

ANGLO-CHINESE JUNIOR COLLEGE
2016 JC2 PRELIMINARY EXAMINATIONS



ECONOMICS

9732/01

Higher 2

18 August 2016

Paper 1: Case Studies

2 hours 15 minutes

Additional materials: Answer Paper

READ THESE INSTRUCTIONS FIRST

Write your index number and name on all the work you hand in.

Write in dark blue or black pen on both sides of the paper.

You may use a soft pencil for any diagrams, graphs or rough working.

Do not use staples, paper clips, highlighters, glue or correction fluid / tape.

Begin each question on a **fresh** sheet of paper.

Answer **all** questions.

At the end of the examination, fasten all your work securely together.

Fasten the **BLUE** cover sheet on top of your Case Study Question 1 answers and the **ROSE** cover sheet on top of your Case Study Question 2 answers.

The number of marks is given in brackets [] at the end of each question or part question.

This document consists of **8** printed pages.
Please check that your question paper is complete.

Answer **all** questions.

Question 1

The Market for Steel

Table 1: Crude steel production (million tonnes)

Country \ Year	2010	2011	2012	2013	2014
China	638.7	702.0	731.0	822.0	822.7
United Kingdom	9.7	9.5	9.6	11.9	12.1
WORLD	1,433.4	1,538.0	1,560.1	1,650.3	1,670.1

Source: World Steel Association

Table 2: Crude steel consumption (million tonnes)

Country \ Year	2010	2011	2012	2013	2014
China	587.6	641.2	660.1	735.1	710.8
United Kingdom	8.8	9.0	8.4	8.5	9.6
WORLD	1,308.2	1,411.8	1,439.3	1,528.4	1,537.3

Source: World Steel Association

Figure 1: Global steel prices (US\$/tonne)

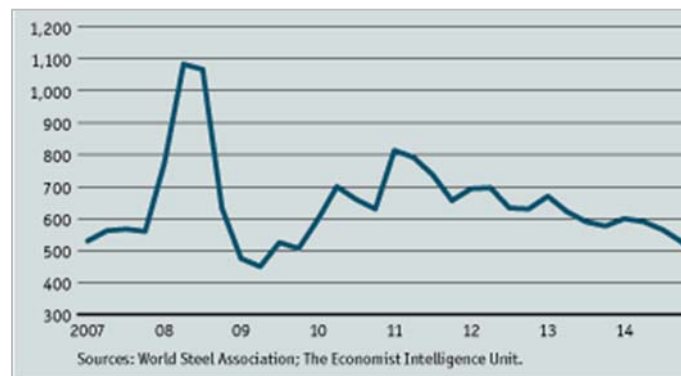


Figure 2: Employment in UK Steel Manufacturing (thousands)

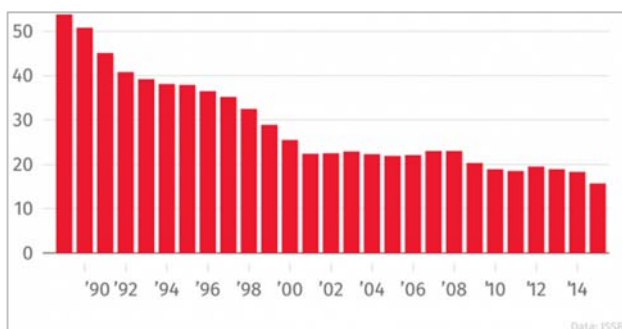


Figure 3: UK Industrial Production Index (1990=100)

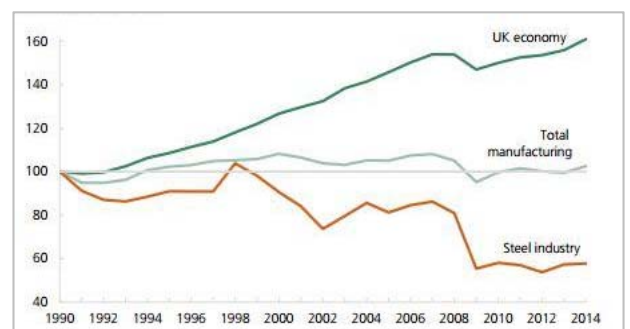


Fig 2 & 3 Source: www.independent.co.uk

Extract 1: Niobium the boutique commodity

Applications of niobium have increased steadily over the years. About 90 per cent of niobium is used in the steel industry, primarily in oil and gas pipelines, automobiles, bridges, high-rise buildings and welded pipes. Resistant to corrosion, niobium strengthens and lightens steel. Adding niobium reduces the weight of a car and improves fuel efficiency; it also significantly reduces the amount of cement required in the construction of building and bridge structures.

The growth and evolution of niobium also extend into the field of medicine (magnetic resonance imaging that produce detailed images of the inside of the body), electronics and nanotechnology (e.g. developing quantum computers which can process multiple data simultaneously, with unlimited capacity).

Brazil is the largest producer of niobium in the world; niobium is the country's third most important mineral export. Two firms in Brazil alone make up 92 per cent of global niobium production with Canada producing the remaining 8 per cent. As of 2010, China was the largest consumer of niobium, accounting for 25 per cent of total consumption. This reflects the size and importance of China's steel industry - China was the largest producer of stainless steel, with its share in world production rising from 1-2 per cent in the 1990s to 37 per cent in 2010.

Adapted from "The Evolution of the Niobium Production in Brazil",
Materials Research, vol. 18 no. 1, Jan/Feb 2015 & *Argonaut Research*, 29 April 2016

Extract 2: The changing niobium landscape

Niobium is hard to find and currently mined in only three places on Earth. 84 per cent of the global supply comes from one company - Companhia Brasileira de Metalurgia & Mineracao (CBMM) in Brazil. London-based Anglo American is the second largest niobium producer in the world and also mines in Brazil. The third niobium producer is Niobec, which mines in Canada.

The demand for niobium remains high due to its use in the production of quality steel. Yet, prices fell last year as slumping oil and gas markets led to fewer metal pipe purchases, according to niobium producer, Anglo American, which wants to cut debt after a collapse in commodity prices. Anglo American is a global and diversified mining business, with a mining portfolio that includes copper, platinum, diamonds, coal, iron ore and manganese, nickel, niobium and phosphates.

Despite the money to be mined in niobium, divestments have taken place in the past few years for considerable compensation. In 2011, CBMM sold a 30-percent stake to Asian steelmakers at US\$3.9 billion in two transactions – a consortium of five Chinese steelmakers, and a consortium of Japanese and South Korean companies. In late-2014, Iamgold divested its Niobec mine to a consortium for US\$530 million to focus on its core gold mining business. In the most recent transaction, Anglo American announced on 28 April 2016 that it was selling its niobium business in Brazil for US\$1.5 billion to China Molybdenum. The company's decision was another step in its quest to sell non-core assets and cut back debt against a backdrop of volatile commodity prices.

Adapted from *The Globe and Mail*, 18 May 2016
& Reuters, 2 September 2011

Extract 3: Chinese steel firms expanding in Africa

China produces too much steel. With 800 million tons of steel a year, the country makes up half of world production in 2014 - adding to the current global glut. Chinese steel is at its lowest price in over a decade and most firms producing the commodity in the country are loss-making as construction slows in the world's second largest economy. Market analysts are not surprised to see China's steel sector shrinking because "a lot of that growth was artificially supported by government subsidies".

But with overcapacity continuing, Chinese steelmakers are exporting a large amount of the metal to other markets at low prices, hurting the sector and prompting trade participants to cry foul on what is perceived as dumping. Yet, instead of shrinking its steel sector, Chinese firms are expanding steel production in Africa. According to a Shanghai-based trade publication, Chinese firms are taking a longer view of Africa's potential given that African steel demand is expected to hit 300m tonnes per year by 2050. African sources of iron ore and basic steel could also give China a more stable supply to feed its industry.

There is a further reason why China has to play the long game in African minerals - Chinese firms use a stick-at-it-strategy because of their newcomer status. In contrast with firms from Britain and France which have roots going back to African countries' colonial days, Chinese firms have had to prove their reliability. They hope that good behaviour during a crisis - even if it loses them money in the short run - will secure them better contracts in the future.

Adapted from *The Economist*, 13 July 2015
& *CNBC.com*, 18 November 2015

Extract 4: UK steel crisis

More than one in six workers in Britain's steel industry is facing the axe after Tata Steel, one of Europe's leading steel manufacturers, confirmed it was cutting almost 1,200 jobs as part of a radical shakeup. The announcement increases pressure on the government over its handling of the crisis.

Britain's steel industry has been battered by falling steel prices, high energy costs, cheap imports and the strength of the pound. Tata said imports of steel plate into Europe had doubled in the past two years and imports from China had quadrupled. The steel crisis threatens severe knock-on effects, with jobs threatened throughout the supply chain for the industry. In addition, many towns with steel plants rely on the sector's skilled workers to spend money in local shops and other businesses.

Karl Köhler, chief executive of Tata Steel's European operations, said "The European commission needs to do much more to deal with unfairly traded imports – inaction threatens the future of the entire European steel industry." Tom Westley, chairman of the UK's Westley Group foundry business, said that in the short run, ministers might need to intervene to save the industry. "When prices of products become so low ... you have to have a longer-term strategy. Perhaps we have got to give some level of subsidy to keep this industry alive and look at it as a national asset rather than [in terms of] costs."

Adapted from *The Guardian*, 20 October 2015

Questions

- (a) Account for the trend in global steel prices from 2011-2014. [2]
- (b) Explain the decision of niobium producers such as Anglo American to divest its interest of niobium mining. [4]
- (c) Explain how “government subsidies” in Extract 3 affect resource allocation in China’s steel sector. [3]
- (d) Using a demand-supply diagram, explain how “the strength of the pound” would affect the market for steel in the UK. [3]
- (e) Discuss the factors which the UK government could consider in deciding whether or not to protect the country’s steel industry. [8]
- (f) With reference to Extracts 2 and 3, assess whether the move by some Chinese steelmakers to expand steel production in Africa or to buy into the niobium business is a sound strategy. [10]

[Total: 30]

Question 2**Asia's Infrastructure Gap****Table 3: Government Budget Balance (% of GDP)**

	2011	2012	2013	2014
Indonesia	-1.1	-1.8	-2.2	-2.2
Philippines	-2	-2.3	-1.4	-0.6
Singapore	1.1	1.6	1.3	0.1

Source: World Bank, accessed 17 July 2016

Table 4: GDP Growth Rates (Annual % change at constant prices in local currency)

	2011	2012	2013	2014
Indonesia	6.2	6.0	5.6	5.0
Philippines	3.7	6.7	7.1	6.1
Singapore	6.2	3.7	4.7	3.3

Source: World Bank, accessed 17 July 2016

Extract 5: Asia faces five challenges to its economic future

Asia faces five challenges as it pursues sustained economic growth: overcoming the middle-income trap, improving its institutions and governance, coping with an aging population, curbing rising inequality, and promoting financial development.

According to Changyong Rhee, the Asia's Director of the International Monetary Fund (IMF), Asia's future growth appears bright but its success is not guaranteed and it depends crucially "on choosing the right policy mix to contain risks and secure growth."

If things slow down more in China than expected, other countries in the region will pay the price. In addition, China's rebalancing from investment towards consumption, gradual appreciation of the renminbi, increased flexibility in rural-urban migration, and other adjustments by the regional powerhouse are opening up opportunities for other developing countries in Asia.

In Japan, there is a risk that Abenomics-related measures could be less effective in boosting growth than envisaged, particularly if structural reforms in labour and product markets fall short of expectations and fail to raise consumer and investor confidence. And domestic and global political tensions could hamper trade or weaken investment and growth across the region.

Source: *International Monetary Fund Survey*, 29 May 2014

Extract 6: Plugging Asia's \$11 trillion infrastructure gap

The Asian Development Bank forecasts that Asia needs US\$8 trillion (S\$11 trillion) in the decade to 2020 to plug the infrastructure deficit. As countries move up the value chain and urban populations expand, demand for transport, logistics and utilities will only continue to grow, increasing the burden on public funds. The World Bank estimates that a 10 per cent increase in capital investment into infrastructure projects contributes to a 1 per cent growth in gross domestic product.

Rising urbanisation in countries such as Indonesia and the Philippines will spur greater need for physical infrastructure and power generation capacity. Indonesia is focusing on mass transit, toll roads and airport development, while the Philippines is developing its ports, expressways and energy projects. Given the massive requirement, the region may still face a funding shortfall even if the newly launched Asian Infrastructure Investment Bank provides annual loans of US\$10 billion to US\$15 billion for the first five or six years. Better-linked physical and digital infrastructure which promotes the smooth movement of goods and services will edge the 10 members in Asean closer to achieving its goal of seamless regional connectivity.

Source: *The Straits Times*, 31 March 2016

Extract 7: PPPs can help close Asia's infrastructure gap

According to Takehiko Nakao, the Director of Asian Development Bank (ADB), there is a serious lack of infrastructure in Asia and while governments need to increase public infrastructure investment to narrow this infrastructure gap by mobilizing more tax revenues backed by strong enforcement and borrowing from international financial institutions such as ADB, it is also crucial for them to tap on private-resources locally and abroad through public-private partnerships (PPPs).

PPPs are contractual arrangements where a government partners with the private sector to deliver infrastructure services. They can take several forms, from simple contracts for private-sector-run garbage services to more complex build-operate-transfer (BOT) agreements. Under BOT, private parties finance and build infrastructure, then operate it over a fixed period to generate returns before transferring ownership to the government. PPPs are gaining strong foothold in Asia.

Source: <http://www.adb.org/news/op-ed>, accessed 14 July 2016

Extract 8: Spicing up growth in Indonesia

Indonesia's President Jokowi wants Indonesia to return to 7% annual growth — a rate unseen since the Asian financial crisis of the late 1990s, but not unusual before it. The problem is commodities. The country is the world's leading exporter of palm oil and tin, the second-biggest rubber exporter and the fourth-largest coal producer. Indonesia is also the world's biggest gold mine and third-largest copper mine. When China's hunger for commodities was growing and prices were high, Indonesia boomed. As China slows down, Indonesia too.

Jokowi wants to rebalance Indonesia's economy away from commodities and towards manufacturing. He is optimistic. Indonesia today is the fourth-most-populous country in the world, with a huge, fast-urbanising domestic market and a rising consumer class. Workers are cheap and demography is in its favour: the average manufacturing job costs less in Indonesia than in Thailand and China and its population median age, 29.2, is well below those of Thailand (36.2) and China (36.7). However, foreign investment has stagnated in recent years. Companies spend 50% more on logistics than those in Thailand and twice as much as those in Malaysia. Manufacturing's share of GDP, meanwhile, fell from 29% in 2001 to 24% in 2013.

Jokowi has taken some steps to reverse the slide. He launched a one-stop shop to speed up investment approvals, raised the budget for infrastructure by 53% — the biggest year-on-year increase in Indonesia's history, diverting the savings from the welcome cutting of fuel subsidies to boost infrastructure budget and is seeking foreign investment for infrastructure projects.

But many business people worry that the results will not match the rhetoric. Much of the infrastructure money will go to inefficient, state-owned enterprises. Indonesia has inflexible labour laws and minimum wages have shot up. The number of industries barred to foreign investors has grown steadily, now to include onshore oil extraction and e-commerce. A much-criticised draft law may soon require companies that sell tablets and smartphones to produce up to 40% of their components in Indonesia. Tight immigration rules have cut the number of foreign workers in Indonesia by 16% in three years.

Source: *The Economist*, 9 May 2015

Questions

- (a) (i) Compare the change in Singapore's budget balance as a percentage of GDP with that of Philippines between 2011 and 2014. [2]
- (ii) Explain how economic growth might improve the budget balance. [2]
- (b) Explain why it is more likely the government and not the private sector that would finance the provision of infrastructure. [4]
- (c) Explain why there might be concern that Indonesia is too dependent on commodities as a key export sector. [4]
- (d) Discuss how the rebalancing of China's economy and the gradual appreciation of its currency will impact other developing economies in Asia. [8]
- (e) In light of Indonesia's macroeconomic aims mentioned in Extract 8, discuss whether the government should embrace greater market forces and increase the participation of foreign firms in its economic policies. [10]

[Total: 30]