Question 2: Japan's economic challenges and the road ahead

Table 2: Economic indicators for Japan

	2018	2019	2020	2021	2022
Real GDP Growth (annual %)	0.6	-0.4	-4.1	2.6	1.0
Consumer Prices (annual %)	1.0	0.5	0.0	-0.2	2.5
Total Unemployment Rate (% of total labour force)	2.5	2.4	2.8	2.6	2.6
Final Private Consumption Expenditure (current US$ in Trillions)	3.75	3.81	3.79	3.77	3.28

Source: data.worldbank.org, 18 June 2024

Table 3: Economic indicators for USA

	2018	2019	2020	2021	2022
Real GDP Growth (annual %)	3.0	2.5	-2.2	5.8	1.9
Consumer Prices (annual %)	2.4	1.8	1.2	4.7	8
Total Unemployment Rate (% of total labour force)	3.9	3.7	8.1	5.3	3.6
Final Private Consumption Expenditure (current US$ in Trillions)	16.8	17.4	17.4	19.4	21.1

Source: data.worldbank.org, 18 June 2024

Extract 4: Performance of the Japanese economy in 2022

Japan's moderate growth, lower inflation, and structural challenges positioned it uniquely among the G7. While the United States experienced higher growth rates, driven by strong consumer demand and substantial fiscal stimulus, Japan's growth was modest.

In 2022, Japan's economic outlook was influenced by a combination of factors such as a gradual recovery from the COVID-19 pandemic and persistent structural challenges. Tokyo lifted restrictions on economic activity more gradually. This delayed the post-pandemic increase in demand that many other countries have seen. Domestic demand in Japan is weak and this is partly a result of low wages.

Source: weforum.org 6 October 2022

Extract 5: Why Japan Stands Virtually Alone in Keeping Interest Rates Ultralow

As the Federal Reserve has repeatedly pushed up American interest rates to tame rampant inflation, virtually every major central bank in the world has scrambled to keep up the pace. In the United States — where the economic recovery has been rapid and wages are rising apace — the Fed is seeking to squash inflation by throttling demand.

However, the Bank of Japan has remained steadfastly committed to its ultralow interest rates, arguing that making money more expensive now would only suppress already weak demand and set back a fragile economic recovery from the pandemic. The Bank of Japan's governor, Haruhiko Kuroda, made clear in comments to Parliament that the bank would not change course anytime soon stating that "under the current economic conditions, it's appropriate to continue monetary easing.

Weak consumer demand has made officials at Japan's central bank wary of raising interest rates. A rate increase could also make it more difficult for Japan to service its own gargantuan debt. The debt concerns have become even more salient as the government has provided enormous fiscal support to businesses and households to counteract the economic damage from recent world events. "Fiscal policy and monetary policy are joined at the hip, and that's what's making it so difficult for the Bank of Japan to make a move," said Saori Katada, an expert on Japanese financial policy at the University of Southern California.

<u>Impact on Yen</u>

The diverging economic circumstances in the United States and Japan have led to drastically different monetary policies, a gap that has helped drive down the yen as investors seek better returns elsewhere. The yen is in free fall.

Consequently, while inflation pressures in the United States have been broadly distributed, in Japan they have primarily hit essentials like food and energy, for which demand is satisfied largely through imports.

The weak yen has presented a difficult messaging problem for the Japanese government. The currency's depreciation has contributed to tidy profits for export-heavy companies like Toyota, whose products have become cheaper for consumers overseas. It is also expected that the cheap yen would draw international tourists, who started to return after a nearly three-year absence caused by Japan's tough pandemic border restrictions. But the currency's weakness has been a drag on the finances of households and smaller businesses and could have a damaging effect on public sentiment, said Gene Park, a professor of political science at Loyola Marymount University in Los Angeles who studies Japan's monetary policy.

It’s unclear whether raising interest rates would even arrest the yen’s plunge. Rate increases by other central banks have done little to protect their own currencies against the muscular dollar.

Source: The New York Times, 21 October 2022

[Turn over

Table 4: Percentage of Japan General Government Gross Debt to GDP

2018	2019	2020	2021	2022
232.3	236.3	259.4	262.5	263.9

Source: tradingeconomics.com/japan/government-debt-to-gdp, accessed 30 July 2024

Extract 6: Fiscal Prudence and Structural Reforms Needed to Secure Sustained Post-Pandemic Growth

The Japanese economy is confronted with several structural challenges including weakening fiscal discipline, side effects from prolonged monetary easing, and demographic drag from population aging and low fertility rates, which contributed to labor shortages, lagging productivity and competition as well as increased social security spending. Additionally, behind Japan's sluggish growth is stagnating wages that have left households reluctant to spend. At the same time, businesses have been invested heavily in faster growing economies overseas instead of in the aging and shrinking home market.

In addition, Japan's debt swelled, reflecting its heavy reliance on borrowing to meet spending needs to fight the COVID-19 pandemic. There is an urgent need for Japan to restore its fiscal health, the worst among developed countries, to avoid high debt servicing costs and low confidence in the economy.

Priority should be given to rebuild fiscal buffers by containing social security expenditure while raising tax revenues in the post-pandemic period. Credible fiscal consolidations to ensure long-term fiscal sustainability can help lower funding costs, improve fiscal headroom and financial stability. Nonetheless, fiscal policy should remain supportive of the economy in the short term, with targeted measures to hard-hit sectors, backed by a credible medium-term fiscal consolidation plan. Rather than provide universal supports to all households, it is more critical to roll out well-targeted spending measures for vulnerable households and hard-hit businesses in the services sector to enhance the efficacy of the stimulus packages, given the tight fiscal situation.

Additionally, comprehensive structural reforms should be quickened to address Japan's long-term challenges. Japan must also improve the human capital of their young populations, especially as the rest of the country is aging rapidly. Digitalisation should also be accelerated while immigration is one option for solving Japan's labor shortage problem. The country, however, has been relatively unaccepting of foreign labor, except for temporary stays. On the other hand, artificial intelligence also gives hope for boosting productivity. Robotics, another option, are gradually being deployed but not to the extent they can fully make up for the lack of workers.

Source: apnews.com, 16 February 2024
and: amro-asia.org, 9 March 2022

(a)	**(i)**	Using **two** indicators from Tables 2 and 3, what can you conclude about living standards between Japan and US in 2022? Comment on the effectiveness of these indicators as a measure of living standards. <u>Suggested answers:</u> [2m] US real GDP growth in 2022 is higher than Japan's real GDP growth, suggesting that the increase in real GDP is greater in US than Japan. This implies that the increase in the amount of goods and services available for consumption is greater in US than in Japan. Hence US's material SOL may **have improved greater** than Japan. [To note: student cannot compare the level of SOL. Only the change in SOL is accepted.] [2m] Total unemployment rate in US is greater than Japan. As there is a greater proportion of individuals unemployed in the US, it would suggest that there may be greater dissatisfaction in the US over job security etc. which may lead to increased stress. Hence, this suggesting that US may have lower non-material SOL. [2m] Comment: (any well-elaborate comment on the effectiveness of the data) - While these indicators are useful to a certain extent to compare SOL between US and Japan, they are insufficient. Other indicators such as as real GDP per capita, adjusted for purchasing power parity could be better to assess differences in material SOL as it not only looks at the exact amount of goods / service available for consumption, it also considers the differences in cost of living between the two economies. - Also, other non-material SOL indicators may be important as well such as leisure hours / externalities / life expectancy could give a better picture on the non-material SOL of the economy. Markers' comments: - Majority of answers have identified real GDP growth and unemployment rate as the **2 indicators** to be explained o However, students generally associated with higher real GDP growth to higher income levels / higher amount of goods and services produced, which is inaccurate. Higher real GDP growth in USA means that the income level rose faster in USA, indicating that purchasing power increased faster in USA and hence material SOL improved faster in USA compared to Japan. ▪ Some answers interpreted higher real GDP growth as higher income for an average citizen. This is	[6]

		also inaccurate as population size was not accounted for. ○ Majority of the answers associated unemployment rates to non-material SOL and this is accepted. The better answers recognised that a higher unemployment rate indicated a higher proportion of workforce are not earning income, and therefore more stress / uncertainty in the economy, indicating lower non-material SOL. ○ Answers that used consumer prices as an indicator often inaccurately associated consumer prices to disposable income levels. Consumer prices affect household's purchasing power not income levels. - Evaluative comment: ○ Majority of answers were able to provide the limitations to the data provided in comparing SOL between USA and Japan ▪ Better answers were able to elaborate on the limitations (i.e. answers were able to identify the non-material indicators which are important and lacking and explain how the higher growth may be at the expense of leisure hours, worsening -non-material SOL etc.). Answers that lack such elaboration may have their marks capped.	
	(ii)	Using AD/AS analysis, account for the difference in Real GDP Growth rates between Japan and US in 2022. <u>Suggested answers:</u> - Real GDP growth rates in Japan is lower than US in 2022 (i.e 1% vs 1.9%) - [1m – any possible reason] ○ Extract 4 states that US growth rates were driven mainly by "strong consumer demand" and substantial fiscal stimulus. i.e Table 3, final private consumption expenditure is US$21.1 Trillion, compared to Japan's US$3.28. ○ Japan's economic outlook was influenced by a combination of factors such as a gradual recovery from the COVID-19 pandemic and persistent structural challenge - [1m – link to AD/AS] ○ As a result, the increase in AD in US is greater than in Japan → resulting in a greater increase in real GDP in US than in Japan	[2]

		*If no explanation of the reason, to give 1m for stating the difference in Real GDP Growth rates between Japan and US in 2022. Markers' comments: - Most answers were able to recognised that US's higher growth is attributed to the greater increase in AD, quoting evidence from the extract such as greater fiscal stimulus etc, while Japan faced lower growth due to Japan opening up their economy gradually, resulting in slower increase in C etc. - Weaker answers merely quoted the extract without explaining or misinterpreted the growth figures, explaining that Japan's AD has fallen.	
(b)		With reference to Extract 5, explain why the Bank of Japan "has remained steadfastly committed to its ultralow interest rates" while the Federal Reserve "pushed up American interest rates". <u>Suggested answers:</u> State reason for difference in stance [1] i.e Extract 5 states that Japan's demand is weak and economic recovery is fragile while US increases i/r to "tame rampant inflation". As seen from the table, inflation rate in US is higher, driven by strong consumer demand [3m – explanation of low i/r in Japan] o BOJ kept interest rate low to stimulate the economy in hopes of lowering COB for consumers and firms, to increase C and I. [1m] o As C and I increase, AD will increase [1m] o RNY will increase by a k. amount and cyclical unN will fall [1m] [2m – explanation of higher i/r in US] o The Feds increase i/r to increase COB to dampen C and I and to reduce AD. [1m] o GPL would decrease [1m] *To award 3m for explanation of workings of i/r policy for either Japan or US Markers' comments: - Majority of the answers were able to recognise the intended aim of the monetary policy in Japan and US. However, the accuracy and depth of analysis differs. - Stronger answers were able to explain how a fall or rise in interest rates will affect cost of borrowing / returns to savings that	[6]

		will affect C and I to affect RNY / GPL. These answers also recognised that Japan may be keeping i/r low so as to prevent a rise in the cost of their debt. - Weaker answers lack the above elaboration, missing out important analysis such as cost of borrowing or AD change. - A few answers misinterpreted the questions and did not address the changes in i/r rather, went on to explain a change in exchange rate policy. - Also, some answers elaborated on how the change in i/r may affect exchange rate but this is not the direct impact.	
(c)		Extract 5 states that "the weak yen has presented a difficult messaging problem for the Japanese government". Explain the likely impact of a weak yen on the i) export heavy companies like Toyota. <u>Suggested answers:</u> [3m- explanation of how a weak yen leads to rise in TR for export heavy firms] - The weak Yen will result in Japanese exports to be cheaper in foreign currency. [1m] - This will lead to an increase in DD/Qd for Japanese exports such as Toyota cars. [1m] - As a result, firms in Japan such as Toyota will experience are rise in total revenue from the increase in export sales of Toyota cars [1m] Markers' comments: - Most answers were able to score full marks. Answers recognised that question required them to anlayse on the impact of a depreciation of the ER on firms' TR or profit level. - Only a handful analysed impact on economy. ii) Japanese households. <u>Suggested answers:</u> [3m – explanation of how a weak yen leads to rise in consumer expenditure on M/ rise in COL/Fall in MSOL] - Weak Yen will result in Japanese imports to be more expensive in domestic currency. [1m]	[3] [3]

		- Assuming demand for necessities is price inelastic (PED<1), the rise in price will lead to less than proportionate decrease in qty demanded [1] - This will result in increased expenditure on these goods and services/ increased in COL/ fall in MSOL [1m] Markers' comments: - This answer was poorly done. Impact on households was not clearly analysed. A lot of answers analysed the impact on the economy or did not link the impact on households to the weakening of yen (i.e. majority of answers stated that necessities are more expensive hence households purchasing power are affected, without elaborating that these necessities are imported and since the yen has weakened, these imported necessities are more expensive). - Also, some answers associated the rise in price of goods and services to the fall in disposable income level of households. This is inaccurate. The rise in price of goods and services will affect the household's spending power as well as expenditure on other things. - Better answers were able to analyse the impact on households expenditure on imports using the concept of PED and how it will affect their material or non-material SOL.	
(d)	**(i)**	Extract 6 states that "Japan's debt reached a record 1,286.45 trillion yen ($8.6 trillion) at the end of 2023." Explain one possible reason for Japan's swelling debt. <u>Suggested answers:</u> [1m – Identify any possible reason] Aging population/ Fighting the Covid-19 pandemic may have resulted in government expenditure on healthcare subsidies or rise in fiscal expenditure ○ [1m – link to rising debt (emphasis on greater borrowing)] Greater spending will worsen the budget deficit, resulting in Japan having to borrow more to finance spending, worsening its debt Markers' comments: - Better answers were able to provide a reason for increased government spending and therefore increased borrowing, resulting in a swelling debt. - Weaker responses, either did not elaborate on the reason for increased spending or did not emphasize the need for	[2]

		government to increase borrowing of money which resulted in a swelling debt.	
	(ii)	"Priority should be given to rebuild fiscal buffers by containing social security expenditure while raising tax revenues in the post-pandemic period." Discuss the factors that the Japanese government should consider when deciding to "rebuild fiscal buffers" in the post-pandemic period. <u>Suggested answers:</u> Rebuilding of fiscal buffers would require the Japanese government to reduce government expenditure and raise tax revenue. The government would have various considerations when deciding to do so, such as the costs / benefits on various economic agents as well as other considerations such as constraints and demographics of economy. Cost: ○ Rebuilding fiscal buffers may be contractionary for the economy → fall in G and increase in T will lead to fall in AD, fall in RNY by a k. amount and rise in cyclical unemployment. This can worsen the current swelling debt problem. ○ Rebuilding fiscal buffers, depending on which part of expenditure is reduced, may affect C or I, reducing AD, weakening the already weak demand (i.e. reduction in transfer payments etc.) ○ Rise in corporate tax rates may also lead to outflow of FDIs and rise in personal income tax rates may lead to brain drain. ○ Outflow of FDIs → reduce I → reduce AD and limit growth in LRAS ○ Brain drain → reduce quality of labour → limit growth in LRAS / raise labour costs ○ If transfer payments to households are reduced, it will affect their ability to consumer goods and services, worsening mat. SOL. / If government expenditure on essential goods and services / subsidies to healthcare → non-material SOL of the citizens will worsen Benefit: ○ "Improve fiscal headroom, lower funding costs" [Reduce debt (fiscal sustainability)] → help the Japanese government to reduce debt burden, lowering interest payments, creating more resources for the government to spend on essential goods and services in the economy to improve standard of living in Japan. (i.e. healthcare → since Japan is facing aging population).	[8]

- Economic resilience → with better fiscal buffers, the Japanese government has greater room and flexibility to respond to future economic shocks such as any other unexpected global event / natural disasters. The government will be in a better position to stabilize the economy.
    - This may improve business confidence as there is a more favorable environment for private investment and economic growth.
- Monetary Policy Flexibility → with better fiscal buffers, Japan can afford more flexibility in its monetary policy such as raising interest rates as it will not lead to swelling debt.
- By rebuilding fiscal buffers, Japan can ensure that future generations are not burdened with excessive debt. This prevents worsening of SOL of future generations and ensures that future policymakers have the resources needed to address new challenges.
- Long-Term Economic Stability: A solid fiscal position allows the government to undertake long-term "comprehensive structural reforms" and investments in areas like infrastructure, education, and technology, which are critical for sustained economic growth and competitiveness as stated in Extract 6.

Stand on which factor is a more significant one

- Given the poor economic conditions "sluggish growth, lagging productivity, aging population" it might be difficult for Japan's government to cut spending to improve fiscal buffers. The costs of cutting government spending may be too great for the Japanese government. As mentioned in Extract 6, "fiscal policy should remain support of the economy in the short term". Hence, cost is more important than benefit as a factor and the Japanese government should not rebuild fiscal buffers in the post-pandemic period.

- On the other hand, given the gravity of the costs of rising fiscal debts as well as it being a significant factor affecting post-pandemic growth, the benefit is more than cost and the government should not allow the fiscal position to worsen in the long run. The Japanese government need to rebuild its fiscal buffers by providing "well targeted spending measures" rather than universal supports.

Mark scheme:

Levels 2 (4-6 marks)
For a well-developed answer that explains two factors that affect Japan government's decision to rebuild fiscal buffers in Japan. E.g. benefits

and costs of rebuilding fiscal buffers in Japan (i.e. improve fiscal budget position). Answer should be contextualized to Japan.

Levels 1 (1-3 marks)
For an under-developed answer that explains two factors that affect Japan government's decision to rebuild fiscal buffers in Japan. E.g. answer demonstrates limited economic understanding of the benefits and costs of rebuilding fiscal buffers in Japan. Little/no application to the context of Japan.

Or

Only 1 factor explained

Evaluation (1-2 marks)
Up to 2 marks for a relevant comment on the importance of cost / benefits to the government's decision.

H1 Suggested Mark Allocation

Annotation	Level	Mark out of 8
C	L2	4
C + C or D	L2	5
D + C or D + D	L2	6

Markers' comments:

- Most answers were able to understand that this required the considerations under the decision-making framework, mentioning the need to consider the cost and benefits of rebuilding fiscal buffers.
- Weaker responses interpreted rebuilding fiscal buffers as expansionary fiscal policy, and therefore, not addressing the questions.
- Stronger answers were able to explain the various costs and benefits associated with rebuilding of fiscal buffers. However, the costs are better elaborated than the benefits.
    - The costs include a contractionary effect on the economy and the impact of the SOL of households as the rise in tax rates will reduce disposable income of households.
    - The benefits of fiscal sustainability was poorly elaborated, often quoting from extracts and stating that there will be better economic growth. Better answers would analyse how fiscal buffers will increase the confidence level in the economy, promoting investments etc.
- Evaluation was poorly done. Majority of answers either did not have an evaluation or went on to weigh marginal costs vs

		marginal benefits. Students are required to discuss which factor of consideration is more important for the government to consider and not whether the government should go ahead to rebuild fiscal buffers.	
(e)		Discuss whether fiscal policy or supply side policies could best help Japan to secure sustained post-pandemic growth. Suggested answers: Sustained growth refers to the economy experiencing both actual and potential growth, to ensure that real GDP can continue to increase. For Japan to achieve sustained post-pandemic growth, the government needs to consider various policies and its effectiveness, given the current economic climate and challenges it face. R1: Explain how expansionary fiscal policy may work to achieve sustained economic growth. ○ increase G (spending on infrastructure) / transfer payments (to increase C and I) → increase AD → increase RNY. ○ Increase in I → increase in capital stocks → improve LRAS ○ However, given Japan's rising debt, there may be crowding out effect (to explain) that would limit the effectiveness of the policy to stimulate growth. ○ Japan may be limited to how much its government can spend, given its tight budget position, limiting the effectiveness of the policy. ○ Given the weak confidence in the economy, as seen from Extract 6 → "stagnating wages that have left households reluctant to spend" → suggest that even if the government provided households with greater financial assistance, it may not translate to higher C, limiting the effectiveness of fiscal policy. ○ EV: if the government can resolve issues such as stagnating wages, with the improvement in confidence, the economy may benefit from EFP. R2: Explain how supply-side policies may work to achieve sustained economic growth. ○ Extract 6 mentions "Japan must also improve the human capital", "digitalization…for solving Japan's labour shortage", "AI…..boosting productivity" and use of "Robotics" as some SS-side measures. ○ (Explain any one measure)	[10]

		○ Digitalisation / AI / Robotics → improves productivity → improves LRAS ○ Can also attract greater inflow of FDIs who wants to leverage on the technology available → improving AD → increase RNY ○ Lower reliance on expensive labour (due to aging population) → reduce COP → increase SRAS → increase RNY ○ Improving on human capital through education and retraining → improve quality of labour → raising productivity → increase LRAS. Also, increase in productivity of labour may lead to higher wages for the workforce → greater propensity to spend → increase C → increase AD → increase RNY ○ However, ss-side policies take a long time to have an effect on the economy as policies may not be effective in the short run. I.e. retraining takes times and effectiveness depends on the receptiveness of the workforce towards retraining. ○ Also, the use of robotics do not fully make up the lack of workers → suggesting that Japan's aging population is severe → Extract 6 mentions that Japan is "aging rapidly" and the use of technology / AI may not be enough to replace labour. ○ EV: Despite the limitations of the policy, it is essential for Japan to digitalise and rely on technology to raise productivity to counteract the effects of aging population. To complement this policy, retraining and upgrading workers' skill set is important to ensure structural unN is minimized and ensure wage growth. Suggested conclusion (students to come to a conclusion on the best policy or any other well-reason conclusion): ○ Extract 6 states that "Nonetheless, fiscal policy should remain supportive of the economy in the short term, with targeted measures to hard-hit sectors, backed by a credible medium-term fiscal consolidation plan". This means that **Fiscal Policy** could provide and should be implemented for immediate relief as well as to stimulate demand in the **short run**. But this raises concerns about public debt and long-term sustainability. ○ **Supply-Side Policies** focus on enhancing productivity and competitiveness, setting the stage for **long-term growth**, but may not address immediate economic challenges.	

- Given Japan's current structural challenges, including a shrinking workforce and high public debt, a **balanced approach** utilizing both fiscal and supply-side policies could be the most effective strategy. By providing immediate support through fiscal measures while simultaneously implementing supply-side reforms to encourage long-term investment and productivity, Japan could work towards achieving sustained growth post-pandemic.

Mark scheme:

Level 2 (4-7 marks)

Answers in this level will provide detailed analysis of the way in which EFP, as well as supply side policies will lead to sustained economic growth. The answer will also consider the limitations of each policy. Answers are applied to the context of the Japanese economy.

Level 1 (1-3 marks)

Answers at this level will have some limited understanding of the way in which EFP, as well as supply side policies will lead to sustained economic growth. There will be limited/no application to the context of Japan's economy.

Or

Only one policy addressed.

Evaluation (1-3 marks)

Evaluation marks will be awarded for a conclusion reached with respect to 'best; policy after consideration of the analysis provided.

Annotation	Level	Mark out of 10
C	L2	4
C + C or D	L2	5
D + C	L2	6
D + D	L2	7

Markers' comments:

- Better answers were able to explain how expansionary fiscal policy works to increase AD to increase RNY, achieving actual economic growth. Some managed to provide examples of government expenditure which may have effects on LRAS as well, achieving potential economic growth, i.e. spending on

		infrastructure etc. in addition to the supply side policies such as digitalisation, automation to achieve potential economic growth. - Weaker answers were not above to contextualise the above policies. I.e. no examples of government spending provided in the context of Japan or merely regurgitated how lowering direct tax rates may lead to increase C and I. Also, when supply-side policies were explained, these answers also tend to lift examples off the passage without applying to the context. - Some answers explained contractionary fiscal policy rather than expansionary fiscal policy, which is inaccurate. - Limitations were often generic, i.e. effectiveness of supply side policies is dependent on the receptiveness of the workers / firms etc or fiscal policy drains the government budget further. A good mark will be awarded if these limitations were well-elaborated in the context of Japan. - Most answers were able to evaluate using time-period, explaining that fiscal policy is a short-term measure, while supply side policy is a long term one but failed to elaborate or justify. These were awarded lower evaluation marks. Furthermore if students were to conclude that both policies should be implemented together without justifying will not be awarded E marks as it is not answering the questions to which policy is the best.	
			[Total: 40]