A. ASSIGNMENT RECAP

- Write **a 1000-word report** to analyze a country's economic **data over 5 years**, including GDP, inflation, unemployment, and other metrics.
- Use the **AD-AS model** to discuss the country's **response to COVID-19**.
- Based on the above analysis, provide an economic **analysis and recommend 2 policies** to improve the economy, evaluate ease of implementation and effectiveness.

Suggested Structure:

1. **Economic Data Analysis (Suggested 100 words)**
2. **AD-AS Model Analysis (Suggested 400 words)**
    a. **Introduction**
    b. **Discussion**
    c. **Conclusion**
3. **Current State Analysis & Recommendation (Suggested 500 words)**
    a. **Current State Analysis**
    b. **Policy Recommendation**
    c. **Evaluation**

B. KEYWORD EXPLANATION

- **GDP (Gross Domestic Product)**

GDP is the sum of gross value of goods and services added by all resident producers in the economy.

- **Inflation**

Inflation is the rate of increase in prices over a given period of time. It is measured by the Consumer Price Index (CPI). There are different types and sources of inflation, including:

+ **Demand-pull inflation** is caused by an increase in aggregate demand that is faster than aggregate supply. This can happen from things like expansionary monetary policy.
+ **Cost-push inflation** is caused by drops in aggregate supply from increases in production costs like wages and raw materials. This leads firms to raise prices.

- **Unemployment**

Unemployment is the share of the labor force that is **jobless, actively seeking work, and available for work**. There are different types and sources of unemployment, including:

+ **Frictional unemployment**, which occurs when people are between jobs or first entering the labor force as they search for work. This is voluntary and short-term.
+ **Structural unemployment**, caused by a mismatch between workers' skills and available jobs. This can result from technological change or geographic immobility.
+ **Cyclical unemployment**, occurring when there is insufficient aggregate demand in the economy. It rises during recessions and falls during economic expansions.

- **AD-AS Model**

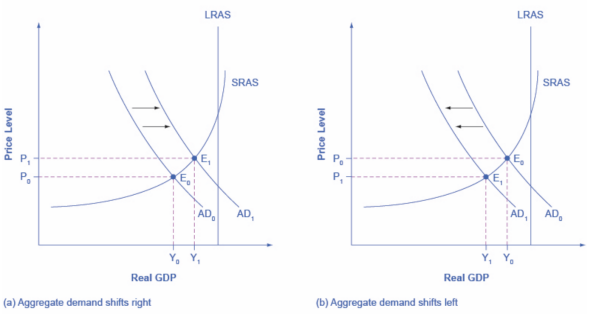
The AD-AS model shows the relationship between aggregate demand (total spending) and aggregate supply (total production) to determine equilibrium price level and GDP.

+ If **aggregate demand (AD)** increases, the AD curve shifts right, leading to higher equilibrium price level and higher GDP. This could represent economic growth.
+ If **aggregate supply (AS)** decreases, like from higher production costs, the AS curve shifts left. This leads to a higher price level but lower GDP. This could illustrate stagflation.

- **Aggregate demand**

Aggregate demand (AD) is the total spending on domestic goods and services in an economy. The AD curve slopes downward, meaning that as the price level falls, the quantity of goods and services demanded rises. There are several factors that can cause the aggregate demand curve to shift, including

+ **Consumer spending** - If consumers spend more, AD will shift right. If they spend less, AD shifts left.
+ **Spending** - If firms invest more in capital, AD shifts right. Less investment causes a leftward shift.
+ **Government spending** - Higher government spending boosts AD to the right. Lower spending shifts AD left.
+ **Exports and imports** - More exports or fewer imports shift AD right. More imports or fewer exports cause a left shift.



- **Aggregate supply**

Aggregate supply (AS) is the total quantity of goods and services supplied by an economy at different price levels. The AS curve slopes upwards, indicating that as the overall price level rises, firms are willing to supply more real output.

There are several factors that can cause the aggregate supply curve to shift:

+ **Resource prices** - Higher wages, raw material costs, etc. mean higher production costs for firms. This causes AS to shift left.
+ **Technology** - Improved productivity and efficiency lowers production costs for firms. This shifts AS right.
+ **Taxes and subsidies** - Higher business taxes raise production costs, shifting AS left. Subsidies do the opposite.
+ **Number of firms** - More firms means greater production capacity, increasing aggregate supply, shifting the curve right.

So the upward slope of the AS curve represents how supply responds to price changes, while shifts depend on input costs, technology, and other supply-side factors.

C. DETAIL GUIDELINE

1. Part 1: Economic Data Analysis

- The first sentence: State clearly the country and five indicators chosen for analyzing. Overall trend for the economic state of the country as well as the overall trend for all five indicators. E.g: VietNam, United States.

Example:

- **Overall trend for the economic state and all five indicators**: Overall, Norway experienced steady growth pre-pandemic before a muted COVID-induced downturn in 2020, followed by a strong rebound (IMF, 2022; Statistics Norway, 2020).

- The next 2-3 sentences: Break down the overall trend into small periods for analysis. It is highly recommended to state any differences or similarities in the 5 indicators' trends.

Example:

- **GDP:** From 2018-2019, most indicators were stable except for a GDP uptick by 3.5% in 2018.
- **Unemployment:** In 2020, unemployment rose 4.5% while other metrics declined amidst COVID disruptions.

- However, Norway saw a vigorous recovery in 2021 as GDP, exports, and consumption surged on economic reopening and stimulus measures (IMF, 2022).
- **Inflation:** Meanwhile, inflation accelerated above the 2% target to 3.5% by 2022 as demand rebounded faster than supply post-lockdowns (Statistics Norway, 2022).

    - The last 1-2 sentences: Explain the causes or reasons behind the pattern you mentioned in your work with sources from reliable sources such as journal articles or reports from organizations.

Example:

- Prudent fiscal policy and Norway's vast oil wealth cushioned the pandemic's economic blow (OECD, 2020). Fuelled by resilient household spending and external demand, GDP and employment are projected to return to pre-crisis levels in 2022, though inflation persists as a near-term concern.

2. Part 2: AD-AS model

a. Introduction

- The first 1-2 sentences: - Provide a brief overview of the impact of the COVID-19 pandemic on the global economy.
- State the purpose of this part, which is to use the AD-AS model to understand how Country X navigated the economic challenges posed by the pandemic.

Example:

The COVID-19 pandemic triggered a global economic crisis as lockdowns and reduced mobility lowered aggregate demand (AD) worldwide. This analysis utilizes Norway's experience to exemplify how the AD-AS model can explain nations' macroeconomic responses to the pandemic shock.

b. Discussion

- The next 2-3 sentences: Discussion of the changes in AD-AS caused by the pandemic.
    - Present a Short-Run AD-AS model diagram to visualize the initial impact of the pandemic on your country.
    - Explain how the pandemic led to a decrease in AD due to factors like reduced consumer spending, business investments, and exports.

Example:

- AD shift left (add reasons) → Decline → GDP giảm

Hints: Norway…

In the short run, Norway's AD shifted left as consumption and exports fell amidst lockdowns and uncertainty. Household spending dropped 11.2% in 2020, decreasing AD and real GDP while unemployment rose (World Bank, 2022). The AD-AS graph shows the shift from AD1 to AD2, lowering the equilibrium GDP from Y1 to Y2.

- The next 2-3 sentences: Explain how lockdowns and supply chain disruptions affected short-run AS, leading to increased costs and reduced output.

Example:

Supply was also disrupted as producers faced input shortages, higher costs, and lost productivity. This constrained aggregate supply (AS) despite lowered demand.

- The next 6-7 sentences: Discussion of the changes in AD-AS when the country overcame the pandemic.
  - Present a Long-Run AD-AS model diagram to illustrate the transition.
  - Discuss how **government policies** such as stimulus packages and increased public spending were used to counter the negative economic effects and increase the AD. In addition, explain how, over time, AD increased as consumer and business confidence improved, and vaccines became available, leading to increased consumer spending, investments, and exports.
  - Emphasize **the importance of supply-side policies** that encourage long-term economic stability and growth, such as investments in infrastructure, education, and healthcare.
  - Discuss how these changes contributed to economic recovery and a return to pre-pandemic levels of output and employment.

Example:

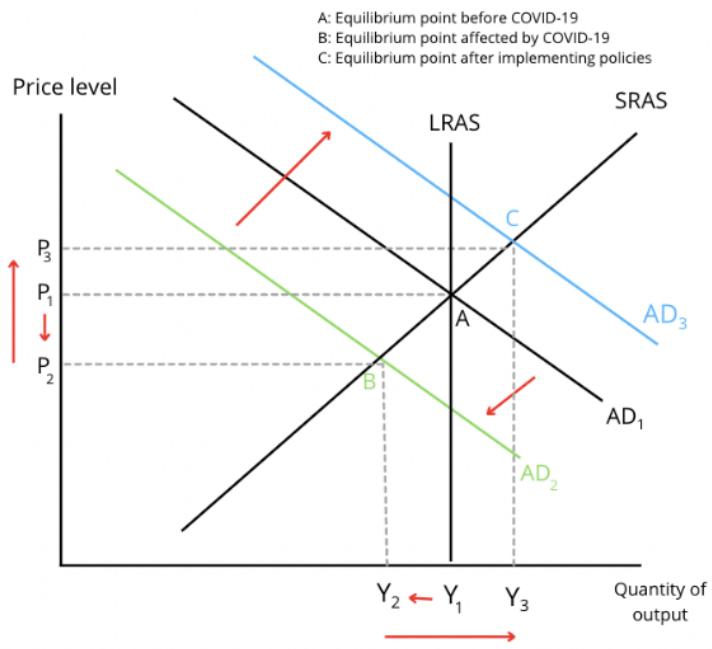


Figure 7: Impact of policies on Norway's AD-AS curve

Government policies: Consumption rebounded on stimulus checks and reopened businesses. Record government spending in 2021 raised AD, seen in the rightward shift from AD2 to AD3.

How everything improved: Accommodative monetary policy also stimulated spending and investment through lower interest rates.

The Importance of supply-side policy: Strong fundamentals like Norway's oil reserves and prudent policy response facilitated recovery.

Impacts of these changes: By 2022, GDP and employment approached pre-pandemic levels. But inflation accelerated above 2% as resilient demand outpaced supply amidst lingering supply chain issues.

c. Conclusion

- The last 3-4 sentences: Reflect on the lessons learned and potential future economic challenges that the country may face, such as inflation or supply chain disruptions.

Example:

Using the AD-AS model demonstrates how nimble policy reactions can counter demand and supply shocks. But risks like inflation remain as the economy normalizes post-pandemic. Norway's experience provides lessons on responding effectively to economic crises while maintaining long-term stability.

3. **Part 3: Current State Analysis & Recommendation**

a. Current State Analysis

- The first 3-4 sentences: Present an overview of the current state of the economy, using key macroeconomic indicators (GDP, unemployment, inflation, etc.) and other relevant data.

Example

Norway's economy is recovering unevenly from COVID-19 amid new headwinds. GDP shrank in Q1 2022 due to Omicron restrictions but rebounded once curbs eased (FocusEconomics, 2022). However, high inflation poses a challenge. Consumer prices rose 5.7% in August - a 13-year high - driven by supply chain disruptions, labor shortages, and the war in Ukraine (Norges Bank, 2022).

- The next 3-4 sentences: Discuss the impact of the COVID-19 pandemic on the economy, including areas where it was hit the hardest.

Example

Unemployment has fallen to pre-pandemic levels of 3.7% after peaking at 10.4% in 2020 (Statistics Norway). However, the economy faces risks from moderating household spending as inflation erodes purchasing power. Business investment and exports also remain below trend.

- The last: 2-3 sentences: Identify the specific economic challenges the country is facing in the post-COVID period, such as high unemployment, supply chain disruptions, reduced consumer spending, or business closures.

Example

Overall, the economy is growing again after pandemic contractions but faces an intricate balance of supporting demand while controlling inflationary pressures. Targeted stimulus and strengthening supply-side capacity will be crucial to sustain the recovery.

b. Policy Recommendation

- The first 3-4 sentences: Present your two policy recommendations for economic recovery. These policies should address one of the identified economic challenges.
- The next 3-4 sentences: Explain these policies in detail, including their objectives, implementation steps, and expected outcomes.
- The last 3-4 sentences: - Discuss the potential advantages and drawbacks of these policies.

- Provide supporting evidence or examples from other countries where a similar policy was effective.

Example

Workforce Development Programs

Problem: With youth unemployment at 10.4%, Norway faces mismatches between worker skills and available jobs (Statistics Norway, 2022).

Objective: improve employability, build human capital.

Solution: expand workforce training initiatives, by providing courses aligned with current labor market needs. Offerings could cover both technical skills like software applications and soft skills like communication and critical thinking (OECD, 2017).

Expected Outcome: Targeted training can better equip the unemployed and new labor market entrants with skills demanded by growing sectors.Germany's successful vocational programs demonstrate how this strategy can improve employment outcomes for participants (Cedefop, 2022).

Advantages and Drawbacks: Challenges include developing relevant, high-quality curricula and facilitating coordination between government, educational institutions, and industry. But the long-term benefits of a more productive, dynamic workforce justify the investment.

C. Evaluation

- The first 4-5 sentences: Compare the two policy recommendations in terms of ease of implementation.
- The next 3-4 sentences: Consider factors like political feasibility, cost, and public support.
- The last 4-5 sentences: - Assess the effectiveness of each policy in addressing the economic challenges and promoting recovery and growth.
  - Consider the short-term and long-term impacts of each policy.

Example

- Ease of implementation: Workforce development programs enjoy stronger public and political support given their focus on investing in people rather than imposing costs. However, developing quality curricula and coordinating stakeholders is administratively challenging. The benefits also manifest slowly as workers complete training. In contrast, interest rate hikes can be swiftly implemented using existing central bank tools, but may face public resistance.

- Factors: In the short run, monetary tightening can more quickly curb demand and ease inflationary pressures. But it risks undermining growth and employment. Workforce training takes longer to augment labor supply but pays long-term dividends through enhanced productivity and human capital.
- Effectiveness: Overall, combining targeted workforce investment with gradual, measured monetary tightening provides a balanced policy mix. Worker training addresses structural mismatches while interest rate hikes tackle inflated demand. Together, these mutually reinforcing policies can promote stable, sustainable growth.

D. TIPS & TRICKS

Tips for choosing two other macroeconomic data

- When presenting a country's economic state, start by defining your objective – whether it's assessing overall economic health, stability, growth prospects, or specific aspects like trade, employment, inflation, or fiscal health. Then, understand the country's unique economic context, considering its development stage, economic structure, and major industries.
- Below are commonly used indicators for assessing a country's economic health:
  - **Government Debt**: Government debt as a percentage of GDP is crucial for understanding a country's fiscal responsibility. High government debt relative to GDP can be a sign of financial stress.
  - **Consumer Confidence Index**: This measures the sentiment of consumers regarding their economic prospects. High consumer confidence can indicate a positive economic outlook.
  - **Industrial Production**: It reflects the output of a country's factories, mines, and utilities. A rising industrial production can be a sign of economic growth.
  - **Gross Domestic Product (GDP) per capita:** GDP per capita shows a country's GDP divided by its total population. GDP per capita illustrates the average income and standard of living of the individuals in a country, serving as an indicator of economic prosperity and development.

Tips for collecting and visualizing data:

- For collecting data
  - The data must be collected from trusted and reliable sources such as The World Bank, IMF, and OECD.

    - Given the variety of available indicators, it is advisable to consult with your lecturer to determine the most appropriate type to utilize. When examining GDP, it is strongly recommended to gather data on either GDP (Current US$) or GDP (constant 2015 $US). For assessing inflation rates, it is advisable to consider Inflation - consumer prices (annual %). Regarding the unemployment rate, Unemployment, total (% of the total labor force) (modeled ILO estimate) should be collected.
- For visualizing:
    - Maintain a consistent design with elements like fonts, colors, and spacing to achieve a polished and professional appearance.
    - It is highly recommended to select a line chart to present changes in your data over a 5-year period.
    - Ensure clear and comprehensive labeling, including titles, captions, and axis labels, to enhance the clarity of your visualizations.

- Use concise professional language. Avoid repetition. Don't just describe - provide insights and analysis.
- Structure your work logically, guided by the prompts. Use strong transitions between sections.
- Proofread closely. Double check figures, formatting, grammar, and citations.

E. FOOD FOR HUNGRY THOUGHTS

1. Amadeo K (2022) *What Are the Major Causes of Inflation?*, the balance website, accessed 10 November 2022. https://www.thebalancemoney.com/causes-of-inflation-3-real-reasons-for-rising-prices-3306094
2. Hall R (2017) 'Low Interest Rates: Causes and Consequences', International Journal of Central Banking, 13(3): 104-117.
3. IMF (International Monetary Fund) (2022) *Policy Tracker*, IMF website, accessed 11 November 2022. https://www.imf.org/en/Topics/imf-and-covid19/Policy-Responses-to-COVID-19
4. Norges Bank (2022) *MONETARY POLICY REPORT WITH FINANCIAL STABILITY ASSESSMENT 1/2022*, Norges Bank, accessed 11 November 2022. https://www.norges-bank.no/en/news-events/news-publications/Reports/Monetary-Policy-Report-with-financial-stability-assessment/2022/mpr-12022/content/

5. OECD (2017) *OECD Employment Outlook 2017*, OECD Publishing, accessed 12 November 2022. https://www.oecd.org/els/employmentoutlook-previouseditions.htm
6. Sanchez J and Liborio C (2012) 'The Relationships Among Changes in GDP, Employment, and Unemployment: This Time, It's Different', Economic SYNOPSES, (13), doi:10.20955/es.2012.13