# **ALGERIA**



# ECONOMIC UPDATE

Building Resilience in Favorable Times



# Algeria Economic Update

Building Resilience in Favorable Times

Spring 2022



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## LIST OF ACRONYMS

ANEM	National Employment Agency (Agence	Mqx	Million quintals
	Nationale de l'Emploi)	MTI	Macroeconomics, Trade, and Investment
APS	Algérie Presse Service	NEER	Nominal Effective Exchange Rate
BdA	Central Bank of Algeria (Banque	OAIC	Algerian Interprofessional
	d'Algérie)		Cereals Agency (Office Algérien
BTU	British Thermal Unit		Interprofessionnel des Céréales)
CPI	Consumer Price Index	OECD	Organization for Economic Cooperation
DAPS	Additional Provisional Safeguard		and Development
	Duty (Droit Additionnel Provisoire de	OLS	Ordinary Least Squares
	Sauvegarde)	ONS	National Statistical Agency (Office
DRM	Disaster Risk Management		National des Statistiques)
DZD	Algerian Dinar	OPEC	Organization of Petroleum Exporting
EIA	Energy Information Administration		Countries
EPT	Territorial Programming Space (Espace	pp	Percentage Point
	de Programmation Territoriale)	PPI	Producer Price Index
EU	European Union	REER	Real Effective Exchange Rate
EUR	Euro	SDR	Special Drawing Rights
FAO	Food and Agriculture Organization	SMMEEI	Steel, Metal, Mechanical, Electrical, and
GDP	Gross Domestic Product		Electronic Industries
GIT	Global Income Tax	SOE	State-Owned Enterprise
IMF	International Monetary Fund	CAS	Special Purpose Accounts (Comptes
IPPI	Industrial Producer Price Index		d'Affectation Spéciale)
JO	Official Journal (Journal Officiel)	PSR	Special Refinancing Program
JODI	Joint Organizations Data Initiative		(Programme Spécial de Refinancement)
LGN	Liquified Natural Gas	TTF	Title Transfer Facility
LPG	Liquified Petroleum Gas	USD	United States Dollar
mb/d	Million barrels/day	UVI	Unit Values Index
MENA	Middle East and Northern Africa	VAR	Vector Autoregression
MoA	Memorandum of Agreement	WB	World Bank

## **ACKNOWLEDGMENTS**

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 up to late 2021 and early 2022. Chapter 2 describes the short- and medium-term outlook for the Algerian economy. The deadline for considering data and preparing forecasts was June 17, 2022.

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

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## **EXECUTIVE SUMMARY**

DP returned to its pre-pandemic level in the fourth quarter of 2021, despite a drop in investment. The recovery was driven by the hydrocarbon sector and a stronger recovery in the services sector, despite a drop in agricultural activity and incomplete recovery in the public manufacturing sector. On a full year basis, non-hydrocarbon GDP remained 1.6 percent below its 2019 level, while hydrocarbon GDP approached this level (1 percent below). The recovery in employment opportunities continued but remained incomplete, and inflation continued to rise. In response, the authorities implemented a set of measures to limit the impact on purchasing power, including the introduction of unemployment benefits, an increase in the threshold for income tax liability, and higher salaries in the civil service.

The continued rise in global hydrocarbon prices has led to a marked improvement in macroeconomic balances. The price of Algerian oil increased by 50 percent over the first five months of 2022, pulling in its wake—albeit with a delay—the export price of Algerian gas. Coupled with the rise in European gas demand and OPEC production quotas, this improvement offset the rise in import prices, especially of cereals, and erased the current account deficit, thus permitting a relative stabilization of foreign currency reserves. Nevertheless, the dinar continued to depreciate against the US dollar while stabilizing against the euro.

The overall budget deficit narrowed in 2021, from 12 to 7.2% of GDP. In addition to the

jump in oil revenues, there was a moderate and cross-cutting increase in non-oil revenues. Current spending increased following the rise in current transfers, but the lack of recovery in public investment limited the rebound in spending. The implementation of the debt buyback program for state-owned enterprises increased public debt, from 51 to 63% of GDP. Monetary policy remained accommodative, and bank liquidity recovered in line with export earnings. Credit growth to the private sector remained sluggish, and bank credit to the Treasury exceeded that to private businesses.

The recovery in economic activity is expected to continue in 2022, while high hydrocarbon prices generate a current account surplus. Activity in the hydrocarbon sector should continue to support growth, and activity in the nonhydrocarbon sectors will return to its pre-pandemic level. However, the recovery in investment could be more marked than that in consumption. Hydrocarbon exports are expected to remain at a high level, generating a current account surplus and a marked increase in fiscal revenues, which, assuming a prudent spending policy, should bring the overall budget deficit closer to balance. However, a fall in hydrocarbon export prices and volumes in 2023 and 2024 may lead to a gradual deterioration in external and budget balances.

The main risks to the macroeconomic outlook arise from fluctuations in global hydrocarbon prices, underscoring the crucial role of the implementation of the Government's reform program. Macroeconomic balances remain dependent

on fluctuations in highly volatile world oil prices in a context of uncertainty surrounding the evolution of the war in Ukraine and the dynamics of the global economy. This means that the pace and sustainability of the recovery will depend on the impact of the reform program on the ability of the private sector to sustain

growth. As elsewhere, inflation has also become a growing concern in Algeria, and prudent budgetary and monetary policies (in the medium term), as well as reforms favoring a greater degree of competition (in the longer term) will contribute to limiting inflationary pressures.

# RÉSUMÉ ANALYTIQUE

e PIB a retrouvé son niveau prépandémie au quatrième trimestre 2021, malgré une baisse de l'investissement. La reprise a été portée par le secteur des hydrocarbures et un redressement plus marqué dans les services, malgré la baisse de l'activité agricole et une reprise incomplète dans le secteur manufacturier public. En année pleine, le PIB hors-hydrocarbures est demeuré à 1,6% en deçà de son niveau de 2019, tandis que le PIB des hydrocarbures s'en est approché (1% en deçà). La reprise des offres d'emploi s'est poursuivie mais est demeurée incomplète, et l'inflation a continué d'augmenter. Les autorités ont alors mis en œuvre un ensemble de mesures afin de limiter l'impact sur le pouvoir d'achat, ceci incluant l'introduction d'une allocation-chômage, la hausse du seuil d'assujettissement à l'impôt sur le revenu, et la hausse des salaires dans la fonction publique.

La hausse continue des prix mondiaux des hydrocarbures a cependant généré une nette amélioration des équilibres macroéconomiques. Le prix du pétrole algérien a gagné 50% durant les cinq premiers mois de l'année 2022, entraînant dans son sillage, bien qu'avec un délai, le prix à l'export du gaz algérien. Couplé à la hausse de la demande européenne en gaz et des quotas de production de l'OPEP, cette amélioration a contrebalancé la hausse des prix à l'importation, notamment des céréales, et effacé le déficit du compte courant, permettant une stabilisation relative des réserves de change. Néanmoins, le dinar a continué à se déprécier vis-àvis du dollar US, mais s'est stabilisé face à l'Euro.

Le déficit budgétaire global s'est ainsi largement résorbé en 2021, passant de 12 à 7,2% du PIB. Au bond des recettes pétrolières s'est ajoutée une hausse modérée et transversale des recettes hors-pétrole. Les dépenses courantes ont augmenté suivant la hausse des transferts courants, mais l'absence de reprise de l'investissement public a limité le rebond des dépenses. La mise en œuvre du programme de rachat de créances des entreprises publiques a fait grimper l'endettement, de 51 à 63% du PIB. En outre, la politique monétaire est demeurée accommodante et la liquidité bancaire est remontée. suivant les recettes d'exportation. La croissance du crédit au secteur privé est demeurée atone, et les crédits bancaires à l'État ont dépassé ceux aux entreprises privées.

La reprise graduelle de l'activité devrait se poursuivre en 2022, et les prix élevés des hydrocarbures permettre un surplus du compte courant. L'activité du secteur des hydrocarbures devrait continuer de soutenir la croissance, et l'activité dans les secteurs hors-hydrocarbures retrouver son niveau prépandémie. La reprise de l'investissement pourrait cependant être plus marquée que celle de la consommation. Les exportations d'hydrocarbures devraient demeurer à un niveau élevé, générant un surplus du compte courant et une hausse marquée des recettes budgétaires qui, dans l'hypothèse d'une politique de dépense prudente, permettrait de rapprocher le solde global du Trésor de l'équilibre. En 2023 et 2024, la baisse des prix et volumes d'exportation d'hydrocarbures devrait cependant entraîner une détérioration graduelle des équilibres extérieurs et budgétaires.

Les principaux risques aux perspectives macroéconomiques émanent des fluctuations sur le marché des hydrocarbures, soulignant le rôle crucial de la mise en œuvre du programme de réforme du Gouvernement. Les équilibres macroéconomiques restent tributaires des fluctuations des prix mondiaux du pétrole, hautement volatils, dans un contexte d'incertitude autour de l'évolution de la

guerre en Ukraine et de la dynamique de l'économie mondiale. Ainsi, le rythme et la durabilité de la reprise dépendra de l'impact du programme de réforme sur la capacité du secteur privé à soutenir la croissance. Comme ailleurs, l'inflation est aussi devenue un sujet de préoccupation croissant en Algérie. En outre, des politiques budgétaires et monétaires prudentes (à moyen terme), ainsi que des réformes favorisant un plus grand degré de compétition (à plus long terme) contribueraient à limiter les pressions inflationnistes.

## ملخص وافِ

اد إجمالي الناتج المحلي غير الهيدروكربوني إلى مستواه المسجل فيما قبل جائحة كورونا في الربع الأخير من عام 2021، على الرغم من انخفاض الاستثمار. وكان الانتعاش مدفوعًا بقطاع الهيدروكربونات مع انتعاش أقوى في قطاع الخدمات، على الرغم من تراجع النشاط الزراعي والانتعاش غير الكامل في قطاع الصناعة العمومية. أما عند قياسه على مدار العام بأكمله، فقد ظل إجمالي الناتج المحلي غير القيدروكربوني أقل من مستواه لعام 2019 بنسبة %1.6، في حين اقترب منه إجمالي الناتج المحلي الهيدروكربوني (10% أقل). كما استمر الانتعاش في فرص العمل لكنه ظل غير مكتمل، واستمر التضخم أيضاً في الارتفاع. الأمر الذي أدى الى اتخاذ السلطات مجموعة من الإجراءات للحد من التأثير على القوة الشرائية، عما في ذلك إطلاق برنامج منحة البطالة، ورفع الحد الأدنى للإعفاء من ضريبة الدخل، وزيادة رواتب الوظيف العمومي.

ومع ذلك، أدى الارتفاع المستمر في أسعار النفط والغاز عالمياً إلى حدوث تحسن ملحوظ في موازين الاقتصاد الكلي. فقد ارتفع سعر النفط الجزائري بنسبة 50% خلال الأشهر الخمسة الأولى من عام 2022، مما أدى إلى ارتفاع أسعار تصدير الغاز الجزائري، وإن كان مع بعض التأخير. إلى جانب ذلك، ارتفع الطلب الأوروبي على الغاز وحصص إنتاج أوبك، الأمر الذي أدى إلى تعويض الارتفاع في أسعار الواردات، وخاصة الحبوب، والتخلص من عجز الحساب الجاري، مما سمح بالاستقرار النسبي لاحتياطيات العملات الأجنبية. ومع ذلك، استمر الدينار في الانخفاض مقابل الدولار الأمريكي، لكنه استقر مقابل اليورو.

وبالتالي، انخفض العجز الكلي في الميزانية إلى حد كبير في عام 2021، من %12 إلى %7.2 من إجمالي الناتج المحلي. فبالإضافة إلى القفزة في الإيرادات النفطية، كانت هناك زيادة معتدلة في جميع بنود الإيرادات غير النفطية. كما زاد الإنفاق الجاري في أعقاب الزيادة في التحويلات الجارية، لكن عدم انتعاش الإنفاق الاستثماري حد من انتعاش الإنفاق

الإجمالي. وأدى تنفيذ برنامج إعادة شراء ديون الشركات العمومية إلى زيادة المديونية، من %51 إلى %63 من إجمالي الناتج المحلي. كما بقيت السياسة النقدية ذات طبيعة تيسيرية وانتعشت السيولة المصرفية مع انتعاش الصادرات، إلا أن نهو الائتمان للقطاع الخاص ظل بطيئًا، وتجاوز الائتمان المصرفي المقدم للحكومة الائتمان المقدم للشركات الخاصة.

من المتوقع أن يستمر الانتعاش الاقتصادي في عام 2022، وسيسمح ارتفاع أسعار النفط والغاز بفوائض في المالية العامة و الحساب الجاري. من المتوقع أن يستمر نشاط القطاع الهيدروكربوني في دعم النمو، وسيعود النشاط في القطاعات غير الهيدروكربونية إلى مستوى ما قبل الجائحة. ومع ذلك، يمكن أن يكون الانتعاش في الاستثمار ملحوظاً بدرجة أكبر من ذلك في الاستهلاك. ومن المتوقع أن تظل الصادرات الهيدروكربونية عند مستوى مرتفع، مما سيولد فائضًا في الحساب الجاري، وزيادة ملحوظة في الإيرادات المالية بحيث ستجعل رصيد المالية العامة قريبًا من التوازن إذا ما اقترن بسياسة إنفاق حصيفة. أما اذا حدث انخفاض في أسعار الصادرات الهيدروكربونية أو في أحجامها خلال عامي 2023 و2024، فسوف يؤدي ذلك إلى تدهور تدريجي في الحسابين الخارجي والمالية العامة.

تتمثل المخاطر الرئيسية التي تهدد آفاق الاقتصاد الكلي في تقلبات أسعار النفط والغاز عالمياً، مما يؤكد أهمية تنفيذ برنامج الإصلاح الحكومي. لا تزال موازين الاقتصاد الكلي تعتمد على تقلبات أسعار النفط العالمية وعلى حالة عدم اليقين المحيطة بتطورات الحرب في أوكرانيا وديناميكيات الاقتصاد العالمي. وبالتالي، فإن وتيرة الانتعاش واستدامته ستعتمد على تأثير برنامج الإصلاح وقدرة القطاع الخاص على استدامة النمو. وكما هو الحال في أي مكان آخر، أصبح التضخم مصدر قلق متزايد في الجزائر. بالإضافة إلى ذلك، فإن السياسات المالية والنقدية الحكيمة (على المدى المتوسط) والإصلاحات التي تميل نحو إيجاد درجة أكبر من المنافسة (على المدى الطويل) ستساعد في الحد من الضغوط التضخمية.



# RECENT ECONOMIC DEVELOPMENTS

# Non-Hydrocarbon Activity Continued its Gradual Recovery in the Second Half of 2021

Non-hydrocarbon GDP returned to its prepandemic level in the fourth quarter of 2021, despite a drop in investment. In 2021, private consumption gradually returned to its 2019 level (+0.6 percent) despite the effects of rising prices on real household consumption. This was also the case for investment (+0.2 percent) despite a drop in the final quarter of 2021 (-4.6 percent y-o-y), consistent with the lack of recovery in public investment. In addition, the authorities have appointed an official mediator in charge of unblocking outstanding investment projects.<sup>1</sup> The change in inventories remained at zero in 2021, with a decline in the fourth guarter erasing a modest increase at the start of the year.<sup>2</sup> However, over the full year, non-hydrocarbon GDP remained 1.6 percent below its 2019 level. Nighttime light data confirm this recovery in the non-hydrocarbon segment of the economy in 2021, which is more marked in the North-West region as well as in Q3. However, the same data suggest a cross-cutting slowdown in activity in Q1-2022, which is more marked in the North-Central region. (Figures 1 and 2).

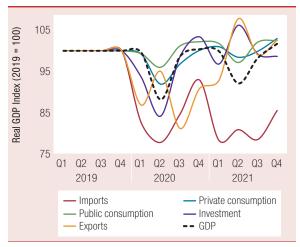
The recovery in activity in Q4-2021 was cross-cutting despite a decline in agricultural GDP. In a context marked by low rainfall, agricultural GDP fell in 2021, driven in particular by a low cereal harvest.<sup>3</sup> After a strong dynamic in Q3, the fall in investment in Q4 contributed to a decline in construction and industrial activity. The latter have thus exceeded their 2019 activity level. Meanwhile, industrial recovery was less marked in the public sector, which, except for food processing industries, performed less well than the rest of the economy and did not experience a marked recovery in

According to the Government, 861 investment projects were the target of interventions enabling the removal of obstacles to their implementation (APS, May 8, 2022).

Change in inventories fell from 6 percent of GDP in 2019 to 3 percent in 2020 and 0 percent in 2021, which may partly explain the lack of recovery in imports.

According to the Ministry of Agriculture and Rural Development, the Algerian Interprofessional Cereals Agency (OAIC) reported harvests totaling 13 million quintals (Mqx) of cereals in 2021 compared to an average of 53 Mqx between 2017 and 2019.

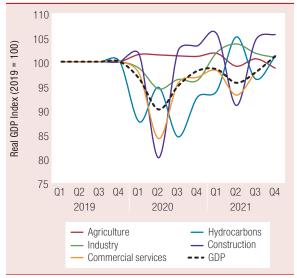
FIGURE 1 • Private Consumption and Investment have Returned to pre-Pandemic Levels in 2021



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

Note: The indexes show the level of GDP at constant prices by sector relative to its level for the corresponding quarter in 2019. These are obtained by successively applying real quarterly growth rates supplied by ONS for 2020 and 2021 to a base of 100 for 2019.

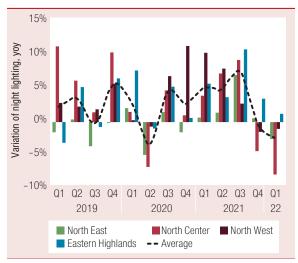
FIGURE 3 • The Recovery Was More Marked in the Industrial and Construction Sectors...



Source: ONS and World Bank estimates.

the second half of the year. Consistent with the absence of a marked recovery in public investment, the performance of steel, metal, mechanical, electrical, and electronic (SMMEEI) activities mainly carried out by state-owned enterprises (SOEs) was particularly disappointing (–14.5 percent relative to 2019). Finally, in 2021, trading activity

FIGURE 2 • After a Stronger Recovery in 2021, Activity Appeared to Slow Down

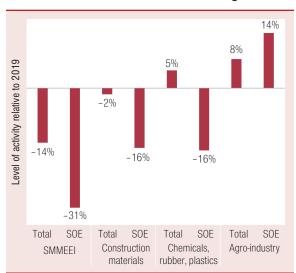


Source: Earth Observation Group and World Bank estimates.

Note: The four regions (EPT) presented exclude the wilayas (provinces) producing hydrocarbons as well as the areas of the Arzew and Skikda petrochemical plants.

According to the last census (2008), these four regions account for 80 percent of the Algerian population.

FIGURE 4 • ...but Remained Largely Incomplete in the Public Manufacturing Sector



Source: ONS and World Bank estimates

*Note*: Total activity uses real GDP for 2021 and activity of state-owned enterprises (SOE) uses the industrial production index for 2021.

recovered to its 2019 level, and the services sector was the main contributor to non-oil GDP growth. The sector's recovery remained incomplete, however, weighed down by the hotels, cafés and restaurants sector (-31 percent relative to 2019) and the transport and communication sector (-2.9 percent). (Figures 3 and 4).

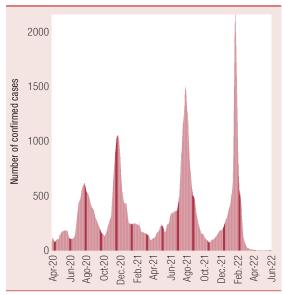


#### **BOX 1: LATEST COVID-19-RELATED DEVELOPMENTS**

As elsewhere in the MENA region, the arrival of the Omicron wave in Algeria brought about a peak in COVID-19 infections in January 2022.

Prior to this, the pace of the vaccination campaign slowed, with the number of people who had received two doses of COVID-19 vaccines rising from 9.2 percent at the end of September 2021 to 12.8 percent at the end of December 2021 and 14.8 percent in April 2022. Meanwhile, the last restrictions on mobility, gatherings, and activities were lifted at the beginning of December 2021. However, the number of confirmed cases of COVID-19 infections jumped between December and February, peaking at the end of January 2022 and pushing up the number of hospitalizations. In response, the authorities chose to bring forward then to extend the winter school holidays in order to break the chain of infection in the school environment. In May 2022, infections fell to their lowest level since the start of the pandemic.

FIGURE 5 • As Elsewhere in the Region, Infections Peaked in January 2022



Source: Johns Hopkins University.

Note: Data presented as 7-day moving average.

FIGURE 6 • In 2020, Excess Mortality in Algeria Was Comparable to That of the Wider Region



Source: Organization for Economic Cooperation and Development (OECD), ONS, and World Bank estimates.

Note: ONS recorded 236,000 deaths in 2020, 14.4 percent higher than a counterfactual forecast based on the trend over the last 10 years. Mortality peaked in July/August then in November/December, when COVID-19 infections also peaked.

## GDP Growth Was Supported by Hydrocarbon Production and Exports

The increase in hydrocarbon production continued in Q1-2022, allowing for a moderate increase in export volumes. Following an exceptional third quarter, natural gas production remained at its high 2020 level in Q4-2021 and Q1-2022 in a context of a marked increase in European demand prior to the Russian-Ukrainian crisis. As a result, exports equaled their 2020 high. In April 2022, crude oil production exceeded one million barrels per day (mb/d), approaching its pre-pandemic level. Oil exports therefore increased, even though they remained below their

pre-pandemic level, with the recovery in domestic consumption offsetting the gradual lifting of OPEC production quotas. At the same time, export volumes of liquefied petroleum gas (LPG), condensates, refined petroleum products, and liquefied natural gas (LNG) remained relatively stable. (Figures 7 and 8).

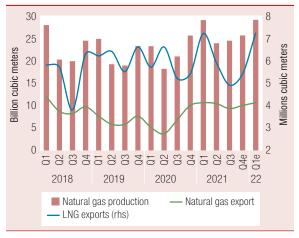
### Surging Export Revenues Reduced the Current Account Deficit

Export revenues increased by 76 percent in 2021, mainly due to the jump in global oil prices. From January to September 2021, the export price of Algerian natural gas increased by 29 percent, compared to

a As the vaccination rate is not reported continuously, the data presented refer to September 25, December 21, and April 24, respectively.

<sup>&</sup>lt;sup>b</sup> APS (January 12, 2022)

FIGURE 7 • The High Level of Gas Production and Exports Was Maintained...



Source: Bank of Algeria (BdA), Joint Organizations Data Initiative (JODI), World Bank estimates.

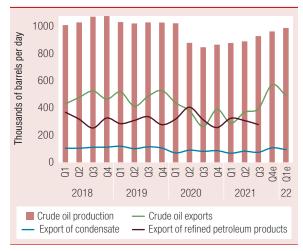
Note: Natural gas and LNG exports in Q4-2021 and Q1-2022 were estimated using monthly LNG production and natural gas pipeline exports data, respectively.

64 percent for the European reference price<sup>4</sup> due to the number of gas supply contracts tied to oil prices with a lag (see Annex 1). Over the same period, the price of crude and refined oil, condensates, LPG, and LNG increased between 37 and 42 percent.<sup>5</sup> Combined with the increase in volumes exported, notably for natural gas and crude oil, hydrocarbon exports grew by 70 percent in 2021, reaching USD 34.1 billion. This trend was strengthened by the increase in non-hydrocarbon exports (+136 percent in 2021), reaching USD 4.5 billion, or 12 percent of goods exports.<sup>6</sup> (Figures 9 and 10).

Imports remained subdued despite an increase in the price of imported goods. Algeria's food import bill increased in 2021 as low rainfall heightened the need for cereal imports, and the global price of wheat, sugar, and dairy products surged late in the year. At the same time, non-food imports did not recover as expected due to the moderate recovery in consumption and domestic investment, dinar depreciation, and the continued implementation of import reduction measures. Furthermore, the authorities expanded the list of products subject to additional provisional safeguard duties, which jumped from 992 to 2,608 products, and further limited resale imports. (Figures 11 and 12).

The marked improvement in the terms of trade and stagnation in imports led to a

FIGURE 8 • ...while the Oil Sector Continued its Gradual Recovery



Source: BdA, Organization of Petroleum Exporting Countries (OPEC), Bloomberg, World Bank estimates.

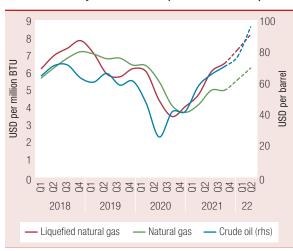
Note: Exports in Q4-2021 and Q1-2022 are estimated using monthly oil tanker export data.

#### current account surplus in Q4-2021 and the stabilization of foreign exchange reserves. In

- <sup>4</sup> Dutch TTF European natural gas.
- In 2021, export values for Algerian oil were composed of 27 percent crude oil, 24 percent refined oil products, 23 percent natural gas, 10 percent LNG, 10 percent LPG, and 6 percent condensates.
- <sup>6</sup> This is a record high.
- In 2021, 46 percent of Algeria's food imports were made up of cereal products (35 percent in 2020), 14 percent of dairy products (19 percent in 2020) and 11 percent of sugar products (10 percent in 2020). However, the authorities maintained their wheat purchasing program in 2021 and 2022 despite price increases.
- See World Bank, Algeria Economic Monitor, Fall 2021 (Table 1).
- According to the Ministry of Commerce, the review of protection requests led to the creation of this new list, which includes reduced rates for countries that have preferential trade agreements with Algeria (APS, January 7, 2022).
- The Ministry of Commerce announced the suspension of direct debit for the importation of resale products and goods for importers who had not modified the extracts from their trade registers as required by the new executive decree regulating this activity (APS, September 1, 2021). Later, an obligation to justify the absence of local production for these same products was imposed (APS, April 26, 2022).



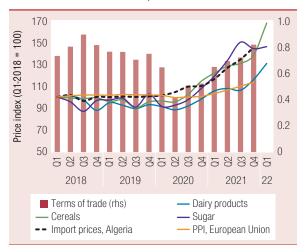
FIGURE 9 • Hydrocarbon Export Prices Jumped...



Source: BdA, World Bank estimates.

Note: Export prices for crude oil, condensates, and petroleum products have correlation rates of between 93 and 98 percent. The liquefied petroleum gas price shows similar, though less pronounced, variations. The dotted curves are estimates. See Annex 1 for natural gas price projections.

FIGURE 11 • The Strong Increase in Import
Prices Was Overcompensated by
That of Export Prices...

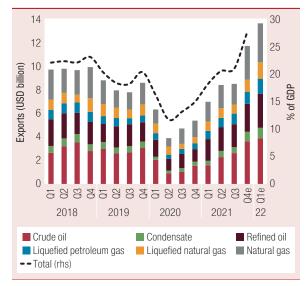


Source: The terms of trade are computed as the ratio of export prices to import prices (IMF). Algeria's import price index is the unit values index (UVI) from ONS. PPI = producer price index (OECD). Food prices are taken from the Food and Agriculture Organization's (FAO) global data.

 $\it Note$  : Since the UVI are based on Customs Authority data, they also include transportation and logistics costs.

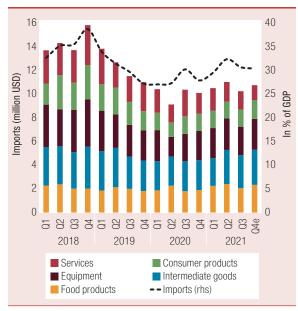
2021, the rise in export prices exceeded that of import prices, leading to a substantial improvement of Algeria's terms of trade.<sup>11</sup> Added to the rapid

FIGURE 10 • ...and Exports Reached their Highest Level Since 2014



Source: BdA, JODI, Bloomberg, World Bank estimates for Q4-2021 and Q1-2022.

FIGURE 12 • ...and Compensated by a Decrease in Import Volumes

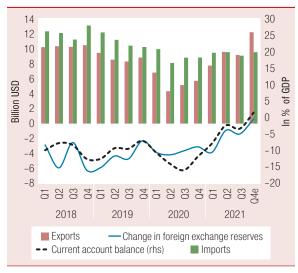


Source: BdA, World Bank estimates.

Note: Consumer goods do not include food products.

According to the ONS, import prices increased by 23 percent in 2021, compared to 68 percent for export prices.

FIGURE 13 • The Current Account Deficit Shrank...

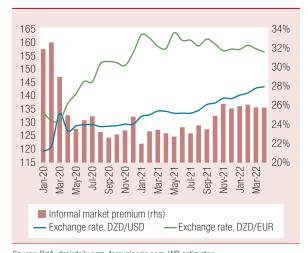


Source: BdA, IMF, World Bank estimates.

rise in exports and stagnation in imports, this allowed the current account balance to jump from a USD 3 billion deficit in Q1-2021 (7.8 percent of GDP) to a surplus of USD 737 million in Q4-2021 (roughly 1.6 percent of GDP). The annual current account deficit thus dropped dramatically from USD 20 billion on average from 2016 to 2020 (or 12.9 percent of GDP) to USD 4.8 billion in 2021 (roughly 2.9 percent of GDP). Consequently, foreign exchange reserves dropped from USD 46.9 billion in late 2020 to USD 41.4 billion in late 2021<sup>12</sup> (or 11 months of goods and services imports), but then remained stable, reaching USD 41.5 billion in late March 2022.

Despite a significant improvement in external balances, the depreciation of the dinar against the US dollar continued. From June 2021 to June 2022, the dinar depreciated by 8 percent against the US dollar. However, the depreciation of the euro against the US dollar in H2-2021 stabilized the eurodinar exchange rate. Moreover, the war in Ukraine and the drop in the Euro led to a relative appreciation of the dinar in H1-2022. Since oil exports are denominated in US dollars and imports come primarily from Europe and China, these relative movements of exchange rates thus helped improve Algeria's terms of trade. (Figures 13 and 14).

FIGURE 14 • ...but the Dinar/dollar Exchange Rate Continued to Slip



Source: BdA, dzairdaily.com, forexalgerie.com, WB estimates.

Note: The premium is the average ratio of the parallel market exchange rate for the currencies in question and the official exchange rate for the euro and the US dollar.

#### Fiscal Balances Improved Markedly, Supported by Hydrocarbon Revenues

The overall budget deficit shrank significantly in 2021 and was financed via domestic bond issues. Driven by the jump in hydrocarbon revenues and the lack of a marked recovery in expenditures, the overall budget balance improved from a deficit of 12 percent of GDP in 2020 to a deficit of 7.2 percent of GDP in 2021. However, the implementation of the SOE debt buyback program contributed most of a DZD 3,900 billion (USD 26.8 billion) increase in the Treasury's debt to banks in 2021, making it possible to finance the repurchasing of SOE debts from banks, to finance the overall budget deficit, and to increase public savings. <sup>14</sup> Public debt thus advanced from 50.7

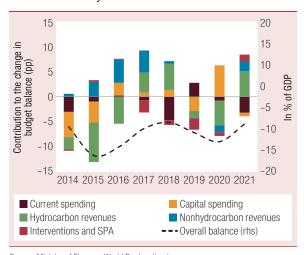


Excluding IMF Special Drawing Rights (SDRs) In August 2021, Algeria converted USD 2.7 billion of its additional SDR allocation into additional foreign reserves.

The nominal effective exchange rate (NEER) showed a moderate depreciation in 2021 (+0.1 percent) and Q1-2022 (+0.3 percent). Given the level of inflation, the real effective exchange rate (REER) showed a significant depreciation in 2021, then an appreciation in Q1-2022 (-1 percent) given the fall in the value of the euro (based on IMF data).

The debt buyback (syndicated loans) consisted of substituting SOE debts with Treasury bonds on the

FIGURE 15 • The Overall Budget Balance
Decreased Significantly, Driven by
Hydrocarbon Revenues



Source: Ministry of Finance, World Bank estimates.

Note: A positive contribution to the overall cash balance

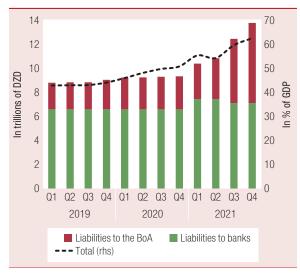
Note: A positive contribution to the overall cash balance means either an increase in revenues or a decrease in expenditures. Interventions and SPA Balance = Treasury interventions and changes in Special Purpose Accounts balance.

percent of GDP in 2020 to an estimated 63 percent of GDP in 2021.<sup>15</sup>

Bugdet revenues increased by 17 percent in 2021, led by a jump in hydrocarbon export revenues. Hydrocarbon revenues increased by 36 percent due to the increase in oil prices, the recovery of exports, and continued depreciation of the dinar against the US dollar.<sup>16</sup> Nonhydrocarbon revenues increased 6.8 percent as the upturn in economic activity led to an increase in revenues from income taxes, VAT, and the tax on oil products, to which was added a sharp increase in BdA dividends. This upturn was partially counterbalanced by stagnation in customs duties following that of import volumes and by a sharp fall in corporate income tax revenues (-16 percent) due to the consequences of COVID-19 for corporate profits and the tax relief measures implemented to support them.<sup>17</sup> Altogether, fiscal revenues remain 2.9 percent below their pre-pandemic level.

Furthermore, public investment did not show a marked recovery. Public expenditure increased by 7.6 percent in 2021 primarily thanks to the increase in current expenditures (+8.7 percent) driven by a significant increase in current transfers

FIGURE 16 • The Debt Buyback Program Led to a Jump in Public Debt



Source: BdA, IMF.

Note: Public savings consists of the Treasury's current account balance at the BdA. The debt is compared to rolling GDP over 4 quarters.

(+18 percent). At the same time, capital expenditure increased 4.8 percent in 2021 after falling 34 percent in 2020, and thus remained 30 percent below its prepandemic level. (Figures 15 and 16).

public banks' balance sheets, thus increasing public debt. These bonds could then be presented to the BdA and exchanged for liquidity as part of the special refinancing program, and these liquidities were partially reinvested in Treasury bonds. The special refinancing program (SRP) (Ordinance 21-02 of June 10, 2021) and—implicitly—the debt repurchasing program have a limit of DZD 2,100 billion. Of this amount, DZD 1,680 had been used by November 2021. See also World Bank, Algeria Economic Monitor, Fall 2021 (Figure 13).

- Excluding guarantees. Including guarantees, public debt increased from 51.7 percent of GDP at end-2020 to 63 percent at end-2021.
- Since oil exports are denominated in USD, a relative depreciation of the dinar increases oil revenues in dinars.
- The sharper drop in activity for public enterprises cumulated with their highest degree of formalization can also explain the magnitude of this drop.



#### Bank Liquidity Recovered, without Generating a Marked Increase in Private Sector Credit

Bank liquidity recovered, supported by an accommodative monetary policy and the rise in hydrocarbon export revenues. The recovery of hydrocarbon exports allowed for a strong progression of bank liquidity, with M2 increasing 13.6 percent in 2021. After hitting a peak during the COVID-19 crisis (+14.3 percent),18 the growth of currency in circulation slowed in 2021 (+8.6 percent). The rise in liquidity was also driven by the continuation of prudential and monetary easing measures established during the COVID-19 crisis. including the decrease of the required reserve ratio, of the policy rate,19 of the liquidity ratio, 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>20</sup>

The growth of credit to the private sector remained subdued, however, and bank loans to the State surpassed private sector and SOE loans. In the second half of 2021, banking sector claims to the State doubled (+DZD 3.258 billion), while those to public enterprises decreased

FIGURE 17 • Bank Liquidity Recovered without Generating a Rise in Private Sector Credit



Source: IMF.

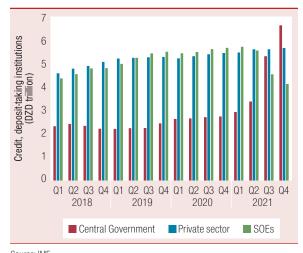
26 percent (-DZD 1.431 billion), as the debt buyback program was implemented. Thus, in December 2021, bank lending to the State (excluding the BdA) reached approximately 29 percent of GDP, compared to 18 percent of GDP for SOE lending and 25 percent of GDP for private sector lending. As a result, the share of middle- and long-term loans in bank lending decreased, with SOE loans being for longer terms, on average. (Figures 17 and 18).

## Import Prices, Depreciation and Monetary Expansion Fueled Inflation

Consumer price inflation remained high in Q1-2022. Growth of the consumer price index (CPI)

- Simultaneous withdrawals by private individuals during the COVID-19 crisis contributed to this marked increase in currency in circulation, while banks saw the mandatory amount of their social capital and liabilities to the Treasury increase, thus exacerbating the bank liquidity situation.
- The Bank of Algeria's rediscount rate, which was set at 4 percent from 2004 to 2016 then at 3.5 percent was lowered to 3.25 percent in March 2020 and 3 percent in April 2020.
- See also World Bank, Algeria Economic Monitor, Spring 2021 (Table 2).

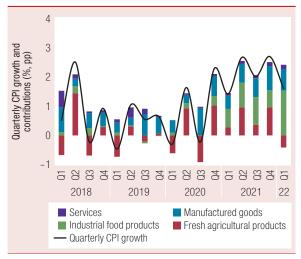
FIGURE 18 • Bank Lending to the Government Now Surpasses Private Sector and SOE Lending



Source: IMF.
Note: Data exclude BoA loans.



FIGURE 19 • Quarterly Growth of the CPI Remained High in Q1-2022

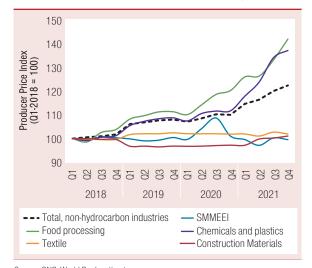


Source: ONS, World Bank estimates.

reached 7.2 percent y-o-y in 2021 and 9.2 percent y-o-y in Q1-2022 driven primarily by food prices but also manufactured goods prices. Furthermore, the increase in consumer prices may have been 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 early stages of the COVID-19 crisis, by rising import prices as well as potentially by speculation in production and distribution channels. Production prices in the public industrial sector, which was especially impacted by the depreciation of the exchange rate, also rose sharply, notably in the SMMEEI and textile sectors (See Annex 2). (Figures 19 and 20).

In response, the authorities took measures to mitigate the effect of price increases on households. These measures included suspending the streamlining of grain subsidies that had taken place in the summer of 2020,<sup>21</sup> canceling the VAT increase for sugar imports and taxes on digital goods and services,<sup>22</sup> delivering unemployment benefits to young first-time job seekers, increasing civil servant salaries and retirement pensions,<sup>23</sup> allocating additional funds to stabilize sugar and oil prices and ensure the availability of powdered milk, prohibiting the export of widely-consumed food products that Algeria imports,<sup>24</sup> and intervening in the legislation and among economic operators to limit speculation.<sup>25</sup>

FIGURE 20 • Producer Prices Rose Sharply



Source: ONS, World Bank estimates.
Note: Data for the national public sector.

#### Available Labor Market Indicators Suggest Partial Recovery

The official number of job offers showed partial recovery in Q1-2022 but remained below its pre-pandemic level. According to ANEM data, employment opportunities dropped in Q4-2021 (-9.6 percent q-o-q) before rising in Q1-2022 (+4.5 percent q-o-q) but remained 1.1 percent below their Q1-2020 level. Meanwhile, domestic private sector opportunities showed full recovery unlike

The use of subsidized flour and semolina was restricted in the summer of 2020 (JO, September 2, 2020). However, the President of the Republic cancelled this decision in the Council of Ministers meeting of February 13, 2022.

In the Council of Ministers meeting of February 13, 2022, the President of the Republic ordered the blocking of all taxes on food products introduced in the 2022 budget law.

Official Gazette No. 23, April 6, 2022.

<sup>&</sup>lt;sup>24</sup> APS, March 13, 2022.

The law on the fight against illicit speculation of December 2021 introduces prison sentences and fines for the hoarding of goods or merchandise as well as the dissemination of false information aimed at causing a shortage or disturbing market supplies to manipulate prices of goods or merchandise (Law No. 21-15 of December 28, 2021).

#### BOX 2: MACROECONOMIC DETERMINANTS OF INFLATION IN ALGERIA

**Like many countries in the world, Algeria is facing a strong acceleration of inflation.** The proportion of countries with inflation rates in excess of 5 percent thus rose 1/ in emerging and developing economies, from less than 40 percent at the beginning of 2020 to 71 percent at the end of 2021 (79 percent for food inflation), as well as 2/ in advanced economies from less than 1 percent at the beginning of 2020 to 44 percent at the end of 2021 In Algeria, the consumer price index (CPI) reached 5.5 percent year-on-year in H1-2021, and 8.8 percent in H2-2021. In 2022, the war in Ukraine contributed to a significant rise in commodity prices and increased inflationary pressures around the world, and the Algerian CPI reached 10 percent y-o-y in April 2022.

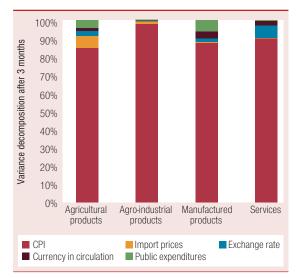
In Algeria, the inflationary surge was mainly driven by agricultural and food products. In 2019 and 2020, inflation in manufactured goods, which represent 40 percent of the CPI basket, contributed 1.9 percentage points (pp) to Algeria's CPI, climbing by 2.6pp in 2021. The contribution of services fell from 0.4pp to 0.3pp, while that of agricultural and food inflation rose from 0.4pp in 2019–2020 to 3.6pp in 2021. This contrasts with the two most recent inflation peaks: the 2012 peak was driven mainly by the price of fresh agricultural products and was observed after a sharp increase in public spending, while the 2016 peak was driven by manufactured goods following a sharp depreciation in the exchange rate.

**Modeling the determinants of inflation allows us to better understand its dynamics.** Inflation is notably influenced by external factors such as global commodity prices, by monetary and fiscal policies, by the structure of the goods, capital and labor markets, and by the structure of distribution networks. In annex 2, a VAR model is estimated to identify the role of quantifiable macroeconomic determinants, based on monthly data from 2009 to 2021. It estimates the dynamic relationship between the sub-components of the Algerian CPI on the one hand, and government spending, currency in circulation, import prices and the dinar exchange rate on the other. It allows to identify the fraction of the CPI variance explained by these four variables, at different horizons.

In the medium term, half of the dynamics of the Algerian CPI can be explained by these quantifiable macroeconomic factors. External factors (import prices, exchange rate) explain approximately 15 percent of the change in inflation two years later but over 30 percent of the change in industrial food prices, while strongly affecting producer prices in the public sector. Meanwhile, domestic demand factors (public spending and currency in circulation) explain over 30 percent of the change in inflation, which suggests supply constraints that motivate price increases. However, the four variables explain only 12 percent of inflation in the short run (less than three months) suggesting significant price rigidities (Figures 21 and 22).

**The analysis thus informs the calibration of public policies.** Indeed, it suggests that prudent fiscal and monetary policies will help contain inflationary pressures in the short and medium term. Since the price rigidity observed in Algeria is often associated in other countries with a limited degree of competition in domestic production or distribution markets, reforms that promote a greater degree of competition would also help limit inflationary pressures.

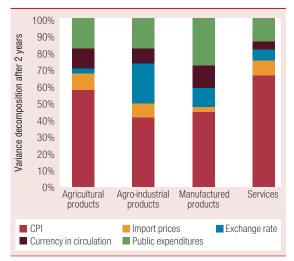
FIGURE 21 • Inflation Shows Significant Short-Term Inertia...



Source: World Bank estimates.

*Note*: The figure shows the share of the variance in inflation which is explained by the change in each explanatory variable, three months earlier.

FIGURE 22 • ... but Macroeconomic Factors Explain Half of Inflation in the Medium Term

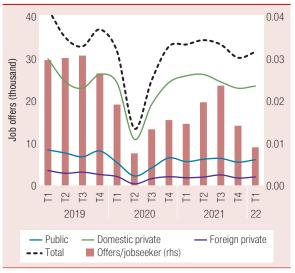


Source: World Bank estimates.

Note: The figure shows the share of the variance in inflation which is explained by the change in each explanatory variable, two years earlier.



FIGURE 23 • Employment Opportunities Recovered Partially in Q1-2022...



Source: ANEM and World Bank estimates.

Note: Data are in quarterly averages and were not seasonally adjusted.

those in the public sector (-2.9 percent) and the foreign private sector (-12.5 percent). In parallel, the number of job seekers increased sharply in Q4-2021, reaching a level 54 percent higher than its pre-pandemic level<sup>26</sup> (Figure 23).

In February 2022, the authorities introduced unemployment benefits for young first-time job seekers registered with the National Employment Agency (ANEM). Beneficiaries of the DZD 13,000 (USD 90) monthly benefit must be 19 to 40 years old, have no other sources of income, not be enrolled in an educational or training institution, and never have contributed to social security.<sup>27</sup> Following the announcement, the number of job seekers spiked in Q1-2022 (+64 percent Q-o-Q), with the jump in registration highest among unskilled and low-skilled workers (+84 percent) and women (+63 percent). On April 18, 917,000 applications had been accepted for an estimated initial monthly cost of DZD 12 billion (over USD 80 million).<sup>28</sup> The number of registered

FIGURE 24 • ...and the Introduction of Unemployment Benefits Caused the Number of Registered Job Seekers to Spike



Source: ANEM and World Bank estimates. Note: Data are in quarterly averages.

S1-2019.

job seekers reached over 4 million in March 2022, or approximately 14.4 percent of Algeria's working age population.<sup>29</sup> (Figure 24).

- APS, April 21, 2022. The Minister of Labor, Employment, and Social Security reported 1.5 million payment requests for a provisional initial monthly cost of close to DZD 20 billion (USD 140 million).
- World Bank estimates. If those registered can be considered active, then this rate is a lower bound for the unemployment rate of March 2022.

This paragraph is based on unconventional labor market statistical data published by ANEM because the most recent standard labor market data (including unemployment rate and participation rate) date from

<sup>&</sup>lt;sup>27</sup> Beneficiaries must be Algerian citizens, reside in Algeria, demonstrate national service status, not benefit from public business creation or activity expansion schemes, or professional and social integration support, and not have a spouse who has another source of income (Executive Decree No. 22-70, JO. 11).



## **OUTLOOK AND RISKS**

# The Rise in the Price of Hydrocarbons is Providing Some Respite for the Algerian Economy

The rise in the international price of energy and commodities, fueled by the war in Ukraine, is having a somewhat positive impact on the Algerian economy. Though trade flows between Algeria and Ukraine and Russia are limited, the crisis has contributed to a marked rise in the price of hydrocarbons and global food products, along with a simultaneous rise in production costs all over the world. As regards Algeria, the rise in revenues from hydrocarbon exports more than makes up for the rise in import costs. The corresponding increase in the country's budget hydrocarbon revenues will also more than compensate for the rise in the budget costs of subsidized, largely imported food products. Nonetheless, increasing global food prices will contribute to inflation in Algeria, although this will be cushioned by universal food subsidies. Furthermore, the crisis increases long-term demand for Algerian hydrocarbons, although there is limited short-term capacity for increasing production (see Box 3).

Hydrocarbon sector activity will therefore continue to support growth. In the short term, oil production will continue to increase, however it is already close to pre-pandemic, full capacity levels. Natural gas production will also contribute to growth but may also be constrained by limited production capacity. Nevertheless, the new Law on Hydrocarbons was implemented in 2021 and will contribute to a rise in investment as new contracts have already been signed under the new tax regime, which is more favorable to foreign investors. In particular, Sonatrach's rise in revenues will help finance significant domestic investment in the sector, while the SOE also announced substantial discoveries of oil deposits.

In March 2022, the former Algerian minister for energy noted that Algerian gas exports to Europe would not be able to increase beyond 3 billion m3, or around 6 percent of Algerian gas exports.

Overall, tax rates for activities linked to the production of hydrocarbons have been reduced. Eight Memorandums of Agreement (MoA) were signed with foreign companies in 2020 followed by an additional one in 2021.

Sonatrach has notably announced the discovery of a significant crude oil deposit in Touggourt worth a billion barrels, or 8 percent of proven Algerian crude oil reserves.

#### BOX 3: THE CONSEQUENCES OF THE WAR IN UKRAINE FOR ALGERIA

In the short term, the war in Ukraine should have a limited effect on Algeria's international trade flows. Neither Russia nor Ukraine are major suppliers to Algeria, which limits the potential for import disruption. In 2020, Russia was Algeria's 10th largest supplier, accounting for 2.5 percent of total product imports, while Ukraine was not among the top 15 suppliers. At the same time, Algeria's exports to these two countries are close to zero. However, the crisis may delay Algeria's efforts to diversify global wheat suppliers away from France and Capada b

In the meantime, the crisis has contributed to the rise in world oil and gas prices, thus increasing Algeria's export revenues. Around 90 percent of Algeria's exports of goods are hydrocarbons, whose prices have risen with the war in Ukraine. The effect has been reinforced by the increase in production and export volumes as OPEC+ quotas have risen and European demand for Algerian gas has increased.

On the other hand, Algeria is the world's 6th largest importer of wheat, and the crisis is contributing to a marked increase in world wheat prices. Between 2016 and 2020, Algeria's wheat imports averaged USD 1.8 billion per year and represented 71 percent of domestic consumption, exposing the country to fluctuations in international wheat prices. According to the authorities, however, Algeria has been relatively safe in importing most of its needs for 2022. If prices were to remain high for a prolonged period, however, the effect of the current low rainfall on domestic wheat production could increase import requirements, with greater implications for the import bill.

As wheat is heavily subsidized at the national level, the increase in world wheat prices is expected to have a less than proportionate impact on consumer prices. However, this increase could contribute to inflation, through second-round effects. The Office Algérien Interprofessionnel des Céréales (OAIC) buys wheat on the international markets and provides processors with their wheat quotas at subsidized prices, allowing them to respect the administered prices. As a result, the price of bread, semolina or pasta has changed little in relation to world wheat prices. By the summer of 2020, however, the use of subsidized wheat had been banned for the production of pasta and semolina, contributing to a price increase. In February 2022, the reform was cancelled, due to concerns about the impact of rising world wheat prices. According to official reports, it succeeded in lowering the price of these products on domestic markets.

The concomitant increase in oil and gas prices more than offsets the rise in wheat prices, improving the budget and external deficits. Given that cereal imports account for 4–8 percent of hydrocarbon exports, and that budgeted wheat subsidies account for 5–9 percent of oil revenues, the net effect of higher wheat and hydrocarbon prices is expected to be positive, and the increase in hydrocarbon revenues will allow Algeria to finance the more expensive wheat imports and subsidies in the short term, thanks to higher export revenues.

In the longer term, Algeria should also benefit from Europe's efforts to diversify its energy supply, increasing investment, growth and exports. European leaders have identified Algeria as one of the countries that can help substitute energy imports from Russia. On the other hand, Algeria has expressed its willingness to increase its gas exports to Europe, using spare capacity in trans-Mediterranean pipelines. However, given the limited capacity to expand production and the increase in domestic gas consumption, a significant increase in gas supply from Algeria to Europe would require significant investments in the gas sector.

Activity in non-hydrocarbon sectors should return to pre-pandemic levels in 2022.

On the demand side, recovery in investments should be faster than in consumption, constrained by the impact of higher prices on the real purchasing power of households. On the production side, recovery should be cross-cutting, based on recovery in agricultural production, the effect of higher investment on industrial sectors and construction, and more gradual recovery in the services sector. The recovery will help improve the labor market,

though by how much will depend on the private sector's capacity for taking over from the public sector.

Hydrocarbon exports will remain high in 2022, generating a temporary current account surplus. In the baseline scenario, hydrocarbon prices will remain high in 2022 before progressively falling in 2023 and 2024, bringing the current account balance back into deficit. Thus, the value of hydrocarbon exports should remain high despite a limited rise in export volumes. This improvement in external



<sup>&</sup>lt;sup>a</sup> In 2017 (latest available data), Ukraine accounted for 1.3 percent of Algeria's product imports, and 2.2 percent of grain imports, with Ukrainian exports to Algeria comprising mainly steel products (79 percent). At the time, Russia accounted for 1.9 percent of Algeria's product imports, and 0.6 percent of grain imports, with Russian exports to Algeria consisting mainly of iron and steel products (39 percent), edible fats (20 percent) and electrical equipment (14 percent).

b in 2020, Algeria changed its wheat import specifications, making wheat from the Black Sea region eligible for purchase through international tenders.

<sup>&</sup>lt;sup>c</sup> The price of processed wheat has not been revised for 25 years, with the price of a baguette capped at DZD 7.5 (USD 0.05), encouraging high consumption of grain products.

balances should help finance a moderate rise in imports of equipment and inputs, in support of the recovery. Meanwhile, foreign exchange reserves will stabilize at around 12 months of imports of goods and services before gradually falling again.

The marked rise in hydrocarbon revenues and a prudent budget policy will return the overall budget deficit closer to balance. In the baseline scenario, oil revenues in 2022 exceed their prepandemic level (+3.3pp of GDP), while non-hydrocarbon revenues remain below (-3.5pp) and expenditure only partially catches up (-4.2pp). Thereafter, the fall in hydrocarbon export prices should be partially compensated by the rise in non-hydrocarbon revenues, generating absorbable deficits. In addition, public debt would gradually increase to reach 61 percent of GDP in 2024. However, these estimates remain dependent on the trajectory of public expenditure, which could be revised in the context of the Amending Finance Law now being drafted, also factoring in new expenditure announced in 2022 (unemployment benefits, public sector salary grid review, etc.).

The inflation rate should remain high despite the moderating effect of price controls and policies **designed to preserve purchasing power.** The rise in global prices will affect the cost of Algerian imports, which should be mitigated by continued subsidies to basic products. The depreciation of the Algerian dinar will also increase the price of imports and the production costs in industries dependent on imports of equipment and inputs. In the baseline scenario, the limited rise in public expenditure and in the amount of currency in circulation helps moderate inflation, which however remains high (see annex 2). In addition, the government has again authorized the greater use of subsidized cereal products and has intervened to limit speculation in the distribution chains of essential products, which should also helps moderate the rise in prices. Moreover, the marked rise in public sector salaries and the introduction of unemployment benefits will contribute to limiting the impact of inflation on purchasing power. This increase could however contribute to inflation, through second round effects.

### Improving Resilience Would Help Confront Present and Future Risks

Macroeconomic balances remain dependent on global fluctuations in the price of hydrocarbons. In the baseline scenario, oil prices fall gradually over the projection period. Higher (or lower) than anticipated prices could have a marked impact on both external and budget balances, as well as on fiscal space and the trajectory of foreign exchange reserves. Thus, improving macroeconomic balances in the long term would promote resilience to: (i) external shocks, by increasing non-hydrocarbon exports and reducing import needs; and (ii) budget shocks, by increasing tax revenues, prudent budget behavior, and greater effectiveness, efficiency, and equity in public spending.

The pace and sustainability of the recovery will depend on the impact of the reform program on the private sector's capacity to become the engine of growth. In 2020, the authorities have announced a major reform effort to allow the private sector to develop over the long term, specifically by improving the business climate as well as the level of competition in domestic markets. Reforms will include a new law on investments, reform of public enterprises, opening up the capital of two public banks, and promoting non-hydrocarbon exports. Acceleration in implementation of these reforms should help to make the private sector the engine of growth and increase the resilience of growth, public finances, and external balances in the face of shocks in world hydrocarbon markets.

Price rises will continue to pose risks for purchasing power, requiring calibrated policies. Inflation threatens to remain high primarily as a result of substantial inertia. Given the role of monetary and budget policies on inflation (see Annex 2), prudent management of these policies will be required to contain inflation in the short term. Conversely, a marked rise in liquidity or public expenditure without any productive compensation could feed into price rises. Ultimately, reforms to increase the level of competition in production and distribution markets would moderate inflation in the long term.

TABLE OF MAIN MACROECONOMIC AGGREGATES

					Estimation		Projections	
	2017	2018	2019	2020	2021	2022	2023	2024
Output and prices				Annual perd	entage change			
Real GDP	1.3	1.1	1.0	-5.1	3.5	3.5	1.9	1.8
Non-hydrocarbon sector	2.1	3.0	2.7	-3.9	2.4	3.6	2.0	2.0
Hydrocarbon sector	-2.4	-6.4	-4.9	-10.2	10.3	2.7	1.0	0.6
Per capita	-0.8	-0.9	-0.9	-6.8	1.6	1.7	0.1	0.0
Consumer price index (period average)	5.6	4.3	2.0	2.4	7.2	9.6	8.2	7.4
GDP (in trillions of current DZD)	18.9	20.4	20.5	18.4	22.0	28.5	29.2	30.9
GDP (in billions of current US\$)	170.1	174.9	171.8	145.0	163.0	198.0	190.0	189.0
GDP per capita (USD)	4,077	4,108	3,956	3,306	3,634	4,350	4,106	3,994
Crude oil production (thousand barrels per day)	1,059	1,040	1,023	899	911	1,004	1,015	1,012
Natural gas production (billion of m³)	94.8	95.9	90.3	85.1	105.0	103.1	103.3	103.4
External sector				In percen	t of GDP			
Current account	-13.0	-9.6	-10.0	-12.9	-2.9	5.4	-1.6	-6.5
Trade balance	-13.2	-9.0	-9.3	-12.4	-1.6	6.4	-0.6	-5.5
Exports of goods and services	22.2	25.4	22.3	17.2	25.5	30.7	25.8	22.8
Hydrocarbon exports	19.7	22.3	19.3	13.9	21.8	25.6	22.8	20.6
Nonhydrocarbon exports	2.5	3.1	3.0	3.3	3.7	5.1	3.0	2.2
Imports of goods and services	35.3	34.4	31.6	29.6	27.2	24.3	26.4	28.3
Gross official reserves (months of imports) <sup>a</sup>	19.2	15.7	13.6	13.1	11.2	12.4	11.5	8.4
Exchange rate (Algerian dinar per US\$; period average)	111.0	116.6	119.4	126.8	135.1			
Sahara Blend export price (US\$)	54.1	70.8	63.5	41.4	70.6			
Central Government Finance				In percen	t of GDP			
Government revenue and grants	32.0	33.5	32.2	30.7	29.9	32.0	30.8	29.7
Hydrocarbon revenue <sup>b</sup>	11.5	14.2	13.0	10.5	11.8	16.3	14.5	13.1
Nonhydrocarbon revenue	20.5	19.3	19.2	20.2	18.0	15.7	16.3	16.6
Tax revenues	13.9	13.3	13.9	14.3	12.5	11.8	12.5	12.9
Non-tax revenues	6.6	6.0	5.3	6.0	5.5	3.9	3.8	3.7
Expenditures <sup>c</sup>	38.6	37.9	37.8	37.5	33.7	33.6	33.1	32.5
Current expenditures	24.8	26.1	23.9	27.2	24.7	23.6	22.6	21.6
Wages and salaries	11.7	10.6	11.1	12.4	10.7	9.9	9.9	9.6
Purchase of goods and services	1.0	1.1	1.1	0.6	0.8	0.8	0.8	0.8
Interest payment	0.9	0.5	0.6	0.9	0.7	0.7	1.0	1.2
Current transfers	11.1	13.9	11.1	13.3	12.6	12.2	11.0	10.0
Capital expenditures	13.8	11.9	13.9	10.3	9.0	10.0	10.5	10.9
Special Account Balance and Treasury Interventions	1.9	2.4	4.0	5.1	3.4	3.0	3.3	3.5

(continued on next page)



TABLE OF MAIN MACROECONOMIC AGGREGATES (continued)

					Estimation		Projections	
	2017	2018	2019	2020	2021	2022	2023	2024
Fiscal balance	-6.6	-4.4	-5.6	-6.9	-3.8	-1.6	-2.3	-2.8
Overall budget balance	-8.4	-6.8	-9.6	-12.0	-7.2	-4.6	-5.6	-6.3
Primary overall budget balance	-7.5	-6.3	-9.0	-11.0	-6.6	-3.9	-4.7	-5.1
Nonhydrocarbon overall budget balance	-20.0	-21.0	-22.6	-22.4	-19.0	-20.9	-20.1	-19.4
Total central Government debt	27.0	37.9	45.6	50.7	63.0	55.0	58.7	61.2
Domestic debt	26.3	37.1	44.8	49.9	62.3	54.5	58.2	60.7
External debt	0.8	0.8	0.8	0.8	0.7	0.5	0.5	0.5

Excluding IMF Special Drawing Rights (SDR).
 Includes dividends from Sonatrach and hydrocarbon revenues transferred to the oil savings fund.
 In 2018, a transfer to the national pension fund was reclassified from capital expenditures tu current expenditures.

# ANNEX 1: DOES ALGERIA BENEFIT FROM HIGHER GAS PRICES?

xport prices for Algeria's natural gas follow a different trajectory from the gas reference price on international markets. Although the Henry Hub reference price for natural gas rose almost 50 percent between Q2 and Q3-2021, the export price of Algerian natural gas only increased 0.5 percent over the same period (EIA, BoA). These prices are established contractually, sometimes over the long term, and are often based on bilateral negotiations with buyers. Although there is no public information on how the export price of Algerian gas is determined, it is presumed to be—at least in part—tied to the price of oil (European Commission, 2021) and adjusted to the latter after a certain lag.

It is therefore possible to model the development of the export price of Algerian natural gas. An ordinary least squares (OLS) regression allows for the analysis of the empirical relationship between the price of natural gas, the price of oil, and gas production between 2015 and 2021. In this model, the price of natural gas is explained partly by its lagged values, the price of oil (current or lagged), and volumes of natural gas produced. Regression helps estimate the following equation:

$$PExp_m^{gaz \, nat} = 0.30^{***} PExp_{m-6}^{gaz \, nat} + 0.027^{***}$$
  
 $P_m^{pétrole} + 0.041^{***} P_{m-6}^{pétrole} - 0.0029 VExp_m^{gaz \, nat} + 0.33$ 

Where  $PExp_m^{gaz\,nat}$ ,  $P_m^{\,p\'etrole}$  et  $VExp_m^{\,gaz\,nat}$  designate, respectively, the price of natural gas (USD/BTU million), the price of crude oil (USD/barrel), and the volume of natural gas (BTU billion) each for month m. The three stars next to the coefficients indicate statistical significance of the coefficient estimate at the 1 percent level.

This modeling demonstrates that a linear combination of these four variables determines 79 percent of the level of the price of Algerian natural gas. The estimate of the statistically significant autoregressive coefficient confirms a degree of inertia in the price of natural gas. The positive coefficient related to the price of oil with a six-month lag is higher than that linked to simultaneous prices, thus translating the reaction lag of export prices for natural gas. The selection of the amount of lag was dictated by the model's R² maximization and does not necessarily reflect the contractual clauses for setting prices. With only one value lagged for gas and oil prices, the amount of lag maximizing R2 is four months. Finally,

FIGURE 25 • Recorded and Predicted Export Prices for Algerian Natural Gas



production volumes are negatively correlated to price, which reflects not only the impact of a supply-side shock on prices such as a fall in production on increases in prices or vice-versa but also the impact of prices on demand, specifically through storage behavior.

This modeling helps estimate a significant rise in natural gas export prices in Q4-2021 and Q1-2022 and predict that they will remain high for the rest of the year. Estimates suggest that the export price will reach an average USD 6.4/BTU million in Q4-2021 (+12 percent y-o-y), an average USD 7.2 in Q1-2022 (+11.9 percent y-o-y). Given that the price of oil remained high in the first half of 2022, it is expected that the export price of Algerian natural gas will also remain high for the remainder of 2022.

# ANNEX 2: IMPACT OF MACROECONOMIC FACTORS ON INFLATION IN ALGERIA

Inflation has risen in 2021 and 2022 both globally and in Algeria, but the underlying causes vary depending on the country. In Algeria, the rise in prices since 2021 has been driven by food products. A model of the consumer price index since 2009 shows that the depreciation of the dinar, the increase in the price of imported products, the increase in public spending and the increase in currency in circulation have all contributed to inflation. However, the importance of these factors varies according to the category of goods and services, reflecting in particular their import intensity and the characteristics of the Algerian market in terms of both production and distribution.

# Inflation is on the Rise Both Globally and in Algeria

After slowing in the early stages of the COVID-19 crisis, global inflation has since picked up. In most countries, inflation slowed in the first quarter of 2020 against a backdrop of falling demand and tumbling energy prices. Subsequently, the recovery in global demand and in commodity prices generated an inflationary surge, despite the moderation of

constraints on the supply side. This phenomenon was reinforced by episodes of devaluation and by expansionary monetary and fiscal policies. The proportion of countries with inflation rates in excess of 5 percent thus rose 1/ in emerging and developing economies, from less than 40 percent at the beginning of 2020 to 71 percent at the end of 2021 (79 percent for food inflation), as well as 2/ in advanced economies from less than 1 percent at the beginning of 2020 to 44 percent at the end of 2021 (27 percent for food inflation).<sup>33</sup> The debate now centers on the permanence of this shock and the effect of the war in Ukraine on prices and the availability of food.<sup>34</sup>

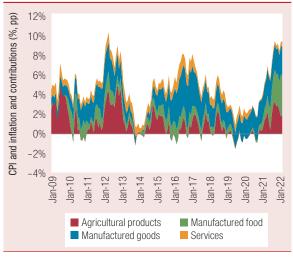
In Algeria, the recent rise in the consumer price index (CPI)<sup>35</sup> has been driven by rises in the prices of fresh agricultural and industrial

<sup>&</sup>lt;sup>33</sup> Reinhart and Von Luckner (February 2022).

<sup>&</sup>lt;sup>34</sup> See World Bank (June 2021, January 2022) and International Monetary Fund (October 2021, April 2022).

The structure of Algeria's CPI and its constituent goods have not been updated since 1990. It is therefore an imperfect indicator of consumer prices. This analysis draws on the more detailed consumer price index of the region of Algiers.

FIGURE 26 • CPI Growth Has Reached Historically High Levels...



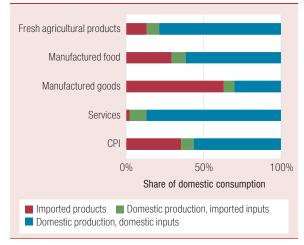
Source: National Statistical Agency (ONS).

food products. As elsewhere, inflation remained low during the lockdown in response to the pandemic before accelerating in the fourth quarter of 2020, reaching 5.5 percent year-on-year in H1-2021 and 8.8 percent in H2-2021.36 In 2019 and 2020, inflation in manufactured goods, which represent 40 percent of the CPI basket, contributed 1.9 percentage points (pp) to Algeria's CPI, climbing to 2.6pp in 2021. The contribution of services fell from 0.4pp to 0.3pp, while that of agricultural and food inflation rose from 0.4pp in 2019-2020 to 3.6pp in 2021. This contrasts with the two most recent inflation peaks: the 2012 peak was driven mainly by the price of fresh agricultural products and was observed after a sharp increase in public spending, while the 2016 peak was driven by manufactured goods following a sharp depreciation in the exchange rate (Figure 26). In a context of rising prices globally, the heterogeneity of the degree of import intensity by sector sheds light on the recent dynamics of inflation's sub-components (Figure 27).

# An Econometric Analysis to Understand Inflation in Algeria

A vector autoregression (VAR) model makes it possible to identify the macroeconomic determinants of inflation while taking into account the specificities of the Algerian economy. Inflation

FIGURE 27 • ...import Intensity by Sector Explains the Recent Dynamics of CPI Sub-Components



Source: ONS, World Bank calculations.

dynamics must be viewed in light of the respective weights of public spending and imports, as well as the long-run relationship between the money supply and inflation.37 The analysis is based on monthly inflation data between 2009 and 2021. The dynamic relationship between inflation, public spending, the money supply, import prices, and the dinar's exchange rate was estimated. The analysis was also applied to the industrial producer price index (PPI) in the public manufacturing sector and its main sub-components in the steel, metal, mechanical, electrical, and electronic (ISMMEE) industries, as well as in food processing industries. This model makes it possible to analyze the portion of inflation variance explained by endogenous variables at different time horizons (see Figure 28 showing variance decomposition below) and to better understand the contribution of the various macroeconomic channels to inflation in Algeria.

The VAR model confirms the role of macroeconomic factors.<sup>38</sup> After three months, these

<sup>&</sup>lt;sup>36</sup> Based on average CPI per semester.

<sup>37</sup> See in particular the IMF (2017) analysis on non-food inflation

These data and the following charts use the variance decomposition produced by the VAR analysis. This decomposition makes it possible to estimate the effect of a shock to endogenous variables on the CPI at different horizons. The direction of the contribution of the various

factors explain 12 percent of the inflation variance, rising to 41 percent after one year and 48 percent after two years, suggesting short-term rigidities that delay adjustment in prices or the influence of factors outside the model. After two years, changes in nominal public spending and in currency in circulation<sup>39</sup> explain 17 percent and 18 percent of the inflation variance, respectively, while changes in exchange rates and in import prices explain 9 percent and 6 percent of the inflation variance, respectively.

# Goods and Services Categories React Differently to Macroeconomic Factors

The relative importance of the determinants of inflation varies across goods and services categories. To analyze these dynamics, the model was applied separately to the four categories of goods and services in the consumer price index: fresh agricultural products (17 percent of the CPI), manufactured food products (26 percent), manufactured goods (excluding food, 40 percent), and services (17 percent):

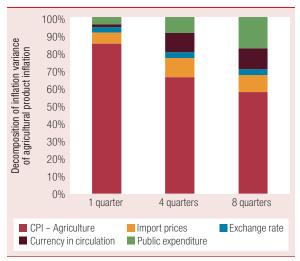
 Prices of fresh agricultural products respond mainly to domestic demand factors, which is

- consistent with the smaller share of imports in their domestic consumption (Figure 28).
- Prices of industrial food products react strongly to external factors but are moderated by subsidies. The model explains close to 60 percent of the variance in prices and shows that external factors and public spending play an important role, explaining 32 percent and 18 percent respectively of the variance in inflation (Figure 29).

shocks involving endogenous variables to inflation, discussed in this section, is documented by the impulse response functions set out in the paper on which this summary is based.

While the M2 effect is not very noticeable in the estimation results, replacing it with currency in circulation significantly improves the performance of the model. The fact that the relationship between M2 and non-food CPI was apparent in the IMF analysis (2017) may suggest a different relationship between monetary aggregates and food inflation (excluded from the IMF analysis) or, following the 2017-2019 monetary financing program, a strong correlation between M2 and public spending or the consequences of the absence of inflationary pressures following the program, which may have altered the relationship between M2 and the CPI.

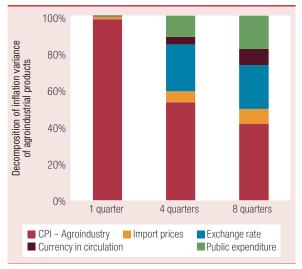
FIGURE 28 • Agricultural Prices React More Strongly to Domestic Factors...



Source: World Bank estimates.

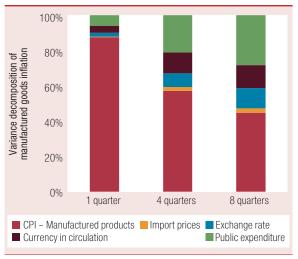
 $\it Note$ : The graphs show the contributions of the model's endogenous variables to the variance of prices 3, 12 and 24 months later.

FIGURE 29 • ...and Agroindustrial Products to External Factors, Moderated by Subsidy Policies



Source: World Bank estimates.

FIGURE 30 • The Prices of Manufactured Products React Strongly to Domestic Demand...

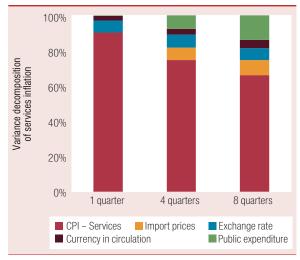


Source: World Bank estimates.

- Prices of manufactured consumer goods react strongly to domestic factors. For that category, the model explains nearly 60 percent of the inflation variance and suggests that changes in public spending play an important role in the process, explaining 25 percent of the variance in prices over two years. The increase in currency in circulation and depreciation also have inflationary effects, explaining nearly 30 percent of the inflation variance (Figure 30).
- Changes in prices of services are more dependent on domestic market dynamics. The four factors considered by the model explain only one third of this variance, which reflects high price inertia in these sectors, which have seldom exceeded 5 percent since 2009 (Figure 31).

When applied to producer price indices in the public sector, the model also makes it possible to document the effect of import prices on producer prices, thus inflating public consumption. The output of state-owned non-hydrocarbon enterprises is concentrated in the steel, metal, mechanical, electrical, and electronics (ISMMEE) and food processing sectors. The depreciation of the dinar explains 24 percent and 31 percent, respectively,

FIGURE 31 • ...while the Model Explains a Minor Share of Fluctuations in Services Prices



Source: World Bank estimates.

of the variance in producer prices in these sectors. This illustrates the effect of the depreciation on the prices of industrial products and thus the cost of public investment projects, which are largely carried out by state-owned enterprises, as well as the cost of food subsidies for the Treasury, as state-owned enterprises produce the majority of subsidized products. (Figures 32 and 33).

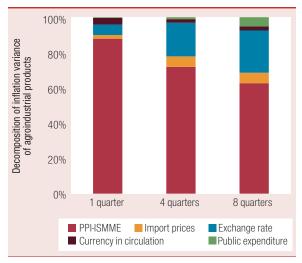
## Conclusion

In the medium term, half of the dynamics of Algeria's CPI are explained by a set of quantifiable macroeconomic factors. External factors (import prices, exchange rate) explain approximately 15 percent of the change in inflation two years later but over 30 percent of the change in industrial food prices, while strongly affecting producer prices in the public sector. Meanwhile, domestic demand factors (public spending and currency in circulation) explain over 30 percent of the change in inflation, which suggests supply constraints that motivate price increases.

This analysis sheds some light on the causes of the current surge in inflation, partly linked to the COVID-19 crisis. In March 2022, year-on-year CPI growth was 9.3 percent, driven in equal



FIGURE 32 • Depreciation Has a Marked Effect on the Producer Prices of SOEs in the ISMMEE Sectors...



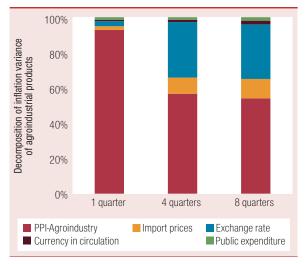
Source: World Bank estimates.

IPPI = public sector industrial producer price index; ISMMEE = steel, metal, mechanical, electrical, and electronic industries.

measure by rising prices for fresh agricultural products (fruit and vegetables, meat, and fish), industrial foods (grains, dairy, and oilseed products), and manufactured products. Variance breakdown analyses illustrate the impact of:

- The increase in currency in circulation during the COVID-19 crisis, particularly on the prices of fresh agricultural products and manufactured products.<sup>40</sup>
- The larger depreciation of the exchange rate during the COVID-19 crisis, particularly for industrial food products and, to a lesser extent, the rise in import prices.

FIGURE 33 • ...and those of Agroindustrial Products, Which are Largely Subsidized



Source: World Bank estimates.

The analysis presented here suggests that prudent fiscal and monetary policies will limit inflationary pressures. In the medium to long terms, structural reforms encouraging a greater degree of domestic and international competition should also contain price rises.

<sup>&</sup>lt;sup>40</sup> By restricting the analysis to 2015-2022, the contribution of growth in currency in circulation increases significantly.

# ANNEX 3: SUMMARY OF SPECIAL SECTIONS IN LATEST ALGERIA ECONOMIC MONITOR

# 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 Hauts Plateaux Central 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 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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