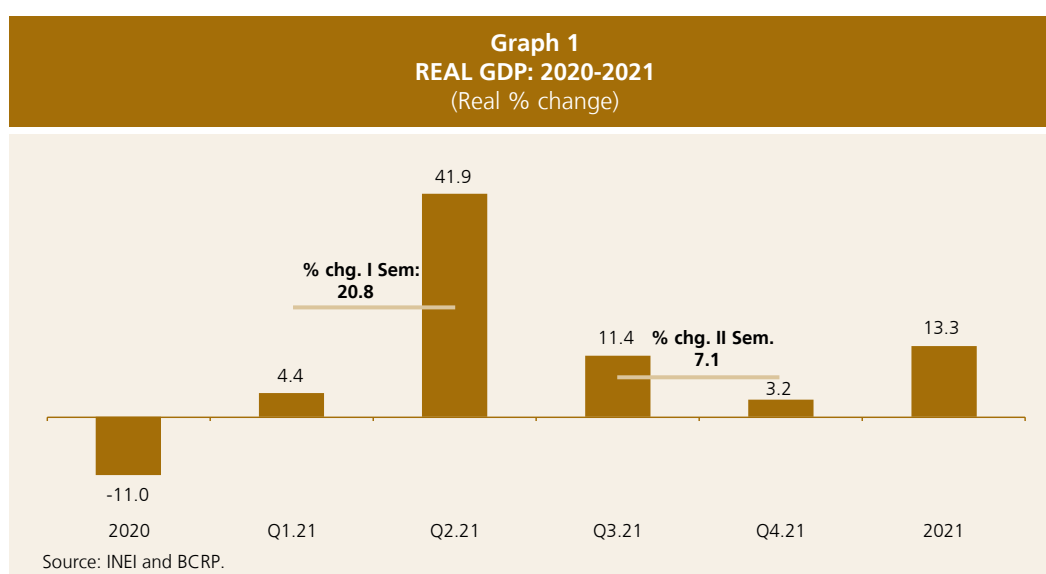


PRODUCTION AND EMPLOYMENT

The recovery of the Peruvian economy in 2021 was driven by the easing of sanitary measures and the progress of the vaccination process, factors that contributed to reverse a significant part of the negative impact caused by the lockdown of non-essential activities in 2020. Fiscal stimuli and expansionary monetary policy were also important aspects in reversing the contraction of productive activity.

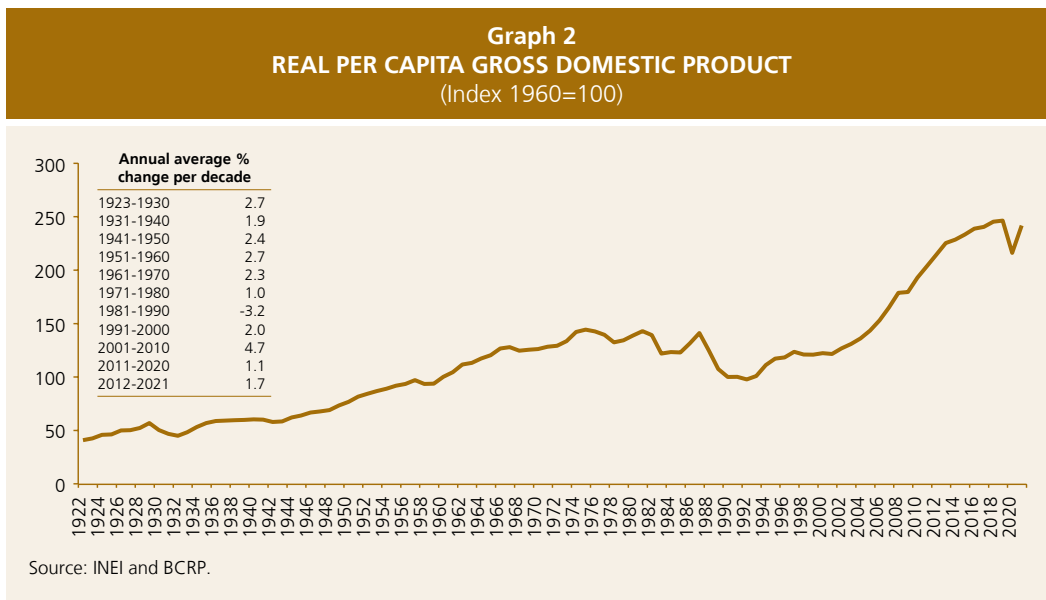
The economy lost momentum during the second half of the year, which is explained by a lower statistical effect as well as by the deterioration of expectations about the future of the economy due to political noise. Despite this, GDP in monthly terms showed sustained growth during the second half of the year compared to 2019 levels. Thus, the recovery of activity in 2021 to pre-crisis levels (2019) is explained to a greater extent by the components of domestic demand, with private investment standing out in the first place, in line with the strong increase in activity in the construction sector. On the other hand, public consumption, private consumption, and public investment contributed to a lesser extent. The improvement of these components of aggregate expenditure was offset by the lag of exports of services, especially services related to inbound tourism.



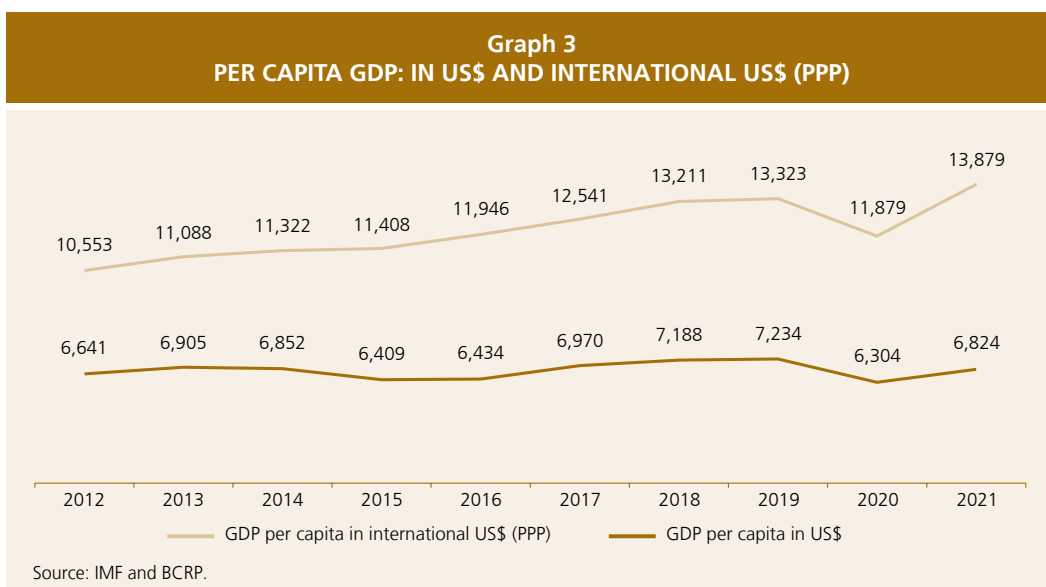
In 2021, Peru's economic activity increased 13.3 percent (0.9 percent compared to 2019), registering the highest growth rate of activity within the group of the six main Latin American economies (Brazil,

Chile, Colombia, Mexico, Argentina, and Peru). With this, Peru's GDP was above its pre-pandemic level (2019), in a magnitude exceeded in that group only by Chile and Colombia.

GDP per capita grew 11.9 percent year-on-year in 2021 (-1.9 percent compared to 2019), reaching slightly higher levels than in 2017. As a result, the average GDP per capita growth rate over the last 10 years grew from 1.1 percent to 1.7 percent, although it is still well below the rate registered between 2001-2010 (4.7 percent).



GDP per capita in dollars grew from US\$ 6,304 in 2020 to US\$ 6,824 in 2021, which represents a year-on-year increase of 8.2 percent (down 5.7 percent from 2019), offset in part by the depreciation of the PEN. On the other hand, GDP measured in terms of purchasing power parity (PPP) –an indicator that considers the same basket of goods, which is used for international comparisons– grew 16.8 percent year-on-year (4.2 percent with respect to 2019) to US\$ 13,879 PPP.

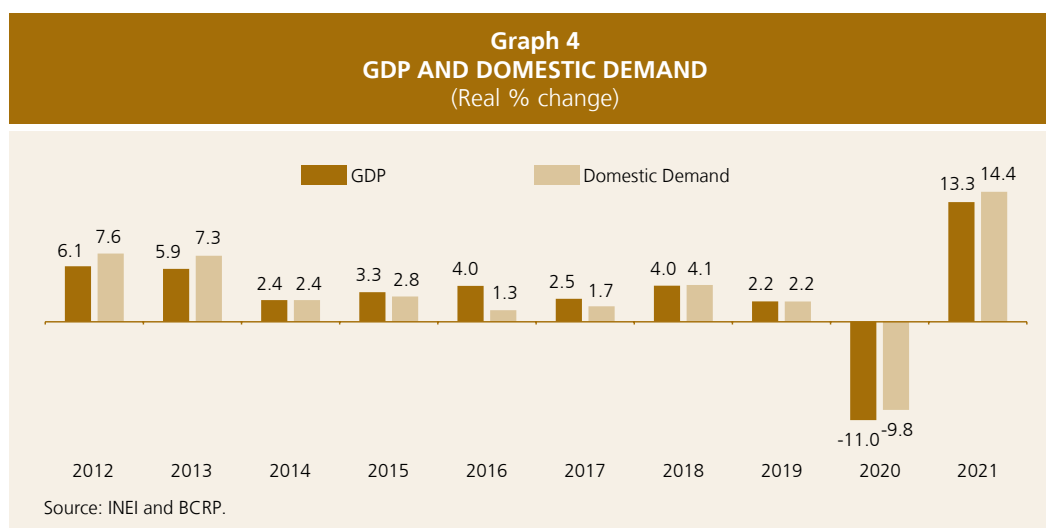


1. Domestic demand

Contrasting with the 9.8 percent drop registered in 2020, domestic demand grew 14.4 percent in 2021 (3.2 percent compared to 2019). This result is explained by the recovery of private consumption and the dynamism of private investment, indicators driven by the easing of health restrictions and by people's greater access to goods and services, as well as by self-construction works, the increased execution of reconstruction projects and other mining and non-mining investment projects.

Table 1 GROSS DOMESTIC PRODUCT BY TYPE OF EXPENDITURE (Real % change)					
	2019	2020	2021	Average 2012-2021	Average 2017-2021
Domestic Demand	2.2	-9.8	14.4	3.2	2.2
a. Private consumption	3.2	-9.8	11.7	3.5	2.1
b. Public consumption	2.2	7.8	10.6	5.1	4.2
c. Gross fixed investment	3.3	-16.2	35.0	3.1	4.0
- Private	4.5	-16.5	37.4	3.2	4.5
- Public	-1.5	-15.1	24.9	2.7	1.6
Exports	1.1	-19.6	13.7	1.7	0.3
Minus:					
Imports	1.0	-15.8	18.6	2.1	1.5
GDP	2.2	-11.0	13.3	3.1	1.9
Memo:					
Total public expenditure	1.1	1.3	14.0	4.4	3.5

Source: INEI and BCRP.



1.1 Private consumption

Private consumption grew 11.7 percent in 2021 (0.8 percent over 2019), contrasting with the 9.8 percent drop observed in 2020. This growth rate resulted from the recovery of private formal employment and the formal wage bill, as well as from greater access to goods and services. Low interest rates during most of the year also played a role, boosting consumer credit (which grew 3.8 in nominal terms). However, the growth of consumption slowed down during the second part of the year due to the deterioration in consumer confidence.

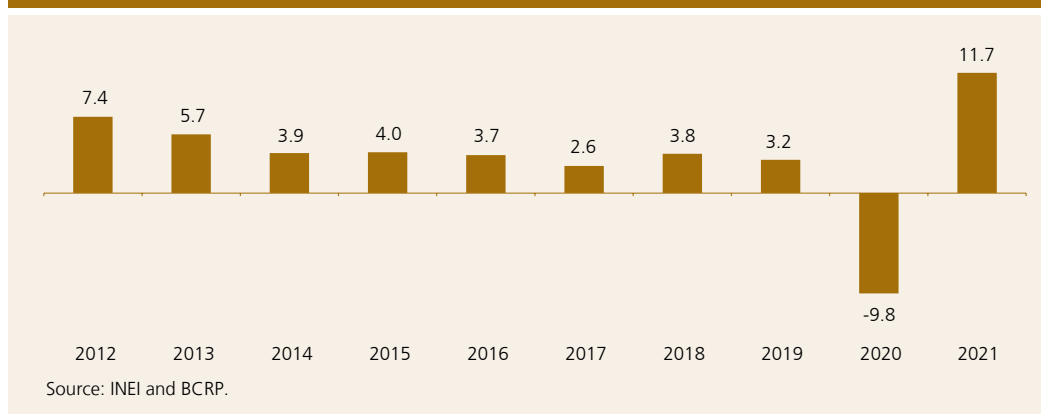
In the labor market, private formal employment grew 4.3 percent year-on-year on average in 2021 (-2.3 percent with respect to 2019), with 151 thousand new jobs being created in comparison to 2020. Despite this, however, 86 thousand jobs remain to be recovered. Likewise, after having fallen 4.3 percent in 2020, the formal wage bill grew 10.6 percent year-on-year in 2021, that is, 5.9 percent above the level observed in 2019.

Table 2
INDICATORS OF PRIVATE CONSUMPTION
(% change)

	2019	2020	2021
National employment (private sector)	3.7	-6.3	4.3
Payroll (private and public sector)	5.8	-4.3	10.6
Consumer confidence index - Apoyo 1/	49	41	39
Expectation about household situation 12 months ahead 1/	63	56	54
Real consumer loans	10.7	-8.9	-2.5
Sale of poultry (tons, diary average)	12.8	-15.1	0.1
Retail sales	2.9	-15.2	12.2
Volume of imports of consumer goods	-1.0	-9.3	14.2
Non-durable, excluding foods	2.5	-2.0	7.8
Durable	-4.0	-21.3	29.5

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

Graph 5
PRIVATE CONSUMPTION
(Real % change)



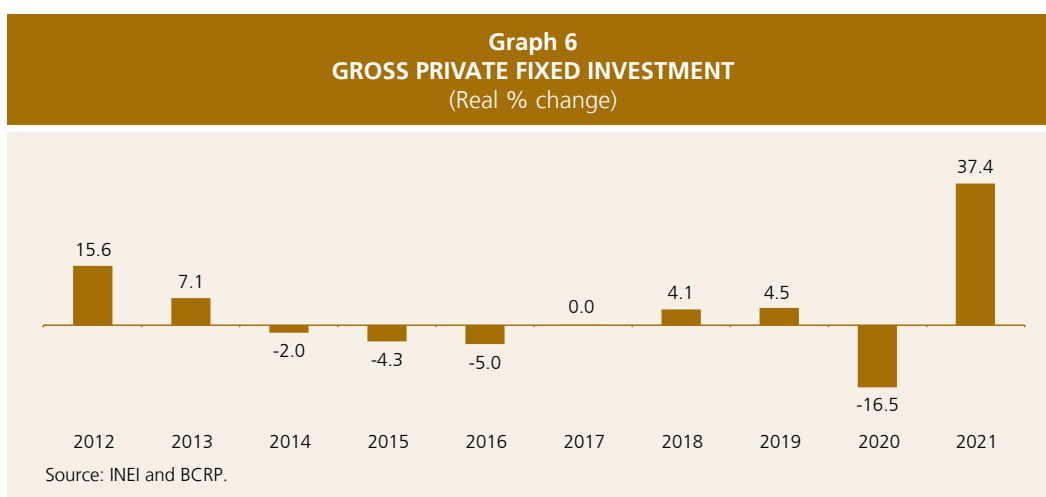
1.2 Private investment

Private investment grew 37.4 percent in 2021 (14.7 percent compared to 2019) and reversed the 16.5 percent drop registered in 2020. This strong pace of growth was driven by the restart of investments that had been postponed in 2020 due to the strict sanitary measures imposed at the time, as well as by the dynamism of self-construction and home improvement works, sales of new homes, and the increased execution of infrastructure projects. However, this was offset by lower business confidence because of heightened political uncertainty, especially in the fourth quarter. On average, domestic consumption of cement grew 36.8 percent year-on-year and the volume of imports of capital goods, excluding building materials and mobile phones, grew 28.6 percent in 2021. For its part, the index of business expectations about the economy over a 3-month period grew slightly, but remained in pessimistic territory, while the 12-month indicator registered a slight decrease.

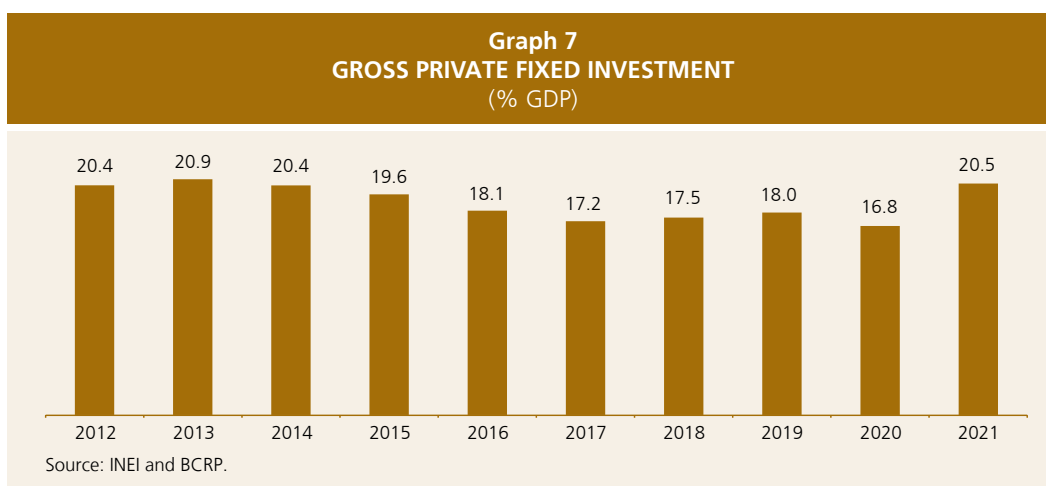
Table 3
MINING AND NO MINING INVESTMENT
(Real % change)

	2019	2020	2021	Average 2012-2021
Total private investment	4.5	-16.5	37.4	3.2
Mining sector	18.3	-25.3	23.1	-2.2
No mining sectors	2.6	-15.1	39.7	4.2

Source: MINEM and BCRP.



Private investment growth in 2021 brought the investment-to-GDP ratio to 20.5 percent, a slightly higher level than that observed in 2014.



Mining investment grew from US\$ 4,325 million in 2020 to US\$ 5,238 million in 2021, representing a growth rate of 21.1 percent in dollar terms. By companies, Anglo American's investment stands out with US\$ 1,312 million for the construction and equipment of its Quellaveco project in Moquegua. Antamina ranks second, with an investment of US\$ 481 million in 2021 oriented mainly to its Huincush mining operation. Finally, Southern invested a total of US\$ 339 million, mostly used for its Toquepala Concentrator and Cujone Accumulation beneficiation plants.

In the energy sector, Luz del Sur executed projects for US\$ 123 million, mainly oriented to the improvement and expansion of the electricity system. Enel invested US\$ 186 million, of which US\$ 153 million went mainly to investments in the expansion of distribution networks and the construction of new transmission substations, network maintenance and security of supply, information systems, and the expansion of the public lighting system. In addition, US\$ 34 million were allocated to projects for the automation and digitalization of its operations, as well as to various activities associated with the operation and maintenance of its facilities.

In the manufacturing sector, Aceros Arequipa invested US\$ 116 million in its new steel plant, financed through a financial lease. Unión de Cervecerías Peruanas Backus y Johnston invested US\$ 19 million in projects aimed at increasing production and marketing capacity and capturing new market opportunities. Similarly, Unión Andina de Cementos invested US\$ 36 million in various projects, such as dedusting the cooler, the migration of the control system, the installation of a valve rack, modernization of the Cenit-Pillard system and major maintenance of kiln 2, the modernization of the Carpapata 1 and 2 hydroelectric power plants, and the roofing of the clinker field at the Condorcocha plant, among other projects. Finally, Alicorp invested US\$ 5 million mainly in the purchase of land in Trujillo for the construction of a distribution center, civil works and the acquisition of equipment and furniture for the administrative offices in Miraflores and Callao, the expansion of the bottling line at the oil plant and the capacity for its sauces plant, the acquisition of machinery for the mill plant, and the expansion of its refinery plant.

1.3 Public expenditure

Public spending in 2021 registered an expansion rate of 14.0 percent, a higher rate than the 1.3 percent observed in 2020, which is explained by higher growth rates of public consumption (10.6 percent) and public investment (24.9 percent).

Public consumption accelerated its growth rate from 7.8 percent in 2020 to 10.6 percent in 2021, driven mainly by the National Government's higher spending on the acquisition of medical supplies, professional and technical services to address the health crisis, and on road maintenance and upkeep. In the last quarter of the year, however, public consumption declined because of lower spending by subnational governments.

On the other hand, **public investment** in 2021 increased 24.9 percent and 6.1 percent compared to 2019, overcoming the 15.1 percent drop of the previous year. The evolution of public investment was mainly associated with the implementation of reconstruction projects under the Government-to-Government Agreement with the United Kingdom, and other projects linked to the Reconstruction and Arranca Peru programs. However, this growth pace was offset by lower investment execution at all levels of government in the last quarter of the year.

2. Exports and imports

Reversing part of the 19.6 percent drop recorded in 2020, exports of goods and services grew 13.7 percent in 2021 as a result of increased exports of traditional products (10.5 percent) and non-traditional products (20.2 percent). This was associated with the recovery of global demand following the lifting of sanitary restrictions in several countries and the progress of the vaccination process at the global and local levels. This performance was offset by lower exports of services, in particular services related to inbound tourism, as well as by the negative impact of conflicts and political uncertainty on mining production. Thus, in terms of volume, total exports are still 8.6 below the levels registered in 2019.

The annual increase in traditional exports is largely explained by higher shipments of products associated with the mining and fishing sectors. Gold and copper exports recovered due to the

higher production of these metals by Antamina, Cerro Verde, Yanacocha, Aurífera Retamas, Minera Poderosa and Ares, while fishmeal exports grew due to higher anchovy catches for industrial consumption. The increase in exports of oil contributed to this recovery as well, although to a lesser extent. In contrast, coffee exports fell, while zinc exports remained similar to those of the previous year. Non-traditional exports, on the other hand, showed a high level of dynamism with increased shipments of agricultural, textile, fishing, chemical, iron and steel and non-metallic mining products.

Imports increased 18.6 percent, contrasting with the 15.8 percent drop observed in 2020. This increase is explained by higher purchases of consumer durables and capital goods, as well as by increased acquisition of vaccines and inputs (industrial inputs, and crude oil and oil derivatives). In addition, there was also a higher demand for imported services, with transportation and travel services standing out. On the other hand, the increase in the volume of imports was partially offset by lower purchases of foodstuffs such as rice, sugar, wheat, and maize.

3. Economic sectors

GDP growth showed an almost generalized recovery by productive sectors, except for the hydrocarbons sector, where output continued to fall due to maintenance plans, failures in the natural gas plant, and problems with the communities. In the non-primary sector, it grew 15.6 percent as a result of increased activity in all subsectors, especially manufacturing and construction. The sectors with the highest average growth rates during the last decade of this century have been construction (4.2 percent), electricity and water (4.0 percent), and services (3.8 percent).

Table 4					
GROSS DOMESTIC PRODUCT BY ECONOMIC SECTOR					
<i>(Real % change)</i>					
	2019	2020	2021	Average 2012-2021	Average 2017-2021
Primary GDP	-0.9	-7.6	5.4	2.6	0.6
Agriculture and livestock	3.5	1.0	3.8	3.7	3.8
Fishing	-17.2	4.2	2.8	-1.1	6.5
Metallic mining	-0.8	-13.8	9.7	3.5	-0.8
Hydrocarbons	4.6	-11.0	-4.6	-2.0	-2.8
Manufacturing	-8.5	-2.0	1.9	1.6	1.0
Non-primary GDP	3.2	-11.9	15.6	3.2	2.3
Manufacturing	1.1	-16.4	24.6	0.5	1.5
Electricity and water	3.9	-6.1	8.5	4.0	2.3
Construction	1.4	-13.3	34.5	4.2	4.9
Commerce	3.0	-16.0	17.8	2.8	1.1
Services	3.8	-10.3	11.8	3.8	2.3
GDP	2.2	-11.0	13.3	3.1	1.9

Source: INEI and BCRP.

3.1 Agricultural sector

This sector continued to show the steady growth behavior observed over the last seventeen years and registered a growth rate of 3.8 percent in 2021. During the year, it maintained its export dynamism (blueberries, grapes, and avocados) and a greater production of farming commodities thanks to higher harvests of palm oil and hard yellow maize. It also reached record levels in products oriented to the domestic market (potatoes, bananas, tangerines, oranges, and lemons) and increased the supply of poultry meat to meet domestic demand.

The sector's sustained growth over the last ten years (3.7 percent) is mainly explained by the strength of export-oriented agriculture (6.5 percent) and by the contribution of livestock production (3.6 percent) and production for the domestic market (2.9 percent).

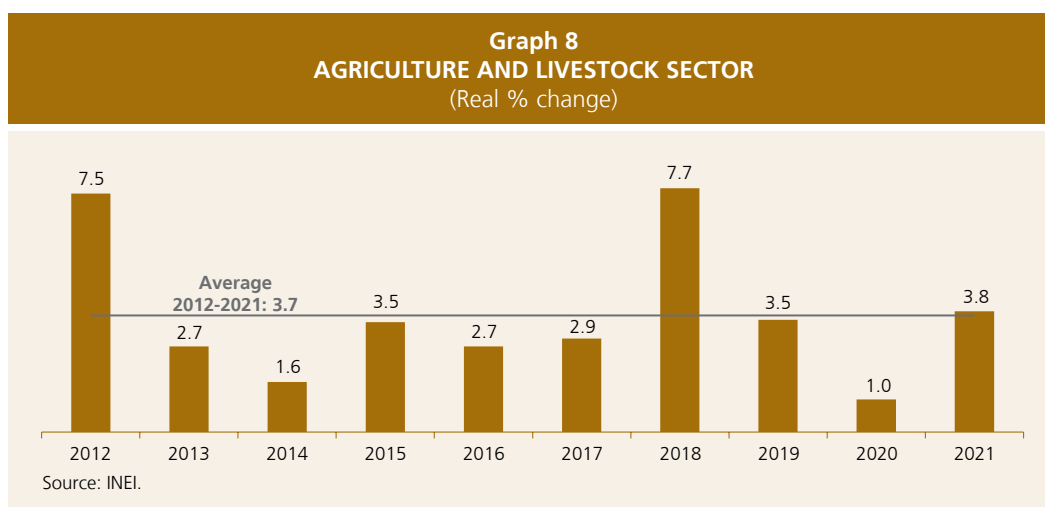


Table 5
AGRICULTURE AND LIVESTOCK PRODUCTION
(Real % change)

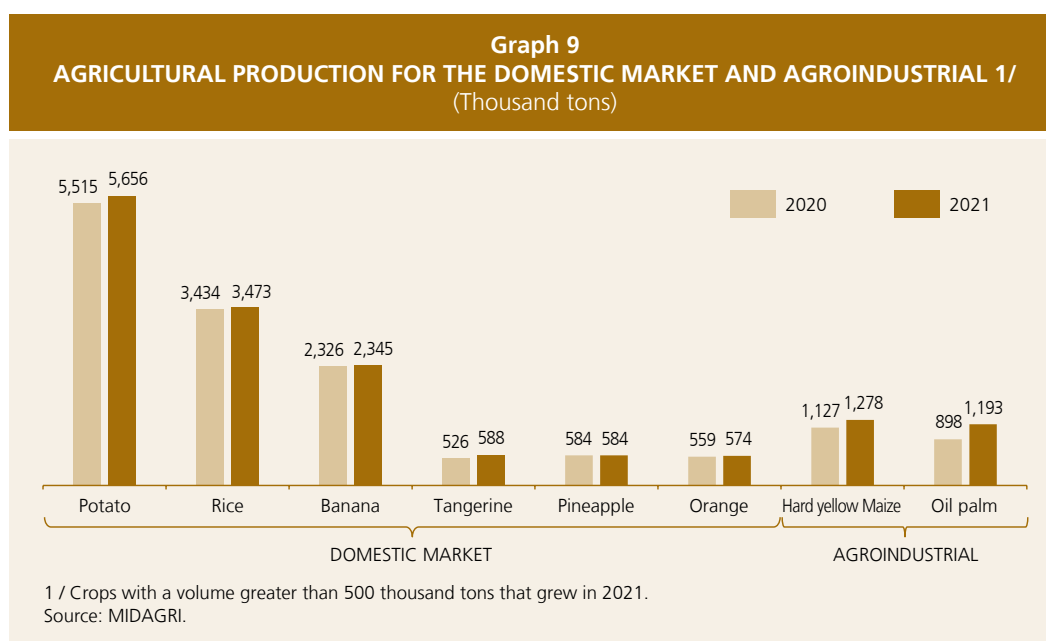
	2019	2020	2021	Average 2012-2021	Average 2017-2021
A. Agricultural production	3.2	2.8	5.0	3.7	4.6
For the domestic market	-0.3	2.3	3.0	2.9	2.6
Potato	5.0	2.3	2.5	3.3	4.6
Rice	-10.3	7.6	1.1	2.8	1.9
Tangerine	4.5	4.6	11.8	9.5	7.8
Orange	1.4	9.6	2.7	3.2	3.2
Tomato	-20.2	1.1	18.8	2.7	0.8
Banana	2.6	3.3	0.8	1.8	2.5
Garlic	-20.7	9.3	21.2	2.2	7.0
Lemon	12.0	5.1	6.1	4.2	3.6
Peach	0.4	-9.8	12.4	0.1	-2.1
Pineapple	3.1	3.3	0.1	3.8	4.8
Sweet passion fruit	-5.2	6.1	16.1	9.0	5.0
Passion fruit	18.3	24.7	14.2	3.0	10.4
Strawberry	21.3	-23.0	74.2	4.5	8.0
For industry	3.9	-11.8	8.8	0.0	1.1
Yellow hard maize	0.4	-11.3	13.4	0.1	0.7
Oil palm	1.2	-3.6	32.8	12.7	10.1
Sugar cane	5.5	-4.0	-6.1	-0.1	0.0
For export	9.5	7.3	7.4	6.5	9.2
Coffee	-1.7	-2.8	3.3	1.0	5.4
Asparagus	-1.1	3.5	-3.1	-0.9	-1.1
Grapes	-0.9	14.6	12.4	10.7	3.6
Avocado	13.3	17.5	15.6	13.8	11.3
Mango	12.9	20.1	-16.2	2.0	2.6
Cocoa	5.3	12.1	-0.7	10.8	7.9
Quinoa	3.0	12.1	6.4	10.0	6.1
Blueberry	74.4	21.3	27.1	n.a	51.7
B. Livestock production	4.0	-1.8	1.9	3.6	2.5
Poultry	4.5	-2.2	1.6	4.9	3.0
Eggs	8.0	1.9	1.3	4.7	4.7
Pork	5.0	-1.9	4.7	4.2	3.5
C. Total	3.5	1.0	3.8	3.7	3.8

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

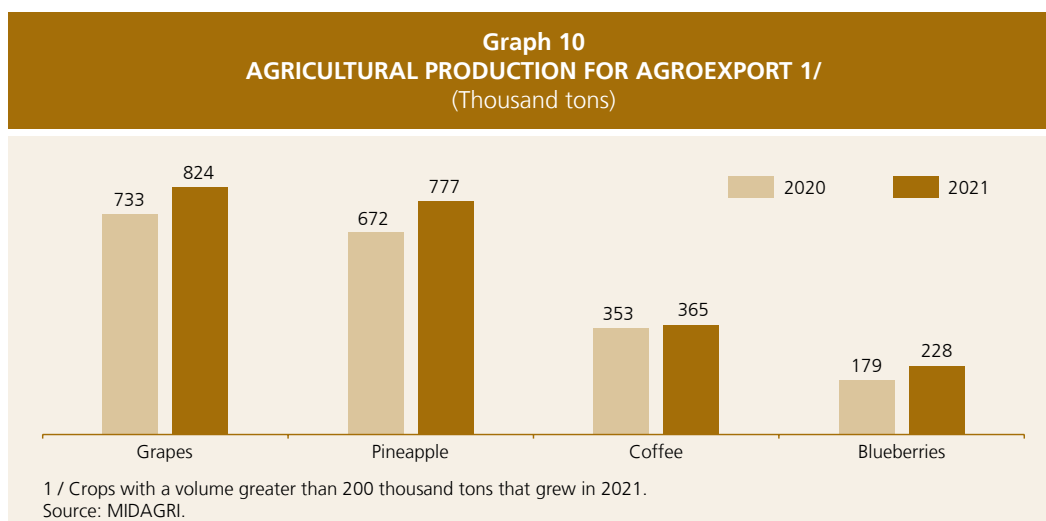
Growth in 2021 (3.8 percent) resulted mainly from greater harvested areas of blueberries, grapes, avocados, coffee, and palm, as well as from the recovery of the livestock subsector due to greater demand from restaurants after these establishments were allowed to reopen and increase their dining room capacities following advances in vaccination against COVID-19, and from the increase in a varied agricultural supply for the domestic market.

Farming production for the **domestic market** grew 3.0 percent due to higher potato and rice harvests, which are highly weighted in the structure of the sector, and thanks to the diversity of ecological zones which made it possible to overcome the rainfall deficit experienced since 2020 that had affected the planting of both crops in some valleys. Thus, the higher potato supply from Puno, Huánuco and Cajamarca compensated for the lower production in Ayacucho and Huancavelica, while the higher quantity of rice from Piura compensated for the lower volume of rice registered in La Libertad. Also noteworthy for their contribution to annual growth were higher tomato harvests from Ica and Arequipa, greater harvests of mandarins from Lima and garlic from Arequipa, and other crops promoted for exports, either as fresh products (mandarins) or processed products (e.g. tomato paste, passion fruit pulp and frozen strawberries).

Agro-industrial production grew 8.8 percent due to the increased supply of hard yellow maize (13.4 percent) in Ica and San Martin for the poultry feed industry and the greater supply of oil palm (32.8 percent) in Ucayali and San Martin destined for vegetable oil production. On the other hand, sugarcane decreased (6.1 percent) due to the impact of the 2020 water deficit on agricultural yields (down 6.4 percent), mainly in La Libertad, where the Casa Grande mill faced delays in importing spare parts, and the Cartavio mill registered more days of technical stoppages.



The main crops that drove the growth of **agroexports** (7.4 percent) were fresh fruits: blueberries (27.1 percent), grapes (12.4 percent) and avocados (15.6 percent) in high-yielding young plantations, and coffee (3.3 percent). The Lambayeque and Ica producing areas had the largest exportable supply of blueberries, the valleys of Ica and Piura stood out for their supply of grapes, while the coastal regions of Lambayeque, Lima and La Libertad and the highlands of Huancavelica and Ayacucho stood out for their supply of avocados. The largest coffee production came from the departments of Pasco and Cajamarca.



Potato planting in some areas of the central highlands and rice planting and sugarcane yields in the northern coast were affected by anomalies in the rainfall cycle for the 2021 crop year, causing delays in the agricultural calendar and shifting the harvest peaks from the second to the third quarter. These anomalies were reflected in two key factors in the agricultural season linked to the 2021 production: the low availability of water resources in reservoirs in the northern areas until December 2020 –the fifth month after the start of the agricultural season– and in the rainfall indicator in the highland region, which showed a deficit of rainfall in the August-December 2020 period.

Table 6
EVOLUTION OF THE NORTH RESERVOIRS 1/
(Millions of cubic meters)

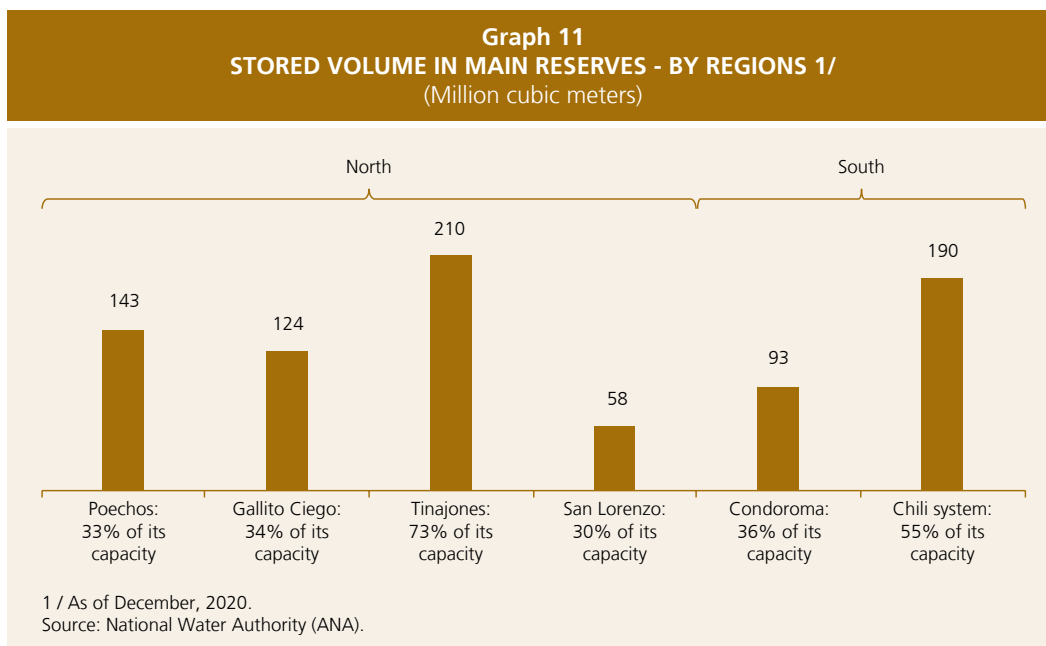
	2016	2017	2018	2019	2020	2021	Capacity of use
Piura							
Poechos	103.8	272.1	171.2	238.7	143.2	233.4	438.3
San Lorenzo	19.1	37.4	95.0	98.3	57.8	95.9	195.6
Lambayeque							
Tinajones	53.4	262.5	187.7	306.8	210.0	324.7	285.9
La Libertad							
Gallito Ciego	203.6	148.6	141.2	219.9	124.3	293.1	366.6

1/ As of December 31.
Source: National Water Authority (ANA).

Table 7
PRECIPITATION INDICATOR - SIERRA REGION - AGRICULTURAL SEASON AUG.20 - DEC.20 1/
(In % change respect to its historical average)

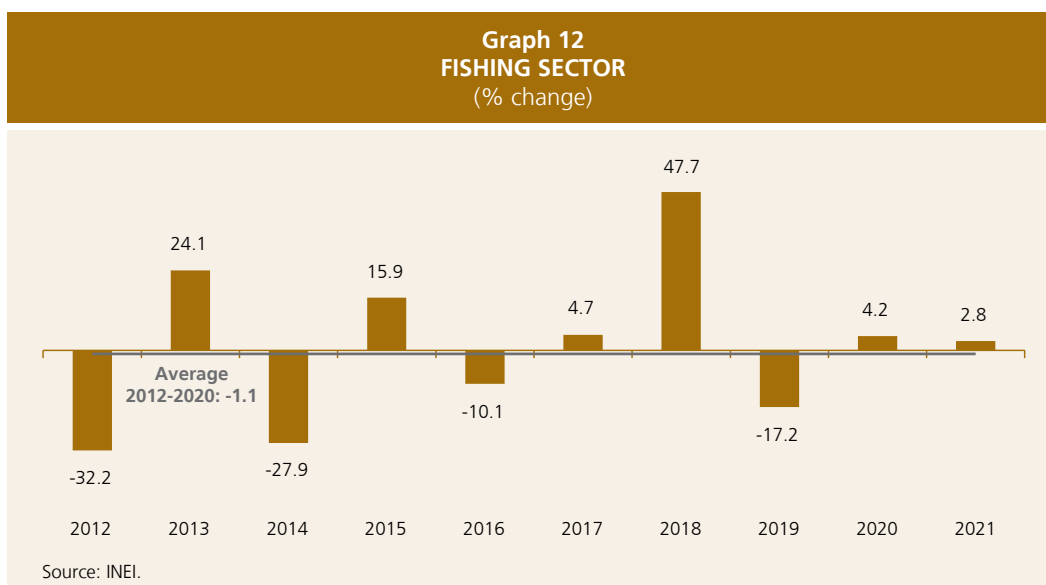
	Aug.	Sep.	Oct.	Nov.	Dec.2/	Accumulated Aug.-Dec.2020
North	-47.1	-23.0	-64.0	-0.3	92.3	5.8
Central	-61.1	-8.2	-44.9	-54.5	35.6	-14.3
South	-61.6	10.0	10.1	-57.8	31.0	-1.8

1/ Sample of 262 SENAMHI Meteorological Stations, with a historical average of 30 years (1981-2010).
2/ As of December 31.
Source: SENAMHI.



3.2 Fishing sector

Output in the sector grew 2.8 percent in 2021, mainly due to the better performance seen in the first anchoveta fishing season in the north-central zone 2021 (April - July 2021) than that observed in 2020. The annual catch rose from 4.3 million tons in 2020 to 5.2 million tons in 2021 (up 19.7 percent), this increase being offset by lower catch of species for direct human consumption as lower annual fishing quotas were established for species such as bonito (lower biomass and annual quota) and jack mackerel.



Anchovy catch was higher in the first fishing season in the north-central zone in 2021 than in the same period of the previous year because the catch quota allowed was increased. On the other hand, a lower quota than in 2020 was established in the second fishing season of 2021 (2.0 vs. 2.8 million tons), so the catch of 2.0 million tons of anchoveta represented a 17.8 percent reduction compared to 2020.

Graph 13
EXTRACTION OF ANCHOVY FOR INDUSTRIAL CONSUMPTION
(Million tons)

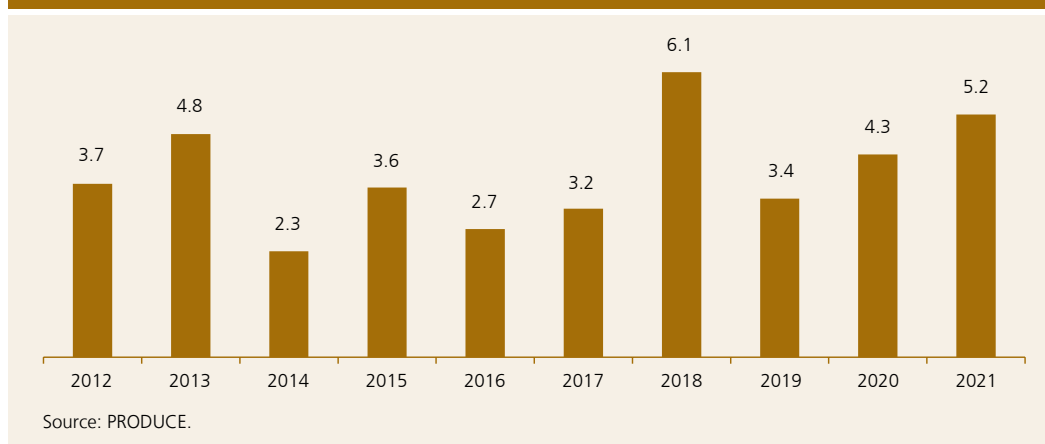


Table 8
MAXIMUM LIMIT OF THE TOTAL ALLOWABLE CATCH AND ANCHOVY EXTRACTION
(North-Central zone)

Year	Season 1/	Biomass (Million tons)	Maximum limit of the total allowable catch (Million tons)	Extraction (%)	Catch (Million tons)
2014	First	6.1	2.5	68	1.7
	Second	4.4	0.0	0	0.0
2015	First	9.5	2.6	97	2.5
	Second	5.6	1.1	97	1.1
2016	First	7.3	1.8	51	0.9
	Second	6.9	2.0	100	2.0
2017	First	7.8	2.8	85	2.4
	Second	6.1	1.5	46	0.7
2018	First	10.9	3.3	98	3.2
	Second	7.2	2.1	99	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	98	2.0

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.

Fishing for direct human consumption decreased 5.2 percent mainly because of lower catches of species that are marketed in fresh state, such as bonito and jack mackerel.

Table 9
FISH CATCH BY MAIN SPECIES
(% change)

Especies	2019	2020	2021	Average 2012-2021	Average 2017-2021
Anchovy 1/	-44.3	27.8	19.7	-3.0	13.6
Jack mackerel 2/	177.1	29.1	-13.2	-4.6	29.7
Prawns 3/	36.0	-19.3	0.0	4.0	3.4
Giant Squid 3/	51.6	-5.3	3.0	2.4	13.9
Mackerel 4/	-20.4	61.8	4.8	5.0	-10.4
Tuna 4/	-1.7	-84.4	-45.8	-13.7	-32.6
Scallops 3/	45.4	-10.4	-32.1	-9.9	26.2

1/ Industrial consumption.
2/ Fresh.
3/ Frozen.
4/ Canned
Source: PRODUCE.

3.3 Mining and hydrocarbons sector

Output in the mining and hydrocarbons sector grew 7.4 percent in 2021 –the highest growth rate in the last five years–, driven by higher activity in metal mining (9.7 percent) after the reduction of the operating restrictions imposed in 2020 to contain the spread of COVID-19. On the other hand, output in the hydrocarbons sector declined 4.6 percent due to maintenance operations and failures at the Melchorita Plant, and social problems with the communities.

In the decade from 2012 to 2021, the average growth of the mining and hydrocarbons sector (2.5 percent) was explained mainly by the increase in the production of copper (7.3 percent), molybdenum (6.0 percent) and iron (5.7 percent).

Table 10
MINING AND HYDROCARBONS SECTOR
(Real % change)

	2019	2020	2021	Average 2012-2021	Average 2017-2021
METALLIC MINING	-0.8	-13.8	9.7	3.5	-0.8
Gold	-8.4	-31.4	9.7	-5.3	-8.8
Copper	0.8	-12.7	6.5	7.3	-0.5
Zinc	-4.7	-5.0	14.8	2.0	2.8
Silver	-7.2	-29.4	21.5	-0.3	-5.4
Lead	6.6	-21.6	9.3	1.4	-3.4
Tin	6.7	4.0	30.7	-0.7	7.5
Iron	6.1	-12.1	36.6	5.7	9.7
Molybdenum	8.6	5.7	6.1	6.0	5.8
HYDROCARBONS	4.6	-11.0	-4.6	-2.0	-2.8
Oil	8.4	-24.9	-3.5	-5.8	-1.1
Liquid of natural gas	1.5	-1.8	-4.8	-0.2	-3.1
Natural gas	5.6	-10.4	-5.4	0.0	-4.1
TOTAL 1/	0.0	-13.4	7.4	2.5	-1.1

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

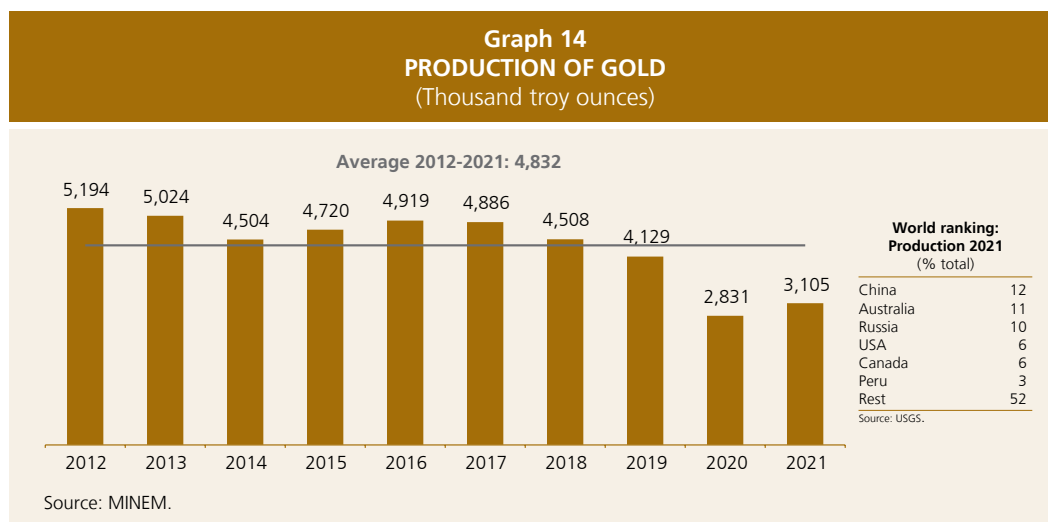
Table 11
VOLUME OF MINING PRODUCTION

	2018	2019	2020	2021
GOLD (Thousand troy ounces)	4,508	4,129	2,831	3,105
<i>Of which:</i>				
Minera Yanacocha	515	524	340	264
Compañía de Minas Buenaventura	482	323	220	252
Hochschild	211	216	142	179
Shahuindo-Pan American	90	165	144	137
La Arena-Pan American	153	136	104	109
Pucamarca-Minsur	103	102	80	69
Minera Barrick Misquichilca	332	186	84	67
Anama-Aruntani	35	19	2	3
COPPER (Thousand fine metric tons)	2,371	2,389	2,087	2,223
<i>Of which:</i>				
Compañía Minera Antamina	460	460	396	461
Sociedad Minera Cerro Verde	455	434	351	375
Las Bambas-MMG	385	383	313	290
Southern Peru Copper Corporation	304	388	398	373
Toromocho-Chinalco	208	190	203	236
Antapaccay	205	198	190	171
Constancia-Hudbay	122	114	73	78
ZINC (Thousand fine metric tons)	1,474	1,404	1,335	1,532
<i>Of which:</i>				
Compañía Minera Antamina	476	366	491	533
Nexa Resources	215	208	148	171
Volcan Compañía Minera	151	145	100	143
Empresa Minera Los Quenuales	26	40	79	72
Sociedad Minera El Brocal	48	50	60	41
SILVER (Million fine troy ounces)	134	124	88	106
<i>Of which:</i>				
Compañía Minera Antamina	17	16	13	17
Volcan Compañía Minera	14	12	9	12
Compañía Minera Ares	17	13	7	9
Compañía de Minas Buenaventura	21	15	9	8
LEAD (Thousand fine metric tons)	289	308	242	264
<i>Of which:</i>				
Volcan Compañía Minera	51	53	44	60
Nexa Resources	49	50	36	44
Sociedad Minera El Brocal	24	27	27	14
Empresa Minera Los Quenuales	8	9	14	13
Compañía Minera Antamina	7	6	9	5

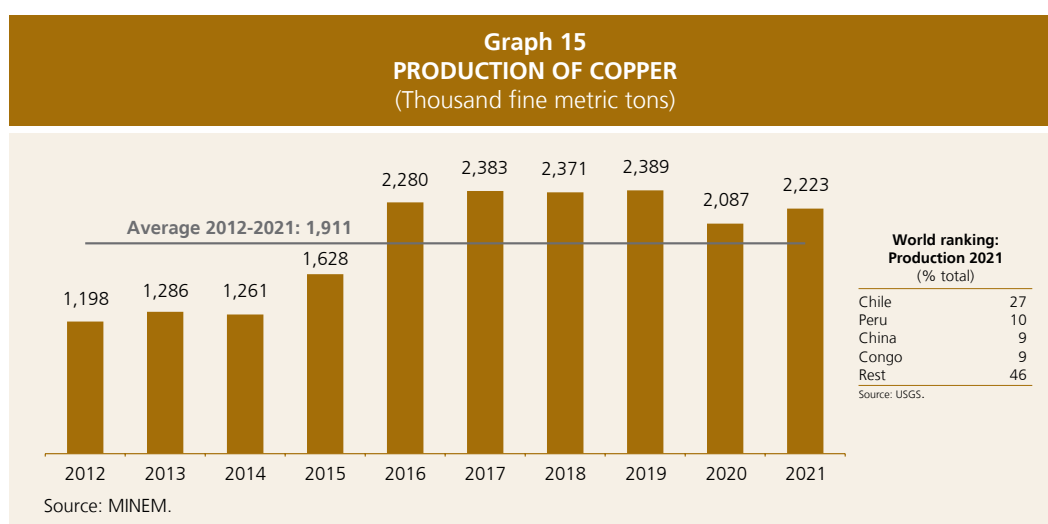
Source: MINEM.



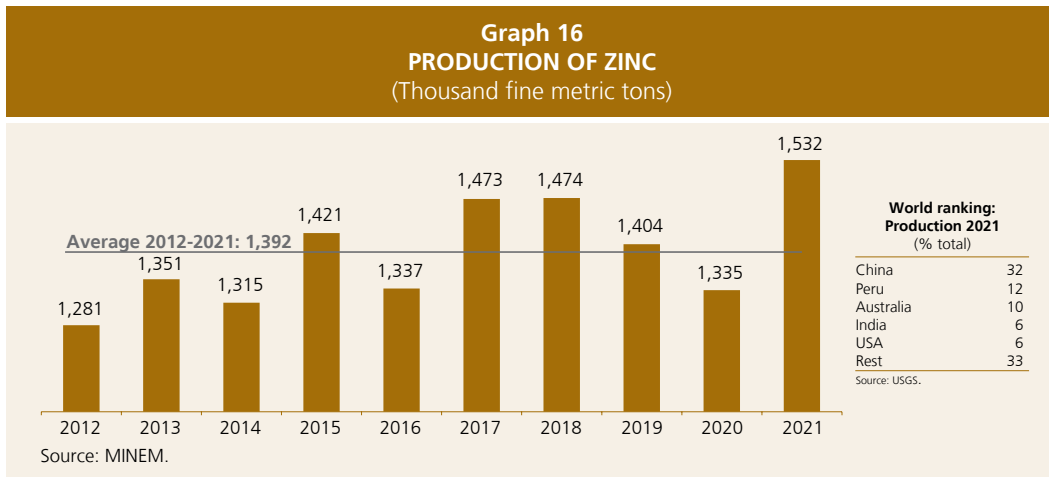
Gold production grew by 274 thousand ounces in comparison to 2020 –which represents a growth rate of 9.7 percent–, this result being associated with a recovery of production in most of the companies authorized to operate after the lifting of the confinement measures of the previous year. On the other hand, the lower extraction of Yanacocha and Barrick Misquichilca (now Boroo Misquichilca) was due to lower ore grades and also to depletion of the Lagunas Norte unit.



Increasing by 6.5 percent compared to the previous year, the production of **copper** amounted to 2,223 thousand FMT in 2021, which is explained by increased activity in most mines after the reduction of sanitary restrictions. However, Las Bambas registered lower production due to the constant blockades in the southern mining corridor, while Southern Peru Copper Corporation's results were similar to those seen in 2020 due to lower ore grades.



Zinc production grew 14.8 percent in 2021, mainly as a result of the higher extraction of this metal obtained by large and medium-sized mining companies. Antamina increased its production by 41 thousand FMT to 533 thousand FMT, the highest level recorded in the mine's history. On the other hand, output in the medium mining subsector was higher than in the previous year because activities in this subsector were shut down from mid-March to May in 2020.

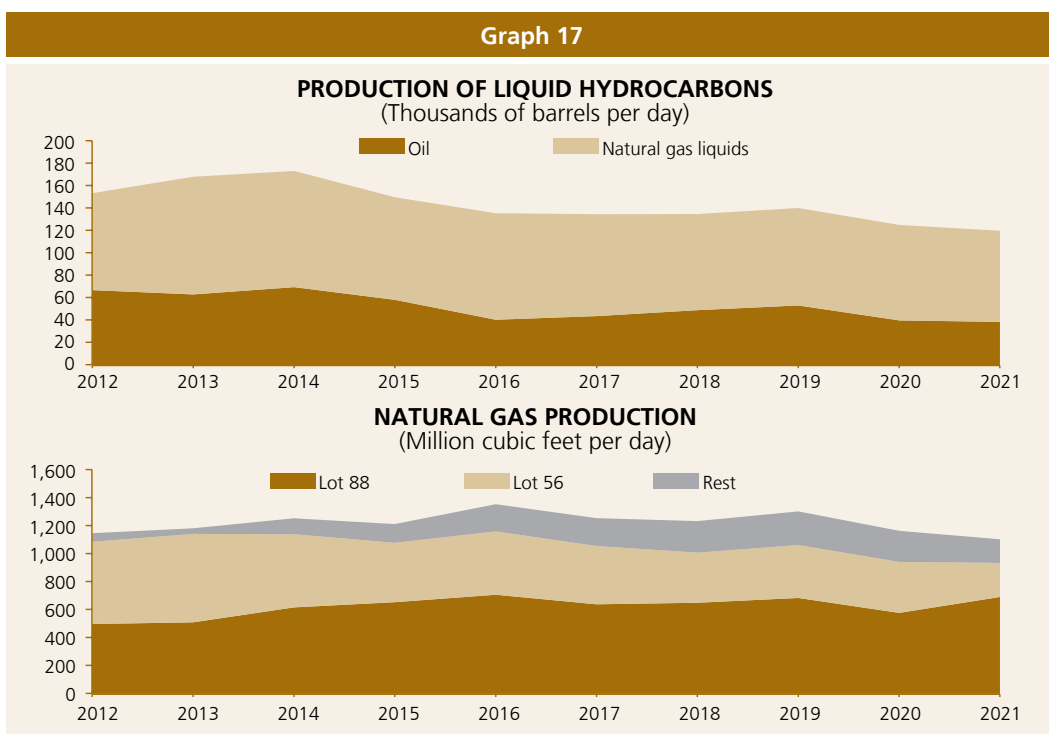


Iron ore production grew 36.6 percent due to higher supply from Shougang, driven mostly by better ore grades and by the expansion of Marcona.

Molybdenum production grew 6.1 percent due to higher extraction at most mines, with the exception of Antamina and Constancia.

In addition, a higher production of **silver** (21.5 percent) and **lead** (9.3 percent) was observed in 2021, while **tin** production increased by 30.7 percent due to the Minsur tailings project.

The hydrocarbons subsector showed a 4.6 percent drop in 2021 due to lower production in all its components. The lower amount of **oil** was due to the stoppage of operations in lots 192, 8 and 67. In the case of lot 192, the concession period given to Frontera Energy ended in September 2020. On the other hand, operations in lot 67 were resumed from March to November 2021, when they were stopped again due to problems with the local communities, while operations in lot 8 were suspended after Pluspetrol Norte announced its liquidation.



The lower production of **natural gas** (-5.4 percent) and **natural gas liquids** (-4.8 percent) was due to the failures registered at the Melchorita Plant, which affected the results of lots 56 and 57. On the other hand, the supply of lot 88 grew 19.8 percent, driven by higher domestic demand.

3.4 Manufacturing sector

Manufacturing activity in 2021 registered a growth rate of 17.8 percent, with greater activity in the primary and non-primary subsectors accounting for this rate. This was also accentuated by the statistical effect resulting from comparing output with the low production of the previous year caused by the COVID-19 pandemic.

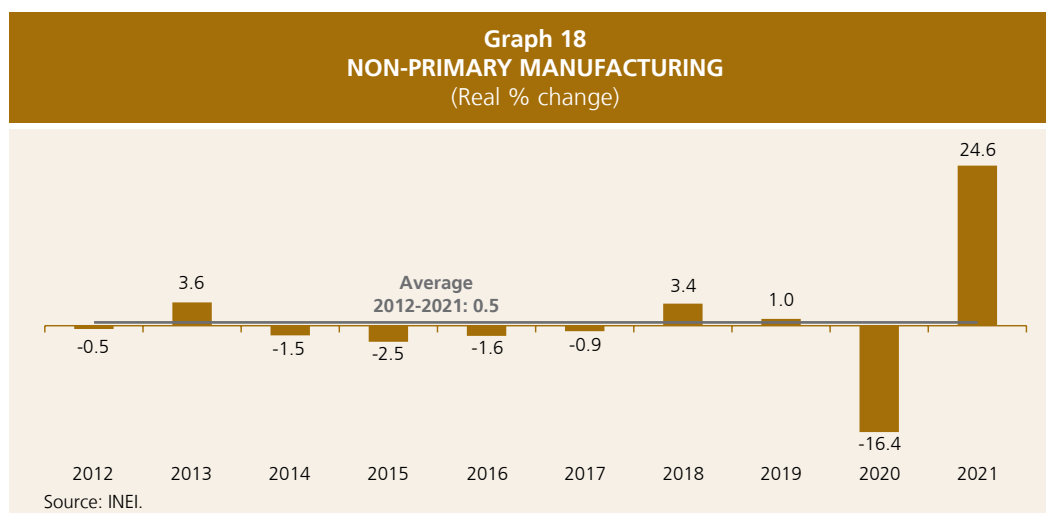
Manufacturing based on primary resources grew 1.9 percent, reflecting a greater production of refined oil by Repsol, Pluspetrol and PetroPerú, as well as higher processing of fishmeal as a result of increased catch of anchoveta. This growth rate was offset by Southern's lower refining of copper due to maintenance scheduled for November 2021. It is worth mentioning that the highest dynamism in primary manufacturing activities over the last 10 years has been observed in the branches of canned and frozen fish products (4.0 percent), refining of non-ferrous metals (3.1 percent), and meat products (3.1 percent).

Table 12
MANUFACTURING BASED ON RAW MATERIALS
(Real % change)

	2019	2020	2021	Average 2012-2021	Average 2017-2021
Manufacturing based on raw materials	-8.5	-2.0	1.9	1.6	1.0
Rice	-8.7	7.1	1.8	2.9	2.0
Sugar	1.1	0.1	-8.2	0.5	-0.8
Meat products	3.1	-2.7	1.5	3.1	2.2
Fishmeal and fish oil	-44.1	31.7	16.5	2.3	13.8
Canned and frozen fish products	44.3	2.6	5.1	4.0	11.4
Refining of non-ferrous metal	-2.4	-0.5	-4.6	3.1	-1.7
Refining of crude	-8.0	-32.9	8.5	-4.6	-7.4

Source: PRODUCE.

For its part, **non-primary manufacturing** grew 24.6 percent in 2021, because of the effect of comparing the lower supply of most branches achieved during 2020 due to the mobility restrictions imposed in response to the COVID-19 pandemic.



Output in the investment-oriented branches grew 43.1 percent, although this rate is mainly the result of the comparative base effect since these branches bore the brunt of the pandemic. The branches that registered greater growth rates during most of the second quarter of 2020 were machinery and equipment, construction materials, industrial services, metal products, and the iron and steel industry.

On the other hand, activity in the manufacturing branches linked to mass consumption goods grew 16.7 percent. The statistical effect was lower given that they were the least affected by the pandemic and the first to be reactivated in 2020. These branches include the manufacturing of goods such as miscellaneous manufactured goods, furniture, beer and malt, clothing, soft drinks, and bakery foods.

Activity in input-related industries grew 21.6 percent due to higher production of rubber, natural essences, processed wood, printing, and glass, among other products. Output in export-related areas grew 24.9 percent due to higher production of yarns, fabrics, finished products, artificial fibers, and knitted fabrics, in line with higher external demand as a result of the international economic recovery.

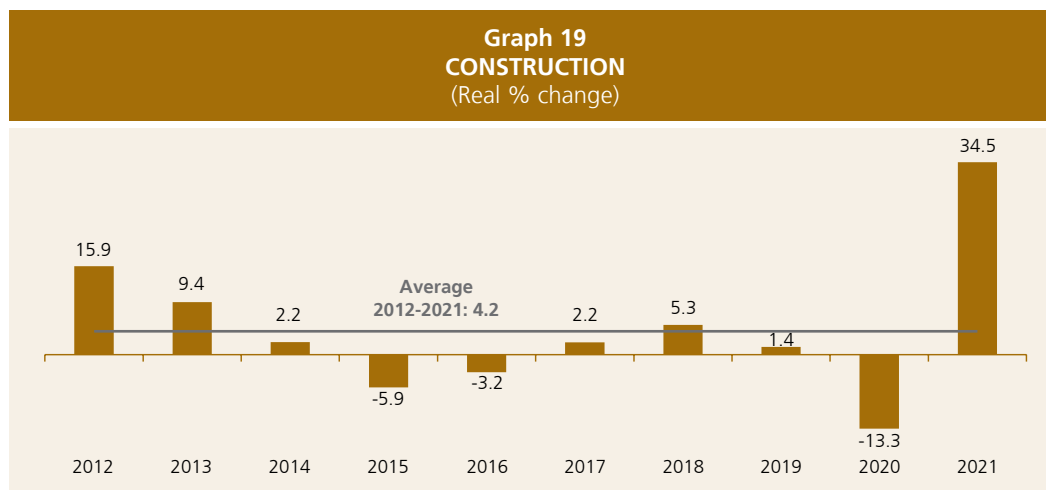
Table 13
GROWTH OF NON-PRIMARY MANUFACTURING BY TYPE OF GOODS
(Real % change)

	2019	2020	2021	Average 2012-2021	Average 2017-2021
Mass consumption goods	1.9	-8.4	16.7	1.3	2.3
Dairy products	5.8	-1.6	2.7	0.5	0.5
Bakery	18.2	8.9	16.7	5.0	9.0
Oils and fats	3.2	-7.9	10.7	3.8	2.8
Miscellaneous food products	0.9	-5.7	7.8	0.7	3.8
Beer and malt	0.6	-25.7	27.9	-0.6	-0.9
Soft drinks	14.7	-19.9	18.6	0.0	-1.3
Garment	-1.7	-36.0	22.3	-4.9	-4.5
Shoes	-21.9	-29.2	3.7	-9.2	-13.6
Furnitures	6.5	17.6	34.0	4.8	11.4
Other paper and cardboard items	-8.3	-7.7	-5.7	-0.6	-2.9
Toiletries and cleaning products	-1.1	3.8	-3.9	0.5	-2.8
Pharmaceutical products	0.4	10.1	8.5	0.6	2.9
Miscellaneous items	-0.9	-44.6	70.8	6.0	5.1
Inputs	0.2	-15.6	21.6	-0.2	0.9
Wheat flour	11.4	4.4	12.7	2.9	6.5
Other textil items	-8.7	-12.5	16.2	1.4	-0.5
Processed woods	6.6	-28.8	33.4	-2.5	-2.4
Paper and cardboard	2.0	-24.9	4.2	-6.0	-5.1
Paper and cardboard containers	2.6	1.5	13.1	5.1	8.7
Publishing and printing	-12.2	-39.6	31.1	-8.7	-10.9
Basic chemicals	1.6	1.8	0.0	4.6	1.6
Explosives, chemical and natural scents	-4.7	-24.2	49.7	4.5	2.7
Rubber	0.5	-40.1	55.4	-3.9	-2.1
Plastic	5.2	-3.6	18.9	4.5	5.0
Glass	-8.3	-22.8	28.0	-7.7	-0.9
Capital good	2.9	-25.4	43.1	0.8	2.9
Iron & steel industry	1.4	-21.5	45.4	7.3	4.5
Metallic products	7.2	-22.6	49.0	2.0	5.7
Machinery and equipment	-8.0	-28.1	59.4	-3.1	1.2
Electric machinery	-12.0	-32.2	40.8	0.8	-1.2
Transport equipment	5.3	-40.3	38.5	-7.1	-0.2
Paints, varnishes, and lacquers	-4.0	-17.1	21.6	-1.2	1.1
Cement	4.5	-13.3	35.7	1.8	4.3
Construction materials	2.8	-37.9	54.1	-2.0	-0.5
Industrial services	9.1	-37.6	49.4	1.5	1.6
Goods for external markets	-2.8	-24.9	24.9	-1.3	-2.1
Canned food	7.5	4.5	-2.6	0.0	2.5
Synthetic fibers	-25.2	-14.2	46.3	1.6	0.4
Yarns, fabrics and finished garments	-8.6	-29.4	49.9	-0.7	-2.2
Knitted garments	-1.5	-33.5	30.5	3.0	-3.4
Clothing items	-1.7	-36.0	22.3	-4.9	-4.5
Total non-primary manufacturing	1.0	-16.4	24.6	0.5	1.5

Source: PRODUCE.

3.5 Construction sector

The construction sector grew 34.5 percent in 2021, driven mainly by self-construction projects and the continuation of public and private works. The internal consumption of cement, the main indicator of the sector's output, grew 36.8 percent during the year.



As for the residential real estate market, in its Study of the Building Market in Metropolitan Lima and Callao, the Peruvian Chamber of Construction (CAPECO) reported that 28,868 housing units (28,821 apartments) were offered in 2021, reaching a similar number to that registered in the previous year (28,793 units). Forty-three percent of the housing supply (12,461 units) was concentrated in the intermediate price range (between S/ 90 and S/ 400 thousand), mainly in Lima Centro and Lima Moderna, while higher price apartments (with prices over S/ 400 thousand) represented 57 percent (16,407 units). The units considered in the Lima Top areas stand out in the latter group, with 55 percent of the units sold recording prices higher than S/ 700 thousand, followed by those considered in Lima Moderna, where 91 percent of the units were offered at prices between S/ 400 and S/ 700 thousand.

Table 14
REAL ESTATE SECTOR: EVOLUTION OF MAIN VARIABLES

	2018	2019	2020	2021	Difference 2021-2020
Apartments: Unit sold - CAPECO 1/	18,000	18,000	13,388	19,642	6,254
% change	21.2	21.2	-25.6	46.7	
Apartments: Unit sold- TINSA	15,328	15,328	12,152	14,156	2,004
% change	27.0	27.0	-20.7	16.5	
New mortgage loans 2/	36,253	35,778	26,768	43,882	17,114
% change	19.0	-1.3	-25.2	63.9	
New loans Mivivienda 3/	7,941	10,476	7,541	11,218	3,677
% change	18.8	31.9	-28.0	48.8	
Number of debtors of current mortgage borrowers 2/	227,572	237,434	237,839	243,151	5,312
% change	3.7	4.3	0.2	2.2	
Mortgages disbursed in S/ (mills.) 2/	11,222	11,531	8,949	15,362	6,414
% change	31.6	2.7	-22.4	71.7	
Mortgages disbursed in US\$ (mills.) 2/	360	234	272	177	-96
% change	-39.2	-35.0	16.5	-35.2	
Average interest rate by mortgage loans in S/ 2	7.6	7.0	6.4	6.9	0.5
Average interest rate by mortgage loans in US\$ 2/	6.1	5.6	5.4	5.0	-0.4
Ratio PER 4	17.6	17.6	19.7	20.8	1.1

1/ "El Mercado de Edificaciones Urbanas en Lima Metropolitana", CAPECO. A 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 y TINSA PERU SAC.

In 2021, a total of 19,764 housing units were sold, with 58 percent of the supply being sold as construction projects in blueprints or in the excavation stage. Forty-three percent of the homes sold were in the intermediate price range (between S/ 90 and S/ 400 thousand) while 57 percent were sold at a higher price range (over S/ 400 thousand).

4. Savings and investment

In GDP terms, gross domestic investment increased by 2.1 percentage points, from 19.8 percent of output in 2020 to 21.9 percent of GDP in 2021, as a result of the easing of sanitary measures and the resumption and increased execution of investment projects. Domestic savings, on the other hand, contracted by 1.4 percentage points of GDP, due to the lower use of government resources to mitigate the negative effects of the pandemic. This led to a greater need for foreign financing, resulting in an external gap of 2.3 percent of GDP in 2021.

Private sector savings registered a contraction, falling from 25.5 percent to 17.4 percent of GDP, a ratio similar to that observed in pre-pandemic levels. It is worth mentioning that because the increase in private savings generated during 2020 was associated mostly with the restriction on the consumption of certain goods and services, the reopening of economic activity in 2021, along with other factors mentioned above, boosted the recovery of private consumption, facilitating a return to pre-pandemic spending habits.

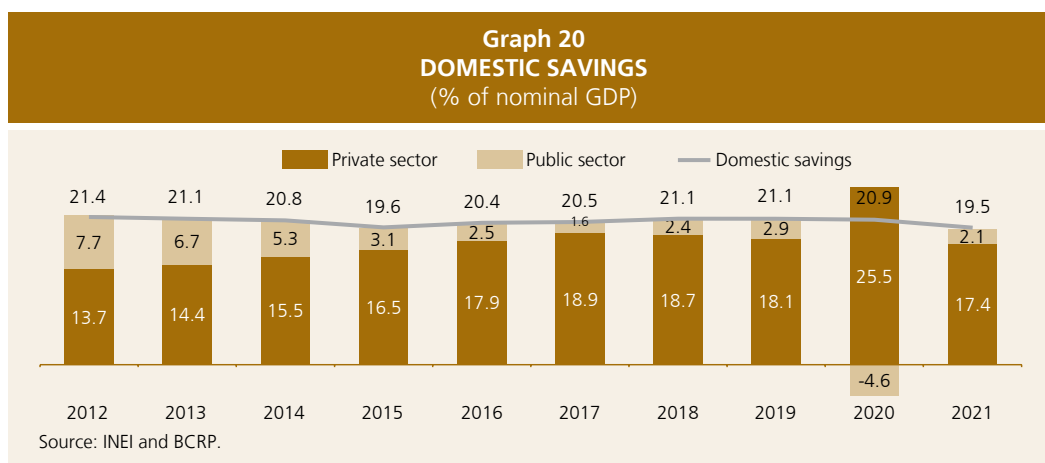


Table 15
SAVINGS AND INVESTMENT
(% of nominal GDP)

	2019	2020	2021	Average 2012-2021
I. Investment (= II + III)	21.8	19.8	21.9	22.7
Gross fixed investment	22.5	21.1	25.2	23.7
Public investment	4.6	4.3	4.7	4.9
Fixed private investment	18.0	16.8	20.5	18.8
Change on inventories	-0.7	-1.3	-3.4	-1.0
II. Domestic savings	21.1	20.9	19.5	20.5
Public sector	2.9	-4.6	2.1	2.7
Private sector	18.1	25.5	17.4	17.8
III. External savings	0.7	-1.2	2.3	2.2

Source: BCRP.

5. Labor

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



According to this registry's information, the number of formal jobs¹ increased 4.0 percent at the national level in 2021 and 0.4 percent compared to 2019. At the sector level, jobs grew both in the private sector (4.3 percent) and in the public sector (3.4 percent, with private sector employment recovering the pre-pandemic level since September). By geographical area, the growth of employment was higher in the rest of the country than in Lima (5.5 percent versus 2.7 percent). The number of jobs remained on average below the 2019 level in Lima.

Table 16
FORMAL JOBS - ELECTRONIC PAYROLL
(Thousand jobs)

	Levels					Annual change 2021	
	2017	2018	2019	2020	2021	In thousand	In %
Total 1/	4,935	5,122	5,264	5,081	5,284	203	4.0
Private	3,510	3,662	3,797	3,559	3,710	151	4.3
Public	1,425	1,460	1,467	1,522	1,574	51	3.4
Lima	3,070	3,137	3,214	3,036	3,118	81	2.7
Rest of Peru	1,859	1,972	2,033	2,029	2,140	112	5.5

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.

The 4.3 percent recovery of jobs observed in the private sector reflects mainly the increase seen in the sectors of construction (48 thousand jobs) and services (37 thousand jobs). However, the levels of employment in the sectors of manufacturing, commerce and services remained, on average, below those registered in 2019.

Table 17
FORMAL JOBS IN THE PRIVATE SECTOR - ELECTRONIC PAYROLL
(Thousand jobs)

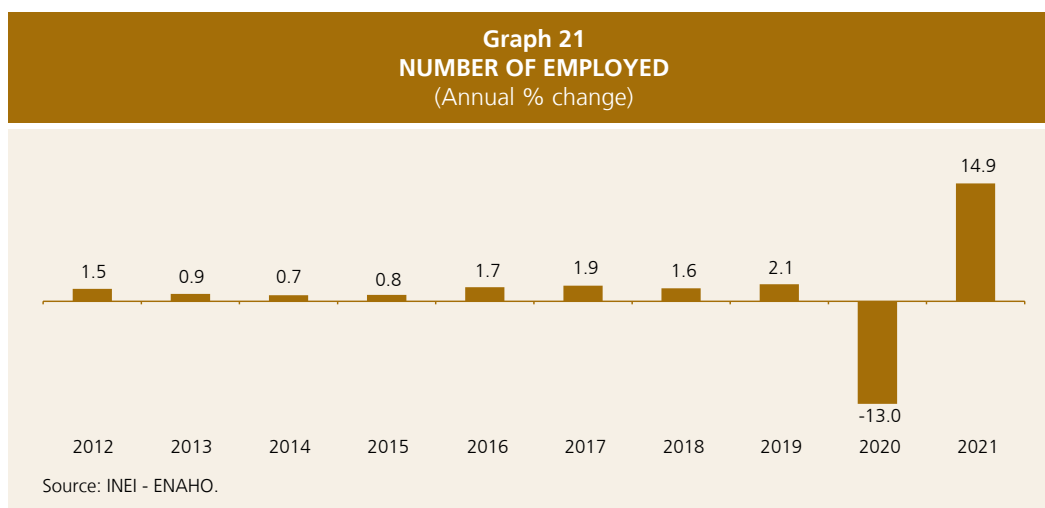
	Levels					Annual change 2021	
	2017	2018	2019	2020	2021	In thousand	In %
Total	3,510	3,662	3,797	3,559	3,710	151	4.3
Agriculture and livestock 1/	355	424	452	485	494	10	2.0
Fishing	25	22	21	20	21	1	2.9
Mining	99	102	103	100	111	11	10.7
Manufacturing	464	472	479	448	463	16	3.5
Electricity	14	13	13	14	15	1	5.9
Construction	201	212	225	193	241	48	24.7
Commerce	602	616	629	602	623	20	3.4
Services	1,749	1,798	1,870	1,695	1,732	37	2.2

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

5.1 National employment

According to ENAHO data, employment at the national level grew 14.9 percent in 2021, reversing the drop registered in 2020 due to the pandemic. It is worth noting that although the annual average number of employed persons remains slightly below the 2019 level (0.1 percent), by the fourth quarter of 2021 it had already surpassed pre-pandemic levels (it grew 1.2 percent compared to the fourth quarter of 2019).

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



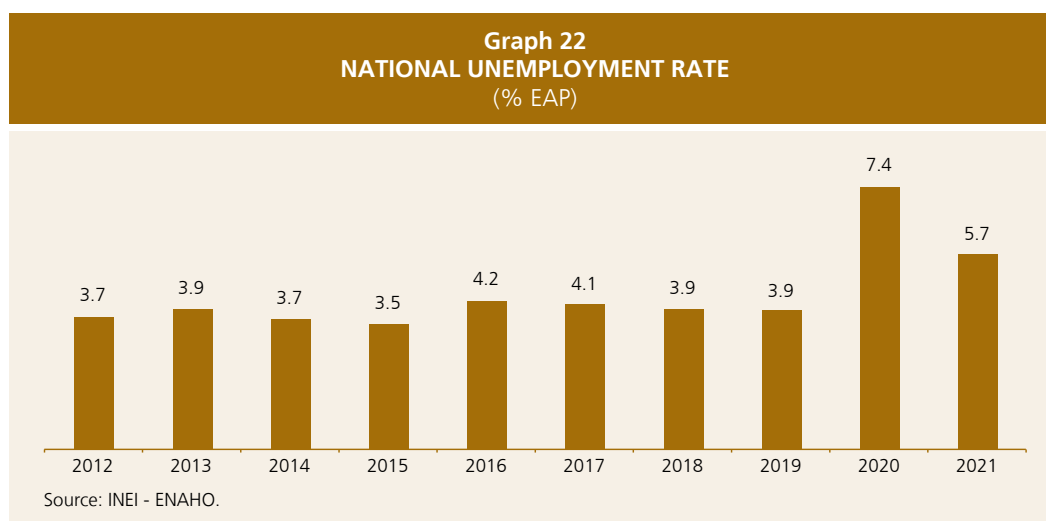
By production sectors, employment in construction and commerce recovered the most, although employment levels in manufacturing and services remain below 2019 levels. By size of business, employment in firms with 1 to 10 workers grew by 1,832 thousand jobs.

Table 18
NATIONAL EMPLOYMENT
(Thousand people)

	Levels				Annual change 2021	
	2018	2019	2020	2021	In thousand	In %
I. ECONOMICALLY ACTIVE POPULATION (EAP): 1+2	17,463	17,831	16,095	18,149	2,054	12.8
1. EMPLOYED	16,777	17,133	14,902	17,120	2,218	14.9
By economic activity						
Agriculture and livestock/Fishing/ Mining	4,341	4,343	4,917	4,989	73	1.5
Manufacturing	1,505	1,519	1,264	1,499	235	18.6
Construction	1,003	1,055	938	1,245	307	32.7
Commerce	3,162	3,272	2,639	3,338	699	26.5
Services	6,766	6,944	5,145	6,050	905	17.6
By size of business						
From 1 to 10 workers	12,149	12,409	11,203	13,035	1,832	16.4
From 11 to 50 workers	1,247	1,229	912	1,122	210	23.0
More than 50 workers	3,372	3,481	2,770	2,953	183	6.6
2. UNEMPLOYED	686	697	1,193	1,029	-164	-13.7
II. INACTIVE POPULATION	6,680	6,681	8,787	7,101	-1,685	-19.2
III. WORKING-AGE POPULATION (PWA)	24,142	24,512	24,882	25,251	369	1.5
RATES (%)						
Activity rate (EAP/PWA)	72.3	72.7	64.7	71.9		
Employment/population ratio (Employed EAP/PWA)	69.5	69.9	59.9	67.8		
Unemployment rate (Unemployed EAP/EAP)	3.9	3.9	7.4	5.7		

Source: INEI - ENAHO.

The unemployment rate at the national level was 5.7 percent in 2021, 1.8 percentage points higher than the rate registered in 2019 (3.9 percent). Moreover, unemployment was higher among women than among men (6.7 percent versus 4.9 percent), while by age group, unemployment was higher among the population under 25 years of age (12.4 percent). Finally, by educational level, the most affected group was that integrated by people with higher education, where unemployment among people with university education registered 9.7 percent and a rate of 6.3 percent among those with non-university higher education.



In 2021, the average monthly income in urban areas was S/ 1,448. Although it increased 2.3 percent compared with the average income level in 2020, it is still lower than before the pandemic (S/ 1,595). By production sector, a strong increase in income was observed among workers in the agricultural sector, while income in the sectors of mining and services remained below 2019 levels. By gender, the increase in men's income contrasts with the fall observed in women's income (5.5 percent versus -1.8 percent). By age group, income fell among workers over 45 years old, and by educational level income grew mainly among less educated workers. In real terms, average monthly income decreased 1.6 percent with respect to 2020.

Table 19
MONTHLY AVERAGE INCOME BY JOB: URBAN AREA -INEI - ANNUAL
(Soles)

	2019	2020	2021	Change 2021/2020	
				Nominal	Real
Total	1,595	1,415	1,448	2.3	-1.6
By gender					
Men	1,819	1,559	1,645	5.5	1.5
Women	1,308	1,208	1,186	-1.8	-5.6
By economic activit					
Agriculture and livestock	919	773	940	21.6	16.9
Fishing	1,550	1,319	1,418	7.5	3.4
Mining	3,595	3,326	3,289	-1.1	-4.9
Manufacturing	1,584	1,374	1,454	5.9	1.8
Construction	1,745	1,483	1,551	4.6	0.6
Commerce	1,289	1,099	1,147	4.4	0.4
Services	1,771	1,690	1,661	-1.7	-5.5
By age					
From 14 to 24 years	960	926	966	4.4	0.4
From 25 to 44 years	1,730	1,470	1,548	5.3	1.3
More than 44 workers	1,655	1,507	1,491	-1.1	-4.9
By educational level					
Primary	914	778	883	13.5	9.1
Secondary	1,298	1,113	1,178	5.9	1.8
Higher No Univ.	1,653	1,529	1,536	0.5	-3.3
Higher Univ.	2,600	2,443	2,474	1.3	-2.6

Source: INEI - ENAHO.

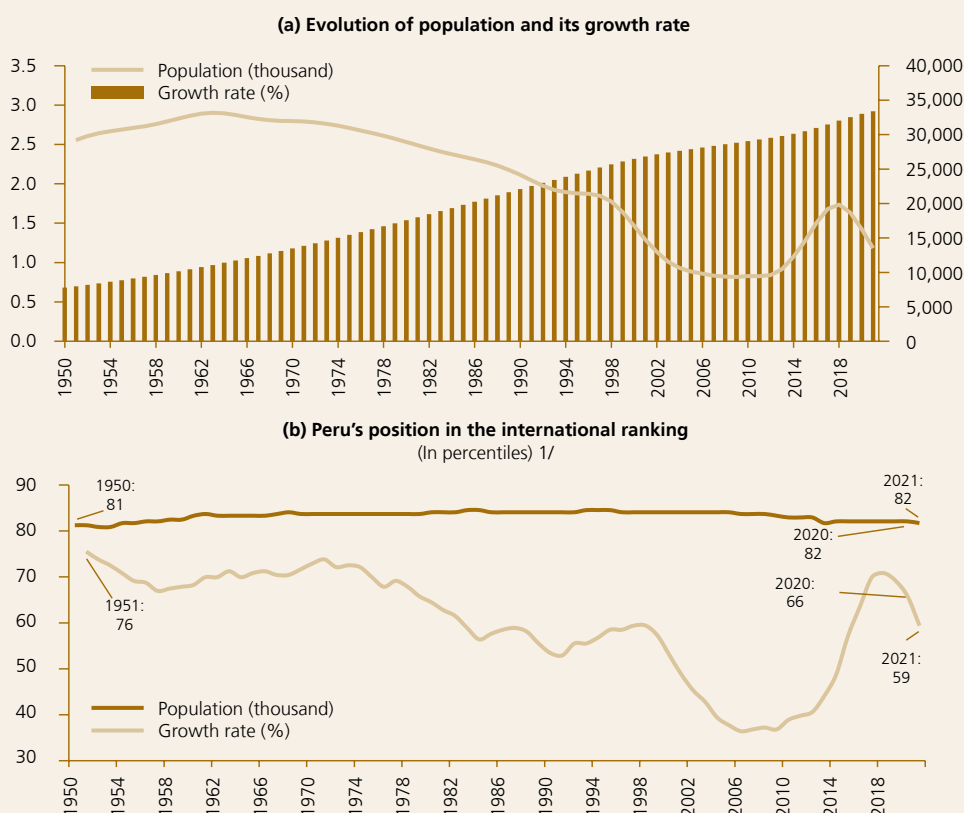
Box 1
DEMOGRAPHIC EVOLUTION OF PERU: COMPARATIVE PERSPECTIVE

This text analyzes the evolution of Peru’s population and the country’s demographic transition in comparison with the rest of the world. The aim is to understand the context of the country’s demographic evolution, identifying similarities and differences in the trends observed in terms of population, population growth and dependency ratio.²

Evolution of the population

The attached graph shows the evolution of Peru’s population and its growth rate between 1950 and 2021 in the upper panel, and the percentile where Peru stands in relation to the rest of the world for each of these variables in the lower panel. Thus, a higher percentile in this second panel indicates a higher number of inhabitants or a higher population growth rate relative to the rest of the countries. For example, in the case of population, China and India are in the 100th percentile in 2020 as they are the countries with the largest number of inhabitants.³

PERU: EVOLUTION AND INTERNATIONAL COMPARISON OF POPULATION AND ITS GROWTH RATE BETWEEN 1950 AND 2021



1/ Percentiles in each period are calculated only for countries and areas for which data is available that year. Values for 2020 and 2021 are United Nations forecasts. The population ranking takes into account the current structure of countries in the world. The database reports estimated population data for all countries throughout the period even though certain countries did not exist in previous periods. The highest percentiles are occupied by countries with a higher value of the analyzed variables. The 100th percentile corresponds to China as it is the country with the largest population.

Source: United Nations – World Population Prospects 2019.
Made by BCRP.

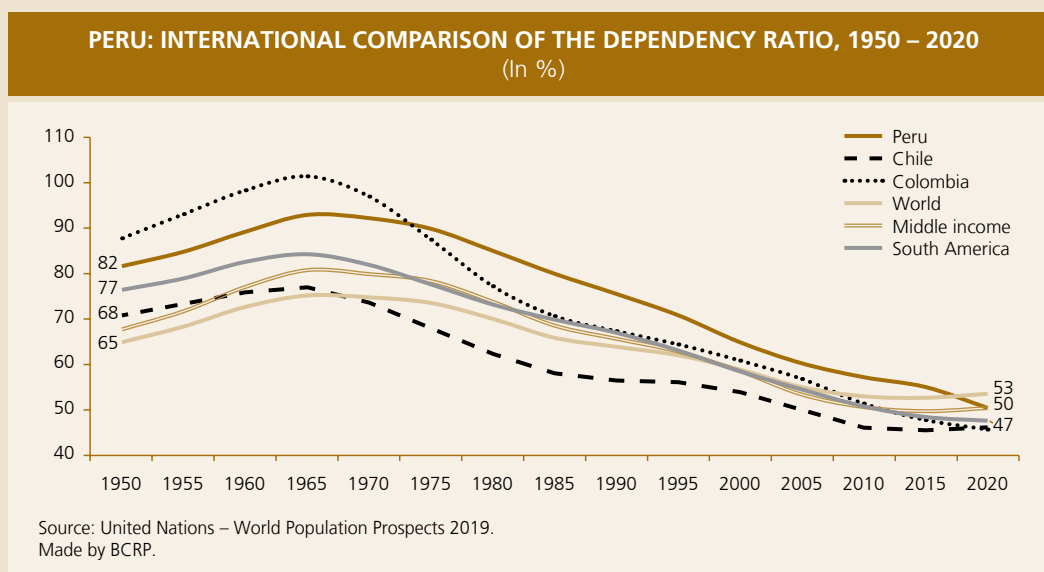
2 The dependency ratio is defined as the ratio of the population under 15 years of age and over 65 years of age (dependent population) to the population between 15 and 64 years of age (labor force).
3 The United Nations estimates published in its “World Population Prospects 2019” have been used here to ease comparisons. The values shown for 2020 and 2021 are forecasts prepared in 2019 by this institution.

The graph above shows that although the growth rate of the Peruvian population has been gradually decelerating over time (with the exception of the 2014-2018 period), Peru has had a similar position in the ranking of countries according to the number of inhabitants (graph below). Thus, despite the fact that the population growth rate slowed down from 2.6 to 1.2 percent between 1951 and 2021, Peru's position in terms of number of inhabitants went from percentile 81 to percentile 82 and remained above other countries in the region such as Chile and Ecuador, both of which are countries with a smaller population that are located in the 74th and 72nd percentiles, respectively. This slight increase in the population ranking (from percentile 81 to percentile 82) is associated with the fact that the average population growth rate of Peru has been higher than the world average rate during the period analyzed (2.1 versus 1.6 percent) and that after showing a faster pace of growth in the last decade, it has positioned itself between percentiles 60 and 70 in the population growth ranking after recording a minimum growth rate in percentile 36 in 2006). It is worth pointing out that the population growth rate of the rest of the world has moderated more rapidly than that of Peru in the last 15 years, which is in part explained by greater Venezuelan immigration to the country in the second half of the last decade.

Evolution of the dependency ratio

The dependency ratio measures the population in the range from under 15 years old to 65 years old or older as a percentage of the population between 15 and 64 years old. The analysis of this indicator allows us to identify the weight of the dependent population in relation to the working age population. The dependency ratio has traditionally been used as an approximation of a country's potential capacity to support both the young and the elderly and, above all, to finance education and health services for these groups. In addition, the dependency ratio is closely linked to the concept of demographic dividend, which is defined by the Economic Commission for Latin America and the Caribbean (ECLAC) as the period when there are fewer than two dependents for every three people of working age.⁴

The following graph summarizes the evolution of Peru's population between 1950 and 2020 by five-year periods, and compares it with the world average, the South American average, the average for middle-income countries, and with two nations in the region (Chile and Colombia). The graph reflects, on the one hand, that the Peruvian dependency rate has been decreasing steadily over time (from 82 to 50 percent between 1950 and 2020). This is explained by the fact that the large initial share of the population under 15 years of age has been decreasing as the population has been aging and more people have joined the labor force.



4 According to Saad et al. (2012), the demographic dividend comprises the entire period of declining dependency ratio plus the stage when this ratio begins to rise, but still remains at favorable levels, with fewer than two dependents for every three persons of working age. Saad, P., Miller, T., Holz, M. and C. Martinez (2012). "Juventud y bono demográfico en Iberoamérica", CEPAL.

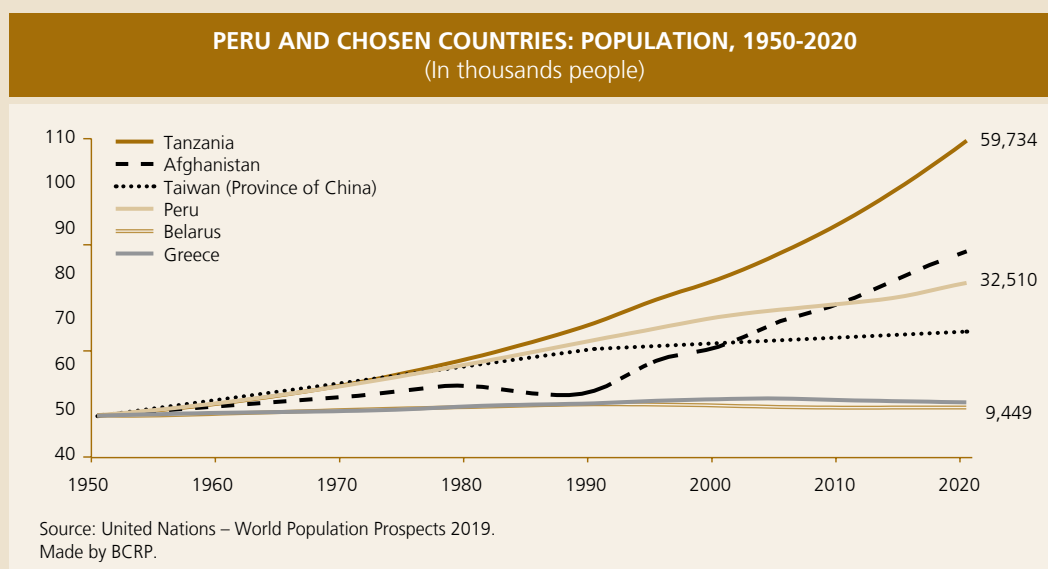
In connection with this, Huaranca and Castellares (2020)⁵ state that Peru is going through a period of demographic dividend that stimulates economic activity. According to the study, the growth of the demographic factor is estimated to have contributed by around 0.4 percentage points to the annual increase in GDP per capita in the 2000-2019 period. Moreover, the contribution over the last 60 years would have been around 0.3 percentage points per year.

Nevertheless, the graph suggests that Peru's dependency ratio is in line with the values of its regional and income peers, and that it is already below the minimum observed for the world average. According to the United Nations, a slight increase will be seen in the Peruvian dependency ratio in the next five years as a result of a greater number of people that will stop being actively employed and become retirees, which will eventually lead to the loss of the effects of the demographic bonus. This projection confirms the relevance of improving the country's pension coverage as well as savings for old age.

Demographic transition: Peru and countries with a similar population structure

With the aim of deepening the previous analysis, this last section compares Peru's demographic transition with that experienced by countries that shared similar population characteristics in 1950, comparing first Peru with countries that had a similar population size at that time and then with countries that had a population with similar age structures in 1950 to the one Peru has today.

In 1950, Peru had 7,777,000 inhabitants. The five territories that in 1950 were closer to Peru in terms of population were Taiwan (Province of China) (with 7,602 thousand inhabitants), Tanzania (7,650 thousand inhabitants), Greece (7,669 thousand inhabitants), Belarus (7,745 thousand inhabitants) and Afghanistan (7,752 thousand inhabitants). As reflected in the next graph, there are three different dynamics: rapid growth, moderate growth, and transition to population decline. The first group includes Tanzania and Afghanistan, which have experienced rapid population growth in recent years, although they do not have numerically similar populations. Peru and Taiwan are in the second group, with moderate growth rates. These countries have reduced their population growth rates in the period analyzed and this moderation is expected to continue until they reach negative growth rates. Finally, Belarus and Greece are already experiencing negative population growth rates and are currently the least populated of the five countries mentioned.



⁵ Huaranca, M. & Castellares, R. (2020) Bono Demográfico, Productividad y Crecimiento Económico. Revista de Estudios Económicos 39, 59-82.



Finally, the countries that had an age structure in 1950 similar to that of Peru in 2020 are, in order of similarity, the United States, Australia, Norway, Hungary and Italy⁶. All of them show a reduction in their population growth rates and their population pyramids show population aging (the pyramids are wider in the middle ages and the base is reduced)⁷. The table below shows how the growth rate has declined in these countries, while the dependency ratio has tended to increase.

PERU AND CHOSEN COUNTRIES: POPULATION GROWTH RATE AND DEPENDENCY RATIO (In %)				
Countries	Population growth rate		Dependency ratio	
	1951	2021	1950	2020
USA	1.3	0.6	54	54
Australia	2.7	1.1	53	55
Norway	1.1	0.8	51	53
Hungary	1.5	-0.3	49	53
Italy	0.9	-0.2	43	57
Peru in 2020		1.4		50

Source: United Nations – World Population Prospects 2019.
Made by BCRP.

Final Comments

This box shows that from 1950 to 2021, Peru's population has grown at a higher rate than the world average rate, which has allowed it to maintain its position in terms of number of inhabitants, even though the population growth rate has decreased over time. The box also shows that Peru's dependency ratio has been decreasing over time, although it is estimated that it will probably begin to rise again in the coming years, thus reducing the benefits of the demographic dividend. This is supported by the fact that countries that had an age structure in 1950 similar to that of Peru today experienced thereafter a lower growth rate and an aging population in the following 70 years analyzed. Finally, evidence shows that countries with populations similar to that of Peru in 1950 did not necessarily experience the same population growth trend.

6 These countries were identified using a 100-point index, where the highest score indicates that the country has an age structure by quinquennium more similar to that of Peru. The similarity index is defined as: $100-i$, where $i = \sum |P_{PaisX_G_1950} - P_{Peru_G_2020}|$, considering each of the 21 age ranges or quinquennia (G) expressed as a percentage of the total population.

7 In the cases of Hungary and Italy, there has even been a population decrease since 1981 and 2018, respectively.