

## Question 2 Korea's Performance, Prospects and Lessons

**Table 1: Some economic statistics for South Korea over the period 2008-2012**

	2009	2010	2011	2012
Current account balance, % of GDP	3.6	2.7	2.2	3.5
Consumer Price inflation, % per year	2.8	3.0	4.0	2.2
Unemployment , % of labor force	3.6	3.7	3.4	3.2
GDP growth, % per year	0.7	6.5	3.7	2.3
Gross Savings(% of GDP)	33	35	35	35
Imports of Goods and Services (% of GDP)	43	46	54	54

Source of Table 1: World Bank

### Extract 6: South Korea lowers its growth forecast

The finance ministry has forecast a growth of 3% for 2013, down from its earlier projection of 4.3%. The sovereign debt crisis in the eurozone has hurt demand for South Korean exports from the region. Meanwhile, the economic recovery in the US - another key market for its exports - has also remained fragile and consumer demand there has not picked up drastically. The slowdown in demand for exports has hurt growth in Asia's fourth largest economy. South Korea's economy grew at its slowest pace in three years in the July to September quarter, expanding at an annual rate of 1.6%.

South Korea's exports, which account for almost half of its overall economy, have been hit by slowing demand from markets such as the US and eurozone. "Growth next year will be better than this year, although there are significant downside risks," said the finance ministry's Choi Sang-mok. "Nevertheless, the strength of the recovery won't be strong enough for the economy to catch up to its potential growth rate."

Source: *BBC*, 27 December 2012

### Extract 7: South Korea unveils \$5.2bn stimulus

South Korea is to spend \$5.2bn on fiscal stimulus measures, as it seeks to boost a flagging economy hit by slowing global exports. The finance ministry has announced steps including a temporary easing of taxes on consumption and property transactions, and an increase in state credit for small businesses. The measures, effective from this month, will cost \$4.07bn this year and \$1.15bn in 2013.

Bahk Jae-wan, the finance minister, had previously indicated a reluctance to conduct large-scale stimulus, citing the need to preserve ammunition in case of a more serious deterioration in the economy. Like a \$7.5bn package announced in June, the stimulus will not involve an expansion of this year's government budget, and it is far smaller than the March 2009 stimulus of \$21.6bn. A senior government official said it is expected to boost gross domestic product by just 0.06 per cent this year and 0.1 per cent next year.

However, the stimulus is larger than economists had expected, reflecting policy makers' concern at a string of data indicating ebbing momentum in the economy. Exports – the main driver of South Korea's economy – fell 6.2% last month, while growth in industrial production has turned negative and confidence is declining among both consumers and businesses.

Source: *Financial Times*, 10 September 2012

### **Extract 8: China, South Korea Start Talks on Free-Trade Pact**

Since 2003, South Korea has signed several trade agreements with partners including US, EU and ASEAN. It is now pursuing entry to the US-led Trans-Pacific Partnership group as well as a trade pact with China. Currently China and South Korea are starting discussions toward reaching a free-trade agreement. The two countries' goal is to lift trade to \$300 billion in 2016. Asia's biggest and fourth-biggest economies would form a market with annual trade that rose 19% in 2011 to \$246 billion. A free trade accord is strategic from both economic and political standpoints, given the proximity to North Korea. Both can gain much for economic growth and closer ties will help beef up regional security. The world economic recovery is sluggish as the global financial crisis endures. Trade protectionism is rising. Exports to China, South Korea's largest market, increased 14.9% to \$134.2 billion in 2011 from a year ago, which accounted for 24.1% of South Korea's total exports last year.

For South Korea, makers of cars, electronics, chemicals and petrochemical products will benefit most from a trade pact while farmers and small manufacturers will be hit hard. China buys mostly cars and electronics from South Korea while selling mainly mineral products and electronic parts to South Korea. A free trade deal with China would boost South Korea's economic growth by as much as 3 percentage points and create as many as 330,000 jobs over a decade. South Korea's Finance Minister Bahk Jae Wan said that the nation should take advantage of China's efforts to generate more growth from domestic demand.

Source: *Bloomberg*, 2 May 2012

### **Extract 9: South Korea cuts interest rates in a bid to spur growth**

South Korea's central bank has cut interest rates for the second time in the space of four months amid concerns about a slowdown in its economy. The bank cut its key rate to 2.75% from 3% in a bid to spur growth. South Korea's exports, one of its biggest drivers of growth, has been hurt by slowing demand from key markets such

as the US and the eurozone. At the same time, domestic demand continues to remain subdued, further hurting economic growth.

With the eurozone continuing to struggle with its debt crisis and the recovery in the US remaining weak, South Korea may need to cut its borrowing costs even further in the coming months. South Korea's export-driven economy will have difficulty picking up if the global economy continues to struggle to grow.

Source: *BBC*, 11 October 2012

## Questions

- (a) Using the information in Table 1, identify and explain the relationship between unemployment and inflation rate in South Korea between 2009 and 2012. [3]

<b>Identify</b>	A direct correlation. [1]
<b>Explain</b>	A rise in GDP growth rate → higher returns of investment → reduction in unemployment rate → rise in disposable income and consumption → at excess capacity, rise in inflation at a slower rate. [2]

- (b) (i) Using AD/AS analysis, explain why, in South Korea, 'the finance ministry has forecast a growth of 3% for 2013, down from its earlier projection of 4.3%', as stated in Extract 6? [3]

'Explain why' → Give reasons

<b>Topic Statement</b>	The forecast growth is down to 3% → eurozone and US economies have not recovered completely.
<b>Theory</b>	<p>General Price Level</p> <p>Figure 1</p> <p>South Korea's exports Eurozone debt crisis → fall in economy purchasing power → fall in demand for South Korea's exports. US weak recovery → slow rise in demand for South Korea's exports. In Figure 1, slower rise in AD → AD forecast down from AD<sub>4.3%</sub> forecast to AD<sub>3%</sub> forecast → real national income rises from 0Y<sub>1</sub> to 0Y<sub>2</sub> instead of 0Y<sub>3</sub> → %change in growth will be smaller [2]</p>
<b>Evidence (Case Study)</b>	<p>Extract 6 Para 1:</p> <ul style="list-style-type: none"> <li>• Sovereign debt crisis hurt demand for South Korean exports</li> <li>• US weak economic recovery, slow rise in consumer demand</li> <li>• South Korea exports, almost half of its overall economy [1]</li> </ul>
<b>Conclusion</b>	South Korea forecast economy growth will fall.

- (ii) Using the information from the extract, how far does the multiplier help to explain the economic recovery of South Korea? [4]

'How far' → Thesis vs Antithesis

<b>Topic Statement (Thesis)</b>	The multiplier → generates multiple increases in nominal national income and actual economy growth and recovery.
<b>Theory</b>	Given $\Delta J \times k = \Delta NY$ → due to tax reduction on consumption and property, the proportion of each extra dollar of income taken by the South Korean government falls → based on \$5.2bn autonomous expenditure → at the first round, the multiplier generates the maximum amount of nominal national income. At subsequent rounds, the rise in nominal income falls till it reaches

	a final and higher equilibrium national income and growth. [2]
<b>Evidence (Case Study)</b>	<u>Extract 7 Para 1:</u> <ul style="list-style-type: none"> <li>temporary easing of taxes on consumption and property transactions</li> <li>\$5.2bn on fiscal stimulus measures</li> </ul>
<b>Topic Statement (Antithesis)</b>	Rising trend in MPS and MPM and negative outlook may negate the effectiveness of the multiplier.
<b>Theory</b>	<p>Table 1 across 2009-2012 → rising trend in Gross Savings (% of GDP) and Imports of Goods and Services (% of GDP). In addition, negative outlook → force firms to cut back on investment → withhold planned inventories. Due to job instability → consumers save a greater proportion of total income earned.</p> <p>Overall, if the fall in MPT does not exceed the rise in MPM and MPS → bigger MPW → smaller multiplier → slower rise in economy recovery. [2]</p>
<b>Evidence (Case Study)</b>	<u>Table 1:</u> <ul style="list-style-type: none"> <li>Gross Savings (% of GDP)</li> <li>Imports of Goods and Services (% of GDP)</li> </ul> <u>Extract 7 Para 2:</u> <ul style="list-style-type: none"> <li>growth in industrial production has turned negative</li> <li>confidence is declining among both consumers and businesses</li> </ul>
<b>Conclusion</b>	The multiplier helps to explain the economic recovery of South Korea through raising government spending and nominal national income however the rate of economic recovery could be hindered by the declining value of the multiplier.

- (c) Use the concept of circular flow of income to explain how the fiscal stimulus measures suggested in Extract 7 will affect the equilibrium level of national income in South Korea in 2013.

[6]

'Explain how → Step by step explanation of the process

'Increase in state credit' → Increase in investment expenditure

<b>Topic Statement</b>	Fiscal stimulus measure will raise the equilibrium level of national income in South Korea in 2013.
<b>Theory</b>	<ul style="list-style-type: none"> <li>Rise in Government spending</li> <li>Fall in tax revenue due to easing of taxes</li> </ul> <p>→ Overall, increases injections relative to withdrawals, creating a net injection into the circular flow.</p> <p>Assume that there is no change in the other components of injections and withdrawals and to keep it simple:  <u>Government spending to rise by \$4.07bn</u></p> <ul style="list-style-type: none"> <li>Gross Savings (% of GDP) = 35 → MPC = 0.65 since MPC+MPS=1 → MPW= 0.35</li> </ul> <p>Firms' revenue in South Korea rises by \$4.07bn. The rise in AD → firms raise production and inventories to optimal level → rise in demand for factors of production as they are derived demand → factor income paid out rises by \$4.07bn.</p> <p>South Korean household income rises by \$4.07bn → rise in household purchasing power and induced consumption. This consumption however does not rise by the full extent of the rise in income. Given MPC=0.65, induced consumption rises by only \$2.65bn [4.07*0.65]</p>

	<p>with the rest of the shortfall (\$1.42bn) coming from cut backs in savings, taxes and imports.</p> <p>The rise in induced consumption of \$2.65bn → further rise in revenue of firms in South Korea → with another round of rise in AD → further rise in small businesses' production and inventories → rise in factor income disbursed. Rise in Korean household income of \$2.65bn leads to yet more expansion in induced consumption (\$1.72bn), savings, taxes and imports (\$0.93bn).</p> <p>Each subsequent round of expansion in induced consumption gets smaller as the withdrawals after each subsequent round (cutbacks in S, T and M) help reduce the extent by which induced consumption has to rise to balance the income and spending of Korean households. The process continues until the total rise in withdrawals = initial rise in injections = \$4.07bn → new equilibrium achieved at a higher level of national income.</p> <p>Multiplier, <math>k = \frac{1}{1 - MPC_d} = 2.86</math></p> <p><math>\Delta Y = k \Delta J = 2.86 \times (+\\$4.07bn) = +\\$11.6bn</math></p> <p>An increase in government spending of \$4.07bn, working through the multiplier process, will cause nominal national income to rise by \$11.6bn.</p>
<b>Evidence (Case Study)</b>	<p><u>Extract 7 Para 1:</u></p> <ul style="list-style-type: none"> <li>• Will cost \$4.07bn this year</li> <li>• temporary easing of taxes on consumption and property transactions</li> </ul>
<b>Conclusion</b>	Hence the equilibrium level of national income will rise.

Level	Descriptors	Marks
L2	Thorough explanation to explain the concept of circular flow of income using numbers or diagrams.	5-6
	Explanation of circular flow of income with no reference to data on taxes.	4
L1	<p>Wrong use of other economic framework e.g. AD/AS</p> <p>Lop-sided analysis with little / no reference to data</p> <p>Answer did not address requirements of the question, i.e. does not know what question is about OR had no economic framework</p>	1-3

- (d) According to Table 1 and Extract 8, explain the possible effects of a China-South Korea Free-Trade Pact on the economy of South Korea.

[6]

<b>Cause</b>	A China-South Korea Free-Trade Pact on the economy of South Korea		
<b>Rationale</b>	World economic recovery is slow due to eurozone debt crisis and US slow recovery → trade protectionism is rising		
<b>Consequence</b>	Reduction in trade barriers e.g. tariffs on South Korea's exports into China → South Korea's exports e.g. cars, electronics parts, higher competitive advantage → raise quantity demanded of exports and export revenue by more than proportionate due to price elastic demand.		
<b>Topic Statement</b>	<b>Positive</b>	<b>Negative</b>	
	It would have positive externalities	It	would have negative

	on South Korea's <ul style="list-style-type: none"> <li>• BOP &amp; Inflation</li> <li>• Unemployment &amp; EG rate</li> </ul>	externalities on South Korea's <ul style="list-style-type: none"> <li>• Efficiency and Equity</li> </ul>
<b>Theory</b>	<p>Given China's EG rate and high demand for imports from South Korea → rise in demand for South Korea's exports → boost trade in goods account, ceteris paribus, widen the current account surplus [% of GDP] and yuan reserves in Bank of Korea. Raise market contestability → boost business investment by products makers e.g. cars, chemicals → boost risk bearing EOS, cp → inflation rate will rise at a slower rate as <math>\uparrow AD &gt; \uparrow LRAS</math>.</p> <p>Boost demand for factors of production including export workers → reduce cyclical unemployment rate, below 3.4% in the long run. Via the upward multiplier, would boost AD and South Korea's NY multiple times → rise in actual EG above 3.7% in the long run. [4]</p>	<p>Market competition → higher opportunity cost of production e.g. electronics on farmers and small firms while the product makers enjoy comparative advantage as they have a lower opportunity cost in capital intensive production modes. Profits may fall → small firms may raise price and reduce output → rise in inequity in income and accessibility while at the same time, rise in welfare loss due to allocative inefficiency as <math>P &gt; MC</math>.</p> <p>Rise in structural unemployment. [2]</p>
<b>Evidence (Case Study)</b>	<u>Extract 8 Para 1. 2, Table 1:</u> <ul style="list-style-type: none"> <li>• lift trade to \$300 billion in 2016</li> <li>• create as many as 330,000 jobs over a decade</li> <li>• EG grow as much as 3% points</li> <li>• Products makers will benefit</li> <li>• Take advantage of China's efforts to generate growth</li> </ul>	<u>Extract 8 Para 2:</u> <ul style="list-style-type: none"> <li>• Farmers and small manufacturers will be hit hard</li> </ul>
<b>Conclusion</b>	Using the PPC framework, assume South Korea is at full employment level of output, PPC shift outwards → higher level of output for production and consumption → higher profits and more choices [imports] → rise in SOL	

Level	Descriptors	Marks
L2	Thorough explanation of both negative and positive effects of the China-South Korea Free-Trade Pact on South Korea economy.	5-6
	Some explanation of either positive or negative effects but not grounded in terms of economic framework. Attempts at showing a balance. Some / little reference to case study material.	4
L1	Max 2-Limited explanation of 1 goal e.g. economic growth  Answer did not discuss or totally disregarded the given problems  Lop-sided analysis with little / no reference to data  Answer did not address requirements of the question, i.e. does not know what question is about OR had no economic framework	1-3

- (e) Discuss the policy options outlined in Extract 7 and Extract 9 for promoting actual economic growth rate.

<b>Problem</b>	GDP growth rate across 2009-2012 → average 3.3%	
<b>Cause</b>	Pessimistic market outlook, caused by EU and US	
<b>Rationale</b>	Promote actual economic growth rate in South Korea by at least 3.3%	
<b>Policy</b>	<b>Fiscal Stimulus Measures</b>	<b>Cut interest rate</b>
<b>Topic Statement</b>	Fiscal stimulus measures would promote actual economic growth	South Korea CB cut interest rate to boost actual economic growth
<b>Theory</b>  <u>Take note:</u> State credit is government loan to small firms that are credit worthy but are not able to obtain loans from private sector to expand output and create jobs.	Temporary taxes reduction on consumption e.g. sales tax → rise in disposable income → rise in consumption.  Temporary taxes reduction on property → reduces unit cost of production of housing developers in South Korea → rise in post-tax profits and investment.  Increase in state credit → rise in investment	Reduction in unit cost of borrowing, cp → raises unit profits → a rise in investment, more than proportionate. Consumers who are interest rate sensitive → a reduction in unit cost of borrowing may spur borrowing → rise in consumption, more than proportionate.
	Rise in C, I → Rise in AD, cp → via the upward multiplier, raises national output and NY multiple times → raises actual EG rate	
<b>Evidence (Case Study)</b>	<u>Extract 7 Para 1:</u> <ul style="list-style-type: none"> <li>temporary easing of taxes on consumption and property transactions</li> <li>increase in state credit for small businesses</li> <li>\$5.2bn on fiscal stimulus measures</li> </ul>	<u>Extract 9 Para 1:</u> <ul style="list-style-type: none"> <li>The bank cut its key rate to 2.75% from 3% in a bid to spur growth</li> <li>South Korea may need to cut its borrowing costs even further</li> </ul>
<b>Evaluation</b>	Proportion of cost of fiscal stimulus, approx. a cut of 75% as compared to budget 2009 and small multiplier → fiscal policy little impact on NY and growth rate  Rise in financial opportunity cost	Pessimistic market outlook → for big firms, MEI is interest inelastic → nominal interest rate need to lower further → as inflation is 2.2% (2012), real interest rate will fall or become negative → outflow of hot money initially disguised as long term investment → render interest rate cut policy ineffective.  For small firms, policy could be more effective as $MEI > 1$ .
<b>Conclusion</b>	In theory, these policies should boost jobs and economic growth rate. In reality, the South Korean government should raise the fiscal stimulus substantially and de-regulate markets to encourage FDI and investment, not neglecting the consumption market.	

Level	Descriptors	Marks
L2	Thorough explanation using relevant economic policies. Provided a justified stand.	5-6
	Some explanation of relevant policies but not well-grounded in terms of economic framework. Attempts at showing a balance. Some / little reference to case study material	4
L1	Limited explanation of relevant policies  Answer did not discuss or totally disregarded the given problems  Lop-sided analysis with little / no reference to data	1-3



	Wrong use of policies  Answer did not address requirements of the question, i.e. does not know what question is about OR had no economic framework	
	<b>Evaluation</b>	
E1	Judgment with analysis	+2

**[Total: 30]**