment → cause AD to rise also → upward pressure on px level → <b>inflation and unfavourable balance of payment</b>	Inflexibility of G	Unpredictability of mkt sentiment
	Size of k		Increase PIT to cut growth in C → if people <b>remain optimistic about the future</b> → continue to spend
	Small k → DD management policy <b>may not deliver large increase in NY</b>		Decrease CIT to stimulate I → if <b>eco outlook remain bleak / tax cuts viewed as temporary</b> → firms will not invest

### Singapore's Fiscal Policy:

- Goal: Promote LT EG, instead of ST DD management → focus on enhancing LRAS
  - Limited scope for active DD management in SG
1. Relatively small domestic eco  
**Small domestic market** → rely heavily on **external DD as primary source of growth** → **EFP unlikely to deliver strong impact on economy** as there is only so much the domestic market and population can consume and invest
  2. Small k/ High m/p leakages  
SG is **highly open and is m/p reliant** → relatively large mps (compulsory savings plan) and mpm (reliance on import of i/p and final g/s) outweigh relatively small mpt (competitive tax structure) → relatively large mpw → small k value → multiple increase in NY given increase in AD small → **any increase in C due to EPE will likely leak as out m/p + increase in GDP accrues mainly to foreign workers' remuneration or to foreign contractors and leaks out of SG**
    - Fiscal Policy is still relevant to Singapore
  1. Multiplier or discretionary fiscal measures not insignificant  
**Targeted transfers** to lower income group (e.g. GST credit, Workfare Income Supplement) → relatively higher mpc → tend to have **relatively higher multiplier** → **spend most of what they receive and their spending tends to have smallest m/p leakages** → larger multiple increase in NY
  2. Relatively short implementation lags  
Efficient tax and CPF systems enable the government to distribute transfers quickly
  3. Limited crowding out effects  
**Disciplined and prudent FP** → **deficits are usually financed from budget surpluses** rather than borrowing → **no need to borrow to finance deficit/ impose higher taxes in future** → **avoid crowding out effect + reduce burden on future taxpayers**

### Evaluation of EFP in Singapore:

- Govt **prefers to adjust timing on policy implementation** rather than implement EFP/ CFP as ad-hoc response to fluctuations in economic activity.  
If govt keeps up practice of timely expenditure into the future, SG can maintain continued rate of EG into future, as expenditures are likely to be sustainable.
- **FP has supply side intention**  
Low PIT/ CIT → attract foreign talent and FDI  
G on infrastructure/ extensive training institutions → increase qty and qly of FOP → increase LRAS + increase real GDP if eco operating near/ at Yf
- **Little scope to decrease T further and government spending might be better alternative to achieve actual growth**  
CIT/ PIT already one of lowest in world + ageing popn → increase healthcare expd → ought to avoid running budget deficit in future with steady stream of tax revenue

## Glossary of CSQ/ EQ attempted

To answer most Qns:

- Most of the time is just how policy work (i.e. cheat sheet)
- Consequences of FP usually bring in when discussing impact of policies

EV CSQ vs EQ:

- Purpose: To support your stance
- **CSQ EV must come extract.** EQ no context so EV must come from yourself.

(CSQ1)

Skills and Content:

- Usually for trend comparisons, 1 similarity 1 difference, but if don't have, 2 differences will do, typically make comparisons from entire data frame question wants, unless providing refinement of data.
- Possible ways to comment to data: Direction + anomaly/ Percentage change + absolute change
- What evidence is there in the data that real interest rates were negative in UK for most of 2009 (2m)?

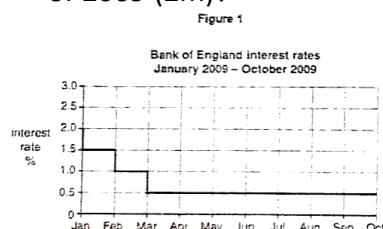


Table 2: Annual percentage change in selected economies

	real GDP			consumer prices		
	2007	2008	2009	2007	2008	2009
Australia	4.0	2.4	0.7	2.3	4.4	1.6
UK	2.6	0.7	-4.4	2.3	3.6	1.9
All advanced economies	2.7	0.6	-3.4	2.2	3.4	0.1

UK's consumer prices in 2009 increased 1.9% (i.e. infln rate is 1.9%), while the nominal i/r did not go above 1.5%. Since real i/r = nominal i/r – infln rate, the real i/r is likely to be negative.

- Context of CSQ is important! To explain how recession affects public sector debt (3):

EFP	Other
<p><b>Cannot</b> explain this. Extract says UK has high debt to GDP ratio and is implementing <b>restrictive</b> FP.</p> <p>In fact, we cannot take for granted govt does EFP during recession. Depends on:</p> <ol style="list-style-type: none"> <li>1. <b>Severity</b> of recession</li> <li>2. <b>Ability</b> to implement EFP</li> </ol>	<ul style="list-style-type: none"> <li>- Recession → business activity and pdtn slow down → UnE rise → <b>more welfare payment by government</b> (1)</li> <li>- Fall in income and consumer spending → ppl pay less income tax and sales tax → <b>tax revenue fall</b> (1)</li> <li>- Taken together, leads to budget deficit → if financed by borrowing, causes government to chalk up high public sector debt</li> </ul>

- Given a warning about a currency's credit rating, its value is likely to fall:  
Downgrade of credit rating → lose confidence/ bring uncertainty for UK economy  
① [Supply]: Don't want to hold too much pound → 'pump' pound for USD instead → rise in SS of pound in mkt for pounds OR ② [Demand] Foreigners expect pound to fall → buy less pound → demand for pound decreases. Then bring in diag and exp.

- Discussing policy impact on an economy: ① Macro Perspective (EG<sup>4</sup>, UnE, GPL, BOP) ② Micro Perspective (Efficiency and Equity)
- For restrictive FP on economy experiencing recession (increase T and/or decrease G):

Impact on	Key points
Actual growth, UnE, GPL (i.e. infln)	<p>... fall in C,I,X → fall in AD → fall in NY  (+ ) fall in DD labour → increase UnE  (+ ) likely GPL remain constant since economy far from Yf</p> <p>BUT, <u>decreasing budget deficit → improve consumer and investor confidence</u> → increase C and I → increase AD → increase NY  (+ ) increase in DD labour → decrease UnE</p>
Potential growth	<ul style="list-style-type: none"> <li>- Increase PIT → decrease Yd → some ppl leave workforce → decrease qty labour</li> <li>- Increase CIT → decrease aft tax profit → less fund to plough back into investment → decrease I → decrease qty and qly of capital</li> <li>- Decrease G on public infrastructure/ education → decrease FDI → decrease qty/ qly of capital</li> </ul> <p>Together, may limit growth in productive capacity and potential growth.</p>
Equity	Decrease G on <u>transfer payment to lower income</u> (e.g. healthcare/ financial assistance) → decrease ability to purchase essential g/s → worsen equity

#### Evaluation:

- UK only has EMP at its disposal in times of recession, as EFP requires increase in G and/or T, which may not be feasible  
Reason being: High public sector debt and increasing public sector debt as proportion of GDP over the years limits ability for govt to execute EFP
- EMP executed with EFP → limit negative impact brought by increase in G and/or T
- In view of budget deficit, focus on spending cuts rather than tax increases (page 3)

N.B. Reasoned conclusion should be provided for all available evaluation marks to be awarded.

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<sup>4</sup> can talk about the different types actual, potential, sustained, sustainable

Not concerned with increase or decrease in individual savings, concerned with **high/ low** individual

**Avoid repeated points:** don't use mps twice and try to **explain from different perspectives** (e.g. +ve/ -ve)

In EV, can attempt to **downplay** the reduced ability to tackle a recession due to thrift by emphasising other factors

(EQ1) Individual saving is collectively harmful, particularly when the economy is facing a recession. As such, the government is often prepared to incur a budget deficit so as to pump-prime the economy.

**Discuss how far the level of thriftiness affects the effectiveness of pump-priming in tackling a recession (25m).**

**Require multiplier process** as focus on NY, 25m, and mps can link to k process

Every effectiveness qn will have an objective to achieve, and you'll need to **address that objective**

Don't need to talk about all 4 goals: only concerned with **UnE and NY**

EFP

Structure:

- Explain how pump-priming resolves the negative effects of recession  
AD-AS analysis with diagram explanation, and explanation for increase in AD
- Explain how level of thrift affects the effectiveness of pump-priming to tackle a recession  
**High lvl of thrift** → high value of mps → Y-induced C will be smaller in each time period → smaller increase in NY + **bleak economic outlook** → expect Y fall/ expect to sell less → decrease C and I → smaller increase in C and I due to pump-priming → smaller increase in AD
- Explain how other factors affect the effectiveness of pump-priming to tackle a recession  
 $\Delta NY = k \Delta AD$ : ① Size of k ② Amt/ duration of tax cut ③ Government ability to fund spending (crowding out effect)

Evaluation:

- Extent of employment generated depends on whether the economy has a large or small % of industries which are labour intensive (Mentioned in MP, EP Notes).  
For a capital-intensive economy, increase real o/p → increase DD capital  
→ UnE may not decrease
- Higher level of thrift is not always damaging for an economy  
Savings constitutes pool of loanable funds that can be channelled towards I → help to increase potential o/p in LT
- Most economies are globalised and much more open to trade compared to many years ago → likely that pump-priming undertaken by govt may not be very effective in raising NY → much of it will leak out of eco due to high mpm compared to the past
- Those who do not need to borrow to fund government spending (e.g. Singapore) will not have to contend with crowding out effects, possibly raising the effectiveness of pump-priming compared to another country who needs to borrow.
- Opportunity cost will arise from pump-priming especially if govt needs to raise taxes in future or cut spending to finance current EFP → depress consumption in future

Standard EV for qns that use DD mgmt policy to tackle UnE