

External Macro Issues: Tutorial Worksheet Suggested Answers

Section A: Discussion Questions

Note to teachers: This question was assigned as one of the SLS questions.

Question 1: Understanding exchange rate changes

Different countries' governments may choose to adopt different exchange rate regimes. For this question, we will assume that all three countries (UK, US and Malaysia) adopt a floating exchange rate regime.

Event	Explain the impact of the event on the country's exchange rate
A rise in domestic interest rates in UK, making them above the rates in many other developed countries.	<p>1. <u>Explain the impact on the demand for bank deposits in UK:</u> Higher interest rate in UK relative to other countries will lead to an increase in short term capital inflow into UK (i.e. hot money: increase in bank deposits by foreigners).</p> <p>2. <u>Explain the impact on the foreign exchange market:</u> The demand for UK's £ increases since bank deposits made in foreign currencies must be converted to £, creating a shortage at the original equilibrium price, exerting upward pressure on the equilibrium price to rise. UK's £ appreciates (currency strengthens).</p>
US reports that its trade deficit is the highest in recent years.	<p>1. <u>Explain what is meant by trade deficit:</u> Trade deficit suggests that export revenue is less than import expenditure. US's trade deficit may be a result of higher demand for imports.</p> <p>2. <u>Explain the impact on the foreign exchange market:</u> To pay for the imports in foreign currencies, the supply of US\$ would have to increase, creating a surplus at the original equilibrium price, exerting downward pressure on the equilibrium price to rise. US\$ depreciates (currency weakens).</p>
Malaysia's export price competitiveness improves	<p>1. <u>Explain what is meant by an improvement in export price competitiveness:</u> Malaysia's exports are now cheaper, leading to an increase in quantity demanded of Malaysia's exports, ceteris paribus.</p> <p>2. <u>Explain the impact on the foreign exchange market:</u> The demand for MYR increases since payment for Malaysia's exports must be made in MYR, creating a shortage at the original equilibrium price, exerting upward pressure on the equilibrium price to rise. MYR appreciates (currency strengthens).</p>

Question 2: Understanding balance of payments

Note to teachers: This question was assigned as one of the SLS questions.

With respect to Singapore's balance of payment account, identify and explain which of the accounts would likely be affected by each of the following events.

Events	Account
A rise in expenditure by tourists in Singapore.	<p><u>Current account (goods balance and/or services balance)</u></p> <p>Reason: Higher export revenue. Note that export revenue will be recorded as a credit entry due to the inflow of money. Current account improves.</p>
An increase in import duties on cigarettes in Singapore.	<p><u>Current account (goods balance)</u></p> <p>Reason: Lower imported expenditure. Note that import expenditure will be recorded as a debit entry due to the outflow of money. Current account improves.</p>
Bread Talk Singapore sets up more franchise outlets in the Middle East.	<p><u>Capital and financial account</u></p> <p>Reason: There will be an outflow of capital (long-term funds) when a Singapore-based company invests overseas. This is recorded as a credit entry since outward direct investments are regarded as assets. Capital and financial account improves.</p> <p><u>Current account (primary income balance)</u></p> <p>Reason: Profits earned from outward direct investments will eventually be remitted back to Singapore. This is recorded as a credit entry.</p>
Malaysian ringgit depreciates against Singapore dollar.	<p><u>Current account (goods and/or services balance)</u></p> <p>Reason: Lower export revenue and higher import expenditure. Current account worsens if export revenue < import expenditure.</p> <p><u>Capital and financial account</u></p> <p>Reason: There may be a decrease in inward direct investment by Malaysian firms due to the higher start-up/operating costs. Note that inward direct investments are regarded as liabilities and recorded as a debit entry.</p>

A rise in foreign direct investment into Singapore from the Asian region.	<p><u>Capital and Financial account</u></p> <p>Reason: There will be an inflow of capital (long-term funds) when there is a rise in inward direct investment. Note that inward direct investments are regarded as liabilities and recorded as a debit entry.</p> <p><u>Current account (primary income balance)</u></p> <p>Reason: Profits earned from inward direct investments will eventually be remitted back to the Asian economies. This is recorded as a debit entry.</p>
The Federal Reserve announces lower domestic interest rates in the US.	<p><u>Capital & Financial account</u></p> <p>Reason: There will be an inflow of short-term capital into Singapore since Singapore's interest rates will now be relatively higher than that of US. This is recorded as a debit entry since all capital inflows, just like inward direct investment, are regarded as liabilities.</p>

Section B: Data Response Questions

Question 3: Japan posts record ¥20 Trillion Trade Deficit in 2022

Extract 1:

Japan's balance of trade for 2022 announced by the Ministry of Finance showed a deficit of ¥20.0 trillion. This far exceeds the ¥12.8 trillion deficit of 2014, marking the largest trade shortfall since comparative statistics were first available in 1979.

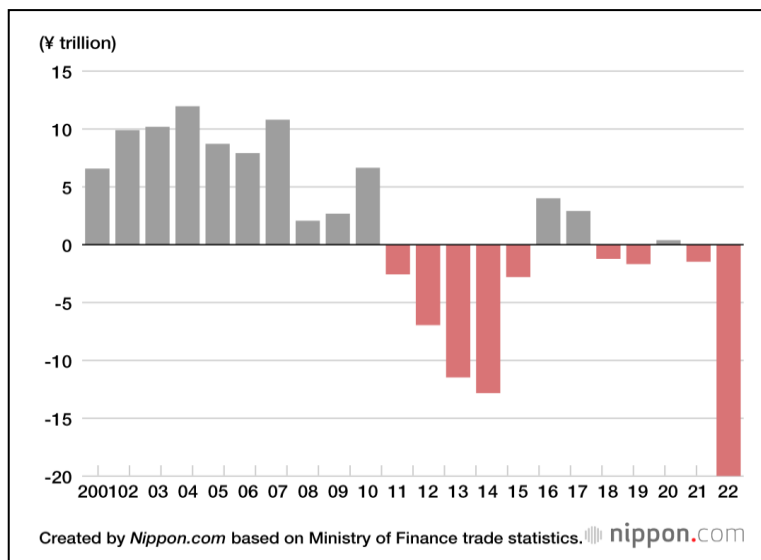
Resource-poor Japan is dependent on imports for 94% of its primary energy supply. The depreciating yen and soaring energy prices from Russia's invasion of Ukraine have thus been cited as the significant reasons for the trade deficit.

(a) Explain how "depreciating yen and soaring energy prices from Russia's invasion of Ukraine" caused Japan's trade deficit in 2022. [4]

- A depreciating yen suggests that yen has weakened, causing import prices in yen to increase. This, coupled with soaring energy prices from Russia's invasion of Ukraine, meant that prices of imported energy sources in yen have increased.
- Since Japan is highly dependent on imported energy sources as mentioned in the extract, its demand for imported energy sources is likely price inelastic.
- Import expenditure thus increases since the increase in price in yen would only lead to a less than proportionate decrease in quantity demanded, ceteris paribus.
- Assuming that export revenue is < import expenditure, Japan incurs a trade deficit in 2022 as a result.

Note to students: There is no need to bring in AD/AS analysis in your answer since the endpoint of this question is on “trade deficit” and not “RNY and/or GPL”.

Figure 1: Japan’s balance of trade with the rest of the world

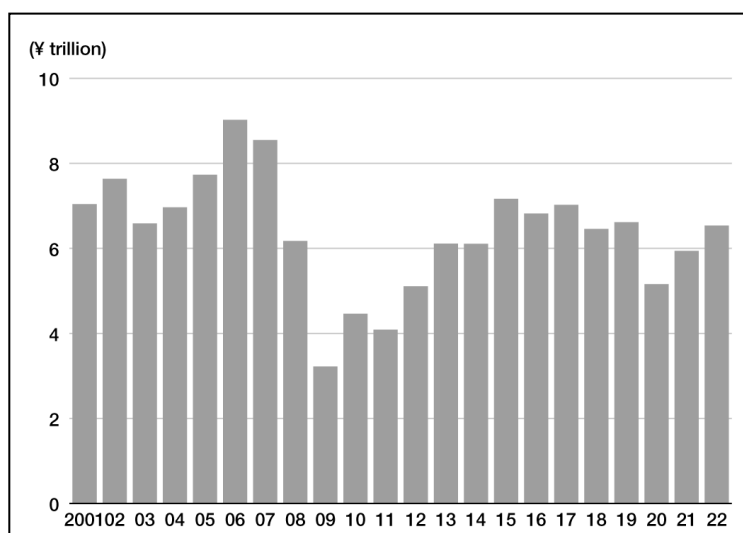


(b) With reference to Figure 1, describe the change in Japan’s overall balance of trade [2] during the period of 2008-2014.

- Overall change: The balance of trade worsened from a trade surplus to a trade deficit over the period of 2008-2014.
- Refinement: The balance was in rising surplus from 2008 to 2010 but from 2011 to 2014 there was increasing deficit.

Note to students: We should identify the trade balance (i.e., trade surplus or deficit) in the relevant years if the data shows both types of trade balance over the period given.

Figure 2: Japan’s balance of trade with the United States



- (c) Using Figure 2, comment on the impact of Japan's trade balance with the US in 2022 on Japan's economic growth. [6]

Explaining [4 marks]:

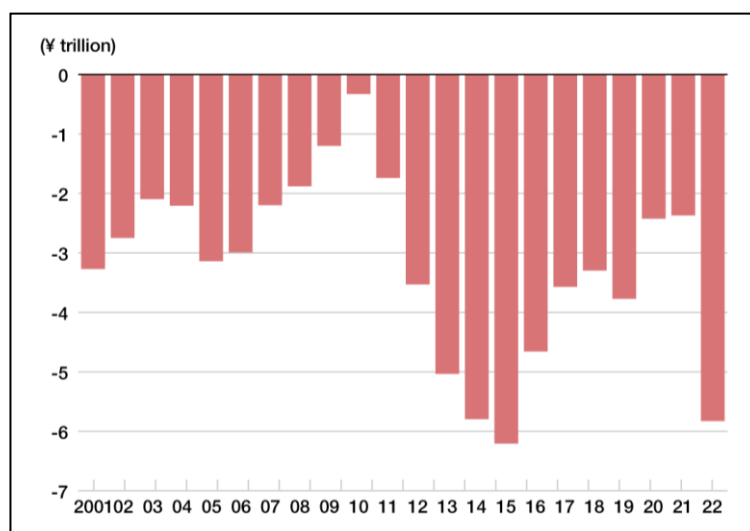
- Japan had an increasing trade surplus with US in 2022 (relative to 2021).
- Positive and rising net export revenue → higher AD.
- Brief explanation of the expansionary income process → Higher AD leads to more workers being employed to produce goods and services → Workers/households spend their income on consumption and withdrawals → AD increases again due to the increase in induced consumption expenditure → process repeats itself until total withdrawal is equal to the initial injection contributed by the positive net export revenue.
- RNY increases by the magnitude of Japan's multiplier → positive economic growth reflected.

Commenting [2 marks]:

- US's AD falls if domestic C falls due to the increase in M from Japan causing US's RNY to decrease which may then cause future demand for Japan's X to fall, causing Japan's AD hence EG to decrease in future.
- While Japan as a BOT surplus with US, its overall BOT with the rest of the world is still a deficit. Thus, the AD is unlikely to be increasing.

Note to students: Since the command word is "comment", the answer should include a valid evaluative judgement after explaining. In addition, since the question is worth 6 marks, we should include a brief explanation of the multiplier process to strengthen the depth of our explanation.

Figure 3: Japan's balance of trade with China



(d) With reference to Figure 2 and 3, compare the changes in Japan's trade balances with the US and China from 2019 to 2022. [2]

- Japan's trade balance with US was in surplus throughout the four years but Japan's trade balance with China remained in deficit throughout.
- Japan's trade surplus with US shrank in 2019 but increased from 2020 to 2022. In contrast, Japan's deficit with China shrank from 2019 to 2021 but increased significantly in 2022.

Note to students:

- Since the question is phrased as "compare the changes in...trade balances..." instead of "compare the trade balances...", providing a difference in terms of the type of trade balance (e.g., Japan's trade balance with US was in surplus throughout the four years but Japan's trade balance with China remained in deficit throughout.) would not be answering the question.
- There is also no need to identify a general trend in the changes since the question is phrased as "compare the changes" instead of "compare the trend..."

[For Self-Practice] Question 4: Challenges faced by China (2022 HCI Prelims)

Table 1: China's exports and imports of goods and services demand (USD, billions)

	2014	2015	2016	2017	2018
Exports Of Goods And Services	2462.8	2362.1	2199.9	2424.2	2655.6
Imports Of Goods And Services	2241.3	2003.2	1944.5	2208.5	2564.1

Table 2: Singapore's exports and imports of goods and services (USD, billions)

	2014	2015	2016	2017	2018
Exports Of Goods And Services	604.4	549.4	525.2	587.4	665.7
Imports Of Goods And Services	530.6	465.3	441.7	496.6	557.5

Source: World Bank

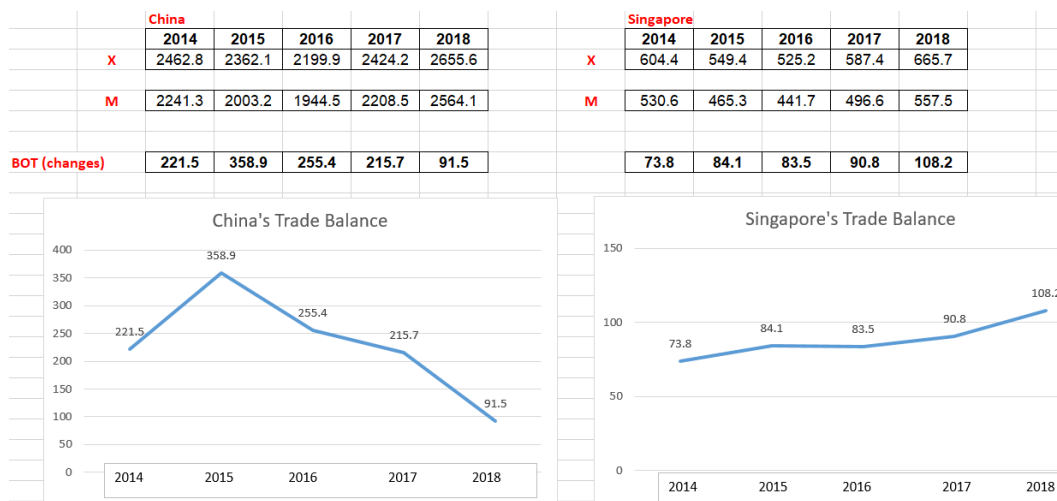
Extract 2: China's economy to face key challenges

The global economic downturn and US-China friction have entered new phases, bringing about unprecedented uncertainty to global economic policies. This will not only directly impact China through trade, but it will also negatively influence its economy by undermining market confidence. As external demand has weakened from 2018, the global manufacturing industry is set to slump. Also, domestic demand is expected to remain weak and has experienced a significant decline, which may accelerate the economic slowdown.

Source: Adapted from Global Times, 11 December 2019

(a) (i) Compare China's balance of trade with that of Singapore from 2014 to 2018. [2]

- Similarity: Both countries experienced a trade surplus (where export revenue is greater than import expenditure) from 2014 to 2018.
- Difference: However, China experienced a decrease in trade surplus while Singapore experienced an increase in trade surplus from 2014 to 2018 / China's trade surplus is consistently greater than Singapore's trade surplus except in 2018.



(ii) With reference to Extract 2, explain one reason why the trend of China's balance of trade is likely to continue in 2019. [2]

- Identify the trend: China is likely to continue to experience a decrease in its trade surplus.
- Explain using Extract 2: Due to weakening export demand as mentioned in Extract 2, China's export revenue is likely to continue to decrease, hence leading to a decrease in net export revenue.