



Research Article

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Positive Slope Model of Aggregate Demand

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Abstract

This paper analyzes Internal Aggregate Demand. This aggregate, along with other production indicators, is the main indicator of the country's economic performance rate. Objective analysis is important for their perspective, as well as for a set of other related indicators, such as inflation rate, unemployment rate, etc. In economic theory, the Aggregate Demand Curve (AD) deals with negative slope. At the point where AD intersects the AS (aggregate supply curve) there is macroeconomic equilibrium. Creating this equilibrium, shifting curves, creates a number of other figures that show how the level of output, prices and employment will be, and overall the level of economy in the future. In this study, with the data of the Albanian economy, was built, for a period of 17 years, the Internal Demand Curve. Three effects are analyzed: the real balance sheet effect, the interest rates and the external trade effect. The internal demand curve has resulted in a Positive Slope. The equilibrium is not created at the intersection point of the curves. These curves stand facing each other. The equilibrium is set by the different aggregate price level. The Gross Domestic Product Curve (GDP) is the equilibrium curve created by the interaction of Aggregate Demand and Aggregate Supply. This position is real, and creates opportunities for objective analysis of the economy. This paper uses econometric, statistical, comparative and synthesis methods.

Keywords: economic growth, slope of aggregate demand curve, interest rate effect, foreign trade and real balances, nominal and real GDP, consumption, investment, savings, REPO, deflator price, exchange rate

1. Introduction

The Albanian economy, after the 1990s, was thrust into the market economy. In 1997 it was determined by law the Bank of Albania's main objective, "achieving and maintaining the level of prices". At the end of 2003, all commercial banks of the second tier were privately owned, with no fully state-owned capital. After the year 2000 the euro was introduced and almost all the other European currencies came out of the market. The Albanian economy over the years has an economic growth at different rates. The exception is year 1997 where we have a negative economic growth and the highest inflation rate of 42%. In other years there is a slight increase in the price level, inflation and GDP deflator. GDP deflator is different with the level of inflation because a large part of the basket products, on which the inflation rate is calculated, are imported.

The analysis of macroeconomic indicators, such as nominal GDP, real GDP growth rate, National Income, Inflation Rate and Unemployment Rate are done annually by the Government, Central Bank, INSTAT, etc. Aggregate Demand and Bid Analysis, market model analysis, with these two aggregates has never been made. The Aggregate Market studied in Macroeconomics has never been analyzed. In this way the theoretical knowledge acquired in the field of macroeconomics has not been applied to the concrete conditions of the Albanian economy.

Why not do this? Why not analyze the aggregate market with all its elements? Why not build a model with concrete data of the Albanian economy?

When a market model is not built and not used, why should it be studied in macroeconomic trends? Is an effective market study with the Keynesian model? Should the market model improve?

The answers to these questions we tried to give in this analysis. We think that we have already started analyzing this important problem in the economy.

In this paper we will analyze the Albanian Aggregate Demand Curve. We will determine the slope of the curve. We will determine that the Aggregate Demand Curve has a positive slope; it does not have a negative slope. This slope sets this curve against the Aggregate supply curve and does not interrupt it. The macroeconomic balance is set not only when they are expected at a point but also when they are not expected but have a buffer pricing area between them. The aggregate demand and aggregate supply performance is Gross Domestic Product. The GDP curve equals equilibrium.

The model proposed by us is the Model that can be applied. We have built it with the data of the Albanian economy. We have built the Demand, Consumption and Investment curve. With the existing theoretical model of the aggregate market, so far no one has built such a model with concrete data. In this analysis we will not focus on one-year curves, but we will take the curve over a long-term. This will give us the opportunity to create an idea of what can happen to the economy in the face of a rise in prices or real product. The aggregate annual expenditure curves will be the subject of a future study.

2. Overview of the Aggregate Demand and its Curve

In classical and Keynesian analysis is generally operated with the Aggregate Supply, with the Aggregate Supply Curve. The classics consider the Aggregate Supply curve completely inelastic, the potential product economy, frictional unemployment and structural unemployment. Wages are considered floating. They do not support the state intervention in the economy. Any intervention of the state, according to them, will bring only increase of the price level and not the stimulus of economic growth.

The Keynesians consider the Aggregate Supply curve fully elastic. They build this market model because Keynes theory was drafted after the Great Depression of the US economy. Wages presuppose hardened, introduce the concept of involuntary unemployment, effective demand etc. This theory presupposes state intervention in the economy. According to them, any state intervention in the market increases productivity.

Both of these economic theories stop at the Aggregate Offer and do not stop at the Aggregate Demand. Both claim an equilibrium point where the Aggregate Supply Curve is expected with the Aggregate Demand Curve. The Keynesians identify the point with the Effective Demand. They in their analysis start from employment. In this paper we will not analyze the Aggregate Supply and its curve but we will analyze the Aggregate Demand and its Curve. Upon Aggregate request we will identify the Inquiry. This requirement is closer to its theoretical concept.

Aggregate Demand is an expression of Aggregate Expenditures on time. Aggregate expenditures consist of C (expenditure on purchasing final goods and services) plus I (gross investment for business) plus G (government expenditure excluding payment transfers and debt interest rates) plus Ex (net exports calculated as Exports minus Import). These aggregate expenditures are calculated at any time as the product and service sold at the relevant prices of the period. In this way, during a year we have continuously transactions with the prices of the period when the operations are carried out. If, at the end of the period, all these actions are listed, we get the aggregate expenditure curve for this period. This curve is also called the Aggregate Demand Curve.

3. What is the Meaning of Aggregate Demand?

Aggregate Demand Theoretically understands: the amount of goods and services final those economic entities plan (individuals, governments, firms, others) seek to buy at different aggregate prices over a certain period of time.

In this way the requirement is the plan that the economic entities have to buy. This plan takes

into account a number of factors. These factors that are taken into account are reflected in defined costs, which link a certain level of aggregate demand at a certain aggregate price or deflator price. In short; Aggregate demand represents the total real GDP that all economic entities and foreigners want to buy for different levels of aggregate prices over a given period of time (Naqellari 2017).

The Aggregate Demand Concept is provided by dozens of authors. We will mention some of them because almost all make the same definition.

- Total planned or desired expenditure in an economy over a given period (Samuelson, Nordhaus 1985).
- The total amount that consumers business firms and government agencies are willing to spend for the finest goods and services (Baumol, Blinder 1991).
- Aggregate demand is the total demanded by households, business, government, the foreign sector for final good and services produced in the economy at alternative price level (Orley, Amos 1987).
- Aggregate demand represents the total amount of goods required in the economy (Donbursch, Fischer 2000).
- According to him, Aggregate demand is the general demand for all goods and services in a whole economy. It is a macroeconomic term that describes the relationship between everything purchased within a country and its prices. Everything bought in one place is the same as everything produced in one place. Therefore, the aggregate demand is equal to the gross domestic product of that economy (Amadeo 2018).
- Aggregate demand is A schedule or curve that shows the total quantity of good and services demanded (purchased) at different price level (McConnell, Brue 2002).
- Aggregate demand; the economy wide demand for output for output when the goods market and the asset market are in equilibrium; the level of output corresponding to the intersection of the IS and the LM curves (Abel, Bernanke 1998).
- Aggregate demand; Total value of real aggregate output (that is, real GNP) that all sectors of the economy are willing to purchase at various average price levels. (Contrast with aggregate expenditure),(Spencer 1990).
- Aggregate demand is an economic measurement of the sum of all final goods and services produced in an economy, expressed as the total amount of money exchanged for those goods and services.. As a macroeconomic term describing the total demand in an economy for all goods and services at any given price level in a given period, aggregate demand necessarily equals gross domestic product (GDP), (INVESTOPEDIA 2018).
- In macroeconomics, aggregate demand (AD) or domestic final demand (DFD) is the total demand for final goods and services in an economy at a given time. It specifies the amounts of goods and services that will be purchased at all possible price levels (Wikipedia 2018).

According to these definitions Aggregate Demand is a list of Gross Domestic Product (GDP) and aggregate prices.

3.1 Our consideration on this concept

When talking about aggregate demand, for short-term periods, consider aggregate expenditures. Aggregate demand is created only when we have, listing aggregate expenditures - aggregate price. The request in this regard can only be expressed through a table or just through a curve. The Aggregate Demand is an abstract concept, which is realized only as a sum of aggregate expenditures realized throughout the period, at various aggregate prices. Thus, there is no Aggregate Demand equal to the Aggregate Supply for a certain price level. There are Aggregate Expenditures equal to Aggregate Supply(Aggregate Product). For the short term, we cannot speak of the Aggregate Demand

Equal are Aggregate Expenditures as money with Aggregate Offer as commodity at a specified time, Expense = Manufacturing for Sale x Lek. The sum of these expenditures, according to the price level, at the end of the year provides the realization of the Aggregate Demand and Aggregate Supply. *They are the same but expressed in different ways*, the demand through $AD = C + I + G + Nx$, and the product through its structure.

When we talk about spending, we take into consideration not the total money in circulation, but only that amount of money that goes for the purchase of goods and services. We can present this with a simple scheme.

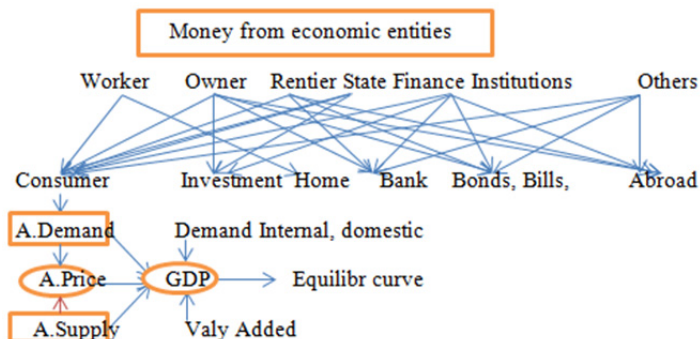


Fig. 1: Simple Money Exchange Circulation

Source. Author

In this respect, the Sayan Law is also accurate today. Revenue for the seller is an expense to the buyer, it is the gift expressed in different ways.

The total amount of money goes not only for the consumption costs we are talking about, but also in many other directions. Some parts keep you home, do not use it. Go to the bank, for savings deposits, for stocks, bonds, treasury bills, etc, etc. destinations.

It is important to specify the equilibrium concept. It is wrong to conclude that the balance is set when all the money goes for consumption and investment. This can only happen in a hypothetical economy, and in the short term. Talking about such balances in the 21st century makes a big mistake. Today, the world economy is increasingly integrating. It is trying to function as a whole. Today the balance must be seen as a regional equilibrium, such as a balance for a country block or a balance as a whole. This is more pronounced for small opened markets such as the case of the Albanian economy.

Today has lost the concept classic market. Today the market is not determined by the country and the commodity that is sold. Today you can buy and sell different products directly from your home, office or car. Today, the economy is not real. There are sophisticated financial markets, labor markets, capital markets, etc.

The Aggregate Demand can also be compared with Microeconomic Demand.

What conclusion do we draw from the comparison with the Microeconomic Demand?

Even in Microeconomics there is a demand concept for a commodity or service, there is a demand curve for a commodity or service.

Even then, we say that Demand is an abstract concept, the required amount increases, at a certain price, at a certain time. There is no increase in demand for a good one.

Regarding the slope of the demand curve, here too many problems exist. Judging that the price of an inferior good is lowered people will buy more is wrong, people will buy a quality commodity that has a high price.

Or, if the price of a normal car will fall, people will buy more is not true. They can buy more even when the commodity price rises. This effect has been proven in the field of fuels for 2009-2010 (Naqellari 2011). In this study, it has been shown that the amount of fuel sold has increased despite the price increase.

The effect of the income and the effect of the substitution have not only an interpretation, but have some interpretations. These interpretations create doubts about the negative slope of the individual demand curve.

3.2 What is the meaning of the aggregate demand curve?

In theory, the aggregate demand curve is a negative slope curve. It links aggregate costs with different levels of aggregate price, in a certain period of time, in a given place. In this way, the curve that is generated from the real GDP (measured through spending) with different levels of deflator price is the aggregate demand curve. This model assumes the picture as follows:

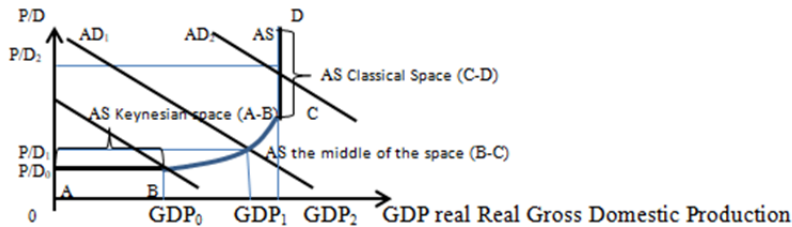


Fig. 2: Aggregate market model
Source. Author

The figure clearly shows that the aggregate demand curve is the same, with a negative slope. The aggregate supply curve has three spaces, Keynesian, intermediate and classical. Both theories rely on the supply curve. They do not set the aggregate demand curve, they take it with negative slope.

We analyze the demand and determine its connection to the aggregate price level. AS's offer, we look like AD request partner and vice versa. We will conclude that the AD-AS curves have the same direction. They stand opposite one another and not the other side.

The theoretical slope of the curve AD for our opinion is unarguable. At first glance, the tools seem convincing, but after an analysis, with concrete data, we have proven that they do not stand.

Keynes, Keynesian's theoretical father, has not built any macroeconomic model, when demand with a negative slope. This curve was built by other authors, neo-Keynesians, supporters of his ideas.

Initially, the argument for its slope starts from the Individual Demand Curve in Microeconomics.

From the microeconomic point of view it has a negative slope for two reasons, the first, for income and the second, due to the effect of the substitution. Above we talked a bit about the effect of substitution.

When it comes to the AD curve, the second reason is rejected because the effects of substitution between goods do not exist in an economy taken as a whole. But here are given other reasons for substitution, such as the replacement of today's commodities with future goods, domestic goods with imported goods, real assets with unrealistic assets, and so on. Generally, three reasons are given, which are also referred to as three effects;

- The first effect is the effect of real balances.
- The second effect is the interest rate effect.
- The third effect is the effect of external trade.

For the aggregate demand curve and its negative slope there are many definitions. *We will mention some of them.*

- The aggregate demand (AD) curve is a curve that shows how a change in the price level will change aggregate expenditures on all goods and services in an economy". Aggregate demand curve "shows how to change aggregate expenditures for goods and services in an economy by changing prices (Colander 2001). The author gives three reasons for the negative slope of the aggregate demand curve, the first the effect of the asset, the second the interest rate effect and the third effect of the foreign trade.
- It shows the relationship between the amount of goods and services people are willing to buy and the aggregate price level (Samuelson, Nordhaus 1985).

- The Aggregate Demand Curve displays the amount of National Product (GNP) required for each possible price level value (Baumol, Blinder 1991).
- Aggregate Demand Curve Express the opposite relationship between the price level and the aggregate product's required quantity derived from the interplay between the commodity markets and the monetary markets (Mankiw 1999).
- Aggregate demand curve reflects all price level combinations and National Revenues when the asset and service market and asset market are in balance. "The AD curve appears as the Value of the National Product Balance from the IS-LM model, differs from the price level change (Lipsey 1992).
- Aggregate demand curve represents the relationship between aggregate demand for good and final services and the average price level (Orley, Amos 1987).
- Aggregate demand curve shows price and product level combinations in which the markets of good and asset markets are simultaneously in equilibrium (Donbursch, Fischer 2000).
- The aggregate demand curve is one that relates the demand for real GNP to the general price level (Henderson, Poole 1991).
- Aggregate expenditures schedule is: A schedule or curve showing the total amount spent for final goods and services at different levels of *real GDP* (McConnell, Brue 2002).
- The aggregate demand curve shows what level of GNP will be demanded given a particular price level (Hall, Taylor 1988).
- Aggregate demand is defined as a negative relationship between the general price level measured by the CPI price index and the real output level in an economy (Peterson 1991).
- The Aggregate Demand Curve (AD) shows the relationship between the total demand of the economy for products and the level of product prices (Waud 1992).
- in a diagram with output on the horizontal axis and the price level on the vertical axis, the downward-sloping relation between the price level and the economy wide demand for output: ...The aggregate demand curve shows the relation between the aggregate quantity of goods demanded, $C_d + I_d + G$ and the price level P . The aggregate demand curve slopes downward ... down the same as the demand curve for a particular commodity (Abel, Bernanke 1998).
- The aggregate demand curve shows what level of GNP will be demanded given a particular price level (Hall, Taylor 1988).
- The aggregate demand curve (AD) shows the relation between the total amounts of production required (measured as real GDP) and the price level (measured as the implicit price deflator). At each price level, the total amount of goods and services required is the sum of the components of real GDP. There is a negative relationship between the price level and the total quantity of goods and services required, when all other things are unchanged (open.lib.umn.edu/macroeconomics/chapter/7-1-aggregate-demand).

In our opinion there is no reason for the aggregate AD demand curve to have a negative slope.

In which study, authors has extracted a negative inclination curve with specific country data? There is no Albania.

In our analysis we will look at all three factors that theoretically bring negative slopes. In the end we will conclude that these factors have affected the slope of the demand curve. The dynamics of these factors and the correlation with economic growth indicators show that their effect has been the opposite of the theoretical effect. They have affected the positive slope of the demand curve. With a sloping demand curve, economic and financial analysis can easily be done.

Aggregate Demand should be viewed at two angles;

Firstly, from the point of view of GDP measurement, in this case, GDP is measured through spending, through income and through the product. All three are equal. For this there are no doubt, because it is counted almost anywhere in the world. The Albanian INSTAT applies the same methodology applied by European EUROSTAT.

Concretely in Albania are calculated: = Production method: $GDP = VSHB + TP + TD - SP$, where: GDP = Gross Domestic Product (at market prices), VSHB = Gross Value Added (at basic

prices), TP = Taxes on Products Including Value Added Tax, TD = Customs Fees, SP = Subsidies on Products and Imports).

= With the cost method: $GDP = KF + FBKF + NGJ + (E - I)$, where KF = Final Consumption, FBKF = Gross Fixed Capital Formation, NGJ = State Change, E = Exports, I = Imports.

Second, Aggregate Demand is viewed as a plan, with the look I seek, we seek and we plan. In this concept I want to buy at the lowest prices. In that sense the more the price drops so much the more I buy, or so much more we will buy. This is an infamous mistake. It can exist only in a certain category of people who are in survival conditions, in extreme poverty conditions that are not fed with bread. In any other case it is not applicable. To think today that prices are falling people will eat more, will wear more, is wrong. From the interviews we have made, it has been concluded that revenue growth has not affected the growth of the mass of consumption but the growth of expensive goods purchases.

In Albania, a study was conducted on the demand and supply of diesel, benzene and liquefied gas in 2010. Data on the quantity and the price were received by month. The result was breathtaking. Price increases have been accompanied by increased demand. This study has broken many concepts because the idea prevailed that the demand increases only when the prices fall (Naqellari 2011).

In this study we will not deal with individual demand analysis but with aggregate demand analysis which is determined by other factors.

Below we will analyze the three factors, or three effects that determine its negative slope.

4. Internal Demand and Link to the Deflator Price Level. Real Balance Effects

The effect of real balances or the effect of wealth was studied by many authors. But this effect is known as the effect of Arthur C. Pigou because he analyzes it in more detail and formulates concrete theses.

In this part we will briefly talk about some of his thoughts about this effect without going into details. Pigou started from Keynes' analysis in his work "The General Employment, Interest and Money Theory".

Pigou says a price cut will lead to growth in the economy and economic growth will result in full employment.

He argues that when the wage level decreases this will also affect the reduction in prices.

Reducing prices will result in increased purchasing power of money. Increasing the purchasing power of money will mean that with the same amount of money you buy a bigger amount of goods and services.

The decrease in prices also leads to asset valuations, which are held in cash, such as bank deposits, shares, bonds, treasury bills, etc.

This increase in purchasing power makes people "feel" richer. In fact, the amount of their money to buy does not change but the amount of goods that will be purchased will change. They can buy more units of goods and services. In this way, their real wealth will be increased by price cuts.

Scheme on price reduction and its consequences

$\downarrow W \rightarrow \downarrow P \rightarrow \uparrow C \rightarrow \uparrow AD \rightarrow \uparrow I \rightarrow \uparrow Y \rightarrow Np \downarrow$

Interpretation: Wage reduction brings Price drops, price drops increase Consumption, growth in consumption brings Aggregate Demand growth, Aggregate Demand growth brings Investment growth, investment growth brings Production growth, and Product growth brings reduction unemployment.

The decrease in prices also leads to asset valuations, which are held in cash, such as bank deposits, shares, bonds, treasury bills, etc. This increase in purchasing power makes people "feel" richer. In fact, the amount of their money to buy does not change but the amount of goods that will be purchased will change. They can buy more units of goods and services. In this way, their real wealth will be increased by price cuts. When prices decrease, people are inclined to buy more. Thus the fall in prices would increase the level of consumer spending and lower the level of savings. Growth in consumer spending would increase aggregate demand and aggregate

production. Their growth will lead to full employment.

These are Pigou's arguments for the Effect of Real Balances, and consequently for the slope of the aggregate demand curve. We will not make the analysis of his theory. His theory was analyzed by other authors such as Kalecki, Patinkin, Shapiro, Kurihara and others. We will only present one statement to Kalecki (1944), and we will continue the analysis taking into account the data of the Albanian economy.

Pigou starts from falling prices and not rising prices. The decline in prices is a rare phenomenon in the economy, while growth is a common phenomenon. Today, in every economy, excluding financial crisis cases, we have GDP growth coupled with an increase in aggregate prices. This is expressed in all three ways of measuring GDP. In the analysis we will not deal with assumptions, if it were so, as it were, but we will deal with concrete figures. The figures will show the correlation between the Aggregate Domestic Demand and its component components, nominal GDP, real GDP at the aggregate price level (or deflator price). To makes this analysis we have received data for 17 years from the Albanian economy. We will also use data from 2017 for those indicators that have been calculated.

Table 1: Deflators GDP, real GDP, nominal GDP and Internal Demand

| | Nominal GDP, mld/ALL | Real GDP, mld/All, | Domestic Demand Mld/ALL | Deflator Price, P/D, All |
|------|----------------------|--------------------|-------------------------|--------------------------|
| 2000 | 501,199.00 | 20,352.44 | 623,160 | 24.63 |
| 2001 | 563,449.00 | 22,039.66 | 707,494 | 25.57 |
| 2002 | 610,494.00 | 23,040.26 | 777,924 | 26.50 |
| 2003 | 677,738.00 | 24,314.39 | 862,915 | 27.87 |
| 2004 | 737,656.00 | 25,654.11 | 931,003 | 28.75 |
| 2005 | 804,163.00 | 27,072.78 | 1,012,414 | 29.70 |
| 2006 | 872,735.00 | 28,670.08 | 1,101,571 | 30.44 |
| 2007 | 965,528.00 | 30,384.55 | 1,241,950 | 31.78 |
| 2008 | 1,080,676.00 | 32,663.39 | 1,377,019 | 33.09 |
| 2009 | 1,143,936.00 | 33,757.61 | 1,426,271 | 33.89 |
| 2010 | 1,239,645.00 | 35,010.02 | 1,459,002 | 35.41 |
| 2011 | 1,300,624.00 | 35,902.77 | 1,543,058 | 36.23 |
| 2012 | 1,332,811.00 | 36,412.59 | 1,536,736 | 36.60 |
| 2013 | 1,350,053.00 | 36,776.72 | 1,581,377 | 36.71 |
| 2014 | 1,395,305.00 | 37,427.67 | 1,640,130 | 37.28 |
| 2015 | 1,434,307.00 | 38,258.56 | 1,707,007 | 37.49 |
| 2016 | 1,475,251.00 | 39,540.22 | 1,727,258 | 37.31 |

Source. Bank of Albania, INSTAT and author calculations

Nominal GDP = Gross Domestic Gross Domestic Product, Real GDP = Real Gross Domestic Product, P / D = Deflator Price = Aggregate Price, All = Domestic Coin, Billion, Million, Million, ID = DD = Internal Demand = Domestic Demand,

The table data shows that nominal GDP, real GDP and GDP have increased despite the aggregate price level has increased. This connection contradicts the definition of Pigou and other authors whose slope of this curve sees the negative relation between P/D and AD. Real GDP and P/D are calculated by the authors. Data have been used for their calculation since 1993. From 1993 to 1999, the Central Bank has been calculated and provided in Annual Reports, nominal GDP and real GDP.

In this way, starting from 1993, according to the nominal GDP and real GDP growth, we could determine Deflator Price and Real GDP by 2016. With the above data we can build the aggregate market model. On the Y axis, we set the Deflator Price while on the X axis we put real GDP. The curve that is taken is the aggregate demand curve because it at any given point gives us the nominal GDP ($P / D * GDP_r$). We use this model for the effect of price level impact and real GDP in nominal GDP.

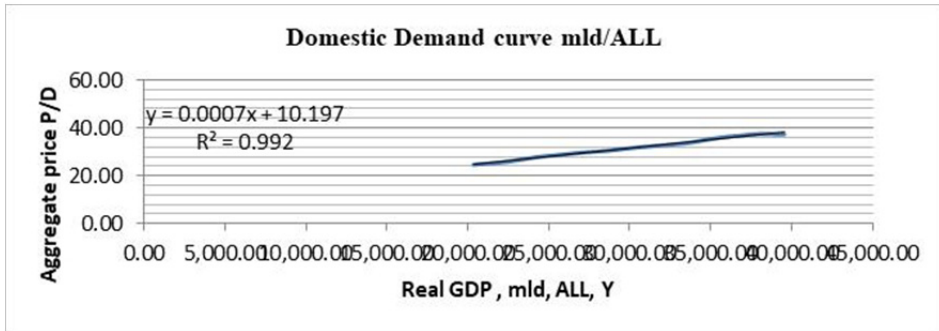


Fig. 3: The nominal GDP curve (Aggregate Demand) generated by the relationship between real GDP and P/D.

Source. Author

This curve was created as a result of listing the Aggregate Price with real GDP for each level. At any point in it we have aggregate costs (AE). It is the first time that such a curve is being built in the Albanian economy. We use this model to determine the price impact and real GDP at nominal GDP.

Below we will set the nominal domestic demand on the X axis and P/D on the Y axis. This macroeconomic model is more widely used than the first, because it includes the effect of monetary policies and the effect of external trade. Placement of nominal GDP on the X axis eliminates a number of defects and includes all economic policies that apply in one country.

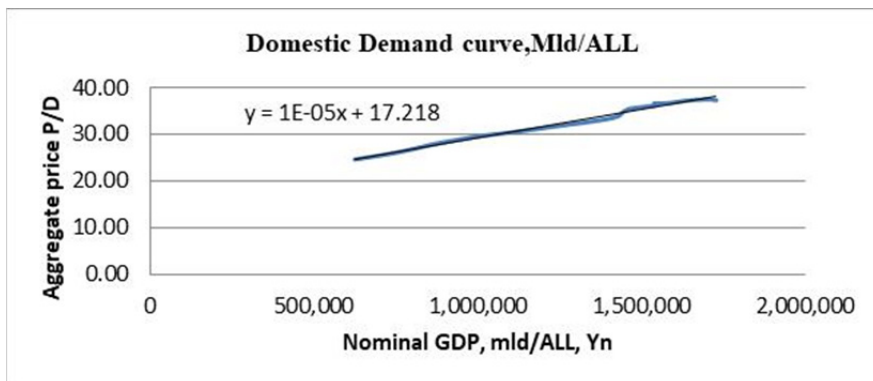


Fig. 4: Link between Nominal Domestic Demand and Deflator Price

Source. Author

The model is similar to the first figure. There is a change in gradient, but including other elements then the error is minimized. Using this model we can build the internal demand curve with its two elements. We did not include the government because there are few elements in it. Consumption and other final products or services are included in C. The figure gives the construction, its structure with the data of a real economy. Here is the volume of consumer spending on the Domestic Demand.

It is seen, the difference between the slope of investment and consumer curves. Changing their slope, comes from the annual change in investment spending, as well as their size that has changed constantly.

Table 2: Structure of Internal Demand (FC+GFCF), mld/All

| | Final People Consumption, mld/All | Final Consumption of Public Administration, mld/All | Individual consumption, mld/All | Consumption Collectiv, mld/All | Consumption of Non-Profit Institutions, mld/All | Final Consumption, mld/All | Gross Fixed Capital Formation, mld/All | Domestic Demand (FC+GFCF), mld/All | Deflator Price, All |
|------|-----------------------------------|---|---------------------------------|--------------------------------|---|----------------------------|--|------------------------------------|---------------------|
| 2000 | 413,162.0 | 48,578.5 | 23,642.3 | 24,936.1 | 1,504.0 | 463,244.4 | 159,915.5 | 623,159.9 | 24.6 |
| 2001 | 438,522.9 | 59,871.8 | 26,905.8 | 32,966.1 | 2,148.0 | 500,542.7 | 206,951.0 | 707,493.7 | 25.6 |
| 2002 | 486,152.1 | 69,200.3 | 28,345.4 | 40,854.9 | 2,454.9 | 557,807.3 | 220,116.8 | 777,924.1 | 26.5 |
| 2003 | 541,625.2 | 75,218.2 | 30,941.4 | 44,276.9 | 2,804.7 | 619,648.1 | 243,266.6 | 862,914.7 | 27.9 |
| 2004 | 566,336.1 | 82,660.8 | 33,818.6 | 48,842.2 | 3,203.6 | 652,200.5 | 278,802.2 | 931,002.6 | 28.8 |
| 2005 | 615,107.6 | 88,709.4 | 37,632.8 | 51,076.6 | 3,659.2 | 707,476.2 | 304,937.4 | 1,012,413.6 | 29.7 |
| 2006 | 673,235.6 | 91,875.3 | 40,565.9 | 51,309.4 | 4,208.1 | 769,319.1 | 332,252.4 | 1,101,571.5 | 30.4 |
| 2007 | 784,866.7 | 101,162.6 | 45,925.3 | 55,237.3 | 4,615.8 | 890,645.1 | 351,304.9 | 1,241,949.9 | 31.8 |
| 2008 | 892,776.2 | 112,162.9 | 52,375.6 | 59,787.3 | 5,197.8 | 1,010,136.9 | 366,881.9 | 1,377,018.8 | 33.1 |
| 2009 | 918,650.9 | 127,084.8 | 60,051.7 | 67,033.1 | 6,366.7 | 1,052,102.4 | 374,169.0 | 1,426,271.4 | 33.9 |
| 2010 | 961,911.8 | 138,311.7 | 66,232.6 | 72,079.0 | 6,366.7 | 1,106,590.2 | 352,412.1 | 1,459,002.3 | 35.4 |
| 2011 | 1,011,825.7 | 142,732.6 | 68,474.7 | 74,257.9 | 6,555.5 | 1,161,113.9 | 381,944.3 | 1,543,058.1 | 36.2 |
| 2012 | 1,032,477.9 | 144,540.9 | 70,532.6 | 74,008.2 | 6,673.3 | 1,183,692.1 | 353,044.0 | 1,536,736.1 | 36.6 |
| 2013 | 1,073,608.6 | 148,850.0 | 74,359.2 | 74,490.8 | 6,830.4 | 1,229,289.0 | 352,087.8 | 1,581,376.8 | 36.7 |
| 2014 | 1,119,647.5 | 159,788.5 | 80,059.6 | 79,728.9 | 7,582.5 | 1,297,285.9 | 342,844.0 | 1,640,129.9 | 37.3 |
| 2015 | 1,146,557.8 | 159,360.6 | 77,021.5 | 82,339.1 | 10,852.8 | 1,316,771.2 | 350,164.4 | 1,666,935.6 | 37.5 |
| 2016 | 1,186,804.6 | 165,938.3 | 77,277.2 | 88,661.1 | 12,526.8 | 1,365,269.7 | 361,988.6 | 1,727,258.3 | 37.3 |

Source. INSTAT (the deflator price is calculated by the author)

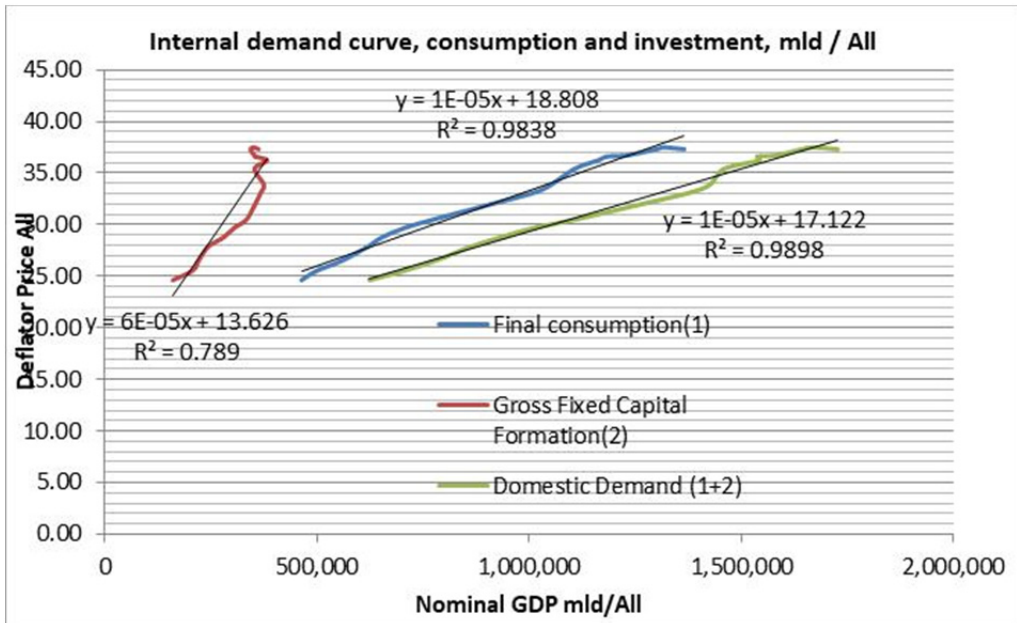


Fig. 5: Internal Demand Curve and its Elements

Source. Author

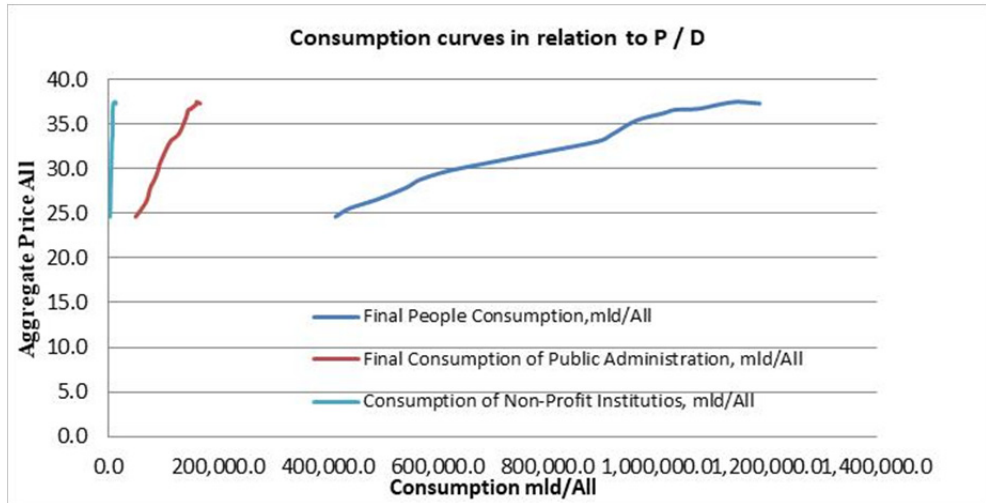


Fig. 6: Link between consumption and P / D
Source. Author

The slope of consumer curves in relation to the aggregate price is positive. This shows that the consumption of population, public administration and non-profit companies has increased, when the price of final goods and services has increased. Only individual consumption in public administration has decreased in the last two years. This decline did not affect the general trend of consumer spending because it is a very small expense.

Table 3: Correlation coefficients between the above indicators.

| | Nominal GDP, mld/All | Real GDP, mld/All | Aggregate price, P/D All |
|----------------------|----------------------|-------------------|--------------------------|
| Nominal GDP, mld/All | 1 | | |
| Real GDP, mld/All | 0.9980 | 1 | |
| Aggregate price, All | 0.9962 | 0.9951 | 1 |

Source. Author

The data shows that the relationship between them is very strong and positive. Ultimately, the first reason for the slope of the aggregate demand curve does not stand. The Aggregate Demand Curve has a positive slope and is directly linked to the Aggregate Price or the Deflator Price.

5. Internal Demand and Link to Interest Rate Level. Interest Rate Effect

The second reason for the negative slope of the aggregate demand curve is the interest rate effect. This reason or effect is addressed in more detail by John Maynard Keynes (Keynes 1997).

What is the argument Keynes uses? Reducing the price level makes individuals more money available. They deposit this money at the bank. Consequently, the deposit interest rate drops. The fall in interest rates on deposits causes the interest rates on loans to fall and their amount to increase. Their growth affects GDP growth. We can concretely present this Scheme:

$$\downarrow P/D \rightarrow \downarrow id \rightarrow \downarrow ik \rightarrow \uparrow I \rightarrow \uparrow GDP \rightarrow \downarrow Np$$

P/D is the aggregate price, id is the deposit interest rate in ALL, ik is the interest rate on loans in ALL,

I is the credit stock in ALL, GDP is Gross Domestic Product in ALL, Np is the unemployment rate, D is the deposit stock in All.

From the scheme we see that the reduction of the aggregate price leads to increasing the amount of money of individuals. Increasing the amount of money leads to deposit growth, deposit growth leads to the decline in its interest rate.

The fall in the deposit interest rate leads to the decline in the loan rate. The decline in the interest rate on loans leads to the growth of their stock. Increasing the investment stock leads to increased Aggregate Demand (AD). AD growth leads to GDP growth which leads to declining unemployment rates. What do the figures of the Albanian economy show?

The data of the Albanian economy does not indicate the above link. The price level has not decreased but has increased. Deposits at ALL are down while loans in ALL have risen. Interest rates on ALL loans and deposits have decreased. Deposit interest rates in ALL have fallen more than lending rates. This has resulted in increased profits of commercial banks.

We can present this link with this scheme:

$\uparrow P/D \rightarrow \downarrow id \rightarrow \downarrow D \rightarrow \downarrow ik \rightarrow \uparrow I \rightarrow \uparrow GDP \rightarrow \downarrow Np$

The Keynesian model does not take into account the impact of Central Bank policies. In the Albanian monetary market, the Central Bank continually intervenes with its crunching and expansionist policies. From 2008 onwards (2008-2017) has applied an expansionist policy, it has lowered the Interest Rate Basis or the REPO Rate (Reimbursement Agreement) from 6.25 to 1.25. In September 2018 it was 1 (one). We conclude that, at the interest rate on deposits and loans in ALL, has affected the decline in the rate of REPO. This by the author is the main reason. The decline in the stock of deposits was accompanied by the growth of the ALL loan stock. In this way, there is no increase in deposits and credit growth, but falling deposits and increasing loans.

The Bank of Albania has lowered the Interest Standards Basis, REPOs for the purpose of achieving its main objective. The Bank of Albania's main objective is "achieving and maintaining the level of prices". Thus, it has lowered the interest rate to increase the amount of money in circulation because the inflation rate for a long period has been below its forecasted rate.

Although there is a large fall in this indicator, the inflation rate has not accompanied the rate of decline of REPO. Outflow of cash outside the bank from falling credit rates is minimal. In this way, we do not see any connections under the Keynes scheme below we have analyzed the correlation of these indicators for the Albanian economy. The fall in deposits and the very small increase in loans are not related to the decline in the price level.

Table 4: The dynamics of deposit, credit, REPO, GDP and unemployment rate dynamics

| | Time deposits, mld /All | Loan, mld /All | Time deposit dynamics % | The dynamics of loans, % | Base Rate of Interest. REPO | Real GDP. % | Unemployment rate, % |
|------|-------------------------|----------------|-------------------------|--------------------------|-----------------------------|-------------|----------------------|
| 2000 | 140,456 | 9,500.00 | 2.8 | -10.4 | 7 | 7.80 | 16.8 |
| 2001 | 162,376 | 12,810.00 | 15.6 | 34.8 | 7 | 7.30 | 16.4 |
| 2002 | 171,986 | 9,221.9 | 5.9 | -28.0 | 8.5 | 4.30 | 15.8 |
| 2003 | 204,783 | 10,700.9 | 19.1 | 16.0 | 6.5 | 5.80 | 15 |
| 2004 | 218,577.00 | 15,694.1 | 6.7 | 46.7 | 5.25 | 5.71 | 14.4 |
| 2005 | 198,467.00 | 33,720.6 | -9.2 | 114.9 | 5 | 5.72 | 14.1 |
| 2006 | 230,234.00 | 59,156.5 | 16.0 | 75.4 | 5.5 | 5.43 | 13.8 |
| 2007 | 256,406.00 | 84,836.4 | 11.4 | 43.4 | 6.25 | 5.90 | 13.5 |
| 2008 | 262,261.00 | 114,051.9 | 2.3 | 34.4 | 6.25 | 7.50 | 12.5 |
| 2009 | 293,675.90 | 140,479.9 | 12.0 | 23.2 | 5.25 | 3.35 | 13.8 |
| 2010 | 329,090.00 | 157,197.30 | 12.1 | 11.9 | 5 | 3.71 | 14.2 |
| 2011 | 370,105.20 | 188,779.10 | 12.5 | 20.1 | 4.75 | 2.55 | 14.3 |
| 2012 | 388,330.50 | 215,122.70 | 4.9 | 14.0 | 4 | 1.40 | 13.9 |
| 2013 | 397,295.60 | 219,933.00 | 2.3 | 2.2 | 3 | 1.00 | 16.1 |
| 2014 | 369,035.00 | 233,443.00 | -7.1 | 6.1 | 2.25 | 1.80 | 16.2 |
| 2015 | 338,847.20 | 240,783.90 | -8.2 | 3.1 | 1.75 | 2.20 | 15.5 |
| 2016 | 301,511.70 | 259,547.60 | -11.0 | 7.8 | 1.25 | 3.40 | 15.6 |
| 2017 | 277,349.90 | 273,261.90 | -8.0 | 5.3 | 1.25 | 3.95 | 14.1 |

Source. Bank of Albania and INSTAT

Time deposits in lek until 2013 have increased, after 2013 have fallen. So there are 4 years since they sit down. In 2017 there were 69.8% of 2013, or in 2013 there were time deposits in Lek 119.8 billion more than in 2017. ALL loans from 2013 to 2017 increased by 124.6% or ALL 53.3 billion. This phenomenon is also seen in the lek currencies and credits curves. Loans have steadily increased, while deposits after 2013 have fallen. In 2017, they were almost equalized.

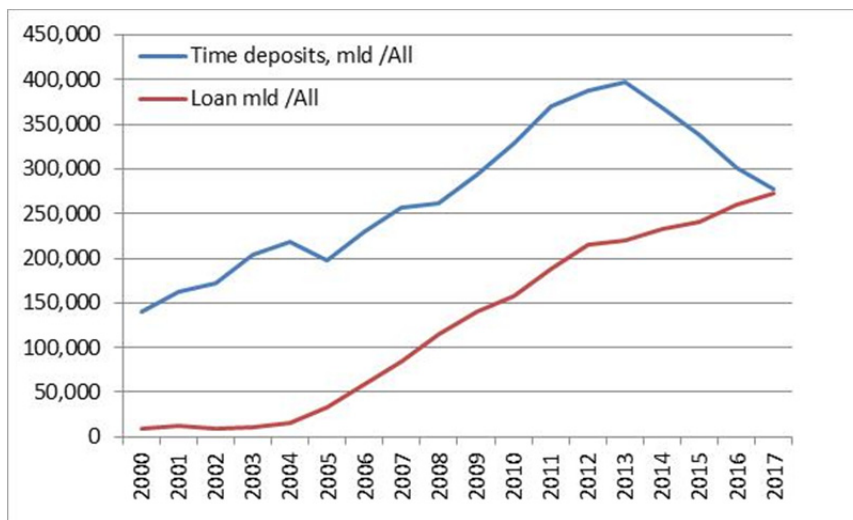


Fig. 7: The dynamics of deposits and loans in absolute terms

Source. Author

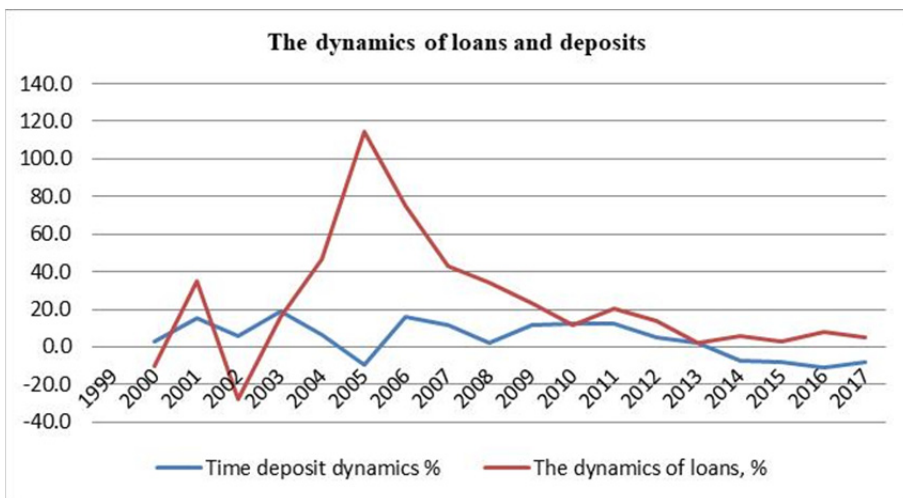


Fig. 8: The dynamics of deposits and loans by percentage

Source. Author

The percentage of deposit and credit dynamics indicators reflects the dynamics of their absolute amount. Deposits from 2013 onwards have negative growth rates, while credits for this period have been downsized and increased by less than 8%.

Table 5: Correlative correlation between deposit, credit, and Unemployment, GDP and REPO indicators

| | Time deposits, mld /All | Loan mld /All | Time deposit dynamics % | The dynamics of loans, % | Base Rate of Interest. REPO | Real GDP. % | Unemployment rate, % |
|-----------------------------|-------------------------|---------------|-------------------------|--------------------------|-----------------------------|-------------|----------------------|
| Time deposits, mld /All | 1 | | | | | | |
| Loan mld /All | 0.856 | 1 | | | | | |
| Time deposit dynamics % | -0.236 | -0.544 | 1 | | | | |
| The dynamics of loans, % | -0.224 | -0.333 | 0.069 | 1 | | | |
| Base Rate of Interest. REPO | -0.684 | -0.891 | 0.687 | 0.108 | 1 | | |
| Real GDP. % | -0.876 | -0.778 | 0.299 | 0.348 | 0.661 | 1 | |
| Unemployment rate, % | -0.146 | -0.043 | -0.185 | -0.498 | -0.059 | -0.115 | 1 |

Source. Author

The correlation between them is expressed in correlation indicators. The relationship that is taken into consideration is the one between Time Deposits and Loans with 0.856, that is, the increase in deposits is accompanied by credit growth. The correlation coefficient between deposit and GDP is high, -0.846, which means that when the output rises, the deposits fall. In fact, this is realistic in the Albanian economy. This connection also creates problems for the Hick-Hansen model in creating IS curves, because the deposit curve is not positively sloping, relative to GDP but it is with a different link (Naqellari, Hebovia, Dumani 2017).

Table 6: Interest rate data on deposits, loans, treasury bills and REPOs. Interest rates are in percentage (There are no data for colored lines)

| | 12m interest rate, deposits in all | 12m interest rate, loans in all | Maturity breakdown of Treasury bill yield, 3 months | Maturity breakdown of Treasury bill yield, 6 months | Maturity breakdown of Treasury bill yield, 12 months | Base Rate of Interest. REPO |
|------|------------------------------------|---------------------------------|---|---|--|-----------------------------|
| 2000 | 7.16 | 23.7 | 8 | 9.8 | 10.5 | 7 |
| 2001 | 7.8 | 11.9 | 8 | 9.8 | 10.5 | 7 |
| 2002 | 9.3 | 16 | 11.21 | 12.02 | 12.62 | 8.5 |
| 2003 | 7.62 | 10.52 | 7.32 | 8.83 | 9.56 | 6.5 |
| 2004 | 5.99 | 13.73 | 6.09 | 7.22 | 8.11 | 5.25 |
| 2005 | 5.57 | 12.16 | 5.42 | 6.91 | 6.91 | 5 |
| 2006 | 5.46 | 11.16 | 6.25 | 7.18 | 7.88 | 5.5 |
| 2007 | 5.67 | 11.73 | 6.32 | 7.41 | 8.26 | 6.25 |
| 2008 | 6.86 | 11.11 | 6.27 | 7.45 | 8.56 | 6.25 |
| 2009 | 6.75 | 12.04 | 6.3 | 7.52 | 9.14 | 5.25 |
| 2010 | 6.07 | 11.52 | 5.29 | 6.41 | 7.09 | 5 |
| 2011 | 5.87 | 11.17 | 5.65 | 6.82 | 6.95 | 4.75 |
| 2012 | 5.38 | 10.28 | 5.03 | 5.65 | 6.37 | 4 |
| 2013 | 4.17 | 9.52 | 3.4 | 3.54 | 3.66 | 3 |
| 2014 | 1.92 | 7.66 | 3.15 | 3.16 | 3.33 | 2.25 |
| 2015 | 1.35 | 7.77 | 0 | 2.46 | 2.4 | 1.75 |
| 2016 | 0.8 | 5.89 | 0 | 2 | 2.92 | 1.25 |
| 2017 | 0.75 | 5.98 | 0 | 2.04 | 2.63 | 1.25 |

Source. Bank of Albania

Deposit interest rates dropped drastically from 6.86% in 2008 to 0.75% in 2017. From 4.17% in 2013 to 0.75% in 2017.

The deposit interest rate has declined; this has led to a decrease in their stock. GDP growth has not been accompanied by an increase in deposits. Deposits, in absolute terms, have decreased.

The interest rate on loans in 2018 was 11.11%, in 2017 it decreased to 5.98%. From 9.52% in

2013 to 5.98 in 2017. The difference between interest rates on deposits and interest rates on loans in 2013 was 5.35%, in 2017 it was 5.23%. This difference is almost equal. This phenomenon is also shown in the picture, starting in 2008 and following. This difference shows that commercial banks stabilize their profits, despite lowering the rate of REPOs.

Commercial banks have lowered the deposit rate by about 10 times, while loan rates have decreased by about 5.4 times. This difference is explained by several reasons. The main reason is that All is not only used for loans, but is also used for the purchase of government debt instruments, Treasury Bills and Bonds.

The data show that there is no strong link between lowering the credit rate and raising its stock. The absolute increase is 12.4% (2013-2017), while the interest rate cut is almost 60%.

The link between the REPO Rate and other interest rates is given by the following chart.

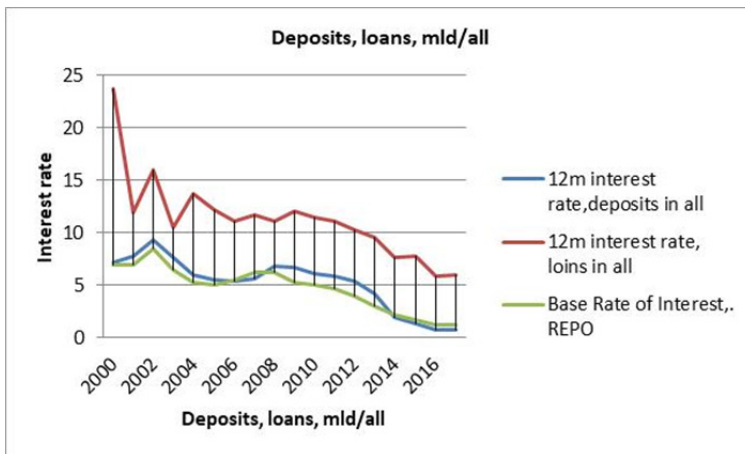


Fig. 9: The dynamics between the interest rates and the rate of the REPO
Source. Author

The 12-month deposit and loan interest rate has declined. They are related to lowering the REPO rate. Deposits have stronger bonds than loans.

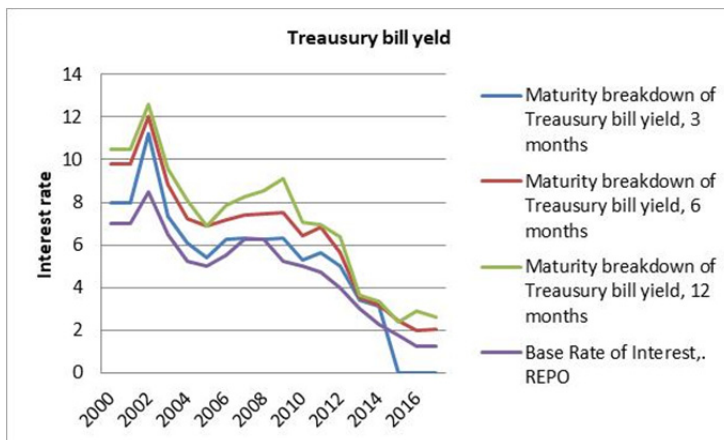


Fig. 10: Bond Rate Dynamics and REPO
Source. Author

The table and figure data show that; Treasury bill rates, 3 months, 6 months and 12 months, have come down. This is related to lowering the rate of Repos. This decline is positively correlated with the GDP growth rate. The connection is not strong, it's only 0.6614.

Table. 7: The correlation coefficients between interest rates, REPO and real GDP

| | 12m interest rate, deposits in all | 12m interest rate, loans in all | Maturity breakdown of Treasury bill yield, 3 months | Maturity breakdown of Treasury bill yield, 6 months | Maturity breakdown of Treasury bill yield, 12 months | Base Rate of Interest, REPO | Real GDP, % |
|--|------------------------------------|---------------------------------|---|---|--|-----------------------------|-------------|
| 12m interest rate, deposits in all | 1 | | | | | | |
| 12m interest rate, loans in all | 0.7126 | 1 | | | | | |
| Maturity breakdown of Treasury bill yield, 3 months | 0.9678 | 0.7474 | 1 | | | | |
| Maturity breakdown of Treasury bill yield, 6 months | 0.9627 | 0.7753 | 0.9769 | 1 | | | |
| Maturity breakdown of Treasury bill yield, 12 months | 0.9589 | 0.7586 | 0.9657 | 0.9912 | 1 | | |
| Base Rate of Interest, REPO | 0.9665 | 0.7551 | 0.9737 | 0.9867 | 0.9805 | 1 | |
| Real GDP, % | 0.5283 | 0.5544 | 0.5251 | 0.6308 | 0.6493 | 0.6614 | 1 |

Source. Author

From the table data we conclude:

- The relationship between real GDP and interest rates is positive and not strong. This means that when interest rates rise, economy grows.
- REPOs are weakly linked to the interest rate on loans.
- REPO are strongly linked to the deposit interest rate.
- REPO are strongly linked to the Treasury Bond interest rate.
- The link between the Treasury Bond rates is strong.
- The link between interest rates on loans and other rates is not strong.
- The link to GDP is weak, almost negligible.

From the data analysis of the Albanian economy we can conclude that: The interest rate effect did not affect the negative slope of the aggregate demand curve. It has influenced its positive slope. Trade Bank Policies have been influenced by Central Bank policies.

The Central Bank with its tightening policies has aimed at keeping the inflation rate at 3% target. To achieve this goal, it has consistently reduced the rate of REPOs. Despite the large fall in the REPO rate from 8.5% in 2002 to 6.25% in 2008 to 1% in 2018, the amount of investment has increased symbolically.

In recent years, loans to the economy have remained almost unchanged, while credit to households has increased.

6. Internal Demand and External Trade Relations, the External Trade Effect

The third reason explaining the negative slope of the aggregate demand curve is the effect of external trade. This effect is dealt with in more detail by two economists, Mundell-Fleming. Mundell-Fleming has dealt with this issue in more detail and has linked it to IS-LM curves.

= Reduced prices will make the goods more enjoyable. This way their exports will increase. Import will decrease because the depreciation of the domestic currency from falling prices will make foreign goods more expensive. Increasing exports and lowering imports will cut net exports. This will have a positive impact on aggregate demand growth, resulting in GDP growth.

The above we construct this scheme:

↓ P → ↑ Exp and ↓ Imp → ↑ EX, Net exports → ↑ AD → ↑ GDP, Production

= Reduced price level, resulting in lower interest rates. According to theory, when the overall level of prices decreases, the interest rate tends to decrease. Reducing the interest rate leads to financial instruments having a lower price. Thus, foreign assets become more enjoyable. Individuals

no longer buy Treasury Bills of Albania but seek to buy Treasury Bills to other countries. This is why they are addressing the currency market. The increase in demand for foreign currency also increases its exchange rate, ie the euro and the dollar, while depreciating the domestic currency.

The increase in the national currency exchange rate, relative to the euro (All estimate), reduces aggregate demand ($\rightarrow \downarrow AD$) because exports decrease ($\rightarrow \downarrow Ex$) and imports increase ($\rightarrow \uparrow Im$).

The links outlined above do not stand for the Albanian economy.

For this reason, the external trade effect theory, in the negative slope of the aggregate demand curve, does not stand for the Albanian economy.

- Real GDP growth has increased with the growth of imports and trade deficit.
- GDP real has risen while the euro has depreciated (2013-2017)
- Show coverage of imports from exports has decreased from 50.5 to 21.5 (2013-2017)
- Real GDP growth, nominal GDP, GDP deflator, CPI, falling interest rates on loans and deposits, and REPOs have resulted in depreciation of the euro and local currency appreciation ALL.
- Increased import, export and trade deficit

The above trends for the Albanian economy are tested with the dynamics and links of the above mentioned macroeconomic indicators.

Table 8. The Dynamics of Some Foreign Trade Indicators

| | Real GDP, % | Nominal GDP, % | All /Euro average of period | All /Euro end of period | All /Dollar Average of period | Coverage rate EX/IM, % |
|------|-------------|----------------|-----------------------------|-------------------------|-------------------------------|------------------------|
| 2000 | 7.80 | 10.90 | 132.58 | 132.57 | 143.71 | 23.6 |
| 2001 | 7.30 | 10.75 | 128.47 | 120.73 | 143.48 | 22.9 |
| 2002 | 4.30 | 6.96 | 132.36 | 140.18 | 140.15 | 22.2 |
| 2003 | 5.80 | 10.39 | 137.51 | 134.32 | 121.86 | 25.1 |
| 2004 | 5.70 | 7.95 | 127.67 | 126.35 | 102.78 | 27.6 |
| 2005 | 5.70 | 9.26 | 124.19 | 122.58 | 99.87 | 26.4 |
| 2006 | 5.40 | 9.45 | 123.08 | 123.85 | 98.10 | 27.2 |
| 2007 | 5.90 | 9.17 | 123.62 | 121.78 | 90.43 | 27.2 |
| 2008 | 7.50 | 9.52 | 122.80 | 123.80 | 83.89 | 27.4 |
| 2009 | 3.35 | 9.69 | 132.06 | 137.96 | 94.98 | 24.6 |
| 2010 | 3.71 | 3.61 | 137.79 | 138.77 | 103.94 | 36.0 |
| 2011 | 2.55 | 7.95 | 140.33 | 138.93 | 100.90 | 38.5 |
| 2012 | 1.40 | 0.98 | 139.04 | 139.59 | 108.18 | 43.3 |
| 2013 | 1.00 | 1.30 | 140.26 | 140.20 | 105.67 | 50.5 |
| 2014 | 1.80 | 3.35 | 139.97 | 140.14 | 105.48 | 30.2 |
| 2015 | 2.20 | 2.33 | 139.74 | 137.28 | 125.96 | 25.1 |
| 2016 | 3.40 | 4.06 | 137.36 | 135.23 | 124.14 | 21.5 |
| 2017 | 3.95 | x | 134.2 | 132.95 | 119.1 | 22 |

Source. Bank of Albania and INSTAT(the nominal GDP is calculated by the author)

The data show that, in relation to the euro, until 2011 the local currency ALL was depreciated. From 2013 until 2017 the euro has been depreciated and the domestic currency has been appreciated. This trend is for the average course and the course at the end of the year.

Even the exchange rate of the dollar has changed. Until 2008, the dollar was depreciated, and after 2008 its valuation has begun. Significance for the Albanian economy has the euro rate, because the major part of the loans and deposits are in euro. Deposits and loans in foreign currency are almost 50/50. Credit by 2015 has been more in euros than in ALL (Lek).

Euro also for 2018 continued to depreciate. In July, the average annual rate was 125.86 All / 1 Euro. Export-Import ratio in percent has decreased. This means that despite the increase in the level of exports, it continues to decline in imports. This phenomenon has a negative impact on the Commerce Balance, which has been getting worse.

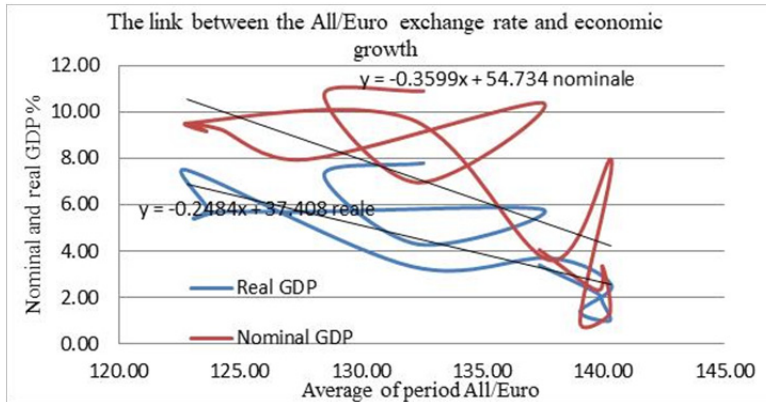


Fig. 11: The link between economic growth and the ALL / Euro exchange rate
Source. Author

= The relation between real GDP and the ALL / Euro exchange rate show that when ALL is estimated the economic growth rate decreases. Thus, foreign trade does not affect the negative slope of the demand curve. It has positive links. Local currency rating has brought about economic growth and not a fall in the economy. This conclusion is contrary to the theoretical conclusion that: the depreciation of the domestic currency leads to economic growth. For the year 2013-2017 the link between the All / Euro exchange rate and real GDP growth is reflected in the following figure:

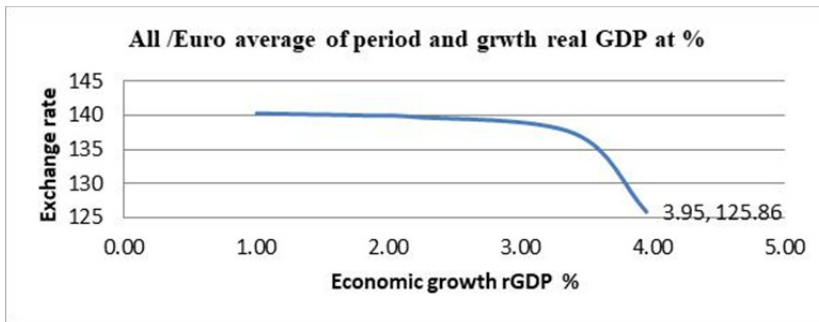


Fig. 12: The link between the All / Euro exchange rate and real GDP growth for the years 2013-2017.

Source. Author

Data and figures show that, starting from 2013 and onwards, the link between real GDP growth and euro depreciation is greater.

= The exchange rate of the dollar did not adversely affect economic growth.

This has no impact on the economy, because the dollar occupies a small symbolic weight in monetary circulation.

= The depreciation of the euro and the appreciation of ALL has led to the increase in Imports. Imports have risen faster than exports. This phenomenon had to be accompanied by the reduction of real GDP. In fact, the opposite happened, imports increased, exports increased, Trade deficit increased and real GDP increased.

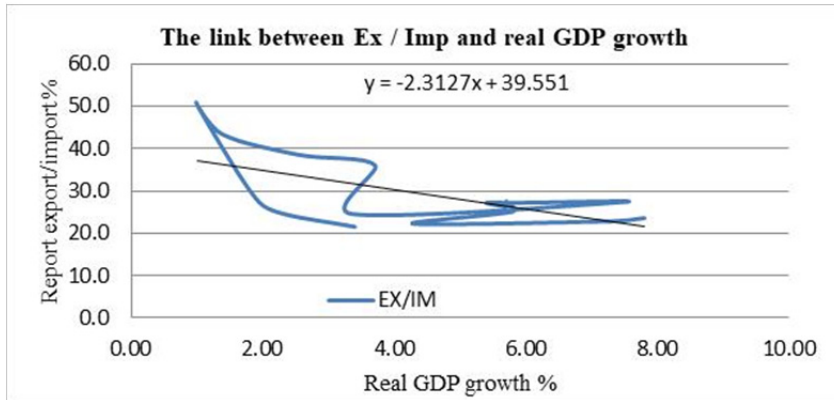


Fig. 13: The relationship between Ex / Imp and real economic growth
Source. Author

The data and the relevant curve show that the decline in the Export-Import ratio has affected the growth of the economy. The opposite had to happen, because Trade Deficit has grown. The correlation between external trade indicators and GDP is presented through correlation indicators.

Table 9: Link between external trade indicators and economic growth

| | Real GDP, % | Nominal GDP, % | All /Euro average of period | All /Euro end of period | All /Dollar Average of period | Coverage rate EX/IM, % | Trade Deficit |
|-------------------------------|-------------|----------------|-----------------------------|-------------------------|-------------------------------|------------------------|---------------|
| Real GDP, % | 1 | | | | | | |
| Nominal GDP, % | 0.854 | 1 | | | | | |
| All /Euro average of period | -0.761 | -0.688 | 1 | | | | |
| All /Euro end of period | -0.786 | -0.657 | 0.891 | 1 | | | |
| All /Dollar Average of period | 0.155 | 0.037 | 0.293 | 0.179 | 1 | | |
| Coverage rate EX/IM, % | -0.626 | -0.610 | 0.461 | 0.424 | -0.363 | 1 | |
| Trade Deficit | -0.127 | -0.245 | 0.528 | 0.389 | 0.901 | 0.078 | 1 |

Source. Author

Table 4 shows the strength of the link between external trade indicators and economic growth. Interesting is the relationship between real and nominal GDP with exchange rates, Ex/Imp and Trade Deficit. The bond between real GDP at the exchange rate of the euro was -0.761 and -0.786. This shows that the link is opposite but not strong. That is, the lek appreciation has positively impacted on the growth of the economy. This makes nonsense because the opposite had to happen. The depreciation of the lek should lead to the growth of the economy through the growth of higher exports than imports.

Table 10: Relationship between the Export-Import, and Growth ratio.

| | Exports, mil/ALL | Imports, mil/ ALL | Trade Deficit, mil/ALL | Nominal GDP, mil/All | Nominal GDP, % | Real GDP, % |
|------|------------------|-------------------|------------------------|----------------------|----------------|-------------|
| 2000 | 36,728.01 | -155,674.09 | -118,946.08 | 480,581.0 | 10.90 | 7.80 |
| 2001 | 43,718.38 | -191,304.84 | -147,586.46 | 532,977.0 | 10.75 | 7.30 |
| 2002 | 46,115.76 | -207,348.19 | -161,232.43 | 590,282.0 | 6.96 | 4.30 |
| 2003 | 54,301.36 | -216,130.15 | -161,828.78 | 631,338.0 | 10.39 | 5.80 |
| 2004 | 61,995.31 | -224,993.76 | -162,998.45 | 696,950.0 | 7.95 | 5.70 |
| 2005 | 65,842.72 | -249,233.42 | -183,390.70 | 752,368.0 | 9.26 | 5.70 |

| | Exports, mil/ALL | Imports, mil/ ALL | Trade Deficit, mil/ALL | Nominal GDP, mil/All | Nominal GDP, % | Real GDP, % |
|------|------------------|-------------------|------------------------|----------------------|----------------|-------------|
| 2006 | 77,621.45 | -285,062.06 | -207,440.61 | 822,035.0 | 9.45 | 5.40 |
| 2007 | 97,206.03 | -357,324.56 | -260,118.53 | 899,700.00 | 9.17 | 5.90 |
| 2008 | 112,671.70 | -411,254.77 | -298,583.07 | 982,200.00 | 9.52 | 7.50 |
| 2009 | 99,137.44 | -403,364.06 | -304,226.62 | 1,075,718.00 | 9.69 | 3.35 |
| 2010 | 161,420.99 | -448,396.22 | -286,975.23 | 1,180,000.00 | 3.61 | 3.71 |
| 2011 | 197,233.82 | -511,797.54 | -314,563.73 | 1,222,631.00 | 7.95 | 2.55 |
| 2012 | 212,119.42 | -490,088.19 | -277,968.77 | 1,319,836.00 | 0.98 | 1.40 |
| 2013 | 246,324.61 | -487,529.73 | -241,205.12 | 1,332,747.00 | 1.30 | 1.00 |
| 2014 | 129,360.27 | -440,597.57 | -311,237.29 | 1,350,053.00 | 3.35 | 1.80 |
| 2015 | 107,753.51 | -429,015.77 | -321,262.26 | 1,395,305.00 | 2.33 | 2.20 |
| 2016 | 98,033.83 | -455,554.44 | -357,520.61 | 1,427,799.00 | 4.06 | 3.40 |

Source. Bank of Albania and INSTAT

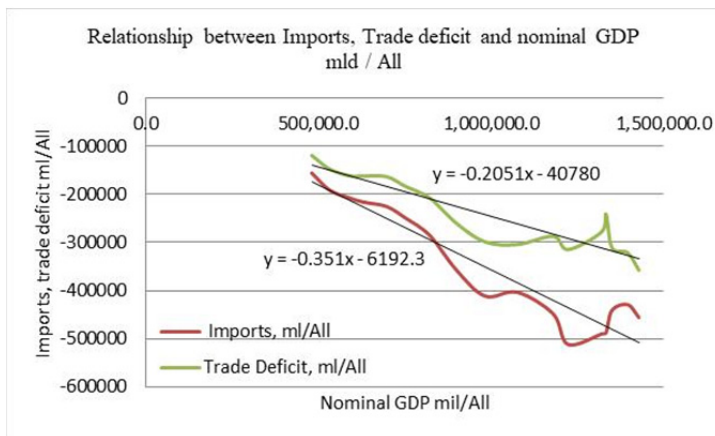


Fig. 14: Relationship between Nominal GDP with Trade Imports and Deficits
Source. Author

Figure shows that; the relationship between imports, trade deficit and nominal GDP is positive. This will mean that the more imports and the trade deficit grow, the more the Albanian economy grows.

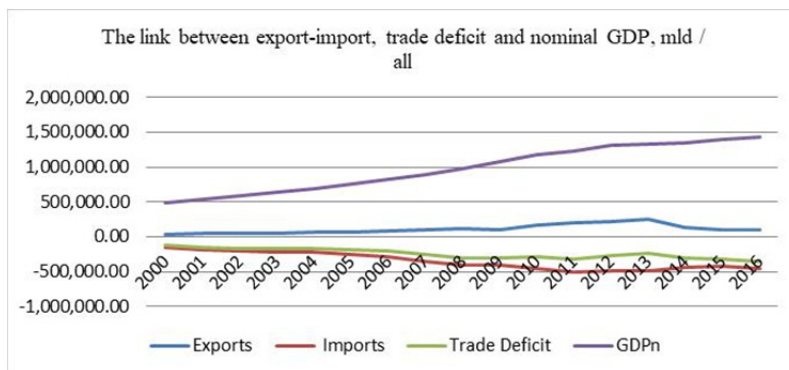


Fig. 15: Dynamics of Exports, Imports, B.Talkar and nominal GDP in mld / ALL
Source. Author

The chart shows the dynamics of external trade indicators. By 2013, they have been increasing, while in subsequent years they have fallen. Real GDP has been increasing, in recent years at faster rates. The conclusion of the analysis of the effect of foreign trade is: The gap between Imports, Trade deficit and nominal GDP is positive. Their growth has led to the growth of the Albanian economy. This indicator also speaks of the positive slope of the domestic demand curve.

Above, we have analyzed three factors, or three effects, that determine the negative slope of the aggregate demand curve. From the analysis results that: the three effects or three factors have affected the positive slope of the curve.

Real Balance Effects, Interest Rate Effect, and Foreign Trade Effect show that the Domestic Demand Curve is positively sloping.

The real model, with concrete data, for 17 years, of the Albanian economy shows that it is not like the Keynesian theoretical model. The Domestic Demand Curve is positively sloping. It has a sloping Aggregate Supply, regardless of the degree of elasticity.

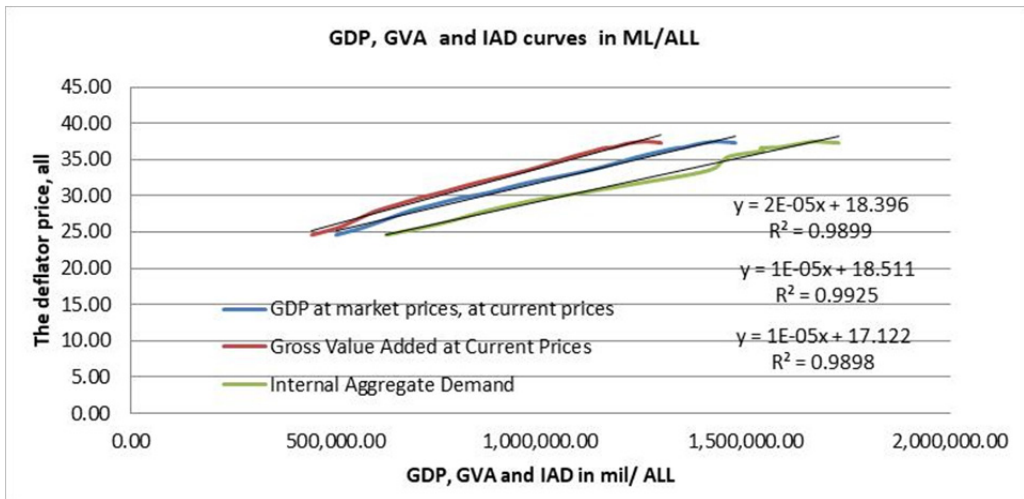


Fig.16: Domestic Demand Curves, Nominal GDP and Gross Value Added, in Million ALL
Source: Author

Theoretically, we can build a new Model of Aggregate Market. This model can be used as a general model in aggregate market analysis. Here, as the equilibrium curve, GDP is not set. This is handed to the model makers and performers.

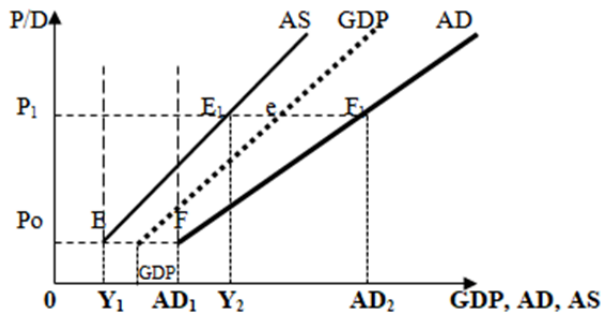


Fig. 17: New Model of Aggregate Market

In the model there is no cut point between the Aggregate Demand Curve and the Aggregate Supply Curve. They stand facing each other, with the same price level. Despite having no cutting points, they show an equilibrium situation. The price is never fixed; it is always changing, generally growing. This change is a consequence of the constant change of demand and supply. All factors act simultaneously by creating an unstable equilibrium.

For this reason they have no cutting moment. Cutting them can happen in a particular case. From this model can be created all the effects of the increase or decrease of Aggregate Demand and Aggregate Supply.

7. Conclusions and Recommendations

In the Albanian economy, no analysis has been made, through the use of the theoretical model of the aggregate market. Macroeconomic indicators are analyzed as; Nominal GDP, real GDP growth rate, inflation and unemployment. The aggregate market model has not served any concrete analysis for the study of economic phenomena. The authors in this material constructed the Internal Demand Curve, Real and Nominal GDP, the gross investment curve, total Consumption curve and realized the links between them and the respective positions.

The conclusion is that the authors determined the aggregate demand curve with positive and non-negative slope. Only by taking the curve in such a position can economic analyzes be made. It is not a requirement that the Aggregate Demand and Aggregate Bid Curve be crossed, and from the crossroads create an equilibrium point. This equilibrium is called the general equilibrium of the economy, or macroeconomic equilibrium.

AD-AS curves stand facing each other and all other phenomena are created through price action.

The built curve will serve interagency scholars, government officials, bankers, and other researchers to truly see the situation of the Albanian economy through real market models. The Keynesian theoretical models, studied in macroeconomics, have run out of time. They cannot be applied in practice. Models are created to serve the economy rather than just the lessons of the history of the economy.

We recommend to the Government, the Central Bank, in their analysis to apply the Model presented by us because it is not merely a theoretical model. It is a model that is based on the figures of the Albanian real economy.

Through this model, it is concluded whether there is economic growth or no economic growth in Albania, is there a rise in the unemployment rate. What are the factors that have affected the growth of the economy and how much. How much has the CPI level and the level of real GDP growth affected. In other words, this is a model for action.

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