	<h1>PRELIM EXAM 2013</h1>
	<h2>Economics JC 2 H1 (8819)</h2>

### PAPER 1

Monday

16 September 2013

14:00 – 17:00

**TIME** : 3 hours 00 mins

### INSTRUCTIONS TO CANDIDATES

**Do not open this paper until you are told to do so.**

Write your name, class and name of economics tutor in the space provided on the writing paper.

Answer **all** questions in **Section A** and **one** question in **Section B**. The number of marks is given in the brackets at the end of each question. Write your answers on the writing papers provided. If you use more than one sheet of paper, fasten the sheets together.

You are advised to spend several minutes per question reading through the data and questions before you begin writing your answers.

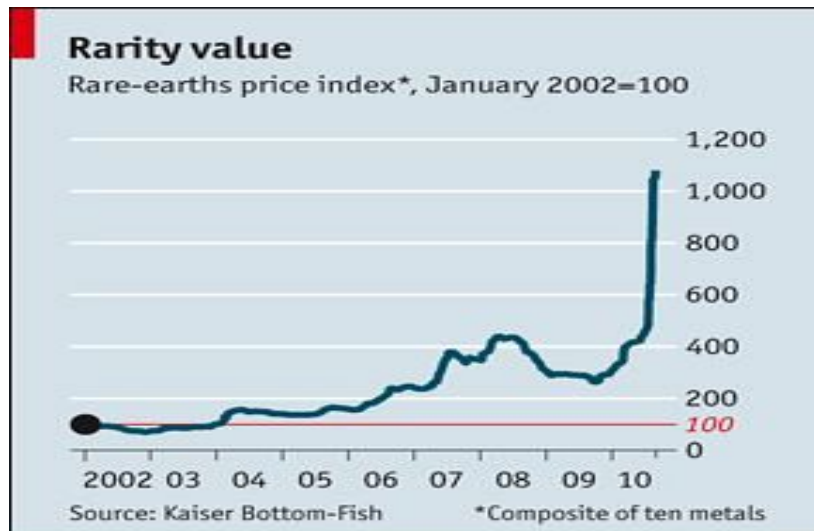
There are 8 printed pages including this cover page

Answer all questions in this section.

Question 1

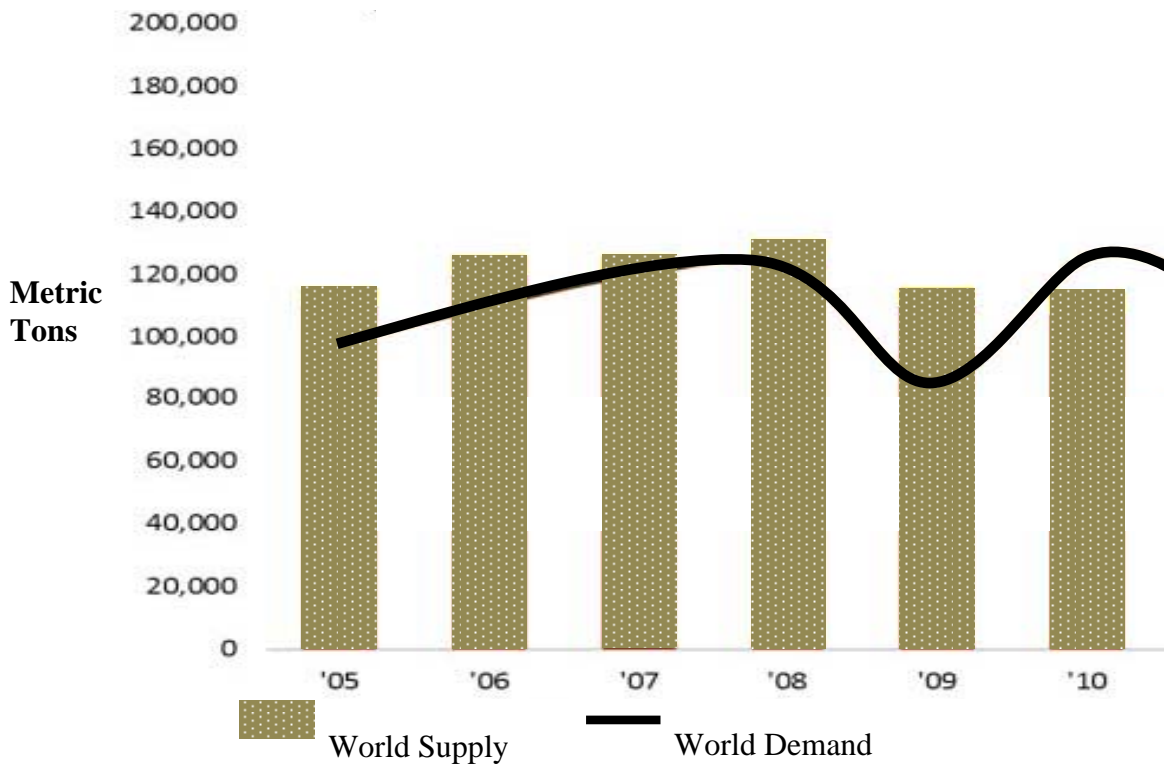
The Market for Rare Earth Metals

Figure 1: Global rare earth metals price index



Source: *The Economist*, 2 Sep 2010

Figure 2: Global Rare Earth Metals Supply and Demand 2005 - 2010



Source: *Industrial Minerals Co. of Australia*

### **Extract 1: China's grip on the world's rare earth market may be slipping**

For the past two years, the world has had a rare earth problem. Rare earth metals are crucial for a wide range of electronics, from solar panels, fluorescent bulbs to iPod headphones to hybrid vehicles. And China produces 95 percent of the world's supply. So when China began sharply restricting exports in 2010 — allegedly to give its own industries an advantage — the global prices for rare earths skyrocketed. Bad news. Except now, it is looking like the rare earth crisis is receding.

Despite their colorful name, rare earth metals aren't actually all that rare. At one point or another during the twentieth century, Brazil, India, the United States and South Africa were all major producers. In the 1980s, China decided to ramp up production massively, driving out competitors and cornering the market. China managed to do this, in part, through preferential policies by the Chinese government and lax environmental standards. This quickly enabled China to become a dominant, low-cost producer of rare earths by the late 1990s.

In 2010, China decided to restrict its export quota by 40 percent. That helped drive prices up and suddenly made it economical for other countries to start boosting their own production again. Out in Mountain Pass, California, for instance, Molycorp is now reopening and expanding its massive rare earth metals mine. Many countries are also doing the same.

Meanwhile, Japan has rushed to reduce its dependence on rare earths over the past few years—especially since China has a habit of restricting exports every time the two nations get into a territorial spat. Panasonic has developed a technique to recycle neodymium from old electronic appliances. Honda is extracting rare earths from used car batteries. TDK Corp., which creates magnets for motors, now sprays dysprosium on its motors rather than mixing it in, in order to conserve.

*Source: The Washington Post, October 19, 2012*

### **Extract 2: The Case Against Lynas in Malaysia**

If everything goes as planned, by September this year, the largest rare earth refinery in the world will start operating in Gebeng Industrial Zone, some 25 km away from Kuantan town, home to almost half a million people. This plant will cast a shadow over Kuantan town. Real estate price will plunge, residents who are able to relocate will flee and those who are not will be in constant fear of radiation exposure.

The authorities have learnt nothing from the Asian Rare Earth (ARE) debacle in Bukit Merah, Perak. The ARE plant was operated by Mitsubishi Chemical and it extracted rare earth from old tin mine slag. Unfortunately the waste contains high level of thorium, which is a perpetually radioactive substance because its half life is 14.05 billion years! The residents there blamed the plant for birth defects and eight leukemia cases, 7 of whom have since died. As a result of strong public opposition, the ARE was finally closed in 1992 and is currently undergoing a massive RM303 million cleanup.

Similarly, for the new rare earth refinery, the point of contention is the waste management. Lynas will import rare earth ores from Mount Weld in Australia to be processed in Gebeng. The finished products will be exported overseas while the radioactive waste dumped in Gebeng. From the press statements, one can surmise that the waste management is not even finalized yet.

Environmentalists contends that the much larger volume causes thorium levels to build up over time, to which Lynas has yet to provide any reply. Lynas also conveniently skipped the

issue of radon gas, another potent carcinogen, which is discharged when the ores are cracked. Finally, Lynas refuses to disclose whether they will process uranium bearing ores in Gebeng from their newly acquired Malawian mine in Gebeng.

*Source: Malaysia Today, 05 May 2011*

### **Extract 3: China's Rare Earth Industry and Export Regime**

Over the past few years, the Chinese government has implemented a number of policies to tighten its control over the production and export of rare earths, which are important to a number of high technology industries, including renewable energy and various defense systems.

Moreover, many analysts contend that China's recent actions to consolidate its rare earth production and restrict exports are intended to promote the development of domestic downstream industries, especially those engaged in high technology and green technology industries, by ensuring their access to adequate and low-cost supplies of rare earths.

It is further argued that China's rare earth export policies are intended to induce foreign rare earth users to move their operations to China, and subsequently, to transfer technology to Chinese firms. This would aid to increase the productive capacity of China. China denies that its rare earth policies are political, discriminatory, or protectionist, but rather, are intended to address environmental concerns in China and to better manage and conserve limited resources. However, there could be adverse effect on the Chinese economy.

*Source: Adapted from Congressional Research Service [www.crs.gov](http://www.crs.gov)*

### **Questions**

- (a) With reference to the data
- (i) Summarise the trends in global rare earth metals prices from 2007 to 2010 [2]
  - (ii) Prices of rare earth metals have changed differently for the period 2008-2009, and 2009-2010. Using demand and supply analysis, account for this difference. [4]
  - (iii) What can be inferred from extract 1 about the rare earth metals prices in 2011? [2]
- (b) Explain why China adopted preferential policies for its producers of rare earth metals. [2]
- (c) (i) With reference to the data, define and explain how negative externalities can arise in rare earth metals extraction. [4]
- (ii) As a consultant economist, what options would you present to the Malaysian government for responding to the alleged negative externalities of rare earth metals extraction, and what would you recommend? Justify your answer. [8]
- (d) China can only benefit from the implementation of export restrictions on rare earth metals. Discuss. [8]

**[Total: 30 marks]**

## Question 2

### India and its macroeconomic problems

#### Extract 4: Slowing down of the BRIC

Brazil, Russia, India and China, was acronymed into the BRIC in 2001 by Jim O'Neill, an investment banker from Goldman Sachs. In 2007 China's economy expanded by an eye-popping 14.2%. India managed 10.1% growth, Russia 8.5%, and Brazil 6.1%. The IMF now reckons China will grow by just 7.8% in 2013, India by 5.6%, and Russia and Brazil by 2.5%. So, what is ailing the BRIC and other emerging markets?

Firstly, the idea that emerging-market economies could fully decouple from economic weakness in advanced economies was far-fetched: recession in the eurozone, near-recession in the United Kingdom and Japan in 2011-2012, and slow economic growth in the United States were always likely to affect emerging-market performance negatively – via trade, financial links, and investor confidence.

Secondly, and most recent, factor is the US Federal Reserve's signals that it might end its policy of quantitative easing earlier than expected, and its hints of an eventual exit from zero interest rates. The era of cheap or zero-interest money that led to a wall of liquidity chasing high yields and assets – equities, bonds, currencies, and commodities – in emerging markets is drawing to a close.

These countries share other weaknesses as well: excessive fiscal deficits, external deficits, above-target inflation, and stability risk (reflected not only in the recent political turmoil in Brazil but also in India's political and electoral uncertainties). Thus, emerging economies with large twin deficits and other macroeconomic fragilities may experience further downward pressure on their growth rates.

*Adapted from various sources*

**Table 1: BRIC's in 2011**

Indicator - %	Brazil	Russia	India	China
Real GDP Growth	2.7	4.3	7.2	9.2
Inflation	6.6	8.4	8.6	5.4
Unemployment	6	6.5	9.8	4
Investment/GDP	20.6	23.2	34.4	48.3
Saving/GDP	18.4	28.6	31.6	51
Current Account/GDP	-2.1	5.5	-2.8	2.8
Budget Balance /GDP	-2.6	1.6	-8.7	-1.2

*Source: The Economist, 29<sup>th</sup> September 2012*

### Extract 5: Rupee fall may have triggered inflation, but it also offers a way out of industrial decline

Every dark cloud has a silver lining. Nowhere is this saying more apt than in the case of the falling rupee. It has raised fears of a spike in already high inflation rates and decline in foreign investment flows. But it has simultaneously opened up new possibilities of boosting exports, making India's economy more competitive and aiding a manufacturing revolution. The opportunity offered by the rupee depreciation can be substantial, given that labour costs in China have risen sharply.

Current trends have already made India the cheapest source of auto components. Important industries that can leverage these trends include automobiles, IT, engineering, metals, pharmaceuticals, chemicals, textiles, leather and sports goods. Sustained growth of labour-intensive manufactured products offer great potential for absorbing the growing numbers of workers added to the labour force each year.

The rupee, which has been hurt by a record current-account deficit, has sunk 7.4 percent against the dollar in 2013. In July 2013, India stepped up efforts to help the rupee after its plunge to a record low. The RBI (Reserve Bank of India, India's Central Bank) raised bank rates by 2 percentage points, and plans to drain 120 billion rupees (\$2 billion) through open market sales of government bonds. These actions of the RBI will lead to an increase in interest rates.

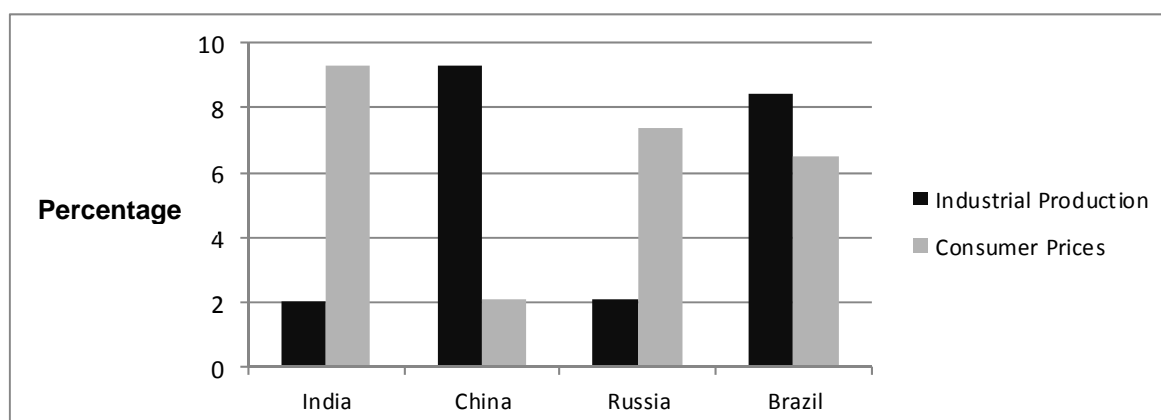
Finance Minister, Palaniappan Chidambaram, told reporters that "these measures in no way affect our commitment to growth. Measures are taken to quell excessive speculation and reduce volatility and stabilize the rupee."

Prasanna Ananthasubramanian, an economist at ICICI Securities Primary Dealership Ltd. in Mumbai exclaimed that "it's quite surprising that the central bank has used these measures to support the rupee at a time when the economy is in such a bad state." India's economy expanded 5 percent in the fiscal year ended March, the slowest since 2003, hurt by moderating investment, easing domestic demand and subdued exports.

*Source: India Times, Aug 2013*

**Figure 3: The BRIC Growth and Inflation rate in March 2013**

#### BRICS: India worst off on Industrial Growth and Inflation



*Source: The Economist and The Guardian 2013(Adapted)*

### Extract 6: FDI no panacea for ailing economy

In a bid to shore up India's flagging economy, the government on Tuesday announced opening up foreign direct investment (FDI) in 13 sectors, including petrol and natural gas, insurance, defence production and telecom. The truth is that FDI easing only makes it easier for foreign investors to put their money in India. It doesn't change the fundamentals that determine if they should put their money in India.

A liberal FDI regime can yield results only if domestic economy is revived. The investors, including Indian firms that have been growing in India for decades, are reluctant to risk money due to uncertainties of doing business in India. That Korean steel giant Posco walked out of the biggest FDI deal in Karnataka the day the government announced liberalization of FDI rules is a grim reflection of ground realities. To create an enabling investment atmosphere, the government must remove bureaucratic hurdles, adopt stable fiscal policies and a transparent tax regime. It should allow level playing field for Indian industry and fix a lock-in period for FDI so that money doesn't flow back easily.

*Source: The New Indian Express, 18<sup>th</sup> July 2013*

### Questions

- (a) Using Table 1, summarise the economic performance of India compared to that of China in 2011. [2]
- (b) (i) Using a diagram, explain why the Indian Rupee appreciated after the Indian government raise the interest rates. [2]
- (ii) Explain how this rise in the Indian rupee might affect prices of goods and services in India. [2]
- (c) (i) Explain what is meant by the term 'downward pressure on their (BRIC) growth rates'. [2]
- (ii) Using AS/AD analysis, explain two evidences contained in the data that could cause downward pressure on the growth rates of the BRIC in the near future. [6]
- (d) With reference to the data where appropriate, assess whether on balance the Indian economy would benefit from its 'liberal FDI regime'. [8]
- (e) The finance minister of India stated that raising bank rates and having open market sales have 'no way affect our commitment to growth'. Discuss the validity of this statement. [8]

**[Total: 30 marks]**

## Section B

Answer **one** question from this section.

- 3 From June 1st 2013, there will be a cap imposed on the number of times financially vulnerable patrons visit a casino each month. Administered by the National Council on Problem Gambling (NCPG), the Casino Visit limit will complement the current Casino Exclusion system by providing another option for individuals and their families to control gambling habits.

*- Adapted from Channel News Asia 28th May 2013*

- (a) Explain with examples, the factors affecting demand for and supply of gambling services in Singapore. [10]
- (b) Discuss the view that this new policy of imposing a cap on the number of visits for financially vulnerable patrons is the best option available to tackle the problem of gambling addiction in Singapore. [15]

- 4
- (a) Explain the likely causes of an appreciation of a country's exchange rate. [10]
  - (b) Assess the possible impact of an appreciation of a country's exchange rate on its economy. [15]

\*\*\*\*\*THE END\*\*\*\*\*