

# ALGERIA



# ECONOMIC UPDATE

Staying the Course  
for Transition

Fall 2022



**THE WORLD BANK**

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Middle East & North Africa



# Algeria Economic Update

Staying the Course for Transition

Fall 2022



Middle East and North Africa Region

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# ACRONYMS

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ANEM	National Employment Agency (Agence Nationale de l'Emploi)	OAIC	Algerian Interprofessional Cereals Agency (Office Algérien Interprofessionnel des Céréales)
APN	People's National Assembly (Assemblée Populaire Nationale)	OECD	Organization for Economic Cooperation and Development
BdA	Central Bank of Algeria (Banque d'Algérie)	ONS	National Statistical Agency (Office National des Statistiques)
BTU	British Thermal Unit	OPEC	Organization of Petroleum Exporting Countries
CAS	Special Purpose Accounts (Comptes d'Affectation Spéciale)	Pp	Percentage Point
CPI	Consumer Price Index	PPI	Producer Price Index
DZD	Algerian Dinar	PRCEP	Public Enterprise Debt Buyback Program
EIA	Energy Information Administration	PSR	Special Refinancing Program (Programme spécial de refinancement)
EPT	Territorial Programming Space (Espace de Programmation Territoriale)	QOQ	quarter-on-quarter
EUR	Euro	REER	Real Effective Exchange Rate
FAO	Food and Agriculture Organization	RRF	Revenue Regulation Fund
GDP	Gross Domestic Product	SMMEEI	Steel, Metal, Mechanical, Electrical, and Electronic Industries
IMF	International Monetary Fund	SOE	State Owned Enterprises
JODI	Joint Organizations Data Initiative	tb/d	Thousand barrels/day
LNG	Liquefied Natural Gas	TTF	Title Transfer Facility
LPG	Liquefied Petroleum Gas	USD	United States Dollar
mb/d	Million barrels /day	WB	World Bank
MENA	Middle East and Northern Africa	YOY	year-on-year
Mtoe	Million tonnes of oil equivalent		
NEER	Nominal Effective Exchange Rate		





# ACKNOWLEDGMENTS

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**T**his Algeria Economic Update provides an account of main recent economic developments and policies. It places them in a global and longer-term context and assesses the consequences of these developments and policy changes for Algeria's prospects. The report is intended for a wide audience, including policymakers, business leaders, financial market participants, and the community of analysts and professionals working in and on Algeria. The report is organized into two chapters. Chapter 1 presents macroeconomic developments in Algeria for the first nine months of 2022. Chapter 2 describes the short- and medium-term outlook for the Algerian economy. **The deadline for considering data and preparing forecasts was October 31, 2022.**

The preparation of this Algeria Economic Update is the work of the Middle East and North Africa (MENA) Section of the World Bank's Macroeconomics, Trade, and Investment (MTI) Global Practice. It was prepared by Cyril Desponts, Amel Henider, and

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The findings, interpretations, and conclusions expressed in this report are those of World Bank staff and do not necessarily reflect the views of its Board of Directors or of the countries it represents. For information about the World Bank and its activities in Algeria, including electronic copies of this publication, please visit <https://www.worldbank.org/en/country/algeria>. For any questions or comments on the content of this publication, please contact Cyril Desponts ([cdesponts@worldbank.org](mailto:cdesponts@worldbank.org)) or Éric Le Borgne ([eleborgne@worldbank.org](mailto:eleborgne@worldbank.org)).



# EXECUTIVE SUMMARY

**T**he recovery continued in the first semester of 2022, supported by nonhydrocarbon activity and crude oil production. Nonhydrocarbon GDP accelerated in Q1-2022, supported by a continued recovery of the service sector and a partial recovery of agricultural activity, while economic activity proxy data, such as nighttime lighting and employment opportunities, suggest that the recovery extended into Q2. The recovery in S1-2022 was also supported by crude oil production's return to its pre-pandemic level, in contrast to a moderate decrease in natural gas production. Inflation remained high, however, led by its food component. The authorities thus continued to implement measures to protect purchasing power, primarily by increasing civil service salaries, implementing a transfer for first-time job seekers, and strengthening subsidy mechanisms for basic foodstuffs.

**The continuing high level of global hydrocarbon prices prolonged the upturn of external balances.** In June 2022, the average export price of Algerian hydrocarbons had increased 70 percent year-on-year, and product export receipts reached USD 28.4 billion in S1-2022, also supported by a notable rise in non-hydrocarbon exports. Moreover, the recovery of imports was slowed down by the moderate rebound in domestic demand and import reduction measures, thus counterbalancing the increase in prices. As a result, these dynamics generated a current account surplus in S1-2022, reversing the downward trend of foreign currency reserves. The dinar also began to appreciate relative to the US dollar

in the summer of 2022, and the more rapid appreciation relative to the Euro improved the terms of trade.

**The budget deficit is expected to narrow moderately in 2022, as the strong increase in public expenditure compensates for most of the increase in revenues.** Despite the anticipated sharp rise in hydrocarbon revenues in 2022, the Complementary Finance Law for 2022 suggests a massive increase in public expenditure, primarily to finance the growth in payroll, transfers to first-time job seekers, and the food price stabilization policy. Public debt thus continued to increase rapidly in S1-2022, led by low-cost financing from public banks as part of the special refinancing program. The strong rise in liquidity observed in S1-2022 was therefore channeled to the State, as private sector credit showed only a moderate recovery. The overall budget deficit is expected to reach 5.7 percent of GDP in 2022, and public debt 54 percent of GDP.

**The economic recovery should continue in 2023, supported by the nonhydrocarbon sector and public expenditure growth.** Hydrocarbon GDP growth (+0.5 percent), as well as the impact of the gradual continued recovery of the services and agricultural sectors on non-hydrocarbon GDP growth (+3.1 percent), should support overall growth (+2.3 percent). The recovery of investment, led by the public and hydrocarbon sectors, should be more marked than that of private consumption. Export revenues should remain high, generating a current account surplus despite a moderate recovery of imports. However, high hydrocarbon revenues are expected to

be overcompensated in the budget by the increase in public expenditure. In the medium term, a fall in hydrocarbon export prices and volumes may lead to a gradual deterioration in external and budgetary balances.

**The main risks to the macroeconomic outlook arise from fluctuations in global hydrocarbon prices, underscoring the importance of the Government's current reform program.** While the sustainable improvement of external balances contributes to the economy's resilience, a limited recovery of

budgetary balances would strengthen their sensitivity to hydrocarbon prices, in a context of uncertainty surrounding the dynamics of the global economy. High inflation also remains a concern despite the moderation of import prices, heightening the need for a prudent public expenditure and deficit financing policy. Furthermore, pursuing the implementation of reforms to allow the private sector to become a driving force for sustainable growth and improving the macroeconomic framework in a sustainable manner remain essential to the growth and stability of Algeria's economy.



# RÉSUMÉ ANALYTIQUE

**L**a reprise s'est poursuivie au premier semestre 2022, soutenue par l'activité hors-hydrocarbures et la production pétrolière. La croissance du PIB hors-hydrocarbures s'est accélérée au T1-2022, portée par une reprise continue du secteur des services et par un redressement partiel de l'activité agricole, tandis que les données proxy de l'activité économique telles que l'éclairage nocturne et les offres d'emplois suggèrent une poursuite de la reprise au T2. La reprise au S1-2022 a également été soutenue par le retour de la production pétrolière à son niveau prépandémie, contrastant avec une baisse modérée de la production gazière. L'inflation est cependant demeurée élevée, entraînée par sa composante alimentaire. Les autorités ont donc continué de mettre en œuvre des mesures de protection du pouvoir d'achat, principalement à travers une hausse des salaires dans le secteur public, une mise en œuvre d'un transfert pour les primo-demandeurs d'emploi et un renforcement des mécanismes de subvention aux produits alimentaires de base.

**Le maintien à un niveau élevé des prix mondiaux des hydrocarbures a prolongé l'embellie des équilibres extérieurs.** En juin 2022, le prix moyen à l'exportation des hydrocarbures algériens avait augmenté de 70% en glissement annuel et les recettes d'exportations de biens atteignaient ainsi un montant de USD 28,4 milliards au S1-2022, également tirées par une hausse notable des exportations hors-hydrocarbures. Par ailleurs, la reprise des importations a été ralentie par le rebond modéré de la demande nationale et par les mesures de réduction

des importations, contrebalançant la hausse des prix. Ces dynamiques ont ainsi généré des surplus du compte courant au S1-2022, inversant la tendance baissière des réserves de change. Le dinar a également commencé à s'apprécier vis-à-vis du dollar EU à l'été 2022, et l'appréciation plus rapide vis-à-vis de l'Euro a amélioré les termes de l'échange.

**Le déficit budgétaire devrait se résorber modérément en 2022, la forte augmentation des dépenses publiques compensant majoritairement la hausse des recettes.** Malgré la forte hausse anticipée des recettes budgétaires issues des hydrocarbures en 2022, la Loi de Finances Complémentaire pour 2022 suggère une hausse massive des dépenses publiques afin de financer principalement la croissance de la masse salariale, les transferts aux primo-demandeurs d'emploi et la politique de stabilisation des prix alimentaires. L'endettement public a ainsi continué d'augmenter rapidement au S1-2022, emmené par un emprunt à bas coût auprès des banques publiques dans le cadre du programme spécial de refinancement. Ainsi, la forte hausse de liquidité observée au S1-2022 a été canalisée vers l'État, le crédit au secteur privé ne connaissant qu'une reprise modérée. Le déficit du solde global du Trésor devrait atteindre 5,7% du PIB en 2022 et la dette publique, 54% du PIB.

**La reprise économique devrait se poursuivre en 2023, soutenue par le secteur hors-hydrocarbures et par la croissance des dépenses publiques.** La croissance du PIB du secteur des hydrocarbures (+0,5%), de même que l'effet

de la reprise graduelle continue dans le secteur des services et de l'agriculture sur la croissance du PIB hors-hydrocarbures (+3,1%), devraient soutenir la croissance (+2,3%). La reprise de l'investissement, tirée par le secteur public et par celui des hydrocarbures, devrait être plus marquée que celle de la consommation privée. Les recettes d'exportation devraient se maintenir à un niveau élevé, générant un surplus du compte courant malgré une reprise modérée des importations. Les recettes élevées des hydrocarbures seraient cependant surcompensées dans le budget par la hausse des dépenses publiques. À moyen terme, une baisse des prix et des volumes d'exportation des hydrocarbures entraînerait une détérioration graduelle des équilibres budgétaires et extérieurs.

**Les principaux risques associés aux perspectives macroéconomiques émanent des fluc-**

**tuations sur le marché des hydrocarbures, renforçant l'importance de l'effort de réforme structurel en cours.** Si l'amélioration durable des équilibres extérieurs contribue à la résilience de l'économie, un redressement limité des équilibres budgétaires renforcerait leur sensibilité aux prix des hydrocarbures, dans un contexte d'incertitude autour de la dynamique de l'économie mondiale. L'inflation élevée demeure également un sujet de préoccupation malgré la modération des prix à l'importation, renforçant la nécessité d'une politique de dépense publique et de financement du déficit prudente. En outre, la poursuite de la mise en œuvre de réformes devant permettre au secteur privé de devenir le moteur d'une croissance soutenable et d'améliorer durablement le cadre macroéconomique demeure essentielle à l'essor et à la stabilité de l'économie algérienne.

## ملخص تنفيذي

في الارتفاع بسرعة في النصف الأول من عام 2022، مدفوعة بالافتراض منخفض التكلفة من البنوك العامة في إطار برنامج إعادة التمويل الخاص. وبالتالي، فإن الزيادة الكبيرة في السيولة التي لوحظت في النصف الأول من عام 2022 كانت موجهة نحو الدولة، حيث لم يشهد الائتمان الممنوح للقطاع الخاص سوى انتعاش بسيط. ومن المتوقع أن يصل عجز الموازنة إلى 5.7% من الناتج المحلي الإجمالي في عام 2022، كما سيبلغ إجمالي الدين العام 54% من الناتج المحلي الإجمالي.

من المتوقع أن يستمر الانتعاش الاقتصادي في عام 2023، بدعم من القطاع غير الهيدروكربوني والإنفاق العام المتزايد. نمو الناتج المحلي الإجمالي الهيدروكربوني (+0.5%) وكذلك تأثير الانتعاش التدريجي المستمر في قطاع الخدمات والزراعة على نمو الناتج المحلي الإجمالي غير الهيدروكربوني (+3.1%)، سيدعم النمو الإجمالي (+2.3%). كما ينبغي أن يكون الانتعاش في الاستثمار، الذي يقوده القطاع العام والقطاع الهيدروكربوني، أكثر تأثيراً من تعافي الاستهلاك الخاص. من المتوقع أن تظل عائدات الصادرات مرتفعة، مما يؤدي إلى تحقيق فائض في الحساب الجاري على الرغم من الانتعاش المعتدل في الواردات. كما من المتوقع أن زيادة الإيرادات الهيدروكربونية سوف يتم تعويضها بشكل أكبر بزيادة في الإنفاق العام. وعلى المدى المتوسط، سيؤدي الانخفاض في أسعار وحجم الصادرات الهيدروكربونية إلى ضعف تدريجي في حسابي المالية العامة والخارجي.

تنبع المخاطر الرئيسية التي تهدد آفاق الاقتصاد الكلي من التقلبات في سوق السلع الهيدروكربونية، مما يؤكد أهمية تسريع جهود الإصلاح الهيكلي الجاري. في حين أن التحسن الدائم في الحساب الخارجي يساهم في صمود الاقتصاد، إن انتعاش محدود في حساب المالية العامة سيزيد من حساسيتها لأسعار الهيدروكربونات، خصوصاً في ظل حالة عدم اليقين المحيطة بديناميات الاقتصاد العالمي. كما يظل التضخم مصدر قلق على الرغم من الاعتدال في أسعار الواردات، مما يعزز الحاجة إلى سياسة حكيمة للإنفاق العام وتمويل العجز بحذر. بالإضافة إلى ذلك، يظل استمرار تنفيذ الإصلاحات لتمكين القطاع الخاص من أن يصبح محركاً للنمو المستدام والتحسين المستدام لإطار الاقتصاد الكلي ضرورياً لتحقيق نمو واستقرار الاقتصاد الجزائري.

الانتعاش في النصف الأول من عام 2022، مدعوماً بالنشاط غير الهيدروكربوني وإنتاج النفط. تسارع نمو الناتج المحلي الإجمالي غير الهيدروكربوني في الربع الأول من عام 2022، مدفوعاً بالانتعاش المستمر في قطاع الخدمات والانتعاش الجزئي في النشاط الزراعي، في حين بيانات النشاط الاقتصادي الاستدلالية، مثل بيانات الإضاءة الليلية وعروض العمل، تشير إلى استمرار الانتعاش في الربع الثاني. كما تم دعم الانتعاش في النصف الأول من عام 2022 من خلال عودة إنتاج النفط إلى مستوى ما قبل الجائحة، متناقضاً مع انخفاض معتدل في إنتاج الغاز. كما بقي التضخم مرتفعاً مدفوعاً بارتفاع أسعار الغذاء، وعليه واصلت السلطات تنفيذ عدة تدابير لحماية القوة الشرائية، ابتداءً من زيادة الأجور في القطاع العام، وتنفيذ تحويل مالي للباحثين عن عمل لأول مرة، وتعزيز آليات دعم المنتجات الغذائية الأساسية.

أدى استمرار ارتفاع أسعار المواد الهيدروكربونية العالمية إلى إطالة أمد التحسن في الموازين الخارجية. في يونيو 2022، ارتفع متوسط سعر تصدير المواد الهيدروكربونية الجزائرية بنسبة 70% على أساس سنوي، ووصلت عائدات صادرات السلع إلى مبلغ 28.4 مليار دولار أمريكي في النصف الأول من عام 2022، مدفوعة أيضاً بزيادة ملحوظة في الصادرات غير الهيدروكربونية. بالإضافة إلى ذلك، تباطأ انتعاش الواردات بسبب الانتعاش المعتدل في الطلب المحلي وإجراءات خفض الواردات، مما عوض ارتفاع الأسعار. وعليه ولدت هذه الديناميكيات فوائض في الحساب الجاري في النصف الأول من عام 2022، وعكست الاتجاه التنازلي لاحتياطيات العملات الأجنبية. كما بدأ الدينار في الارتفاع مقابل الدولار الأمريكي في صيف عام 2022، وأدى الارتفاع السريع مقابل اليورو إلى تحسين شروط التبادل التجاري.

من المتوقع أن ينخفض عجز الموازنة بشكل طفيف في عام 2022، حيث أن الزيادة الحادة في الإنفاق العام سيتم تعويضها بشكل رئيسي من الزيادة في الإيرادات. على الرغم من الزيادة الحادة المتوقعة في إيرادات الموازنة من القطاع الهيدروكربوني في عام 2022، يقترح قانون المالية التكميلي لعام 2022 زيادة هائلة في الإنفاق العام من أجل تمويل نمو فاتورة الأجور بشكل رئيسي، وتحويلات للباحثين عن عمل لأول مرة، وسياسات استقرار أسعار الغذاء. وهكذا استمرت المديونية العامة







# RECENT ECONOMIC DEVELOPMENTS

## Non-hydrocarbon growth accelerated in Q1-2022

**Non-hydrocarbon real GDP growth accelerated in Q1-2022, despite modest growth in private consumption, while activity appears to remain on an upward trend in Q2.** Household consumption slowed down significantly in Q1-2022 (+1.5 percent y-o-y), partly a reflection of the effect of rising consumer goods prices on household purchasing power. Investment growth was also moderate in Q1-2022 (+1.1 percent y-o-y), suggesting limited recovery in public investment in early 2022, and investment therefore remained lower than before the pandemic. Overall, Algeria's non-hydrocarbon GDP has continued its gradual recovery, reaching a level 2.9 percent higher than in Q1-2021. In addition, nighttime light data suggest a continued recovery across regions in Q2 (Box 1), which the available data on the labor market also seem to suggest (see below) (Figure 1).

**The continued recovery in the services sector was the key driver of non-hydrocarbon activity in Q1-2022.** Agricultural value added was recovering

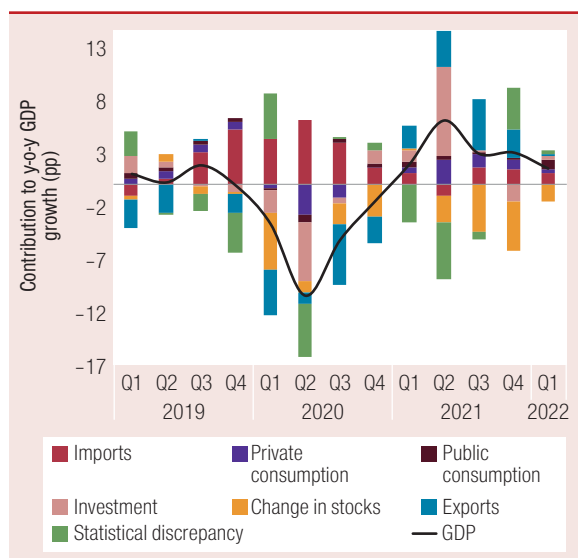
on a year-on-year basis in Q1-2022 (+1.9 percent), following a 2021 marked by a poor cereal harvest due to low rainfall.<sup>1</sup> The momentum noted in the industrial sector in 2021 was more subdued in Q1-2022, consistent with the lack of a marked recovery in investment. Recovery in the steel, metal, mechanical, electrical, and electronic Industries (SMMEEI), whose activity is mainly conducted by public companies, remains particularly subdued (-6 percent in Q1-2022, y-o-y). (Figure 2).

## Job offers increased moderately in Q2-2022

**The official number of job offers suggests a moderate resumption of activity in H1-2022, but it**

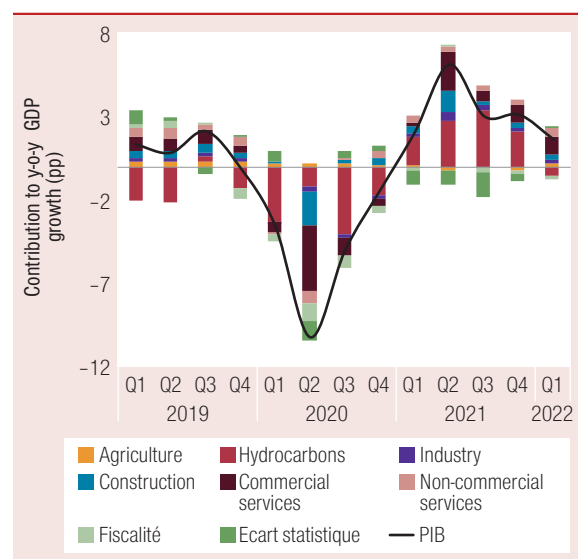
<sup>1</sup> According to the prime minister, cereal production reached 41 million quintals during the 2021/2022 campaign, compared to 28 million quintals one year before, with a production forecast of 55 million quintals in 2025 (APS, November 8, 2022).

**FIGURE 1 • GDP growth slowed in Q1-2022...**



Source: National Statistical Agency (ONS) and World Bank estimates.

**FIGURE 2 • ...despite the acceleration in non-hydrocarbon GDP growth**



Source: ONS and World Bank estimates.

**remains below pre-pandemic levels.** According to data from the National Employment Agency (ANEM),<sup>2</sup> job offers rose in Q1-2022 and Q2-2022 (by 17.5 percent and 4.2 percent, respectively), although the average number of offers in H1-2022 remained

<sup>2</sup> This paragraph presents unconventional labor market statistics published by ANEM, because the latest conventional statistics (unemployment rate, participation rate, etc.) were published in H1-2019.

### BOX 1 : NIGHTTIME LIGHT DATA COMPLEMENT PUBLIC STATISTICS ON ECONOMIC ACTIVITY

**Nighttime light data are now commonly used to assess economic activity.** Their application to economic monitoring was highlighted by Henderson, Storeygard, and Weil (2012), and they have become widely used for estimating economic activity. Since 2012, daily satellite data have been available and are accessible to the public on the Earth Observation Group website. At the beginning of the COVID-19 crisis, Roberts et al. (2020) used these data in 47 cities in the MENA region, documenting a significant drop in activity in March 2020 in Algiers, Constantine, and Oran (Annex 1).

**In Algeria there is a strong empirical link between nighttime light data and economic activity:**

- **Oil production.** Nighttime light data from oil production sites, geolocated by gas flaring sites, isolate the oil sector. Nighttime light, coupled with a long-term trend and the modeling of lower quotas in 2020, explains 94 percent of Algeria's quarterly crude oil production.
- **Gas production.** Nighttime light data from natural gas-producing wilayas (excluding gas flaring sites) and a variable indicating the month of the year explain 72 percent Algeria's quarterly natural gas production.
- **Non-hydrocarbon activity.** Finally, nighttime light in non-hydrocarbon producing areas, a trend, and a variable indicating the current quarter explain 82 percent of the non-hydrocarbon quarterly GDP level. Nighttime light alone explains 53 percent of the GDP level.

The estimation methodology and empirical results are shown in Appendix 1.

**The strong correlation between nighttime light and non-hydrocarbon activity means that these data can be used to estimate the current level of economic activity.** Besides their predictive capacities, these finely geolocated data enable the production of spatialized estimates for activity levels and dynamics, which are useful for analyzing sector and local development. The data suggest that recovery after the COVID-19 crisis was strongest in the North-West region, less so in the North-Central region, and suggest a recovery in Q2-2022 across regions.

(continued on next page)

FIGURE 3 • Nighttime light data allow to model economic activity...

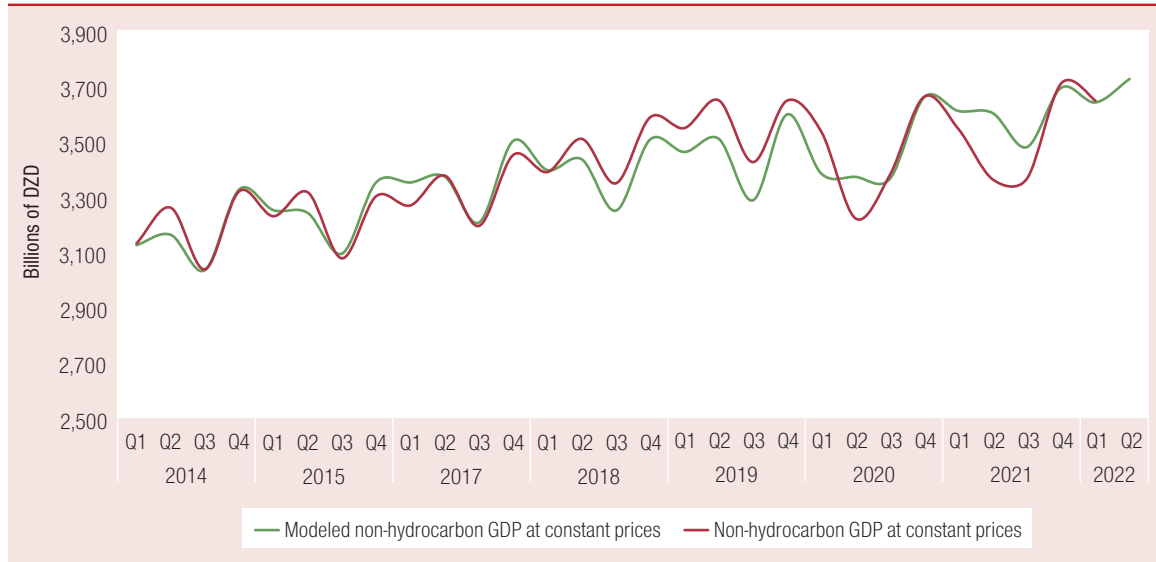
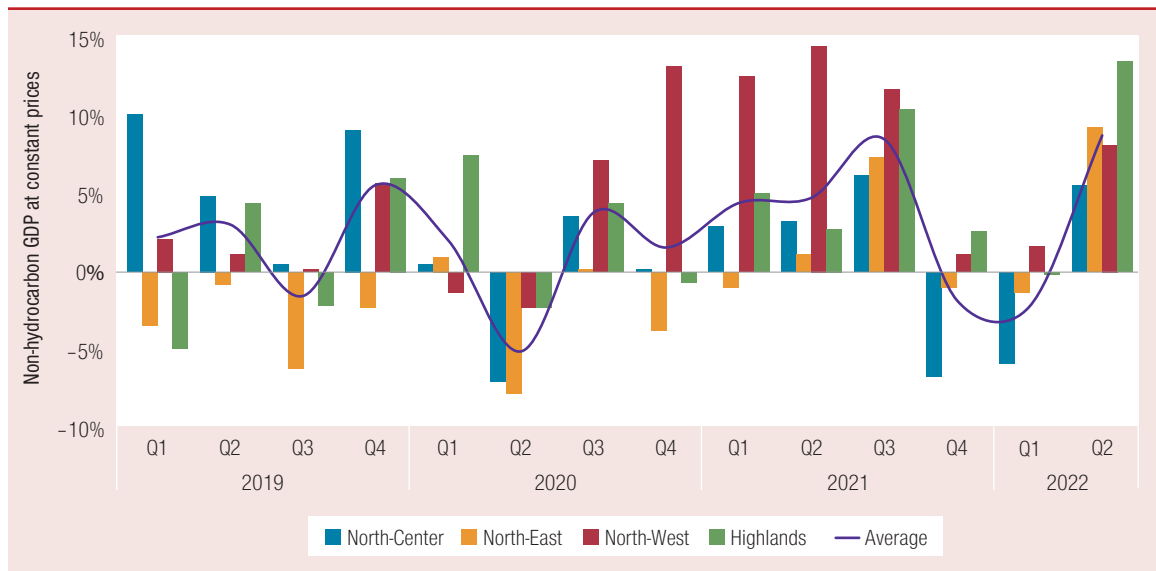


FIGURE 4 • ...and anticipate its trajectory with minimum delay



Source: Earth Observation Group; World Bank estimates.

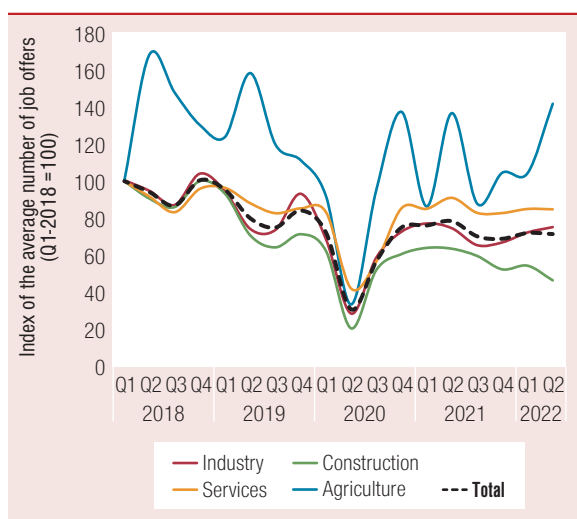
Note: The four Territorial Programming Spaces (EPTs) exclude the hydrocarbon-producing wilayas and the areas with petrochemical plants in Arzew and Skikda. These four EPTs comprise 80 percent of the Algerian population according to the latest (2008) census.

7.1 percent below the H1-2021 level and 18.2 percent below the H1-2019 level. At sector level, this marked decline compared to the pre-pandemic situation is explained by the continued fall in job offers in the building, public works, and hydraulics sector (-39 percent) and an only partial restoration of job offers in the industrial sector (-12.5 percent).<sup>3</sup> Meanwhile,

the number of registered job seekers increased by 16.3 percent in Q2-2022 to 4.7 million individuals,

<sup>3</sup> At the same time, the number of job offers in the more volatile agricultural sector has increased by 30 percent and, in the services sector, has returned to its pre-pandemic level (+0.6 percent).

**FIGURE 5** • The number of job offers increased slightly in H1-2022



Source: ANEM and World Bank estimates.

following the massive hike in registrations in Q1-2022 (+53 percent) in the wake of the announcement that an allocation for first-time job seekers was being established.<sup>4</sup> (Figures 5 and 6).

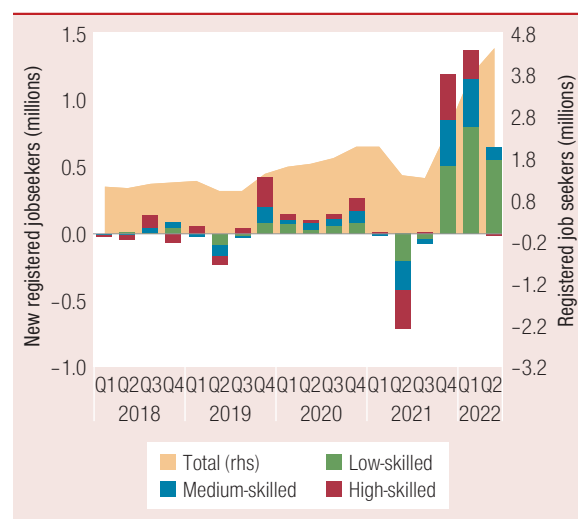
### In addition, hydrocarbon production has stabilized

**In 2022, the continued rise in oil production enabled the partial resumption of exports.** Algerian crude oil production recorded an average growth of 2.8 percent in the first three quarters of 2022,<sup>5</sup> back to its pre-pandemic level, as OPEC production quotas and European demand gradually resumed.<sup>6</sup> The resumption of production has enabled an increase in exports in H1-2022, with Algerian crude oil and condensate exports reaching a level 8.6 percent higher than in H1-2021. The resumption is particularly noticeable toward the EU27 (+15.8 percent for crude oil), sustained by the EU27 decision to ban the import of Russian oil by ship in April 2022. Export levels in H1-2022 still remain lower than before the pandemic, namely -33.1 percent compared to H1-2019 for crude oil and condensate exports, and -32.6 percent for crude oil exports to the EU27.<sup>7</sup> (Figure 7).

**The oil sector upturn was partly offset by reduced gas production and export in Q2-2022.**

The value added of hydrocarbons at constant prices

**FIGURE 6** • The number of registered jobseekers continues to expand rapidly



Source: ANEM and World Bank estimates.

fell slightly in Q1-2022 (-2.3 percent y-o-y), despite greater oil production. After 2021, a year when the resumption of production and the lack of a marked

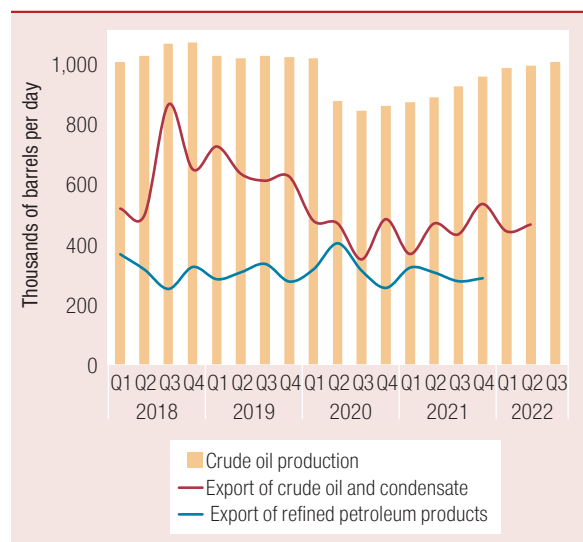
<sup>4</sup> Beneficiaries of the monthly allocation of DZD 13,000 (USD 94) must be aged between 19 and 40, have no other source of income, not be registered in a teaching or training establishment, have never paid social security contributions, and have been registered with ANEM for at least six months. There is no time limit to the compensation, but the job seeker cannot turn down more than two offers corresponding to his or her profile. In Q1-2022, the rise in registrations was more marked among poorly or unqualified workers (+84 percent) and women (+63 percent). As of April 18, 917,000 cases had been accepted (out of a total of 1.5 million applicants), at an initial estimated monthly cost of DZD 12 billion (over USD 80 million). At the same time, the Government has allocated close to DZD 62 billion (JO No. 52 2022) or five months of allocations for the beneficiaries accepted in April 2022.

<sup>5</sup> Quarter-on-quarter, +3 percent in Q1, +3.2 percent in Q2, and +2.2 percent in Q3.

<sup>6</sup> Or year-on-year growth of 13.6 percent over the first nine months of 2022.

<sup>7</sup> The rise in Algerian exports in H1-2022 year-on-year was more pronounced toward Spain and Germany. However, exports fell quarter-on-quarter, following a peak in Q4-2021. Algerian crude oil exports to European OECD countries represented on average 62.5 percent of total oil exports between 2017 and 2021. Bloomberg data for crude oil and condensate exports by oil tanker, and Eurostat data on European crude oil imports from Algeria.

**FIGURE 7 • Oil production returned to its pre-pandemic level...**



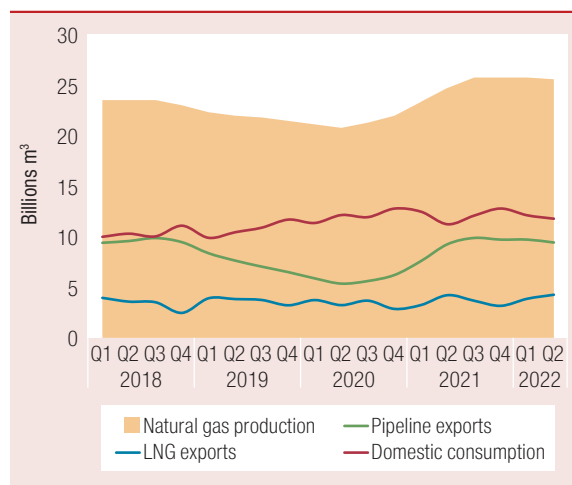
Source: Central Bank of Algeria (BdA) for exports of refined oil products (latest available data); OPEC for crude oil production; Bloomberg for crude oil and condensate exports.

rebound in domestic consumption led to a leap in exports, natural gas production fell slightly in H1-2022 (-1.1 percent y-o-y) driven by a steeper fall in Q2-2022 (-3.5 percent y-o-y). Therefore, pipeline exports stabilized in Q1-2022 but fell in Q2-2022 (-11.1 percent y-o-y),<sup>8</sup> even more so to Europe (-15 percent y-o-y), despite the price competitiveness of Algerian gas supply contracts, partly indexed to the price of oil,<sup>9</sup> and despite strong European demand, greatly enhanced by the Russia-Ukraine crisis.<sup>10</sup> At the same time, Algerian liquified natural gas (LNG) exports fell by 3.6 percent y-o-y in Q2-2022, whereas exports to Europe plunged by 12 percent y-o-y. Nevertheless, after a particularly disappointing 2019 and 2020, in H1-2022 pipeline gas exports remained at their high level from H1-2018. (Figure 8).

### However, the rise in export prices bolstered revenues

**Nevertheless, the strong momentum of hydrocarbon export prices has led to a continued rise in export revenues.** A synthetic index of hydrocarbon export prices shows, year-on-year, an 70 percent rise in Algerian hydrocarbon export prices in June 2022.<sup>11</sup> The momentum in international prices suggests that

**FIGURE 8 • ...whereas the gas sector slowed after the 2021 peak**



Source: Joint Organizations Data Initiative (JODI) and World Bank estimates. Note: Data are presented as a four-quarter moving average to eliminate seasonality effects. Local consumption is estimated as the difference between gross production and pipeline and LNG exports, since Algeria does not import any natural gas.

the price of Algerian natural gas for export rose by 62% between June 2021 and June 2022.<sup>12</sup> The delayed effect of the rise in international prices on gas export prices therefore explains the positive contribution of gas to the rise in the synthetic index of hydrocarbon export prices in H1-2022, strengthened by the renegotiation of some natural gas supply contracts. Between June 2021 and June 2022, crude oil prices rose by 72 percent. This rising dynamic enables an overcompen-

<sup>8</sup> Or a q-o-q rise of 14.2 percent in Q1-2022 and a q-o-q fall of 13.3 percent in Q2-2022 (JODI data).

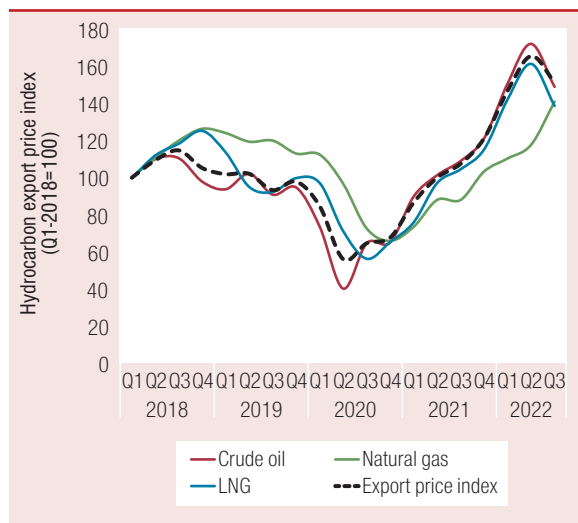
<sup>9</sup> See World Bank (2022). According to the European Commission, the price of Algerian gas exported by pipeline also leaped in Q2-2022 (+172 percent to Spain, +160 percent to Italy, y-o-y) but remains more than half as cheap as the import price of LNG.

<sup>10</sup> The fall in production may have been fueled by the closure of the Maghreb-Europe pipeline in Q4-2021, partly compensated by the rise in the capacity of the Medgaz pipeline and increased supply to Italy (+10 percent y-o-y) (European Commission, 2022).

<sup>11</sup> This synthetic index is constructed by weighting export prices of various kinds of hydrocarbons by their weight in the total value of Algerian hydrocarbon exports.

<sup>12</sup> According to the nowcasting model of natural gas export prices in the spring 2022 Algeria Economic Update (Annex 1).

**FIGURE 9** • The fall in oil prices in Q3 is moderated by the delayed rise in gas prices...



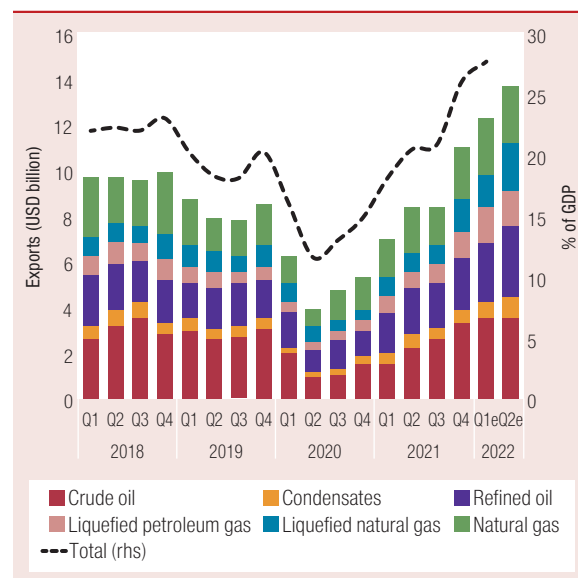
Source: Bda, Energy Information Administration (EIA), oilprice.com, and World Bank estimates.  
 Note: Data are estimates from Q4-2021. Natural gas estimates are based on the methodology used in World Bank (July 2022). The export price index is reached by weighting the price index for each of the six product groups (crude oil, refined oil, condensates, LPG, LNG, and natural gas) by their weight in the total value of hydrocarbon exports in the preceding period.

sation for the decline in export volumes and explains the strong increase in hydrocarbon export revenues in H1-2022 (+68 percent compared to H1-2021).<sup>13</sup> (Figures 9 and 10).

## Therefore, the upturn in Algeria’s external accounts continues

**The continued momentum of hydrocarbon export revenues has led to growing current account surpluses, reversing the foreign exchange reserves trajectory.** The rapid upturn in exports has been stronger than the moderate rise in imports. As a result, in the first six months of 2022, exports of goods and services reached USD 30.1 billion (+59.1 percent y-o-y), and imports of goods and services amounted to USD 23.6 billion, generating a trade surplus of USD 6.5 billion. This means a rise from a current account surplus of USD 200 million in Q4-2021 to a surplus of USD 1.8 billion in Q1-2022, to USD 3.3 billion in Q2-2022. Over the first nine months of the year, international reserves therefore rose by USD 9.4 billion to reach USD 50.8 billion in September 2022.<sup>14</sup> (Figure 11).

**FIGURE 10** • ...and hydrocarbon export revenues peak



Source: Bda, and World Bank estimates from Q3-2021 on the EIA database, oilprice.com, JODI, and Bloomberg.  
 Note: Crude oil and condensate export estimates are based on monitoring data of oil tankers, gas export estimates on pipeline gas exports, and LPG and refined oil product estimates on continuation of the trend of preceding years.

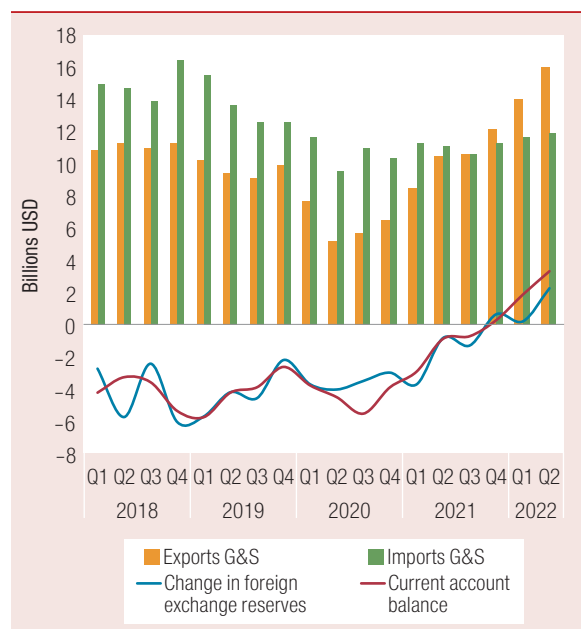
**A more rapid appreciation of the dinar against the euro than against the US dollar has simultaneously improved terms of trade.** After a 5.6 percent depreciation against the US dollar in 2021, followed by 7.5 percent in H1-2022, the dinar recovered against the US dollar in Q3-2022 (+3.9 percent quarter-on-quarter), so that the DZD-to-USD exchange rate returned to the level seen at the beginning of the year.<sup>15</sup> At the same time, the strong depreciation of the euro against the US dollar in 2021 (–7.1 percent) and especially in 2022 (–15.6 percent until the end of September) led to an appreciation of the dinar against the euro in 2021 and, in the context of the war in Ukraine and the fall of the euro, to accelerated appreciation of the dinar over the first nine months of 2022 (12.4 per-

<sup>13</sup> Therefore estimated at USD 25 billion in H1-2022. According to the Ministry of Energy, they reached USD 42.6 billion after nine months in 2022 (APS, November 6, 2022).

<sup>14</sup> Related to the value of imports over four consecutive quarters, foreign exchange reserves thus cover 11.6 months of imports of goods and services at the end of June 2022.

<sup>15</sup> DZD 140.4 per USD in January 2022, compared to DZD 140.7 per USD in September 2022.

**FIGURE 11** • Rising current account are rebuilding foreign exchange reserves...



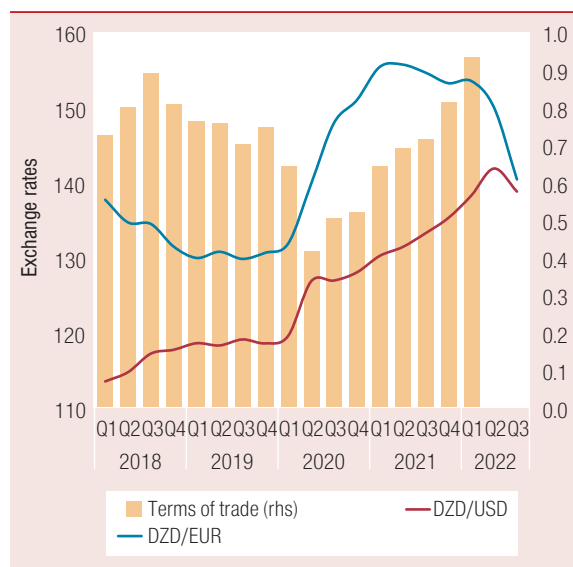
Source: International Monetary Fund (IMF).

cent). Since hydrocarbon exports are denominated in US dollars, and imports come mainly from Europe and China,<sup>16</sup> foreign exchange rate movements contributed to improving Algeria's terms of trade in 2021, and this improvement was more marked in 2022.<sup>17</sup> (Figure 12).

**Product export receipts have reached a level unseen since 2014, driven by the rise in hydrocarbon and non-hydrocarbon exports.** Driven by hydrocarbon revenues, product exports rose by 15.7 percent quarter-on-quarter in Q1-2022, and by 15.6 percent quarter-on-quarter in Q2 to USD 28.4 billion in H1-2022, or an increase of 64.2 percent y-o-y. Furthermore, non-hydrocarbon exports reached USD 4 billion at the end of August 2022 (+42 percent y-o-y), or more than half the official goal of USD 7 billion in a full year. Thus, exports of non-hydrocarbon goods represented 13.5 percent of product exports in H1-2022, or their highest share in over 15 years.<sup>18</sup>

**In Q2-2022, the rise in the prices of imported goods subsided and was mostly compensated by a fall in import volumes.** Imports of goods and services rose by 3.6 percent quarter-on-quarter in Q1-2022, and by 1.7 percent quarter-on-quarter in Q2, to USD 23.6 billion in H1-2022, remaining significantly below their pre-pandemic level (USD 29.1 billion

**FIGURE 12** • ...while foreign exchange and price movements have improved terms of trade



Source: investing.com, IMF.

Note: A rising exchange rate on the graph means a depreciating Algerian dinar, and vice versa.

in H1-2019). In Q1-2022, the rise in product imports is explained mainly by the rise in the price of food products and raw materials,<sup>19</sup> amidst a marked increase in

<sup>16</sup> In 2020 and 2021, Europe and China, respectively, represented 48.5 percent and 16.8 percent of imports.

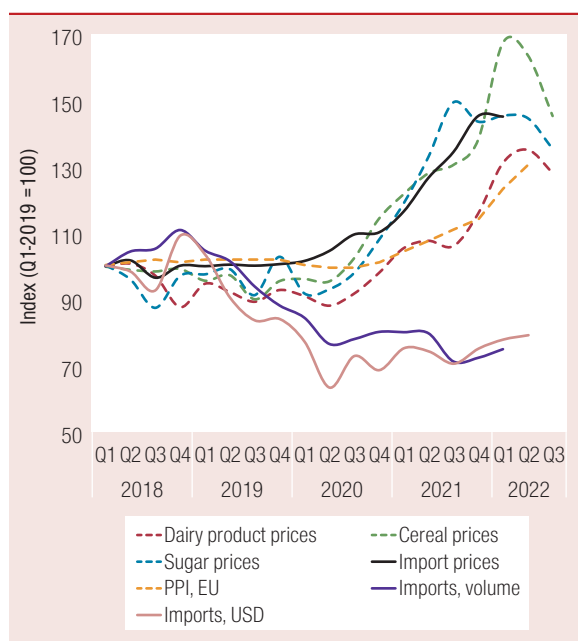
<sup>17</sup> Therefore, the nominal effective exchange rate appreciated by 8.5 percent between January and August 2022, and the real effective foreign exchange rate by 5.5 percent, given higher inflation in Algeria compared to its trade partners.

<sup>18</sup> In 2021, non-hydrocarbon exports recorded an exceptional performance with a rise of 123 percent y-o-y to USD 5 billion, with most, but not all, of this improvement coming from the rise in the export of chemical products (+107 percent y-o-y) and fertilizers (+78.9 percent y-o-y).

<sup>19</sup> Food and raw materials each already accounted for 3.6 percentage points of the 9.6 percent rise in import value in 2021. Algeria's food import invoice rose in 2021, with low rainfall in particular having increased requirements in cereal imports and the price of wheat, sugar, and dairy products having surged on international markets at the end of the year. Algeria's imports of food comprise 33 percent cereal products, 19 percent dairy products, and 9 percent sugar (Directorate General of Customs, 2020). However, the authorities maintained their wheat purchasing program in 2021 and 2022, despite the rise in prices.



**FIGURE 13** • The rise in import prices is still compensated by lower volumes...



Source: ONS, OECD, FAO.

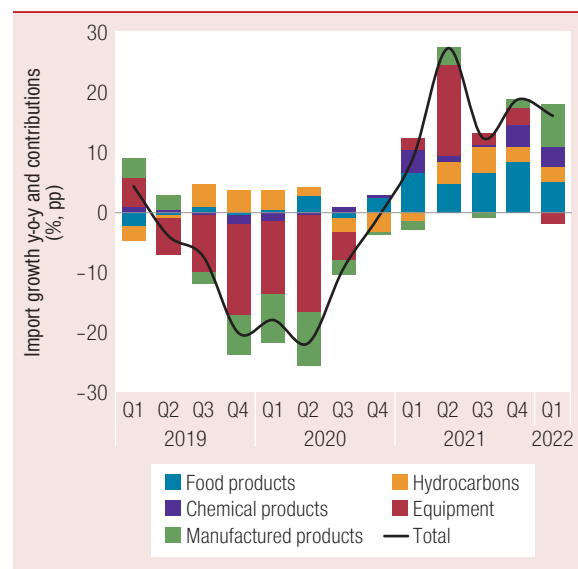
Note: All data calculations based on Q1-2019 = 100.

prices on international markets,<sup>20</sup> and the rise in the prices of manufactured goods. However, this rise was offset by the marked fall in the equipment import bill (-12.1 percent quarter-on-quarter), due to the fall in their import prices (-10.2 percent quarter-on-quarter), driven by the appreciation of the dinar against the euro.<sup>21</sup> Overall, after a significant rise in 2021 (+32 percent), the price of imported goods stabilized in Q1-2022 (-0.1 percent quarter-on-quarter), mitigating the effect of the higher volume of imports. Moreover, the moderation of global food prices in Q2-2022<sup>22</sup> contributed to the relative stability of the import bill, a trend that continued in Q3-2022. (Figures 13 and 14).

## The jump in hydrocarbon revenues partially financed a boost in public spending

**The 2022 Complementary Budget Law (CBL2022) provides for a huge increase in expenditure, much higher than that in hydrocarbon revenues.** In 2021, the increase in hydrocarbon revenues

**FIGURE 14** • ...with the import invoice being driven by the price of food and manufactured goods



Source: ONS.

Note: Equipment corresponds to machines and transport equipment; hydrocarbons correspond to non-edible raw materials (except fuels) and mineral fuels, lubricants, and related products; food products correspond to food products and live animals, drinks, tobacco, animal and vegetable oils, fats, and waxes; manufactured products correspond to various manufactured goods.

(+36 percent), combined with a prudent expenditure policy,<sup>23</sup> substantially improved the overall budget deficit, from 12 percent of GDP in 2020 to 7.2 percent in 2021. However, the CBL2022, approved in July, provides for a 56.3 percent increase in public expenditure compared to 2021, generated by the doubling of public investment and a 41 percent increase in current expenditure, primarily aiming to compensate for the loss of purchasing power caused by high inflation. The rise in current expenditure mainly stems from a general increase in wages and pension benefits in the public

<sup>20</sup> According to ONS, the import prices of food rose by 8.2 percent quarter-on-quarter. International prices for cereals and dairy products rose 21.1 percent and 13.1 percent, respectively, in one quarter in Q1-2022.

<sup>21</sup> The majority of Algeria's imports of equipment come from Europe.

<sup>22</sup> Over the period, the price of cereals fell by 2.2 percent, whereas the rise in the price of dairy products slowed to 2.9 percent.

<sup>23</sup> Operating expenditure had increased 8.7 percent compared to 4.8 percent for investment expenditure, which remained 30 percent below its 2019 level.



## BOX 2 : THE 2022 COMPLEMENTARY BUDGET LAW

**The 2022 Complementary Budget Law (CBL2022) was published on August 3, 2022, and raised the projected budget deficit, anticipating a marked increase in expenditure.**<sup>a</sup> This law foresees a deterioration of the budget deficit (-1.6 pp of GDP) compared to the Initial Budget Law (IBL), as the marked increase in hydrocarbon revenues is overcompensated by public expenditure. Compared to the IBL, expenditure was revised upwards (+18 percent) for both operating (+22 percent) and capital (+10 percent) expenditure. Projected revenues increased 23 percent, led primarily by the increase in hydrocarbon revenues (+53 percent). The overall budget deficit is thus expected to reach 16.2 percent of GDP. However, the budget deficit will likely turn out to be lower. The CBL assumes a price of USD 60 per barrel of oil (compared to 104 for the first 10 months of 2022) and thus underestimates revenues.<sup>b</sup> Furthermore, capital expenditure execution was 77 percent on average from 2017 to 2021, and it is likely to be under-executed again.

**The strong increase in common expenses, primarily reallocated to financing wage increases in the public sector, represents 40 percent of the new current expenditure.** Common expenses are increased by DZD 560 billion (+44 percent) compared to the IBL, or 40 percent of the CBL's new expenditure. This chapter is used to supply additional appropriations requests throughout the year. From August to October 2022, DZD 420 billion had already been reallocated, including 89 percent to the Ministry of National Education, Ministry of the Interior (including through the Local Authority Solidarity Fund), Ministry of Health, and Ministry of Higher Education, mainly to finance the wage increases for civil servants, but also to finance the additional cost of sugar and edible oil subsidies (+DZD 45 billion).

**The Ministry of Labor and Ministry of Agriculture also receive 40 percent of the new current expenditure, financing the new transfer to the unemployed and the increased cost of food subsidies.** The Ministry of Labor's budget increased by DZD 363 billion (+206 percent) compared to the IBL. This increase is essentially due to the introduction of unemployment benefits for first-time job seekers in February 2022. The Ministry of Agriculture's budget increased by DZD 180 billion (+53 percent), following the increase in global grain and dairy product prices and the suspension of the rationalization of grain subsidies launched in the summer of 2020. The Ministry of Health and the Ministry of the Interior's budget increases represent more than two-thirds of the remaining new expenditure, which is in addition to transfers from common expenses.

**The CBL2022 does not introduce new taxes and strengthens the universal food subsidies policy.** It provides for the exoneration of the production and import of sugar and strengthens the monopoly on cereal production held by the Algerian Interprofessional Cereals Agency (*Office Algérien Interprofessionnel des Céréales*, OAIC). The CBL's other measures include widening the tax base for the simplified tax regime (*Impôt Forfaitaire Unique*, or IFU), the easing of certain import constraints for professionals and individuals, the possibility of securitizing state-owned enterprise (SOE) debt and the requirement for merchants to provide electronic payment terminals.

<sup>a</sup> Official Gazette (JO) No. 53.

<sup>b</sup> The revenues exceeding the amount projected by the Budget Law will be placed in the Revenue Regulation Fund, thus artificially increasing the budget deficit, and can then be used to finance this same deficit.

sector, bonus payments for health sector workers, the increased cost of food subsidies,<sup>24</sup> and the introduction of an unemployment benefits scheme (see details in Box 3). The CBL2022 thus projects a tripling of the budget deficit, despite the anticipated increase in budget revenues, led by hydrocarbon revenues (+66.7 percent) and tax revenues (+5.9 percent).<sup>25</sup> The pro-cyclical fiscal policy stance in 2022 echoes the budget policies of certain comparable economies marked by the concomitant effect of the increase in hydrocarbon revenues and the harmful effects of inflation on the purchasing power of the most vulnerable. (Figures 15 and 16).

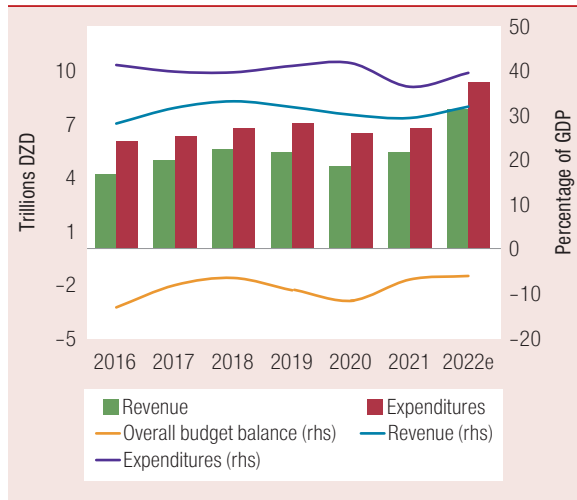
**High budget deficits continue to be financed at low cost by domestic public debt issuance, mainly through the special refinancing program (*Programme special de refinancement, PSR*).** Public debt thus rose from DZD 13,864 billion at end-2021 (62 percent of GDP) to DZD 14,738 bil-

lion in late June 2022 (+6.3 percent). It is still almost entirely domestically held, at negative real interest rates, and primarily with long-term maturities. Despite the marked increase in debt, the cost of public bond issues remained low, with new issuances being carried out under the state-owned enterprise (SOE) debt buyback initiative, part of the PSR. First, SOE debt was swapped for Treasury bonds on public banks' balance

<sup>24</sup> The Ministry of Agriculture's operating budget increased 52.6 percent in the CBL2022 compared to the initial BL2022, reaching DZD 521 billion.

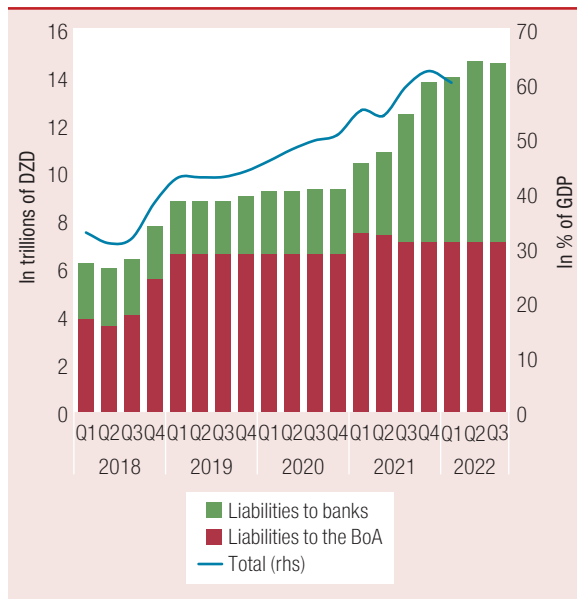
<sup>25</sup> From DZD 1,524 billion in 2021 to DZD 4,609 billion in 2022. It should be noted, however, that 1) the CBL supposes a barrel of oil at USD 60 per barrel (compared to USD 104 for the first 10 months of 2022) and thus underestimates oil revenues, 2) the execution of capital expenditure is 77 percent on average (from 2017 to 2021).

**FIGURE 15** • Hydrocarbon revenues are financing a pro-cyclical increase in public spending...



Source: Ministry of Finance, ONS, and World Bank estimates for 2022. Compared to the CBL2022, these estimates provide for a higher price for a barrel of oil, an execution rate of public investment at 77 percent (average for 2017 to 2021) and include projections of the dividends paid to the Treasury by the Central Bank of Algeria, the amount of the Treasury's special interventions, and the change in the special purpose accounts balance.

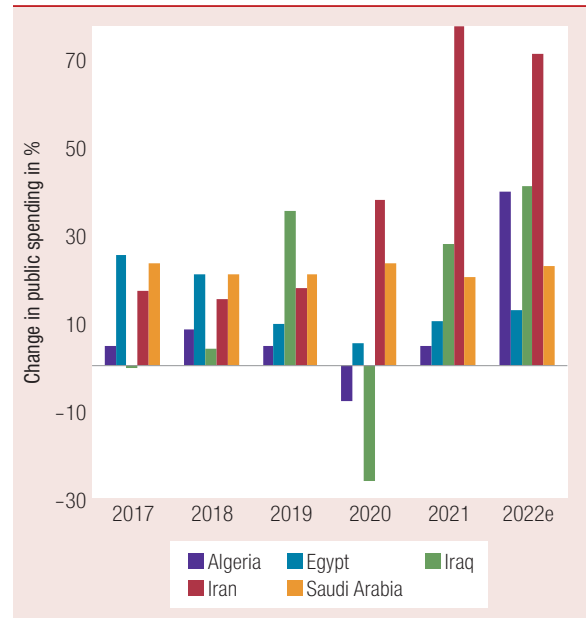
**FIGURE 17** • Domestic public debt exceeded the threshold of 60 percent of GDP...



Source: IMF and World Bank estimates.  
Note: On the right axis, public debt is brought down in relation to GDP over four rolling quarters.

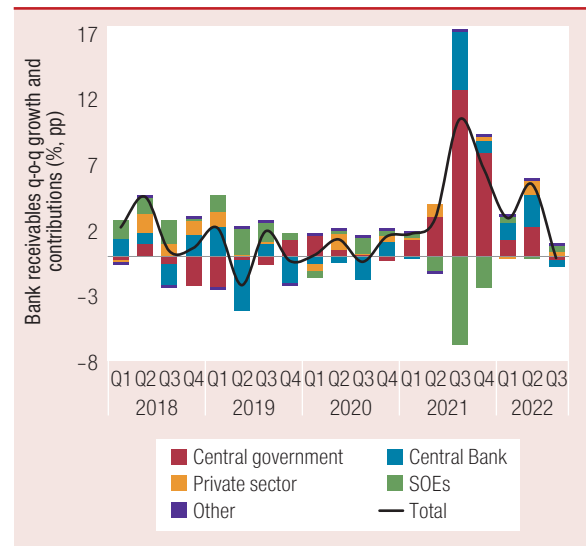
sheets. Afterwards, these Treasury bonds were presented to the Bank of Algeria in exchange for liquidity as part of the PSR,<sup>26</sup> the majority of which was rein-

**FIGURE 16** • ...that is higher than that of hydrocarbon-exporting countries in the region



Source: Estimates of World Bank country teams for 2022.

**FIGURE 18** • ...after a leap in domestic debt through the PSR



Source: IMF and World Bank estimates.  
Note: Bank receivables from the Central Bank of Algeria comprise Treasury bonds placed as part of the PSR and thus resulted in an equivalent flow of liquidity to the banks. The BdA's net indebtedness thus remains unaffected.

<sup>26</sup> Public banks' receivables and payables to the Central Bank of Algeria thus increased simultaneously.

vested in Treasury bonds. These two types of operations thus led to a strong increase in bank lending to the State, but at negative real interest rates and long-term maturities.<sup>27</sup> The last phase of the PSR, capped at DZD 2,100 billion, took place in June 2022.<sup>28</sup> As the PSR was implemented, SOE bank debt decreased significantly, dropping by 25 percent between June 2021 and June 2022,<sup>29</sup> while the Treasury's debt to the banking sector increased 122 percent. (Figures 17 and 18).

## Liquidity continued to grow, without generating a marked increase in private sector credit

**Over the first nine months of 2022, the rapid rise of bank deposits and currency in circulation continued, without a marked increase in private sector credit.** Altogether, the growth of M2 reached 14 percent y-o-y in September 2022, with the growth of deposits in M2 accelerating to reach 17.3 percent y-o-y in September 2022, and the growth of currency in circulation stabilized at a high level, hitting 9.8 percent y-o-y after peaking during the COVID-19 crisis. The recovery of hydrocarbon exports, the implementation of the PSR starting in July 2021, and the marked increase of public expenditure in 2022 may have contributed to this strong rise in liquidity, in addition to the policy rate and reserve requirement ratio remaining low, at the level established during the COVID-19 crisis.<sup>30</sup> However, the growth of private sector credit remained moderate (+5 percent y-o-y in September 2022), as bank liquidity was channeled towards the Treasury. Thus, in September 2022, domestic bank lending to the State (net, and excluding the BdA) reached 35.5 percent of total bank credit, compared to 26.5 percent for SOE lending and 36.6 percent for private sector lending. The high share of bank liquidity placed in Treasury securities compared with other countries, could thus affect the efficient financing of the economy through a crowding-out effect. (Figure 19).

## The rise in prices continued, triggering a strong response from the authorities

**Consumer price increases continued in Q3-2022.** Inflation hit 9.5 percent y-o-y over the first nine

months of 2022, driven by food prices (+14 percent) that weighed on the poorest households. Inflation showed a slight dip in Q3-2022, primarily due to the stabilization of food prices compared to Q2-2022. The increase in consumer prices observed since mid-2021 was fueled by the delayed impact of the depreciation of the exchange rate and of the increase in the amount of currency in circulation, more marked during the COVID-19 crisis, by rising import prices as well as by speculation in production and distribution channels.<sup>31</sup> (Figure 20).

**The authorities continued to take measures to mitigate the effect of price increases on households, primarily by strengthening food subsidy mechanisms and increasing public wages.** These measures included suspending the streamlining of grain subsidies that had taken place in the summer of 2020, canceling the VAT increase for sugar imports, prohibiting sugar exports,<sup>32</sup> allocating additional funds to stabilize sugar and edible oil prices and ensure the availability of powdered milk, prohibiting the export of widely consumed food products that Algeria imports, and intervening in the legislation and among economic operators to limit speculation. In 2021, the government gave the OAIC exclusive rights to wheat imports, later giving it exclusive rights to the purchase of wheat on the domestic market.

<sup>27</sup> According to the IMF, the Treasury bonds issued under the SOE debt buyback program have an interest rate of 2.75 percent and 3 percent, and maturities of 10 to 15 years. Most liquidity obtained by public banks under the PSR (60–80 percent) is reinvested in Treasury bonds with maturities of 10 to 15 years and rates of 5.4 percent and 5.7 percent.

<sup>28</sup> The PSR can be renewed twice, however.

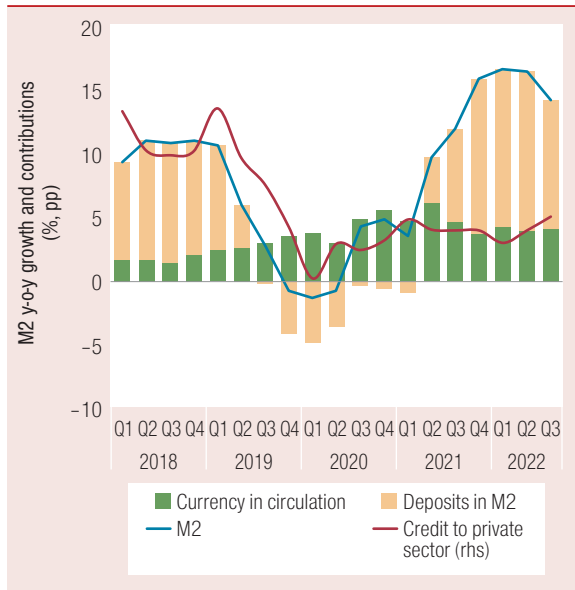
<sup>29</sup> Or DZD 1,400 billion, suggesting that the SOE debt buyback program was in part compensated by a concurrent increase in bank credit to SOEs.

<sup>30</sup> Other prudential and monetary easing measures expired at end-2021 (decrease in liquidity ratio, and of liquidity reserves, the increase in the threshold for the refinancing of government securities, the rescheduling of existing liabilities with the extension of interest subsidies, the full satisfaction of refinancing needs for existing debtors, and the extension of the refinancing period).

<sup>31</sup> See World Bank (2022).

<sup>32</sup> APS (March 28, 2022).

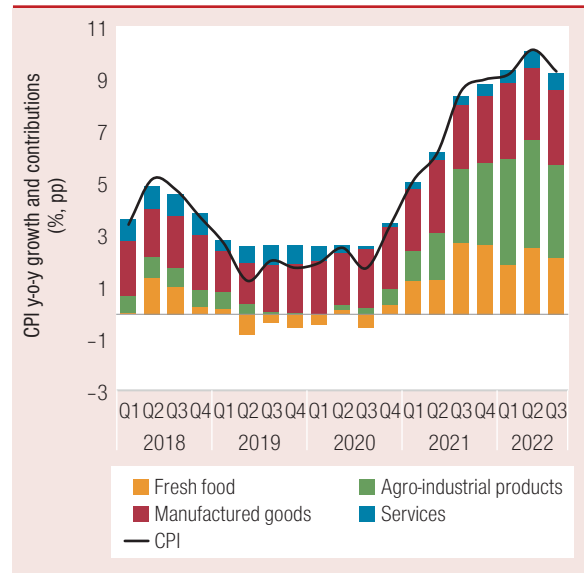
**FIGURE 19** • Increasing liquidity was channeled to the Treasury, without a rise in private sector credit...



Source: IMF and World Bank estimates.

The authorities also introduced unemployment benefits for young first-time job seekers and significantly

**FIGURE 20** • ...while inflation remained high



Source: IMF and World Bank estimates.

increased civil servant wages and pension benefits. (Table 1).

**TABLE 1 • Household Support Measures Introduced in 2022**

Type	Date	Description
Wages and pensions	Jan. 2022	Revision of income tax brackets and exoneration of income below 30,000 dinars. The GNMW (guaranteed national minimum wage) was increased from 18,000 dinars to 20,000 dinars in April 2021. <sup>a</sup>
	Apr. 2022	Revision of public sector pay scales for the first time since 2007. The average civil servant received a 15 percent (highest category) to 25 percent (lowest category) increase, senior officials a 5 percent increase, and the average contract agent a 14 percent (highest category) to 25 percent (lowest category) increase. <sup>b</sup>
	Apr. 2022	Increase in pension benefits between 2 percent (large pensions) and 10 percent (small pensions).
Price controls for basic products	Jan. 2022	Increased domestic purchase price for durum wheat from DZD 4,500 to DZD 6,000, for soft wheat from DZD 3,500 to DZD 5,000, for barley from DZD 2,500 to DZD 3,400, and for oats from DZD 1,800 to DZD 3,400. <sup>c</sup>
	Feb. 2022	Freeze on new taxes and 2022 Finance Law taxes on certain food products. <sup>d</sup>
	Apr. 2022	Postponement of the subsidy reform project introduced by the 2022 Finance Law. <sup>e</sup>
	Aug. 2022	Exoneration of dietary sugar from customs duties and VAT. Locally produced white sugar was also exempted from VAT at various stages of distribution. <sup>f</sup>
	Aug. 2022	Attribution of exclusive rights for the purchase of wheat on the domestic market to the Algerian Interprofessional Cereals Agency ( <i>Office Algérien Interprofessionnel des Céréales</i> , OAIC). The OAIC had obtained exclusive rights to wheat imports in August 2021. <sup>g</sup>
Transfers and benefits	Feb. 2022	Introduction of a DZD 13,000/month unemployment benefit for first-time job seekers. <sup>h</sup>
Other	Aug. 2022	Suppression of all taxes on e-commerce, mobile phones, and IT equipment for personal use and startups, relying solely on regulated tariffs. <sup>i</sup>

<sup>a</sup> 2022 Finance Law (JO No. 53).

<sup>b</sup> JO No. 23 (April 27, 2022).

<sup>c</sup> Algérie éco (January 17, 2022).

<sup>d</sup> APS (February 13, 2022).

<sup>e</sup> APS (April 24, 2022).

<sup>f</sup> 2022 Complementary Finance Law (JO No. 53).

<sup>g</sup> 2022 Complementary Finance Law (JO No. 53).

<sup>h</sup> JO No. 11 (February 27, 2022).

<sup>i</sup> 2022 Complementary Finance Law (JO No. 53).



# OUTLOOK AND RISKS

## High hydrocarbon prices continue to give the Algerian economy a comparative respite

**Recovery is expected to continue into 2023, sustained by the nonhydrocarbon sector and increased public expenditures.** In the baseline scenario, the public and energy sectors will drive investment growth, while consumer growth will be more modest, amidst gradual labor market recovery and the effects of high inflation on real consumer income, offset in part by purchasing power support measures. From a sectoral standpoint, oil production is expected to level off at its pre-pandemic level, reached in summer 2022. Gas production would remain stable, continuing its solid 2022 performance. In the non-hydrocarbon segment of the economy, growth will be sustained by the complete recovery of the service sector and an upturn in agricultural activity. The industrial and construction sectors will nevertheless benefit from increased public investment. Thus, real GDP is expected to grow by 2.3 percent in 2023, buoyed by the non-hydrocarbon (+3.1 percent) and hydrocarbon (+0.5 percent) sectors. GDP growth would slow down to 1.8 percent in 2024.

**In addition, authorities have approved supplemental efforts to encourage investment, in particular a new investment law.** In December 2019, authorities amended the law on hydrocarbons<sup>33</sup> to make the sector more attractive, specifically by lowering taxes.<sup>34</sup> Then, in 2020, the foreign ownership limit of 49 percent for Algerian enterprises was lifted for “non-strategic” sectors.<sup>35</sup> In February 2022, a Mediator of the Republic<sup>36</sup> was also nominated to unblock delinquent investment projects and improve administration-citizen relations. Finally, in June 2022, a

<sup>33</sup> Law 05-07 of April 28, 2005, amended by the law of January 13, 2013 (JO No. 11 of February 24, 2013).

<sup>34</sup> The application decrees were published between 2019 and 2021.

<sup>35</sup> Article 49 of the Finance Law of 2020 defines as strategic those sectors whose activity relates to the military industry, the pharmaceutical industry, mining, hydrocarbons, railways, harbors, and airports. This measure has not, for the moment, been followed by an announcement of foreign majority shareholding in any Algerian company.

<sup>36</sup> Instituted by presidential decree no. 20-45 of February 15, 2020 (JO No. 9 of February 19, 2020). This is an instance of a non-jurisdictional remedy that contributes to the protection of the rights and liberties of citizens and the regulation of institutional and public administration operations.

new investment promotion law<sup>37</sup> replaced that of 2016, aiming to improve investment frameworks, attract domestic and foreign investment, and simplify incentive programs. Eight provisions were enacted in the month of September<sup>38</sup> (see Box 2).

**In 2023, the current account balance is expected to remain in surplus (+1.2 percent of GDP) due to the continued high price of hydrocarbons.** Hydrocarbon exports will fall to 22.5 percent of GDP as a result of slight decreases in price and export volumes, amidst a rebound in domestic consumption. Non-hydrocarbon exports will continue performing well, while imports will resume growth, reaching 24.5 percent of GDP, driven by increased investment, particularly public investment (see Box 4). These trends will continue into 2024, bringing the current account balance below equilibrium. Consequently, foreign exchange will continue to increase in 2023 to reach

13.5 months of imports of goods and services at year-end 2023, before declining in 2024.

**The overall budget deficit is projected to improve in 2022, then widen in the medium term due to declining hydrocarbon revenues and rigid new expenditures.** Despite the strong growth of current expenditures as presented by the CBL2022, and a marked recovery in public investment,<sup>39</sup> the momentum of hydrocarbon export revenues is generating a large increase in revenues in 2022, expected to exceed

<sup>37</sup> The law on investment, adopted on June 27, 2022, by the APN, then on July 13 by the Council of the Nation, was published in the Official Gazette under law no. 22-18 of July 24, 2022 (JO No. 50 of July 28, 2022).

<sup>38</sup> The eight implementing texts were published in the Official Gazette on September 18, 2022 (JO No. 60).

<sup>39</sup> Investment expenditures may reach a 77 percent execution rate, the average of the past five years.

### BOX 3 : A NEW INVESTMENT LAW TO IMPROVE THE INVESTMENT CLIMATE

**A new investment law was adopted on July 24, 2022, replacing the law of 2016 on investment promotion.** The new law is meant to improve the business climate to increase private investment, both domestic and foreign, in economic activities of production of goods and services. It specifies the rights and obligations of investors as well as the incentive regimes granted to investments. The implementation decrees were already adopted in September 2022. The main changes are meant to increase the attraction of the country and simplify administrative procedures for the establishment and operations of investors.

**The Law lays out some new or improved protection guarantees for investors.** It introduces the principle of freedom to invest and equality of treatment of investments. Thus, foreign and domestic investment should be treated the same way, subject to existing legislation. The new law reiterates the transfer guarantee for foreign investors (invested capital, income, proceeds from the sale and liquidation of the investment); the decree, however, simplifies the conditions to benefit from this guarantee. As for the dispute settlement provision, like under the 2016 law, foreign investors can use the provisions of the international investment agreements (IIAs) ratified by Algeria or can include an arbitration clause in their agreements with the State. The new law reiterates these options but adds a reference to mediation in IIAs and specifies that the investment promotion agency (now called Algerian Investment Promotion Agency or “Agency”) can agree on behalf of the State on an arbitration clause with the investor.

**The Law improves the institutional framework.** The Agency is focused on investment promotion and aftercare as well as streamlined procedures to operationalize investment projects and grant incentives. In particular, the law establishes decentralized one-stop shops (OSS) and an OSS to facilitate major projects (over 2 billion DA) and foreign investments, which should assist with access to land. The law also foresees the setting up of a digital platform for the Agency’s services to investors and the filing of complaints before the High National Commission competent for investment related issues. The National Investment Council remains in place and is mainly in charge of investment policy.

**Investment incentive regimes were also rationalized and streamlined.** Instead of five schemes, the new law proposes three, with clearer eligibility criteria detailed in the decree: regimes based on sectors, zones and for “structuring” investments (i.e., creation of at least 500 jobs and greater than 10 billion DA). While the regimes essentially provide for fiscal incentives in the form of tax exemptions, their durations can be shorter than under the 2016 law: 3 to 7 years for the investment phase and 3 to 10 years for the operating phase.

**Additional actions could be considered to further investors’ confidence.** With streamlined administrative procedures, decreasing entry restrictions and better-defined incentives, this new law should attract more foreign direct investment. Provided the Agency gets the adequate resources, it can also promote retention and expansion of existing investments. Yet, the removal of some entry restrictions like the cap of 49/51 for foreign ownership for most activities could be reflected in a restriction list for foreign investors in a decree. Some guarantees could be reintroduced fully or strengthened (e.g., fair and equitable treatment or protection against indirect expropriation). Incentives could be further rationalized with performance or cost-based instruments instead of tax holidays, especially given the OECD/G20 BEPS project resulting in minimum tax rate for MNEs.



that in expenditures, and the overall budget deficit may resolve somewhat (5.7 percent of GDP). In 2023 and 2024, falling hydrocarbon exports will reduce revenues, which will be offset only in part by increased tax revenue. Current and investment expenditures will increase slightly, and the deficit will rise, funded by public domestic debt issuance.<sup>41</sup> Public debt is expected to reach roughly 68 percent of GDP by year-end 2024.

**Inflation will subside somewhat, mitigated by the appreciation of the dinar in relation to the Euro and the Dollar.** In the baseline scenario, inflation will slow, in part because of decreasing import prices, the delayed effect of the appreciation of the dinar vis-à-vis the euro, and policies to strengthen food subsidy mechanisms. Inflation will nevertheless remain high because of inertia and the delayed effects of sharp increases in both liquidity in the economy and public expenditures.<sup>42</sup>

## In a global context of uncertainty, improved resilience is still the priority

**The viability of external and budgetary balances is still dependent on volatile world oil prices, in a context of uncertainty about the global economy.** In the baseline scenario, the price of oil gradually diminishes over the projection period. Higher or lower prices than anticipated could have a marked impact on external and budgetary balances, fiscal space, financing needs, and foreign exchange reserves trajectories. Although sustained improvements in external balances<sup>43</sup> may contribute to economic resilience, the marked rise in public spending in 2022 increases the sensitivity of budgetary balances and the trajectory of public debt to hydrocarbon prices, making prudent budgetary management, increased mobilization of tax revenues, and strengthened efficiency, effectiveness, and equity in public expenditures all the more important. Furthermore, reducing pressure on the domestic banking sector to finance budgetary deficits would allow it to allocate its resources to finance recovery and diversification, all while mitigating inflationary risks.

**Although a significant increase in public expenditures may partially mitigate inflationary pressure on certain households, it is not without risks.** The CBL2022 projects current expense increases of 41 percent and a doubling of investment expenditures

year-on-year. An analysis of fiscal multipliers, however, suggests that the economic benefits of such an increase may be limited. The model presented in Box 4 suggests that historically, an increase in current expenditures has had no identifiable effect on Algerian GDP, the marginal increase in private consumption being counterbalanced by an increase in imports. This model suggests that increasing public investment has also had no identifiable effect on GDP, stimulating the construction sector but once again leading to marked increases in imports. Furthermore, increasing public expenditures has historically had a delayed effect on consumer prices, accounting for 17 percent of consumer price index variations two years later.<sup>44</sup>

**Ultimately, the hydrocarbon sector and public expenditures represent only partial solutions for sustainable recovery and durable growth in Algeria.** Europe's efforts to diversify its energy supply may bolster hydrocarbon sector investments, state revenues, and medium-term growth in Algeria. However, it is expected that global initiatives to fight climate change will discourage investment in fossil fuel industries. As the State's capacity to drive growth is limited and expected to diminish, the non-hydrocarbon private sector must become the motor for Algerian growth and diversification of the economy. Therefore, the promotion of sustainable non-hydrocarbon growth and job creation will depend upon the continued implementation and success of government structural reform programs, which must allow for greater openness to the private sector. Improving the economy's competitiveness, building business productivity, and strengthening investment in human capital are essential to the flourishing and resilience of the Algerian economy.

<sup>40</sup> At the time of publication, a deficit financing strategy had not been announced. As the PSR is renewable up to two times, it may continue to finance the Treasury deficit but will continue to fuel liquidity and absorb resources that could serve to fund businesses.

<sup>41</sup> Inflation in Algeria is characterized by high short-term inertia, but macroeconomic factors (import price, exchange rate, currency in circulation, and public expenditures) account for half of inflation over a two-year timeframe (World Bank, 2022).

<sup>42</sup> Continued non-hydrocarbon export growth and import moderation.

<sup>43</sup> See World Bank (2022).

## BOX 4 : FISCAL MULTIPLIERS IN ALGERIA

**The marked increase in public expenditures in 2022, ratified by the Complementary Budget Law of 2022, poses the question of what effect it will have on economic activity at different stages.** The propensity for public expenditures, whether current or investment, to drive economic activity and generate additional economic activity is captured by the fiscal multiplier, which quantifies the impact of variations in public expenditures on GDP growth.

**Empirical studies that estimate fiscal multipliers in the MENA region and Algeria find low multipliers.** The International Monetary Fund (2018) has estimated short- and long-term fiscal multipliers for Algeria to be modest and less than unity. An analysis conducted on quarterly Algerian data since 2000 (see Technical Annex 2) corroborates the results of existing literature and finds a low multiplier effect of Algerian government expenditures on GDP, notably caused by the effect of a worsening commercial balance.

**Decomposition of GDP by sub-component suggests that the limited impact of public expenditures on economic activity results from its impact on imports.** Algerian quarterly data indicate that imports increase in response to budgetary shocks, while the effect of shocks on exports is null or even negative, even in the medium term. The knock-on effect of public expenditures on private consumption is observable but limited.

**The differentiation of multiplier effects by type of expenditure (current or investment expenditure) suggests a positive relationship between public investment and export levels.** This effect suggests an inverse causality resulting from a pro-cyclical rise in public investment following an increase in budget revenues due to rising hydrocarbon exports. In contrast, the impact of public investment on total investment is not sustained, and the response function on total investment even suggests a crowding-out effect in the medium term. Furthermore, this crowding-out effect could result from the impact of public investment on public debt dynamics.

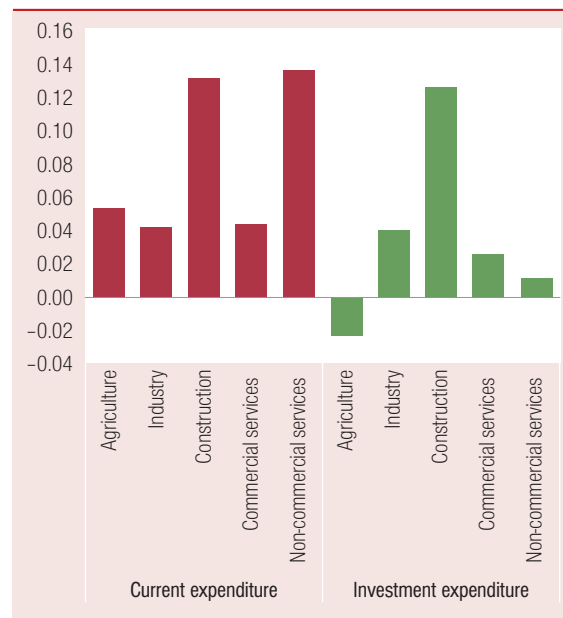
**At the sector level, a marked effect of public expenditures on the construction sector is visible.** Construction and non-market services appear to react more strongly to public expenditure shocks—though the calculated levels of these budgetary multipliers at the sector level are very low—while the hydrocarbon sector appears to respond negatively to increases in public expenditures. The latter mechanism seems to reflect the difficulty the econometric model has in isolating inverse causality and, in such cases, the countercyclical role of public current expenditures since the 2000s.

**FIGURE 21 • Fiscal multipliers after 3 years, demand side**



Source: World Bank estimates.  
Note: Quarterly data, Q1 2002–Q1 2022.

**FIGURE 22 • Fiscal multipliers after 3 years, production side**



Note: The hydrocarbon sector is not represented graphically for better legibility. Its negative reaction in the model seems to reflect the difficulty the econometric model has in isolating inverse causality and, in such cases, the countercyclical role of public current expenditures since the 2000s.

## TABLE OF ECONOMIC INDICATORS

	Projections						
	2018	2019	2020	2021	2022	2023	2024
<b>Output and prices</b>							
Real GDP	1.1	1.0	-5.1	3.5	3.7	2.3	1.8
Non-hydrocarbon sector	2.9	2.7	-3.9	2.4	4.1	3.1	2.6
Hydrocarbon sector	-6.4	-4.9	-10.2	10.3	2.6	0.5	-0.2
Per capita	-0.9	-0.9	-6.8	1.6	1.8	0.5	0.0
Consumer price index (period average)	4.3	2.0	2.4	7.2	9.3	7.8	6.4
GDP (in trillions of current DZD)	20.4	20.5	18.4	22.0	28.7	28.7	29.1
GDP (in billions of current US\$)	174.9	171.8	144.9	163.0	201.4	197.9	193.2
GDP per capita (USD)	4,107	3,955	3,293	3,632	4,427	4,270	4,094
Crude oil production (thousand barrels per day)	1,040	1,023	899	911	1,016	1,031	1,022
Natural gas production (billions of m3)	95.9	90.3	85.1	105.0	102.7	102.8	103.0
<b>External sector</b>							
Current account	-9.7	-9.9	-12.5	-2.8	4.7	1.2	-2.2
Trade balance	-9.0	-9.1	-12.0	-1.6	6.0	2.5	-0.9
Exports of goods and services	25.4	22.5	17.2	25.6	29.7	27.0	24.6
Hydrocarbon exports	22.2	19.2	13.8	20.9	24.8	22.5	19.9
Nonhydrocarbon exports	3.1	3.3	3.4	4.7	4.9	4.4	4.7
Imports of goods and services	34.4	31.6	29.2	27.2	23.7	24.5	25.4
Gross official reserves (months of imports) <sup>a</sup>	15.7	13.6	13.3	11.2	12.9	13.5	12.3
Exchange rate (Algerian dinar per US\$; period average)	116.6	119.4	126.8	135.1			
Sahara Blend export price (US\$)	71.3	64.4	42.1	72.7			
<b>Central Government Finance</b>							
Government revenue and grants	33.5	32.2	30.7	29.9	34.0	33.9	33.1
Hydrocarbon revenue <sup>b</sup>	14.2	13.0	10.5	11.8	16.7	15.6	14.1
Nonhydrocarbon revenue	19.3	19.2	20.2	18.1	17.3	18.2	18.9
Expenditures <sup>c</sup>	37.9	37.8	37.6	33.7	37.1	38.2	38.5
Current expenditures	26.1	23.9	27.3	24.7	26.7	27.1	26.9
Capital expenditures	11.9	13.9	10.3	9.0	10.4	11.1	11.6
Special Account Balance and Treasury Interventions	2.4	4.0	5.1	3.4	2.6	2.6	2.6
Fiscal balance	-4.4	-5.6	-6.9	-3.8	-3.1	-4.3	-5.5
Overall budget balance	-6.9	-9.6	-12.0	-7.2	-5.7	-6.9	-8.0
Primary overall budget balance	-6.4	-9.0	-11.0	-6.6	-5.0	-6.2	-7.2
Nonhydrocarbon overall budget balance	-21.0	-22.6	-22.5	-19.1	-22.5	-22.5	-22.2
Total central Government debt	37.9	45.5	52.1	63.0	54.0	61.0	68.3
Domestic debt	37.1	44.8	51.3	62.3	53.5	60.5	67.8
External debt	0.8	0.6	0.8	0.7	0.5	0.5	0.5

<sup>a</sup> Excluding IMF Special Drawing Rights (SDR).

<sup>b</sup> Includes dividends from Sonatrach and hydrocarbon revenues transferred to the oil savings fund.

<sup>c</sup> In 2018, a transfer to the national pension fund was reclassified from capital expenditures to current expenditures.

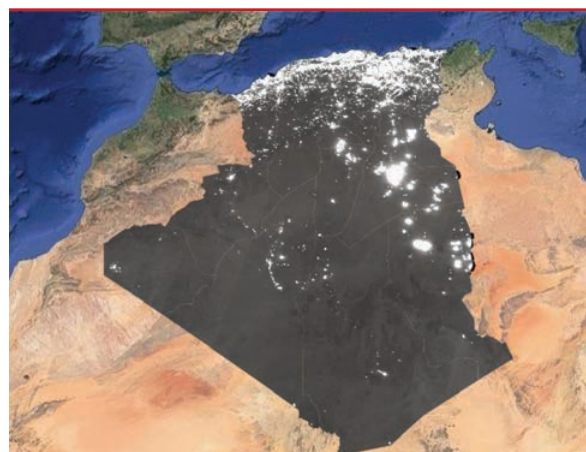


# ANNEX 1: ESTIMATING ECONOMIC ACTIVITY THROUGH NIGHTTIME LIGHT DATA

**N**ighttime light data are now among the information often used to evaluate economic activity at a higher frequency and at finer geographic levels. The applicability of nighttime light data to monitor economic activity was brought to light for the first time by Henderson, Storeygard, and Weil (2012) and has since become a widely accepted proxy for economic activity. Satellite data have been available daily at a fine geographic level since 2012 and can help to evaluate economic activity when data are rare, aggregated by space or time, or delayed. Furthermore, these data are accessible to the public [on the Earth Observation Group website](#), and the World Bank has created a [complete tutorial](#) for researchers to learn to harness these data autonomously.

**Nighttime light data have been used to evaluate the effects of the COVID-19 crisis in cities of the Middle East and North Africa (MENA) region, particularly Algiers, Oran, and Constantine.** Roberts et al. (2020) have observed nighttime light in quasi-real time in the 47 cities of the MENA region and documented the sharp drop in activity in March 2020 in Algeria's three largest cities, similar to the drop in activity in most of the region's cities.

FIGURE 23 • Nighttime lights in Algeria



Source : Google Earth Engine..

**The use of nighttime light data to monitor economic activity in Algeria requires isolating hydrocarbon production activities.** Gas flaring on petroleum production sites creates disproportionate quantities of luminosity, which is also the case to a lesser extent in the production of natural gas. The hydrocarbon sector represented 20.9 percent of Algeria's GDP in 2021, but it generated 90.3 percent of luminosity. For example, Illizi, a wilaya producing

oil and gas, emits 10 percent more luminosity than Algiers, despite having a population 58 times smaller.

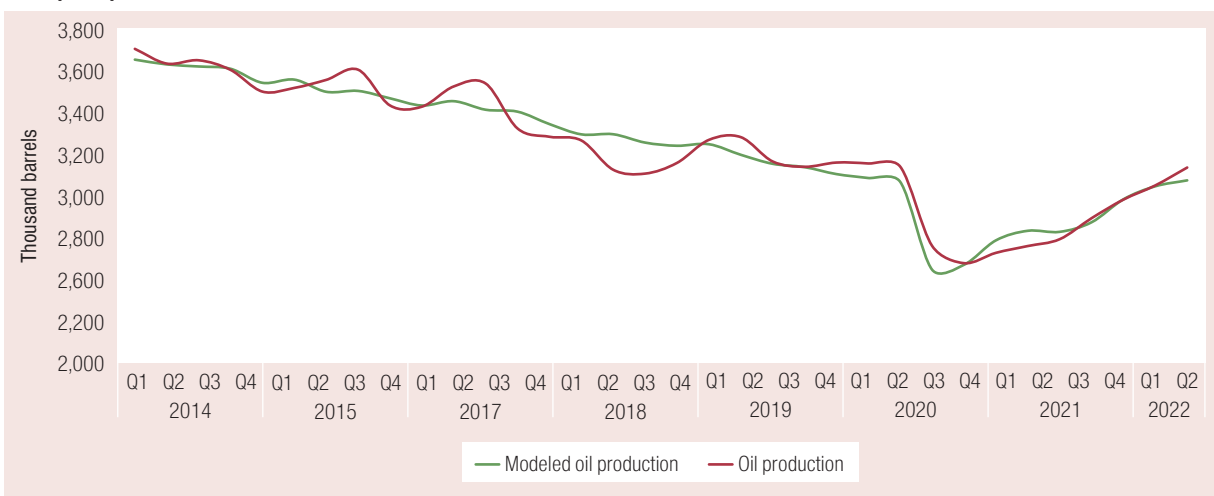
**The correlation between nighttime light emanating from gas flaring sites and the production of crude oil proves to be consistent, allowing us to estimate their levels of production based on these data within a minimal timeframe.** Algerian nighttime light emanating from flaring sites is isolated by using the geo-coordinates of flaring sites provided by the World Bank's Global Gas Flaring Reduction Partnership. Nightlights from gas flaring are highest in the wilayas of Ouargla and Illizi, which represent 71 percent and 15 percent, respectively, of petroleum reserves in Algeria, but also in the two Algerian petrochemical factories in Arzew (near Oran) and Skikda. The correlation between nighttime light due to flaring and crude oil production is clear. A simple Ordinary Least Squares model in which monthly crude oil production in Algeria, gleaned from OPEC data, is regressed over monthly nighttime light from flaring,

a time trend, and a dummy variable for reductions in quotas in 2020 accounts for up to 94 percent of the crude oil production level. A model using nighttime light in the gas producing wilayas of Ghardaia and Laghouat—the immense Hassi R'Mel site is split between the two—Adrar, and Illizi (excluding flaring sites) accounts for about 69 percent of natural gas production (Figure 23 and 24).

**Nighttime light also provides a good approximation of non-hydrocarbon sector activity.** It is possible to exclude oil and gas production regions and to regress non-hydrocarbon real GDP provided by the National Statistical Agency over nighttime light for the four largest regions (North-West, North-Central, North-East, and the Eastern Highlands), which represent about 80 percent of the Algerian population. Nighttime light accounts for 53 percent of non-hydrocarbon real GDP in a univariable regression, and 82 percent once a quarterly trend and dummy variable are introduced (Figure 25).

**FIGURE 24 • Modeling of crude oil production by nighttime light**

**a. Graphic representation**



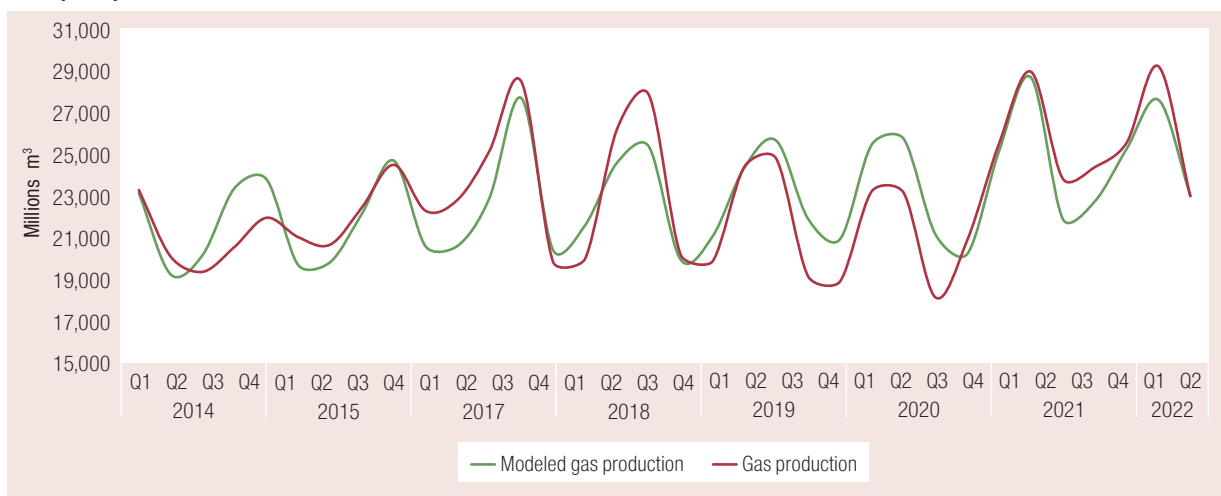
**b. Regression estimates**

	(1)	(2)	(3)
Ouargla		1.11e-05***	1.11e-06
Illizi		-2.42e-05*	1.32e-06
Laghouat		-5.91e-05	-4.41e-05
Ghardaïa		-4.53e-05	1.01e-05
Trend	Yes	No	Yes
Dummy COVID	Yes	No	Yes
COVID x trend	Yes	No	Yes
R <sup>2</sup>	0.939	0.448	0.944

Note: Regressions include a constant and use 34 quarterly observations. Dummy COVID takes a value of zero prior to Q2-2020, and of 1 starting in Q1-2020. It then interacts with a trend line. Robust standard errors in parentheses (\*\*\*) p<0.01, \*\* p<0.05, \* p<0.1). Model 3 is used for the graphic representation.

**FIGURE 25 • Modeling of natural gas production by nighttime light**

**a. Graphic representation**



**b. Regression estimates**

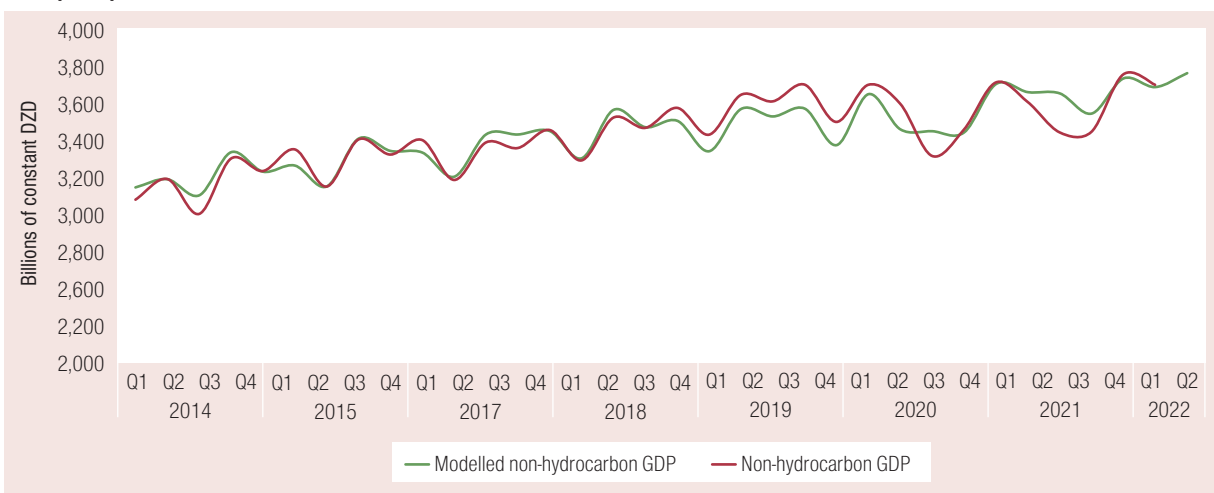
	(1)	(2)	(3)
Laghouat		-0.00780**	-0.00336
Ghardaia		0.00838***	0.00363*
Illizi		0.000251	0.000904
Adrar		-0.00135***	-0.000962**
Dummy quarter	Yes	No	Yes
R <sup>2</sup>	0.530	0.521	0.717

Note: Regressions use 34 quarterly observations. Robust standard errors in parentheses (\*\* p<0.05, \* p<0.1). Robust standard errors in parentheses (\*\* p<0.01, \*\* p<0.05, \* p<0.1). Model 3 is used for the graphic representation.



**FIGURE 26 • Modeling of non-hydrocarbon GDP by nighttime light**

**a. Graphic representation**



**b. Regression estimates**

	(1)	(2)	(3)
Four regions		0.0199***	0.00931*
		(0.00302)	(0.00495)
Trend	Yes	No	Yes
Dummy quarter	Yes	No	Yes
Constant	Yes	Yes	Yes
R <sup>2</sup>	0.794	0.530	0.816

Note: Regressions use 34 quarterly observations. Robust standard errors in parentheses (\*\*\*) p<0.01, \*\* p<0.05, \* p<0.1). Robust standard errors in parentheses (\*\*\*) p<0.01, \*\* p<0.05, \* p<0.1).



# ANNEX 2: ESTIMATING FISCAL MULTIPLIERS IN ALGERIA

**T**he analysis of fiscal multipliers relies on the methodology proposed by Blanchard and Perotti (2002), which is also used in Hory's study of the fiscal multipliers in emerging economies (2016). Algerian fiscal multipliers are calculated from the impulse response functions of the GDP and its subcomponents after a fiscal shock, derived from Blanchard and Perotti's structural vectorial autoregressive (SVAR) model estimations. These impulse response functions make it possible to calculate, at different temporal horizons after the fiscal shock, the variation of the economic activity attributable to this shock.

**The estimation of the impact of public expenditure on the GDP raises an issue of reverse causality.** Public expenditure can affect the GDP, but the GDP can also affect public expenditure. Blanchard and Perotti (2002) propose estimating a SVAR model by supposing that public expenditure does not correspond to the economic context of the ongoing quarter. The discretionary (exogenous) part of fiscal policies may thus be isolated.

**An increase in public expenditure may broadly result from three types of events:** (i) the automatic and immediate response to variations of the GDP and macroeconomics, commonly called

“automatic stabilizers,” (ii) a discretionary change of fiscal policies depending on the economic context, or (iii) an exogenous change in public expenditure unrelated to the economic context. The effects of automatic stabilizers are controlled by supposing that the GDP of the ongoing quarter does not affect that quarter's public expenditure. If the automatic stabilizers have an immediate effect, Blanchard and Perotti (2002) affirm that their effect on public expenditure is very low. The hypothesis, therefore, remains realistic. Concerning the discretionary changes in public expenditure depending on the economic context, if we consider that public expenditure cannot be modified due to a shock to the GDP in just one quarter, we once again artificially inhibit the endogenous changes of the fiscal policies through the structural hypothesis of Blanchard and Perotti (2002).

**By supposing that the GDP does not have a contemporary effect on public expenditure, it is therefore possible to ensure that the sole source of variation in public expenditure is exogenous.** It is thus possible to control the automatic response of public expenditure to the GDP and to isolate exogenous fiscal shocks to retrace their effects on the GDP and its subcomponents. From this perspective, quarterly data are preferable.



# ANNEX 3: SPECIAL SECTIONS IN LATEST ALGERIA ECONOMIC UPDATES

## **Spring 2022: “Does Algeria benefit from the increase in gas prices?”**

Export prices for Algeria’s natural gas follow a different trajectory from the gas reference price on international markets. As such, although the Henry Hub gas reference price increased nearly 50 percent between Q2 and Q3-2021, export prices for Algeria’s natural gas increased only 0.5 percent over the same period. These prices are established contractually, sometimes on a long-term basis, and based on bilateral negotiations with the buyers. Furthermore, an econometric modeling exercise allows us to establish that export prices for Algeria’s natural gas are characterized by strong inertia, as well as a delayed link to the price of oil. This model makes it possible to explain 88 percent of the price variations for exported natural gas.

## **Spring 2022: “Impact of Macroeconomic Factors on Inflation in Algeria”**

Inflation has had an upward orientation in 2021 and 2022, in Algeria and throughout the world, but the

underlying causes vary depending on the country. In Algeria, the price increase that began in 2021 was driven by that of food products. Additionally, since 2009, a modeling of the Consumer Price Index makes it possible to determine that this is characterized by a strong short-term inertia, but that the depreciation of the dinar, the increase in the price of imported products, the increase in public expenditure, and the increase in currency in circulation explain more than 40 percent of the variation of the CPI after two years. Furthermore, the importance of these factors varies according to product and service categories, reflecting notably the intensive import of these products and the characteristics of the Algerian market in production and distribution.

## **Fall 2021: “Development of Non-Monetary Poverty and Inequality in Algeria”**

The indicator of multidimensional poverty in Algeria improved between 2013 and 2019, reflecting progress in all areas, including education, health, and living standards. Although Algeria reports

respectable results in the MENA region and despite notable improvement, multidimensional poverty varies considerably according to region and between rural and urban areas. The North-Central and North-Eastern regions face lower deprivation levels than the rest of the country, whereas the Central Highlands region faces higher deprivation. However, the poorest regions experienced more rapid improvement between 2013 and 2019, thus converging with richer regions. Meanwhile, health and education have become more important aspects of deprivation, highlighting Algeria's political priorities in terms of human development.

### **Fall 2021: “Algeria’s Resilience in the Face of Risks from Climate Change and Natural Disasters”**

Algeria's territory is exposed to an array of climate and geological risks—floods, earthquakes, droughts, forest fires, coastal and soil erosion, etc.—particularly in urban areas, where there is rapid demographic growth and significant concentration of economic activity. In Algeria, the most common disasters are floods, while the most significant economic losses have been caused by earthquakes. Algeria has a modern, legal framework for disaster risk management (DRM) as well as a clear framework for decision-making in terms of emergency intervention and recognizes the importance of protecting strategic infrastructure and critical sectors. Serious effort has been made to reduce risk, especially in the management of emergency interventions and reconstruction though at the expense of prevention. Moreover, data sharing is not systematic, leading to inconsistencies, especially in disaster prevention, and the application of DRM legislation could be improved. Significant effort should also be made toward reducing the general and inter-sector management of climate-related and disaster risks.

### **Spring 2021: “Effects of COVID-19 on Inequality in the MENA Region and Algeria”**

The results of surveys conducted in the Middle East and North Africa (MENA) region confirm that the poorest individuals have reported worsening living standards since the onset of the COVID-19 crisis. Despite the lack of recent data on household wellbeing in Algeria, the characteristics of vulnerable individuals suggest that inequalities have also increased. Such individuals are at greater risk of contracting COVID-19 or of losing their job during the pandemic, are least likely to have adequate social protection, and risk being disproportionately affected by the macroeconomic and tax adjustments made in response. Long-term and inclusive recovery will therefore require providing the most vulnerable with the opportunity to recover what they lost.

### **Spring 2021: “Toward Equitable Reform of the Algerian Health System”**

The consequences of the COVID-19 pandemic have shown the need for equitable reform of the Algerian health system. Although the number of cases and deaths remains low at least officially, the pandemic has highlighted the limitations of the health system. A dual burden of transmissible and nontransmissible diseases and limited means suggest that there is a need to strengthen the system. Although it received significant public financial support and requires relatively little individual expenditure, and although life expectancy and non-transmissible disease control are comparable to peer countries, results in terms of health remain below those of middle- and high-income countries, especially in terms of equity in the health conditions of mother and child. Physical and human resources and better distribution of health coverage are major challenges. Finally, reduced public financing and falls in capacity endanger the resilience of the health system.

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