Candidate Name: ______________________________

Class	Adm No

H

millennia institute

2024 End-of-Year Exams
Pre-University 2

H1 ECONOMICS **8843/01**

Paper 1 **10 September 2024**

3 hours

Additional Materials: Answer Booklet

READ THESE INSTRUCTIONS FIRST

Write your name and class 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 or graphs.
Do not use staples, paper clips, highlighters, glue or correction fluid.

Answer **all** questions.

You are reminded of the need for clear presentation in your answers.

An answer booklet will be provided with this question paper. You should follow the instructions on the front cover of the answer booklet. If you need additional paper, ask the invigilator for a continuation booklet.

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

Answer **all** questions.

Question 1: The Chinese Air Travel Industry

Extract 1: Tourism Development in China

As China transitions into a new stage of high-quality development, it has adopted the implementation of the new development concept of "innovation, coordination, green, openness, and sharing". China's tourism industry is of significant importance for promoting this transition towards a more sustainable, innovative, and inclusive tourism within China and globally. Thus, as a pillar of China's new-era economy, the tourism industry plays a crucial role in meeting the growing expectations of people regarding the quality of life.

As a result, environmental supervision, ecological protection, green technology and technological innovations have been embraced by some of the provincial authorities such as the Yangtze River Delta. They exhibit superior development, influencing neighbouring regions through spillover effects. The emergence of virtual experiences, smart guides, promotion of spiritual and cultural tourism, development of high-speed rail and the upgrading of airports has spurred interest in domestic tourism. However, the heavy subsidies offered to the provincial and city governments and travel related industries including airlines has cost China over 500 billion dollars.

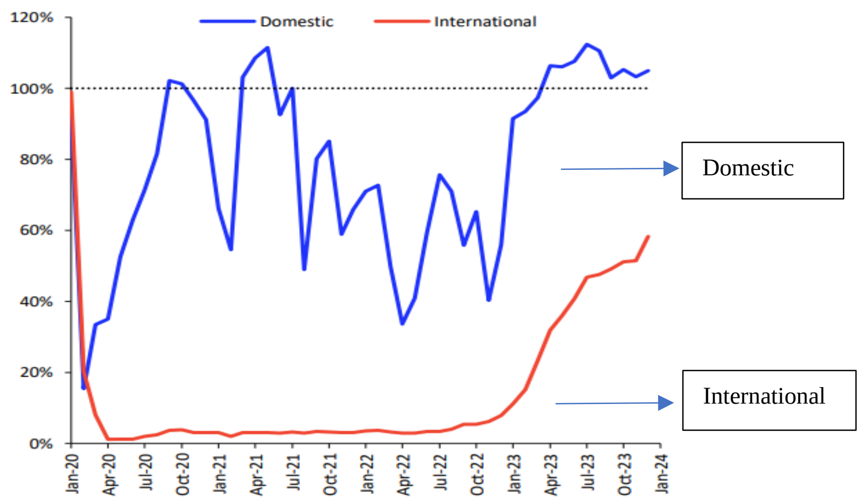
Adapted from: www.mpdi.com, June 2024

Extract 2: The State of the Chinese Airline Industry

The Chinese domestic air travel industry is the second largest in the world and in 2023 has already surpassed pre-pandemic levels. Its international traffic on the other hand, is still lagging and full recovery to pre-pandemic levels is only expected beyond 2025.

Figure 1: China's passenger traffic recovery (2023 vs 2019)

(Note: The dotted line at 100% represents the 2019 levels)



Source: IATA Sustainability and Economics, DDS, February 2024

Extract 3: The Drivers of China's Tourism Industry's Revival

China remained under very strict travel policies for three years, while the rest of the world closely watched for its reopening and the effects it would have on the global economy and air traffic numbers. There were periods within the three years when the strict travel policies were tightened more due to the outbreak of further Covid variants such as delta and omicron variants. However, when restrictions were lifted in January 2023, pent-up travel demand surged in the country mainly propelled by a renaissance of domestic tourism and the timing of Lunar New Year seasonal travel period. Air travel benefitted more as compared to high-speed rail as the latter was relatively pricier while travel time was longer.

Chinese airlines, which managed to keep most of their pre-pandemic staff and flying crews ready to operate, were quick to answer to the sudden increase in demand. Seat capacity levels were also reinforced by the more frequent use of widebody aircraft in domestic operations. By April 2023, China had fully recovered its pre-pandemic levels of origin-destination domestic passengers. Any further pressure from the demand side will inevitably raise costs as capacity building activities such as purchasing new aircraft is a very expensive affair.

International passenger traffic, however, reached a more modest 58% recovery by December 2023. Challenges such as geopolitical rifts, closure of Russian airspace due to the Ukraine war, visa difficulties imposed by many foreign countries, depreciation of the Chinese Yuan, high inflation in destination countries have all added to the woes and dampened international flight capacity.

The lag in international traffic growth is not only driven by the lower numbers of foreign tourist arrivals but also by the national economy's current state, linked to the property crisis and high unemployment notably among the younger generation, a situation that arguably contributes to the preference for domestic travel destinations rather than overseas.

Travel industry experts have commented that the revival of the domestic travel sector will eventually lead to higher fares for air tickets, but consumers may benefit with lower prices for hotel rooms and restaurant as these sectors remain competitive.

Source: www.iata.org/economics, February 2024

Extract 4: The High-Speed Rail Alternative

China's high-speed rail launched in 2008 has become the world's most extensive network in less than two decades. During the 2008 global financial crisis, China ramped up investments in this sector to stimulate the economy and create jobs. Initially, China relied on technology transfer agreements with foreign companies such as Alstom, Siemens and Kawasaki Heavy Industries. Over time, China developed significant domestic expertise and innovation, becoming a leader in high-speed rail technology. The dense and connected network has reduced travel times and boosted connectivity between regions. As part of the Belt and Road Initiative a line connects China's Kunming with the Laotian capital Vientiane. Besides increasing regional transportation links the network serves as an effective form of Chinese soft power.

Despite the benefits, however, the high-speed rail network has not generated enough revenue to cover its substantial initial investment and ongoing maintenance costs. China State Railway Group, the state-owned operator, is heavily indebted, with about $900 billion in liabilities by the end of 2021. This has prompted an increase in ticket prices, a rare move in the country. Often, for comparable connections high-speed rail tickets are more expensive than air tickets.

Source: Newsweek, July 2024

Extract 5: Consequences Of Flying

Unlike the greener and cleaner mode of high-speed rail, air travel has a more sinister impact on the environment. Aviation fuel is highly polluting, and the sector accounts for about 4 percent of the world's carbon emissions. This is one of the toughest sectors to tackle due to a lack of alternative technologies to drive jet fuelled engines. However, since 2021, a new kind of fuel known as sustainable aviation fuel (SAF) has been approved as an alternative to jet fuel. First blended by Shell for the European market, SAF is made from waste products and sustainable feedstocks and is blended at an approved ratio of up to 50 per cent with conventional jet fuel. According to Shell, in its neat form, SAF can reduce carbon emissions by up to 80 per cent compared with conventional jet fuel.

Shell, whose customers include SIA Engineering Company and the Republic of Singapore Air Force, has also completed an upgrade of its Singapore facility, which will enable it to blend it here and aims to test the supply chain it is establishing for SAF in Asia. Shell Aviation's global president, Jan Toschka, said that they are also developing regional infrastructure that will supply SAF to all their customers in Asia, including China and India. Meanwhile, SIA reported that it too will start buying SAF for use in its flights.

Source: Reuters, February 2022

Extract 6: Inequality and Environmental Footprint

The Hot or Cool Institute publishes annually its Happy Planet Index (HPI); a metric that combines data on countries' health, happiness and environmental impact to understand their progress towards achieving sustainable well-being. Its latest report shows that in most countries, the top 10% of earners are responsible for around a third of emissions, contributed by their air travel, homes with high energy footprints and investments with high carbon tracks.

The biggest factor contributing to their high levels of carbon inequality is air travel. In the EU, the top 10% of the population emits a staggering 3 tons of CO2 per capita from flights alone - 30 times more than the average flight-related emissions for everyone else. Their emissions, however, are dwarfed by the 22.6 tons per capita emitted by the top 1% of earners. But all this extra travel doesn't translate to a happier life. The HPI shows that these frequent flyers in the top 10% don't report a significant increase in well-being compared with those who fly less.

Source: Reuters.com, June 2024

Questions

(a) With reference to **Figure 1**, compare China's domestic and international passenger traffic recovery (to 2019 levels) for the period between January 2020 and January 2024. [3]

(b) **(i)** Explain the opportunity cost of Chinese government subsidies to the tourism industry. [2]

(ii) Using a Production Possibility Curve diagram, explain **two** benefits of the sharp increase in domestic tourism in China. [5]

(c) **(i)** Using information from **Extracts 1 & 3**, identify and explain one demand factor **and** one supply factor that contributed to recovery of the domestic airline market in China. [4]

(ii) Using price elasticity of demand, explain how 'the inevitable rising costs due to capacity building activities **(Extract 3)** is likely to affect total revenue on domestic air travel in China. [4]

(d) **(i)** With the use of a diagram, explain how the market for air travel fails. [4]

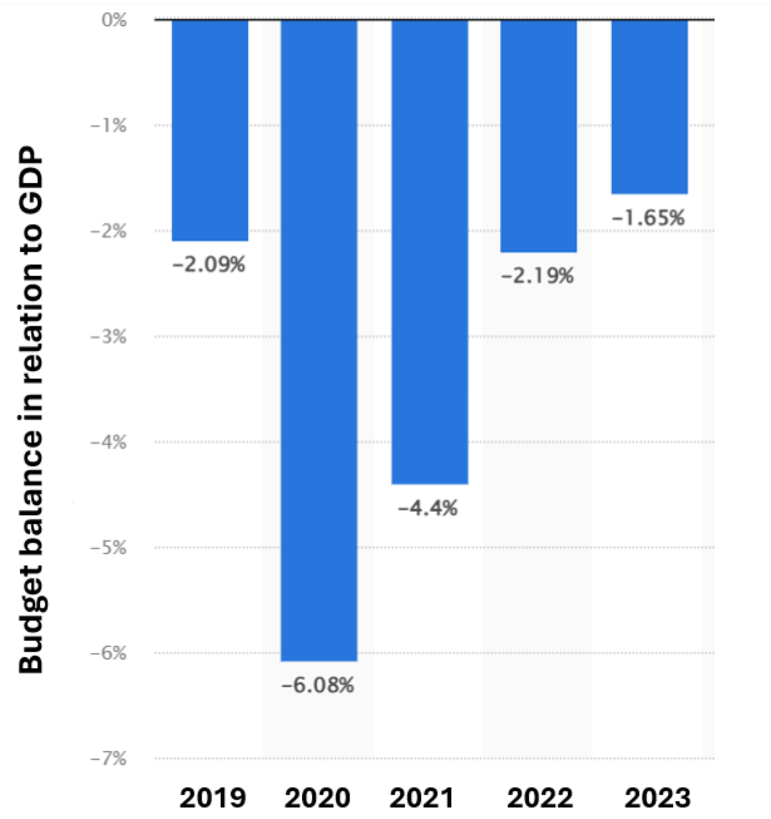
(ii) Discuss the appropriate policies a government could adopt to overcome the carbon intensive nature of air travel and achieve an efficient allocation of resources in this market. [10]

(e) Discuss the factors a government should consider when deciding to pursue an infrastructure project such as high-speed rail. [8]

[Total: 40 marks]

Question 2: Indonesia's Growth Ambitions

Figure 2: Indonesia's budget position as a percentage of GDP (%) (2019 – 2023)



Source: Statista, Aug 2024

Table 1: Indonesia selected economic indicators (2021-2023)

	2021	2022	2023
Real GDP growth (%)	1.07	1.12	1.18
Population growth (%)	0.7	0.64	0.74
Gini coefficient	0.379	0.379	0.383

Source: World Bank

Extract 7: Growth in Indonesia economy despite falling exports

Indonesia's economy expanded by 5.05 per cent in 2023, a shade above the government's projections. Gross domestic product slowed due to weaker exports driven by Indonesia's lower commodity prices. Domestic consumption was the key driver for South-east Asia's largest economy, which helped to offset lagging exports. The main contributor to GDP growth included household consumption, which grew 4.82 per cent.

Meanwhile, investments in Indonesia – the second-largest contributor to growth – was up 5.02 per cent in the fourth quarter. Foreign direct investment (FDI) in 2023 rose 13.7 per cent year-on-year to 744 trillion rupiah (S$63.5 billion). The country has seen strong FDI growth after the Covid-19 pandemic, particularly as investments in the nickel processing industry continues to be strong due to greater interest in electric vehicles.

Investments are likely to remain a key counterweight for Indonesia's growth, even as export-oriented sectors, particularly commodities, face a cloudier outlook. Indonesia recently reported a fall in its 2023 trade surplus as exports and imports dropped amid falling commodity prices and slowing demand from its trading partner. Weaker demand from China, Indonesia's biggest trading partner, is also expected to add more pressure on the Indonesia's exports.

Source: Adapted from Business Times, 5 February 2024

Extract 8: Rupiah weakens to 4-year low against US dollar

The Indonesian rupiah is among Asian currencies that have weakened against the US dollar this year. The rupiah has slid to its weakest level in four years. This has prompted intervention by Indonesia's central bank to support the currency.

There are several reasons why the rupiah is weakening. The main factor is high inflation in the US, which prompts the Federal Reserve (Fed) to tighten its monetary policy. The Fed's interest rate is currently at a 23-year high of about 5.25 per cent to 5.5 per cent. Higher Fed interest rates attract investment capital as investors seek higher returns on bonds and interest-rate products. In turn, global investors sell their investments denominated in their local currencies for investments denominated in US dollars. This results in a stronger US dollar.

Another reason why the rupiah is underperforming is the war in the Middle East which triggers capital outflow from developing countries.

While it is still early days for the rupiah's depreciation against the dollar to have a major impact on domestic prices, analysts are concerned it may lead to bigger economic problems. Among other things, there could be a price hike in imported goods and weaker purchasing power. Industry Minister Agus Gumiwang said the rupiah's weakening will impact Indonesia's industrial competitiveness, especially sectors that use raw materials from abroad. Raw materials for industries such as automotive, electronics, textile and even pharmaceuticals will feel the impact.

Source: Adapted from CNA, 22 April 2024

Extract 9: Growing a green economy through the Nusantara Sustainability Hub

Indonesia has ambitious plans to relocate its capital from Jakarta to Nusantara in East Kalimantan. The move, expected to take place by 2045, is part of Indonesian President Joko Widodo's plan to distribute economic activity throughout the country and reduce the capital's population and traffic congestion. Nusantara is estimated to cost around $35 billion to construct. Priority will go to building main roads, water sanitation infrastructure, the presidential palace and the vice president's office, according to the country's Ministry of Public Works.

As part of the relocation, a sustainability hub will also be developed in Nusantara. Jokowi expressed hope that the Nusantara Sustainability Hub would be a centre of research and development for Indonesia's green economy. The hub would be developed by Indonesia's state-owned energy corporation, Pertamina and private company Bakrie Group, in partnership with Stanford University. It is expected to attract global companies and other universities interested in developing a green and sustainable economy in Indonesia.

Spanning 2.5 hectares, the Nusantara Sustainability Hub is projected to be the "Green Silicon Valley" in Southeast Asia. Its primary functions will include research and development in four key areas: sustainable urban cities, carbon markets, energy transition, and blue food, which refer to animals, plants and algae harvested from freshwater and marine environments. With the support of research and technology, the aim of the hub is to reduce energy imports and lower carbon emissions.

Sources: Adapted from CNBC, 27 August 2023, Antara News, 5 June 2024

Extract 10: Benefits and risks of the relocation of Indonesia's capital

To fully implement the relocation of the Indonesia's capital is perhaps the biggest government undertaking in Indonesian history. This gigantic work spans from comprehensive city planning, moving hundreds of thousands of civil servants and their families. The relocation is expected to stimulate economic growth after the pandemic. Adequate infrastructure in the new capital is expected to encourage new industrialisation in the surrounding area and create employment opportunities.

RISKS AND UNINTENDED CONSEQUENCES

Notwithstanding all the benefits relocating the capital city may reap, this project is fraught with risks. There is a concern over environmental degradation, considering that Kalimantan has already been degraded following the expansion of mining companies in the area. While Indonesia's agenda to develop a new capital city with a green and sustainable design could be seen as a 'positive' commitment towards the transition to renewable energy, the construction process alone generates significant emissions.

Moreover, instead of creating equal employment opportunities, there is worry that relocating the capital might trigger new inequality. By 2027, an estimated 127,000 civil servants would have moved to the new capital. Most of this demographic will be from the upper-middle class, who will co-exist with existing low-middle class communities who are predominantly rural. This may lead to lower-middle populations facing job competition. Darman, a local fisherman, expressed worries that these plans will mean the displacement of his family, potentially forcing him to quit working as a fisherman and learn a new set of skills to make a living. The alternative, he said, is to stay put and endure a wide and growing social disparity.

Sources: Adapted from Fulcrum Sg, 18 July 2022, Mongabay, 8 March 2023

Questions

(a) **(i)** Using **Figure 2**, describe the trend in Indonesia's budget position as a percentage of GDP from 2019 to 2023. [2]

(ii) State two main components of a government's budget. [2]

(b) With reference to **Table 1**, comment on the reliability of the use of real GDP growth to measure the changes in Indonesia 's standard of living over time. [6]

(c) Explain why Indonesia's economy expanded in 2023 despite its falling exports. [3]

(d) With reference to **Extract 8**, explain how the Federal Reserve's tightening of its monetary policy can reduce high rates of inflation in the United States. [4]

(e) **(i)** With reference to **Extract 8**, explain why the Rupiah has depreciated. [5]

(ii) Discuss whether the depreciation of the Rupiah is likely to bring more benefits or costs to the Indonesia economy. [8]

(f) Discuss the extent to which the relocation of Indonesia's capital to Nusantara can bring about sustainable and inclusive growth. [10]

[Total: 40 marks]

- End of Paper -