

Impact of the Decline in Hydrocarbon Prices on the Macroeconomic and Macrosocial Balances of the Algerian Economy: The Urgency of a New Economic Policy

Dr Abderrahmane Mebtoul

University professor, international expert

Oil Prices in the Face of the New Global Energy Changes

As a result of unstable fossil fuel markets and the need to protect the environment and reduce gas emissions, countries around the world must review their energy strategies with a view to ending the hegemony of oil and gas. The energy transition – which could be defined as the shift from a human civilisation predominantly powered by cheap, abundant, dirty fossil fuel to one in which energy is scarce, renewable, expensive and cleaner – is intended to replace stock energies (oil, coal, gas, uranium) with flow energies (wind, solar). This poses the problem of a new growth model, as it affects all households and economic sectors, including transport, construction, industry and agriculture. Today's technical choices are long-term societal commitments. To ensure a coherent energy transition, it will be necessary to strengthen grid interconnections and optimize their management (smart grids) in order to facilitate energy efficiency, industrial development, and the shift towards a new growth model that fosters the emergence of an energy industry conducive to economic integration. In this context, national and international public-private partnerships should be established to promote competition, as monopolies inevitably result in higher costs.

The Impact of the Decline in Hydrocarbon Prices on Macroeconomic Balances: Trade Balance, Foreign-Exchange Reserves and Price of the Dinar

Overall, in 2016, Algeria had a foreign trade deficit of \$17.84 billion, 4.8% higher than that registered in 2015.

Algerian imports fell 9.62% compared to 2015. Hydrocarbons accounted for the bulk of exports in 2016, with a share of 93.84% of the total volume of exports.

Algeria's hydrocarbon sales totalled \$27.66 billion in 2016, with an average price per barrel of \$45. That is a decline of more than \$5 billion in one year, despite a 10.6% increase in the volumes exported, according to the Bank of Algeria. Due to this decline in receipts, especially Sonatrach's, tax revenue from oil fell to 1,805 billion dinars (down from 2,273.5 billion dinars in 2015). Total foreign exchange inflows between 2000 and 2016 stood at \$798.36 billion, of which more than 97% was directly or indirectly (derivatives) from hydrocarbons.

The level of external debt remains historically low, at 2.45% of GDP, or \$3.85 billion, according to data from the Bank of Algeria published on 12 April 2017. This is down from an estimated \$23.203 billion as of 31 December 2003. The estimated foreign-exchange reserves between 1999 and 2016, 97/98% of which come directly or indirectly from oil and gas receipts, were as follows:

The value of a currency depends on confidence and a productive economy. However, Algeria has a fun-

TABLE 12 Evolution of Oil Prices (in €/barrel)

2017	2016	2014	2013	2012	2011	2010	2009	2008	2007	2006
€51.60	€42.00	€50.50	€80.7	€83.8	€82.8	€69.4	€29.8	€51.4	€62.7	€47.1
2005	2004	2003	2002	2001	2000	1999	1998	1997	1994	
€48.00	€29.70	€24.20	€27.80	€20.9	€28.9	€25.1	€8.5	€15.6	€13.1	

Source: London Brent, London Stock Exchange.

TABLE 13 Imports, Exports and Hydrocarbon Exports

	Imports	Exports	Hydrocarbon exports
	Billions of dollars	Billions of dollars	Billions of dollars
2016	46.72	28.88	27.66
2015	51.50	37.38	32.70
2014	50.58	62.82	58.40
2013	55.02	64.97	63.75
2012	50.37	71.86	69.80
2011	47.27	73.48	71.43
2010	40.47	57.05	55.53
2009 (global crisis)	39.29	45.19	44.13
2008	39.47	79.29	77.36
2007	27.63	60.16	58.83
2006	21.45	54.61	53.43
2005	20.35	46.00	45.09
2004	18.30	32.08	31.30
2003	13.53	24.61	23.24
2002	12.00	18.82	18.09
2001	9.94	19.13	18.48
2000	9.17	22.03	21.41

Source: Customs statistics from the Algerian National Statistics Office (ONS) and the National Centre for Customs Statistics (CNIS) of the Algerian Ministry of Finance.

TABLE 14 Foreign Exchange Reserves and Price of the Dinar

	Level of Foreign Exchange Reserves	Price of the Dinar	
	Billions of dollars	Dinars per dollar	
1999	4.4		
2000	11.9		
2001	17.9	2001	77.29
2002	23.1	2002	79.68
2003	32.9	2003	77.39
2004	43.1	2004	72.66
2005	56.2	2005	73.35
2006	77.8	2006	72.64
2007	110.2	2007	69.37
2008	143.1	2008	64.58
2009	147.2	2009	72.63
2010	162.2	2010	74.39
2011	182.2	2011	72.85
2012	190.6	2012	77.55
2013	194.0	2013	79.38
2014	179.9	2014	80.52
2015	144.1	2015	100.46
2016	144.1		
2017 Feb.	109.0	2017 Feb.	110.25

Source: Bank of Algeria/IMF and ONS

TABLE 15

Evolution of Gross Domestic Product (GDP) at Current Prices and of the GDP Growth Rate

	GDP	GDP Growth Rate
	Billions of dollars	%
2000	3,698	4.1
2001	3,754	3.1
2002	4,023	5.8
2003	4,700	7.7
2004	5,545	4.5
2005	6,930	6.4
2006	7,823	1.5
2007	9,352	3.4
2008	11,043	2.0
2009	9,968	1.0
2010	11,991	3.3
2011	14,588	2.5
2012	16,808	3.2
2013	16,650	2.5
2014	17,242	3.7
2015	16,591	3.8

Source: ONS

TABLE 16

Population, Labour Force and Unemployment

Population		Labour Force		Unemployment Rate as % of Labour Force	
Year	Millions of inhabitants	Year	Millions	Year	%
1966	12.90	1990	6.27	2000	29.7
1970	13.30	1995	7.94	2001	27.3
1980	18.66	2001	8.56	2002	25.9
1990	25.02	2003	8.76	2003	23.7
2000	30.41	2004	9.47	2004	17.7
2005	32.90	2005	9.49	2005	15.3
2010	35.97	2006	10.11	2006	12.4
2013	39.21	2008	10.31	2007	11.8
2015	39.96	2009	10.54	2008	11.3
2016	41.20	2010	10.81	2009	10.2
2017	40.04	2011	10.66	2010	10.0
		2012	11.42	2011	9.8
		2013	11.93	2012	11.0
		2016	12.12	2013	9.8
				2014	10.6
				2015 (Sept.)	11.2
				2016 (Sept.)	10.5

Source: ONS

damentally rentier economy, and rentier economies contradict the basic laws of economics, whereby, for instance, any devaluation of the currency should, in principle, boost exports.

At the budgetary level, according to the IMF, in 2016 Algeria needed an oil price of \$87.6/barrel to balance its budget, down from \$109.8/barrel in 2015. This is consistent with the Bank of Algeria report presented by the bank's governor in late January 2017, according to which foreign-exchange reserves

fell \$29.9 billion between 2015 and 2016 and the country's external debt stood at \$3.3 billion. At this rate, the foreign-exchange reserves could melt away in three years. Thus, the Algerian dinar holds steady as a result of the foreign-exchange reserves from hydrocarbons. Any decline in the foreign-exchange reserves will automatically lead to a gradual devaluation of the dinar, as is the case of many large oil-producing countries. Were the foreign-exchange reserves to trend towards zero tomorrow, the gov-

ernment would be forced to sharply devalue the dinar (to 200 dinars per euro); the exchange rate on the parallel market would be 250 dinars per euro.

The Impact of the Decline in Hydrocarbon Prices on the Real Economy: GDP, Employment and Inflation

Evolution of Gross Domestic Product (GDP) at Current Prices

Algeria's nominal GDP stood at \$166 billion in 2016, down from \$172.3 billion in 2015, according to the IMF's projections in its report on the growth outlook for the Middle East-North Africa-Afghanistan-Pakistan (MENAP) region. Table 15 shows the evolution of the GDP growth rate (%) from 2000 to 2015.

The unemployment rate for university graduates climbed from 13.2% to 17.7%. Furthermore, the breakdown of unemployment by qualification held shows that the 44.9% of the total unemployed population, hold no qualification at all

This downward trend in the GDP deflator is mainly due to the changes in the export prices of hydrocarbon products and in the price of oil per barrel discussed above.

Impact on Employment

The basis of any socio-economic policy is to meet the needs of a population. The Algerian population is steadily growing. In 2016, the labour force reached 12.117 million people. The labour force refers to all people of working age available on the labour market, whether or not they are employed. The female labour force stood at 2,392,000, or 19.7% of the total labour force. The share of the population under the age of five continues to grow, having inched up from 11.6% to 11.7% between 2014 and

2015, as does the share under the age of 15, which increased from 28.4% to 28.8% over the same period. The female population of childbearing age (15-49 years old) has reached 10.8 million women.

According to the International Labour Organization, the status "unemployed" refers to those members of the workforce who are available for and seeking work but are unable to find it. Wage labour is the dominant form of employment, accounting for, on average, seven out of ten workers (69.7%). This share is considerably higher amongst women, standing at 77.5% vs 68.0% for men. The structure of employment by industry shows that the market and non-market services sectors account for 61% of the total workforce, followed by construction (17.5%), industry (13.5%) and, finally, agriculture (8%). The private sector absorbs 59.8% of total employment, with a volume of 6,490,000 workers, 158,000 more than in April 2016. Large disparities are found by gender, with female employment being concentrated mainly in the public sector (62.1% of all female employment).

Impact on Unemployment

From an economic perspective, unemployment is the result of a mismatch between supply and demand in the labour market. According to the ONS, in 2016, the unemployed population, as defined by the ILO, was estimated at 1,272,000 people, with a national unemployment rate of 10.5%. The employed population was estimated at 10.845 million people in September 2016. Of the 1.271 million unemployed, 792,000 were men and 479,000 women. By gender, unemployment is higher amongst women (20%) than men (8.1%). Unemployment amongst young people between the ages of 16 and 24 is 26.7%. Significant disparities can be found by age, education and qualification held. The evolution of unemployment by level of educational attainment shows that the registered increase has been fairly pronounced amongst university graduates. The unemployment rate amongst unskilled labour fell from 8.3% to 7.7% between April and September 2016. The rate for university graduates climbed from 13.2% to 17.7%. Furthermore, the breakdown of unemployment by qualification held shows that 570,000 unemployed, or 44.9% of the total unemployed population, hold no qualification at all. Holders of vocational

TABLE 17 Evolution of Inflation and Income

	Inflation	Wage Bill	Income of the Self-Employed	Per-capita Income
		%	Billions of dinars	Dinars
2000	2.0			
2001	3.0	970	1,148	136,892
2002	3.0	1,048	1,206	114,235
2003	3.5	1,138	1,356	164,918
2004	3.1	1,278	1,527	189,998
2005	1.9	1,364	1,673	229,805
2006	3.0	1,498	1,862	253,924
2007	3.5	1,722	2,017	274,310
2008	4.5	2,134	2,340	319,265
2009	5.7	2,355	2,743	282,636
2010	5.0	2,907	3,049	333,302
2011	4.5	3,863	3,487	397,323
2012	8.9	4,287	4,007	432,289
2013	3.3	4,391	4,569	434,764
2014	2.9	4,674	4,955	440,828
2015	4.8	4,928	5,293	415,180
December 2016	6.4			

TABLE 18 Total Wage Bill as Share of GDP

Year	2001	2005	2010	2011	2012	2013	2014	2015
Total wage bill as share of GDP (%)	22.94	18.03	25.97	26.48	26.44	26.53	27.11	29.70

qualifications account for 27% of the unemployed population, whilst university graduates account for 28.2%. Meanwhile, in September 2016, the population defined as falling within the “unemployment halo” stood at 797,000 people. This population is characterized by its low level of educational attainment; 68.8% hold no qualification, whilst 61.3% have not gone beyond secondary school. However, the survey’s most important finding was that 71.6% of the unemployed accept jobs below their professional skill level, 68.4% accept jobs that do not match their profile, 28.7% accept tedious or strenuous jobs, and 73.1% accept poorly paid ones.

Impact on Inflation

Inflation accelerates the excessive concentration of national income in the hands of a rentier minority to the detriment of productive profits and fixed incomes, with the consequent erosion of the purchasing power of the majority. The question is thus: how can an Algerian living on the guaranteed national minimum wage (€200-250 a month when a kilo of meat costs €10) cover his or her

essential expenses, i.e. food, transport, health-care and education? With the housing crisis, the family unit (pooled costs) and the informal economy act as temporary safety valves. To guard against this depreciation, which inevitably leads to inflation and, thus, a weaker dinar, Algerians not only put their assets in land, real estate or gold, but also put some of their savings in foreign currencies. This is a security-based choice in a country in which the evolution of oil prices plays a decisive role.

What about Per Capita Income?

According to the ONS, by late 2015, the average monthly net salary, understood as gross salary less the various withholdings (income tax, social security and pension), was 37,800 dinars, with relatively high wage differentials depending on skill and industry for activities linked to hydrocarbons and banking compared to the national average. This is because per capita income, as well as per capita GNP, is an overall rate that blurs the concentration of national income. Without the poorly targeted

and poorly managed subsidies, which benefit the poorest in equal measure as the rich and encourage trafficking at the borders, making Algeria one of the world's largest importers of grains, thanks to hydrocarbons, inflation would be much higher than the official rate. Of course, the perception of inflation is different for a household receiving the guaranteed national minimum wage of about €200, which must spend more than 70% of its modest income on basic necessities, than for a household with a net monthly income of €10,000 or more.

General Conclusions

The future actions of the Algerian government that call for political and social consensus will require the courage to reform quickly and on a massive scale. Far from mere cyclical patches, this will mean deep structural reforms at all levels in keeping with a strategic medium- and long-term vision. Algeria can accomplish this within a reasonable amount of time. To do so, it must relearn to look to its future with confidence, to secure in order to protect, to prefer risk to rent, and to unleash initiative, competition and innovation, for the main challenge facing the country in the 20th century will be time. Putting off the reforms will only lead to slow disintegration, impoverishment, and a loss of confidence in the future, for once the oil and gas revenues dry up, Algeria will no longer have the means to prepare these reforms and will live under the grip of fear, seeing threats all around where others see opportunities. This growth requires everyone to commit, not just the government. Solidarity should be organized to combine economic efficiency and equity with civic engagement and permanent productive dialogue.

Putting off the reforms will only lead to slow disintegration, impoverishment, and a loss of confidence in the future

Algerian power has long lived under the illusion of eternal rent. The majority of Algerians, whose income depends more than 70% on rents from oil and

gas, must know that the future of employment and their purchasing power no longer lies in the civil service, just as that of companies no longer lies in recurring subsidies. The bulk of the action is in the hands of Algerians, who will have to want change and share a desire for the future, to learn more, adapt, work more and better, create, share and dare. The nature of power must also change. This will require a gradual overhaul of the government through a true decentralization around major regional economic hubs, which, in turn, will involve a transition from a management state to a regulatory state, reconciling social costs with private ones. To be part of global growth, Algeria will have to create a true growth economy, developing the entire population's knowledge, from computer skills to teamwork, from Arabic and French to Chinese and English, from primary school to higher education, from nursery to research. It will then have to facilitate business competition, creation and growth by introducing modern means of financing, reducing the cost of labour and simplifying employment rules. It will have to foster the development of key new sectors, including digital, healthcare, biotech, environmental industries, and personal services for an aging population. At the same time, it will need to lay the conditions for social, geographic and competitive mobility, to enable everyone to work better and more, to change jobs more easily and with greater security. To successfully carry out these reforms, the state and local authorities will need to be dramatically reformed as well.

Algeria has been experiencing a crisis of governance for decades, if the structural reforms are slowed, the current governance crisis is likely to morph into a financial crisis by 2018/2020

Algeria has been experiencing a crisis of governance for decades. However, the current situation is different from the impact of the 1986 crisis, which had economic, social and political repercussions between 1989 and 1999. Despite the country's considerable, albeit declining, foreign exchange re-

serves, if the structural reforms are slowed, the current governance crisis is likely to morph into a financial crisis by 2018/2020.

Algeria, which could become a pivotal and stabilizing country for the Mediterranean and African region, must adapt to the new global changes

In spite of the unprecedented monetary expenditures, economic performance is mixed and could lead to socio-political crises in the long run should spending continue unchecked, which points to the urgency and inevitability of the structural changes to be made. Algeria can once again see strong growth, but it will involve a combination of factors: a dynamic labour force, knowledge, a taste for risk and the latest technological innovations, resistance to any form of harmful monopoly, effective competition, a renewed financial system capable of attracting capital and an opening up to the outside world. These reforms are primarily driven by a thriving democracy, legal stability and equity: politicians will talk of social justice. The implementation of all these reforms

cannot be delegated to any particular minister or placed in the hands of any particular authority. They will only be possible if, at the highest level of government, a strong political will (which can only emanate from the President of the Republic and the Prime Minister) is able to lead Algerians and convince them of their importance; hence, the need, in the Internet age, for active, transparent and permanent communication. Each minister will then need to be given a personal “roadmap,” supplementing his or her letter of appointment and covering all the decisions falling under his or her jurisdiction. Given the importance of the measures to be taken and the urgency of the situation, the government will have to choose the most appropriate means of implementing each decision: the acceleration of existing projects and initiatives, a law accompanied, from the moment it is presented to Parliament, by the implementing decrees needed to enact it, or, for emergencies only, the use of decisions by order. Algeria, which could become a pivotal and stabilizing country for the Mediterranean and African region, must adapt to the new global changes by analysing the impacts of the Association Agreement with Europe, which entered into force on 1 September 2005, and its eventual accession to the World Trade Organization (WTO), and by integrating itself into the Maghreb, the bridge between Europe and Africa, its natural social space.