

LOCKIN EDUCATION @ BUGIS



H2 ECONOMICS



ACJC 2025 PRELIM ESSAY PRACTICE

“The more that you read, the more things you will know, the more that you learn, the more places you’ll go.” —Dr. Seuss

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Using AD-AS analysis, discuss the extent to which an aging population makes it harder for Singapore to achieve actual economic growth than to achieve price stability. [15]

Thesis: ageing population makes it harder for SG to achieve AEG than price stability.

C: Ageing population, many people who are retired, loss of income, income fall, PP fall, fall in $w+a$ to consume $g+s$, fall in consumption expenditure. / for working population, will need to support the ageing population, fall in consumer confidence, fall in consumption expenditure. Example: SG, life expectancy is high at 83.5 years + ageing population, many singaporeans are in the "sandwich generation" → have to support their children + non working elderly parents.

I: Ageing population, fall in labour productivity as elderly workers tend to be slower → fall in investor confidence, fall in investment expenditure. Example: Italy suffers from ageing population and the inability to attract foreign investors → one of the weakest economies in EU.

G: Since many are retired, loss of income, don't pay income tax, govt see a fall in personal income tax revenue collected, fall in tax revenue. Since budget = tax revenue - Govt spending, budget worsens, govt spend less on $g+s$, fall in G exp.

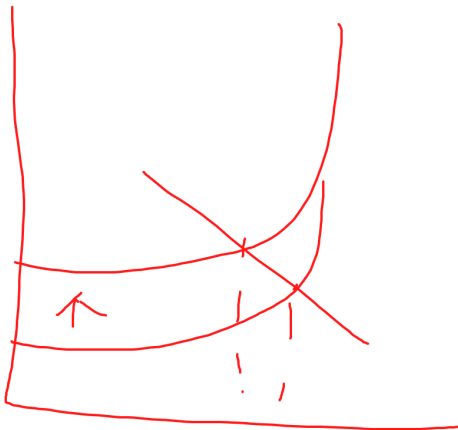
M: need more healthcare equipment to support ageing population, may need to import more healthcare equipment, DD for imports increase, total expenditure for imports increase.

Since $AD = C + I + G + (X-m)$, the fall in C/I/G and increase in M, will cause AD to fall. When AD fall, DD for $g+s$ fall, firms will experience unplanned accumulation of inventories, reduce production, hire less FOPs including labour, households income fall, PP fall, fall in $w+a$ to consume $g+s$, fall in induced consumption expenditure, fall in AD. Firms will again reduce production, hire less FOP, give less factor payment. Hence, RNY will fall by multiple folds causing negative AEG. [reversed multiplier effect]



AS:

Ageing population, more people retiring, leave the labour force, supply for labour fall, shortage of labour, upwards pressure on wage, wage increase. Since wage is an important component of COP, COP increase, fall in $w+a$ to produce $g+s$, SRAS falls, RNY fall, negative AEG.



Thesis: ageing population makes it easier to achieve price stability (GPL to fall).

AD: based on above, when AD falls due to C/I/G falling, assuming near full employment

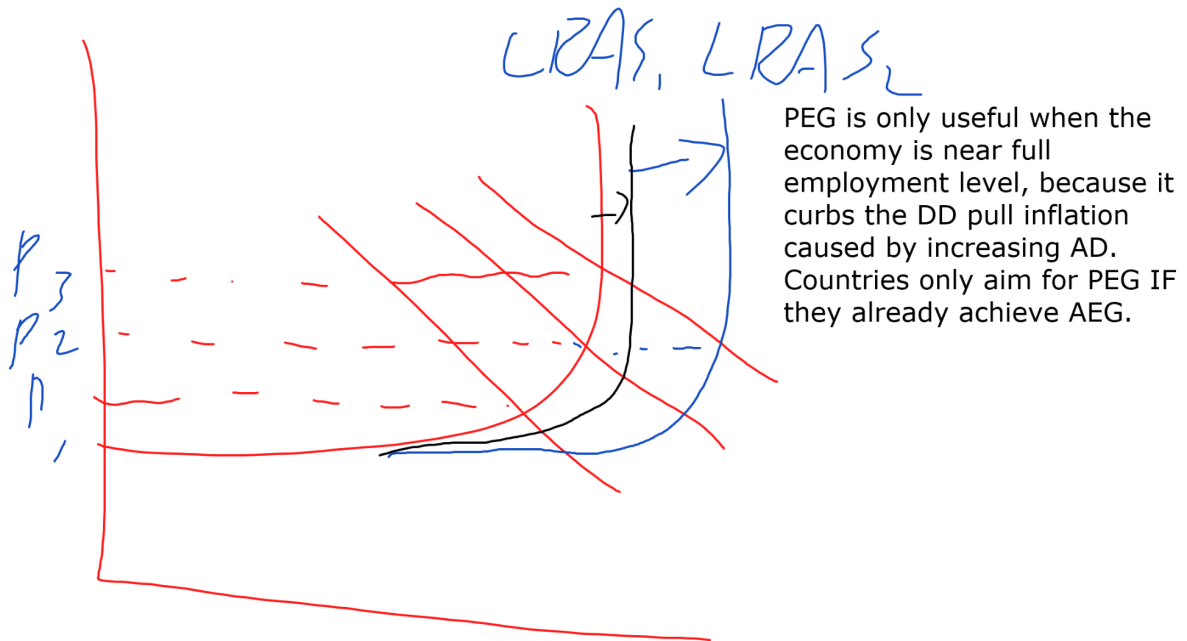
level, firms will compete less for limited FOPs, bids down factor prices, pass on cost savings to consumers in terms of lower prices, GPL fall, curb demand pull inflation.

AS: when there is ageing population, fall in labour productivity, firms may be forced to use technology to reduce human labour, technological improvements will increase productivity, more output per unit input, fall in unit COP, firms can pass on cost saving to consumers in terms of lower prices, GPL fall, curb cost push inflation. Example: Japan → having ageing population but rely heavily on technology (using self service kiosks to replace physical cashiers) → help to drive down overall cost.

AT: Ageing population makes it harder to achieve price stability / easier to achieve AEG.

[wage push inflation economic analysis] : ageing population, retired, leave labour force, supply for labour fall, shortage of labour, upwards pressure on wage, wage increase, since wage is an impt component of COP, COP increase, fall in W+A to produce goods and services, SRAS fall, firms pass on the increase in COP to consumers in terms of higher prices, GPL increase, wage push inflation.

LRAS: Ageing population, retired, leave workforce, quantity of labour falls. + older and slower so quality of labour falls. Fall in ability to produce g+s, productive capacity may not improve much, LRAS will increase by a smaller extent → hinder potential EG. PEG helps to curb DD pull inflation caused by increasing AD. If LRAS increase by only a small extent, the fall in GPL will be small, hence it is unable to curb demand pull inflation causing prices to be high and hence price instability.



AD: Govt needs to prepare for an ageing population, may need to spend more on elderly friendly infrastructure like lifts for overhead bridges, hence govt spending will increase. Since G exp is a component of AD, AD increase. [**Demand pull inflation economic analysis**] → when AD increase, assume near full employment level, firms will compete for limited FOPs, bids up factor prices, pass on the increase in COP to consumers in terms of higher prices, GPL increase, causing DD pull inflation.

[**more challenging to understand**] → When there is ageing population, many elderly will retire and leave labour force, size of labour force will be much smaller → likely every labour will be required to produce g+s, higher likelihood where economy is nearer to full employment level. If economy is near full employment, any slight increase in AD will likely result in a sharp increase in GPL causing DD pull inflation.

Evaluation:

1. The ageing population is unlikely to cause negative AEG in SG. → SG govt brings in foreign talent to supplement the local labour market + invest in technology to replace human labour → Effects of AD falling and SRAS falling is unlikely to happen → SG will still enjoy AEG.

2. Ageing population unlikely to have much effects on price stability. SG prices is mostly affected by external factors since we do not have raw materials → domestic factors are insignificant.
3. SG govt has a huge budget surplus and often spend on wage supplement programme or skills upgrading programme → helps to improve labour productivity and lower wages paid by firms → unlikely to face wage push inflation.