

Full name : _____

Economics subject class : 2ec2_____



NATIONAL JUNIOR COLLEGE
SH2 Preliminary Examination for
General Certificate of Education Advanced Level
Higher 2

ECONOMICS

9570/01

Paper 1

2 hours 30 minutes

No Additional Materials are required.

READ THESE INSTRUCTIONS FIRST

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 answer paper ask the invigilator for a continuation booklet.

Answer **all** questions.

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

This document consists of **9** printed pages and **3** blank pages.



NATIONAL JUNIOR COLLEGE
Economics Department

Answer **all** questions.

Question 1: Global markets for cocoa and chocolate

Extract 1: Small confectioners move away from just selling chocolates as global cocoa shortage hits hard

A recent surge in cocoa prices has caused some small confectioneries in Singapore to branch out from simply selling chocolates in order to save costs and increase revenue. These smaller retailers, which have been hit much harder in terms of profit margins compared with larger stores, are now offering experiential services like chocolate-making workshops.

The price of cocoa – the base ingredient of chocolate – has skyrocketed over the past one to two years due to a global supply shortage. Its key producers, Ghana and the Ivory Coast, have been hit by climate change and disease outbreaks. Decades of underinvestment in cocoa plantations as well as investor speculation have also driven prices up.

Singapore-based artisan chocolatier AnjaliChocolat is one retailer that has switched its business model amid such market challenges. It has a physical store in Tanglin Mall and sells its sweet treats online as well. ‘The recent increase in cocoa prices has been unprecedented and it’s definitely given us a curveball,’ she said. ‘If we were to break even, then we would have to increase our prices by about 30%.’ Another boutique chocolatier, Embrace Chocolate, is paying double the price for raw cocoa beans now compared with the start of the year. Founder Namita Gupta said her shop may have to pass on the cost to consumers by S\$0.50 to S\$1. ‘If people want to continue eating good chocolate, they might have to pay a little more,’ she said. New cocoa trees take as long as three to four years to produce beans, according to the International Cocoa Organisation, which also estimates that global production of cocoa could drop by 10% this year.

Still, with growing affluence, economists said demand for chocolate is unlikely to be deterred. Mr Song Seng Wun, economic advisor at CGS-CIMB Securities, said such demand depends on the global labour market and whether people are still earning enough to spend on less essential items like chocolate.

Source: Adapted from Channelnewsasia.com, 1 May 2024

Extract 2: The chocolate price spike – what’s happening to global cocoa production?

Cocoa prices are going through the roof. In the last week, they have surged more than US\$10,000 per tonne. The world produces nearly 6 million tonnes of cocoa beans each year. Almost two-thirds of this come from West Africa. Most of the rest is produced in South America and Asia. Within West Africa, the Ivory Coast produces around 38% and Ghana 19% of the world’s cocoa beans. That’s almost 60% combined. Bad weather and disease outbreaks have hit cocoa production in West Africa. West Africa experienced extreme wet conditions late last year, driving an outbreak of the ‘Black pod disease’. This is a fungal disease which tends to spike just after the wet season. If not treated, it can destroy an entire harvest. This extreme rain was followed by extremely dry conditions, which has helped the spread of another disease: the ‘Swollen shoot virus’. The International Cocoa Organisation and cocoa traders estimate that global production could drop by around half a million tonnes this year. That’s around 10% of the world’s usual harvest.

The skyrocketing price of cocoa should be good for farmers. Those who have seen a reduced yield this year should be able to top up their income with higher returns on the harvest they did get. This

is not happening. Governments in these West African countries set cocoa prices based on sales from the previous year. In Côte d'Ivoire and Ghana, government agencies such as the Coffee and Cocoa Council (CCC) and the Ghana Cocoa Board (COCOBOD) set a guaranteed price at the start of the growing season to protect farmers from global price swings. If farmers cannot sell through private buyers at the guaranteed price, the government agencies promise to buy all cocoa offered at the guaranteed price, and 'farmers receive exactly the guaranteed price we set'. In 2024, the global price is above US\$10,000 per tonne, but farmers are receiving a fixed (guaranteed) price between US\$1,600 and US\$1,800 per tonne. While this guarantee provides a fixed price for farmers, they lose out when prices are high. It's farmers in other more open markets such as Brazil, Peru, Ecuador and Indonesia that are benefitting from the spike.

What might the future of cocoa look like? Most of the world's cocoa is produced in West Africa which are highly susceptible to extreme and cyclical weather and crop diseases. This is likely to get worse with climate change. And farmers do not earn enough to properly invest in pest management and more productive crops.

One obvious solution at a global level is to diversify cocoa supplies. That means larger markets in South America and Asia, so the global market is less sensitive to shortfalls from West Africa, where 'Black pod disease' and 'Swollen shoot virus' are concentrated. Farmers in other regions – seeing the recent high prices – might be investing in more cocoa production already. It would not be surprising to see countries such as Ecuador, Peru and Brazil becoming the dominant producers in the next decade or two.

But that does not address the root of the problem for farmers in Ghana and the Ivory Coast. They do not have the money to invest in more resilient or protected crops. In the short term, the governments in these countries could lift the fixed price and pay more to farmers. But if we want a sustainable system, farmers will need to be paid a bigger cut for the cocoa. Fail to do so, and many of the world's poorest farmers will be left behind.

Source: Adapted from Sustainabilitybynumbers.com/p/cocoa-prices, 1 April 2024

Extract 3: Bittersweet: The harsh realities of chocolate production in West Africa

The average 40-gram bar of milk chocolate carries a carbon footprint of approximately 200 grams. The carbon footprint of dark chocolate can rise up to 300 grams for a bar due to the higher cocoa content.

Chocolate production requires a substantial amount of land. In fact, hectares of land are increasingly being converted into cocoa farms in West Africa due to increasing demand, often at the expense of forests. For example, since Côte d'Ivoire gained independence in 1960, approximately 90% of its rainforests have vanished due to cocoa cultivation. Pesticide and fertiliser use within the cocoa industry is extremely high due to the susceptibility of cocoa plants to diseases; these chemicals can easily contaminate water sources if not properly contained. This contamination severely harms local aquatic wildlife and animals who drink from these sources.

Chocolate production has also led to considerable deforestation as the rising demand for cocoa has led to aggressive land clearance in cocoa-growing regions. From 2001 to 2023, Ghana lost 24% of its total tree coverage; Côte d'Ivoire, 26%. Younger cocoa trees have a higher production rate than older trees, prompting many farmers to clear older forests to plant new trees. This process further exacerbates deforestation, especially in Côte d'Ivoire. Land clearing increases emissions by

releasing the carbon stored in forests; it also causes soil degradation, including the loss of organic matter, acidification, and loss of biodiversity.

To mitigate the environmental impacts of cocoa production, several strategies can be adopted. Transitioning to agroforestry – which incorporates tree cultivation and conservation – can mitigate climate change impacts by storing carbon and protecting farms from droughts and pests. Other climate-friendly farming practices such as Climate Smart Agriculture (CSA) can increase productivity while reducing greenhouse gas emissions can further reduce the carbon footprint. To counteract the damage caused by deforestation, companies and farms can engage in reforestation projects. Finally, traceability of cocoa origins should be further encouraged and incorporated into policy. Traceability addresses environmental and ethical concerns related to cocoa production while potentially making chocolate more attractive to buyers by marking products as ethically sourced. European Union (EU) importers already require detailed information about the origin of cocoa.

Source: Adapted from hir.harvard.edu, 17 December 2024

Extract 4: Cocoa traceability rates fail to improve as EU deforestation law looms

The volume of cocoa in Ivory Coast and Ghana that can be fully traced did not increase last year, a major UN-backed report has found, raising questions about how the world's top two cocoa growers will comply with a new EU law banning the import of commodities linked to deforestation. The new law next year will require importers of commodities and related goods to prove their products weren't grown on deforested land by, amongst other measures, tracing their supply chains down to the plot where their raw materials were grown.

The report, published by the Cocoa and Forests Initiative (CFI), found 83% of directly sourced cocoa in Ghana and 82% in Ivory Coast can be traced in this way, roughly stable versus 2022 levels. According to the non-profit Trase (Transparency for Sustainable Economies), however, only around 35% of Ivory Coast's cocoa exports were directly sourced from farmer cooperatives in 2022, and industry experts say figures for Ghana are similar, if not lower. Direct sourcing is when a chocolate-maker or trader buys cocoa directly from farmers rather than through a middleman, making traceability easier.

The CFI report said national traceability systems were currently being piloted in both Ivory Coast and Ghana, and that these were expected to yield high traceability figures throughout the supply chain in 2025 when the EU Deforestation Regulation (EUDR) takes effect.

The EUDR, which came into effect in 2023 and is enforceable from December 30, 2024, mandates that companies selling key commodities including cocoa into the EU must prove that their products are not linked to deforestation. Complying with the law is critical for Ivory Coast and Ghana, who ship about two-thirds of their cocoa to the EU and where millions of largely poor, rural farmers and their families rely on the industry for their livelihood.

The EUDR has been hailed as a landmark in the fight against climate change but critics, including the European Cocoa Association, say it could end up excluding small-scale farmers from the lucrative EU market while disrupting the bloc's supply chains. This could reduce global cocoa supply and unintentionally drive cocoa prices even higher. For these farmers, clearing forested land remains the cheapest way to expand production, as they lack resources to invest in more sustainable but costly methods.

Source: Adapted from Reuters.com, 1 October 2024

Questions

- (a) With reference to Extract 1 and using a demand and supply diagram, explain how the rise in the price of cocoa led to the change in the price of chocolates. [3]
- (b) With reference to Extract 1, explain **two** strategies small confectioners, such as a boutique chocolatier, in Singapore used to increase revenue amid rising cocoa costs. [4]
- (c) With reference to Extract 3,
- (i) explain **one** negative externality that could arise from the production of cocoa in West Africa. [2]
 - (ii) explain why cocoa would be over-produced in a free market. [3]
- (d) 'While this guarantee provides a fixed price for farmers, they lose out when prices are high.' (Extract 2)
- Discuss the likely short-term and long-term impact of the fixed price scheme on cocoa producers in West Africa. [8]
- (e) Discuss whether the 'new EU law banning the import of commodities linked to deforestation' is the best way to reduce carbon emissions due to 'land clearing' in the production of cocoa. [10]

[Total: 30]

Question 2: Economic policy challenges in Argentina and the United States (US)

Table 1: Government Budget Balance and GDP Growth in Argentina and the US, 2018-2023

Year	2018	2019	2020	2021	2022	2023
Argentina						
Government Budget Balance (% of GDP)	-5.44	-4.45	-8.67	-4.33	-3.84	-5.36
GDP Growth Rate (%)	-2.6	-2.0	-10.0	10.4	5.3	-1.6
United States						
Government Budget Balance (% of GDP)	-5.34	-5.81	-14.15	-11.39	-3.7	-7.16
GDP Growth Rate (%)	3.0	2.5	-2.2	5.8	1.9	2.5

Source: Statista.com, 25 June 2025

Extract 5: The US national debt dilemma

Economists, investors, and lawmakers are again raising alarm bells about the US national debt. Years of elevated budget deficits, exacerbated by massive government spending during the COVID-19 pandemic, have taken the debt to historic levels: totalling more than \$30 trillion in 2023, the US federal government debt is now at its highest percentage of gross domestic product (GDP) since World War II. Equally alarming to many experts is the debt's unsustainable trajectory, as spending is projected to continue outpacing revenues.

Today, the national debt is almost the same size as the entire US economy, and the debt is on track to double within the next thirty years. Some economists say that could expose the country to a number of dangers, including a budget crisis, rising interest rates, greater economic instability, and a diminished global leadership role. Reducing the debt will require the government to make politically difficult decisions to either curb spending, raise taxes, or both. Other experts say the United States can safely afford to continue borrowing at present levels because it pays relatively little interest due to its unique position in the global economy.

The US has long been the world's largest economy, with no record of defaulting on its debt. Moreover, the US dollar has been the world's reserve currency since the 1940s. High domestic and international demand for the dollar has helped the US to finance its debt. This is because many investors, including central banks around the world, hold dollar-denominated assets, such as US Treasury bills, notes, and bonds, due to their relative safety (low risk), and more recently, the opportunity to generate a higher yield than on safe euro- or yen-denominated financial assets.

Some economists, however, worry that large debts could become a drag on the economy or precipitate a fiscal crisis, arguing that there is a tipping point beyond which large accumulations of government debt begin to slow growth. Under this scenario, investors could lose confidence in Washington's ability to right its fiscal ship and become unwilling to finance US borrowing without much higher interest rates. This would result in even larger borrowing costs, or what is sometimes called a debt spiral. A fiscal crisis of this nature could necessitate sudden and economically painful spending cuts or tax increases.

Various plans have been proposed to balance the federal budget and reduce the debt. Most include a combination of deep spending cuts and tax increases, such as reducing spending on defence, healthcare subsidies and social welfare aid, as well as raising tax rates on higher income earners and corporations, and adding new taxes such as a carbon tax.

Source: Adapted from McBride J, Berman N and Siripurapu A, Council on Foreign Relations, 4 December 2023

Extract 6: The challenge of supporting the Argentina peso

Figure 1: Argentina peso exchange rate, 2019 to 2023

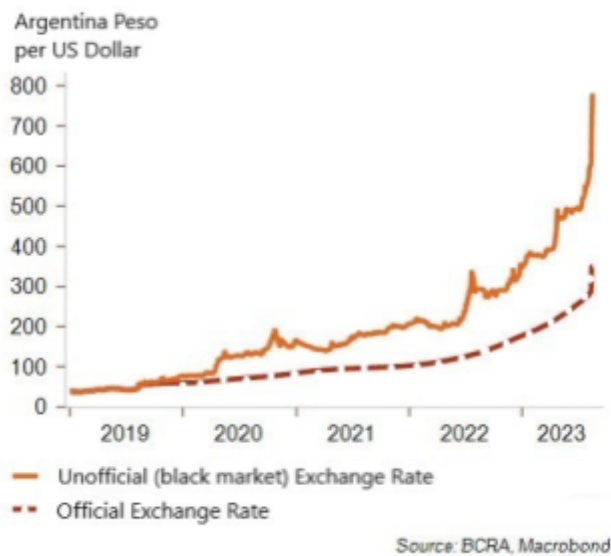
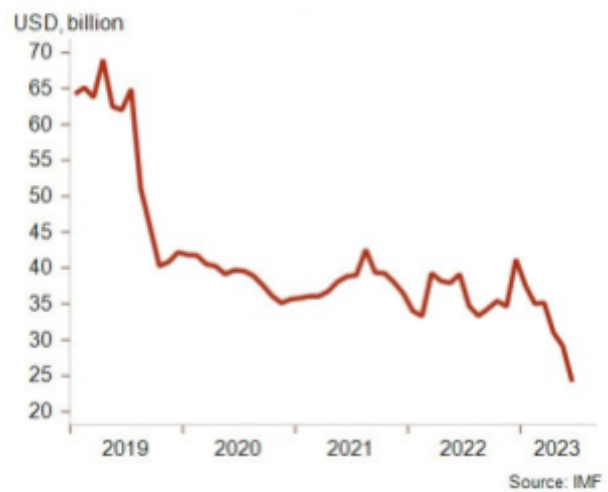


Figure 2: Argentina gross foreign exchange reserves, 2019 to 2023



Argentina's peso currency sank in the unofficial black market, hitting a record low against the US dollar as concerns grew about the Latin American country's economy, with 104% inflation, reserves dwindling and drought hitting exports. The black market peso, which has flourished due to tight capital controls limiting access to official forex markets, weakened almost 4% to 438 per US dollar, roughly double the official rate of 218 pesos.

Argentina, the world's top exporter of processed soy and a major supplier of corn, beef and wheat, is battling to keep its economy stable as a historic drought reduces foreign currency income, drives up local prices and drains central bank reserves.

The Central Bank of Argentina has been draining its foreign exchange reserves due to its commitment to an overvalued currency peg (fixed exchange rate). The worst drought in six decades has seriously hurt current account revenues as food is historically a major source of current account revenues and accounted for about half of current account revenues in the past years. This has put pressure on the already weak peso, forcing the Central Bank to sell dollars to support the peso at the official rate. Although the currency peg is unsustainable, the current government is unlikely to float the exchange rate, as it would fuel inflation and unrest. Hence, restrictive regulatory policies, such as further deepening the capital and currency controls to safeguard gross foreign exchange reserves are more likely in the coming months.

*Sources: Bianchi W, Reuters, 20 April 2023
Debuyscher J, Credendo, 17 August 2023*

Extract 7: Argentina's shock measures for its ailing economy

The painful economic steps that Argentina's new president, Javier Milei, announced this week sound draconian: Slashing the currency's external value in half; Reducing aid to provincial governments; Suspending public works; Cutting subsidies for gas and electricity; Raising some taxes.

Indeed, many analysts believe that only such radical measures offer a realistic opportunity to rescue the economy. Inflation in Argentina has hit 161%. Its economy is shrinking, in part because of a ruinous drought. In the past five years, its currency has lost about 90% of its value against the US dollar. Its debts, including \$45 billion that it owes the International Monetary Fund, are suffocating. One in four Argentinians lives in poverty.

What makes the challenge so difficult is that Milei's plan seems certain to make people's lives worse long before they get better. Reduced government subsidies mean that Argentinians will pay more for electricity and transportation. A devalued peso will make imports more expensive. The annual inflation rate could roughly double to 300%. This will greatly aggravate the misery of the poor.

In the meantime, the government spending cuts will derail economic growth, while helping to reduce inflationary pressure. 'A recession next year is unavoidable,' said Martin Castellano, head of Latin American research at the Institute of International Finance, a banking trade group that is forecasting that Argentina's economy will shrink 1.3% in 2024.

Milei is targeting what many economists see as the root of Argentina's economic problems: Out-of-control government spending. Milei proposes to balance the budget by the end of 2024 by slashing spending and imposing some tax hikes. He plans to increase aid to Argentina's poorest to help them cushion the pain.

At the heart of Milei's audacious economic agenda is his plan to devalue the peso from 400 to 800 per US dollar and then by an additional 2% each month. Part of the goal is to make Argentina's exports less expensive – and thus more competitive – overseas and reduce the country's gaping trade deficit. And by making imports more expensive, the devaluation should not only help cut the trade gap but also slow the amount of money leaving Argentina. This would allow the central bank to replenish its depleted foreign-currency reserves, which are vital during financial crises.

The International Monetary Fund has lent its critical support to Milei's plan. 'These bold initial actions aim to significantly improve public finances in a manner that protects the most vulnerable in society and strengthen the foreign exchange regime,' Julie Kozack, an IMF spokeswoman, said in a statement. 'Their decisive implementation will help stabilise the economy and set the basis for more sustainable and private-sector led growth.'

Source: Adapted from Wiseman P, AP, 15 December 2023

Questions

- (a) With reference to Table 1, compare the change in the government budget balance as a percentage of GDP of Argentina with that of the US between 2018 and 2023. [2]
- (b) With reference to Extract 5, explain **one** reason why a high and rising government debt might cause economic growth to be unsustainable. [3]
- (c) With reference to Figure 1 and Extract 6, and using a demand and supply diagram, explain how the drought in Argentina has affected the unofficial exchange rate of the peso. [4]
- (d) With reference to Extract 6, explain how Argentina's 'commitment to an overvalued currency peg' has caused a decline in its foreign exchange reserves. [3]
- (e) Discuss whether a devaluation of the peso is more beneficial or harmful to Argentina. [8]
- (f) Both the US and Argentina governments have proposed measures to balance the government budget through spending cuts and raising taxes.

Discuss whether such measures to balance the government budget are more appropriate for the US than for Argentina. [10]

[Total: 30]

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