

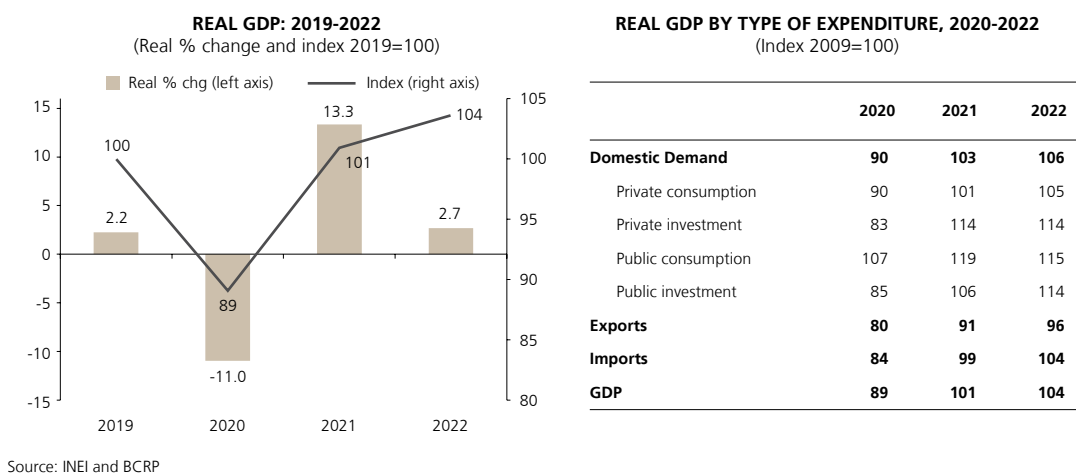
01. PRODUCTION AND EMPLOYMENT

The improved health situation in 2022 allowed the labor market and most economic activities to recover. Higher incomes and access to savings to combat unemployment and finance pensions –such as AFP funds and CTS deposits– encouraged consumers to increase their spending on goods and services. There was also a significant increase in public investment by regional and local governments, which is usually observed in the last year of the term of office of their authorities.

However, business confidence remained pessimistic for most of the year, affected by social conflicts and political uncertainty, a situation that slowed the growth of private investment in non-mining sectors. For its part, mining investment declined due to the lack of new major projects in the sector and the start of Quellaveco operations.

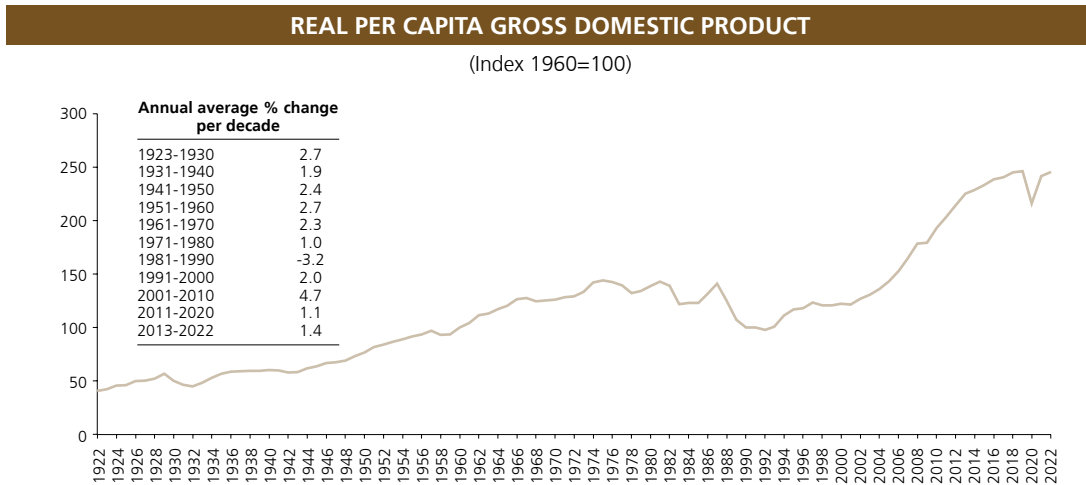
As a result, GDP grew by 2.7 percent in 2022, 4 percent above its pre-pandemic level. All expenditure components are above this level except exports, which continue to lag behind inbound tourism services.

Graph 1



GDP per capita increased by 1.6 percent year-on-year in 2022, bringing it very close to its pre-pandemic level. However, the average annual growth rate of GDP per capita over the past 10 years was 1.4 percent, lower than the 4.7 percent recorded between 2001 and 2010.

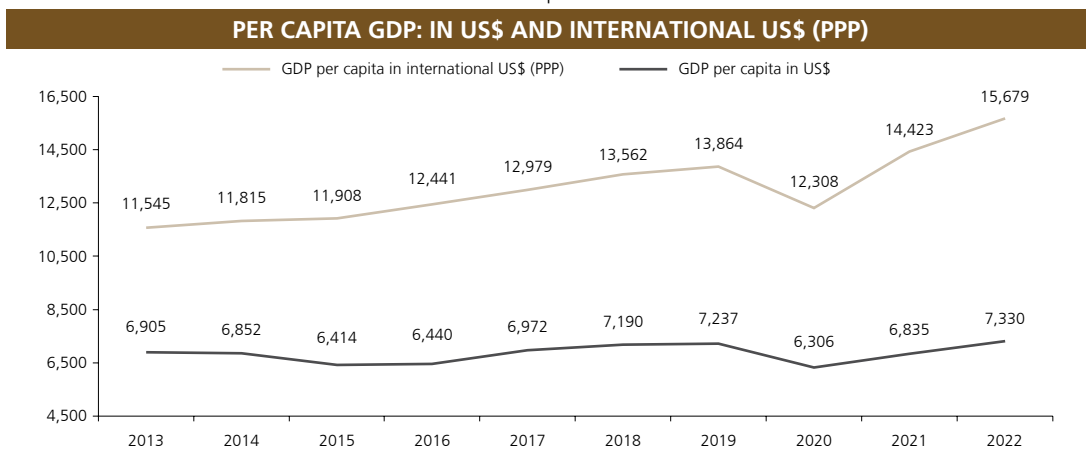
Graph 2



Source: INEI and BCRP.

GDP per capita in dollars rose to US\$ 7,330 in 2022, which represented an increase of 7.2 percent from 2021 and 1.3 percent from 2019. Alternatively, GDP measured in terms of purchasing power parity (PPP) –an indicator that takes into account the same basket of goods and is used for international comparisons– grew 8.7 percent year-on-year and 13.1 percent from 2019 to US\$ 15,679 PPP.

Graph 3



Source: IMF and BCRP.

1. DOMESTIC DEMAND

Domestic demand grew by 2.3 percent in 2022, lower than the rate recorded in 2021 (14.5 percent). Private consumption was the component that contributed most to the growth of domestic demand, reflecting the favorable evolution of the labor market and the continuation of the extraordinary withdrawals of pension savings initiated following the pandemic. To a lesser extent, the expansion of public investment contributed due to the spending that is usually observed in the last year of the term of office of subnational authorities. Private investment fell by 0.4 percent (up 36.9 percent

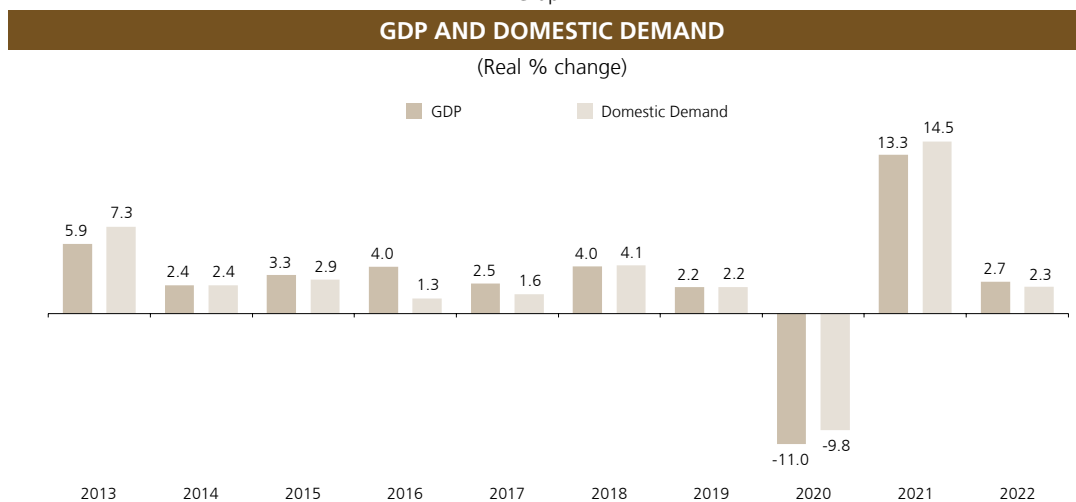
in 2021), weakened by the impact of political uncertainty on businessmen's expectations and the absence of new large mining projects.

Table 1

GROSS DOMESTIC PRODUCT BY TYPE OF EXPENDITURE					
(Real % change)					
	2020	2021	2022	Average 2013-2022	Average 2018-2022
Domestic Demand	-9.8	14.5	2.3	2.7	2.4
a. Private consumption	-9.9	12.4	3.6	3.2	2.4
b. Public consumption	7.5	10.9	-3.4	3.9	3.4
c. Gross fixed investment	-16.2	34.6	1.0	1.7	4.2
- Private	-16.5	36.9	-0.4	1.7	4.4
- Public	-15.1	24.8	7.7	1.6	3.5
Exports	-19.7	13.2	6.1	1.7	-0.1
Minus:					
Imports	-15.8	18.0	4.4	1.4	1.4
GDP	-11.0	13.3	2.7	2.8	2.0
Memo:					
Total public expenditure	1.1	14.2	-0.5	3.2	3.4

Source: INEI and BCRP.

Graph 4



Source: INEI and BCRP.

1.1 PRIVATE CONSUMPTION

Private consumption grew by 3.6 percent in 2022, contributing 2.4 percentage points to economic growth. The dynamism of the labor market allowed for higher employment and incomes, supporting household spending on goods and services. Formal private sector employment grew by 7.8 percent in 2022, adding 292 thousand jobs compared to 2021 and 207 thousand compared to 2019. As a result, the formal wage bill grew 11.5 percent year-on-year in 2022, which was 18.1 percent higher than the level recorded in 2019.

During the year, the government continued to provide monetary incentives such as the Yanapay, Wanuchay, Alimentario and Bono 210 bonds. 100 percent of CTS deposits were kept available throughout the year in accordance with Law No. 31480, and extraordinary withdrawals from AFPs funds of up to S/ 18,400 were authorized in accordance with Law No. 31478.

Other consumer indicators confirm the dynamism of this component during the year. Consumer credit grew by 12.0 percent in real terms, with both car loans and credit cards expanding. The expansion in car loans corresponds to the placement of 160 thousand new light vehicles, while the increased use of credit cards is attributed to the growth in formal employment.

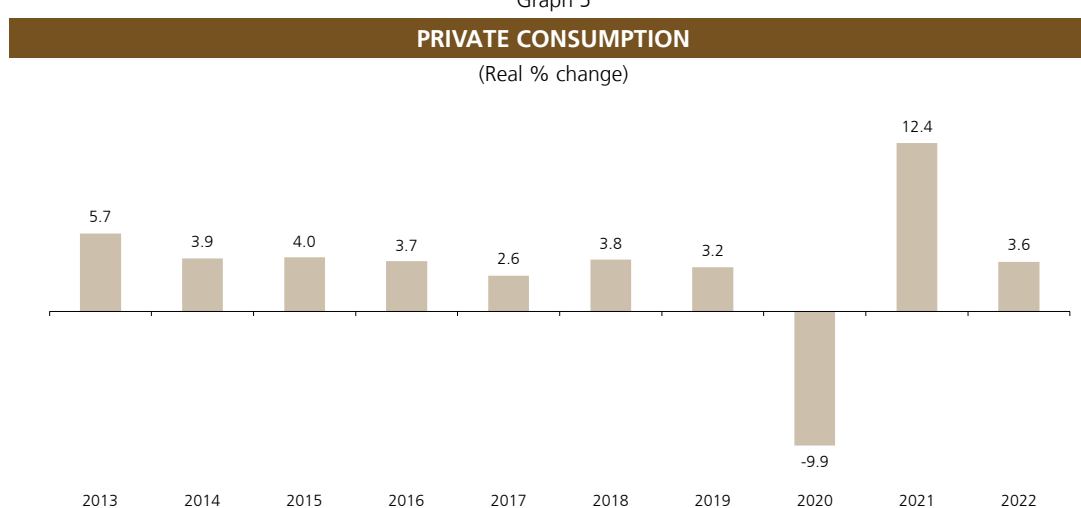
However, inflationary dynamics and political uncertainty limited consumption dynamics by affecting agents' spending capacity and confidence, respectively.

Table 2

INDICATORS OF PRIVATE CONSUMPTION			
(% change)			
	2020	2021	2022
National employment (private sector)	-6.2	4.2	7.8
Payroll (private and public sector)	-4.3	10.6	11.5
Consumer confidence index - Apoyo 1/	41	39	36
Future household situation Index 1/	56	54	47
Real consumer loans	-9.0	-3.1	12.3
Sale of poultry (tons, diary average)	-16.6	2.7	0.5
Retail sales	-15.2	12.2	2.4
Volume of imports of consumer goods	-9.4	14.5	4.5
Non-durable, excluding foods	-2.1	8.1	11.5
Durable	-21.5	29.9	-2.7

1/ Diffusion index. Value more than 50 means growth.
Source: BCRP, INEI, SUNAT, Apoyo, and MINAGRI.

Graph 5



Source: INEI and BCRP.

1.2 PRIVATE INVESTMENT

Private investment fell by 0.4 percent in 2022, in an environment of deteriorating business confidence and falling terms of trade. Mining investment fell by 5.5 percent, due to lower disbursements from

Quellaveco as the project became operational, as well as due to the absence of new large mining projects. On the other hand, investment in the non-mining sector was driven by large infrastructure projects such as Phase 1 of the Chancay port terminal, the Lima Metro Line 2 and the Sol Trujillo-Sullana highway, among other projects.

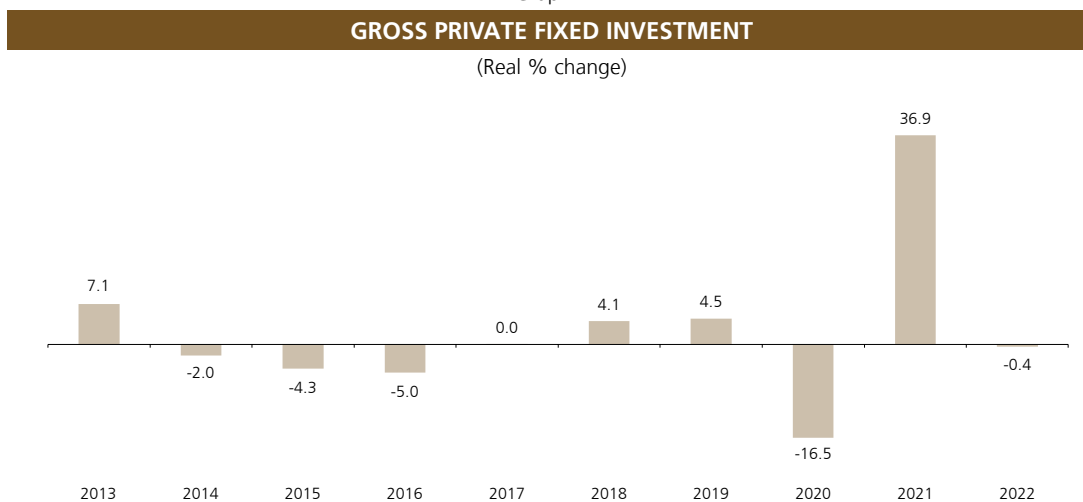
On the other hand, the self-construction momentum observed in 2021 was reduced, as reflected in the 0.7 percent contraction in domestic cement consumption (36.8 percent in 2021). Finally, the volume of capital goods imports excluding construction materials and mobile phones contracted by 0.4 percent, mainly due to lower purchases of information technology equipment and machinery and equipment for the construction sector.

Table 3

MINING AND NO MINING INVESTMENT				
(Real % change)				
	2020	2021	2022	Average 2013-2022
Total private investment	-16.5	36.9	-0.4	1.7
Mining sector	-25.3	23.0	-5.5	-3.9
No mining sectors	-15.1	39.0	0.2	2.7

Source: MINEM and BCRP.

Graph 6

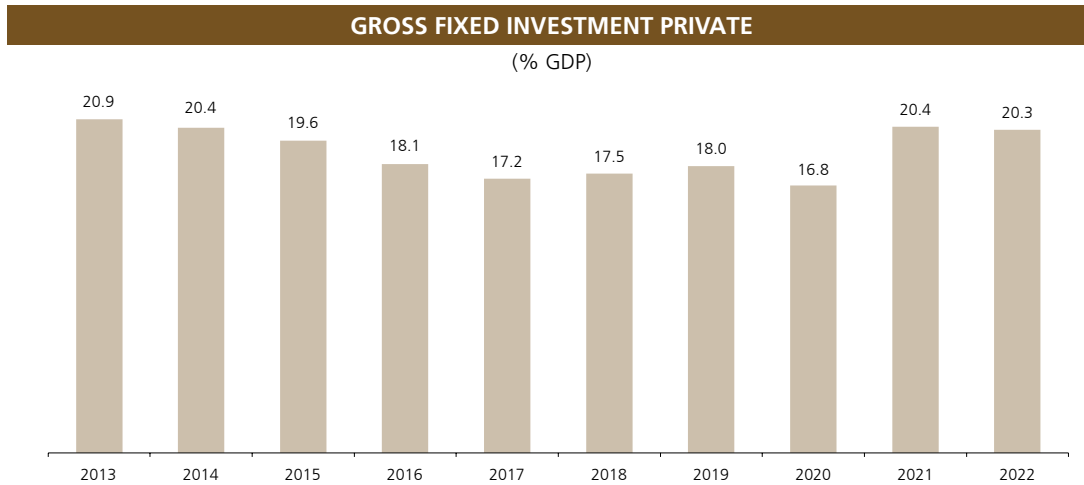


Source: INEI and BCRP.

The ratio of private investment to GDP decreased from 20.4 percent to 20.3 percent between 2021 and 2022.

In nominal terms, mining investment increased from US\$ 5,238 million in 2021 to US\$ 5,364 million in 2022, representing a growth of 2.4 percent, mainly in development and preparation and exploration. At the company level, Yanacocha increased its annual investment by US\$ 254 million, mainly in its Chaquicocha Accumulation concession. Minsur’s US\$ 85 million investment increase was mainly in mining equipment. Finally, Cerro Verde increased its investment by US\$ 61 million, focusing on infrastructure, processing plants and mining equipment.

Graph 7



Source: INEI and BCRP.

In the energy sector, Luz del Sur invested US\$ 75 million (US\$ 124 million in 2021), mainly to improve and expand the electricity system. For its part, Enel Distribución invested US\$ 175 million (US\$ 153 million in 2021) for the development of sub-transmission projects and for increased maintenance, expansion and automation of its networks and public lighting.

Investments in the hydrocarbons sector included Refinería La Pampilla's investment of US\$ 49 million (US\$ 28 million in 2021) in major plant maintenance, the Nuevo Terminal T4 project, improvements to Terminals T1, T2 and T3 (RLP35), the Revamping Unidades Bloque Gasolinas project (RLP53), and projects related to safety and facility improvements. In the fishing sector, Pesquera Exalmar invested US\$ 35 million (US\$ 15 million in 2021), mainly in vessels and indirect human consumption facilities.

In the manufacturing sector, Aceros Arequipa invested US\$ 100 million (US\$ 116 million in 2021) in property, plant and equipment and intangible assets. Of this amount, US\$ 17 million was invested in the new steel mill, US\$ 12 million in the rolling mill and US\$ 17 million in the distribution center in Lurín. On the other hand, Unión de Cervecerías Peruanas Backus y Johnston invested US\$ 110 million (US\$ 121 million in 2021) to increase production and marketing capacity and to take advantage of new market opportunities. Similarly, Alicorp increased its property, plant and equipment by US\$ 19 million (US\$ 11 million in 2021), investing mainly in the purchase of machinery for the refinery, the installation of a new distribution center and the purchase of various machinery and equipment for the Callao mill, oils and sauces plant.

1.3 PUBLIC EXPENDITURE

Public spending in 2022 decreased by 0.5 percent. The decline in spending for the year is explained by the decrease in public consumption (-3.4 percent), which was partially offset by the increase in public investment (7.7 percent).

The reduction in public consumption was explained by lower spending by the national and local governments on medical supplies and payments to CAS personnel to deal with COVID-19. This reduction was partially offset by the recovery of spending not related to the health emergency and higher salary payments at the regional government level.

On the other hand, **public investment** in 2022 increased by 7.7 percent due to higher disbursements by subnational governments, an effect usually observed in the last year of their administrations.

The projects that stand out for their size at the regional government level include hospital infrastructure works in Iquitos and Junín, education projects in 8 provinces of Piura, water supply for irrigation in Apurímac and the Arequipa-La Joya regional road. Similarly, the construction of the Ayo Andamayo-Castilla highway in Arequipa, citizen security in Ventanilla-Callao, five one-teacher schools in Ayacucho, vehicular and pedestrian traffic on the Ramiro Prialé bridge, and the northern section of the Metropolitano in Lima stand out among the projects implemented at the municipal level.

2. EXPORTS AND IMPORTS

Exports of goods and services increased by 6.1 percent in 2022, driven by higher shipments of non-traditional agriculture, textiles, and iron and steel products (5.6 percent). To a lesser extent, exports of traditional products (2.4 percent), such as copper, coffee, and natural gas, and exports of services, particularly inbound tourism, increased in line with reduced restrictions on international flights.

Imports, on the other hand, increased by 4.4 percent. This result reflects higher purchases of inputs such as fuels, lubricants, and related products and raw materials for industry; non-durable consumer goods, including clothing, footwear, and others; and higher demand for imported services, including transportation and travel. This increase was tempered by lower volumes of imports of capital goods for industry and consumer durables due to the decline in business and consumer confidence, respectively.

3. ECONOMIC SECTORS

A moderation in growth was observed in the non-primary sectors in 2022 after the recovery registered in 2021. On the primary side, a contraction or moderation of growth was observed in almost all sectors, with the exception of hydrocarbons, which recovered from the maintenance, technical failures and problems with communities experienced in 2021. The contraction in mining stands out due to lower production of several metals, with the exception of tin, iron and copper (driven by Quellaveco). In 2022, production in this sector was affected by lower grades, depletion of units and problems with communities.

Table 4

GDP ACCORDING TO ECONOMIC SECTORS					
(Real % change)					
	2020	2021	2022	Average 2013-2022	Average 2018-2022
Primary GDP	-7.6	6.4	0.6	2.3	0.3
Agriculture and livestock	1.0	4.6	4.3	3.4	4.2
Fishing	4.2	9.9	-13.7	1.7	3.9
Metallic mining	-13.8	10.5	-0.2	3.3	-1.5
Hydrocarbons	-11.0	-4.6	4.0	-1.7	-1.6
Manufacturing	-2.0	3.2	-2.9	0.2	0.3
Non-primary GDP	-11.9	15.4	3.2	2.9	2.4
Manufacturing	-16.4	25.2	2.3	0.8	2.3
Electricity and water	-6.1	8.5	3.9	3.9	2.8
Construction	-13.3	34.9	3.0	3.0	5.2
Commerce	-16.0	17.8	3.3	2.5	1.6
Services	-10.3	11.4	3.4	3.4	2.3
GDP	-11.0	13.3	2.7	2.8	2.0

Source: INEI and BCRP.

3.1 AGRICULTURE SECTOR

The agricultural sector recorded a growth rate of 4.3 percent in 2022. This rate is explained by the good results obtained in the blueberry and grape campaigns, due to previous investments in young plantations and new varieties, as well as in the avocado and cocoa crops, following the increase in harvested areas, and in the high yields of olives, favored by good weather conditions. Domestically oriented agricultural production grew at a moderate rate compared to the previous year, in a year of rising fertilizer prices and low water availability in the highlands at the beginning of the season. Poultry meat supply continued its recovery from 2020, growing by 2.8 percent.

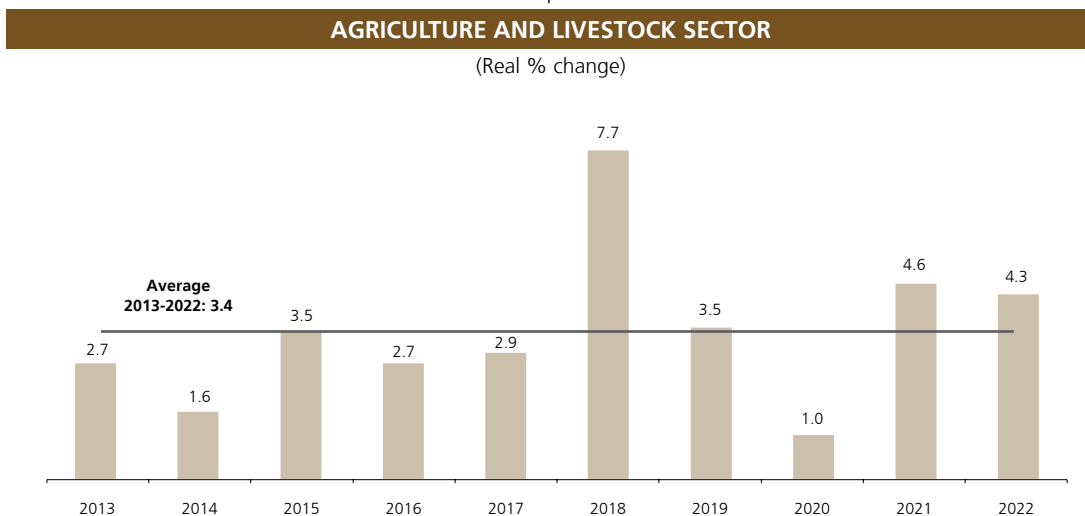
The sector's sustained growth over the past decade has been based on the strength of export-oriented agriculture (7.6 percent), livestock production (3.2 percent) and, to a lesser extent, production for the domestic market (2.0 percent).

Table 5

AGRICULTURE AND LIVESTOCK PRODUCTION					
(Real % change)					
	2020	2021	2022	Average 2013-2022	Average 2018-2022
A. Agricultural production	2.8	6.1	5.5	3.5	5.3
For the domestic market	2.3	4.5	2.0	2.0	3.2
Potato	2.3	2.9	5.8	3.0	4.6
Rice	7.6	3.0	-1.9	1.3	2.2
Onion	-4.9	-0.4	-14.9	-3.8	-6.6
Tangerine	4.6	11.8	11.5	8.8	10.0
Tomato	1.1	19.4	-13.3	-0.8	-0.9
Banana	3.3	1.9	2.3	1.5	4.1
Yucca	5.2	-0.1	3.5	2.2	3.0
Amilaceous maize	5.3	-3.1	14.6	2.4	5.4
Garlic	9.3	20.8	1.0	3.0	3.1
Lemon	5.1	7.1	1.6	4.1	14.6
For industry	-11.8	8.7	4.1	-0.3	2.4
Yellow hard maize	-11.3	12.8	-3.0	-1.2	-0.3
Cotton branch	-65.8	-22.9	158.0	-10.1	10.4
Oil palm	-3.6	36.4	14.3	10.5	10.7
Sugar cane	-4.0	-6.1	-2.5	-0.8	0.4
For export	7.3	8.2	11.0	7.6	9.6
Coffee	-2.8	2.9	-3.0	1.0	0.9
Asparagus	3.5	-0.1	0.2	-0.2	-0.7
Grapes	14.6	12.6	11.3	9.8	7.3
Avocado	17.5	15.5	11.1	12.4	13.1
Mango	20.1	-13.9	11.7	10.3	5.0
Cocoa	12.1	1.0	6.1	10.5	6.9
Blueberry	21.3	27.2	28.2	120.2	41.1
Olive	-8.7	-15.7	54.4	9.4	23.1
B. Livestock production	-1.8	2.0	2.4	3.2	2.4
Poultry	-2.2	1.6	2.8	4.4	2.8
Bovine	-4.7	3.3	1.4	0.3	0.4
Eggs	1.9	1.3	1.4	5.0	4.2
Pork	-1.9	3.7	3.0	3.7	2.8
C. Total 1/	1.0	4.6	4.3	3.4	4.2

1/ Includes the forestry sector.
Source: INEI and MIDAGRI.

Graph 8

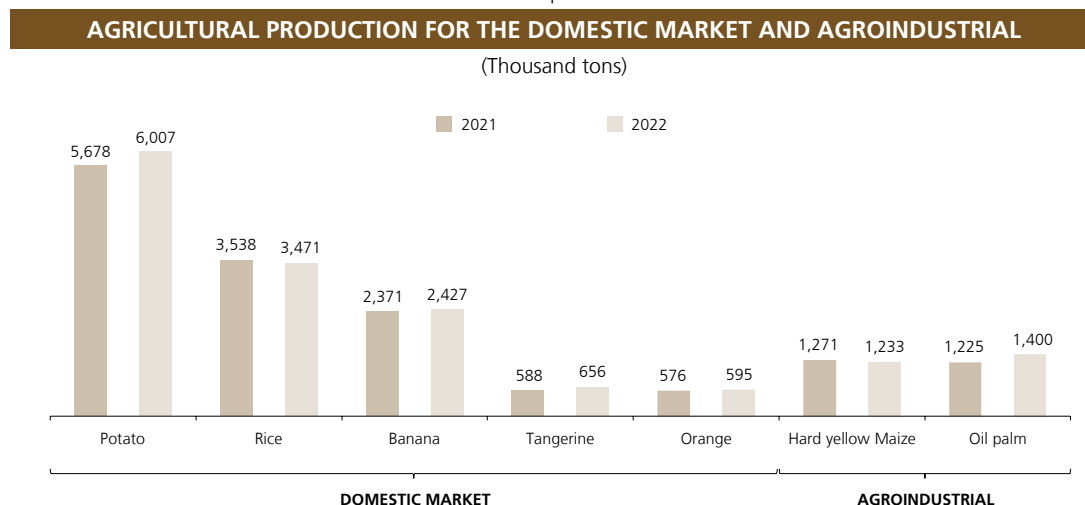


Source: INEI and MIDAGRI.

Domestically oriented production grew by 2.0 percent. The impact of the increase in fertilizer prices on crops with a significant weight of this input in their cost structure, such as rice, was offset by higher yields of Andean products, such as potatoes and starchy maize, due to good weather conditions (cold temperatures as a result of the coastal La Niña event and water availability) as well as larger areas harvested with mandarins.

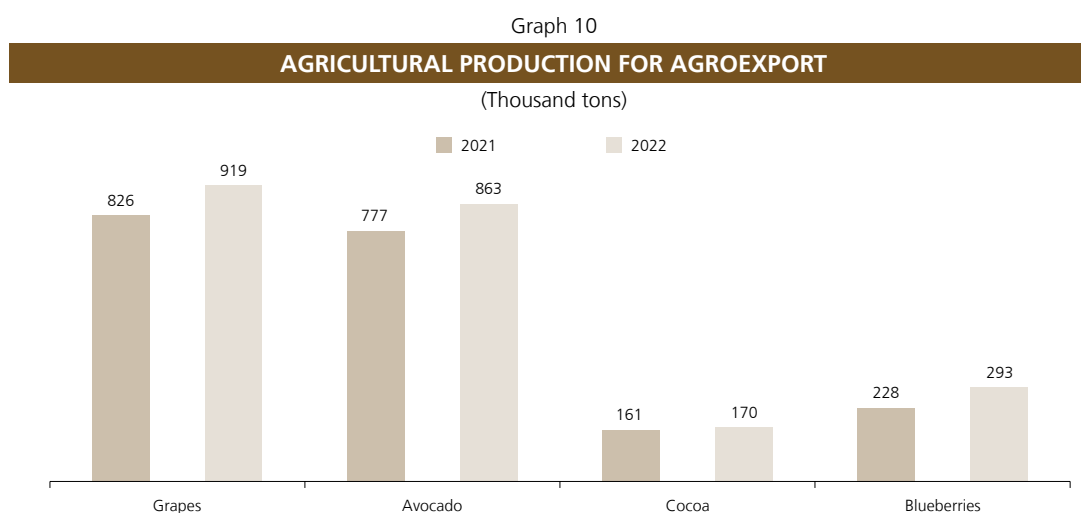
Agro-industrial production increased by 4.1 percent due to higher production of cotton for the textile industry and oil palm for oil production. Both products enjoyed a favorable price scenario: cotton prices increased by 36.4 percent, from S/ 4,600 to S/ 6,280 per MT, while oil palm prices increased by 13.4 percent, from S/ 580 to S/ 660 per MT.

Graph 9



Source: MIDAGRI.

Agricultural exports grew by 11.0 percent. This expansion was evidenced by higher export volumes of blueberries and avocados, with historical levels being exceeded every year for the past decade by high-yielding young plantations. In the case of blueberries and grapes, investments in varietal changes with high commercial demand should be highlighted, while in the cases of cacao and avocados, there was a greater coverage of the production areas. This was associated with greater inclusion of areas in the jungle region in the first case, while in the second case, production in the highlands complemented production in coastal regions.



Source: MIDAGRI.

Early season rainfall was low in the Central and Southern Highlands. In addition, hailstorms occurred in the Sierra region in November 2021 and January 2022, which had an impact on plantings related to the 2022 farming production in these regions.

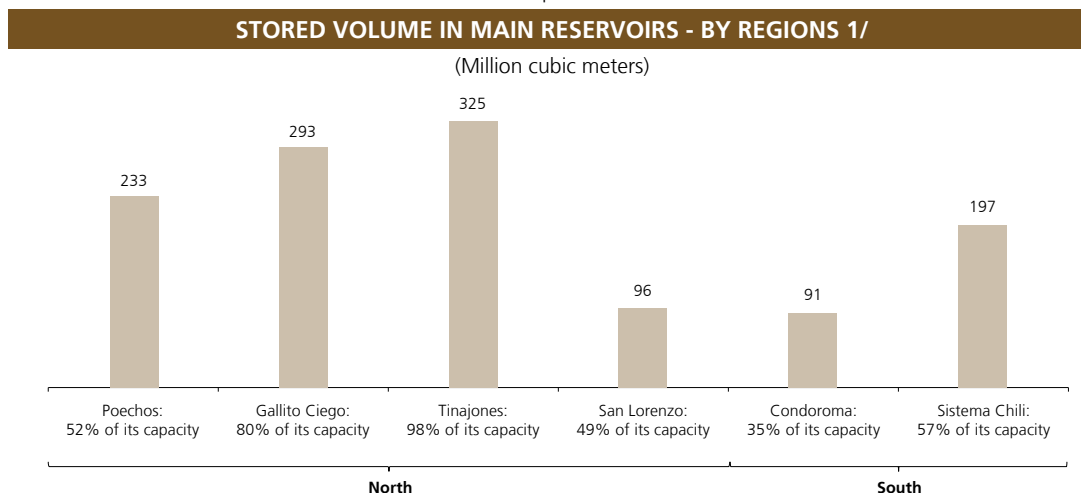
Table 6
PRECIPITATION INDICATOR - SIERRA REGION - AGRICULTURAL SEASON
AUGUST- DECEMBER 2022 1/
(% change respect to its historical average)

	Aug.	Sep.	Oct.	Nov.	Dec.	Accumulated Aug. - Dec.
North	47.5	11.6	-21.0	-69.8	-10.5	-22.2
Central	3.5	-1.1	-50.5	-57.8	-1.6	-25.9
South	-46.5	-43.7	-78.0	-76.9	-13.2	-45.6

1/ Sample of 262 SENAMHI Meteorological Stations, with to historical average of 30 years (1981-2010).
Source: SENAMHI.

Water storage in the main reservoirs as of December 31, 2021 in both the north and south was higher than in the same period of the previous year, with the exception of Condorama Reservoir (in Arequipa), which had a similar storage level to that observed in the previous year.

Graph 11



1/ As of December 31.

Source: Users, Special Irrigation Projects, and AUTODEMA.

Table 7

EVOLUTION OF THE NORTH RESERVOIRS 1/
(Millions of cubic meters)

	2016	2017	2018	2019	2020	2021	2022	Capacity of use
Piura								
Poechos	104	272	171	239	143	233	78	446
San Lorenzo	19	37	95	98	58	96	33	196
Lambayeque								
Tinajones	53	263	188	307	210	325	182	332
La Libertad								
Gallito Giego	204	149	141	220	124	293	93	367
Arequipa 2/								
Sistema Chili 2/	111	174	190	172	190	197	150	345
Condoroma	38	102	88	81	93	91	54	259

1/ As of December 31.

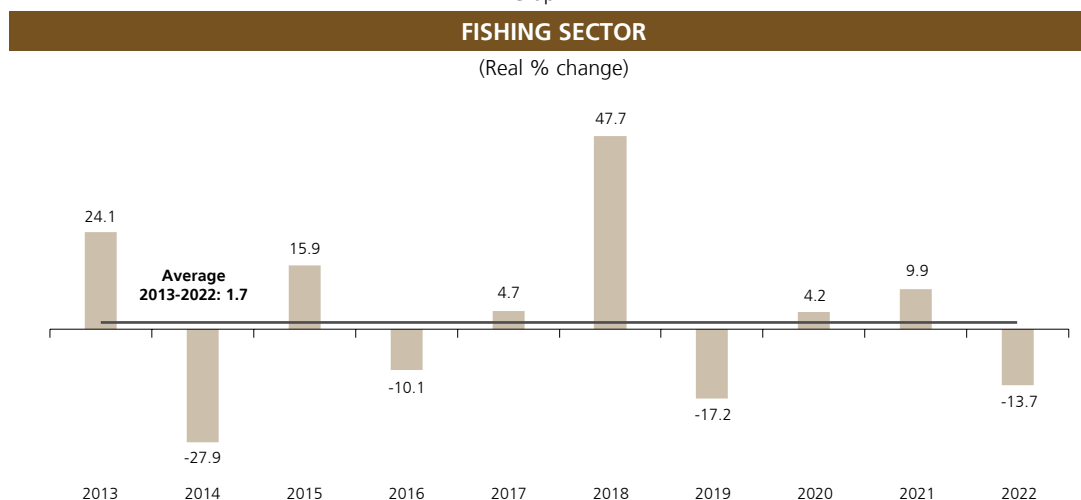
2/ El Pañe, Los EspYearles, Pillones, El Frayle and Aguada Blanca are considered.

Source: Users, Special Irrigation Projects, and AUTODEMA.

3.2 FISHING SECTOR

The fishing output decreased by 13.7 percent in 2022, mainly due to the poor result obtained in the second anchoveta fishing season in the North Central Zone (November 2022 to February 2023). Not only did the annual catch go from 5.2 million MT in 2021 to 4.0 million MT in 2022 (21.9 percent lower), but there was also a lower catch of marine species for direct human consumption, such as scallops, squid and perico, due to their lower availability associated with colder sea temperatures as a result of the coastal La Niña event.

Graph 12



Source: INEI.

In January 2022, the anchoveta catch in the North Central Zone was lower than in the same month of the previous year (0.1 vs. 0.5 million mt) due to the lower remaining quota from the second season of 2021. The catch in the North Central Zone in the first season of 2022 was also slightly lower than in 2021 because the season was closed earlier when the juvenile quota was reached. In addition, the 2022 second season started on November 23, which resulted in fewer fishing days in the fourth quarter of the year compared to 2021 (the 2021 second season started on November 15).

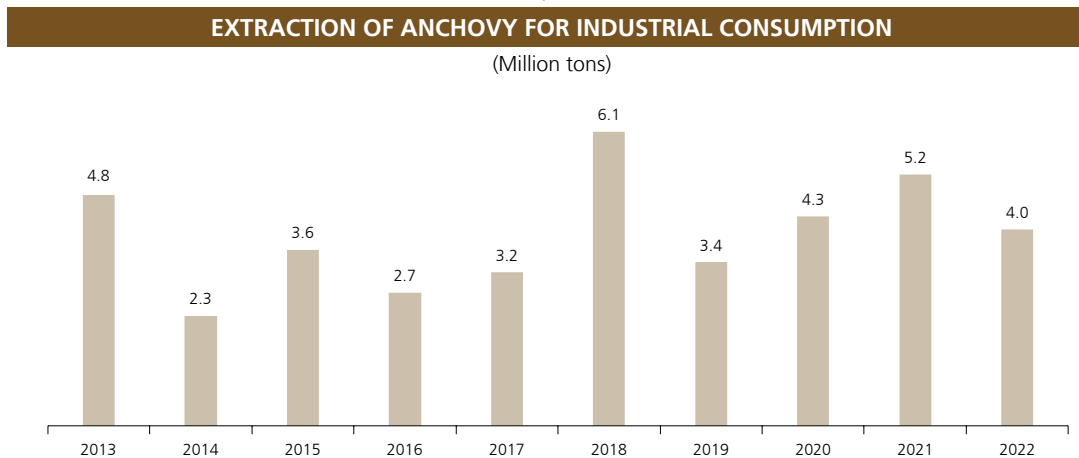
Table 8

MAXIMUM LIMIT OF CATCH AL LOWER AND ANCHOVY EXTRACTION					
(North-Central zone)					
Year	Season 1/	Biomass (Million tons)	Maximum limit of the total allowable catch (Million tons)	Extraction (%)	Catch (Million tons)
2015	First	9.5	2.6	97	2.5
	Second	5.6	1.1	98	1.1
2016	First	7.3	1.8	51	0.9
	Second	6.9	2.0	98	2.0
2017	First	7.8	2.8	86	2.4
	Second	6.1	1.5	47	0.7
2018	First	10.9	3.3	98	3.2
	Second	7.2	2.1	100	2.1
2019	First	7.0	2.1	95	2.0
	Second	8.3	2.8	36	1.0
2020	First	10.1	2.4	98	2.4
	Second	8.4	2.8	88	2.5
2021	First	9.9	2.5	98	2.5
	Second	7.0	2.0	99	2.0
2022	First	9.8	2.8	84	2.4
	Second	6.8	2.3	84	1.9

1/ Usually the second season of anchovy fishing in the North-Central Zone extends until the first months the following year.

Source: IMARPE and PRODUCE.

Graph 13



Source: PRODUCE.

Marine fisheries for direct human consumption decreased by 11.4 percent, mainly due to lower catches of species intended for freezing, such as scallops and squid.

Table 9

FISH CATCH BY MAIN SPECIES
(% change)

Species	2020	2021	2022	Average 2013-2022	Average 2018-2022
Fishing sector	4.2	9.9	-13.7	1.7	3.9
Anchovy 1/	27.8	19.7	-21.9	0.9	5.0
Jack mackerel 2/	29.1	-13.0	32.2	-1.8	54.4
Prawns 3/	-19.3	-1.7	24.4	6.4	1.8
Giant Squid 3/	-5.3	4.2	-12.9	-0.9	10.5
Mackerel 4/	61.8	13.6	-24.1	10.6	3.3
Tuna 4/	-84.4	-36.6	224.3	17.8	-13.4
Scallops 3/	-10.4	13.7	-53.5	-4.3	40.5

1/ Industrial consumption.

2/ Fresh.

3/ Frozen.

4/ Canned

Source: PRODUCE.

3.3 MINING AND HYDROCARBONS SECTOR

Production in the mining and hydrocarbon sector increased by 0.3 percent in 2022, driven by higher activity in the hydrocarbon subsector (4.0 percent). This was due to higher production of oil (from Lot 95) and natural gas, in response to higher domestic and external demand (from Lot 88 and Lots 56 and 57, respectively). It is worth mentioning that maintenance and breakdowns were recorded at the Melchorita plant in 2021. On the other hand, activity in the sector of metal mining decreased by 0.2 percent due to lower production of most metals, with the exception of copper, iron and tin.

Over the last ten years, the average growth in the mining and hydrocarbon sector was mainly due to the increase in the production of copper (6.9 percent), molybdenum (6.5 percent) and iron ores (6.8 percent).

Table 10

MINING AND HYDROCARBONS SECTOR					
(Real % change)					
	2020	2021	2022	Average 2013-2022	Average 2018-2022
Metallic mining	-13.8	10.5	-0.2	3.3	-1.5
Gold	-31.4	10.7	-0.8	-5.0	-8.6
Copper	-12.7	7.7	4.1	6.9	-0.4
Zinc	-5.0	14.9	-10.7	0.7	-1.4
Silver	-29.4	22.4	-7.6	-1.2	-7.0
Lead	-21.6	9.5	-3.4	0.2	-3.6
Tin	4.0	30.7	4.6	0.8	9.7
Iron	-12.1	36.6	6.5	6.8	8.0
Molybdenum	5.7	6.1	-7.5	6.5	2.3
Hydrocarbons	-11.0	-4.6	4.0	-1.7	-1.6
Oil	-24.9	-3.5	5.6	-4.9	-1.4
Liquid of natural gas	-1.8	-4.8	-5.5	-1.2	-3.3
Natural gas	-10.4	-5.4	20.5	1.5	1.2
TOTAL 1/	-13.4	8.1	0.3	2.4	-1.5

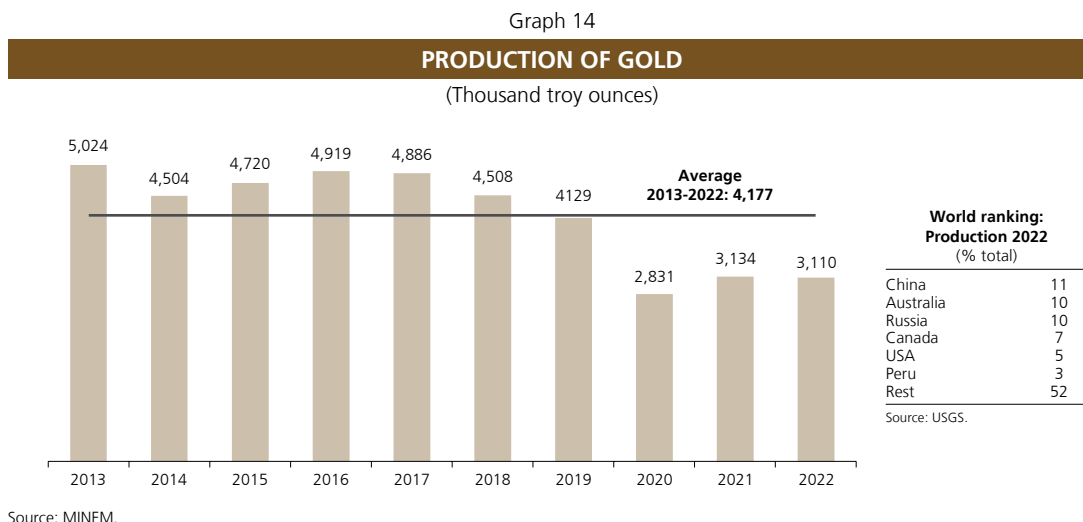
1/ Includes non-metallic mining and other minerals and secondary production.
Source: MINEM.

Table 11

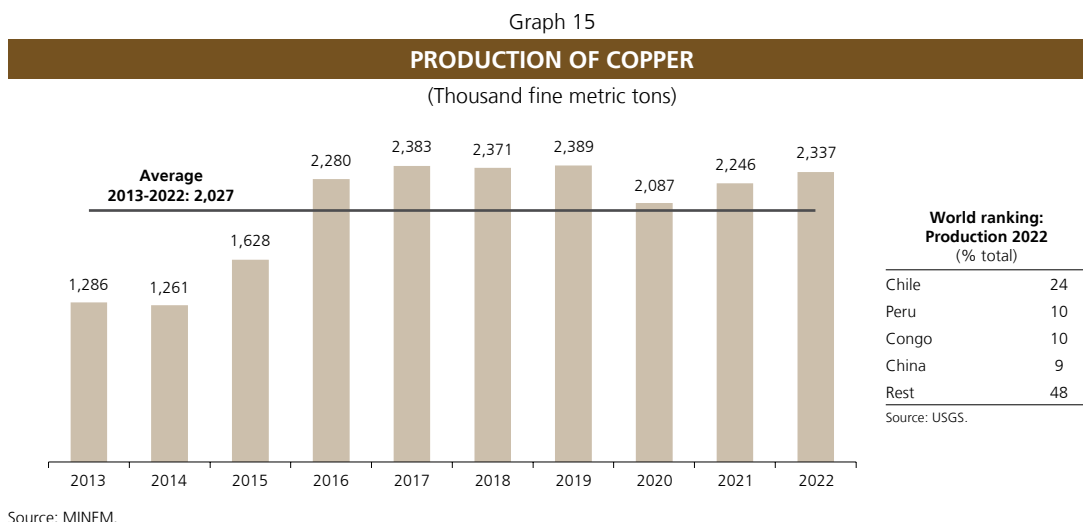
VOLUME OF MINING PRODUCTION					
Production	2018	2019	2020	2021	2022
GOLD (Thousand troy ounces)	4,508	4,129	2,831	3,134	3,110
<i>Of which:</i>					
Compañía Minera Poderosa	279	300	265	298	303
Compañía de Minas Buenaventura	482	323	220	253	245
Minera Yanacocha	515	524	340	264	244
Hochschild	211	216	142	179	166
Shahuindo - Bread American	90	165	144	137	153
Minera Barrick Misquichilca	332	186	84	67	104
La Arena - Bread American	153	136	104	109	95
Pucamarca - MinSouth	103	102	80	69	65
COPPER (Thousand fine metric tons)	2,371	2,389	2,087	2,246	2,337
<i>Of which:</i>					
Compañía Minera Antamina	460	460	396	461	468
Sociedad Minera Cerro Verde	455	434	351	375	414
Southern Peru Copper Corporation	304	388	398	373	315
Las Bambas - MMG	385	383	313	290	255
Toromocho - Chinalco	208	190	203	236	245
Antapaccay	205	198	190	171	151
Mina Justa-MarCopper	-	-	-	75	96
Quellaveco	-	-	-	-	94
Constancia - Hudbay	122	114	73	78	89
ZINC (Thousand fine metric tons)	1,474	1,404	1,335	1,533	1,370
<i>Of which:</i>					
Compañía Minera Antamina	476	366	491	533	500
Nexa Resources	215	208	148	171	156
Volcan Compañía Minera	151	145	100	143	151
Sociedad Minera El Brocal	48	50	60	41	29
Empresa Minera Los Quenuales	26	40	79	72	20
SILVER (Million fine troy ounces)	134	124	88	107	99
<i>Of which:</i>					
Compañía de Minas Buenaventura	21	15	9	8	5
Compañía Minera Antamina	17	16	13	17	16
Volcan Compañía Minera	14	12	9	12	11
Compañía Minera Ares	17	13	7	9	8
LEAD (Thousand fine metric tons)	289	308	242	264	255
<i>Of which:</i>					
Volcan Compañía Minera	51	53	44	60	60
Nexa Resources	49	50	36	44	54
Sociedad Minera El Brocal	24	27	27	14	10
Empresa Minera Los Quenuales	8	9	14	13	8
Compañía Minera Antamina	7	6	9	5	3

Source: MINEM.

Gold production decreased by 24 thousand ounces compared to 2021, which represents a decrease of 0.8 percent. This result is due to lower production at Yanacocha due to lower ore grades and lower production at Antapaccay and Hochschild due to social conflicts in the region. In addition, artisanal production continues to be under-reported.

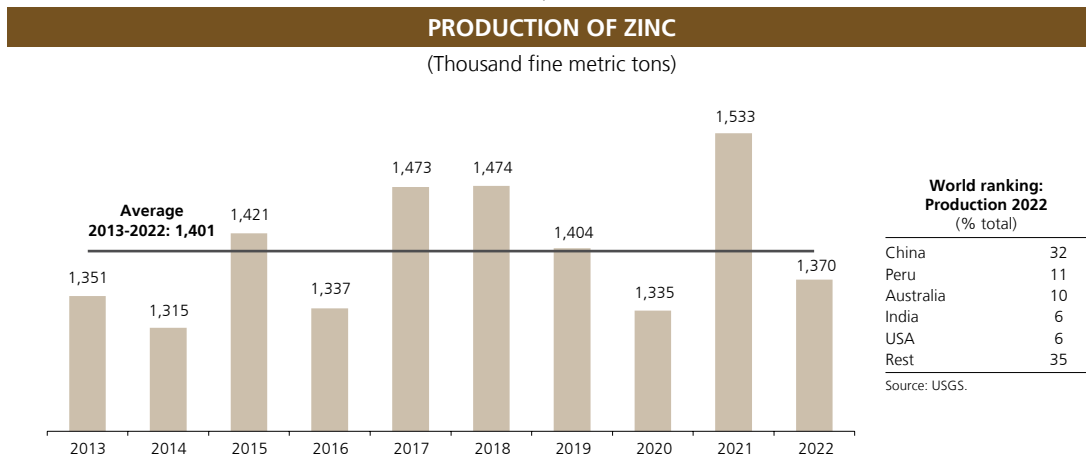


Copper production increased by 91 thousand FMT in 2022, an increase of 4.1 percent over the previous year. The result is explained by the commissioning of Quellaveco and higher production at Mina Justa, Cerro Verde and Constanca due to increased ore processing. On the other hand, production decreased at Antapaccay, Las Bambas and Southern due to the social conflicts in the country.



Zinc production decreased by 10.7 percent in 2022 due to lower production from large and medium-sized mining companies. Antamina reduced its production by 33 thousand FMT after reaching 533 thousand FMT in 2021 (the highest level in the mine's history). Los Quenuales' production was also reduced due to the depletion of the Iscaycruz unit, while production at Nexa Resources and El Brocal decreased due to lower ore grades (in the case of the latter, due to the transition from a polymetallic mine to a copper mine). On the other hand, Compañía Minera Raura resumed operations after suspending them in 2020.

Graph 16



Iron ore production increased by 6.5 percent due to higher mining at Shougang, mainly as a result of improved grades and the expansion of Marcona.

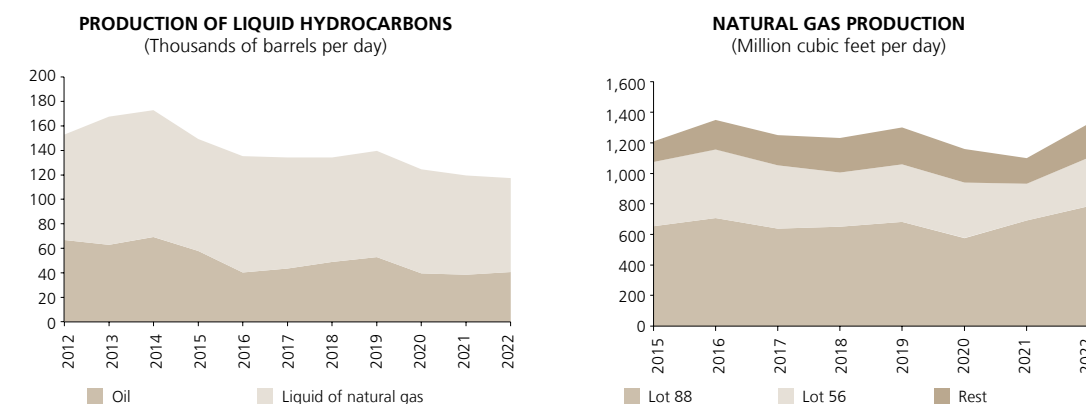
Molybdenum production decreased by 7.5 percent due to lower production at Southern and Las Bambas, which were impacted by social conflicts and lower ore grades.

In 2022, lower production of **silver** (-7.6 percent) and **lead** (-3.4 percent) was recorded, while **tin** production increased by 4.6 percent due to higher extraction by Minsur.

The hydrocarbon subsector grew by 4.0 percent in 2022 due to higher oil and natural gas production. The higher oil production was due to higher production from Lot 95, whereas natural gas production was favored by lower rainfall, which resulted in higher demand for thermoelectric generation (domestic market).

On the other hand, production of natural gas liquids decreased by 5.5 percent due to lower production from Lot 56 as a result of lower yields.

Graph 17



3.4 MANUFACTURING SECTOR

Manufacturing activity recorded a growth rate of 1.0 percent in 2022. This performance corresponds to increased activity in the non-primary subsector.

Primary manufacturing decreased by 2.9 percent. This result reflected lower oil refining production at Repsol, Pluspetrol and PetroPerú, as well as lower fishmeal production due to delays in the start of the anchoveta fishing season. This decline was mitigated by higher copper refining at Southern and Cerro Verde and higher zinc refining at Nexa. Over the past 10 years, the most dynamic primary manufacturing industries have been meat products (3.3 percent), canned and frozen fish products (2.0 percent), and milled rice (1.3 percent).

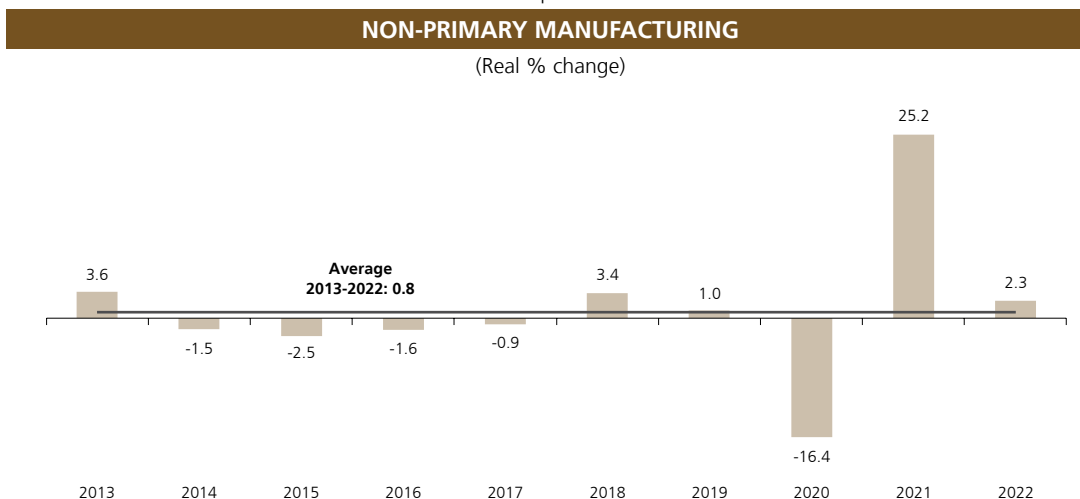
Table 12

MANUFACTURING BASED ON RAW MATERIALS					
(Real % change)					
	2020	2021	2022	Average 2013-2022	Average 2018-2022
Manufacturing based on raw materials	-2.0	3.2	-2.9	0.2	0.3
Milled rice	6.9	1.3	-0.5	1.3	2.6
Sugar	-0.1	-8.2	1.2	0.0	0.6
Meat products	-2.7	2.0	2.3	3.3	2.2
Fishmeal and fish oil	31.7	16.5	-23.8	0.4	5.0
Canned and frozen fish products	2.8	5.1	-6.4	2.0	10.0
Refining of non-ferrous metal	-0.5	-4.5	10.6	0.5	0.9
Refining of crude	-32.9	19.4	-19.8	-4.5	-11.2

Source: PRODUCE.

For its part, **non-primary manufacturing** increased 2.3 percent in 2022 due to higher production of inputs, investment-oriented goods, and goods oriented to the foreign market.

Graph 18



Source: INEI.

Activity in the manufacturing branches of **mass consumption** products declined by 2.8 percent, mainly due to lower production of furniture and other paper and cardboard products and lower domestic demand for miscellaneous manufactured goods. Lower production of dairy products due to lower demand combined with higher prices, aggravated by the closure of the main plants during the social conflicts in the Arequipa region, also contributed to the decline.

Activity in the **capital-intensive industries** grew by 5.7 percent due to the increase in the production of metal products as a result of higher domestic demand for metal products for construction

and higher foreign demand for metal tanks. Increases in the production of iron and steel products, paints and varnishes, and machinery and equipment contributed to this growth rate as well.

The **input** industries grew by 1.9 percent, mainly due to higher production of explosives and natural essences, processed wood, glass, wheat flour, and animal feeds, among others. **Foreign market-**oriented industries increased by 14.2 percent due to higher output of canned foods, knitwear, apparel, and man-made fibers in response to greater foreign demand.

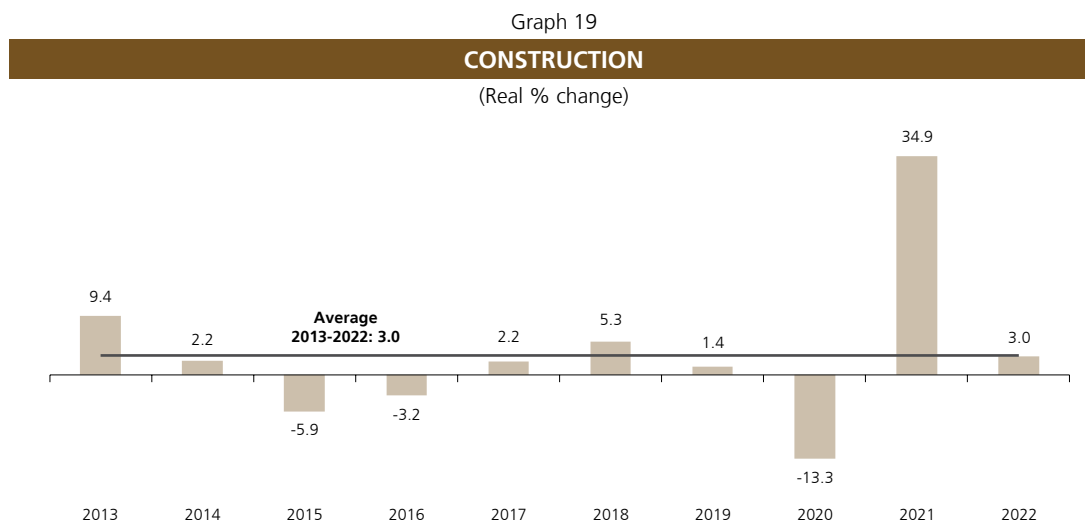
Table 13

NON-PRIMARY MANUFACTURING BY TYPE OF GOODS					
(Real % change)					
	2020	2021	2022	Average 2013-2022	Average 2018-2022
Mass consumption goods	-8.4	17.1	-2.8	1.1	1.7
Dairy products	-1.6	2.7	-10.3	-0.5	-0.7
Bakery	8.9	16.7	2.6	3.8	8.9
Oils and fats	-7.9	5.4	-4.5	1.8	-0.4
Miscellaneous food products	-5.7	7.2	4.4	1.1	1.9
Beer and malt	-25.7	27.9	13.5	0.7	1.6
Soft drinks	-19.9	18.6	7.2	2.3	0.9
Garment	-36.0	23.9	18.2	-3.4	-0.3
Shoes	-29.2	3.7	18.4	-5.5	-13.6
Furnitures	17.6	38.4	-22.7	4.9	7.7
Other paper and cardboard items	-7.7	-5.7	-3.7	0.4	-6.0
Toiletries and cleaning products	3.8	-3.9	2.2	0.7	0.9
Pharmaceutical products	10.1	8.5	-1.6	-1.3	4.2
Miscellaneous items	-44.6	72.4	-16.7	0.7	-0.7
Inputs	-15.6	21.4	1.9	-0.2	1.8
Wheat flour	4.4	10.2	3.3	2.8	6.5
Othe textil items	-12.5	15.7	-9.5	-2.6	-4.1
Processed woods	-28.8	33.4	10.6	-4.7	5.0
Paper and cardboard	-24.9	4.2	32.1	-2.3	2.3
Paper and cardboard containers	1.5	13.1	0.4	5.5	7.1
Publishing and printing	-39.6	32.1	-8.3	-8.4	-9.2
Basic chemicals	1.8	0.0	-2.7	1.6	0.0
Explosives, chemical and natural scents	-24.2	51.7	33.7	7.9	10.1
Rubber	-40.1	55.4	8.0	-4.1	-2.0
Plastic	-3.6	18.9	-5.7	4.0	3.5
Glass	-22.8	27.6	29.2	1.2	3.7
Capital goods	-25.4	44.3	5.7	2.5	4.3
Iron & steel industry	-21.5	45.4	5.7	4.0	4.5
Metallic products	-22.6	49.1	13.9	5.7	9.5
Machinery and equipment	-28.1	59.4	8.1	-2.5	0.4
Electric machinery	-32.2	40.9	-1.1	-1.7	1.3
Transport equipment	-40.3	38.2	1.7	-2.6	-3.9
Paints, varnishes, and lacquers	-17.1	21.6	6.7	1.2	1.3
Cement	-13.3	35.7	3.0	3.1	5.0
Construction materials	-37.9	60.0	0.6	-0.4	1.0
Industrial services	-37.6	55.0	1.8	4.4	3.6
Goods for external markets	-24.9	26.2	14.2	-1.1	1.0
Canned food	4.5	0.2	6.4	2.1	4.7
Synthetic fibers	-14.2	46.3	6.3	-0.4	1.6
Yarns, fabrics and finished garments	-29.4	50.0	-2.0	-3.0	-2.2
Knitted garments	-33.5	31.0	50.9	2.1	4.4
Clothing items	-36.0	23.9	18.2	-3.4	-0.3
Total non-primary manufacturing	-16.4	25.2	2.3	0.8	2.3

Source: PRODUCE.

3.5 CONSTRUCTION SECTOR

In 2022, the construction sector grew by 3.0 percent, mainly due to higher progress in public works. During the year, domestic cement consumption, the main indicator of the sector's activity, decreased by 0.7 percent compared to 2021.



Source: INEI.

Regarding the residential real estate market, the Peruvian Chamber of Construction (CAPECO) reported that 41,083 housing units (40,769 apartments) were offered in 2022, a figure 14.1 percent higher than in the previous year (36,013 units). In terms of square meters, the total housing supply amounted to 2,850 thousand square meters, 9.5 percent higher than recorded in 2021 (2,602 thousand square meters). The segment Modern Lima accounted for 39 percent of the housing supply in 2022, followed by Lima Top with 34 percent.

Table 14

REAL ESTATE MARKET INDICATORS					
Indicador	2019	2020	2021	2022	Difference 2022 - 2021
Apartments: Unit sold - CAPECO 1/	18,000	13,388	19,642	17,892	-1,750
% change	21.2	-25.6	46.7	-8.9	
Apartments: Unit sold- TINSA	15,328	12,152	14,156	16,622	2,466
% change	27.0	-20.7	16.5	17.4	
New mortgage loans 2/	35,778	26,768	43,882	34,665	-9,217
% change	-1.3	-25.2	63.9	-21.0	
New loans Mivivienda 3/	10,476	7,541	11,218	11,279	61
% change	31.9	-28.0	48.8	0.5	
Number of debtors of current mortgage borrowers 2/	237,434	237,839	243,151	248,235	5,084
% change	4.3	0.2	2.2	2.1	
Mortgages disbursed in S/ (mills.) 2/	11,531	8,949	15,362	11,876	-3,487
% change	2.7	-22.4	71.7	-22.7	
Mortgages disbursed in US\$ (mills.) 2/	234	272	177	197	20
% change	-35.0	16.5	-35.2	11.4	
Average interest rate by mortgage loans in S/ 2/	7.0	6.4	6.9	9.9	3.0
Average interest rate by mortgage loans in US\$ 2/	5.6	5.4	5.0	8.3	3.3
Ratio PER 4/	17.6	19.7	20.8	18.9	-1.9

1/ "El Mercado de Edificaciones Urbanas In Lima Metropolitana", CAPECO. to one-year period is considered (from July to June in the next year).

2/ Commercial banks.

3/ "Nuevo Credit Mi Vivienda".

4/ Data as of Q4 of the year. Price to earning ratio.

Source: Mivivienda, SBS, BCRP and TINSA PERU SAC.

In terms of demand, CAPECO reports sales of 17.9 thousand housing units for 2022, 8.9 percent lower than sales in 2021 (19.6 thousand units), with modern Lima accounting for 39 percent of housing sales.

4. SAVINGS AND INVESTMENT

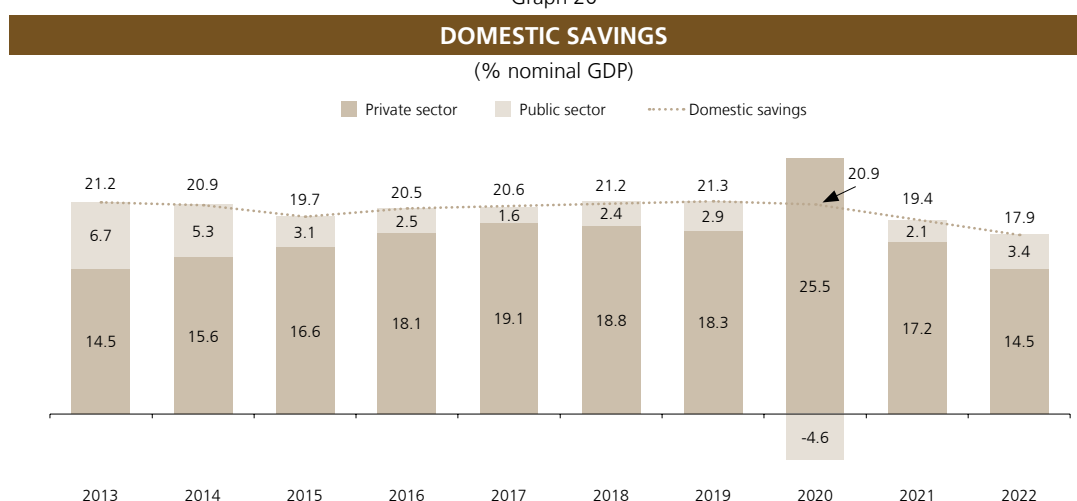
In terms of GDP, gross domestic investment rose by 0.4 percentage points in 2022, from 21.6 percent of output in 2021 to 22.0 percent of GDP, due to increased investment by subnational governments. On the other hand, domestic savings declined by 1.5 percentage points of GDP, due to sustained growth in private consumption and access to previously intangible sources of savings, which reduced private sector savings. As a result, more external financing was required, leading to an external gap of 4.0 percent of GDP in 2022 (2.2 percent in 2021).

Table 15

SAVINGS AND INVESTMENT					
(% of nominal GDP)					
	2019	2020	2021	2022	Average 2013-2022
I. Investment (=II+III)	21.8	19.9	21.6	22.0	22.5
Gross fixed investment	22.5	21.0	25.1	25.3	23.8
Public investment	4.6	4.3	4.7	5.1	4.9
Fixed private investment	18.0	16.8	20.4	20.3	18.9
Change on inventories	-0.7	-1.2	-3.5	-3.4	-1.3
II. Domestic savings	21.3	20.9	19.4	17.9	20.2
Public sector	2.9	-4.6	2.1	3.4	2.4
Private sector	18.3	25.5	17.2	14.5	17.8
III. External savings	0.6	-1.1	2.2	4.0	2.3

Source: BCRP.

Graph 20



Source: INEI and BCRP.

5. LABOR

The Electronic Payroll is the administrative dataset of the Superintendencia Nacional de Aduanas y de Administración Tributaria (SUNAT, the National Superintendency of Customs and Tax Administration) that collects monthly information on jobs and salaries of the universe of formal companies and public institutions.

According to this dataset, the number of formal jobs¹ at the national level increased by 6.5 percent in 2022 compared to 2021 (6.9 percent compared to 2019), with this increase being explained by an increase in both private sector jobs (7.9 percent) and public sector jobs (3.0 percent). Geographically, the increase was higher on average in regions outside of Lima (7.3 percent versus 5.7 percent in Lima).

Table 16

FORMAL JOBS - ELECTRONIC PAYROLL								
(Thousand jobs)								
	Levels						Annual change 2021	
	2017	2018	2019	2020	2021	2022	In thousand	%
Total 1/	4,935	5,122	5,264	5,081	5,284	5,625	341	6.5
Private	3,510	3,662	3,802	3,566	3,717	4,010	294	7.9
Public	1,425	1,460	1,462	1,515	1,567	1,614	47	3.0
Lima	3,070	3,137	3,222	3,044	3,127	3,306	179	5.7
Rest of Peru	1,859	1,972	2,025	2,022	2,134	2,290	156	7.3

1/ The sum of employment by sectors is not total due to the number of workers that can not be classified by sector.
Source: SUNAT - Electronic Payroll.

In the private sector, the 7.9 percent increase mainly reflects the increase in the number of jobs in services (188 thousand jobs) and trade (45 thousand jobs). The level of formal jobs in all sectors is higher than in 2019.

Table 17

FORMAL JOBS IN THE PRIVATE SECTOR - ELECTRONIC PAYROLL								
(Thousand jobs)								
	Levels						Annual change 2021	
	2017	2018	2019	2020	2021	2022	In thousand	%
Total	3,510	3,662	3,802	3,566	3,717	4,010	294	7.9
Agriculture and livestock 1/	355	424	450	483	493	527	34	6.8
Fishing	25	22	21	20	21	21	0	-0.8
Mining	99	102	99	97	107	113	6	5.7
Manufacturing	464	472	472	441	457	477	20	4.4
Electricity	14	13	14	14	15	16	1	7.6
Construction	201	212	222	188	236	232	-4	-1.5
Commerce	602	616	629	602	624	669	45	7.2
Services	1,749	1,798	1,888	1,712	1,749	1,937	188	10.7

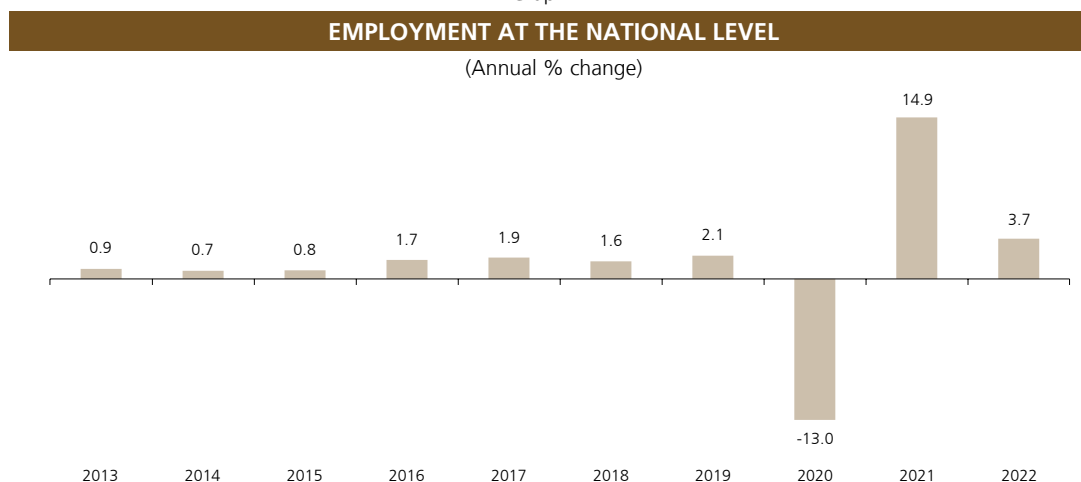
1/ Includes the agro-export sector: Processing and preservation of fruits and vegetables.
Source: SUNAT - Electronic Payroll.

5.1 NATIONAL EMPLOYMENT

According to INEI's National Household Survey (ENAHU), employment at the national level increased by 3.7 percent in 2022, continuing the recovery after the decline recorded due to the pandemic. The annual average number of employed is above the level of 2019.

¹ The number of jobs differ from the number of workers because one person can hold more than one job.

Graph 21



Source: ENAHO - INEI.

By production sector, employment increased more in the services, manufacturing, and trade sectors; however, employment in the services sector is still lower than in 2019. In contrast, employment in the extractive sectors decreased compared to 2021. In terms of company size, employment in companies with 1 to 10 employees contributed the most to the year's growth, adding 273 thousand jobs.

Table 18

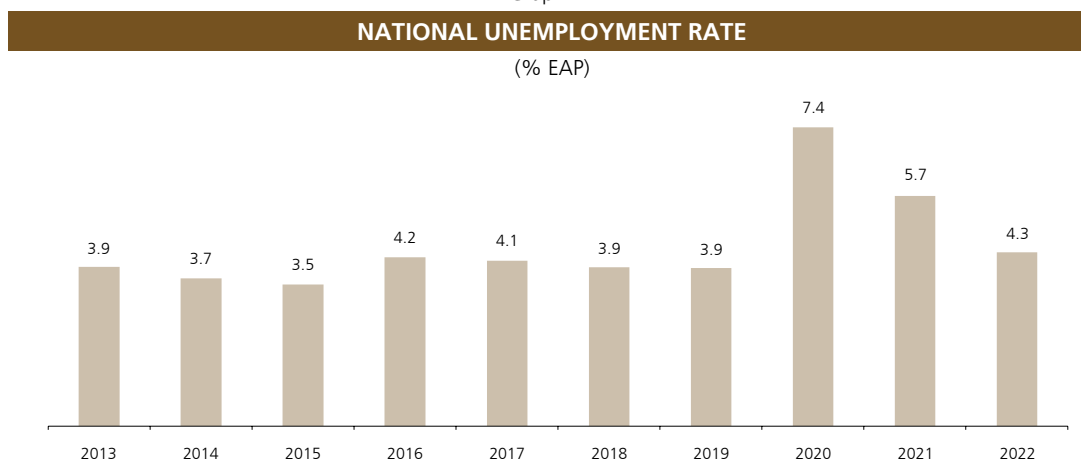
NATIONAL EMPLOYMENT
(Thousand people)

	Level					Annual chg. 2022/2021	
	2018	2019	2020	2021	2022	In thousand	%
I. ECONOMICALLY ACTIVE POPULATION (EAP): 1+2	17,463	17,831	16,095	18,149	18,551	402	2.2
1. EMPLOYED	16,777	17,133	14,902	17,120	17,756	636	3.7
<i>By economic activity</i>							
Agriculture and livestock/Fishing/ Mining	4,341	4,343	4,917	4,989	4,599	-391	-7.8
Manufacturing	1,505	1,519	1,264	1,499	1,629	131	8.7
Construction	1,003	1,055	938	1,245	1,303	59	4.7
Commerce	3,162	3,272	2,639	3,338	3,450	112	3.4
Services	6,766	6,944	5,145	6,050	6,775	726	12.0
<i>By size of business</i>							
From 1 to 10 workers	12,149	12,409	11,203	13,035	13,308	273	2.1
From 11 to 50 workers	1,247	1,229	912	1,122	1,248	126	11.2
More than 50 workers	3,372	3,481	2,770	2,953	3,181	229	7.7
2. UNEMPLOYED	686	697	1,193	1,029	795	-234	-22.8
II. INACTIVE POPULATION	6,680	6,681	8,787	7,101	7,069	-32	-0.5
III. WORKING-AGE POPULATION (PWA)	24,142	24,512	24,882	25,251	25,620	369	1.5
RATES (%)							
Activity rate (EAP / PWA)	72.3	72.7	64.7	71.9	72.4		
Employment/population ratio (Employed EAP/PWA)	69.5	69.9	59.9	67.8	69.3		
Unemployment rate (Unemployed EAP/EAP)	3.9	3.9	7.4	5.7	4.3		

Source: INEI - ENAHO.

The national unemployment rate was 4.3 percent in 2022, down 1.4 percentage points from the 2021 rate, but still higher than the 2019 rate (3.9 percent). Over the past year, female unemployment was higher than male unemployment (5.3 percent versus 3.5 percent). By age group, unemployment was highest in the 14-24 age group (10.4 percent). Finally, by education level, the group most affected by unemployment was the population with a tertiary education, with a rate of 6.1 percent.

Graph 22



Source: INEI - ENAHO.

The average monthly income in urban areas was S/ 1,589, which represents an increase of 10.0 percent compared to 2021 (0.7 percent in real terms). However, the level is slightly lower than before the pandemic (S/1,595), because incomes in non-primary sectors such as construction, trade and services are still below 2019 levels. By gender, women's income is still 2.3 percent below pre-pandemic levels, while men's income is 0.4 percent above pre-pandemic levels. By age group, only the youngest workers (ages 14 to 24) have earnings above 2019 levels. Finally, earnings are above pre-pandemic levels for all education categories except for higher education (university).

Table 19

MONTHLY AVERAGE INCOME BY JOB: URBAN AREA
(In soles)

	Years				Change 2022/2021	
	2019	2020	2021	2022	Nominal	Real
Total	1,595	1,415	1,445	1,589	10.0	0.7
<i>By gender</i>						
Men	1,819	1,559	1,641	1,825	11.2	1.9
Women	1,308	1,208	1,185	1,278	7.8	-1.2
<i>By economic activity</i>						
Agriculture and livestock	919	773	937	1,077	15.0	5.3
Fishing	1,550	1,319	1,418	1,617	14.0	4.5
Mining	3,595	3,326	3,251	3,608	11.0	1.7
Manufacturing	1,584	1,374	1,454	1,607	10.5	1.3
Construction	1,745	1,483	1,550	1,729	11.6	2.2
Commerce	1,289	1,099	1,142	1,266	10.9	1.6
Services	1,771	1,690	1,660	1,763	6.2	-2.7
<i>By age</i>						
From 14 to 24 years	960	926	966	1,058	9.6	0.4
From 25 to 44 years	1,730	1,470	1,545	1,706	10.5	1.2
More than 44 workers	1,655	1,507	1,489	1,627	9.3	0.1
<i>By educational level</i>						
Primary	914	778	880	977	11.0	1.7
Secondary	1,298	1,113	1,177	1,300	10.5	1.2
Higher No Univ.	1,653	1,529	1,533	1,733	13.1	3.6
Higher Univ.	2,600	2,443	2,469	2,597	5.2	-3.6

Source: INEI.

Box 1 SHORT-TERM POPULATION DYNAMICS

The dynamics of birth and death rates since the onset of the COVID-19 pandemic is analyzed in this box.

The mortality rate (deaths per 1,000 persons) increased significantly in 2020 and 2021 as a result of the COVID-19 pandemic. The global mortality rate increased from 7.8 to 8.5 and 9.0 deaths per 1,000 persons between 2019 and 2020 and 2021, respectively. In absolute terms, the number of deaths worldwide increased from 57.6 to 62.8 million people (+5.2 million) and 68.9 million people (+11.3 million) between 2019 and 2020 and 2021, respectively.

Peru was among the 30 countries with the largest increase in their mortality rate in 2020 (7.3 deaths per 1,000 inhabitants), out of a total of 159 countries (countries with more than 1 million inhabitants). In addition, when comparing the mortality rates between 2019 (6.0 deaths per thousand inhabitants) and 2021 (8.0 deaths per thousand inhabitants), Peru recorded an increase of almost 2 points in this indicator, remaining among the 46 countries with the greatest increase in mortality².

MORTALITY RATE, 2019-2021			
(deaths per thousand population)			
	2019	2020	2021
Peru	6.0	7.3	8.0
World	7.8	8.5	9.0

Note: Only countries with more than one million inhabitants (159 countries) are considered for the calculation of the global figure.
Source: United Nations - World Population Prospects 2022.

According to the United Nations³, the available evidence on the impact of the COVID-19 pandemic on fertility is mixed. The multilateral agency notes that there are several channels through which the pandemic could potentially affect the number of children per woman. For example, women may postpone childbearing due to uncertainty about illness and/or economic consequences, changes in marriage patterns and/or family formation, and disruptions in access to reproductive health services, including family planning.

At the global level (in a sample of 159 countries), the birth rate, defined as births per thousand of people in a population, declined by 0.36 and 0.68 in 2020 and 2021, respectively, compared with 2019. However, this decline is heterogeneous across countries. For example, 17 out of 159 countries recorded an increase in their birth rate in 2020, with the Netherlands and Denmark standing out, while in 2021 the number of countries recording an increase decreased to 13 countries (compared with 2019).

In the case of Peru, the birth rate in 2020 was 17.8 births per 1,000 inhabitants, which represented a decrease of 0.21 compared to 2019 (18.0 births per 1,000 inhabitants). This decrease is more pronounced when comparing the birth rates between 2021 (17.6 births per 1,000 inhabitants) and 2019.

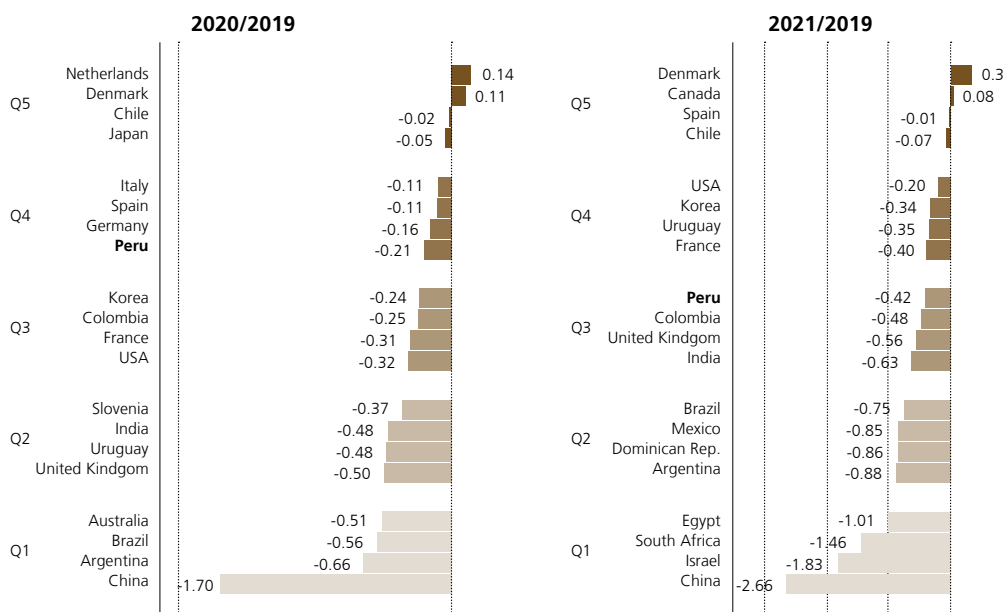
² As a result, Peru moved from the 122nd to the 86th position between 2019 and 2021.

³ World Population Prospects 2022 - Summary of Results - United Nations.

BIRTH RATE, 2019-2021			
(births per thousand population)			
	2019	2020	2021
Peru	18.0	17.8	17.6
World	20.3	19.9	19.6

Note: Only countries with more than one million inhabitants (159 countries) are considered for the calculation of the global figure.
 Source: United Nations - World Population Prospects 2022.

CHANGES IN THE BIRTH RATE ACCORDING TO SELECTED COUNTRIES 2019-2021



Note: Quintiles formed from the change between birth rates (births per thousand population) 2019/2020 and 2019/2021.
 Source: United Nations - World Population Prospects 2022.

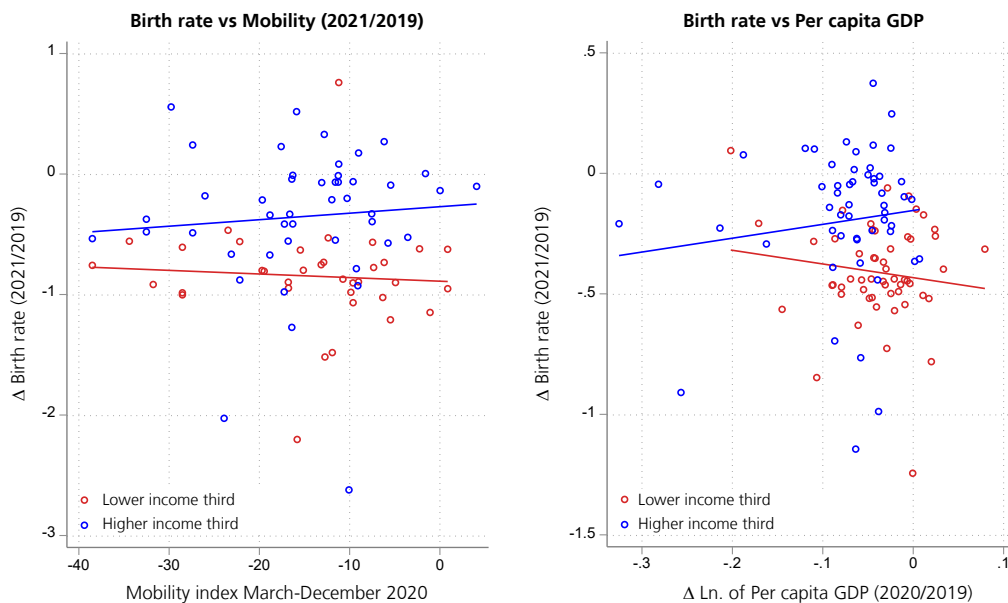
Changes in the birth rate (2021/2019) do not seem to be clearly related to reduced mobility in the first year of the pandemic (March-December 2020). However, taking into account the level of income per capita in 2019, a slight positive relationship is observed between changes in the birth rate and the mobility index (Google)⁴ for countries in the third of the countries with the highest income. In other words, the countries with greater restrictions on mobility (negative mobility indexes) experienced greater reductions in their birth rates.

On the contrary, more pronounced relationships are observed between the variation in birth rates and economic growth (2019/2020) according to the level of GDP per capita of each country. It is worth noting that countries in the bottom third of the income scale that experience a smaller decline in their GDP per capita between 2019 and 2020 have achieved greater reductions in their fertility rate. According to Chirinos and Gutierrez (2021)⁵, uncertainty in economic matters, lower social interaction, higher stress, among others, stand out among the reasons for the decline in

4 Google COVID-19 Community Mobility Reports provide information on how national human mobility has changed in more than 13 countries. Google obtains this information from the data of users who have "Location History" enabled in their Google account.
 5 R. Chirinos and A. Gutiérrez (2021). El COVID-19 y los nacimientos en el Perú: ¿cómo afecta la pandemia a la tasa de fertilidad? - Revista Moneda.

the birth rate since the appearance of COVID-19. The opposite is the case for countries in the third highest income bracket.

**RELATIONSHIP BETWEEN CHANGE IN BIRTH RATE, MOBILITY INDEX (GOOGLE)
AND PER CAPITA GDP, 2019-2021**



Memo: Quintiles (Q1, Q2, and Q3) formed from Per capita GDP (2019).
Source: United Nations - World Population Prospects 2022 and World Bank.

In the short term, Peru was one of the countries with the highest mortality rates between 2020 and 2022 as a result of the COVID-19 pandemic. Similarly, since the outbreak of the virus, Peruvian birth rates have declined, which could be explained, among other factors, by the economic uncertainty experienced in 2020-2022 and changes in family formation patterns.

On the other hand, and considering the long term, Peru is in a demographic transition characterized by the presence of a demographic bonus followed by an aging population, which would pose important challenges in terms of access and quality of health care, pensions, changes in consumption patterns, among other factors.