

Section A

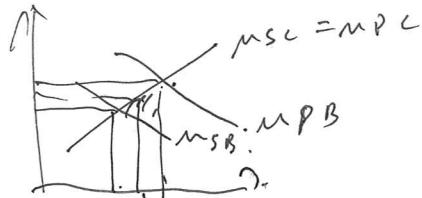
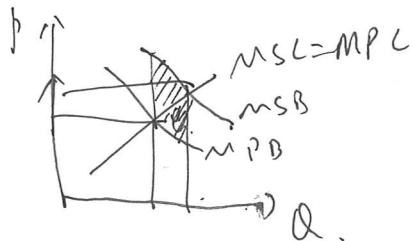
Answer **one** question from this section.

Microeconomics

1. (a) Explain two factors which could shift a firm's supply curve to the left. [10]
(b) Discuss the view that the provision of subsidies by the government on goods such as agricultural products will always be beneficial to stakeholders. [15]

2.

- (a) Explain why public transport, such as buses and trains, might be under-provided in a market economy. [10]
(b) Discuss the view that imposing an indirect tax on gasoline (petrol) is the most effective way of reducing the market failure caused by cars. [15]

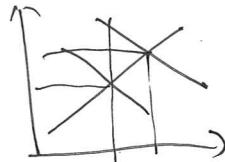


Section B

Answer **one** question from this section.

Macroeconomics

3. (a) Explain how increased investment by the government in education and training can affect both aggregate demand and aggregate supply. [10]
- (b) Evaluate the view that inflationary pressures in an economy are best reduced using supply-side policies. [15]
4. (a) Explain the various phases of the business cycle. [10]
- (b) Discuss the view that economies will always return to the full employment level of output in the long run. [15]
-



Jerry Jiang.

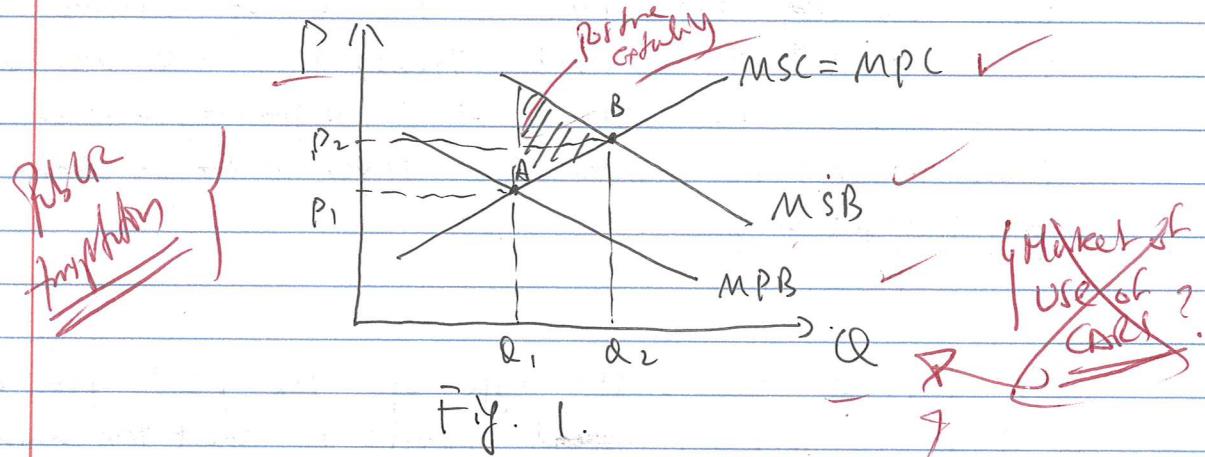
Very good!
24/25

Micro 2.

(a) Externalities: This is when an economic activity poses harm or gives benefit to a third party, where it's not compensated for the harm or pay for the benefit. ✓

✓ Merit good is the type of good that introduces a significant amount of positive externalities when consumed.

In figure below, you can find the case for public transportation in Shanghai, China.



Traffic jams has been a problem in Shanghai as there are so many people heading for work during weekdays in this huge metropolitan. Air pollution has also been a problem and one of the main source of pollution is from the large number of privately-owned cars.

Public transport has been a good solution to all these. Buses can take much more people than private cars, so traffic jam can be, to some extent, reduced while air pollution per capita is also lower than that caused by driving private cars. Therefore, by using public transportation, there's a positive externalities so that the Marginal Social Benefit curve (MSB) is higher than

The Marginal Private Benefit curve (MPB).

In figure 1, we can see $MSC = MPB$ since this is a case for merit good. So the market is at A, where the quantity demanded is Q_1 , and the price is at P_1 . The optimal market quantity, due to the higher MSB, is at B where the optimal quantity demanded is Q_2 and the price at P_2 .

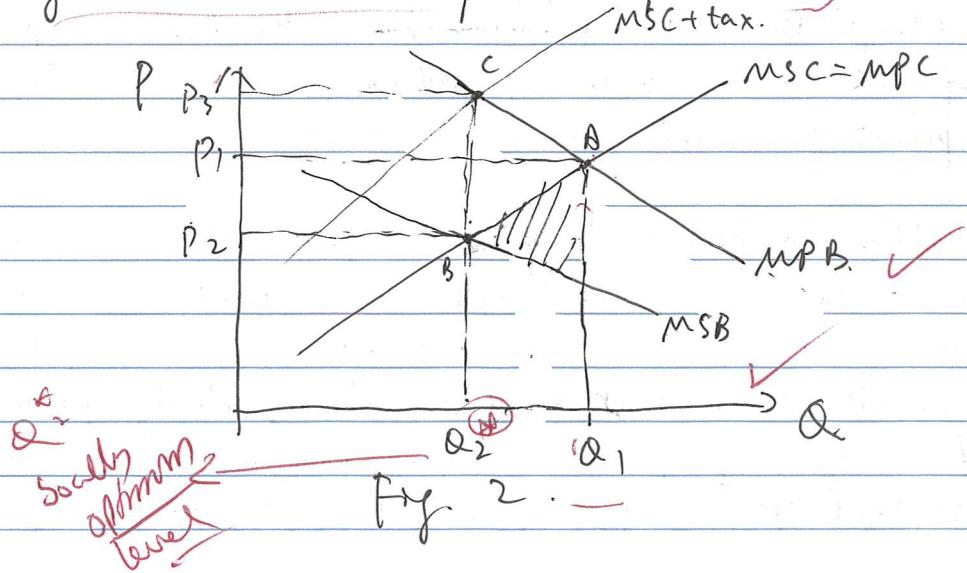
10/10

We can see that Q_2 is bigger than Q_1 , so the current quantity demanded in the market is under-provided compared to the optimal level. The shaded region is the area of welfare loss due to the fact that the public transport is under-provided. If there is a way to increase the market to the quantity level so that the public transport in Shanghai is no longer under-provided, profit/might be gained.

welfare

(b). Indirect tax is the type of tax posed upon consumption of foods or services, ~~not~~ opposite to direct tax which is the income tax.

Demerit goods are the type of goods that introduces significant negative externalities upon consumption.



In figure 2, please find the case for cars around Wall Street in New York.

As we've discussed in part (a), public transport is, comparatively speaking, a merit good compared to private cars. Accordingly, cars are demerit good that introduces negative externalities to the society due to increasing traffic jam and increased air pollution and carbon emission.

~~The tax is the negative externality area~~
Therefore in fig 2, you can see the car's MPB curve higher than MSB. Now, an indirect tax is posed on gasoline, the complement for private cars. The rising cost of maintaining a private car ~~will~~ will lead to a shifting in of the supply curve, ~~initially, elastic fiber, to~~ to MSC + tax.

To illustrate this whole process in figure 2. Let's start from the original situation:

- The market is at point A, where the market quantity is Q_1 and the price is at P_1 . OK
- The optimal stage is at point B where MSC and MSB intersect. The optimal quantity is at Q_2 and the price is P_2 .
- When the indirect tax is introduced and the supply curve shift in, we can find MSC shift in to MSC + tax and the market shift to point C. ~~At point~~ ✓
- At point C, the price is at $P_s = P_2 + \text{tax}$ and the quantity demanded gets to Q_2 where the optimal situation lies. ~~Q*~~ MSC = MSB OK
- During the process, there's a welfare loss represented by the shaded region in fig. 2. ✓ OK

However, things won't go so smoothly due to the relatively inelastic demand of private cars. Due to comfort and the representation of high income, CEOs and investors in Wall Street will still use private cars even the price of petrol increases. They don't really care about the cost. So in order for the indirect tax policy to work, a large tax will be needed if that's the sole solution to this market failure.

Schwartz more the Tax

Another approach is to advocate the carbon emission and air pollution caused by private cars. By illustrating the advantage of other alternative ways of transportation, including biking, walking, taking bus or underground, the rich group of people will be more willing to switch from their old habit of using private cars.

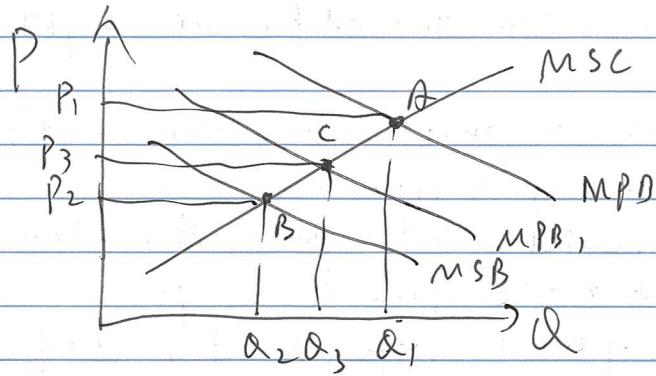


Fig 3.

(In fig. 3, the advocacy method will shift MPB in to MPB_1 , causing the point A to shift to point C. This results in the quantity to change from Q_1 to Q_2 , which is closer to the optimal level Q_3 .

In fact, a combination of the indirect tax policy and the advocacy approach will have a best outcome in terms of solving the market failure case for cars, ~~as~~ due to their nature of inelastic demand.

somehow

14/15



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ECONOMICS
PAPER 2
DATA RESPONSE

45 minutes for 1 question

INSTRUCTIONS TO CANDIDATES

- Do not open this examination paper until instructed to do so.
- Answer one question of the topic remaining (macro or micro)
- Use fully labelled diagrams and references to the text / data where appropriate.

1. Study the extract and data below and answer the questions that follow.

World food prices

- ① Food prices have risen by 45% since the end of 2006. Prices have risen due to a mix of long-term and temporary factors. Strong food demand from emerging economies, reflecting stronger *per capita* income growth, accounts for much of the increase. Rising biofuel production adds to the demand for corn, in particular, because corn is used in the production of biofuels. In addition, increased production of corn leads to falling production of other foods, raising their prices as well. At the same time, elasticity of supply of food remains low and inventory levels (stocks) in many food markets have declined to the lowest levels in years. Drought conditions in major wheat-producing countries (e.g. Australia and Ukraine), and higher input costs (animal feed, energy, and fertilizer) have also contributed to higher food prices.
- ② Table 1 outlines the policy responses to increasing food prices in some countries, some of which have made the problem worse.

Table 1

	Policy response to increasing food prices
Argentina	Corn export taxes increased to 25%, wheat export taxes increased to 28%
Azerbaijan	Eliminated indirect tax on grains
Bangladesh	Reduced tariffs on rice and wheat imports by 5%
Ecuador	Maximum prices for bread
Egypt	Raised food subsidies
Honduras	Export ban on maize
Mexico	Removed quotas on maize, milk and sugar

- ③ Higher food prices affect socioeconomic groups and households within countries differently. Higher food prices hurt the urban poor because food accounts for a very large share of their expenditures. In many countries, food can account for 70 to 80% of expenditures by the poorest quarter of the population. In such circumstances, food price increases can have a large negative impact on their purchasing power.
- ④ Farmers in food exporting countries may benefit from higher prices assuming that food price increases “trickle down” to farmers. Since farming is the major source of income for a large part of the rural population in most developing countries, higher prices could help to reduce rural poverty. The size of the benefit will depend on whether farmers are able to respond to the higher prices through increased **investment**, which would allow them to increase supply.

[Source: adapted from <http://www.imf.org/external/np/exr/faq/ffpfaqs.htm> and
<http://www.fao.org/es/esc/common/ecg/538/en/RisingPricesIFAD.pdf>, 14 February 2008]

(This question continues on the following page)

(Question 1 continued)

- (a) Define the following terms indicated in bold in the text:
- (i) indirect tax (*Table 1*) [2 marks]
- (ii) investment (*paragraph ④*). [2 marks]
- (b) Using an appropriate diagram, explain how rising biofuel production may affect the market for corn (*paragraph ①*). [4 marks]
- (c) Using an appropriate diagram, explain why the elasticity of supply for many commodities is low. [4 marks]
- (d) Using information from the text/data and your knowledge of economics, evaluate Ecuador's policy response to increasing food prices (*Table 1*). [8 marks]

2. Study the extract below and answer the questions that follow.

Pollution of Indonesia's Cisadane River continues

- ① “I still remember when the water in the Cisadane River was very clean – I could clearly see fish swimming around,” said a 65-year-old resident, as he remembered his childhood. “Look at the river now – no one can see the bottom of it, despite being only about two metres deep. The water is dirty, smelly and heavily polluted,” he complained.
- ② Indonesia’s **economic growth** over the past three decades has meant that many industrial firms have been established along the riverbanks. It is said that these firms are the most serious polluters of the river and are suspected of continuously dumping their liquid waste directly into the water.
- ③ Unfortunately, the polluted river is the main source of water for local water suppliers, who take and process the polluted water to serve the needs of their 500 000 customer. This doesn’t include thousands of locals living along the riverbanks who also use the river water for their daily needs – for washing, bathing and even cooking.
- ④ A representative of one of the water suppliers told The Jakarta Post recently that the pollution in the river water had given rise to huge water processing costs to make the water safe for domestic use by customers. Although the water suppliers are able to pass on most of the increased costs to their consumers, this worsens the living standards of local households. According to the suppliers, the latest water sample indicated that the water contained chemical substances which greatly exceeded the limits set out in government regulations.
- ⑤ The water suppliers blamed officials at the local environmental agencies for their failure to control the illegal dumping of liquid waste into the river. Along with the possible danger for people using the water, the pollution had also damaged the environment. This clearly represents a grave threat to **sustainable development**. One village leader complained, “the polluted river water has also killed fish in ponds, the area of which extends to around 200 hectares. The government is doing nothing. These companies should be fined”.
- ⑥ However, environmental agency heads claim “we have regulations but it’s impossible for us to monitor hundreds of industrial firms that allegedly dump their liquid waste into the river at night. We do not have the necessary inspectors and equipment”.

[Source: <http://www.thejakartapost.com/news/2008/02/05/cisadane-river-still-filthy-despite-recent-highprofile-visits.html>, 2 May 2008.]

(This question continues on the following page)

(Question 2 continued)

- (a) Define the following terms indicated in bold in the text:
- (i) economic growth (*paragraph ②*) [2 marks]
- (ii) sustainable development (*paragraph ⑤*). [2 marks]
- (b) Using an appropriate diagram and the concept of elasticity, explain why “the water suppliers are able to pass on most of the increased costs to their consumers” (*paragraph ④*). [4 marks]
- (c) Using an appropriate diagram, explain why the problem discussed in the text illustrates an example of a market failure. [4 marks]
- (d) Using information from the text/data and your knowledge of economics, evaluate the use of regulation as a solution to the market failure caused by the pollution of the Cisadane River. [8 marks]

3. Study the extract and data below and answer the questions that follow.

Iceland

- ① Iceland's *per capita* income has been growing at double the OECD* rate since the mid-1990s. It is now the fifth-highest among member countries and more than a quarter above the OECD average. This impressive performance is due to extensive structural reforms that deregulated and opened up the economy, thereby encouraging greater **entrepreneurship**. Strong economic growth has been accompanied, however, by mounting imbalances in the economy. Aggregate demand has increased beyond potential output. As a result, inflation and the current account deficit have become problems. Cuts in personal income taxes, intended as a supply-side policy to enhance efficiency, contributed to inflationary pressures.
- ② Inflation has exceeded the official target of 2.5% since mid-2004. The Central Bank has been hesitant in raising interest rates in the past, and has only recently begun to tighten **monetary policy** by increasing interest rates. Monetary policy will need to remain tight until inflation expectations are consistent with the inflation target set by the Central Bank. This is crucial because of the effect that wage increases have in creating cost push inflation. It would also be helpful if members of the government respected the independence of the Central Bank, as this would reinforce the credibility and effectiveness of policy.

* OECD is the Organization for Economic Cooperation and Development (formed in 1961). The members in 2006 were: Australia, Austria, Belgium, Canada, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Japan, Korea (South), Luxembourg, Mexico, Netherlands, New Zealand, Norway, Poland, Portugal, Slovak Republic, Spain, Sweden, Switzerland, Turkey, United Kingdom and the United States.

[Source: http://www.oecd.org/document/15/0,3343,en_2649_34569_40158159_1_1_1_1,00.htm, 28 February 2008]

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(Question 3 continued)

Figure 1: GDP, % increase on a year earlier

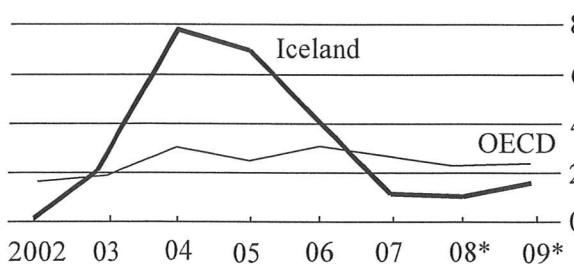


Figure 2: Consumer prices, % increase on a year earlier

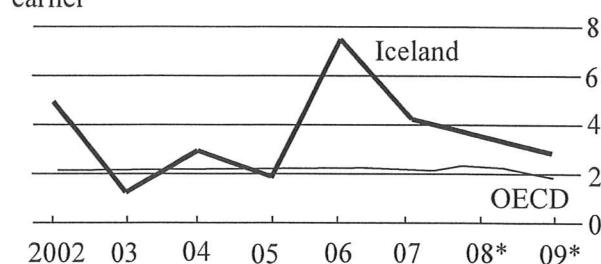
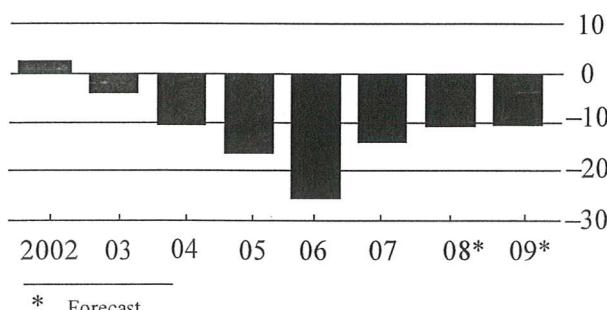
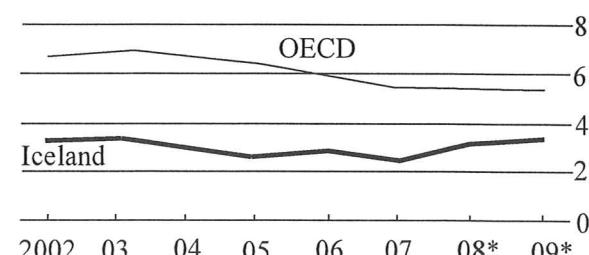


Figure 3: Current account, as % of GDP: Iceland



* Forecast

Figure 4: Unemployment, as % of labour force



[© The Economist Newspaper Limited, London, 13 March 2008.]

- (a) Define the following terms indicated in bold in the text:

(i) entrepreneurship (*paragraph ①*) [2 marks]

(ii) monetary policy (*paragraph ②*). [2 marks]

(b) Using an appropriate diagram, explain the likely effect of aggregate demand increasing “beyond potential output” (*paragraph ①*). [4 marks]

(c) Using an AD/AS diagram, explain how wage increases create cost push inflation (*paragraph ②*). [4 marks]

(d) Using information from the text/data and your knowledge of economics, evaluate the consequences for Iceland’s economy if it maintains tight monetary policies. [8 marks]

2. Study the extract and data below and answer the questions that follow.

A tale of two economies

- ① Both Russia and Poland faced serious challenges in transition when moving from centrally planned to free market economies. In the 1990s, both countries decided to open themselves to international trade and foreign direct investment.
- ② Poland reformed its economic institutions, strengthened property rights, tightened monetary policy using interest rates, and built a competitive market sector through the use of supply-side policies. However, Poland's labour market is still "rigid" and suffers from significant **structural unemployment**, resulting in a high rate of natural unemployment.
- ③ Russia did not reform all its economic institutions, including the property rights system, before opening its economy to competition. This resulted in corruption and crime. Poor economic restructuring has worsened inequality of income and concentrated economic power of firms in an **oligopoly** market structure. Russia has come to depend on the performance of a small number of companies in the natural resource area, especially oil, but these industries are not expected to sustain its economic growth, unless new oil reserves are discovered.

Figure 1
Current account % of GDP

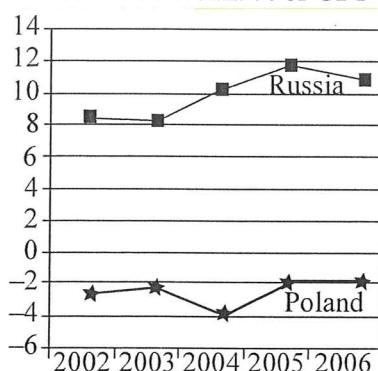


Figure 2
Unemployment rate

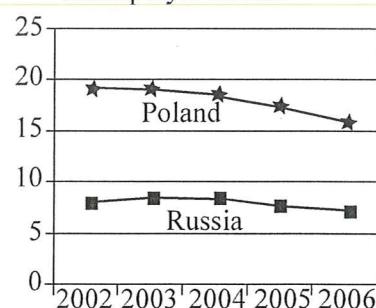


Figure 3
GDP % change on year before

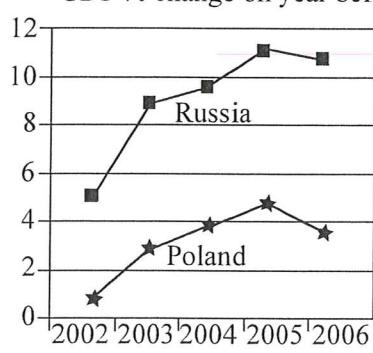
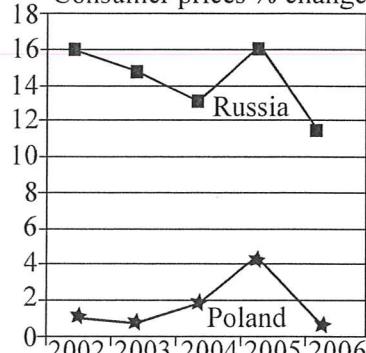


Figure 4
Consumer prices % change on year before



[Source: adapted from <http://www.economist.com/countries>, accessed July 2007]

(Question 2 continued)

- (a) Define the following terms indicated in bold in the text:
- (i) structural unemployment (*paragraph ②*) [2 marks]
- (ii) oligopoly (*paragraph ③*). [2 marks]
- (b) Using an AD/AS diagram, explain how supply-side policies could affect real output in the long-run. [4 marks]
- (c) Using a production possibility curve diagram, explain how the discovery of new oil reserves might affect the Russian economy. [4 marks]
- (d) Using information from the text/data and your knowledge of economics, evaluate the economic performance of Russia and Poland since the 1990s. [8 marks]

Question 3. Macro

(a)

- (i). Entrepreneurship is one of the four factors of production in economics. It's a person's ability to build up a corporation and coordinate between different sectors to ensure the proper functioning of the corporation.

An example is if I want to create or start up, I need entrepreneurship so that I can employ people and put them on the right spot to do the things they're good at, coordinate between them and make right decisions so that the start up develops properly.

~~use
example from
the P.R.
for~~

- (ii) Monetary policy is a demand side policy where government/banks control the interest rate in order to shift the aggregate supply curve to accomplish their intended macroeconomics goals.

~~+ Demand Side~~

An example is that: if country A is in need of economical growth, then monetary policy may be implemented to decrease interest rate so that investment is boosted, resulting in a rising aggregate demand so that growth is achieved.

- (b). In paragraph 1, we know the reason that aggregate demand has increased beyond potential output is that entrepreneurship is encouraged and personal income taxes are cutted.

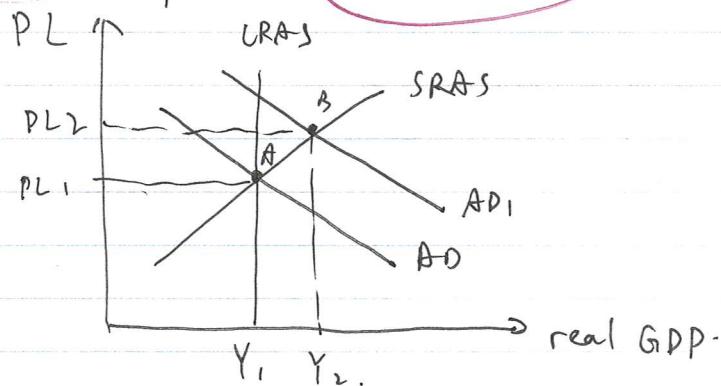


Fig. 1.

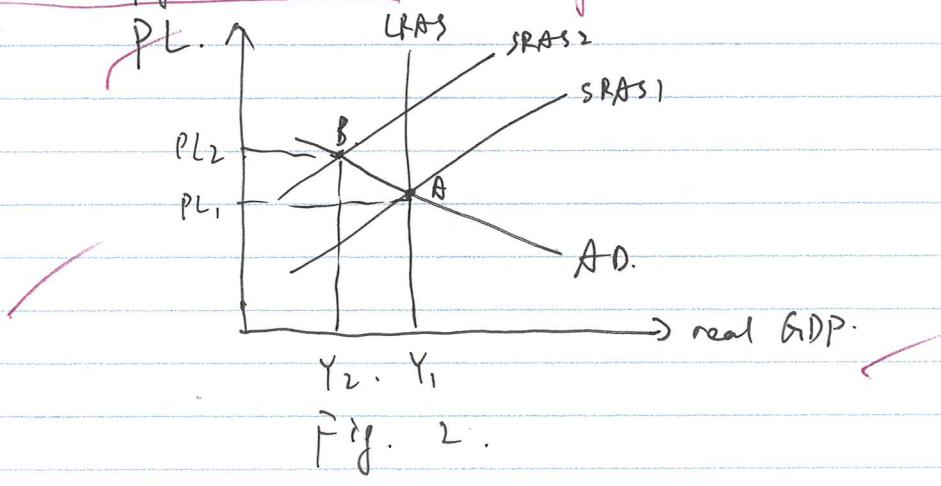
① We know that entrepreneurship causes new economical opportunities and shifts AD curve out. ?? why? It works like SRAS too! Also, $C = Y - T - S$. when income tax are cut, $T \downarrow$, leading to an increase in C. We know that $AD = C + G + I + X - M$. When C is increased, AD shifts out. Ceteris paribus

In figure 1, we can see what's going on.

- The original economy is at A where real GDP is at full potential level Y_1 and price level is at PL_1 .
- Due to the two policies discussed above, AD shifts out to AD_1 , bringing the economy to point B where price level is at PL_2 and real GDP (output) is at Y_2 .
- Since Y_2 is bigger than Y_1 , we know the economy is beyond the potential output.
- From the graph, we spot that PL_2 is higher than PL_1 . This indicate inflation, or inflationary pressures, mentioned at the end of paragraph ①. This is what "beyond potential output" is likely to bring. = in the short run, as long as demand (excessive) outpaces supply

(e). One of the factors of production is labour.

When wage increases, the cost for labour increases as well, resulting the rise of the cost of production. This shifts the SRAS curve in, as shown in figure 2 below. Ceteris paribus



In figure 2, we can see the cost-push inflation.

- At first, the economy is at point A with output at $Y_1 > Y_{FE}$ and price level at PL_1 .
- Then the SRAS curve shifts from $SRAS_1$ to $SRAS_2$ due to the high wages and high cost of production. Point A shifts to point B, resulting in output dropping from Y_1 to Y_2 and the price level to increase from PL_1 to PL_2 .
- Since the output is lower than potential and the price level has increased, we call this a stagflation.

(d). From part (b), we know that the high inflation rate is caused by the demand-pull inflation in fig 3 below.

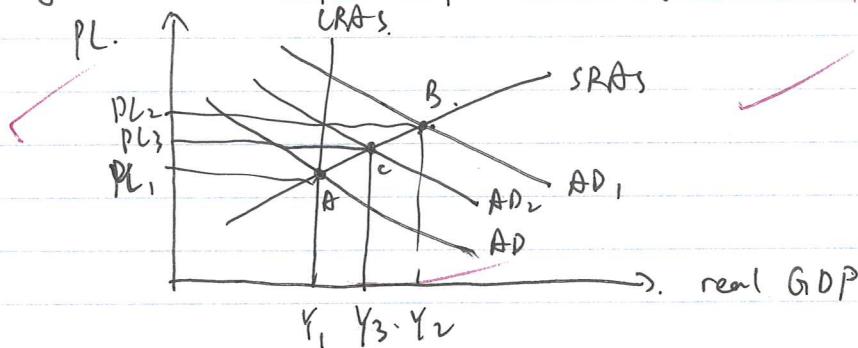


fig. 3.

The current economy is already at point B, where output is beyond potential level at $Y_2 > Y_1 = Y_{FE}$.

By tighten monetary policy, the interest rate rises, investment are discouraged. According to the formula $AD = C + G + I + X - M$, when I falls, aggregate demand fall as well. Also Government.

{ In figure 3, we can see AD_2 shifting in to AD_1 , with Y_2 dropping to Y_3 and price level PL_2 dropping to PL_3 . This will decrease the amount of inflation, and indeed achieve the goal in paragraph ② of "inflation expectations are consistent with the inflationary target set by the Central Bank."

As prediction, a more stable inflation rate leads to a more stable economy, namely a more reasonable output, a cheaper consumer's prices, but a slightly increasing unemployment rate due to decreasing demand of labour after the output level drops. But this

is not a bad thing for Iceland as stated in Chart 4 of the data section, Iceland's unemployment rate will still be lower than OECD's average level. Also, a slightly higher unemployment rate will make the labour market more competitive so that more efficient workers will stay employed while less efficient workers will be spotted and fired. This will potentially improve the efficiency of the economy.

(2/8)

- Use Data + figures from the DR text
for all marks