International Journal of
Business Diplomacy and Economy

ISSN: 2833-7468
Volume 2 | No 5 | May -2023

Aggregate Demand and Aggregate Supply, Their Compositions and Factors Affecting Them

Sevara Erdanova [1], Malika Mirzayeva [2]

[1] Senior Teacher, Department of Uzbek and Foreign Languages, Tashkent Institute of Finance, UZBEKISTAN

[2] Student on Economics, Tashkent Institute of Finance, UZBEKISTAN

Abstract: The article is devoted to highlight the Concepts of Aggregate Demand and Aggregate Supply are two fundamental concepts in macroeconomics that help us understand how the economy works. The study of macroeconomics revolves around concepts like Aggregate Demand and Aggregate Supply, which form the basis of understanding the overall performance of an economy. In this plan, we will delve into the concepts of Aggregate Demand and Aggregate Supply, the factors affecting them and the equilibrium state between the two. Additionally, we will build a model of Aggregate Demand and Supply to better grasp the intricacies of their relationships.

Key words: Aggregate Demand, Aggregate Supply, consumer spending, government spending, investment, net exports, consumer confidence and expectations, interest rates, fiscal policy, monetary policy, exchange rates, changes in the world economy, GDP- gross domestic product, the Keynesian zone, the Intermediate zone, the Neoclassical zone, GDP deflator, levels of unemployment; natural resources, human resources, capital resources, technology advancements, productivity, labour wage costs, taxes, material prices, labour force.

INTRODUCTION

Understanding Aggregate Demand and Aggregate Supply is crucial for policymakers, investors, and anyone who is interested in the economy. Changes in Aggregate Demand and Aggregate Supply can have significant effects on the economy, such as inflation, unemployment and economic growth. Therefore, it is essential to understand the factors that affect Aggregate Demand and Aggregate Supply, as well as the policies that can be used to stabilize the economy.

Firstly, we will discuss Aggregate Demand – what it means, the factors that impact it and its significance in understanding the behavior of an economy. We will also analyze the interplay between the variables that cause changes in Aggregate Demand, such as a consumer spending, government policies and net exports. Consumer spending is the largest component of Aggregate Demand and is influenced by factors such as income, wealth and consumer confidence. Government spending includes spending on goods and services, as well as transfer payments such as Social Security and Welfare. Investment includes spending on capital goods such as machinery and equipment, as well as spending on research and development. Net exports refer to the difference between exports and imports and are influenced by factors such as exchange rates and global economic conditions.

Next, we will explore Aggregate Supply- its meaning, factors affecting it and its impact on an economy's growth and stability. We will also consider the supply-side factors- labor, capital and technology- and their influence on Aggregate Supply. Technological advancements can increase

productivity and lower costs, leading to an increase in Aggregate Supply. The Labor Force includes the number of workers and their skillsand educational levels. Natural Resources include land, minerals and energy sources.

Overall, in this paper, we will explore the concepts of Aggregate Demand and Aggregate Supply in detail. We will discuss the factors that affect Aggregate Demand and Aggregate Supply, equilibrium in the Aggregate Market.

1. The concept of Aggregate demand and factors affecting it

Aggregate Demand, also known as AD, is the total amount of goods and services demanded by all sectors in an economy at any given price level over a certain period. It comprises four elements:

- ✓ Consumer spending;
- ✓ Government Spending;
- ✓ Investment;
- ✓ Net Exports.

1. Consumer Spending

Consumer spending, also known as household consumption expenditure, constitutes the largest component of Aggregate Demand. It refers to the expenditure made by individuals and households on goods and services, such as food, clothing, housing, transportation and entertainment, etc. Consumer spending is influenced by several factors, such as changes in income, availability of credit, consumer confidence and government policies, among others.

For instance, when people have more disposable income due to a rise in wages or tax cuts, they tend to buy more goods and services, thereby increasing AD. Similarly, a favorable credit environment, where loans are easily accessible and interest rates are low, can increase consumer spending . Conversely, a recession, low confidence in the economy, or high interest rates can lead to a decrease in consumer spending, thereby decreasing AD.

2. Government spending

Government spending comprises of both current spending such as salaries for public workers and transfers like pensions, and capital spending such as investments in infrastructure. It refers to the expenditure made by the government on public goods and services for the welfare of society, such as defense, education, healthcare, and public transportation among others.

Government spending can have a significant on AD, especially during periods of economic slowdown. An increase in government spending can stimulate demand in the economy and increase AD. For example, during the COVID-19 pandemic, most governments around the world increased their spending to support citizens and boost their economies. Conversely, a decrease in government spending to control inflation can lead to a decrease in AD.

3. Investment

Investment refers to the expenditure made by firms and individuals in fixed assets such as machinery, buildings and equipment. It also includes business investment in research and development and human capital. Investment can be influenced by several factors such as interest rates, business confidence and technology.

For instance, a lower interest rate can encourage businesses to borrow and invest in capital projects, thereby increasing AD. Similarly, an increase in business confidence can lead to increased investment that can boost AD. Conversely, a recession, low business confidence, or high interest rates might lead to a decrease in investment , leading to a reduction in AD.

4. Net Exports

Net exports are the difference between a country's exports and imports. When a country exports more than it imports, it is said to have a trade surplus, and when its imports more than exports, it has

a trade deficit. Net Exports can be influenced by several factors, such as exchange rates, globalization and the economic performance of trading partners.

For example, if a country's currency depreciates relative to its trading partners, its exports become cheaper, making it more competitive, thereby increasing net exports. Conversely, if the country's currency appreciates, its exports become more expensive, leading to a decrease in net exports.

A trade deficit, where import spending exceeds export earnings, can lead to a decrease in Aggregate Demand. This is because the country is losing wealth to foreign economies, and fewer goods and services are available for domestic consumption.

The Aggregate Demand Curve

If we just think of Aggregate Demand as total spending for now, it includes all four components of demand: consumption, investment, government spending and net exports. This demand is determined by a number of factors, but one of them is a price level – recall though, that the price level is an index number such as the GDP deflator that measures the average price of the things we buy. The Aggregate Demand (AD) curve shows the total spending on domestic goods and services at each price level.

Figure 1.1 presents an Aggregate Demand (AD) curve. The horizontal axis showa real GDP and the vertical axis shows the price level. The AD curve slopes down, which means that increases in the price level of outputs lead to a lower quantity of total spending. The reasons behind this shape are related to how changes in the price level affect the different components of Aggregate Demand. The following Components comprise Aggregate demand:

consumption spending=C

+

Investment spending =I

+

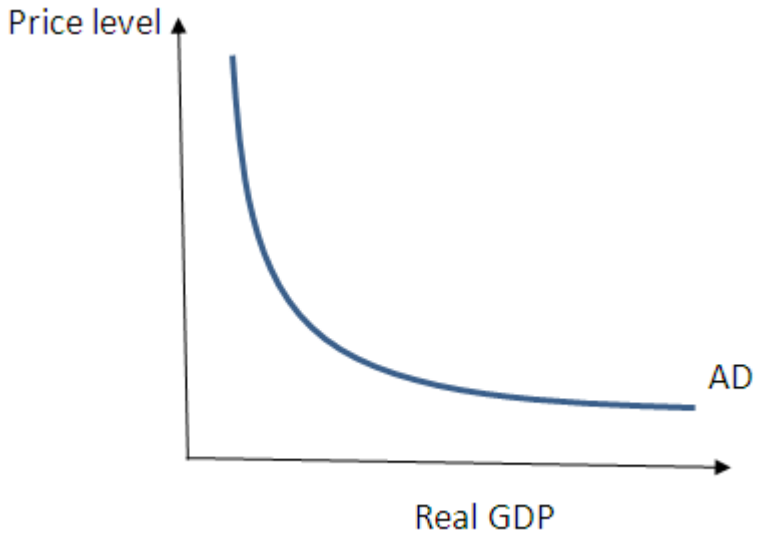
government spending=G

+

Net Exports= Exports-Imports=Xn

Aggregate Demand=C+I+G+Xn

1. Aggregate Demand Curve.



Aggregate Demand(AD) slopes down, showing that, as the price level rises, the amount of total spending on domestic goods and services declines. The wealth effect holds that as the price level increases, the buying power of savings that people have stored up in bank accounts and other assets

will diminish, eaten away to some extent by inflation. Because a rise in the price level reduces people's wealth, consumption spending will fall as the price level rises.

The interest rate affect is that as prices for outputs rise, the same purchases will take more money or credit will push interest rates higher. In turn, higher interest rates will reduce borrowing by businesses for investment purposes and reduce borrowing by households for homes and cars – thus reducing consumption and investment spending.

The foreign price effect points that if prices rise in Uzbekistan while remaining fixed in other countries, then goods in Uzbekistan will be relatively more expensive compared to goods in the rest of the world. Uzbekistan exports will be relatively more expensive and the quantity of exports sold will fall. Uzbekistan imports from abroad will be relatively cheaper, so the quantity of imports will rise. Thus, a higher domestic price level, relative to price levels in other countries, will reduce net export expenditures.

Among economists all three of these effects are controversial, in part because they do not seem to be very large. For this reason, the Aggregate Demand curve in Figure 1.1 slopes downward fairly steeply. The steep slope indicates that a higher price level for final outputs reduces Aggregate Demand for three of these reasons, but that the change in the quantity of Aggregate Demand as a result of changes in price level is not very large.

Several factors can affect the volume of Aggregate Demand, including:

1. Consumer Confidence and expectations:

Psychologically, consumers feel better about spending and investing money when they are optimistic about the future. For example, if consumers expect the economy grow rapidly, they are more likely to be confident about their job prospects and financial situation, leading to higher levels of consumption.

2. Interest rates:

Interest rates on loans and mortgages can affect the volume of Aggregate Demand. The lower the interest rates, the more likely it is that people will borrow and spend, leading to a rise in Aggregate Demand.

3. Fiscal Policy

Government policies relating to spending and taxation can also have an impact on the volume of Aggregate Demand. For example, if the government increases spending on infrastructure projects, such as building roads and bridges, this can lead to increased demand for goods and services within the construction industry.

4. Monetary Policy

The Central Bank can use monetary policy to influence Aggregate Demand by controlling the interest rates that banks charge to lend money to consumers and businesses. If the central bank lowers the interest rates, it becomes easier for people to borrow money, leading to higher levels of spending and therefore higher Aggregate Demand.

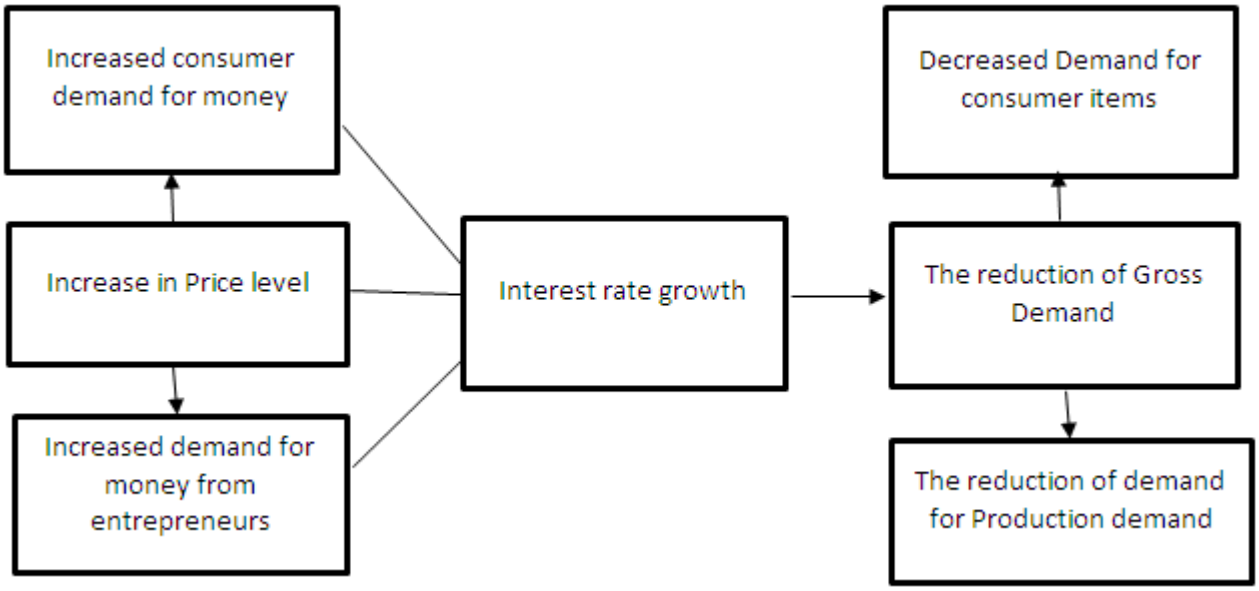
5. Exchange rates:

The strength or weakness of a country's currency can also affect Aggregate Demand. If the currency is weak, exports become relatively cheaper, which encourages foreign buyers to increase their demand for goods and services from that country, leading to higher Aggregate Demand.

6. Changes in the world economy:

Changes in the global economy, such as a recession in a major trading partner, can also affect the volume of Aggregate demand. For example, if there is a decrease in demand for a country's exports due to a recession in a major trading partner, this can lead to a decline in Aggregate Demand.

Impact of price level on Gross Demand



Here we reflected an increase in demand for money, an increase in the interest rate and a decrease in the amount of demand in the event of an increase in the price.

When the price decreases, the opposite happens, to be more clear, the demand for money and a decrease in the interest rate, as a result, an increase in the amount of gross demand.

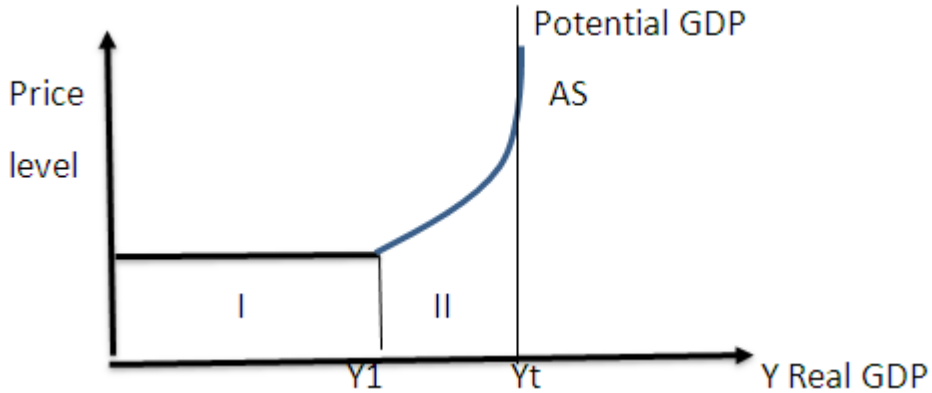
2. The concept of Aggregate Supply and factors affecting it

Aggregate Supply is the total amount of goods and services produced within an economy over a given period of time. It is made up of two components:

- ✓ Real Gross Domestic Product(GDP);
- ✓ The price Level.

Real GDP measures the total value of goods and services produced adjusted for inflation, and the price level measures the average price of goods and services in an economy.

The Aggregate Supply Curve shows the total quantity of output (i.e. real GDP) that firms will produce and sell at each level



If we look at the diagram above, it can be clearly seen that The short run Aggregate supply or we can call SRAS, can be divided into 3 zones:

1. The Keynesian Zone
2. The Intermediate Zone
3. The Neoclassical Zone

Figure 1.2 shows an Aggregate Supply curve. In the following paragraphs, we will walk through the elements of the diagram one at a time: the Horizon and Vertical axes, The Aggregate supply curve itself, and the meaning of the potential GDP vertical line.

Figure 1.2. The Aggregate Supply Curve. Aggregate Supply (AS) slopes up because as the price level for outputs rises, with the price of inputs remaining fixed, firms have an incentive to produce more to earn higher profits. The potential GDP line shows the maximum that the economy can produce with full employment of workers and physical capital.

The diagram's horizontal axis shows real GDP – that is, the level of GDP adjusted for inflation. The vertical axis shows the price level, which measures the average price of all goods and services produced in the economy. In other words, the price level in the AD-AS model is what we called the **GDP deflator** in the Macroeconomic Perspective. The price level is **different from** the inflation rate. Visualize the price level as an index number, like the Consumer Price Index, while the inflation rate is the percentage change in the price level over time.

As the price level rises, real GDP rises as well. Why? The price level on the vertical axis represents prices for final goods or outputs bought in the economy – i.e. the GDP deflator – not the price level for intermediate goods and services that are inputs to production. Thus, the AS curve describes how suppliers will react to a higher price level for final outputs of goods and services, while holding the prices of inputs like labor and energy constant. If firms across the economy face a situation where the price level of what they produce and sell is rising, but their costs of production are not rising, then the lure of higher profits will induce them to expand production. In other words, an aggregate supply shows how producers as a group will respond to an increase in aggregate demand.

And curve's slope changes from nearly flat at its far left to nearly vertical at its far right. At the far left of the aggregate supply curve, the level of output in the economy is far below potential GDP, which we define as the amount of real GDP an economy can produce **by fully employing** its existing levels of labor, physical capital and technology, in the context of its existing market and legal institutions. At these relatively low levels of output, **levels of unemployment** are high, and many factories are running only part-time, or have closed their doors. In this situation, a relatively small increase in the prices of outputs that businesses sell – while assuming no rise in input prices – can encourage a considerable surge in the quantity of aggregate supply because so many workers and factories are ready to swing into production.

As the GDP increases, however, some firms and industries will start running into limits, perhaps nearly all of the expert workers in a certain industry will have jobs or factories in certain geographic areas or industries will be running at full speed. In the AS curve's intermediate area, a higher price level for outputs continues to encourage a greater quantity of output – but as the increasingly steep upward slope of the aggregate supply curve shows, the increase in real GDP in response to a given rise in the price level will not be as large.

Factors affecting Aggregate Supply:

1. Natural Resources

Natural resources are one of the most important factors affecting aggregate supply. These include land, water, minerals, forests and other resources that are used in the production of goods and services. The availability and quality of natural resources can have a significant impact on aggregate supply. For example, an economy with abundant oil reserves is likely to have a higher aggregate supply of goods and services, compared to an economy that has to import oil at a high cost.

2. Human Resources:

Human Resources refer to the quantity and quality of a nation's workforce. The availability of skilled and educated workers is crucial for the production of goods and services. Human resources can affect aggregate supply in two ways. First, an increase in population means more workers, which can increase Aggregate supply. Second, the education and training levels of workers can affect their productivity, leading to changes in aggregate supply.

3. Capital Resources:

Capital Resources refer to the physical assets used in the production of goods and services. These include factories, machinery and equipment. The availability and quality of capital resources can affect Aggregate Supply. For example, an economy with advanced technology and modern equipment is likely to have a higher Aggregate Supply of goods and services than an economy with outdated technology and equipment.

4. Technology Advancements:

Technology Advancements play a significant role in determining Aggregate Supply. New technologies can lead to improved production processes, increased efficiency and higher productivity. For instance, the invention of the internet and other digital technologies has led o significant improvements in productivity and efficiency in many industries. As a result, developments in technology can increase Aggregate Supply.

1. Short Run Aggregate Supply is the total supply of goods and services currently being achieved in the economy.
2. Long Run Aggregate Supply is the maximum supply of goods and services that can be achieved with full employment of resources.

Ultimately, short run Aggregate Supply is affected by the change in unit costs of production, that is the cost of producing on unit of good or service in an economy.

4 Productivity- the level of labour, capital and MultiFactor productivity. Higher level of productivity means goods and services are being produced more efficiently, decreasing unit costs of production, increasing aggregate supply.

5 Labour Wage Costs- higher wage costs means that an economy produces less goods and services due to higher costs of production. In Australia, our labour are pretty high with a minimum wage of $17.70 per hour(around $13USD)

6 Taxes and other costs- costs such as regulation and taxation costs can place a burden on the unit costs of production, lowering the Aggregate Supply of an economy.

7 Material Prices- higher material prices and other inputs will increase the unit labor costs of production and lower Aggregate Supply. Material prices can also be imported which is affected by changes in the exchange rate.

There are factors which affect the Long Run Aggregate Supply.

- Size of Labor Force- Australia has a small population for its land mass, a majority of Australia's output capabilities are from capital.
- Stock of Capital- the amount of capital available in an economy. Australia has a pretty high capital to labor ratio in most mining, where labor is operating multi-million dollar machines
- Productivity- higher level of productivity will mean increases in both short term and ling term supply
- Level of technology- The potential output of an economy be increased through the adaptation of new technology, ideas and managerial processes, which can increase the efficiency of resourses, thus increasing long run Aggregate Supply.

REFERENCES

1. Economy -2, T.T.Jurayev, X.S.Asatullayev, Z.G.Allaberganov. "Nihol Print" OK publisher, 2021 Tashkent.
2. Principles of Macroeconomics 2e author Steven A. Greenlaw, David Shapiro
3. Stanford University. "A Monetary Policy for the future"
4. Journal of Macroeconomic Policy, Volume 126, March 2022.

5. The theory of Macroeconomics, T.T.Jurayev, Study Guide, 2018
6. N. Gregory Mankiw, Macroeconomics 8th edition, Harvard university, ((NY.: Worth Publishers 2015)
7. “Scientific journal of economic research”