



*Analysis of the economic effects of the "COVID-19" and its transmission channels on the monetary and financial spheres in Algeria*

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*Abstract*

The assessment of the effect of the COVID-19 pandemic on the economic, monetary and financial environment in Algeria is addressed through a global and financial analysis of the transmission channels of this crisis and the quantitative measures undertaken to counter contractions of the monetary and financial indicators. The results of this analysis showed adverse effects on macroeconomic indicators, in particular a slowdown in economic growth, a higher unemployment rate and deterioration in the purchasing power and terms of trade, etc. The monetary sphere was more weakened, in particular under the effect of the dwindling of foreign exchange reserves, which drop to 24 billion USD in 2020. However, the monetary authorities have conducted a retracted monetary policy (retracted rate) by introducing a quantitative and regulatory easing measures aimed at remedying problems of refinancing and tightening of bank liquidity, recording a drop of -40.9% and low bank profitability dropping to 8% in 2020.

✓ **Keyword :** COVID 19 pandemic, financial and monetary spheres, Algeria

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## 1. INTRODUCTION

In Algeria, the COVID-19 pandemic has caused a brutal and perverse regression in all economic activity operations. This sudden paralysis triggered by the fall in oil prices reveals dizzying statistics and a spectacular decline in indicators for the economy as a whole. The statistics on the social and economic situation revealed by the surveys of the Ministry of Labor and the National Employment Agency showed disruption of activities in the employment sector by registering more than 200 thousand employees without income, 180 thousand workers in arrears with wages and 52 thousand other employees who have temporarily or permanently suffered a loss of jobs. By tabulating on an unemployment rate of 15%, colossal losses in turnover have been recorded in the crafts, catering, hotel, tourism, transport, industry and energy sectors. Home confinement, measures to stop activities and the disruption of transport led to a shortfall of approximately 19.5 billion dinars for public transport, nearly 82 billion dinars for the activities of hotels and others 36.2 billion dinars for craft activities and 63.8 billion dinars for the public market sector. As for the energy sector, it reveals a decline in SONATRACH's turnover of approximately 4.6 billion dollars (LYES C., 2021, P7).

The monetary and financial environment shows an accentuation of the deterioration of foreign currency assets and a sharp contraction in bank liquidity. According to the press release from the Bank of Algeria, at the end of May 2020, banks recorded a drop in bank liquidity of more than 184 billion dinars compared to 2019. Overall liquidity fell from 1,100.8 billion dinars at the end of 2019 to 916.7 billion in May 2020. To ease tensions on bank liquidity, the Bank of Algeria has taken exceptional measures to "free up additional liquidity" in particular by easing prudential provisions, lowering the reserve requirement rate reduced from 6% to 3% and a 0.25% reduction in the director's loan interest rate set at 3%, etc. (bank of Algeria report 2021, p7).

By analyzing the elements of the balance sheet of the Bank of Algeria, namely the intervention operations on the monetary market, the reserves requirements, the amounts of the current account creditor of the treasury, we will trace a follow-up of the evolution of the monetary statistics and banks and will discuss the effects of the crisis on the banking sector and the measures taken to ease tensions on bank liquidity. However, we will contribute to the analysis of the extent of the crisis through a quantified assessment while focusing on the various transmission channels of the crisis. We will carry out a global and financial analysis by mobilizing statistics relating to the theme and the implications of emergency measures related to the mitigation and fight against the pandemic.

## **2. Analysis of the potential effects of the pandemic on the employment and Small and medium sized enterprises as well as indicators of the Algerian economy**

In 2019, the unemployment rate was estimated at 11.9% against 10.5% in 2016. With a composition that mainly affects women, i.e. 20.4% and the young population with a rate of 26.9%, the pandemic had aggravated the situation. The IMF forecasts have tabulated on an increase in the unemployment rate of up to 14.3%. Through a survey carried out among small and medium sized enterprises SME and very small enterprises VSEs, the Evidencia Business Academy has identified the overall economic impacts as well as the transmission process of the crisis on the professions and the income they generate at the national level. By questioning 250 managers of SMEs and VSEs, a third of the companies surveyed mentioned the layoff of part of their staff, 22% indicated the dismissal of half of their employees and 58% raised the issue of delay or non-payment of wages. The net cessation of activities caused a drop in turnover for nearly 60% of the companies surveyed and cash flow difficulties which affected 54% of the companies. A quarter of companies have encountered supply disruptions and three quarters can no longer cover their fixed costs (Evidencia Business Academy report, 2020).

The impacts on cash show working capital needs varying between 1 million dinars and 5 million for more than 30% of companies. 15.9% experienced a working capital needs between 5 and 10 million dinars and about more than 27% reported to more than 10 million Da. The decline in turnover caused by the disruption of economic activity is raising concerns about incomes and the survival of companies. 36% of respondents indicated a decline in turnover between 50 and 90% and 25 to 50% for a quarter of respondents. This situation jeopardizes the survival of 11.4% of the companies in the absence of emergency and support measures (Evidencia Business Academy report, 2020).

### **2.1. Accentuation of the vulnerability of the Algerian economy**

In its economic report dated August 2020, the Federal Department of Foreign Affairs FDFA of Switzerland provided statistics on the economic situation in Algeria for the period 2019 and 2020. According to the FDFA, "a succession of bad circumstances" has worsened the economic situation of the country which is on the brink of the abyss. During the 2018-2020 periods, a significant decline concerned:

- The country's economic growth: GDP growth has evolved at a slower pace. While it was around 2.8% in 2013, GDP growth continued to decline, falling from 3.4% in 2012 to 1.4% in 2018 and

then to 0.7% in 2019. The World Bank's forecasts for the years 2020 and 2021 were tabulating on a drop of around 6.4% and 1.9% respectively in 2021.

- Non-hydrocarbon growth: The weak diversifications of the Algerian economy and the slowdown in economic activity have led the growth of non-hydrocarbon GDP to bearish trends. The growth rate fell from 3.3% in 2018 to 2.6 in 2019.

**Table 1.** GDP growth, the Annual change in the consumer price index and the current account balance of payments

	2010	2018	2019	2020	2021	2022
GDP growth	3.8%	1.4%	0.7%	-5.2%	- 6.2%	3.4%
				-6.4*%	-1.4*%	
consumer price index**	3.6%	4.3%	2%	3.5%	3.7%	9.2%
the current account balance of payments% of the GPD	7.5%	-9.7%	-9.9%	-18.3%	-17.1%	9.5%

**Source:** Established by the author based on IMF data, "world economic outlook", April 2020, pp 132-137-142.\* World Bank forecasts, \*\* Annual change.

- Real purchasing power: IMF statistics and forecasts have estimated an increase in inflation equivalent to 2% on consumer price index in 2019 against an annual rate of change in the index tabulated respectively on 3.5% in 2020 and 3.7% in 2021. According to the (national office of statistics) ONS, the high inflation would be explained by an increase in consumer price index (2019) in particular industrial food products of 0.8%. An increase of 5.2% for manufactured goods and 1.8 for services were also observed.

- The terms of trade: a decline in hydrocarbon exports with a 26% drop in oil exports and 37% for natural gas. In terms of imports, ONS statistics indicated a decline of 9.5% compared to 2018 due in particular to the decrease in growth of private consumption by more than half and to ban decisions to import some products. This situation of austerity and budgetary rigor has led to government borrowing from the central bank. The loans of the central bank to the public treasury concerned an amount of 56 billion dollars.

- Deficits in the balance of payments: the fall in revenues from hydrocarbon exports and the deterioration in the terms of trade caused a decline in the foreign exchange reserves which drop from 195 billion USD in 2013 to 44 billion USD in July 2020. This drop generated a significant deficit in the balance of payments. IMF statistics and forecasts on the evolution of the balance of payments expressed as a percentage of GDP indicated large deficits rising from 4.4% of GDP in 2014 to 9.6% in 2019. Forecasts for the years 2020 and 2021 indicated larger deficits representing 18.3% of GDP in 2020 and 17.1% in 2021.

## **2.2. Analysis of the macroeconomic impacts of the crisis and effects of the collapse of oil prices on the economy of Algeria (combined shock)**

Referring to the economic report drawn up by the United Nations System UNS and the Economic Commission for Africa ECA published in June 2020, impact analyzes have contributed to the determination of the potential effects of a drop in oil prices on Algeria's economy. For an average reference price per barrel set at 30 dollars then at 35 dollars per barrel, the estimation model revealed (UNS and ECA report, 2020, pp 8-15):

- A decrease in economic growth estimated in 2020 at -4.48% for a price per barrel set at 35 dollars and a decline of -5.70% for a price given at 30 dollars per barrel.
- A drop in public investment between 10% and 30% depending on the evolution of the price of a barrel of oil.
- A drop in consumption growth in 2020. The estimates relate to a drop in private consumption of 0.72% and public consumption around 1.6%.
- A trade balance deficit between 13.33% and 19.02% of GDP.
- A budgetary deficit around 6% to 9.1% of GDP in 2020.
- An unemployment rate that can reach 15%.
- A decline in reserves, which will drop from 62 billion USD at the end of 2019 to USD 24 billion at the end of 2020.

### 3. Towards a vulnerability of the banking system accentuated by the tightening of liquidity and low bank profitability

The analysis of the performance ratios of Algerian banks deciphers a financial malaise, in particular by the worsening of the liquidity and the weakness of bank profitability. The analysis of the evolution of the liquid asset/total assets ratio reveals the fragility of the banking system, in particular by the persistent decline in the overall liquidity of banks going from 2610 billion dinars in 2010 to 1558 billion in 2018 then to 632 billion in 2020. Thus, the liquid assets/total assets ratio continued to decline, dropping from 52.98% in 2010 to 23% in 2017 and then to 13.11% in 2020. Returns on equity express the profitability of capital in terms of its ability to generate profits. Bank profitability, which is measured by returns on equity and assets, is given by the ratio of net-results generated to returns on equity and total assets respectively. These two banking performance indicators experienced a drastic drop from 18.14% in 2016 to 8.31% in 2020. However, the level of returns on equity fell from 2012 when it recorded a lower ratio to that of European banks, which is around 25%. For the asset return ratio, the latter recorded a sharp drop from 2.42% in 2018 to 1.43% in 2020.

**Table 2.** Evolution of bank liquidity, the liquid assets/total assets ratio, Returns on equity ratio, assets return ratio and foreign exchange reserves

billion dinars	2010	2016	2017	2018	2019	2020	2021
Total Bank liquidity	2610.8	821	1380.6	1557.9	1,100.8	632.3	1331.9
liquid assets/total assets Ratio %	52.98	24.1	23.51	19.84	15.97	13.11	35.66*
Returns on equity ratio%	26.7	18.14	18.8	22.4	14.08	8.31	11.2*
assets return ratio%	2.16	1.86	2.05%	2.42	1.51	1.43	1.95*
foreign exchange reserves billion USD	162.2	114.1	97.33	79.88	72.6	44.2	45.30*

**Source:** Established by the author based on data from the Bank of Algeria. Annual reports 2020 and 2021, "Economic and monetary development in Algeria", December 2021 and June 2022, p64-69.

\* Provisional data.

### **3.1. The dwindling of foreign exchange reserves and the increase in the expenditure bill and the public debt**

The dwindling of foreign exchange reserves continued, recording a decline of 7.8 billion dollars (down 9.11%) over the last two years to reach in 2019, 72.6 billion USD against 79.88 billion USD in 2018. Expectations have tabulated on an amount of 44.2 billion dollars during the year 2020, a drop of more than 78% compared to 2012. The continued slump in oil prices and falling foreign exchange reserves have inflicted new fiscal and tax tightening measures on the country. Exceptional measures have been introduced under the complementary finance law for 2020. Among these measures, we cite:

- Reductions and solutions provided to business support for enterprises (Le Cabinet Loyrette N, 2020, pp 1-4):

- Tax measures: postponement of declarations and payment of taxes to dates provided by law.

- Customs measures: accelerated customs clearance procedures for imports of food or medical products that are the subject of a tool to fight the pandemic.

- Financial measures through banking facilitations: the Bank of Algeria guarantees banking and credit establishments exceptional measures, in particular decisions taken by regulatory means to grant some companies deferrals of payment of credit tranches, to reschedule debts or the renewal of bank loans.

- Budget reinforcement: the finance law of the year of 2020 provided for:

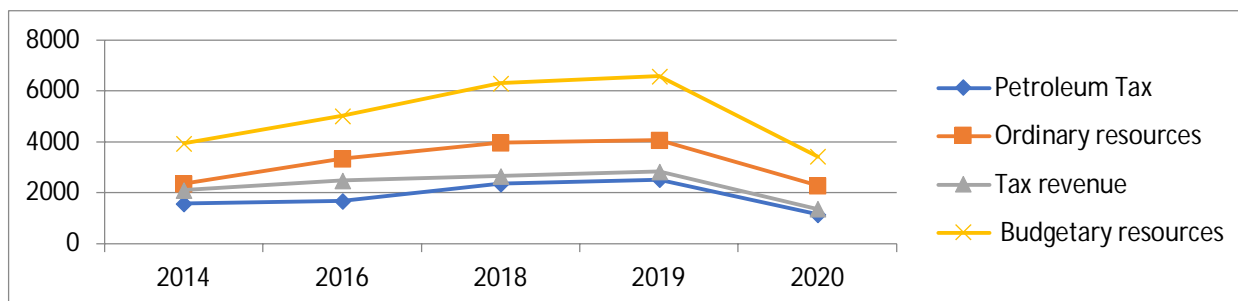
- An increase in the tax on petroleum products: an increase of 3 DA/L for gasoline and 5 DA/L for diesel and also an increase in stamp duties relating to the purchase/sale of new vehicles.

- The introduction of a new income threshold not subject to global income tax (IRG) set at less than 30,000 Da.

- Cancellation of the pre-emption rights of the State and of the 49/51 rule for non-strategic investments.

- Introduction of aid measures for certain sectors impacted by the pandemic.

**Fig.1.** Evolution of State resources in billion dinars

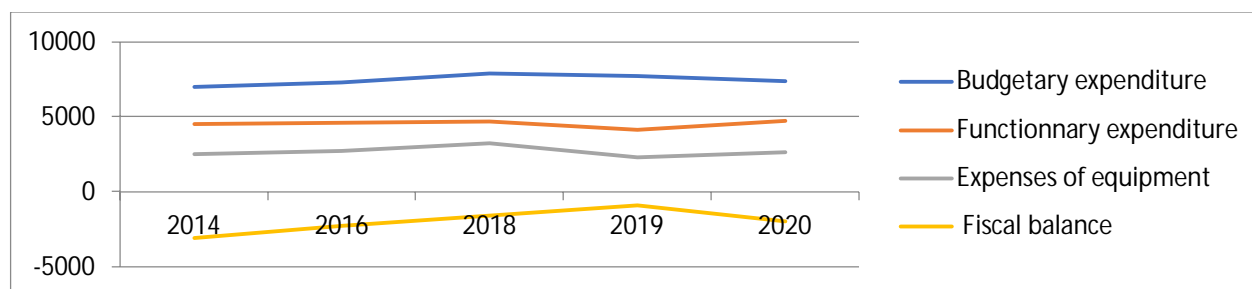


**Source:** Established by the author from DGT/Ministries of Finance data in [www.mf.gov.dz](http://www.mf.gov.dz).

By constituting a combined shock for the national economy, the oil and health crisis that Algeria has gone through has had profound repercussions on the financial commitments of the State and its resources. With the fall in the price of oil and the drop in the volume of exports since 2014, the contribution of petroleum taxation to State resources has fallen to represent only one third of total budgetary resources at the end of June 2020, i.e. 33, 4% against 40.16% in 2014. The share of tax revenue in total budgetary resources is declining. Its contribution increased from 53.24% in 2014 to around 43% in 2019. The analysis of the budget balance indicates a sharp decline in the budget deficit from 3068.02 billion dinars in 2014 to 1585.11 in 2018 then to 976.9 billion dinars in 2019. According to the comments of the Ministry of Finance and following the evolution of the figures indicated in figure 1, this clear improvement is explained by:

- An increase in petroleum revenue with quasi-stability in other non-hydrocarbon budget revenue (i.e. an increase in petroleum revenue of 7.11% between 2018 and 2019 mainly due to a slight increase in the average oil price).
- An increase in exceptional income from dividends from the Bank of Algeria and SONATRACH. The latter went from 919.8 billion dinars in 2017 to 1000 billion in 2018 before dropping to 800 billion from 2019.
- A higher increase in revenue compared to that of expenditure, in particular of capital and social expenditure.



**Fig.2.** Evolution of State expenditure in billion dinars

**Source:** Established by the author from DGT/Ministries of Finance data in [www.mf.gov.dz](http://www.mf.gov.dz). \*provided for the finance law in 2020.

To restore the economic imbalances, the government has started applying its spending reduction policy, particularly for 2019 and 2020. Although this policy has been in place for the past few years, it was only approved in through the complementary finance law for 2020 and the news laws projects for the years 2021-2023. Fiscal discipline is the tool for restoring budget deficits, which weighs heavily on public debt and the economy as a whole. The budget deficit recorded following the decline in revenue from taxation and hydrocarbon exports has caused a dysfunction pushing the government to compress its public expenditure for the years to come, particularly for the year 2019 which recorded a drop of 18.6% i.e. a financial commitment of 6429.52 billion dinars against 7899.06 billion dinars for the year of 2018. This retraction targeted equipment expenditure up to 28.96% and operating with a decrease of 11.44 %. The complementary finance law for 2020 made changes to the law passed during the year. This exceptional law reduced budgetary expenditure from 7,823.1 billion dinars to 7,372.7 billion dinars, i.e. a downward revision of 5.75% of expenditure, of which a 3% drop concerned operating expenditure and 10.5% for capital expenditure through the freezing of several investment projects.

Despite the financial measures taken to reconstitute the additional resources essential to deal with the pandemic and to revive economic activity, the macroeconomic impacts of the crisis were increasingly felt through the deterioration of the financial outlook, in particular by the deterioration in the level of the budget deficit. From 2019 and in accordance with the budget framework planned for the period 2021-2023, the Ministry of Finance has revised State revenue and expenditure upwards, thus bringing the forecasts for the budget deficit to a high level. The latter will increase by 13.75% of GDP in 2021 against 10.4% of GDP in 2020 and 4.38% of GDP in 2019. In terms of the evolution of the overall state balance, the statistics indicate a significant increase in public debt,

which rose from 7.67% of GDP in 2014 to 38.3% in 2018 and then to 45.8% of GDP in 2019.

**Table 3.** Evolution of expenditure and budgetary resources planned for 2021-2023

Billions DA	Budgetary expenditure	Budgetary resources
2021	8113.3	5328.2
2022	8605.5	5673.3
2023	8680.3	5874.9

Source: Established by the author from data taken from ALGERIA-ECO in [www.algerie-eco.com](http://www.algerie-eco.com)

IMF estimates for 2020 bring the weight of public debt to 61% of GDP. It should be recalled that the deficit in the overall treasury balance is explained by the growing level of budget deficits and the amounts of treasury operations (intervention, allocation balances, budgetary operations<sup>1</sup>, etc.). Concerning the financing of the overall treasury balance, table 4 shows the lines and the financing needs of the public treasury (Stat).

- For lines of financing: before 2016, the recovery of the treasury deficit is done by using deductions from the regulation fund called the FRR created in 2000. The use of funds available to finance the State's budget imbalances has makes it possible to cover the overall deficit up to 93% for the year 2014 and nearly 60% in 2016. From 2016, the recovery of the deficit served as amendments to the banking laws<sup>2</sup> authorizing the coverage of the public debt by the use of advances from the Bank of Algeria and purchases of public debt (bank financing). This recourse is done by means of financial advance to be returned within 240 days or by the repurchase of the debts contracted by the public companies with the banks or by repurchase of the public debts<sup>3</sup> of the treasury by their conversion into bond of treasury<sup>4</sup> and other bond etc. As a result, the financing of the deficit takes on another pair of sleeves from 2016 when recourse to bank financing becomes the most requested. Its share has gradually increased to represent in 2019, 79.19% of the total amount of financing lines. This situation is explained by the rise in public debt and the dwindling of the

<sup>1</sup>Examples: Settlement of claims on the State, interventions for the benefit of the CNAS, allocation to the special allocations account, interest rate subsidies, etc.

<sup>2</sup> Examples: Article 46 of the Money and Credit Law which authorizes advances from the central bank to the treasury and Article 99 which authorizes public banks to lower interest rates for the benefit of companies carrying out housing programs of the State (AADL: fourth program).

<sup>3</sup> There are also modifications reported to the LMC, to authorize the Bank of Algeria to buy back for a period of 5 years and this on an exceptional basis, the public debts of the treasury as well as those contracted by SONATRACH, SONELGAZ, etc. , for the benefit of the banks.

<sup>4</sup> These loans are purchased in the form of treasury bills or bonds by the central bank, banks and insurance companies.

revenue regulation fund FRR, the amount of which was completely exhausted in 2019.

- For financing needs: Other than the deficit of its overall balance, the public treasury has contracted national loans (negative numbers in Table 4) (internal public debts) which relate to bond loans for economic growth and external loans (external debts) in the form of loans from banks and international organizations such as the African Development Bank, the IMF, etc.

**Table 4.** Evolution of the overall balance of the State and the sources of its financing

Billion DA	2014	2016	2018	2019	2020	2021
Treasury balance	-3185.99	-2343.73	-2110.1	-1953.4	-1417.7	-1589.5
Public debt %	7.67%	22.9%	38.34%	45.8%	61%**	62.1
External debt in %	1.6%	3.29	3.4%	2.3%	2.1%**	0.1%
Evolution of sources of its financing In billion dinars						
Bank financing	18.67	232.63	1301.13	1547.06	1530.56	3414.3
Non-Bank financing	204.08	64.58	97.81	272.24	364.21	-1818.04
reserve regulation funds RRF	2965.67	1387.93	131.912	0	305.5	***
	93.08%	59.21%	6.25%	0%	21.54%	
Net external Loans	-2.43	100.75	-2.93	-1.75	-1.8	-6.7
National Loans for economic growth	-	557.82	-637.78	-157.93	-2.369	n.b
Total financing	3185.99	2343.73	2110.13	1953.4	2198.5	1589.6

**Source:** Established by the author from DGT/Ministries of Finance data in [www.mf.gov.dz](http://www.mf.gov.dz). \*Data taken from <http://fr.countryeconomy.com/gouvernement/dette/algerie>. \*\*IMF estimate. \*\*\*RRF data included in Bank financing.

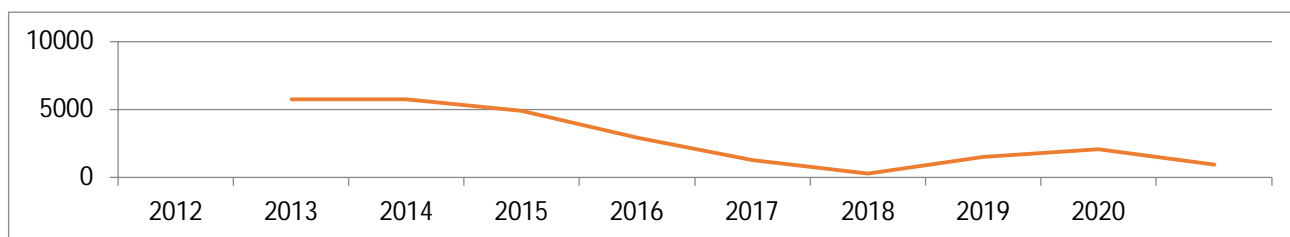
### 3.2. Quantitative easing as a solution for the contractions in monetary sphere

The weight of public debt and the bad circumstances surrounding the country have generated financial and monetary implications through the renewal of the relationship between the central bank and the state. Specialists have focused their attention on the role of the provisions of the Bank of Algeria to cushion deficits and risks arising from exceptional situations. With the tightening of

bank liquidity and the increase in public debt, the mobilization of resources through the central bank becomes the strongest imperative. Indeed, by exhausting all the lines of financing, in particular recoveries drawn from treasury assets placed on the credit current account, the use of unconventional finance becomes the tool to catch our breath.

Figure 3 testifies to this critical situation which brings back the assets of the State by way of an overhaul of the ice. In figure, State assets decreased by more than 74.3% between 2012 and 2018, i.e. 5743.05 billion dinars in 2012 against 2048.69 in 2018. With the onset of the COVID 19 pandemic, assets have strongly regressed by decreasing by more than half, i.e. 2048.69 billion dinars in 2019 against 901.21 billion dinars in September 2020. The intervention of the central bank as a lender of last resort is part of a quest for emergency liquidity through exceptional mechanisms. The power of the central bank is exercised by reinjection liquidity (central bank money). This power is inspired by its ability to set up special mechanisms that central banks use in times of crisis (Lavoie S., Sebastian A., 2011, p29). The fluctuations of the assets and liabilities of the balance sheet of the central bank of Algeria and its compositions reflect monetary and political considerations with the objective of guaranteeing the currency and its stability. In Algeria, the conduct of monetary policy is maintained by the deployment of market instruments relating to open market operations such as temporary withdrawals and disposals of liquidity by tender and indirect or off-market instruments by the rediscount policy, advances and repurchase agreements as well as the obligation to constitute compulsory reserves placed on the accounts opened on the books of the central bank. In a period of excess liquidity, as was the case from 2002 to 2016, the central bank resorted, in order to mop up liquidity, to instruments such as credit limits, liquidity withdrawal operations and deposit facility as well as the upward revision of the reserve requirement rate.

**Fig.3.** Treasury assets in credit current account in Bank of Algeria



**Source:** Established by the author from data taken from the monthly statements of the balance sheets of the Bank of Algeria in [www.bank-of-algeria.dz](http://www.bank-of-algeria.dz)

### **3.3. The conduct of a retracted monetary policy (by retracted rates) to counter the drying up of bank liquidity**

In times of crisis, particularly when liquidity is drying up, as has been the case since 2016, the conduct of monetary policy acts as a regulatory reinforcement stipulating measures to suspend liquidity absorption instruments. Indeed, regulatory measures have been taken to provide the economy with the liquidity that is essential for it to function properly. These are the regulatory texts promulgated in 2016 and the measures currently taken in the context of the crisis (COVID 19). By way of example, we cite:

- Instruction N° 02-2016 on rediscounting, instruction No. 06-2016 on open market operations and the instruction N°. 07-2016 on the marginal lending facility.
- The application from 2016 of article 53 ordinance 03-11 of the law of 08/26/2003.
- The application from 2016 of Article 45 Law n° 17-10.
- Instructions n° 02-2020, n° 06-2020, n° 09-2020 relating to the system of compulsory reserves, instructions n°. 05-2020, n° 10-2020 relating to exceptional relief measures for prudential provisions applicable to banking and financial institutions. The instruction n° 07-2020 relating to the director's interest rate and the instruction n° 08-2020 on open market operations.

The following table reflects the evolution of the intervention operations of the Bank of Algeria to meet the demand for central bank liquidity. Until 2016, intervention is based on maintaining instruments for absorbing surplus liquidity through open market operations such as liquidity withdrawals, standing facilities (the 24-hour interest-bearing deposit facility: introduced from 2011) and mandatory reserves (accounts of banks and financial institutions). The amount of interventions by the Bank of Algeria on the monetary market (recoveries of liquidity and deposit facility by tender) fell relatively between 2011 and 2014. It reduced from 2,373.19 billion dinars in 2011 to 1,771.4 in 2014. This decline relates to the decrease in the level of bank liquidity. Required reserves increased from 458.31 in 2010 to 934.56 billion dinars in 2014. This higher increase in money is explained by the increase in the rate of bond reserves from 9% in 2011 to 12%. From 2016, new measures were taken to remedy the banking liquidity crisis. These measures aimed to:

- The reactivation of the rediscount operations (instruction n° 02-2016): in accordance with article

45 law n° 17-10 (ordinance 03-11 of the law of 26/08/2003) which stipulates on authorizations to intervention of the Bank of Algeria on the monetary market through the purchase/sale of public or private securities eligible for rediscount or advances (in this case, purchases of public debts of the state). The amount of outstanding rediscounts increased sharply, bringing the amount in September 2018 to more than 4005 billion dinars then to 6556.2 billion dinars in September 2020, i.e. an increase of more than 63.7%.

- The suspension of liquidity withdrawals and abolition of the remuneration of the deposit facility (Instruction No. 06-2016). The amount of these operations has recorded since the 2016 instruction a nil amount except for the year 2018 which records the implementation of open market operations (recovery of liquidity of 200 billion dinars).

- The application of article 53 ordinance 03-11 which stipulates the intervention of the Bank of Algeria to make investments of its own funds in securities issued by the State. The application of this law in 2017 allowed the flow on the monetary market of central bank liquidity of 300 billion dinars. Since 2019, new measures have been taken to ensure the refinancing of banks and financial institutions. To deal with the health crisis, exceptional relief measures concerned some prudential provisions, namely:

- The minimum liquidity threshold which is reduced from 100% (instruction n° 11-4 24 May 2011) to 60% (n° 05-2020).

- Suspension of the obligation to constitute a safety cushion for banking and financial institutions.

- Downward revision of the reserve requirement rate from 8% in March 2020 to 6% in May and then to 3% from September. A reduction in the director's interest rate of 0.25%, i.e. a rate that goes from 3.25% to 3% and the setting of refinancing thresholds for securities issued as collateral.

In June 2021, the Bank of Algeria introduced a special refinancing program for banks to counter the drying up of liquidity by easing the prudential rules (cited above) and the refinancing capping policy introduced in 2021. These measures have made it possible to increase the liquidity of banks reaching in 2021, a level of 1331.93 billion dinars against 632.33 in 2020.

**Table 5.** Evolution of monetary policy instruments (billion dinars)

	2011	2012	2014	2016	2017	2018	2019	2020
Securities issued or guaranteed by the state:								
-Under article 53 ordonnance : 03-11	-	-	-	-	300	0	0	
-Under article 45 Law n° 17-10	-	-	-	-	4005	6556.2	6556.2	
Pension :	0	0	0	0	559.5	0	244.2	211.9
-public	0	0	0	0	557.5	0	216.2	211.9
-private	0	0	0	0	2.02	0	28	0
Accounts banks/others	458.3	1021	934.5	759.6	530.7	1114	1438	479.8
Liquidity recovery and deposit facility	2373	1836	1771	246.1	0	200	0	0

**Source:** Established by the author from data taken from the monthly statements of the balance sheets of the Bank of Algeria 2016 and 2021 balance sheets in [www.bank-of-algeria.dz](http://www.bank-of-algeria.dz).

#### 4. CONCLUSION

The COVID 19 pandemic has had negative impacts through its very widespread harmful magnitudes and its significant economic repercussions. This crisis has led to a decline in economic activity growth indicators and an increase in public debt. These findings are visible and can be seen at the level of malfunctioning affecting practically all sectors of economic activity.

At the macroeconomic level, the pandemic has disrupted the growth of the economy by breaking the cycle of its evolution. It has weakened the fundamentals of the markets by creating disruptions in the supply, production, distribution and consumption chains. It has amplified poverty by devaluing purchasing power. On the financial and monetary level, it exacerbated budgetary deficits by widening the gaps and it has exploded public debt by drying up the state coffers. The health crisis has revived old practices through the use of the power of the state bank and it has favored the monetary issues of yesteryear. It threatened confidence in banks and the functions that they manage. The resurgence of confirmed cases affected by the pandemic has prolonged health and economic measures and led the State to maneuver all the challenges of market laws. The return to the years of crisis appeals to the function of the welfare state which extends its policies of regulatory

competence to deflect the strongest blows. The virulence of the pandemic has raised major challenges for the State, which assimilates multitudes costs in relation to urgent responses which are proving to be very costly. The occurrence of this pandemic has affected the financial and monetary balance of Algeria. Consequently, under the effect of bad circumstances, in particular the fall in oil prices and the dwindling of foreign exchange reserves, the financial and monetary sphere was marked by the conduct of a retracted monetary policy by retracted rate and through:

- The suspension of liquidity withdrawals and abolition of the remuneration of the deposit facility as well as the reactivation of the rediscount operations.
- Quantitative and regulatory easing by easing prudential provisions such as the revision of the minimum liquidity threshold, the suspension of the obligation to constitute a safety cushion for banking and financial institutions, the downward revision of interest rates reserve requirements and the director's interest rate, etc.
- The establishment of a special refinancing program for banks and the establishment of a policy of capping refinancing in order to enhance the liquidity of banks reaching in 2020, nearly 633 billion dinars.



**5. Bibliography List:**

1. Business Academy Evidencia (2020), "ECONOMIC IMPACT OF CORONAVIRUS ON ALGERIAN COMPANIES" in <http://evidencia-academy.com/wp-content/uploads/2020/04/EVIDENCIA-PDF-COVID-v1.pdf>.
2. Cabinet Loyrette N (2010), "Business support measures", pp 1-4, in [guide.com](http://guide.com)
3. FDFA (2020), "Algeria Economic Report", pp 1-5 in <https://www.s-ge.com/sites/default/files/publication/free/rapport-economique-algerie-2020-08.pdf>
4. LYES C. (2020), "Algeria: The vertiginous figures of the impact of the Coronavirus on the economy", in <https://www.dzairdaily.com/algerie-chiffres-vertigineux-impact-coronavirus-sur-economie/>.
5. Lavoie S., Sebastian A. and Traclet V. (2011), "Lessons learned from the use of exceptional central bank liquidity mechanisms". Bank of Canada Review, P29.
6. United Nations and CEA (2020), "Rapid analysis of the socio-economic impact of Covid 19 on Algeria", P5.
7. IMF report (2020), "world economic outlook", p 132.
8. Bank of Algeria reports from 2010 to 2019.
9. Reports on the monthly situation of the Bank of Algeria from 2011 to 2020.
10. DGT/finance ministries report in [www.mf.gov.dz](http://www.mf.gov.dz)
11. Law of 26/08/2003, article 53 ordinance 03-11.
12. The law of 26/08/2003, article 45 Law n° 17-10.
13. Instruction No. 02-2016 on rediscounting.
14. Instruction No. 06-2016 of September 1 and 2016 on open market operations.
15. Instruction No. 07-2016 1 and September 2016 on the marginal lending facility.
16. Instructions n°02-2020 of April 29, 2020 relating to the system of minimum reserves.
17. Instruction No. 07-2020 of April 29, 2020 relating to the interest rate
18. Instruction No. 05-2020 of April 29, 2020 relating to exceptional relief measures for prudential provisions applicable to banking and financial institutions.
19. Instructions n°08-2020 of April 29, 2020 relating to open market operations.
20. Instructions n°09-2020 of September 14, 2020 relating to the system of minimum reserves.
21. Instruction No. 10-2020 of October 12 relating to exceptional relief measures for certain prudential provisions applicable to banking and financial institutions.
22. The complementary finance law for 2020 summarized by Algeria eco in [www.algerie-eco.com](http://www.algerie-eco.com).