

## 2019 J1 H1 Economics December Holiday Homework Practice Paper #1

### Oil and Unemployment

(Source: NYJC 2019 J2 H1 Economics Block Test)

**Figure 1: Global Crude Oil Prices (US\$/barrel)**



Source: *trendingeconomics.com*, accessed 10.07.18

#### **Extract 1: Oil Prices Fall on Unexpectedly Large Inventory Build**

Oil prices crashed below \$27 dollars a barrel on Wednesday for the first time since 2003, caught in a broad slump across world financial markets with traders also worried that the crude supply glut could last longer. The slide of more than 25 percent in oil prices so far this year has piled more pain on oil drillers and producing nations alike, yet they continue to pump more oil into an oversupplied market.

Analysts say the drop in oil prices has been driven by economic slowdown in China and Europe which have curbed appetite for commodities in general. At the same time, the rise of the US as a shale oil producer means it now imports less oil, adding to the glut on world markets. The lifting of Western sanctions on Iran has also worsen the existing problem, as the country pumps more oil into the market.

The effects of falling prices are being felt by economies around the world but oil producing nations that rely on exports have been particularly hard hit.

Sources: Adapted from *www.bbc.com*, 18.01.16 and *www.cnn.com*, 19.01.16]

#### **Extract 2 Nigeria is in trouble**

The collapse of the price of crude created serious economic crisis for oil-reliant countries, including Nigeria. It was not unexpected that Nigeria became one of the countries most affected by the downturn. Oil accounts for 69 per cent of Nigeria's exports, according to the National Bureau of Statistics (NBS) and around 70 per cent of government tax revenue. The country's crude oil export revenue fell by 33 per cent between 2015 and 2016. The plunge in oil prices left states and local governments unable to pay workers for months.

In response to fiscal pressure caused by the collapse in crude oil prices, the country announced in May 2016 the removal of oil subsidy that had cost billions of dollars. The removal which resulted in a 67 per cent increase in petrol price also saw the prices of goods and services across all sectors of the economy rise.

The effects of the government curtailing subsidies, introducing austerity measures and tightening of its spending in response to low oil income, started to be felt hard in Nigeria in 2016. The naira fell and investors fled. Foreign direct investment (FDI) in Nigeria fell by 37 per cent year-on-year in 2016. The economy also, in 2016, contracted, inflation hit 17.1 per cent in June, the highest rate in more than a decade; putting Nigeria's status as Africa's largest economy under threat.

Nigeria, Africa's biggest economy, officially slid into recession for the first time in more than 20 years. According to the NBS gross domestic product (GDP) contracted by 2.06 per cent after shrinking 0.36 in the first quarter 2016.

*Sources: Adapted from [www.allafrica.com](http://www.allafrica.com), Jan 2017*

### **Extract 3: Perfect timing for Obama to proposes \$10-a-barrel oil tax**

President Barack Obama is about to unveil an ambitious plan for a “21<sup>st</sup> century clean transportation system.” And he hopes to fund it with a tax on oil.

The president will propose more than \$300 billion worth of investments over the next decade in mass transit, high-speed rail, self-driving cars, and other transportation approaches designed to reduce carbon emissions and congestion. To pay for it all, Obama will call for a \$10 “fee” on every barrel of oil, a surcharge that would be paid by oil companies but would presumably be passed along to consumers. It also comes at a time when the energy industry has been crushed by the dramatic crash in oil prices. "By placing a fee on oil, the President's plan creates a clear incentive for private sector innovation to reduce our reliance on oil and at the same time invests in clean energy technologies that will power our future," the White House said.

*Sources: Adapted from [www.bbc.com](http://www.bbc.com), 04.02.16 and [money.cnn.com](http://money.cnn.com), 04.02.16*

**Table 1: US Macroeconomic Indicators**

	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>
GDP (USD per capita)	52 726	54 651	56 420	57 591	59 535
Change in Consumer Price Index (%)	1.46	1.62	0.12	1.26	2.13
Unemployment (%)	7.38	6.17	5.29	4.87	4.35
GINI Coefficient	0.396	0.394	0.390	0.391	-
Net Exports (million USD)	- 459 602	- 485 036	- 609 603	- 652 823	-

*Source: OECD*

#### **Extract 4: President Obama is handing over a strong economy to his successor**

According to the government's report on Friday, Donald J. Trump can expect to inherit an economy that has added private sector jobs for 80 months, put another 178,000 people on payrolls last month and pushed the unemployment rate down to 4.6 per cent today from 4.9 percent the previous month. Wage growth, though slower, is still running ahead of inflation, and consumers are expressing the highest levels of confidence in nearly a decade.

For all the improvements, tens of millions of Americans understandably feel that the recovery has passed them by. Those without skills are relegated to low-paying positions without steady schedules, security and benefits. Breadwinners who once held well-compensated manufacturing jobs are angry about being forced to settle for lower-wage service jobs – or no jobs at all.

Betsey Stevenson, an economist at the University of Michigan and a former economic adviser to Mr. Obama, said that manufacturing, while still a driving force in the economy, employed fewer and fewer people. More than 80 percent of jobs are now in the service industry, Ms. Stevenson said, and Mr. Trump should be thinking more about how to match workers with those jobs.

*Source: The New York Times, 02 December 2016*

#### **Extract 5: Donald Trump proposals on jobs and wages**

"Right now, 92 million Americans are on the sidelines, outside the workforce, and not part of our economy. It's a silent nation of jobless Americans, said the President.

Our greatest job creation measure is going to be our 15% business tax rate – down from the current 35% rate, a reduction of more than 40 percent. An explosion of new business and new jobs will be created.

*Source: The Guardian, 02 Aug 2017*

### Questions:

- (a) With reference to Figure 1, summarise the changes in the prices of crude oil from 2012 to 2016. [2]
- (b) With reference to Extract 1, and using a supply and demand diagram, account for the crash in oil global crude oil prices. [6]
- (c) Using appropriate diagram(s), explain why Nigeria 'slid into recession for the first time in more than 20 years'. [8]
- (d) Extract 2 and 3 highlights different actions by Nigeria and US in the oil industry.
- (i) Explain why Nigeria removed oil subsidy whereas US imposed an oil tax. [4]
- (ii) Using a diagram, explain what determines the size of the increase in the price of a petrol following the removal of fuel subsidy in Nigeria. [4]
- (iii) The imposition of "a \$10 "fee" on every barrel of oil...that would be paid by oil companies but would presumably be passed along to consumers". [8]
- Discuss whether consumers or producers would bear a greater tax burden when a tax is imposed on producers.
- (e) Governments all over the world are preoccupied with issues of unemployment.
- (i) Explain the possible effects of unemployment. [3]
- (ii) Discuss whether Mr Trump's 'greatest job creation measure' is the best way to deal with the unemployment problem faced by Americans in the US. [10]

**Total: 45 marks**

## 2019 J1 H1 Economics December Holiday Homework Practice Paper #2

### The Middle Income Trap

(Source: NYJC 2018 J2 H1 Economics Block Test)

**Table 1: Food and Agriculture Organization (FAO) Price Index (2002 - 2004 = 100)**

Year	2011	2012	2013	2014	2015
Index	230	215	212	207	179

*The FAO Food Price Index is a measure of the monthly change in international prices of a basket of food commodities. It consists of the average of five commodity group price indices, weighted with the average export shares of each of the groups for 2002-2004.*

Source: *Food and Agriculture Organization of the United Nations*, 2015

#### Extract 1: Global Food market

Cheap oil contributed to abundant global supplies of food in 2014 and prospects of a bumper crop for wheat, maize, potatoes and rice in 2015 - factors that are driving the sharp decline in international food prices. The agriculture and food sector continue to benefit from less expensive chemical fertiliser, fuel and transportation costs brought on by the previous year's oil price declines.

Falling oil prices have also affected the demand for biofuels, made from crops like maize and potatoes, while the developments in rice support policies for the needy are other factors that could impact food prices. However, unexpected domestic food price fluctuations remain a possibility so it is crucial that countries are prepared to address dangerous food price hikes when and if they unfold.

Source: *World Bank*, 1 July 2015

#### Extract 2: Can Brazil Escape the Middle Income Trap?

One often hears that Brazil's economy is stuck in the "middle-income trap." Since the debt crisis of the 1980's, Brazil has failed to revive the structural transformation and per capita income growth that had characterised the previous three decades. Middle-income countries seeking to reach the next stage of development can no longer simply import or imitate existing technologies or capabilities; they must build their own.

The President of Brazil has recognised that the country needs more business-friendly policies. Last year, her re-election campaign saw a doubling of the fiscal deficit, to 6.75 per cent of GDP. To stabilise gross public debt, the president has promised to cut back on government spending. In order to get the economy moving, ideally, Brazil would offset this fiscal contraction with looser monetary policy. But because of the country's hyperinflationary past, as well as more recent price hikes — Central Bank cannot cut its interest rate.

Adapted from project-syndicate.org, February 2015

### **Extract 3: Is China Suffering from the Middle Income Trap?**

For about 30 years, the Chinese economy has grown at an average pace of 10 per cent per year, or three times the global average and has transformed China from a low-income to a middle-income country. Yet, as China now looks to make the next jump to high-income status, it is showing signs of trouble. China appears to be slowing even more quickly than anticipated. While weaker growth is a relatively new phenomenon for China, it is a common experience for other countries that have swiftly moved from low-income to middle-income status. It is so prevalent a trend that it has come to be known as the “middle-income trap” and China may be destined for this trap.

Essentially, the middle-income trap characterises economies that, once they achieve middle-income status, wind up stagnating there, unable to move to high-income status because economic growth continues to be weak. At the middle-income level, a country's competitiveness needs to become driven by productivity increases that utilise resources more efficiently. Ramping up domestic demand is also important as an expanding middle class can use its increasing purchasing power to buy high-quality, innovative products and help drive growth.

China has experienced periodic labour shortages that are putting upward pressure on costs, such that some multinational corporations that produce labour-intensive products in China have started looking at lower-cost alternatives elsewhere. They are also losing the competitiveness battle to high-income countries that produce higher-end, more sophisticated products. The design and workmanship of Chinese products are not of the same quality. Some Chinese consumers have reached a level of income to allow them to buy higher-end products, but they often perceive Chinese automobile brands, for example, as being inferior to foreign brands, even those that were actually manufactured in China.

China has also deliberately lowered the value of the yuan with respect to the US dollar. The devaluation could help stimulate China's declining export industry. As exports have softened, China runs the risk of large job losses in the manufacturing industries.

Adapted from Investopedia.com, September 2015 and Los Angeles Times, August 2015

### **Extract 4: Unemployment in China**

Youth unemployment is coming down in rich countries but rising in China as economic growth abates, the International Labour Organization said.

In China, those who are less educated are far more likely to be employed than those who are better educated. The country is not creating sufficient number of high-quality positions to soak up its educated youngsters. At the same time, most universities are more interested in pursuing revenue and growing themselves in size. The result is that there is little motivation to enhance the quality and the employability of their students.

Young job seekers often find themselves trapped in a vicious cycle. The job-searching period for them becomes considerably longer than for experienced workers, which leads to gaps in employment history, loss of skills and productivity, and harms their future work prospects. High youth unemployment causes immediate and long-term economic damage.

Adapted from OECD.org October 2013 and UK Reuters October 2014

### **Extract 5: An Industrialised China**

After over three decades of double-digit rates of hyper-growth, China's economy in recent years has significantly slowed down, and this growth deceleration is set to continue. But the country's present economic slowdown has been much sensationalised by international media.

China's past dynamic growth had indeed been fuelled by significant technological progress associated with simple technology transfer from imported machines. But China today is no longer relying on technology imports. Its future productivity gains will have to come from its' own technological development.

China has already rapidly expanded its R&D activities, which reached 2.1 per cent of GDP in 2014, compared with 2.8 per cent for the US. In total terms, China's R&D spending is actually quite high, being the world's second-largest after the US. Not surprisingly, China has for several years in a row topped the world in filing the largest number of patents and inventions - some 2.7 million applications were registered in 2015 alone.

Adapted from Straits Times, February 2016

## Questions

- (a) (i) Describe the trend in world food prices from 2011 to 2015. [2]
- (ii) Using a diagram, account for the trend in world food prices from 2011 to 2015. [4]
- (b) Extract 2 states that 'ideally, Brazil would offset this fiscal contraction with looser monetary policy'. With the help of AD/AS diagrams:
- (i) Explain how Brazil's fiscal policy would lead to a contraction of the economy. [4]
- (ii) Explain how an expansionary monetary policy would 'offset' this contraction. [4]
- (c) With reference to Extract 3, explain the expected impact of China's devaluation on its export revenue and comment on the extent of this impact. [6]
- (d) (i) Justify the type of unemployment that is observed in Extract 4. [2]
- (ii) Explain why a government would be concerned with this type of unemployment. [3]
- (e) Discuss the possible economic consequences of a country falling into the 'middle income trap'. [8]
- (f) Evaluate the effectiveness of supply-side policies in addressing the macroeconomic problems facing China. [12]

**[Total: 45m]**



## 2019 J1 H1 Economics December Holiday Homework Practice Paper #3

### Malaysia's and Indonesia's Slowing Growth

(Source: NYJC 2019 J1 H1 Economics End-of-Year Exam)

**Table 1: Economic Indicators in 2018**

Indicators	Malaysia	Indonesia
GDP per capita (constant 2010 US\$)	12,109.5	4,284.7
Industrial Production Growth Rate (%)	4.6	3.8
Population	31,528,585	267,663,435
Gini Coefficient	0.41	0.39
Life Expectancy	75	69
Retirement Age	60	58
Gasoline Price (USD/Litre)	0.50	0.45

Source: [Various sources](#)

#### **Extract 1: Indonesia's electricity subsidy reforms led to improved efficiency**

In 2012, electricity subsidies cost the government US\$10 billion. In an ambitious reform program since 2013, Indonesia has taken major strides to reduce this subsidy bill. The reforms have involved reducing subsidies and thus raising electricity prices to levels that better reflect costs, with exemptions for customers with small electricity connections, including the poor. Electricity use continued to grow, due to continued increases in economic activity. As a result of Indonesia's move to be more energy efficient, the pressure to build new generation capacity has declined. Some of Indonesia's plans to build coal-fired power stations have been cancelled.

Source: Adapted from [The Jakarta Post](#), March 2018

#### **Extract 2: Indonesia's economic growth slows in first quarter**

Indonesia's economic growth pace in January to March fell slightly reflecting still-weak consumption. The rupiah slipped to its weakest level since January 2016. President Joko Widodo had promised to lift gross domestic product (GDP) growth to 7 per cent by inviting investment and cutting reliance on consumption as a growth engine. But despite moves to build infrastructure, streamline regulations, attract investors and keep prices stable, the annual economic growth has stayed close to 5 per cent for years.

Mirae Asset Sekuritas Research Head Taye Shim said a softer rupiah could challenge growth prospects. A weak currency could put pressure on firms reliant on imported raw materials. Weak consumption has been a key factor weighing on growth and the government has announced price control measures on basics such as fuel and rice, aimed at keeping inflation low and purchasing power high. Finance Minister Sri Mulyani Indrawati said the government would work with the business community to stimulate investment and encourage more exports to take advantage of a weak rupiah.

Source: [The Straits Times](#), May 2018

**Extract 3: Worsening air pollution reducing lifespans in Indonesia**

Indonesia's air quality in 2018 has deteriorated from among the cleanest in the world to one of the most polluted over the past two decades, shaving five years from life expectancy in some regions, researchers say. The study by the Energy Policy Institute at the University of Chicago says an increase in coal-fired [power stations](#), burning of land for plantation agriculture and rising car ownership are responsible for the worsening pollution in the world's fourth-most populous country.

According to the researchers, sustained high concentrations of particulate matter in the air people breathe will cut 2.3 years from lifespans in the capital, Jakarta. It rises to 5.6 years for its neighbouring Ogan Komering Ilir district. A Harvard and Columbia study estimated the haze hastened 100,000 deaths in the region. The University of Chicago study said the air pollution effects are widespread. Small particles carried by the wind from land fires at times contribute 31 percent of Jakarta's "PM2.5"—tiny particles that cause haze when levels are elevated and which are linked to lung cancer, respiratory illness and other diseases. Researchers said Indonesia's pollution problem is "solvable" through stricter regulation and stronger enforcement.

[Source: Phys.org, March 2019](#)

**Extract 4: River pollution in Malaysia increasing due to rapid development, lack of conservation**

River pollution nationwide increased slightly, by 2 percent last year. Of the 189 main river basins in the country, 11 percent were considered polluted. Water, Land and Natural Resources Minister Dr Xavier Jayakumar said the increase was likely caused by rapid development and lack of awareness on environmental conservation and preservation. The most affected rivers are due to the effects of deforestation and opening of new logging areas. Although the failure of having an integrated system for forest management will affect a relatively small proportion of the Malaysian population, the effect on those few people depending on the river for clean water can be serious as they may be left without clean tap water. Xavier asked for all state and local authorities to fully enforce laws to keep rivers clean. Incentives and enforcement are both needed to make this happen. Irrigation and Drainage Department launched the Integrated River Basin Management programme nationwide to ensure that there is enough clean water, as well as reduce the risk of floods and increase environmental conservation.

Source: Adapted from [The Star Online](#), October 2018

**Extract 5: Malaysia's economy slowing down**

The softer growth, given the fall in government development expenditure meant that the earlier estimates could not be met. Bank Islam Malaysia Bhd Chief Economist Dr Afzanizam believes that the next economic downturn is oncoming and urged the government to cut taxes, aside from easing the monetary policy. Concurring with Shamsiah, Malaysian Institute of Economic Research Senior Research Fellow S. Nambiar said that, "There are some factors that are not conducive for growth. The cut back in projects and infrastructure investments might also mean a reduction in multiplier effects." AmBank Group Chief Economist Anthony Dass also believes that

the possibility of a recession will be driven more by “external noises as opposed to domestic issues”.

The key threat is a full-blown US-China trade war. “A full-blown trade war added with emerging market debt crisis that becomes contagion may hit household and business sentiments.”

AllianceDBS Research points out that fiscal reforms such as the removal of GST and the standardisation of minimum wage across the country will likely provide favourable domestic demand conditions that will support private consumption growth towards the end of the year. “However, the boost in private consumption growth is likely to be insufficient to keep GDP growth above the 5% level. The moderation in manufacturing sector’s production and possibly a drop within the construction sector due to the cancellation or postponement of mega projects will keep GDP growth subdued.” Moving forward, Anthony expects the country’s public investment to be weak due to lower capital spending by public corporations.

Source: [The Star Online](#), August 2018

### **Extract 6: The Key Ingredients for Malaysia’s Long-Term Success**

Prime Minister Mahathir has said the key to economic success is boosting productivity growth. Despite the economic success of the last twenty years, productivity has not grown as much as hoped. Productivity growth is needed as it drives average income growth and raises living standards.

Malaysia still ranks below the OECD average in Math, reading, and Science. Part of the solution is increased funding for lifelong learning and skills retraining programs. But we can also look at the earliest stages of education. A compulsory education requirement could provide a much-needed boost to student enrolment. Once the young people reach university age, Malaysia can think about training students for the jobs of tomorrow. Investments in high-quality education can reduce skill mismatches, raise wages, and help all Malaysians harness the potential of new technologies.

Another ingredient for success is by empowering women, which can boost growth and help make it more inclusive. Women in Malaysia earn about one-third less than men on average and this suggests that the gap is largely due to discrimination in the workplace. A recent survey showed that 80 percent of women are interested in flexible work arrangements, but only 20 percent had ever used them. New laws have been implemented to protect women’s jobs while they are on maternity leave and remove gender discrimination in the workplace. And the government’s recent budget includes measures to increase paid family leave and mandate that any government-linked company have at least 30 percent female representation on its board. The IMF believes that taken together, these efforts can raise female labor force participation rates to over 56 percent by 2020. In turn, this could mean a boost to GDP growth and overall productivity in the economy. Changes like this are always hard, but they are worth it.

Source: [International Monetary Fund](#), June 2019

## Questions

- (a) Give a possible reason for the different real GDP per capita between Malaysia and Indonesia. [2]
- (b) With reference to Extract 1,
- (i) explain the effect of an increase in economic activity on the equilibrium price and quantity in the electricity market. [2]
  - (ii) explain the effect of the subsidy reform on the equilibrium price and quantity in the electricity market. [2]
  - (iii) explain the combined effects of the increase in economic activity and subsidy reform on the equilibrium price and quantity in the electricity market. [2]
- (c) With reference to Extract 2, discuss whether price control on rice will necessarily keep Indonesian consumers' purchasing power high. [8]
- (d) Using an AD/AS diagram, explain whether the weaker Rupiah will reduce Indonesia's national income. [5]
- (e) Using the table, Extracts 3 and 4, to what extent can you conclude that Malaysia's living standards are better than Indonesia's? [10]
- (f) Extract 4 mentioned that the "Irrigation and Drainage Department launched the Integrated River Basin Management programme nationwide to ensure that there is enough clean water, as well as reduce the risk of floods and increase environmental conservation." [2]
- Explain a possible opportunity cost of the government's spending on such a programme.
- (g) Using Extracts 5 and 6, assess the measures that Malaysia should take to achieve sustained growth. [12]

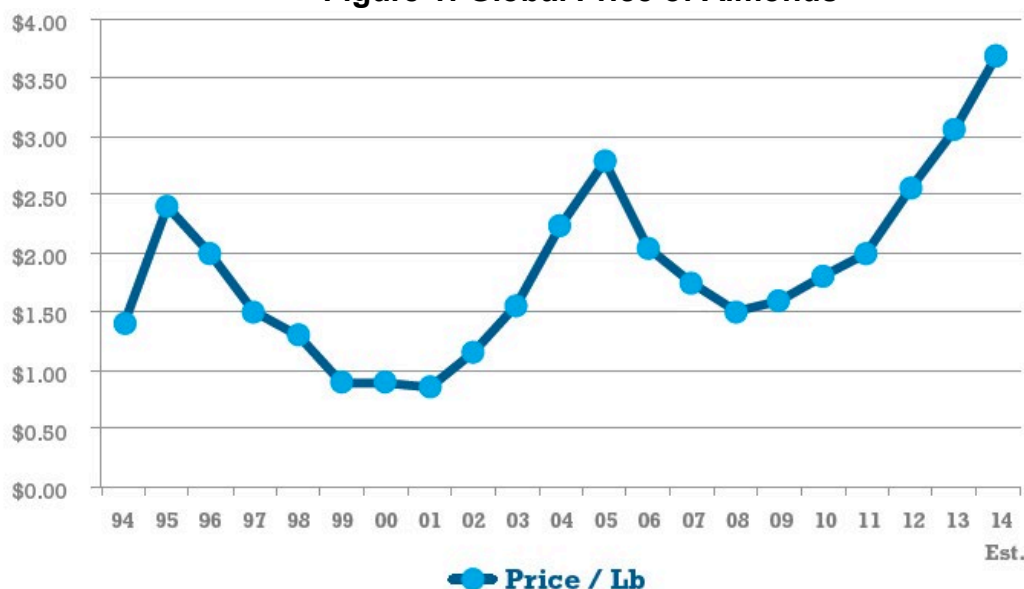
**Total: 45 marks**

## 2019 J1 H1 Economics December Holiday Homework Practice Papers #4

(Source: NYJC 2019 J1 H1 Economics Block Test)

### Question 4.1: Milk Prices

**Figure 1: Global Price of Almonds**



Source: <http://almondinsights.com>

### Extract 1: It's Finally Happening ... Dairy Farmers Are Converting Land to Almond Groves!

You know what they say: if ya can't beat 'em, join 'em. Well looks like this is exactly what's happening in California, where dairy sales are doing so poorly that farmers are actually converting their dairy farms into almond groves. From concerns over growth hormones and antibiotics in dairy milk to a rise in dairy allergies, and growing awareness of the environmental impact as well as animal welfare issues associated with dairy milk, people are increasingly saying "see ya!" to dairy milk and slurping up almond milk as a good alternative. In fact, people are eating almonds in unprecedented amounts. Nutritionists make a strong case that almonds are the best single food a person could eat.

Source: Adapted from [www.oneplanet.org](http://www.oneplanet.org) (Nov 2016)

### Extract 2: Why Do Milk Prices Spike and Crash?

Milk prices may have fallen only slightly in the supermarket. But on the farm, it's dramatic. Dairy farmers are getting about 20 percent less for their milk than they did last year; 40 percent less than when milk prices hit an all-time peak two years ago. In Europe and Australia, dairy farmers are losing money and have taken to the streets to protest their plight.

Big swings in milk prices are not new. Prices were even lower in 2006 and 2009. It's remarkable, in fact, just how volatile the dairy business is. But why do milk prices soar

and crash? The number of cows and the amount of milk they produce do not change so quickly. These are not wheat fields, which bad weather can destroy. And the amount of milk that people drink changes only gradually. Why the volatility?

One reason: Milk is not, for the most part, something that people drink anymore. In the United States, only about a quarter of milk production is sold as milk or cream. The rest is refined into a variety of other products. Cheese and yogurt are the best-known, but there are also a variety of dry products like milk powder, whey concentrate and special high-value proteins that are valuable by-products of cheese-making.

Milk, in fact, is like crude oil. It goes into refineries and emerges in the form of products that are traded around the globe. The prices for these commodities can boom or crash because of political and economic storms on faraway continents.

Two years ago, China was gobbling up milk powder, driving prices to all-time highs. Then the economy slowed, and Chinese buyers disappeared. Russia used to buy a lot of European cheese. But after Western countries punished Russia with economic sanctions in 2014, it struck back with a ban on Western cheese. That left millions of pounds of dairy products looking for new buyers.

Meanwhile, the European Union decided to abolish a quota system that once regulated the amount of milk its dairy farmers could produce. The result was that farmers raced to produce more milk, especially in Ireland and the Netherlands, and the global glut of milk got even worse. In view of this, situation the dairy farmers are likely to suffer. This may prompt governments to subsidise the dairy farmers or impose price floor.

Source: Adapted from [www.npr.org](http://www.npr.org) (Aug 2016)

## Questions

- (a) (i) With reference to Figure 1, describe the trend of almond prices from 1994 to 2014. [2]
- (ii) With reference to the data and using a demand and supply diagram, account for the change in almond prices from 1994 to 2014. [5]
- (b) (i) Extract 1 mentions that “farmers are actually converting their dairy farms into almond groves.” From this, what can we infer about the relationship between almond and dairy products? [1]
- (ii) Explain the effect of ‘dairy sales doing poorly’ (Extract 1) on the revenue of almond farmers. [4]
- (c) Extract 1 claims that there are “concerns over growth hormones and antibiotics in dairy milk to a rise in dairy allergies”. Using demand and supply analysis, explain the big swing in milk prices. [4]
- (d) Extract 2 refers to “a global glut of milk”. With the use of a diagram, explain the effect of this on the revenue of dairy farmers. [4]
- (e) Discuss whether imposing a price floor is effective to address the likely suffering of dairy farmers. [10]

**[30 marks]**

## Question 4.2: Rio Olympics and the Brazilian Economy

**Table 1: Selected Indicators for Brazil over the period 2012-2016**

	2012	2013	2014	2015	2016
Annual rate of growth in real GDP (%)	3.9	3.0	0.4	-3.7	-3.4
Unemployment rate (%)	7.4	7.1	6.8	8.5	11.4
Human Development Index	0.734	0.747	0.754	0.754	0.756
Life expectancy at birth (years)	73.8	74.1	74.4	74.7	75.0

Source: World Bank

### Extract 3: The Challenges of Measuring GDP in the Digital, Borderless World

The digital economy has transformed the way we do business. However it presents many challenges when it comes to measuring its performance. Statistics are bound to lag behind what is happening in the economy when it is changing so rapidly. Statisticians now face a similar challenge because of the effects of digital technologies.

Ensuring online retail sales (now more than 15% of the total excluding petrol) are included in the figures would be one example. Providing a service through digital platforms such as Airbnb, and online activities such as providing blogs or open source content, offer different instances of new behaviour, not easily captured in current statistics. In theory, the work involved and income made from renting out a spare room this way should be recorded, but might not be. 'Volunteer' digital services such as contributing to Wikipedia or open source software are not even counted in principle because they are conceptually similar to cooking at home or volunteering at school – these activities lie outside the 'production boundary' that defines [Gross Domestic Product \(GDP\)](#). Yet they are probably substituting for services people pay for, such as encyclopedias or proprietary software.

Other challenges are even trickier. In the digital sector all kinds of new activities and jobs are emerging, but these do not fit into the existing classification of sectors. People select the classification they think suits their business best, so it is not obvious where newer industries such as video games or software development sit in the statistics. Official statistics are a vital source of information for the government in setting economic policies, and for the public in being able to hold politicians and officials to account. Just as statisticians and economists in the early 20th century worked to define new measures and methods for the modern economy, their counterparts today will need to do the same for the digital, globalised economy.

Source: *Office for National Statistics, 22 November 2016*

### Extract 4: Brazil's Underground Economy

Brazil's underground economy will shrink slightly this year to 16.2 percent of gross domestic product, down from 16.3 percent in 2013, according to a study released by the Getulio Vargas Foundation, a private higher education institution.



Economist Fernando de Holanda Filho, a researcher at Brazilian Institute of Economics, said the slower reduction of the underground economy is attributable to the slow growth of Brazil's formal sector this year.

The underground economy, which includes all output not reported to the government, covers both informal and illegal economic activities.

The informal sector encompasses the production and exchange of goods and services that are not illegal in themselves such as housekeeping and plumbing services; however, all or part of that activity is deliberately concealed from the tax authorities. The illegal economy, meanwhile, includes activities such as prostitution and weapons and drug-trafficking that are against the law.

Source: *Riotimesonline*, 13 November 2014

### **Extract 5: Rio's Challenge of Slums and Olympic Air**

Challenges faced by Brazil to reduce pollution and upgrade the slums of Rio de Janeiro prior to the August 2016 Summer Olympics illustrates the struggles the country faced when trying to protect the respiratory health of thousands of people living in rural slums.

The air is dirtier and deadlier than portrayed by authorities. Rio for years has surpassed WHO limits for the most dangerous air pollutant - called particulate matter (PM) - spewed from millions of vehicles clogging the city's roads.

Thousands die annually in Rio's metropolitan area of 12 million people because of complications related to the air. People exposed to the pollution have higher risks of lung cancer, heart attacks, strokes, asthma and other diseases.

Sources: Harvard School of Public Health, 7 July 2016 and *Reuters*, 1 August 2016

### **Questions**

- (a) Using Table 1, describe the trend in Brazil's real GDP from 2012 to 2016. **[2]**
- (b) With reference to data, explain the difficulties in measuring GDP. **[4]**
- (c) (i) State **two** factors, other than per capita income, that are included in the computation of Human Development Index. **[2]**
- (ii) Using evidence from the case study and/or your own knowledge, discuss whether the standard of living in Brazil has worsened from 2012 to 2016. **[12]**

**[20 marks]**