ECO CONJONCTURE



19 July 2022 N°4

ALGERIA: A WINDOW OF OPPORTUNITY NOT TO BE MISSED

Stéphane Alby

The economy of Algeria was already in a precarious position in 2020 when it had to cope with the double shock of the Covid-19 pandemic and lower hydrocarbon prices. Since then, the situation has improved thanks to the rise in global oil prices and strong demand for gas in Europe. For the first time since 2014, the country should be able to post current account surpluses in 2022-2023, and then accumulate FX reserves. The risk of a balance of payments crisis in the short term is receding. But macroeconomic stability remains fragile as prospects for recovery are modest and public finances are structurally in deficit. The implementation of reforms is a priority to prevent economic troubles in the event of a new oil shock.

A MODEST ECONOMIC REBOUND MACROECONOMIC STABILITY: IN THE SHORT TERM

STILL FRAGILE

BANKING SECTOR: UNDER SURVEILLANCE

MEDIUM-TERM OUTLOOK: UNCERTAINTY ABOUNDS

ECONOMIC RESEARCH



The bank for a changing world

ALGERIA: A WINDOW OF OPPORTUNITY NOT TO BE MISSED

2

ALGERIA: A WINDOW OF OPPORTUNITY NOT TO BE MISSED

The economy of Algeria was already in a precarious position in 2020 when it had to cope with the double shock of the Covid-19 pandemic and lower hydrocarbon prices. Since then, the situation has improved thanks to the rise in global oil prices and strong demand for gas in Europe. For the first time since 2014, the country should be able to post current account surpluses in 2022-2023, and then accumulate FX reserves. The risk of a balance of payments crisis in the short term is receding. But macroeconomic stability remains fragile as prospects for recovery are modest and public finances are structurally in deficit. The implementation of reforms is a priority to prevent economic troubles in the event of a new oil shock.

After several years of low economic growth and macroeconomic imbalances (budgetary and current account deficits, inflation partly due to monetary factors), the outlook improves somewhat. The country benefits from high global oil prices and the strong demand for gas in Europe. Algeria is effectively seen as an obvious alternative to Europe's waning dependence on Russian supply of fossil fuels thanks to its proximity to the continent and its vast untapped reserves. Hydrocarbon exports (which account for almost the totality of the country's exports) are forecasted to reach more than USD50bn over the next two years, up from USD32bn in 2021 and just USD20bn in 2020 (chart 1). The last time oil & gas exports reached such a high level was in 2014. Fiscal pressure will also ease since hydrocarbon receipts account for more than 40% of government revenues. However, Algeria is expected to perform modestly compared with other hydrocarbon producers in the MENA region. Above all, the IMF still sees a bearish MLT outlook, underlining once again the necessity to launch structural reforms. But the ease in macroeconomic pressure could make them less urgent to

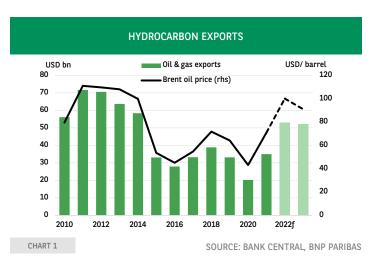
A modest economic rebound in the short term

The growth outlook in 2022-2023 has been revised upward to take into account the planned rise in government expenditures (especially public investment) and a rebound in energy investment. Growth is now expected to be 3.4% in 2022 and 2.5% in 2023 against initial forecasts of 2.5% and 2% respectively. The economic expansion should slightly exceed the pre-Covid growth (+2.1% on average between 2015 and 2019). But this would remain below the growth rate of other hydrocarbon producers in the MENA region expected to be 5.4% on average in 2022 and 3% in 2023 (chart 2). Even on the non-hydrocarbon side, Algeria's performance would be modest compared with its regional peers.

A weakened economy

The economy was in a poor position to cope with the double shocks of the pandemic and the slump in global oil prices in 2020. Low economic growth in 2017-19 caused real GDP per capita in PPP to return to its 2014 level. Since 2021, the recovery has been incomplete as it is driven mainly by the marked rise in the hydrocarbon GDP (+9%). Outside the hydrocarbon sector, growth reached 2.4% in 2021 after the 3.9% recession in 2020. According to the IMF, the unemployment rate stood at 13.4% in 2021, down from the peak of 14.7% reached in 2020 but still two points higher than its 2019 level. Strong inflationary pressures (see below) and the difficult situation on the labour market will inevitably weigh on households' consumption (48% of GDP in 2020).

Credit growth to the private sector is still subdued at 3% on average since the beginning of 2022, i.e. below non-food inflation (chart 3), despite accommodative measures put in place by the central bank. Unlike several countries in the world, Algeria has decided to keep the



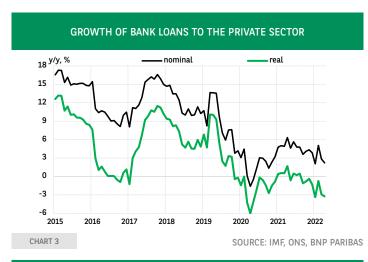


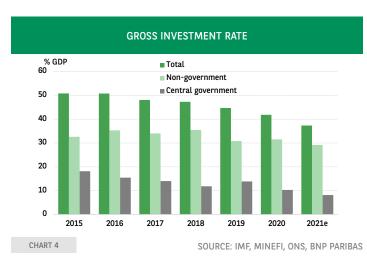
key policy rate at 3% after having cut it three times during the pandemic (from 3.75%). However, in a context of weak demand for credit, banks are also reluctant to lend due to the broad deterioration of their balance sheet and crowding out effect due to massive Treasury financing needs.

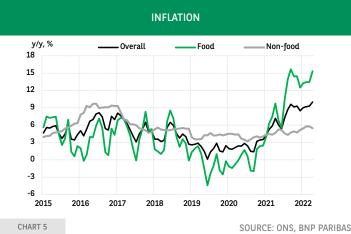
Moreover, the gross investment rate has fallen by more than 10 points over the past 5 years (*chart 4*). At 37.3% in 2021, it even reached a level not seen since 2008. The fall includes government and non-government investment. In absence of investment, the knock-on effects of the expansionist fiscal policy are now weak.













Unfavorable price dynamics

Inflation accelerated markedly in 2021, driven by a combination of factors, including a drought episode, the exchange rate depreciation and restrictions on imports. The rise in the consumer price index (CPI) reached 10% y-o-y in April 2022 due to the 15.3% increase in food prices (chart 5). Price pressure will remain strong in the coming months given the country's structural reliance on imports, the heavy weight of food in the consumer basket (chart 6), and the weak dinar (see External position).

Fortunately, Algeria is not highly dependent on Russia and Ukraine for imports. Only 7% of its cereal imports in 2021 came from these two countries against more than 40% for Egypt and Tunisia. Moreover, domestic petrol prices are still among the lowest in the world, and the marked rise in hydrocarbon revenue will provide the fiscal space for increasing food subsidies.

However, supply disruptions and the rise in international commodity prices due to the conflict in Ukraine are likely to pass through to consumers. Only 30-35% of Algeria's wheat needs are covered by domestic production for example. The steady acceleration in non-food prices from 4.4% in early 2021 to 5.5% currently also suggests that price pressures are becoming broad based. At this stage, we see inflation averaging 8.6% in 2022 and 8% in 2023, up from 7.2% in 2021.

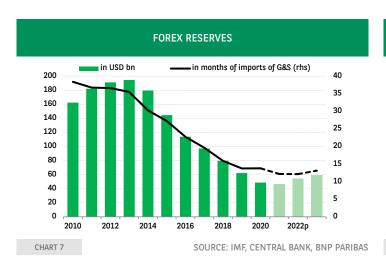
A more pronounced rise cannot be ruled out. Apart from extending fiscal measures, tools to fight inflation are limited given the country's level of financial intermediation.

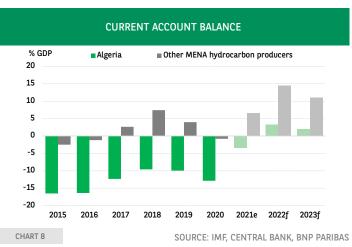
Macroeconomic stability: still fragile External position: pressure easing

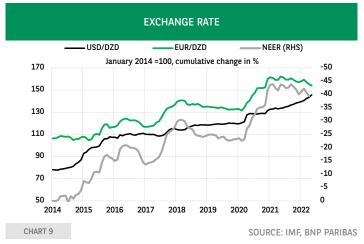
After almost a decade of current account deficits, Algeria' external accounts have been improving markedly thanks to the rise in hydrocarbon exports. The trade balance is in surplus since Q22021 and the current account since Q32021, which has helped to stop the worrisome erosion of external liquidity. Barring a new downturn in global oil prices, this positive dynamic is likely to continue over the next two years, at least. FX reserves could thus reach USD60bn at end-2023, up from USD46bn currently (chart 7). The import coverage ratio should thus remain comfortable, above one year. However, FX reserves should remain well below their peak of almost USD200bn (35 months of imports of G&S) reached at end-2013. Furthermore, the current account surplus will remain contained between 2-3% of GDP in 2022-2023 while 7 of the 9 other hydrocarbon producers in the region should register double-digit current account surpluses in 2022, which for some of them will amount to nearly 20% of GDP (chart 8).

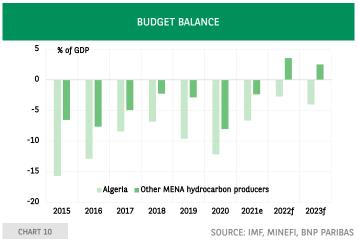












Since food accounts for 18-20% of total imports, the rise in global agricultural commodity prices will inflate imports. Besides, given the high import content of public spending, especially public investment, the expansionist fiscal policy along with the intensification of hydrocarbon projects will also negatively affect external accounts. Despite their marked decline since 2015, imports of industrial equipment still account for ¼ of total imports.

All in all, the risk of a BoP crisis has reduced in the short term. Algeria is not exposed to global financial turmoil (external debt and foreign portfolio investments are negligible). But external fundamentals remain weak due to the country's overreliance on hydrocarbon exports and the scarcity of external financing sources (FDIs rarely exceed 1% of GDP due to Algeria's poor business climate). The narrow industrial base also makes imports difficult to compress.

Various measures have been introduced by the authorities since 2015 to limit imports through quotas, non-tariff barriers and currency depreciation. At first sight, these measures have been effective. Imports were reduced from USD60bn in 2014 to just USD35bn in 2020 before to slightly rise to USD38bn in 2021 (estimates). But the policy of import compression is a double-edged sword. 2/3rds of the fall in imports between 2014 and 2020 came from the decline in imports of capital and non-food consumer goods, with negative effects on investment and inflation.

The monetary authorities seem to prioritise a controlled depreciation of the exchange rate. Though the current account has been back into surplus, the DZD continues to weaken against the USD, albeit more slowly in recent months, and remains at a historic low against the euro (chart 9). A large differential on the parallel market also persists (35-40%) despite the almost 40% depreciation of nominal effective exchange rate since 2014. Since import substitution by local production appears to be a distant possibility in the short term, any strengthening of economic activity (even modest) will inevitably come with higher imports, which in turn will continue to put pressure on the DZD.

Public finances: still in the red

The fiscal situation is even more fragile. Despite the rise in hydrocarbon revenues, Algeria is likely to continue to run budget deficits of between 3-4% of GDP in 2022-23 (chart 10). Obviously, this would mark a considerable improvement compared with the budgetary shortages recorded in 2014-2021 (10% of GDP). Financing constraints will also ease. Since the depletion of the oil stabilization fund in 2017, the Treasury had found it difficult to meet its large financing needs due to a narrow domestic debt market. Thus, between 2017 and 2019, the budget was financed through a massive program of debt purchase by the central bank (32% of GDP). In 2020, the budget deficit was mostly financed by drawing on deposits of the government and public en-





terprises. Then in mid-2021, the central bank implemented a special 12-month refinancing program for both the Treasury and state-owned banks that amounted to 9.8% of GDP. The goal was to meet the state budget funding needs and to improve the lending capacity of banks. In counterpart of debt repurchases of public enterprise in difficulties by the Treasury, state-owned banks involved in the program have invested most of their funds obtained from the central bank in long-term treasuries issued below market rates. Further direct or indirect debt monetization should not be necessary in the short term. However, these operations have resulted in transferring the credit risk supported by public banks to the Treasury, even if the latter has benefited from financing cost at below market rates.

Algeria will be the sole hydrocarbon producer (along with Bahrain and Iran) in the MENA region not to rebalance its fiscal accounts in 2022-23, pointing to the structural weakness of public finances.

Unlike regional peers, spending will increase markedly in 2022 due to the acceleration in public investment program (+27% according to the financing bill) and the heavy cost of social transfers (estimated at 12-15% of GDP when the implicit oil subsidy is included). Moreover, most of fiscal consolidation measures introduced in the budget have been abandoned less than two months after their promulgation. Increases in taxes on several consumer goods and the implementation of new levies have been frozen. Above all, the deep reform of the subsidy system does not look in the pipe for the moment.

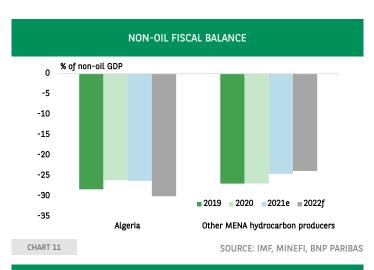
Fiscal consolidation is a long-term process requiring gradual but sustained efforts. Once again, the fiscal policy stance is highly pro-cyclical, which does not help to put the economy in a better position to cope with future oil shocks. Non-oil fiscal balance should widen in 2022 relative to that of 2021 and 2019, keeping again Algeria into a weak position compared with its regional peers (chart 11).

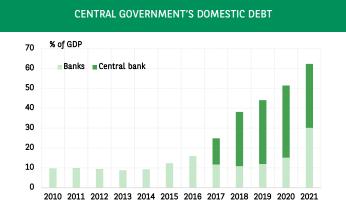
The central government's debt will decrease slightly but remain high at about 60% of GDP in 2022-23 against 9% in 2014. The situation is manageable in the short term. The central government's debt is fundamentally captive. It is almost entirely owed by the central bank and local banks (chart 12) and has long-term maturities and very low cost (interest burden is below 1% of GDP) thanks to successive direct and indirect debt monetization programs. However, such a financing strategy is not sustainable should large budget deficits reappear. Fortunately, recourse to external borrowing seems still to be excluded despite some signs of greater openness, which means that external debt will remain negligible.

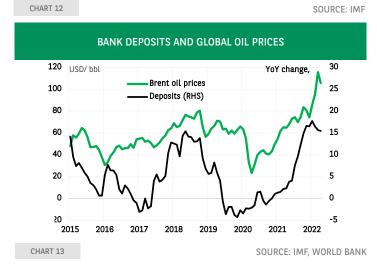
Banking sector: under surveillance

Given the economic importance of the hydrocarbon sector, the rise in global oil prices also provides a welcome respite for the banking system. Liquidity pressure has already eased markedly. After two difficult years, bank deposits have rebounded well since mid-2021 (+15% YoY in February 2022; *chart 13*) to cover now 127% of loans against less than 100% in 2019-2020.

However, the improvement in the liquidity ratio must be kept into perspective. In addition to the marked rise in hydrocarbon receipts, this mainly reflects the Treasury's massive repurchases of SOEs' debt under the special refinancing program put in place in July 2021. Since then, bank loans to public enterprises were down by 23%, leading to a 11% contraction of all loans to the economy given their large share in total loans.



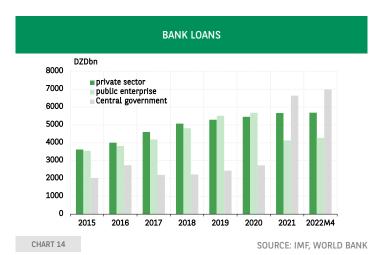




Moreover, banks involved in the program have invested most of their funds in Treasury securities. Consequently, links between the banking system and the State are traditionally strong and have strengthened further. The direct exposure of banks to the central government rose from 20% of total loans at end-2020 to 41% currently.







The combination of loans allocated to public enterprises and the government now account for 2/3rds of total loans, up from 60% over the past decade. Given the country's fragile fiscal position, this rising exposure is a structural weakness for the stability of the banking system even though short-term risk has decreased thanks to the hydrocarbon windfall.

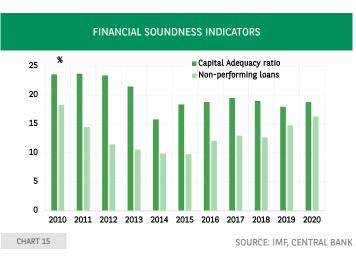
Another source of weakness is the poor quality of loan portfolios. The rate of non-performing loans which increased markedly in 2019 due to political turmoil deteriorated further in 2020 to reach 16.3% (chart 15). The situation is unlikely to have improved in 2021 due to the uneven economic recovery. Banks are sufficiently capitalized (CAR is 18.8%) to support the rise in credit risk. However, the deterioration in banks' balance sheets in the past few years should continue to constrain the lending capacity to the private sector.

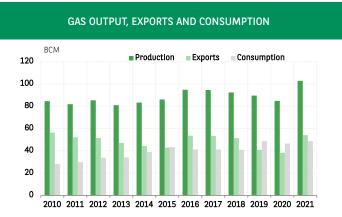
Medium-term outlook: uncertainty abounds

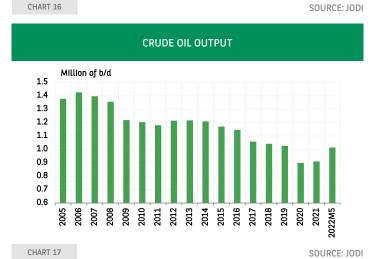
According to the IMF, the medium-term outlook is bleak. Following its modest impulse in 2022-23 thanks to higher hydrocarbon exports and revenues, growth is expected to decelerate thereafter to below 2%. This would imply a quasi-stagnation in real GDP per capita from 2024. The point of view of the World Bank is quite similar, the two institutions emphasising the gradual decline in hydrocarbon production as a key constraining factor. There is a renewed interest of European countries in Algeria's gas, but structural challenges are significant, for both the hydrocarbon and the non-hydrocarbon sectors.

Hydrocarbon sector: between hope and reality

Whether or not Algeria will be able to tap its vast hydrocarbon reserves is a key question that could have many ramifications for the country's economic development in the MLT. The current context looks propitious for that. Algeria is already the third biggest supplier of gas for Europe. The country benefits from its strategic location and existing gas pipeline connections to Italy and Spain with spare capacity, including for LNG. The country is a serious candidate to benefit from Europe's efforts to wean itself off Russian gas. In 2021, Algeria's production soared to a record 103bcm last year on the back of a slew of new projects that have pushed its total gas exports to an 11-year high of 54bcm (chart 16). But gas exports in Q1 2022 (14.7bcm) were broadly the same level as in Q1 2021. Strong domestic demand continues to weigh heavily on volumes available for export. Only half of gas output was exported in Q1 2022 against two-thirds in 2010.







Regarding crude oil production, after having fallen to just 900,000 b/d in 2020, production has gradually risen in line with the OPEC+ policy. At 1mn b/d in April 2022, output has now returned to its pre-pandemic levels (chart 17). The country will be permitted to produce and additional 11,000 b/d in June and 17,000 b/d in July. At this level, Algeria should be able to meet its commitments. But as with gas, questions





about its production capacity beyond recent increases are likely to emerge rapidly.

Many years of lack of effective investment in the country's downstream sector, especially from IOCs, and the decline in the productivity of maturing oilfields have resulted in a marked decline in crude oil production since its peak of 1,4mn b/d reached in 2006. Several new developments are in the pipe, but it is difficult to say whether they will be enough to sustain output, or even stabilize it durably.

Main hope for the authorities is now resting on the country's new hydrocarbon law that is supposed to provide more attractive fiscal conditions. The Italian firm ENI is the first of the IOCs to have signed an agreement under the new terms, but others are likely to follow in the current context. However, results should be effective only in the long term. Furthermore, attracting foreign investors will also require the removal of several constraints that go beyond better fiscal terms (red tape, slow decision-making). Last but not least, Algeria remains one of the worst performers among hydrocarbon producers with regard to gas greenhouse emissions, which could constitute another impediment to attracting LT European investment even if gas is supposed to play an important role during the energy transition. Significant potential for the production of green hydrogen energy (using solar energy), part of which could be exported via existing pipelines, also constitutes a positive factor.

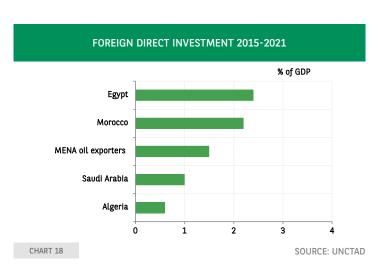
Non-hydrocarbon sector: no time to lose.

Improving the business climate is also a necessity to foster economic diversification. The task will be daunting. The private sector is small, dominated by low-productivity activities (manufacturing accounts for just 6% of the private sector's total value-added), and its development is hampered by a heavy regulatory burden, extensive control of public enterprises in key sectors and a restrictive environment for foreign investors

In response to its wider challenges, the government developed an action plan in late 2021 that is supposed to make the transition to private sector-led growth and prioritize the development of a job creation model. This follows some progress at the legislative level such as the end of the "51/49 rule" whereby foreign investors were forced to accept a majority stake partner in strategic sectors. A new investment law is also close to coming into force. One of its main goals is to develop high value added sectors by ramping up foreign investment that has been desperately low for many years (chart 18). These decisions are going into the right direction. However, much will depend on how reforms will be effectively implemented.

Conclusion

The current context (marked rise in global oil prices) provides the authorities with an unexpected window of opportunity. Moreover, Algeria's strategic profile (European countries are in search of an alternative to Russian gas) raises hopes that foreign investors regain interest for the country. The resulting benefits could go beyond the hydrocarbon sector. But consequences of the conflict in Ukraine also bring risks. Algeria is vulnerable to the current shock on commodity prices due to its structural dependence on imports. Inflationary pressures, already strong in 2021, will persist in the coming months, threatening the recovery of an economy still convalescing and whose short-term performances will be modest compared with other hydrocarbon producers in the region.



Above all, the authorities may decide to postpone delicate reforms as the removal of most of the consolidation measures enacted in the 2022 budget seems to indicate. Yet, there is pressing need to remove barriers that weigh on growth potential and economic diversification, which is critical to make the economy more resilient to cope with new oil shocks in the future. Otherwise, the windfall effect could be short-lived.

Completed on 22/06/2022

stephane.alby@bnpparibas.com



GROUP ECONOMIC RESEARCH

| William De Vijlder Chief Economist | +33 1 55 77 47 31 | william.devijlder@bnpparibas.com |
|--|-------------------|---|
| OECD ECONOMIES AND STATISTICS | | |
| Hélène Baudchon Head - Eurozone - Climate | +33 1 58 16 03 63 | helene.baudchon@bnpparibas.com |
| Felix Berte United States, United Kingdom | +33 1 40 14 01 42 | felix.berte@bnpparibas.com |
| Stéphane Colliac France | +33 1 42 98 43 86 | stephane.colliac@bnpparibas.com |
| Guillaume Derrien Southern Europe, Japan - International trade | +33 1 55 77 71 89 | guillaume.a.derrien@bnpparibas.com |
| Anthony Morlet-Lavidalie Germany, Northern Europe | +33 1 53 31 59 14 | anthony.morletlavidalie@bnpparibas.com |
| Veary Bou, Tarik Rharrab Statistics | | |
| ECONOMIC PROJECTIONS, RELATIONSHIP WITH THE FRENC | CH NETWORK | |
| Jean-Luc Proutat Head | +33 1 58 16 73 32 | jean-luc.proutat@bnpparibas.com |
| BANKING ECONOMICS | | |
| Laurent Quignon Head | +33 1 42 98 56 54 | laurent.quignon@bnpparibas.com |
| Céline Choulet | +33 1 43 16 95 54 | celine.choulet@bnpparibas.com |
| Thomas Humblot | +33 1 40 14 30 77 | thomas.humblot@bnpparibas.com |
| EMERGING ECONOMIES AND COUNTRY RISK | | |
| François Faure Head - Argentina, Turkey - Methodology, Modelling | +33 1 42 98 79 82 | francois.faure@bnpparibas.com |
| Christine Peltier Deputy Head – Greater China, Vietnam – Methodology | +33 1 42 98 56 27 | christine.peltier@bnpparibas.com |
| Stéphane Alby Africa (French-speaking countries) | +33 1 42 98 02 04 | stephane.alby@bnpparibas.com |
| Pascal Devaux Middle East, Balkan countries | +33 1 43 16 95 51 | pascal.devaux@bnpparibas.com |
| Hélène Drouot South Korea, Philippines, Thailand, Andean countries | +33 1 42 98 33 00 | helene.drouot@bnpparibas.com |
| Perrine Guérin South Africa & English/Portuguese-speaking African countries | +33 1 42 98 43 86 | perrine.guerin@bnpparibas.com |
| Salim Hammad Latin America | +33 1 42 98 74 26 | salim.hammad@bnpparibas.com |
| Cynthia Kalasopatan Antoine Ukraine, Central European countries | +33 1 53 31 59 32 | cynthia.kalasopatanantoine@bnpparibas.con |
| Johanna Melka India, South Asia, Russia, Kazakhstan | +33 1 58 16 05 84 | johanna.melka@bnpparibas.com |
| CONTACT MEDIA | | |
| Mickaelle Fils Marie-Luce | +33 1 42 98 48 59 | mickaelle.filsmarie-luce@bnpparibas.com |



GROUP ECONOMIC RESEARCH



CONJONCTURE

Structural or thematic topics.



EMERGING

Analyses and forecasts for a selection of emerging economies.



PERSPECTIVES

Analyses and forecasts with a focus on developed countries.



ECOFLASH

Data releases, major economic events.



ECOWEEK

Recent economic and policy developments, data comments, economic calendar, forecasts.



A monthly video with interviews of our economists.



ECOTY WEEK

A weekly video discussing the main event of



MACROWAVES

Our economic podcast.



Published by BNP PARIBAS Economic Research

Head office: 16 boulevard des Italiens - 75009 Paris France / Phone: +33 (0) 1.42.98.12.34 Internet: www.group.bnpparibas.com - www.economic-research.bnpparibas.com

Head of publication: Jean Lemierre / Chief editor: William De Vijlder

The information and opinions contained in this report have been obtained from, or are based on, public sources believed to be reliable, but no representation or warranty, express or implied, is made that such information is accurate, complete or up to date and it should not be relied upon as such. This report does not constitute an offer or solicitation to buy or sell any securities or other investment. It does not constitute investment advice, nor financial research or analysis. Information and opinions contained in the report are not to be relied upon as authoritative or taken in substitution for the exercise of judgement by any recipient; they are subject to change without notice and not intended to provide the sole basis of any evaluation of the instruments discussed herein. Any reference to past performance should not be taken as an indication of future performance. To the fullest extent permitted by law, no BNP Paribas group company accepts any liability whatsoever (including in negligence) for any direct or consequential loss arising from any use of or reliance on material contained in this report. All estimates and opinions included in this report are made as of the date of this report. Unless otherwise indicated in this report may make a market in, or may, as principal or agent, buy or sell securities of any issuer or person mentioned in this report are preson mentioned in this report, including a long or short position in their securities and/or options, futures or other derivative instruments based thereon. Prices, yields and other similar information included in this report, are included for information purposes. Numerous factors will affect market pricing and there is no certainty that transactions could be executed at these prices. BNP Paribas, including its officers and employees may serve or have served as an officer, director or in an advisory capacity for any person mentioned in this report. BNP Paribas may be a party to an agreement with any person referred to in this report. BNP Paribas may The information and opinions contained in this report have been obtained from, or are based on. to verify its factual accuracy.

BNP Paribas is incorporated in France with limited liability. Registered Office 16 Boulevard des Italiens, 75009 Paris. This report was produced by a BNP Paribas group company. This report is for the use of intended recipients and may not be reproduced (in whole or in part) or delivered or transmitted to any other person without the prior written consent of BNP Paribas. By accepting this document you agree to be bound by the foregoing limitations.

Certain countries within the European Economic Area:

This report has been approved for publication in the United Kingdom by BNP Paribas London Branch. BNP Paribas London Branch. BNP Paribas London Branch is authorised and supervised by the Autorité de Contrôle Prudentiel and authorised and subject to limited regulation by the Financial Services Authority. Details of the extent of our authorisation and regulation by the Financial Services Authority are available from us on request.

This report has been approved for publication in France by BNP Paribas SA. BNP Paribas SA is incorporated in France with Limited Liability and is authorised by the Autorité de Contrôle Prudentiel (ACP) and regulated by the Autorité des Marchés Financiers (AMF). Its head office is 16, boulevard des Italiens 75009 Paris, France.

16, boulevard des Italiens 75009 Paris, France.

This report is being distributed in Germany either by BNP Paribas London Branch or by BNP Paribas Nederlassung Frankfurt am Main, a branch of BNP Paribas SA. whose head office is in Paris, France. BNP Paribas SA. - Niederlassung Frankfurt am Main, Europa Allee 12, 60327 Frankfurt is authorised and supervised by the Autorité de Contrôle Prudentiel and it is authorised and subject to limited regulation by the Bundesanstalt für Finanzdienstleistungsaufsicht (BaFin). United States: This report is being distributed to US persons by BNP Paribas Scurities Corp., or by a subsidiary or affiliate of BNP Paribas that is not registered as a US broker-dealer. BNP Paribas Securities Corp., a subsidiary of BNP Paribas, is a broker-dealer registered with the U.S. Securities and Exchange Commission and a member of the Financial Industry Regulatory Authority and other principal exchanges. BNP Paribas Securities Corp. accepts responsibility for the content of a report prepared by another non-U.S. affiliate only when distributed to U.S. persons by BNP Paribas Securities Corp.

by BNP Paribas Securities Corp.

Japan: This report is being distributed in Japan by BNP Paribas Securities (Japan) Limited or by a subsidiary or affiliate of BNP Paribas not registered as a financial instruments firm in Japan, to certain financial institutions defined by article 17-3, item 1 of the Financial Instruments and Exchange Law Enforcement Order. BNP Paribas Securities (Japan) Limited is a financial instruments firm registered according to the Financial Instruments and Exchange Law of Japan and a member of the Japan Securities Dealers Association and the Financial Futures Association of Japan. BNP Paribas Securities (Japan) Limited accepts responsibility for the content of a report prepared by another non-Japan affiliate only when distributed to Japanese based firms by BNP Paribas Securities (Japan) Limited. Some of the foreign securities stated on this report are not disclosed according to the Financial Instruments and Exchange Law of Japan.

Hong Kong: This report is being distributed in Hong Kong by BNP Paribas Hong Kong Branch, a branch of BNP Paribas whose head office is in Paris, France. BNP Paribas Hong Kong Branch is registered as a Licensed Bank under the Banking Ordinance and regulated by the Hong Kong Monetary Authority. BNP Paribas Hong Kong Branch is also a Registered Institution regulated by the Securities and Futures Commission for the conduct of Regulated Activity Types 1, 4 and 6 under the Securities and Futures Ordinance.

Some or all the information reported in this document may already have been published on ${\tt https://globalmarkets.bnpparibas.com}$

© BNP Paribas (2015). All rights reserved

