

## Migrants' remittances and their impact on some macroeconomic variables in Algeria: An analytical study for a period between (2000-2020).

التحويلات المالية للمهاجرين وأثرها على بعض متغيرات الاقتصاد الكلي في الجزائر:

دراسة تحليلية للفترة بين (2000-2020)

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### Abstract:

The importance of this topic lies in analyzing the impact of migrant variables by presenting the basic concepts of immigrants' financial transfer, as well as its types and determinants, and finally its relationship to some macroeconomic variables. Highlighting the importance of remittances from immigrants in reducing the unemployment rate, as well as raising the rate of economic growth and the balance of the balance of payments in Algeria. The descriptive approach was chosen in an analytical study for the period between the year 2000 to 2020. The results concluded that there is a positive relationship for both the balance of payments and the GDP, inversely to both unemployment, inflation and the real exchange rate. The results also showed that the Corona crisis had the effect of paralyzing the global economy, which would affect these variables away from the remittances of immigrants.

**Keywords:** migrant remittances, balance of payments, inflation, unemployment, GDP, Algeria.

**JEL Classification Codes:** F22-F24-E31-P44-H70

### ملخص:

تكمن أهمية هذا الموضوع في تحليل اثر التحويلات المالية للمهاجرين على بعض متغيرات الاقتصاد الكلي من خلال تقديم المفاهيم الأساسية للتحويلات المالية للمهاجرين وكذا أنواعها ومحدداتها وأخيرا علاقتها ببعض متغيرات الاقتصاد الكلي. مبرزا الأهمية التي تلعبها التحويلات المالية للمهاجرين في التخفيض من معدل البطالة وكذا الرفع من معدل النمو الاقتصادي و توازن ميزان المدفوعات في الجزائر وقد تم اختيار المنهج الوصفي في دراسة تحليلية للفترة بين سنة 2000 الى 2020، وخلصت النتائج إلى وجود علاقة طردية لكل من ميزان المدفوعات و كذا الناتج المحلي الإجمالي عكسيا لكل من البطالة والتضخم وسعر الصرف الحقيقي كما اظهرت النتائج إلى ان أزمة كورونا كان لها الأثر في شل الاقتصاد العالمي الذي من شأنه التأثير على هاته المتغيرات بعيدا عن التحويلات المالية للمهاجرين .

**الكلمات المفتاحية:** تحويلات المهاجرين، ميزان المدفوعات، التضخم، البطالة، الناتج المحلي الإجمالي، الجزائر.

**تصنيفات JEL :** F22,F24,E31,P44, H70

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## **I. INTRODUCTION :**

After the two last decades and having no debts ,Algerian authorities adopted some effective economic policies which were supposed to preach the wheels of economic .The financial crisis of 2008 leads to the fall oil prices (the principle source of economic revenues) make a great obstacle till the beginning of 2014 .In order to look for substitutional source revenues and having a better life for human kind .Authorities should reform the social remittances system and release the income capitals represented in the Algerian migrants 'remittances which were a great part in the national economy.In 2016 , migrants 'remittances play a vital role concerning the national income money after oil 's incomes .

By this study and research we will analyse the impact of migrants financial remittances on macroeconomic variables between 2000 /2020 . So , how far do Algerian migrants financial remittances influence some macroeconomic variables ?

### **Hypothesises to study :**

**1 /** The impact of migrants remittances on economic development, balance of payments and GDP .

**2 /** Migrants remittances has an inverse relationship between: inflation, unemployment and the real exchange price.

### **The objectives of the study :**

Studies 'objectives deal with the great influence of migrants remittances towards some economic changes (inflation, unemployment statistics , GDP , economic development and balance of payments ) between the period 2000 /2020 .

### **The method of the study :**

I have based on the method characteristic analysis to show how much migrants remittances influence the global economic variables between the period 2000 /2020 .

### **Previous studies :**

**1 / Osman Tuncay Ayday (2005)** under the title **Determinants of Workers' Remittances : The Case of Turkey.**

The above study targeted to analyses the global economic determinants of migrants 'remittances to Turkey with the use of two different samples between the period 1964 /2001 .As a result , migrants remittances has a relationship between both economic and political threat in the country .

**2 / (Ibrahim & de Rezende Rocha, 1992)** . under the title **Determinants of Expatriate Workers' Remittances in North Africa and Europe**

This study targeted to evaluate or assume the monetary migrants remittances determinants in sush receptive countries like Algerie ,Morrocow ,Portugal ,Tunisia , Turkey ,Yougslavia between the period 1977 / 1989 .The latest study used a data background related with migrant workers 'remittances , migrants 'remittances level in receptive countries , migrant workers 's number , inflation 's volume in native countries ,exchange premium price .

Concerning the estimation method ,the latest study based on a group of samples using the square 's method (OLS) which led to the following : remittances are influenced positively with the migrants revenues 'level and are impacted negatively with the exchange premium price and inflation volume in native country .

**3/ (M.I.T.El-Sakka & Robert, 1999) under the title The Macroeconomic Determinants of Emigrant Remittances.**

The latest tried to measure the impact of economic variables on migrants remittances in Egypt during the period 1967 /1991 .This study based on a special yearly background for Egyptian migrants revenues outside ,exchange premium price , inflation 's volume ,the difference between benefits 'averages ( between receptive and sender countries )

Its results have shown that migrants remittances have an inversly impact with parallel exchange price ,that is to say :when the exchange price arises in parallel market ,the remittances will decline through official channels .Forethmore , remittances are influenced within the difference in benefits 'percentage .By the end , inflation in native countries influences positively on remittances' amount .

**4/ (Shubhasish, Md. Alauddin , & Dr. Md., 2007)Determinants of Workers' Remittances in Bangladesh: An Empirical Study.**

This study targeted to test the global economic determinants concerning the influx of migrants 'remittances towards Bingledech ,focusing on 10 most receptive countries that attract the migrants of the latest country .They used background samples of PANEL estimation during the period\_(1993 / 2005 ) .

As a result , there is a direct relationship between the influx migrants remittances and the difference between local income in Bingledech and foreign one , researchers called it investment .Also there is an inversly relationship between the influx of migrants remittances and the differences in inflation 's level (internal /external ).They stated that inflation in native countries has a negative impact on migrants 'remittances because of the fall off local money .

**The first demand , theory :**

**1/ The definition of monetary migrants 'remittances :** according to the international organization of migration ;it is the monetary remittances sent by the migrant to his native country .ie the monetary influx related to migration ,and most of these remittances are monetary sent by a migrant worker to relatives in his native or birth country , and may be these remittances could be monetary investments or donations from a migrant to his native birth country ( **Melhawi ,2010,p401** ) .

Others define monetary migrants remittances as the reserves ( monetary or concrete) that the migrant worker sent from non native country to their native birth country .These reserves are sent as a local money of receptive country or as a foreign one ,through legal and illegal channels of transfer .

According to the balance of payments ( 5th edition of FMI ) ,the monetary migrants 'remittances are remittances contain goods and money capital from worker or migrant who lives ouside his birth country for more than one year to his relatives in native birth country ( **M'Hamed Nawal , 2017,p 269**)

FMI defines monetary migrants 'remittances as follow : transfer or transition of money capitals or goods to native country by migrant or worker who lives outside his native country

for more than one year ( **Nour, 2015 ,P 109** ) .However , FMI states 03 principle articles to record remittances :

**- Article one :**

His account ( migrant ) in the balance of payments agreed by FMI is 2310 that have foreign migrants' compensations .The latest is all what the worker earn during one year or more outside ,including his payments ,social servises and assurances .

**- Article two :**

Account n° :2391 considers outside workers 'remittances are kinds of foreign influxes ,related to resident workers outside for more than one year and contain all monetary capitals or goods sent by their own account to their native country .

**- Article three :**

Account n° :2431 migrants remittances represent the net of actual remittances that the migrant do when quitting his native birth country and returning to it for more than one year .we can define the concept **Workers remittances** as the part non spent and transfered towards the native country .

Moreover , we can define **Workers remittances** ; all monetary operations done by the migrant during his residence by transferring his money or part of them towards his native country .these operations involve also goods and other capitals.

## **2 / The different types of migrants 'remittances ; (Hicham ,2017,p115)**

we can classify monatery migrants 'remittances according to threir nature as follow :

**a /** according to their type or kind (**Soudani ,2010, p 85** ) and consists of;

- Liquid monetary remittances ;are money sent by the migrant .
- Concrete remittances ; are goods sent by the migrant to his native country .
- knowledge remittances ;are the influxes of all kind of sciences / competences and experiences acquired by the migrant in the receptive country ,sent to native country .

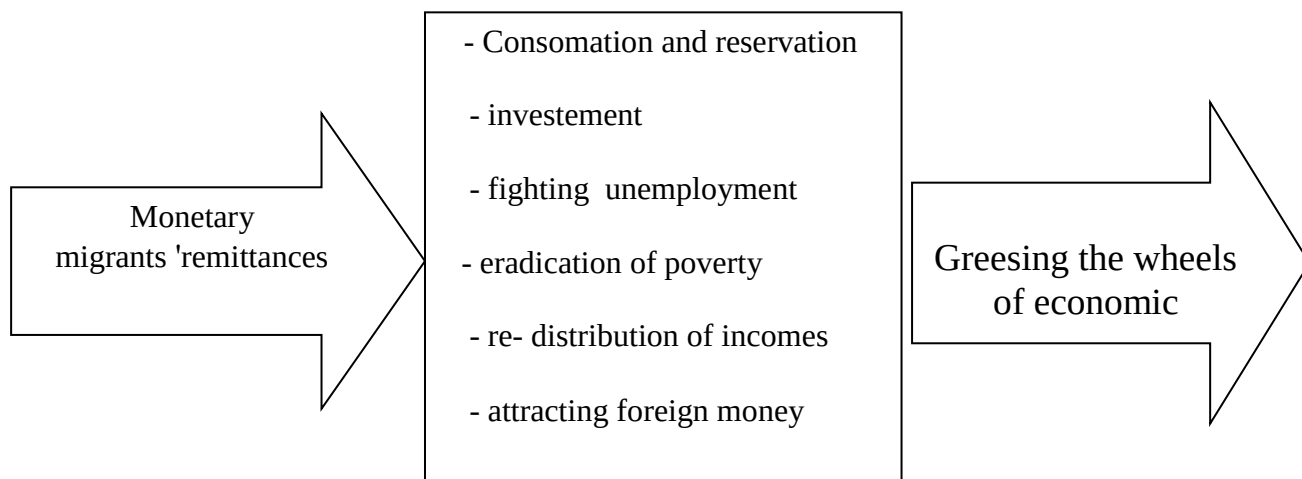
**b /** according to transmission channels ; transmission channel is the path or the track that remittances go through ,towards native country and consist of ;

- Official remittances ;are remittances go through official channels with the help of special monetary institutions such as banks ,post offices and international monetary transfer institutions using tools like ;postal receipts ,account remittances ,automatic exchange services .The influxes concerning the later types of remittances must be recorded in the balance of payments of the receptive country(**Hicham, 2017,p116**) .

-Non Official remittances : are remittances go through parallel channels with non official institutions .This kind of money transmission is difficult to follow ,because it is not recorded in the balance of payments . Non Official remittances contain plenty of moneraty operations such as cash remittances from the migrant to his relatives in native country face to face during the holiday or within a middleman ,also like monetary compensations ie ;the migrant buys goods or pays bills to another person and the later send money to the migrant account or the family 's account in migrant native country(**Hicham, 2019,p 120**).

### **3/ The importance of migrants 'remittances and its use :**

Targeted studies have shown the economic effects of remittances on receptive countries ,we can state some .First ,these remittances reduce somehow poverty in such countries .Second , they improve quality of health and education 'levels .Third ,they improve the global economic circumstances ( reservations and consomations 'levels ).Finally , they improve the benefit 's price ( **M'hammad ,Naoual, 2017** )



### **4 / The global determinants of monetary migrants 'remittances :**

Through our previous and several studies we can state 03 elements :

- a- Migrants ' volume and number .
- b- The economic movements or acts of the native country .
- c- Institutional variables of the native country .

**a - Migrants ' volume :** according to the global economic ,most migrants characteristics are in the study of their volume and number and sometimes we state also their competencies .These factors have a great impact on remittances .The greatest remittances 'volume is due to the large number of migrants , and this hypothesis was proved by a lot of studies .These studies tried to find the determinants of monetary migrants 'remittances and their taxes .In addition ,to know also the remittances ' volume passing through non official channels for 100 countries .

The results of this study have shown that the volume of remittances passing through non official channels are about **35 % to 75 %** from the global remittances ,economists assure that this percentage is due to the high taxes .As a remarkable conclusion ,the migrant 'volume has a great relationship with monetary remittances ' volume .Accoding to the same study , the volume of migrants augmentation within **01 %** leads to the augmentation of the volume of remittances about **0,7 %** .( **Reund ,2008 ,p 356**)

In other hand ,the competencies of migrants have a great impact on migrants remittances volume .Faini 's study in 2007 extracted that migrants 'competency degree reduces the volume of remittances ,dealing with the ideas that the competent migrant belongs

to a rich family he is not obliged to transfer money in one hand and he can live forever in his receptive country ( **Ricardo, 2007,p180** ) .

**b - The economic movements of the native country (Osman, T. A, 2005, p54 ) :**

The economic of countries becomes related completely with the universal one ,and this idea was proved by the latest economic crisis ,and the latest crisis influenced the global economic variables which led to the great impact on remittances 'volume especially developed countries (receptive ) .The economic position of both receptive and native countries ' remittances is not stable . Some studies declared that the economic movements in receptive and native countries has a great relationship with migrants 'remittances .

Huang & Vergassibia's study proved that global economic variables represented in GDP ,inflation and unemployment in receptive and native countries are important factors that impact migrants remittances .

Researcher used global monetary variables represented in ;exchange price ,mass monetary ,benefit price and general index for prices which express the social position of migrants in the receptive country .As a result ,the variables in global economic determinants of receptive countries influence the volume migrants 'remittances .

In other Turkish study done by **Aydas** led to the following ; the Turkish economic development influence directly on migrants 'remittances .The fall down of the economic development leads to the augmentation of migrants 'remittances and the inverse is true .

Another modern study followed by **Mouhoud 2008** demonstrated how global variables impact remittances 'decision and volume through linking them within individual determinants , and the following table summarize it ;

| Determinants                               | Altruism | Familiar agreement |           |
|--------------------------------------------|----------|--------------------|-----------|
|                                            |          | Investment         | Exchanges |
| Migrant 'income level in native country    | —        | +                  | +         |
| Migrant' inflation level in native country | +        | +                  | —         |
| The difference in benefit level            |          | — / +              |           |
| Exchange price level                       | +        | —                  | +         |
| Migrant 'income level in receptive country | +        | +                  | +         |

According to following table we remark that the income level in native country deals inversely with altruism , the migrant will not reduce his remittances if his income level is up ,and his

remittances will arise for another purpose such as ;investment or paying migration 'requirements and demands .

In case of the elvation in inflation' level in native country , altruism is the factor that determine remittances 'level .Therefore ,exchange 'level has a positive relationship with altruism and migrant familiar exchanges .When foreign money 'value arises in native country ,migrant remittances will arise towards his familily .Concerning the benefit s 'level,the impact will be either positive or negative according to the chioce of the migrant ( investement /reservation ) (**Marie ,2010 ,p08**)

### **C- Institutional determinants :**

These variables consist of transfer ' costs ,banking system development and political stability . Transfer ' costs and charges have a direct impact on remittances 'volume of the migrant especially those passing through official channels .

According to Freund & Spatafora 's study (2008) which tried to find the relationship between remittances 'costs ,banking system and the change in exchange price in one hand and monetary remittances in the other hand .They found a strong inverse relationship ie ;the high remittances 'charges and costs is due to the weakness of the banking system and the fall off money ' value .

The progression of banking system leads to the rise or the fall off of remittance through official channels .Most studies done by the international bank have shown an inverse relationship between the banking system and the parallel market , this reflects on remittances 'rise in case of banking system ' progression and avoiding non-official channels ,which mean ; bribery / cheating and terrorism .

The political stability leads to the rise of migrant remittances ,this stability permits to migrants and their relatives to use this money either to consume or to invest.(**Carlos , Huang ,2006 ,p89** ).

### **The second demand ; Migrant remittances'impact on global economic level :**

**1 / Migrant remittances'impact on labor market balance :** migrant remittances influence indirectly on labor market balance in native country through the impact on exposition side in receptive countries of these remittances ,these laters (remittances) help in more revenues for receptive families ,and this leads to the late entry to labor market especially women and childs (**Bouklia.R.H, 2009,p49-50** ).

The use of migrant remittances in little familiar investment leads to the aquisition of more occupations and reduces inflation 'levels .So ,these remittances help directly to control the labor market in native countries .

A lot of experimental studies have shown the vital role of migrant remittances in controlling and adjusting the labor markets in native countries . As an example , it was remarked that the migrant remittances are parallel to the the changes of the distribution of workingman especially male sex (**Hicham & Mohammed, 2019 ,p125**).

However , **Funkhouser** in his study about Nikaraguwa states the vital role of migrant remittances in reducing the participation in labor market level .Also(**Jim .Ariola,2005,p75**) remarked the importance of migrant remittances in reducing labor 'exposition in receptive zones in Mixico .Acosta 2006 has the same idea .

In the Arabic occidental world such as ; Algeria – Tunisia – Morocco some studies improved the important role of migrant 'activities in their native countries and the creation of new investments that preach the wheel of economic .

## **2/ The impact of migrant remittances on economic development :**

Migrant remittances 'impact on economic development has a lot of mechanisms in native and origin and country ,these remittances can influence this development within long term through the augmentation of human 's capital .This augmentation is due to learning process and health 'finance .

Migrant remittances can influence the economic development the augmentation of private officials ' investments level ,because these remittances represent a substitution of non-competent market in native country .Also , migrant remittances impact the economic development in native country through the augmentation of consumption 'level .ie : to enhance global demand , but this influence has a relationship with the economic structure of receptive country .If these countries are related basically on importing , migrant remittances will contribute the augmentation of importing'level .This has a negative impact on economic development in the long term through stimulating the global demand within high production 'energies.

In case that the receptive countries 'economy is based on local production to feed the local market , remittances surely contribute in enhancing local demand through the impact 's double .ie if we have an augmentation in consumption 'level , there will be augmentation in investment level .

According to some experimental studies related to the analysis of the relationship between the influx of migrant remittances and economic development , we can state a positive side in one hand and negative one within the other .As a sample , **Chami 'study 2003** related to 113 progressive countries , he said that migrant remittances impact negatively on economic development in receptive countries .For **Guiliano & Ruiz and Arrag ' study 2005** related to 100 progressive countries , they said that migrant remittances impact positively on economic development especially those countries that have low income .

Finally , **Mundaca ' study 2009** related to a sample from Latin American countries and some Caribbean ones , he said that migrant remittances impact positively on economic development in native countries and contribute in the growth of monetary markets .The growth of individual income will be about ,% **3.49** if the percentage of migrant remittances of internal resultant is more than **10 %** .Furthermore , remittances reduce poverty 'level , and have a special characteristic which is anti –economic inconsistency . ie remittances rise in time of crises , these remittances ' volume sent by migrants to their relatives will arise when economic activities 'level is declined.

This hypothesis was the subject of many studies done by **Mohapatra & Patterno (2009 - 2011)** also **Young & Bougamelli (2009)** which led to the result that ; migrant remittances rise in time of economic crises and natural disasters in native countries in a comparison within another financing sorts such as :external investments and credits .

## **3 /The impact of migrant remittances on monetary system :**

Migrant remittances contribute in developing and modernizing monetary systems in native countries .If these remittances pass through monetary system 'institutions in receptive countries such as ; banks , the migrant and his relatives will gain and benefit extra new

services .In other hand , remittances passed through official channels permit to know and determine its final destination ( generally to migrant ') by banks and monetary institutions , so ;attracting extra monety that leads to more services and banks'offers named the benefit **ie** ; more clients in monetary institutions lead to an extra credits in the banking system .

Some experimental studies have shown the impact of Migrant remittances on monetary sector 's development using data related to remittances 'influx .These studies are about 99 progressive countries between the period 1957-2003 .The result showed that ; remittances contribute in the augmentation of banking trusts 'general level ,and credit 'volume guarranteed to private institutions .

Another study conducted by **Gupta 2009** and others showed that migrant remittances contribute in developing monetary system in this countries through the rise of banking credits and the augmentation of trust 'volume guarranteed , also these remittances can have a negative impact on monetary sector in native countries because these remittances use to pass through non-official channels ,and in this case the demand for banks and monetary institutions 'credits is reduced in native countries in one hand .In the other hand ,these remittances contribute in developing monetary 'sector activity in native countries in the long term .The government of receptive countries are obliged to modernize and reform their monetary sector to benefit from these remittances .

#### **4 /Monetary remittances 'influx and instability of the real exchange price :**

The theory of( the Dutch disease) signs the impact of wealth on exchange price in countries which their economy bases only on oil and gas exportation .

**Gregory (1976 )** through his sample clarifies that natural resources wealth leads to the rise of exportations 'expose and surplus in balance of payments .So ,this surplus serve to the augmentation of real exchange price of local money due to the rise of goods 'price outside the comercial exchange , or to the rise of inflation 'level .

**Gorden (1984)** clarified through the **core model** that the wealth of natural resources leads to the withdrawal of industrial sector and the reduction of exportation level ouside natural resources sector ,especially industrial sector 's exportation and the sector of services which have a vital role in the ecoomic development .

Concerning the analysis of the Dush economic disease 's theory and the impact of Migrant remittances on real exchange price .Through the great volume of remittances 'influx ,the great demand levels will rise and augment ,while we see a stability in great demand for those countries which consider remittances as the principle resource of foriegn money .

The real exchange price will augmentwhen prices are rised of non-comercial goods .A lot of experimental studies tried to analyze the impact of remittances on real exchange price , some have agreed that there is a direct impact (**Shakuri , S. M ,2011, p188** ) in one hand ,and others have disagreed and interrupted this impact in the other .

To insure that (**Amnedo Dorantes and Pozo Dorantes (2004)** clarified that Migrant remittances have a direct impact on real exchange price level through a sample study of 13 countries from Latin America and Carribean zone between the period (1979 -1998 ) .Another study conducted by( Molina( 2007) and others about 20 countries from Latin America between the period (1990 -2003 )which they concluded that monetary migrant remittances

lead to the augmentation of real exchange price in native country .This insure the hypothesis of Dush economic disease .

Forthemore , **Baraja (2010 )** tried to give a theoritical and experimental analysis concerning the impact of migrant remittances on real exchange price levels supporting the Dush economic disease based on data of 138 countries .He estimated weak impact of migrant remittances on real exchange price due to alot of economic factors such as ;the economic flourishing ,production 'S factors mobilization and the political danger of the country .

Another study conducted by **Meriem Brahim (2017)** and others to analyze the impact of Migrant remittances on exchange price presenting 09 countries from the middle east and north Africa .This study is based on ARDL between the period (1980 -2015) and it had the following result ; Migrant remittances lead to the reduction of real exchange price in one hand ,and do not influence the power and ability of competitionin receptive countries of these remittances especially within the long term.

#### **5/ The impact of migrant remittances on the balance of payments :**

Migrant remittances influence positively on the balance of payments in receptive countries through reducing the deficiency 's levels and rising the reservations of foreign money **ie** ; authority or government will be able to make and ensure exchange prices of national money stable towards other foreign money **Bouklia (2010)** . According to what we have seen later , we can remark some negative impacts on the balance of payments especially in accounting operations because we have what we call capriole (**Leffect boomerang** ) .The augmentation of migrant remittances leads to the augmentation of importation .In addition , they leads to the deficiency in balance of payments in one hand , and to a negative impact on real exchange price under the great demand of goods and the finiteness of productivity in the other .

#### **The thired demand ; The practical study .**

#### **1/ The analytic study of migrant remittances on some global economic variables ( Algeria as a sample between the period 2000 – 2020 ) :**

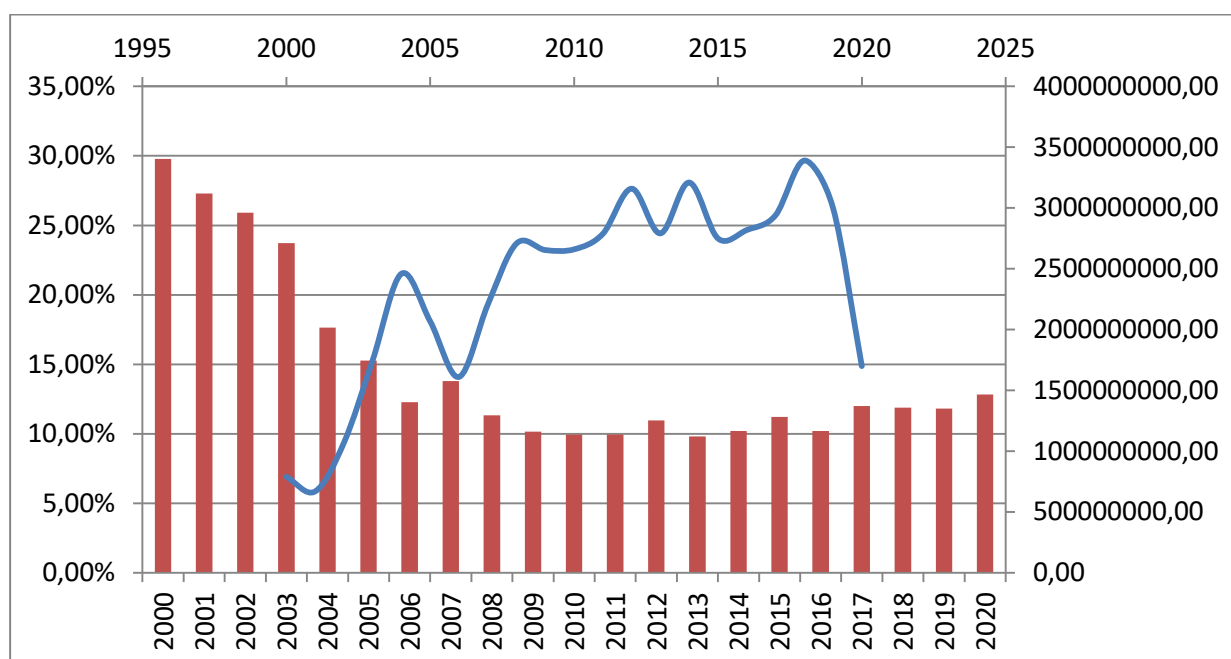
#### **A - Migrant remittances for labor market 's balance / unemployment between the period 2000 – 2020 ) :**

**Table 01** ; Migrant remittances ;umemployment 's level in Algeria (2000 -2020)

| Year | Migrant remittances (Dolar ) | umemployment 's level |
|------|------------------------------|-----------------------|
| 2000 | 790000000                    | 29,77%                |
| 2001 | 670000000                    | 27,30%                |
| 2002 | 1070000000                   | 25,90%                |
| 2003 | 1750000000                   | 23,72%                |
| 2004 | 2460000000                   | 17,65%                |
| 2005 | 2067000000                   | 15,27%                |
| 2006 | 1611000000                   | 12,27%                |
| 2007 | 2205131627                   | 13,79%                |
| 2008 | 2708614986                   | 11,33%                |
| 2009 | 2654127120                   | 10,16%                |
| 2010 | 2660000000                   | 9,96%                 |
| 2011 | 2787502336                   | 9,96%                 |
| 2012 | 3158929325                   | 10,97%                |
| 2013 | 2791175466                   | 9,82%                 |

|             |            |        |
|-------------|------------|--------|
| <b>2014</b> | 3209432556 | 10,21% |
| <b>2015</b> | 2749737878 | 11,21% |
| <b>2016</b> | 2818498677 | 10,20% |
| <b>2017</b> | 2940000000 | 12%    |
| <b>2018</b> | 3390000000 | 11,89% |
| <b>2019</b> | 3000000000 | 11,81% |
| <b>2020</b> | 1700000000 | 12,83% |

**Source** : the international bank – data background ;on the websit [www.worldbank.org](http://www.worldbank.org)



**Source** : prepared by the student according to table 01 's data .

Through the above table we remark that migrant remittances 'level and level the unemployment have an inverse relationship between the period 2000 and 2003 ,the level of unemployment was somehow high with comparison of low level of remittances due to the instability of labor market ,and because of the instability of the political system in Algeria taking in consideration heavy debts in one hand , and the deficiency of public economic institutions ( about 25% of these institutions were under deficiency) in the other .

Starting from the year 2003 to 2011 , the level of unemployment was going to get down till 09% and it was the lowest level due to the augmentation of migrant remittances .This augmentation influences the labor market in Algeria which led to the great influx of money from outside .

After 2017, the level of unemployment was going to rise due to the abstinence of the Algerian policy ,and also due to the economic crisis of Algeria during that time .

Finally , the **COVID 19** epidemic limited completely migrant remittances .They registered their lowest level in the beginning of 2020 ( **about 1,7 million Dolars** ) . This epidemic also

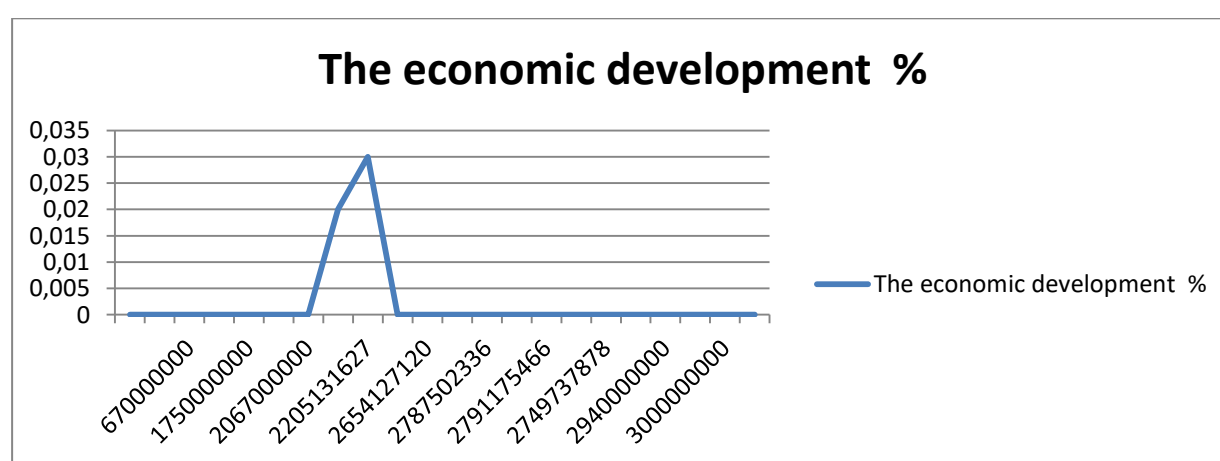
contributed to rise the level of unemployment due to the deficiency of most private and public institutions .

### **B/ Migrant remittances and the economic development between the period ( 2000-2020 )**

**Table 02** : Migrant remittances and the economic development's level in Algeria between the period ( 2000-2020 )

| Year | Migrant remittances (Dolar ) | The economic development % |
|------|------------------------------|----------------------------|
| 2000 | 790000000                    | 1.6%                       |
| 2001 | 670000000                    | 2.6%                       |
| 2002 | 1070000000                   | 4.7%                       |
| 2003 | 1750000000                   | 6.9%                       |
| 2004 | 2460000000                   | 5.2%                       |
| 2005 | 2067000000                   | 5.1%                       |
| 2006 | 1611000000                   | 2%                         |
| 2007 | 2205131627                   | 3%                         |
| 2008 | 2708614986                   | 2.4%                       |
| 2009 | 2654127120                   | 2.4%                       |
| 2010 | 2660000000                   | 3.3%                       |
| 2011 | 2787502336                   | 2.6%                       |
| 2012 | 3158929325                   | 2.56%                      |
| 2013 | 2791175466                   | 3.32%                      |
| 2014 | 3209432556                   | 3.7%                       |
| 2015 | 2749737878                   | 3.1%                       |
| 2016 | 2818498677                   | 3.6%                       |
| 2017 | 2940000000                   | 1.7%                       |
| 2018 | 3390000000                   | 2.3%                       |
| 2019 | 3000000000                   | 2.1%                       |
| 2020 | 1700000000                   | 1.9%                       |

**Source** : the international bank – data background ;on the websit [www.worldbank.org](http://www.worldbank.org)- 27/05/20121



**Source** : prepared by the student according to table 02 's data ,

Through this table ,we remark that migrant remittances and the level of economic development have a direct relationship .Since the year 2000 , remittances started to rise slowly and this leads to the rise of economic development 's level till 2005 when it arrived to **05% , and** this due to the accumulation of costs that were devoted to health and education .

In 2006 ,the consumption 's level started to motivate the demand for goods and services .In the same year , the development 's level started to reduce despite the augmentation of migrant remittances , and this is remarked in the monetary influxes during the long term .

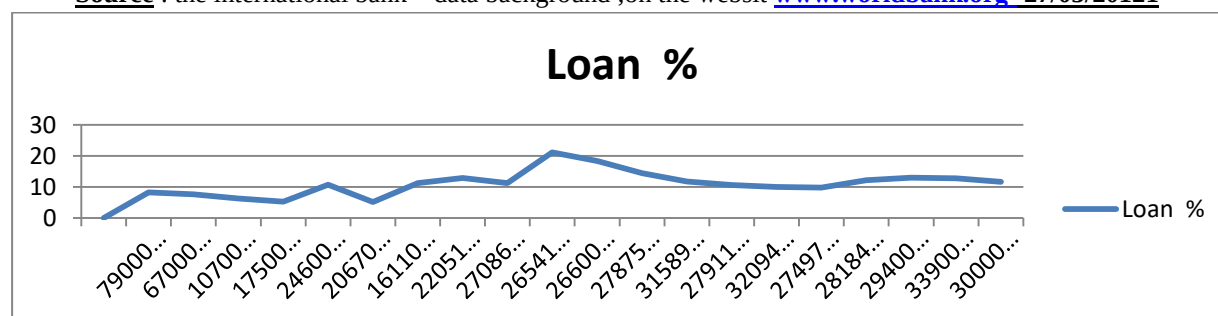
These remittances can impact on consumption that motivate the global demand and the result will be ;the growth of importation and the fall off of exportation .By 2020 ,Covid 19 contributed greatly to reduce migrant remittances due to the deficiency of the economic sector and the closure of external commerce between countries .

### **C/The migrant remittances and the monetary system between the period ( 2000-2020 ) :**

**Table 03:** Migrant remittances and loan 's level from banks in Algeria between the period (2000-2020)

| Year | Migrant remittances (Dolar ) | Loan % |
|------|------------------------------|--------|
| 2000 | 790000000                    | 8,25   |
| 2001 | 670000000                    | 7,54   |
| 2002 | 1070000000                   | 6,23   |
| 2003 | 1750000000                   | 5,21   |
| 2004 | 2460000000                   | 10,69  |
| 2005 | 2067000000                   | 5,12   |
| 2006 | 1611000000                   | 11,22  |
| 2007 | 2205131627                   | 12,87  |
| 2008 | 2708614986                   | 11,25  |
| 2009 | 2654127120                   | 21,14  |
| 2010 | 2660000000                   | 18,31  |
| 2011 | 2787502336                   | 14,39  |
| 2012 | 3158929325                   | 11,72  |
| 2013 | 2791175466                   | 10,56  |
| 2014 | 3209432556                   | 9,93   |
| 2015 | 2749737878                   | 9,76   |
| 2016 | 2818498677                   | 12,08  |
| 2017 | 2940000000                   | 12,95  |
| 2018 | 3390000000                   | 12,69  |
| 2019 | 3000000000                   | 11,56  |
| 2020 | 1700000000                   | 5,36   |

**Source :** the international bank – data background ;on the websit [www.worldbank.org](http://www.worldbank.org)- 27/05/20121



**Source :** prepared by the student according to table 03 's data ,

From the above table we remark that migrant remittances have a direct relation ship with loan's level .The level of laon started to reise within parallel position with migrant remittances

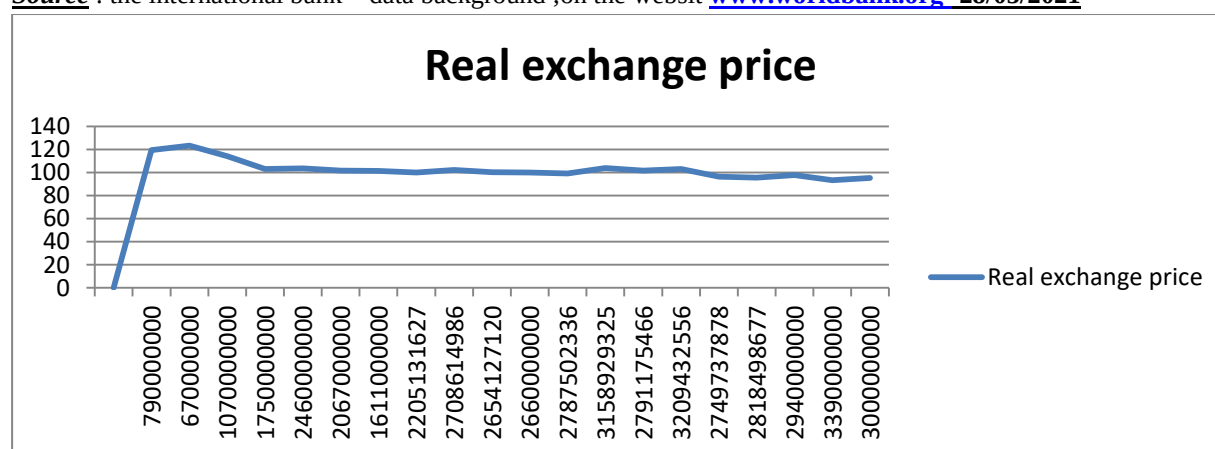
'level .This due to the development of the monetary sector . When migrant remittances pass through official channels , loan 's level devoted both to privates or institutions will augment . Starting from 2020 ,Covid 19 impacted the monetary sector through the great retire of money from official institutions .

**D/The migrant remittances and the real exchange price between the period ( 2000-2020 ) :**

**Table 04 :** Migrant remittances and the real exchange price in Algeria between the period ( 2000-2020 )

| Year | Migrant remittances (Dolar ) | Real exchange price (Dinar) |
|------|------------------------------|-----------------------------|
| 2000 | 790000000                    | 119,41                      |
| 2001 | 670000000                    | 123,20                      |
| 2002 | 1070000000                   | 114,23                      |
| 2003 | 1750000000                   | 103,08                      |
| 2004 | 2460000000                   | 103,52                      |
| 2005 | 2067000000                   | 101,74                      |
| 2006 | 1611000000                   | 101,31                      |
| 2007 | 2205131627                   | 99,92                       |
| 2008 | 2708614986                   | 102,24                      |
| 2009 | 2654127120                   | 100,27                      |
| 2010 | 2660000000                   | 100                         |
| 2011 | 2787502336                   | 99,12                       |
| 2012 | 3158929325                   | 103,91                      |
| 2013 | 2791175466                   | 101,76                      |
| 2014 | 3209432556                   | 102,88                      |
| 2015 | 2749737878                   | 96,49                       |
| 2016 | 2818498677                   | 95,52                       |
| 2017 | 2940000000                   | 97,84                       |
| 2018 | 3390000000                   | 93,27                       |
| 2019 | 3000000000                   | 95,30                       |
| 2020 | 1700000000                   | 123,44                      |

**Source :** the international bank – data background ;on the websit [www.worldbank.org](http://www.worldbank.org)- 28/05/2021



**Source :** prepared by the student according to table 04 's data ,

According to the above table ,it is clear that the real exchange price was instable and was wavering about 100 DA between the period (2000-2014) . Afer that ,it started to decline and

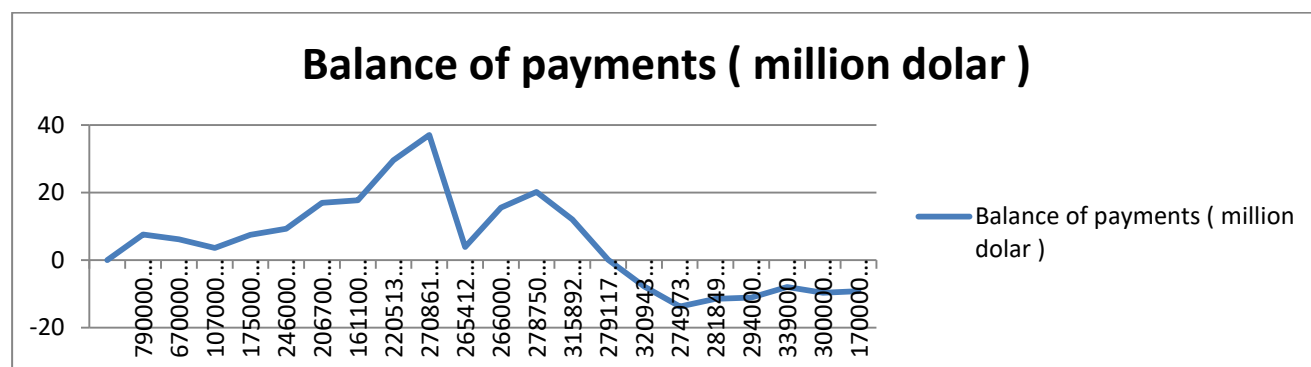
and to withdrawal and was about 100 DA between the period (2015-2014) due to the fall-off of oil's price and the slow augmentation of migrant remittances. According to this, it is obvious that the Algerian policy concerning the exchange price was under control.

**E /The migrant remittances and the balance of payments between the period (2000-2020):**

**Table 05:** Migrant remittances and the balance of payments in Algeria between the period (2000-2020)

| Year | Migrant remittances (Dolar ) | Balance of payments ( million dolar ) |
|------|------------------------------|---------------------------------------|
| 2000 | 790000000                    | 7.57                                  |
| 2001 | 670000000                    | 6.19                                  |
| 2002 | 1070000000                   | 3.65                                  |
| 2003 | 1750000000                   | 7.47                                  |
| 2004 | 2460000000                   | 9.25                                  |
| 2005 | 2067000000                   | 16.94                                 |
| 2006 | 1611000000                   | 17.73                                 |
| 2007 | 2205131627                   | 29.55                                 |
| 2008 | 2708614986                   | 36.99                                 |
| 2009 | 2654127120                   | 3.86                                  |
| 2010 | 2660000000                   | 15.58                                 |
| 2011 | 2787502336                   | 20.14                                 |
| 2012 | 3158929325                   | 12.06                                 |
| 2013 | 2791175466                   | 0.13                                  |
| 2014 | 3209432556                   | 7.78-                                 |
| 2015 | 2749737878                   | 13.71-                                |
| 2016 | 2818498677                   | 11.42-                                |
| 2017 | 2940000000                   | 11.06-                                |
| 2018 | 3390000000                   | 7.93-                                 |
| 2019 | 3000000000                   | 9.66-                                 |
| 2020 | 1700000000                   | 9.21-                                 |

**Source :** the international bank – data background ;on the websit [www.worldbank.org](http://www.worldbank.org) 28/05/2021



**Source :** prepared by the student according to table 05 's data ,

From the above table , we remark a direct positive relationship between migrant remittances and the balance of payments through the augmentation of balance of payments since 2002 to 2011 .During the previous period the balance of payments recorded his highest level and

reach **20.14 MILLION D** .This augmentation awes parallel to the augmentation of migrant remittances which impact positively on the balance of payments in the long term .

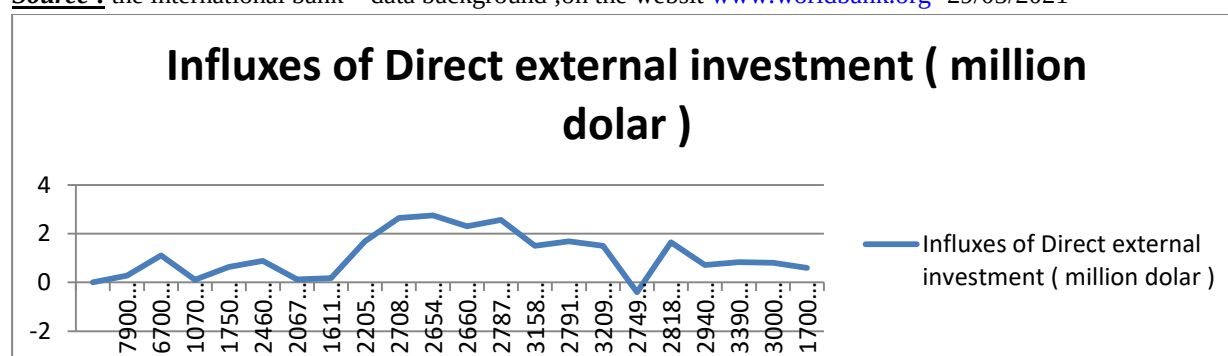
In 2012 , the balance of payments started to reduce till it reached his lowest record and marked a deficiency about **9.21-** due to the dependence on importation for the global demand .

**E /The migrant remittances and the direct external investment between the period ( 2000-2020 ) :**

**Table 06 :** Migrant remittances and direct external investment in Algeria between the period ( 2000-2020 )

| Year | Migrant remittances (Dolar ) | Influxes of Direct external investment ( million dolar ) |
|------|------------------------------|----------------------------------------------------------|
| 2000 | 7900000000                   | 0.28                                                     |
| 2001 | 6700000000                   | 1.11                                                     |
| 2002 | 10700000000                  | 0.11                                                     |
| 2003 | 17500000000                  | 0.64                                                     |
| 2004 | 24600000000                  | 0.88                                                     |
| 2005 | 20670000000                  | 0.12                                                     |
| 2006 | 16110000000                  | 0.18                                                     |
| 2007 | 2205131627                   | 1.69                                                     |
| 2008 | 2708614986                   | 2.64                                                     |
| 2009 | 2654127120                   | 2.75                                                     |
| 2010 | 26600000000                  | 2.30                                                     |
| 2011 | 2787502336                   | 2.57                                                     |
| 2012 | 3158929325                   | 1.50                                                     |
| 2013 | 2791175466                   | 1.69                                                     |
| 2014 | 3209432556                   | 1.50                                                     |
| 2015 | 2749737878                   | 0.40-                                                    |
| 2016 | 2818498677                   | 1.64                                                     |
| 2017 | 29400000000                  | 0.72                                                     |
| 2018 | 33900000000                  | 0.83                                                     |
| 2019 | 30000000000                  | 0.80                                                     |
| 2020 | 17000000000                  | 0.60                                                     |

**Source :** the international bank – data background ;on the websit [www.worldbank.org](http://www.worldbank.org)- 29/05/2021



**Source :** prepared by the student according to table 06 's data ,

From the above table , we remark that ; the direct external investment rised in the period between ( 2000 – 2014 ) due to the large economic reforms done by the Algerian authorities and also due to the augmentation of oil 's price .Despite the political stability , the direct external investment started and continued to decline in parallel with the reduction of oil 's

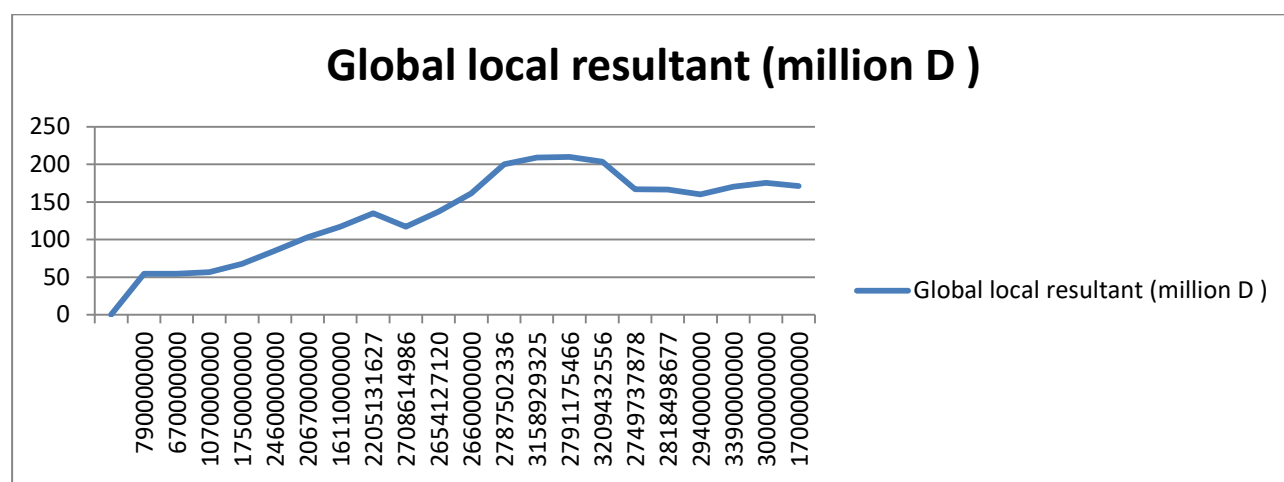
price .Surely , oil's price was the only field that attracted investments , and due to this ,investors weren't sure to bring their capitals to the Algerian market .

**F /The migrant remittances and the global local resultant between the period ( 2000-2020 ) :**

**Table 07 :** Migrant remittances and the global local resultant in Algeria between the period ( 2000-2020 )

| Year | Migrant remittances (Dolar ) | Global local resultant (million D ) |
|------|------------------------------|-------------------------------------|
| 2000 | 790000000                    | 54.79                               |
| 2001 | 670000000                    | 54.74                               |
| 2002 | 1070000000                   | 56.76                               |
| 2003 | 1750000000                   | 67.86                               |
| 2004 | 2460000000                   | 85.32                               |
| 2005 | 2067000000                   | 103.19                              |
| 2006 | 1611000000                   | 117.02                              |
| 2007 | 2205131627                   | 134.97                              |
| 2008 | 2708614986                   | 117.00                              |
| 2009 | 2654127120                   | 137.21                              |
| 2010 | 2660000000                   | 161.20                              |
| 2011 | 2787502336                   | 200.01                              |
| 2012 | 3158929325                   | 209.04                              |
| 2013 | 2791175466                   | 209.70                              |
| 2014 | 3209432556                   | 203.51                              |
| 2015 | 2749737878                   | 166.83                              |
| 2016 | 2818498677                   | 166.36                              |
| 2017 | 2940000000                   | 159.99                              |
| 2018 | 3390000000                   | 170.16                              |
| 2019 | 3000000000                   | 175.40                              |
| 2020 | 1700000000                   | 171.09                              |

**Source :** the international bank – data background ;on the websit [www.worldbank.org](http://www.worldbank.org)- 29/05/2021



**Source :** prepared by the student according to table 07 's data ,

From the above table we remark that migrant remittances have a direct relationship with global local resultant .they started with their lowest level about **54,79** million D in 2000 ,and this due to the first steps of Algeria towards the political stability and the deficiency of governmental institutions ,forthemore the fall-off of oil 's price .

In 2005 , global local resultant started to rise due to the great reforms in all fields and the rise of migrant remittances through investments.

In 2014 , global local resultant withdrew due to the fall-off of oil' s price till the year 2020 when it started to rise gradually . As a result , we can conclude that migrant remittances impact global local resultant through the local investments of foriegn capitals .

**F /The migrant remittances and Inflation in Algeria between the period ( 2000-2020 ) :**

**Table 08** : Migrant remittances and Inflation in Algeria between the period ( 2000-2020 )

| <b>Year</b> | <b>Migrant remittances (Dolar )</b> | <b>Inflation %</b> |
|-------------|-------------------------------------|--------------------|
| <b>2000</b> | 790000000                           | 0.3                |
| <b>2001</b> | 670000000                           | 4.2                |
| <b>2002</b> | 1070000000                          | 1.4                |
| <b>2003</b> | 1750000000                          | 4.3                |
| <b>2004</b> | 2460000000                          | 4                  |
| <b>2005</b> | 2067000000                          | 1.4                |
| <b>2006</b> | 1611000000                          | 2.3                |
| <b>2007</b> | 2205131627                          | 3.7                |
| <b>2008</b> | 2708614986                          | 4.9                |
| <b>2009</b> | 2654127120                          | 5.7                |
| <b>2010</b> | 2660000000                          | 3.9                |
| <b>2011</b> | 2787502336                          | 4.5                |
| <b>2012</b> | 3158929325                          | 8.9                |
| <b>2013</b> | 2791175466                          | 3.3                |
| <b>2014</b> | 3209432556                          | 2.5                |
| <b>2015</b> | 2749737878                          | 4.8                |
| <b>2016</b> | 2818498677                          | 6.4                |
| <b>2017</b> | 2940000000                          | 5.6                |
| <b>2018</b> | 3390000000                          | 4.3                |
| <b>2019</b> | 3000000000                          | 2                  |
| <b>2020</b> | 1700000000                          | 1.9                |

**Source** : the international bank – data background ;on the websit [www.worldbank.org](http://www.worldbank.org)- 29/05/2021

From the table above, in 2000 inflation 'S level marked its lowest percentage and was about **0.3** , after that it rised in the bigining of 2001 in parallel with the refreshment period marked on economic and done by the Algerian authorities which devoted 07 million dollars .

In 2002 , inflation 'S level declined to be 1,4 million dollars due to the augmentation of the monetary mass and also due to the augmentation of importation which became 8,32 % .Economists justified this augmentation to the rise of groceries goods and the different products .Government was obliged to follow such a policy to fight this inflation that was caused by the extra fluidity between ( 2003 -2004 ) . Fluidity reached **04**

In 2008 , inflation 'S level started to rise to reach **4,9** % due to the international crisis of 2008 and the fall-off of oil's price .The great importation of goods impact the economic system in

Algeria .However , migrant remittances have a simple impact on inflation through the stability of exchange price which was a result of the augmentation of foreign reserve .

### **Conclusion :**

Through what we have seen from this modest work ,we tried to show the impact of migrant remittances on some global economic variables because these migrant remittances was considered as an essential and basic income element outside oil 's sector .The exposure of datas and its analyses showed that migrant remittances became the main element in external financing .Also we remaked that migrant remittances have a direct impact on economic development ,balance of payments and global local resultant in one hand ,and have an inverseimpact on labour market situation represented in unemployment ,exchange price level and level of inflation in the other hand .

Migrant remittances contribute in improving the economic fields through the augmentation of families ' incomes and reduction of poverty 's level .We can consider migrant remittances as a financing source for economic activities especially receptive families .

### **Main recommendations :**

- 1- It is important to look for a diversity in the economic sector outside oil' s revenues .
- 2- Motivate and facilitate migrant remittances through official channels to reform the monetary sector and to refresh the banking system .
- 3- Facilitate migrant remittances through avoiding the parallel market for exchange price .
- 4- Support the local products through the creation of national institutions to control goods 'price .

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