

PAPUA NEW GUINEA

NATIONAL ACCOUNTS 2016 to 2022

Gross Domestic Product at Current Price and Constant Price

EMBARGO: 11:30am, Thursday 2th November, 2023

GDP at Current Price

2022
K111.2
billion

In 2021 GDP at Current Price grew by K9.1 billion or +11.0%. This increase was mainly driven by price increases. In 2022 GDP at Current Price grew by K19.6 billion or +21.4%.

The 2022 Current Price GDP increase was due a 5.2% increase in production and a 15.5% increase in prices (across the economy). This strong increase was due to a bounce back from COVID years.

GDP at Constant Price

2021
K91.6
billion

In 2021 GDP at Constant Price fell by K0.5 billion or -0.8%. GDP at Constant Prices only includes changes in the production volumes.

In 2022 GDP at Constant Price grew by K3.3 billion or +5.2% with all industries showing positive production growth.

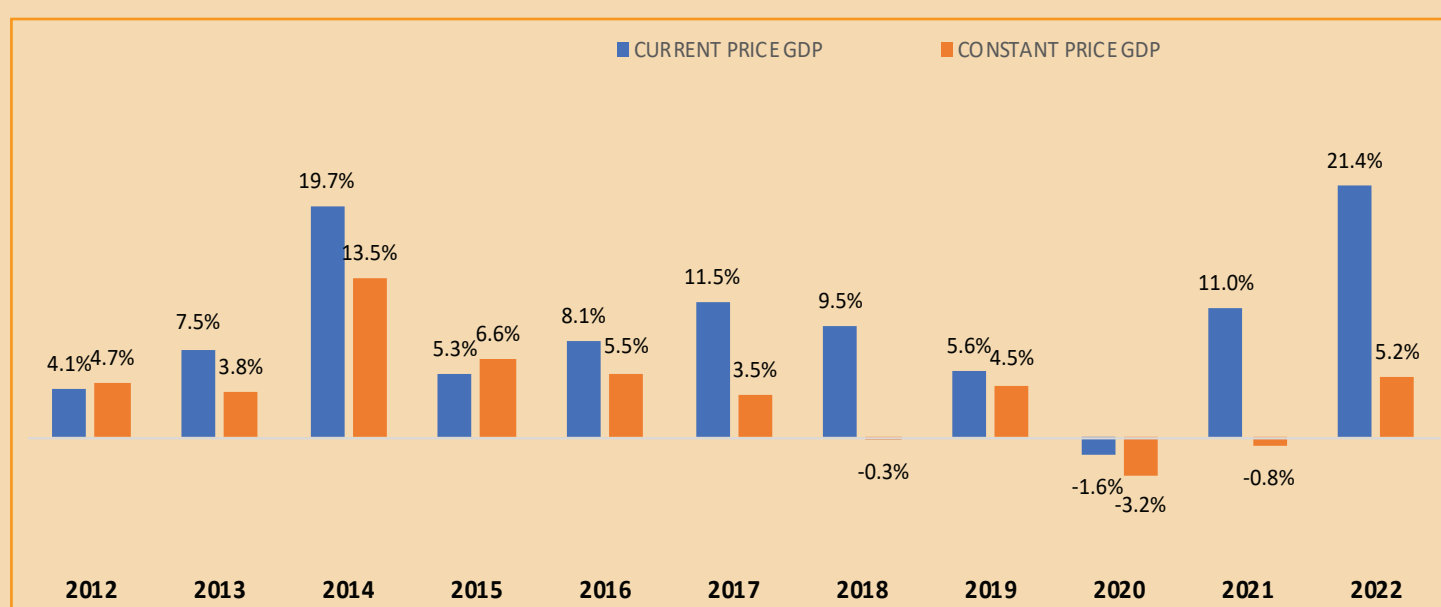
2022
K66.4
billion

2020
K82.50
billion

2021
K63.1
billion

2020
K63.60
billion

GDP Growth 2012 to 2022



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FOREWORD

It is my pleasure to release the Papua New Guinea National Accounts for 2021 and 2022. This publication on Gross Domestic Product (GDP) is a double release of GDP, this is a major accomplishment by the NSO as it reduces the GDP release time lag from 22 months to 10 months.

This National Accounts release is another milestone achievement for the National Statistical Office (NSO) in its endeavour to provide timely and quality statistics to the many users of statistical information. Production of timely and quality statistics to meet the ever-increasing demand for statistical information is always challenging to Statistical Offices around the world and PNG NSO is no exception.

A key challenge faced by PNG NSO currently is the coordination and collection of source data, in particular administrative data collected by other state agencies. The compilation of data from these sources into a coherent set of accounts is also a challenge. As the mandated agency to provide statistical services to the community, the NSO strives to overcome these challenges, thus, this release of the national accounts figures is an indication of the efforts the NSO is putting into improving the production of timely and reliable statistics.

I wish to acknowledge their efforts and contribution of other agencies that supported the compilation of these Accounts:

- I thank the Australian Bureau of Statistics (ABS) for providing essential capability building to NSO National Accounts staff to enable to the NSO to compile this publication.
- I acknowledge the contributions of the Department of Treasury, and the Bank of Papua New Guinea, our major stakeholders, in providing data and being part of the GDP consultations.
- I also extend our appreciation to the Internal Revenue Commission (IRC) for providing the Goods and Services Tax (GST) and Company Income Tax (CIT) data for 2021 and 2022; and other government agencies that provided the required data to compile this series of National Accounts.
- My gratitude goes to all the business houses in the private sector throughout Papua New Guinea which provided the source data needed to produce the National Accounts series.

I take this opportunity to urge all stakeholders to foster and promote this collaborative effort which will contribute to making NSO's statistical system effective because we do have the legitimacy backed up by the Statistical Services Act (1980) that provides both the safeguards of confidentiality for the providers of data and assurance of integrity and accessibility for users.

Finally, with improved data sources, sound statistical methods, new technologies and strengthened statistical systems, will enable better decisions that result in better lives for all of us. As the saying goes: Better Data, Better Lives!



JOHN ASEAVUI IGITOI
NATIONAL STATISTICIAN

Revision Analysis

**FOR THIS RELEASE THE
2006 TO 2020 GDP
ESTIMATES HAVE NOT
BEEN REVISED**

Overview of Papua New Guinea, 2016 to 2022

Gross Domestic Product (GDP) by Production

YEAR 2021

GDP at Current Prices

In 2021 the PNG economy grew by K9,111 million or + 11%. This increase was due to increases in Production volumes combined with prices.

Key contributing industry were:

- Mining and Quarrying +15.8%, K3,165 million
 - *Extraction of crude petroleum and Natural gas, +34.4%, K4,012 Million*
- Agriculture, Forestry and Fishing, +12.4%, K1,924 million
- Wholesale and Retail, +10.7%, K866 million

The main offset to this increase was Other Mining with a fall of -10.1%, -K847 million from the Mining and Quarrying Industry. This was due to the global pandemic that caused the closure of some mines within the country.

GDP at Constant Prices

In 2021 PNG economy fell by K497 million or -0.8%. GDP at Constant Price only includes changes in the production volumes.

Key contributing industries were:

- Wholesale and Retail, +5.9%, K333 million
- Information and Communications, +18.8%, K281 million
- Public Administration and Defense, +7.5%, K254 million

The main offset to this increase was the Mining and Quarrying Industry with a fall of -11.6%, -K2,202 million. Closure in mines caused a fall in volume production in other mining.

YEAR 2022

GDP at Current Price

In 2022 PNG economy grew by K19,615.4 million or +21.4%. The increase was due to increases in production combined with prices.

Key contributing industries were:

- Mining and Quarrying, +53.1%, K12,237 million
 - *Extraction of crude petroleum and Natural gas, +68.4%, K10,722 million*
 - *Other Mining, +21.3%, K1,605 million*
- Agriculture, Forestry and Fishing, +8.3%, K1,436 million
- Wholesale and Retail, +12.6%, K1,134 million

2022 saw strong growth as the economy bounced back from the weak covid years as the Mining and Quarrying re-opened and production returned to normal operations.

Overview of Papua New Guinea, 2016 to 2022

GDP at Constant Price

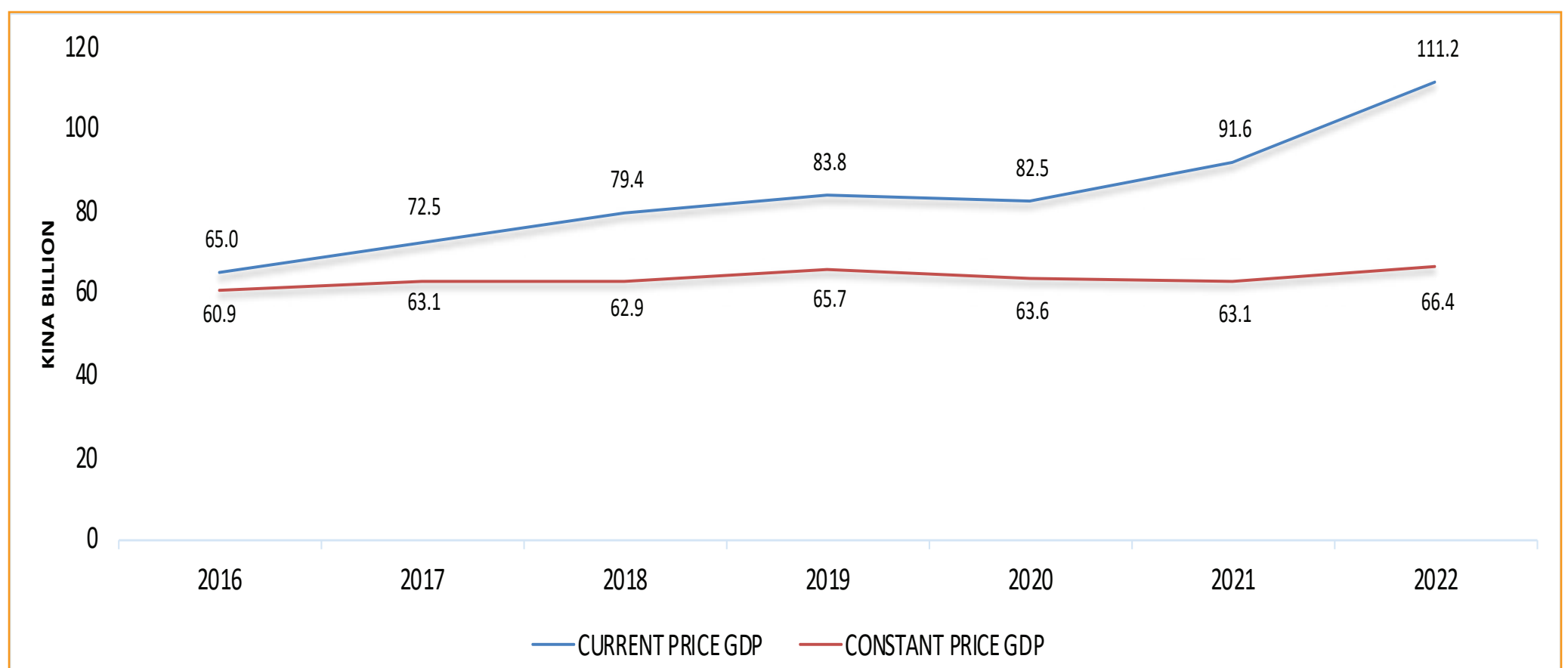
In 2022 GDP at Constant Price grew by K3,261 million or +5.2%. Constant Price only includes changes in the production volumes. GDP at Current Prices.

Key contributing industries were:

- Mining and Quarrying, +5.1%, K862 million
 - *Extraction of crude petroleum and Natural gas*, +1.4%, K164 million
 - *Other Mining*, +14.7%, K698 million
- Construction, +13.4%, K484 million
- Administrative and Support Services, +9.1%, K425 million

There was no offset to this increase as the PNG economy saw growth across all industries in production volume terms.

FIGURE 1. GDP LEVELS, 2016 to 2022

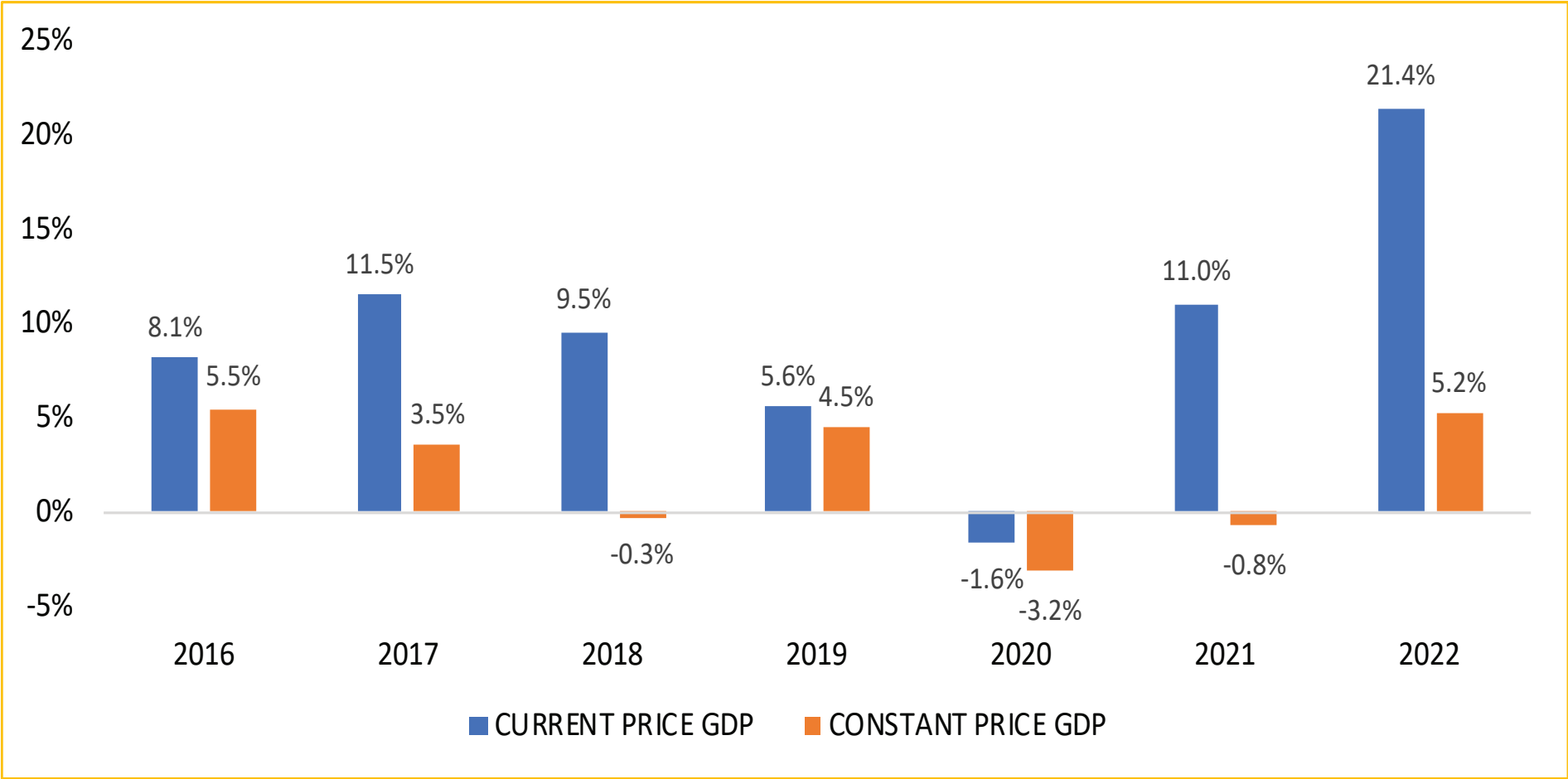


GDP levels show a moderate increase from 2016 to 2019. In 2020, the PNG economy saw a small fall due to the 2019 COVID pandemic. Despite the economic growth in Current Price terms in 2021, the GDP at Constant Price still had a decline in volume terms. The PNG economy experienced a significant increase in 2022 following the COVID years (see figure 1) both in Current and Constant Price terms.

GDP at Current Price increased from K65 billion in 2016 to K83.8 billion in 2019. Then in 2020 it fell to K82.5 billion due to decreases in volume production caused by global pandemic. In 2021 Current Price increased to K91.6 billion mainly driven by prices while volume production saw little change. In 2022, GDP levels increased significantly to K111.2 billion as PNG economy bounced back from COVID years with increasing volume production and prices particularly in the Mining Sector.

GDP at Constant Price exhibited a moderate increase, then a small decline and a strong increase from 2016 to 2022. Constant Price GDP increased from K60.9 billion in 2016 to K65.7 billion in 2019 and in 2020 fell to K63.6 billion and continued to fall in 2021 down by K0.5 billion. Then in 2022 it increased to K66.4 billion (up by K21billion) mainly driven by increases in production for Mining and Quarrying.

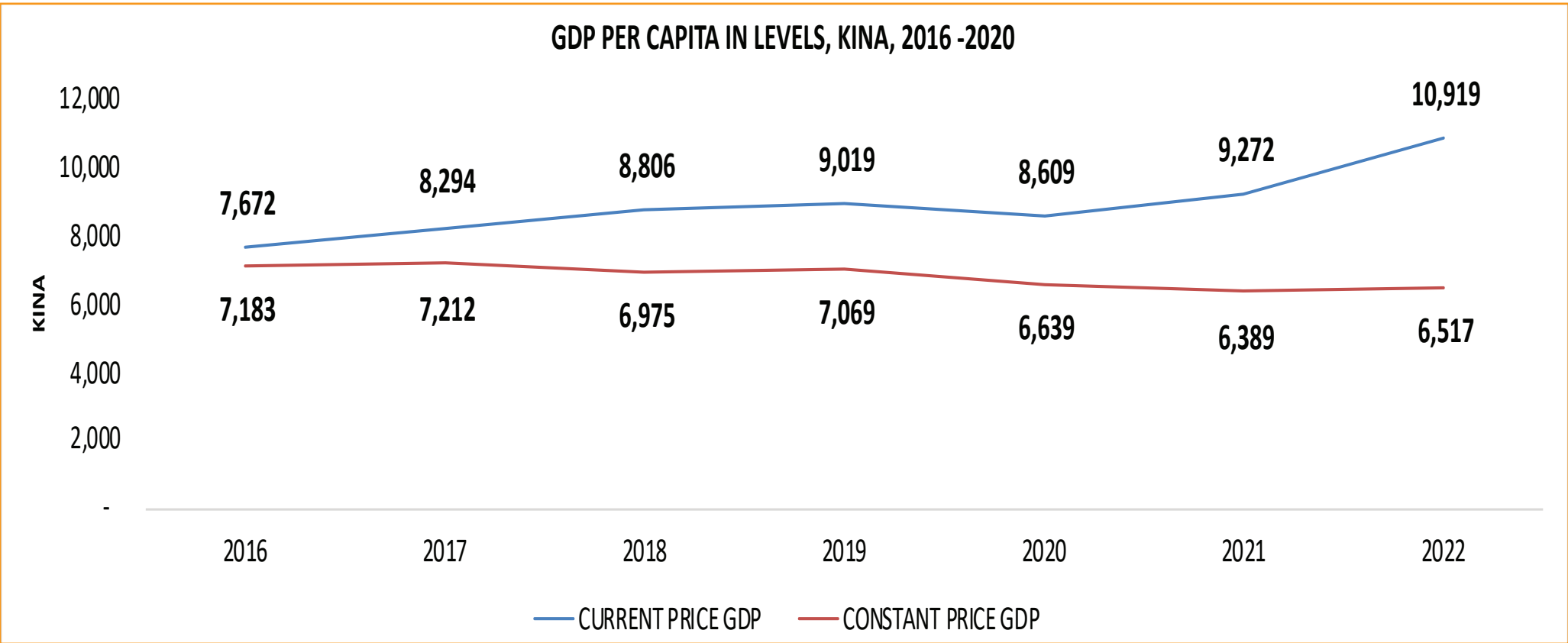
FIGURE 2. GDP GROWTH, 2016 to 2022



GDP in Current Price and Constant Price for PNG showed growth for all years (2016 to 2019) except in 2018 where Constant Price, due the impact of earthquake on LNG production, saw a small fall of -0.3%. For 2020, both Current Price and Constant Price GDP saw a fall due to the impact of the COVID pandemic.

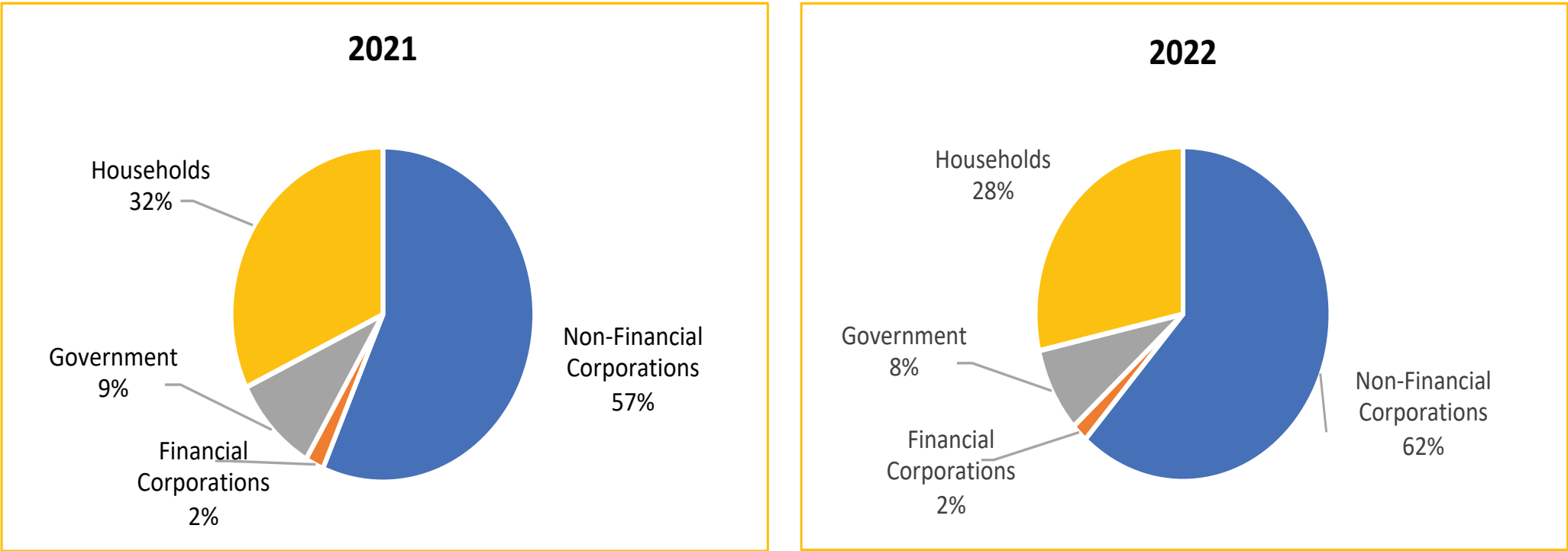
In 2021, the Current Price showed a growth of 11% while Constant Price still showed a small fall of -0.8%. Year 2022 was seen as a bounce back year for PNG economy as it saw growth both in Current Price (up by 21.4 %) and Constant Price (up by 5.2%) respectively.

FIGURE 3. GDP PER CAPITA IN LEVELS, KINA, 2016 to 2022



The current levels of Current Price GDP per capita have increased from K7,672 in 2016 to K10,919 in 2022, a growth of 42.3%.The current levels of Constant Price GDP per capita decreased from K7,183 in 2016 to K6,517 in 2022, resulting in a decrease of -9.3%. This means that PNG’s population growth is outpacing the economic growth.

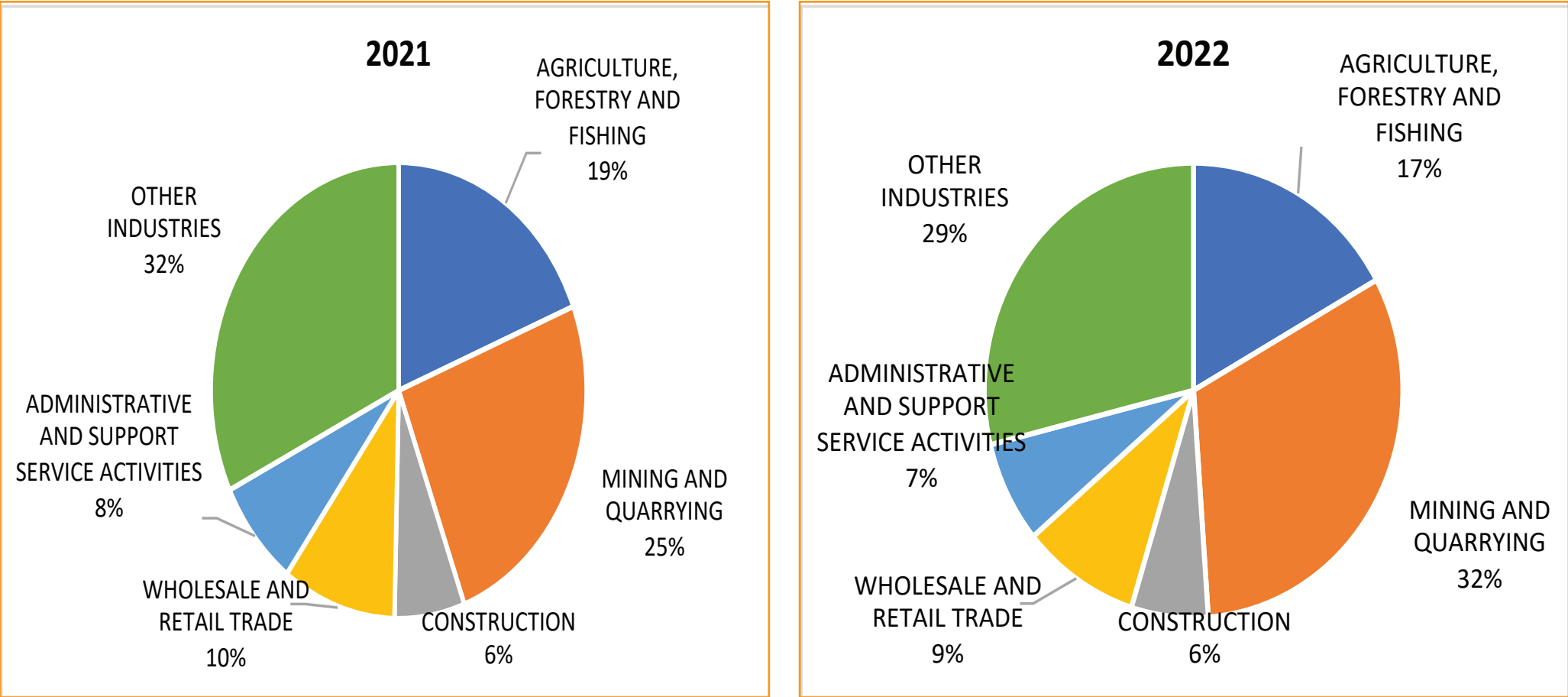
FIGURE 4. INSTITUTIONAL SECTOR SHARE, CURRENT PRICE, 2021 & 2022



The graph above details the share of four institutional sectors to the total economy in 2021 and 2022. That is Non-Financial Corporations, General Government, Financial Corporations and Households respectively. Sector share is defined as the amount of economic activity in a particular institutional sector as a percentage of total economic activity.

Figure 4. shows Non-Financial Corporations contributed 57% in 2021 and 62% in 2022 to the total economic activity.

FIGURE 5. KEY INDUSTRY SHARES, CURRENT PRICE, 2021 & 2022



Industry share is the amount of economic activity in a particular Industry as a percentage of total economic activity. The total of these five key industries contributes to about 70% of PNG’s economy.

Figure 5. shows the Mining and Quarrying Industry was the largest industry in both years, contributing 25% in 2021 and 32% in 2022 of the total economic activity.

TABLE 1. KEY AGGREGATES

TABLE 1A. GDP LEVELS, CURRENT PRICE AND CONSTANT PRICE (KINA BILLIONS)

	2016	2017	2018	2019	2020	2021	2022
CURRENT PRICE GDP	65.0	72.5	79.4	83.8	82.5	91.6	111.2
CONSTANT PRICE GDP	60.9	63.1	62.9	65.7	63.6	63.1	66.4

TABLE 1B. GDP GROWTH, CURRENT PRICE AND CONSTANT PRICE, PERCENTAGE (%) CHANGE (a)

	2016	2017	2018	2019	2020	2021	2022
CURRENT PRICE GDP	8.1%	11.5%	9.5%	5.6%	-1.6%	11.0%	21.4%
CONSTANT PRICE GDP	5.5%	3.5%	-0.3%	4.5%	-3.2%	-0.8%	5.2%

TABLE 1C. GDP PER CAPITA, CURRENT PRICE AND CONSTANT PRICE (KINA)

	2016	2017	2018	2019	2020	2021	2022
CURRENT PRICE GDP (a)	7,672	8,294	8,809	9,019	8,609	9,272	10,919
CONSTANT PRICE GDP	7,183	7,212	6,975	7,069	6,639	6,389	6,517

TABLE 1D. GDP PER CAPITA, CURRENT PRICE AND CONSTANT PRICE, PERCENTAGE (%) CHANGE (a)

	2016	2017	2018	2019	2020	2021	2022
CURRENT PRICE GDP	4.9%	8.1%	6.2%	2.4%	-4.5%	7.7%	17.8%
CONSTANT PRICE GDP	2.3%	0.4%	-3.3%	1.3%	-6.1%	-3.8%	2.0%

TABLE 2. INDUSTRY OUTPUT, CURRENT PRICE ESTIMATE

(KINA MILLIONS)

		2016	2017	2018	2019	2020	2021	2022
A	Agriculture, Forestry & Fishing	16,438.5	18,662.9	19,154.7	19,544.5	21,309.9	24,506.2	26,525.2
	Crop & animal production	12,801.4	14,899.9	15,003.7	15,289.3	17,283.5	21,314.5	22,864.1
	Forestry & logging	1,841.9	1,659.7	1,863.6	1,928.4	1,596.0	1,277.6	1,688.5
	Fishing & aquaculture	1,795.2	2,103.3	2,287.4	2,326.8	2,430.3	1,914.2	1,972.7
B	Mining & Quarrying	21,784.0	27,232.1	31,010.1	33,361.3	28,339.0	32,104.0	48,373.9
	Extraction of Crude Petroleum & Natural gas	12,381.8	15,325.5	17,805.3	18,871.5	14,897.1	20,021.2	33,716.6
	Other Mining	9,402.2	11,906.6	13,204.8	14,489.8	13,442.0	12,082.8	14,657.3
C	Manufacturing	6,390.5	6,988.5	6,764.9	6,962.8	6,777.8	7,483.0	8,473.5
D	Electricity,Gas,Steam & Aircon Supply	1,328.8	1,391.0	1,502.0	1,614.7	1,699.7	1,666.7	1,694.3
E	Water Supply, Sewage, Waste Management	384.2	404.2	444.6	463.0	479.8	517.2	565.8
F	Construction	13,687.0	12,868.5	13,316.0	11,934.9	12,481.5	13,784.1	16,249.6
G	Wholesale & Retail Trade	8,536.4	9,048.7	9,603.7	10,064.6	10,445.9	11,563.4	13,174.3
H	Transport & Storage	4,859.8	5,066.6	5,374.0	5,789.7	4,370.3	4,668.1	5,509.8
I	Accommodation & Food Service Activity	1,884.9	2,008.1	2,366.1	2,312.5	2,170.8	2,357.7	2,638.0
J	Information & Communication	2,341.3	2,399.3	2,598.4	2,972.0	3,090.9	3,461.7	4,032.9
K	Financial & Insurance Activities	3,302.8	3,367.6	3,589.1	3,611.8	3,458.2	3,516.6	3,811.5
	Finance	2,025.3	2,140.0	2,282.0	2,219.1	2,062.5	2,201.8	2,412.6
	Insurance	1,277.5	1,227.5	1,307.1	1,392.6	1,395.7	1,314.8	1,398.9
L	Real Estate Activities	5,353.2	5,848.4	6,217.9	6,623.0	7,103.5	7,413.7	8,022.5
	Rent & Other	2,435.2	2,676.8	2,799.4	2,964.6	3,149.1	3,155.9	3,401.0
	Imputed Rent	2,918.0	3,171.6	3,418.5	3,658.4	3,954.4	4,257.9	4,621.6
M	Professional,Scientific & Technical Activities	1,223.8	1,225.0	1,161.5	1,346.1	1,414.5	1,447.1	1,567.2
N	Administrative & Support Service Activities	7,842.0	8,303.7	9,836.3	10,636.1	10,746.5	11,271.6	12,926.1
O	Public Administration & Defence	7,025.1	7,485.9	9,812.4	9,233.4	10,390.8	11,999.3	13,264.5
P	Education	2,248.5	2,306.4	2,561.1	2,391.8	2,728.3	3,131.8	3,403.5
Q	Human Health & Social Work Activities	2,744.7	2,724.5	2,927.1	2,742.9	4,312.1	4,992.2	5,504.1
R	Arts,Entertainmentand Recreation	60.4	52.4	57.0	58.3	55.7	66.0	75.0
S	Other Service Activities	1,449.1	1,470.5	1,546.2	1,664.2	1,435.2	1,644.2	1,977.7
T	Activities Of Households As Employers	28.1	30.5	32.9	35.2	38.1	37.9	41.2
	Output at Basic Prices	108,913.1	118,884.8	129,876.1	133,362.7	132,848.3	147,632.6	177,830.5

TABLE 3. INDUSTRY OUTPUT, CURRENT PRICE ESTIMATE CHANGE (a)

		2016	2017	2018	2019	2020	2021	2022
A	Agriculture, Forestry & Fishing	9.5%	13.5%	2.6%	2.0%	9.0%	15.0%	8.2%
	Crop & Animal Production	5.8%	16.4%	0.7%	1.9%	13.0%	23.3%	7.3%
	Forestry & Logging	6.9%	-9.9%	12.3%	3.5%	-17.2%	-20.0%	32.2%
	Fishing & Aquaculture	50.4%	17.2%	8.8%	1.7%	4.5%	-21.2%	3.1%
B	Mining & Quarrying	2.7%	25.0%	13.9%	7.6%	-15.1%	13.3%	50.7%
	Extraction of Crude Petroleum & Natural Gas	-10.6%	23.8%	16.2%	6.0%	-21.1%	34.4%	68.4%
	Other Mining	27.8%	26.6%	10.9%	9.7%	-7.2%	-10.1%	21.3%
C	Manufacturing	10.7%	9.4%	-3.2%	2.9%	-2.7%	10.4%	13.2%
D	Electricity, Gas, Steam & Airconditioning Supply	5.1%	4.7%	8.0%	7.5%	5.3%	-1.9%	1.7%
E	Water Supply, Sewage, Waste Management	4.2%	5.2%	10.0%	4.1%	3.6%	7.8%	9.4%
F	Construction	8.7%	-6.0%	3.5%	-10.4%	4.6%	10.4%	17.9%
G	Wholesale & Retail Trade	8.0%	6.0%	6.1%	4.8%	3.8%	10.7%	13.9%
H	Transport & Storage	4.2%	4.3%	6.1%	7.7%	-24.5%	6.8%	18.0%
I	Accommodation & Food Service Activity	3.7%	6.5%	17.8%	-2.3%	-6.1%	8.6%	11.9%
J	Information & Communication	4.6%	2.5%	8.3%	14.4%	4.0%	12.0%	16.5%
K	Financial & Insurance Activities	2.9%	2.0%	6.6%	0.6%	-4.3%	1.7%	8.4%
	Finance	-0.4%	5.7%	6.6%	-2.8%	-7.1%	6.8%	9.6%
	Insurance	8.8%	-3.9%	6.5%	6.5%	0.2%	-5.8%	6.4%
L	Real Estate Activities	12.5%	9.3%	6.3%	6.5%	7.3%	4.4%	8.2%
	Rent & Other	15.6%	9.9%	4.6%	5.9%	6.2%	0.2%	7.8%
	Imputed Rent	10.0%	8.7%	7.8%	7.0%	8.1%	7.7%	8.5%
M	Professional, Scientific & Technical Activities	4.6%	0.1%	-5.2%	15.9%	5.1%	2.3%	8.3%
N	Administrative & Support Service Activities	7.2%	5.9%	18.5%	8.1%	1.0%	4.9%	14.7%
O	Public Administration & Defence	3.0%	6.6%	31.1%	-5.9%	12.5%	15.5%	10.5%
P	Education	11.7%	2.6%	11.0%	-6.6%	14.1%	14.8%	8.7%
Q	Human Health & Social Work Activities	-12.5%	-0.7%	7.4%	-6.3%	57.2%	15.8%	10.3%
R	Arts, Entertainment and Recreation	5.3%	-13.3%	8.7%	2.4%	-4.5%	18.5%	13.5%
S	Other Service Activities	3.4%	1.5%	5.1%	7.6%	-13.8%	14.6%	20.3%
T	Activities of Households as Employers	10.0%	8.7%	7.8%	7.0%	8.1%	-0.4%	8.5%
	Output at Basic Prices	6.0%	9.2%	9.2%	2.7%	-0.4%	11.1%	20.5%

(a) Percentage change on preceding year.

TABLE 4. INDUSTRY GROSS VALUE ADDED, CURRENT PRICE ESTIMATE

(KINA MILLIONS)

		2016	2017	2018	2019	2020	2021	2022
A	Agriculture, Forestry & Fishing	11,619.9	12,799.8	13,478.0	14,233.7	15,476.0	17,399.7	18,835.3
	Crop & Animal Production	9,877.3	10,967.1	11,468.8	12,149.2	13,424.0	15,592.2	16,805.6
	Forestry & Logging	798.5	761.1	851.8	888.5	788.9	694.5	859.3
	Fishing & Aquaculture	944.1	1,071.6	1,157.4	1,196.1	1,263.1	1,113.0	1,170.4
B	Mining & Quarrying	15,520.2	19,382.3	22,125.1	23,758.4	20,041.3	23,206.0	35,533.1
	Extraction of Crude Petroleum & Natural Gas	9,657.8	11,953.9	13,888.2	14,719.8	11,663.3	15,675.2	26,397.7
	Other Mining	5,862.4	7,428.5	8,237.0	9,038.7	8,377.9	7,530.8	9,135.4
C	Manufacturing	1,256.1	1,410.8	1,369.1	1,417.8	1,390.6	1,559.0	1,812.5
D	Electricity, Gas, Steam & Airconditioning Supply	541.2	588.2	638.0	685.8	722.3	709.0	721.1
E	Water Supply, Sewage, Waste Management	124.9	137.9	152.1	158.3	176.5	191.2	209.5
F	Construction	5,145.4	4,849.6	5,035.1	4,759.5	4,938.2	5,532.9	6,602.1
G	Wholesale & Retail Trade	6,345.9	6,844.9	7,368.9	7,750.6	8,106.7	8,973.0	10,106.7
H	Transport & Storage	1,462.3	1,614.7	1,773.0	2,013.4	1,667.5	1,793.2	2,124.9
I	Accommodation & Food Service Activity	1,131.0	1,211.5	1,439.7	1,416.2	1,352.0	1,445.6	1,620.5
J	Information & Communication	1,048.3	1,074.2	1,166.9	1,334.6	1,406.0	1,665.7	1,906.4
K	Financial & Insurance Activities	1,881.4	1,951.4	2,076.0	2,055.4	1,919.5	1,997.6	2,176.4
	Finance	1,503.5	1,588.6	1,690.7	1,644.8	1,508.0	1,610.0	1,763.9
	Insurance	377.9	362.7	385.3	410.6	411.5	387.6	412.4
L	Real Estate Activities	4,080.3	4,453.6	4,741.4	5,054.9	5,435.9	5,689.0	6,157.7
	Rent & Other	1,600.1	1,757.7	1,835.7	1,945.3	2,074.6	2,069.8	2,229.3
	Imputed Rent	2,480.3	2,695.9	2,905.7	3,109.6	3,361.2	3,619.2	3,928.4
M	Professional, Scientific, & Technical Activities	695.6	682.4	647.1	793.1	833.4	855.0	942.0
N	Administrative & Support Service Activities	4,704.8	5,030.9	5,924.2	6,430.8	6,686.7	7,030.1	8,075.6
O	Public Administration & Defence	3,193.0	3,358.0	3,801.0	3,928.9	4,390.3	4,732.2	5,056.2
P	Education	1,875.2	1,968.7	2,112.9	2,187.4	2,275.6	2,415.9	2,570.0
Q	Human Health & Social Work Activities	1,374.8	1,436.0	1,515.7	1,571.7	1,771.3	1,933.7	2,063.6
R	Arts, Entertainment and Recreation	26.9	25.3	27.7	28.7	28.7	32.3	36.1
S	Other Service Activities	402.7	420.1	447.0	480.8	425.9	436.0	522.8
T	Activities of Households as Employers	24.2	26.4	28.4	30.4	32.9	35.4	38.4
	GVA at Basic Prices	62,454.2	69,266.5	75,867.4	80,090.6	79,077.0	87,632.4	107,110.7
Taxes less subsidies on products		2,584.1	3,255.1	3,537.3	3,753.1	3,438.0	3,993.3	4,130.5
Gross Domestic Product (GDP)		65,038.3	72,521.6	79,404.7	83,843.7	82,515.0	91,625.7	111,241.2

TABLE 5. INDUSTRY GROSS VALUE ADDED, CURRENT PRICE ESTIMATE - CHANGE (a)

		2016	2017	2018	2019	2020	2021	2022
A	Agriculture, Forestry & Fishing	10.7%	10.2%	5.3%	5.6%	8.7%	12.4%	8.3%
	Crop & Animal Production	9.2%	11.0%	4.6%	5.9%	10.5%	16.2%	7.8%
	Forestry & Logging	8.9%	-4.7%	11.9%	4.3%	-11.2%	-12.0%	23.7%
	Fishing & Aquaculture	31.7%	13.5%	8.0%	3.3%	5.6%	-11.9%	5.2%
B	Mining & Quarrying	6.9%	24.9%	14.2%	7.4%	-15.6%	15.8%	53.1%
	Extraction of Crude Petroleum & Natural Gas	-3.1%	23.8%	16.2%	6.0%	-20.8%	34.4%	68.4%
	Other Mining	29.0%	26.7%	10.9%	9.7%	-7.3%	-10.1%	21.3%
C	Manufacturing	17.5%	12.3%	-3.0%	3.6%	-1.9%	12.1%	16.3%
D	Electricity, Gas, Steam & Aircon Supply	5.3%	8.7%	8.5%	7.5%	5.3%	-1.8%	1.7%
E	Water Supply, Sewage, Waste Management	10.7%	10.5%	10.3%	4.1%	11.5%	8.3%	9.6%
F	Construction	9.0%	-5.7%	3.8%	-5.5%	3.8%	12.0%	19.3%
G	Wholesale & Retail Trade	9.1%	7.9%	7.7%	5.2%	4.6%	10.7%	12.6%
H	Transport & Storage	5.9%	10.4%	9.8%	13.6%	-17.2%	7.5%	18.5%
I	Accommodation & Food Service Activity	5.6%	7.1%	18.8%	-1.6%	-4.5%	6.9%	12.1%
J	Information & Communication	4.6%	2.5%	8.6%	14.4%	5.4%	18.5%	14.4%
K	Financial & Insurance Activities	1.4%	3.7%	6.4%	-1.0%	-6.6%	4.1%	8.9%
	Finance	-0.4%	5.7%	6.4%	-2.7%	-8.3%	6.8%	9.6%
	Insurance	9.3%	-4.0%	6.2%	6.5%	0.2%	-5.8%	6.4%
L	Real Estate Activities	12.3%	9.1%	6.5%	6.6%	7.5%	4.7%	8.2%
	Rent & Other	16.2%	9.9%	4.4%	6.0%	6.7%	-0.2%	7.7%
	Imputed Rent	10.0%	8.7%	7.8%	7.0%	8.1%	7.7%	8.5%
M	Professional, Scientific & Technical Activities	2.9%	-1.9%	-5.2%	22.6%	5.1%	2.6%	10.2%
N	Administrative & Support Service Activities	9.0%	6.9%	17.8%	8.6%	4.0%	5.1%	14.9%
O	Public Administration & Defence	6.9%	5.2%	13.2%	3.4%	11.7%	7.8%	6.8%
P	Education	10.5%	5.0%	7.3%	3.5%	4.0%	6.2%	6.4%
Q	Human Health & Social Work Activities	21.4%	4.5%	5.6%	3.7%	12.7%	9.2%	6.7%
R	Arts, Entertainment and Recreation	5.0%	-6.2%	9.4%	4.0%	0.0%	12.4%	11.7%
S	Other Service Activities	-2.9%	4.3%	6.4%	7.6%	-11.4%	2.4%	19.9%
T	Activities of Households as Employers	10.0%	8.7%	7.8%	7.0%	8.1%	7.7%	8.5%
	GVA at Basic Prices	8.7%	10.9%	9.5%	5.6%	-1.3%	10.8%	22.2%
Taxes less subsidies on products		-3.6%	26.0%	8.7%	6.1%	-8.4%	16.2%	3.4%
Gross Domestic Product (GDP)		8.1%	11.5%	9.5%	5.6%	-1.6%	11.0%	21.4%

(a) Percentage change on preceding year.

TABLE 6. INDUSTRY SHARE OF GROSS VALUE ADDED, CURRENT PRICE-PERCENTAGE (%) (a)

		2016	2017	2018	2019	2020	2021	2022
A	Agriculture, Forestry & Fishing	18.6%	18.5%	17.8%	17.8%	19.6%	19.9%	17.6%
B	Mining & Quarrying	24.9%	28.0%	29.2%	29.7%	25.3%	26.5%	33.2%
C	Manufacturing	2.0%	2.0%	1.8%	1.8%	1.8%	1.8%	1.7%
D	Electricity, Gas, Steam & Aircon Supply	0.9%	0.8%	0.8%	0.9%	0.9%	0.8%	0.7%
E	Water Supply, Sewage, Waste Management	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%
F	Construction	8.2%	7.0%	6.6%	5.9%	6.2%	6.3%	6.2%
G	Wholesale & Retail Trade	10.2%	9.9%	9.7%	9.7%	10.3%	10.2%	9.4%
H	Transport & Storage	2.3%	2.3%	2.3%	2.5%	2.1%	2.0%	2.0%
I	Accommodation & Food Service Activity	1.8%	1.7%	1.9%	1.8%	1.7%	1.6%	1.5%
J	Information & Communication	1.7%	1.6%	1.5%	1.7%	1.8%	1.9%	1.8%
K	Financial & Insurance Activities	3.0%	2.8%	2.7%	2.6%	2.4%	2.3%	2.0%
L	Real Estate Activities	6.5%	6.4%	6.2%	6.3%	6.9%	6.5%	5.7%
M	Professional, Scientific, & Technical Activities	1.1%	1.0%	0.9%	1.0%	1.1%	1.0%	0.9%
N	Administrative & Support Service Activities	7.5%	7.3%	7.8%	8.0%	8.5%	8.0%	7.5%
O	Public Administration & Defence	5.1%	4.8%	5.0%	4.9%	5.6%	5.4%	4.7%
P	Education	3.0%	2.8%	2.8%	2.7%	2.9%	2.8%	2.4%
Q	Human Health & Social Work Activities	2.2%	2.1%	2.0%	2.0%	2.2%	2.2%	1.9%
R	Arts, Entertainment and Recreation	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
S	Other Service Activities	0.6%	0.6%	0.6%	0.6%	0.5%	0.5%	0.5%
T	Activities of Households as Employers	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

(a) Percentage for the total

TABLE 7A. GROSS VALUE ADDED BY INSTITUTIONAL SECTORS, CURRENT PRICE ESTIMATES

(KINA MILLIONS)

	2016	2017	2018	2019	2020	2021	2022
Non-Financial Corporations	35,894.7	40,643.8	44,752.1	47,279.6	43,808.6	49,480.6	65,889.9
Financial Corporations	1,701.5	1,755.8	1,865.3	1,829.7	1,675.7	1,735.0	1,891.4
Government	5,699.1	6,076.4	6,749.3	6,982.5	7,653.1	8,238.3	8,775.8
Households	19,158.8	20,790.5	22,500.8	24,000.6	25,939.6	28,164.9	30,544.2
Gross Value Added at Basic Prices	62,454.2	69,266.5	75,867.4	80,092.4	79,077.0	87,618.7	107,101.3

TABLE 7B. CURRENT PRICE, PERCENTAGE (%) CHANGE (a)

	2016	2017	2018	2019	2020	2021	2022
Non-Financial Corporations	8.2%	13.2%	10.1%	5.6%	-7.3%	12.9%	33.2%
Financial Corporations	0.6%	3.2%	6.2%	-1.9%	-8.4%	3.5%	9.0%
Government	10.5%	6.6%	11.1%	3.5%	9.6%	7.6%	6.5%
Households	9.8%	8.5%	8.2%	6.7%	8.1%	8.6%	8.4%
Gross Value Added at Basic Prices	8.7%	10.9%	9.5%	5.6%	-1.3%	10.8%	22.2%

(a) Percentage change on preceding year.

TABLE 8. INDUSTRY GROSS VALUE ADDED, CONSTANT PRICE ESTIMATES

		2016	2017	2018	2019	2020	2021	2022
A	Agriculture, Forestry & Fishing	9,496.9	9,720.4	10,164.7	10,394.4	10,588.1	10,702.6	11,035.3
	Crop & Animal Production	8,026.5	8,327.0	8,558.9	8,777.4	9,051.8	9,454.7	9,686.5
	Forestry & Logging	682.1	578.9	692.5	691.8	604.9	493.5	601.4
	Fishing & Aquaculture	788.3	814.6	913.3	925.2	931.4	754.4	747.4
B	Mining & Quarrying	19,123.9	20,667.3	18,775.3	20,889.1	18,976.7	16,774.3	17,636.1
	Extraction of Crude Petroleum & Natural Gas	12,859.9	13,389.9	11,339.6	13,056.7	12,960.5	12,034.6	12,198.5
	Other Mining	6,264.0	7,277.4	7,435.7	7,832.4	6,016.2	4,739.7	5,437.6
C	Manufacturing	1,043.3	1,081.8	1,008.9	1,003.1	938.7	1,007.1	1,112.1
D	Electricity, Gas, Steam & Aircon Supply	511.9	535.7	559.1	581.5	608.3	593.4	596.6
E	Water Supply, Sewage, Waste Management	90.7	95.5	105.0	109.3	116.2	123.9	133.0
F	Construction	4,181.8	3,739.2	3,704.1	3,387.0	3,381.0	3,625.5	4,109.8
G	Wholesale & Retail Trade	5,363.2	5,427.4	5,532.2	5,616.3	5,610.2	5,942.9	6,349.2
H	Transport & Storage	1,343.8	1,359.5	1,407.1	1,458.2	1,163.2	1,197.8	1,343.5
I	Accommodation & Food Service Activity	972.1	1,013.6	1,119.4	1,104.4	1,011.9	1,059.3	1,125.3
J	Information & Communication	1,151.8	1,180.3	1,209.3	1,402.1	1,493.5	1,774.8	1,998.4
K	Financial & Insurance Activities	1,581.4	1,555.8	1,583.2	1,510.0	1,345.1	1,339.7	1,386.8
	Finance	1,263.8	1,266.6	1,289.3	1,208.4	1,056.7	1,079.8	1,124.0
	Insurance	317.6	289.2	293.9	301.6	288.3	260.0	262.8
L	Real Estate Activities	3,392.4	3,511.6	3,582.1	3,679.6	3,774.9	3,787.1	3,893.9
	Rent & Other	1,307.7	1,362.2	1,366.1	1,394.9	1,419.4	1,358.5	1,390.1
	Imputed Rent	2,084.7	2,149.3	2,216.0	2,284.7	2,355.5	2,428.5	2,503.8
M	Professional, Scientific & Technical Activities	639.9	607.6	551.1	615.2	616.6	605.7	633.9
N	Administrative & Support Service Activities	3,948.9	3,969.3	4,485.3	4,670.8	4,632.7	4,663.8	5,088.4
O	Public Administration & Defence	2,748.6	2,800.2	3,079.3	3,095.1	3,370.1	3,623.8	3,761.4
P	Education	1,640.0	1,674.6	1,726.4	1,738.3	1,761.9	1,867.1	1,930.3
Q	Human Health & Social Work Activities	1,116.8	1,150.3	1,215.0	1,223.3	1,343.3	1,455.3	1,503.9
R	Arts, Entertainment and Recreation	22.1	19.7	20.4	20.5	19.6	21.0	22.3
S	Other Service Activities	357.4	346.3	349.2	361.9	305.4	298.3	339.9
T	Activities of Households as Employers	20.4	21.0	21.7	22.3	23.0	23.7	24.5
	GVA at Basic Prices	58,747.3	60,477.2	60,198.7	62,882.2	61,080.6	60,487.2	64,024.4
Taxes less subsidies on products		2,172.0	2,595.2	2,697.6	2,832.1	2,552.3	2,649.2	2,373.0
Gross Domestic Product (GDP)		60,919.3	63,072.4	62,896.3	65,714.4	63,632.9	63,136.4	66,397.4

TABLE 9. INDUSTRY GROSS VALUE ADDED, CONSTANT PRICE ESTIMATES-CHANGE (a)

		2016	2017	2018	2019	2020	2021	2022
A	Agriculture, Forestry & Fishing - Formal	2.7%	2.4%	4.6%	2.3%	1.9%	1.1%	3.1%
	Crop & Animal Production	1.3%	3.7%	2.8%	2.6%	3.1%	4.5%	2.5%
	Forestry & Logging	-1.2%	-15.1%	19.6%	-0.1%	-12.6%	-18.4%	21.9%
	Fishing & Aquaculture	23.3%	3.3%	12.1%	1.3%	0.7%	-19.0%	-0.9%
B	Mining & Quarrying	15.3%	8.1%	-9.2%	11.3%	-9.2%	-11.6%	5.1%
	Extraction of Crude Petroleum & Natural Gas	14.3%	4.1%	-15.3%	15.1%	-0.7%	-7.1%	1.4%
	Other Mining	17.4%	16.2%	2.2%	5.3%	-23.2%	-21.2%	14.7%
C	Manufacturing	3.8%	3.7%	-6.7%	-0.6%	-6.4%	7.3%	10.4%
D	Electricity, Gas, Steam & Airconditioning Supply	5.1%	4.6%	4.4%	4.0%	4.6%	-2.5%	0.5%
E	Water Supply, Sewage, Waste Management	4.2%	5.2%	10.0%	4.1%	6.3%	6.7%	7.3%
F	Construction	1.9%	-10.6%	-0.9%	-8.6%	-0.2%	7.2%	13.4%
G	Wholesale & Retail Trade	1.7%	1.2%	1.9%	1.5%	-0.1%	5.9%	6.8%
H	Transport & Storage	2.4%	1.2%	3.5%	3.6%	-20.2%	3.0%	12.2%
I	Accommodation & Food Service Activity	0.3%	4.3%	10.4%	-1.3%	-8.4%	4.7%	6.2%
J	Information & Communication	4.4%	2.5%	2.5%	15.9%	6.5%	18.8%	12.6%
K	Financial & Insurance Activities	-5.0%	-1.6%	1.8%	-4.6%	-10.9%	-0.4%	3.5%
	Finance	-6.6%	0.2%	1.8%	-6.3%	-12.5%	2.2%	4.1%
	Insurance	2.4%	-8.9%	1.6%	2.6%	-4.4%	-9.8%	1.1%
L	Real Estate Activities	4.9%	3.5%	2.0%	2.7%	2.6%	0.3%	2.8%
	Rent & Other	7.9%	4.2%	0.3%	2.1%	1.8%	-4.3%	2.3%
	Imputed Rent	3.1%	3.1%	3.1%	3.1%	3.1%	3.1%	3.1%
M	Professional, Scientific & Technical Activities	-2.0%	-5.0%	-9.3%	11.6%	0.2%	-1.8%	4.6%
N	Administrative & Support Service Activities	0.6%	0.5%	13.0%	4.1%	-0.8%	0.7%	9.1%
O	Public Administration & Defence	1.7%	1.9%	10.0%	0.5%	8.9%	7.5%	3.8%
P	Education	5.7%	2.1%	3.1%	0.7%	1.4%	6.0%	3.4%
Q	Human Health & Social Work Activities	15.8%	3.0%	5.6%	0.7%	9.8%	8.3%	3.3%
R	Arts, Entertainment and Recreation	0.1%	-10.9%	3.7%	0.3%	-4.2%	7.2%	5.9%
S	Other Service Activities	-2.5%	-3.1%	0.8%	3.6%	-15.6%	-2.3%	13.9%
T	Activities of Households as Employers	3.1%	3.1%	3.1%	3.1%	3.1%	3.1%	3.1%
	GVA at Basic Prices	6.3%	2.9%	-0.5%	4.5%	-2.9%	-1.0%	5.8%
Taxes less subsidies on products		-11.9%	19.5%	3.9%	5.0%	-9.9%	3.8%	-10.4%
Gross Domestic Product (GDP)		5.5%	3.5%	-0.3%	4.5%	-3.2%	-0.8%	5.2%

(a) Percentage change on preceding year.

TABLE 10. GDP IMPLICIT PRICE INDICES INDUSTRY

		2016	2017	2018	2019	2020	2021	2022
A	Agriculture, Forestry & Fishing - Formal	122	132	133	137	146	163	171
	Crop & Animal Production	123	132	134	138	148	165	173
	Forestry & Logging	117	131	123	128	130	141	143
	Fishing & Aquaculture	120	132	127	129	136	148	157
B	Mining & Quarrying	81	94	118	114	106	138	201
	Extraction of Crude Petroleum & Natural Gas	75	89	122	113	90	130	216
	Other Mining	94	102	111	115	139	159	168
C	Manufacturing	120	130	136	141	148	155	163
D	Electricity, Gas, Steam & Airconditioning Supply	106	110	114	118	119	119	121
E	Water Supply, Sewage, Waste Management	138	144	145	145	152	154	158
F	Construction	123	130	136	141	146	153	161
G	Wholesale & Retail Trade	118	126	133	138	144	151	159
H	Transport & Storage	109	119	126	138	143	150	158
I	Accommodation & Food Service Activity	116	120	129	128	134	136	144
J	Information & Communication	91	91	96	95	94	94	95
K	Financial & Insurance Activities	119	125	131	136	143	149	157
	Finance	119	125	131	136	143	149	157
	Insurance	119	125	131	136	143	149	157
L	Real Estate Activities	120	127	132	137	144	150	158
	Rent & Other	122	129	134	139	146	152	160
	Imputed Rent	119	125	131	136	143	149	157
M	Professional, Scientific & Technical Activities	109	112	117	129	135	141	149
N	Administrative & Support Service Activities	119	127	132	138	144	151	159
O	Public Administration & Defence	116	120	123	127	130	131	134
P	Education	114	118	122	126	129	129	133
Q	Human Health & Social Work Activities	123	125	125	128	132	133	137
R	Arts, Entertainment and Recreation	122	128	135	140	146	154	162
S	Other Service Activities	113	121	128	133	139	146	154
T	Activities of Households as Employers	119	125	131	136	143	149	157
	GVA at Basic Prices	106	115	126	127	129	145	167

(a) PNGSIC Sections R, S and T

TABLE 11. GDP IMPLICIT PRICE INDICES INDUSTRY

PRICE INDEXES PERCENTAGE CHANGE

		2016	2017	2018	2019	2020	2021	2022
A	Agriculture, Forestry & Fishing - Formal	7.8%	7.6%	0.7%	3.3%	6.7%	11.2%	5.0%
	Crop & Animal Production	7.7%	7.0%	1.7%	3.3%	7.1%	11.2%	5.2%
	Forestry & Logging	10.3%	12.3%	-6.4%	4.4%	1.5%	7.9%	1.5%
	Fishing & Aquaculture	6.9%	9.8%	-3.7%	2.0%	4.9%	8.8%	6.1%
B	Mining & Quarrying	-7.3%	15.6%	25.7%	-3.5%	-7.1%	31.0%	45.6%
	Extraction of Crude Petroleum & Natural Gas	-15.3%	18.9%	37.2%	-8.0%	-20.2%	44.7%	66.1%
	Other Mining	9.9%	9.1%	8.5%	4.2%	20.7%	14.1%	5.7%
C	Manufacturing	13.3%	8.3%	4.1%	4.2%	4.8%	4.5%	5.3%
D	Electricity, Gas, Steam & Airconditioning Supply	0.2%	3.9%	3.9%	3.4%	0.7%	0.6%	1.2%
E	Water Supply, Sewage, Waste Management	6.3%	5.0%	0.3%	0.1%	4.8%	1.5%	2.1%
F	Construction	7.0%	5.4%	4.8%	3.4%	3.9%	4.5%	5.3%
G	Wholesale & Retail Trade	7.3%	6.6%	5.6%	3.6%	4.7%	4.5%	5.4%
H	Transport & Storage	3.4%	9.1%	6.1%	9.6%	3.8%	4.4%	5.6%
I	Accommodation & Food Service Activity	5.3%	2.7%	7.6%	-0.3%	4.2%	2.1%	5.5%
J	Information & Communication	0.2%	0.0%	6.0%	-1.4%	-1.1%	-0.3%	1.6%
K	Financial & Insurance Activities	6.7%	5.4%	4.5%	3.8%	4.8%	4.5%	5.3%
	Finance	6.7%	5.4%	4.5%	3.8%	4.8%	4.5%	5.3%
	Insurance	6.7%	5.4%	4.5%	3.8%	4.8%	4.5%	5.3%
L	Real Estate Activities	7.1%	5.4%	4.4%	3.8%	4.8%	4.3%	5.3%
	Rent & Other	7.7%	5.5%	4.1%	3.8%	4.8%	4.2%	5.3%
	Imputed Rent	6.7%	5.4%	4.5%	3.8%	4.8%	4.4%	5.3%
M	Professional, Scientific & Technical Activities	5.0%	3.3%	4.5%	9.8%	4.8%	4.4%	5.3%
N	Administrative & Support Service Activities	8.4%	6.4%	4.2%	4.2%	4.8%	4.4%	5.3%
O	Public Administration & Defence	5.1%	3.2%	2.9%	2.8%	2.6%	0.2%	2.9%
P	Education	4.6%	2.8%	4.1%	2.8%	2.6%	0.2%	2.9%
Q	Human Health & Social Work Activities	4.9%	1.4%	-0.1%	3.0%	2.6%	0.8%	3.3%
R	Arts, Entertainment and Recreation	4.9%	5.3%	5.6%	3.6%	4.3%	4.9%	5.5%
S	Other Service Activities	-0.4%	7.6%	5.5%	3.8%	4.9%	4.8%	5.2%
T	Activities of Households as Employers	6.7%	5.4%	4.5%	3.8%	4.8%	4.4%	5.3%
	GVA at Basic Prices	2.3%	7.7%	10.0%	1.1%	1.6%	11.9%	15.5%

(a) Percentage change on preceding year.

EXPLANATORY NOTES

INTRODUCTION

This publication contains National Accounts estimates for the seven (7) years from 2016 to 2022. Estimates are provided for Gross Domestic Product (GDP) by industry and institutional sector. For definitions and description of items in the national accounts, see Glossary.

CONCEPTS, SOURCES AND METHODS

PNG national accounts statistics are compiled in accordance with international standards contained in the System of National Accounts of 2008 (SNA08). National estimates are based on the concepts and conventions embodied in the SNA.

GROSS DOMESTIC PRODUCT (GDP)

GDP can be derived by three broad approaches: the income approach (I), the expenditure approach (E) and the production approach (P). A description of each approach is provided in the following paragraphs. While each approach should conceptually deliver the same GDP estimate, the results may differ with some possible differences when compiled independently using different data sources. The estimates presented in this publication have largely been derived by the production approach. The GDP derivation can incorporate the income and expenditure approaches as additional data sources on households and businesses becomes available.

Income approach (I)

GDP using the income approach is derived as the sum of compensation of employees, gross operating surplus, gross mixed income, and taxes less subsidies on production and imports.

Expenditure approach (E)

GDP using the expenditure approach is derived as the sum of all final expenditures, changes in inventories and exports of goods and services less imports of goods and services.

Production approach (P)

GDP using the production approach is derived as the sum of gross value added for each industry, at basic prices, plus taxes less subsidies on products. Basic values represent the amounts received by producers, including the value of any subsidies on products, but before any taxes on products.

FINANCIAL INTERMEDIATION SERVICES

In the national accounts, estimates are made for the output of banks and similar institutions who produce services through the provision of deposit and loan services. Often there is no single explicit charge for these services and instead the relevant financial institutions set interest rates such that a service margin can be earned. Thus, interest rates on loans are higher than would otherwise be the case if there were no service element provided and interest rates on deposits are lower than would otherwise be the case.

FOREIGN AID (COMPENSATION OF EMPLOYEES)

The output of foreign aid workers working within PNG domestic aid programs falls within the scope of PNG's Gross Domestic Product. The activity of foreign aid workers is classified within the PNG Standard Industry Classification as 'Activities of extra territorial organisations and bodies. This foreign aid' output has been estimated for 2014 through to 2020 and is included within the 'Public administration and defence' Industry (Industry O).

FORMAL AND INFORMAL ECONOMIC ACTIVITY

Formal activity (usually production) of businesses, employees or households is often regulated by government laws. These activities are observable to NSO, either through administrative data or survey collection activity. Given some data gaps on the size of the economically active businesses population in Papua New Guinea, the formal business sector is effectively defined by businesses remitting with respect to Goods and Services Tax (GST). The business is non-dormant and is generating economic output evidenced by GST debits or GST credits remitted to the Internal Revenue Commission (IRC). In contrast, the economic activity of businesses either not remitting GST (above or below the GST threshold) constitutes informal economic activity. The production of goods, particularly agricultural products consumed by the household, constitutes informal economic activity. The production of goods and services which are sold in local markets is also defined as informal economic activity.

INDUSTRY CLASSIFICATION

The industry statistics in this publication are based on the Papua New Guinea Standard Industrial Classification (PNGSIC), 2014. The classification has been derived from the United Nations (UN) International Standard Industrial Classification (ISIC) Revision 4 of all economic activities modified in order to better reflect the forms of economic activity which exist in PNG. The PNGSIC 2014 replaces PNGSIC 2000 which was developed using ISIC Rev. 3 which was used in the last published national accounts in respect of 2006. The structure of PNGSIC 2014 is more detailed than PNGSIC 2000 and identifies new industries separately. This is especially so in respect of services, where a new section entitled "Information and communication" has been introduced to better reflect current economic phenomena.

INSTITUTIONAL SECTOR

Data has been collected and compiled for the following main institutional units, in preparing the production measure of GDP estimates:

- Non-Financial Corporations
- Financial Corporations
- General Government
- Households

NATIONAL ACCOUNTS

A set of seven accounts defined within the System of National Accounts which measures the economic activity, corresponding financial flows and stock changes within a country during a specified period. One of these accounts is the production account, which measures the level of economic activity within a country during a specified period (usually one year).



OUTPUT OF NON-FINANCIAL CORPORATIONS

Business register information was not available to estimate the level of economic activity during the compilation of these GDP estimates. Therefore, taxation data, complemented with business survey data (the Annual Survey of Business Activities and the quarterly Business Liaison Survey) has been used to define the contribution of formal economic activity for the non-financial corporations' sector. Output for the Non-Financial Corporations Sector has been estimated using GST sales data collected from the Internal Revenue Commission (IRC). The IRC provided non-identifiable GST records to the NSO exclusively for statistical purpose. GST sales data includes sales subject to 10% GST, GST exempt sales and also sales subject to GST, but charged at a zero rate. Imputation has been undertaken for missing or partially incomplete GST records.

OUTPUT OF FINANCIAL CORPORATIONS – LENDING INSTITUTIONS

The output of banks is measured indirectly by calculating their income. Banks obtain income from two principal sources. Firstly, through direct charges made in respect of specified services such as credit card and account keeping fees, and secondly, through financial intermediation whereby they accept deposits from customers with surplus funds and make loans to customers requiring finance. The interest rate paid on deposits is generally lower than the rate charged on loans and the differential between the two rates constitutes an implicit service charge. The 2008 SNA terms this charge FISIM, or financial intermediation charge indirectly measured. The sum of FISIM and direct charges is deemed to constitute the value of the banks output. The output of PNG Financial sector was estimated using bank deposit and lending data (deposit and loan volumes) obtained from the Bank of Papua New Guinea (BPNG) along with their corresponding borrowing and lending interest rates. Information on direct banking charges was also sourced from the Bank of PNG.

OUTPUT OF FINANCIAL CORPORATIONS – INSURANCE COMPANIES

As with the commercial banks, the output of insurance companies is estimated indirectly. The 2008 SNA defines the output of general insurance services as premiums plus premium supplements less expected claims. Premium supplements constitute earnings on the insurance companies' technical reserves. The other component of output is expected claims. The output of life insurance and superannuation funds is defined as the change in available funds after deducting payments (claims) from premiums and earnings. The output of PNG's Insurance sector was estimated using insurance premiums and claims data supplied by the Bank of PNG and data collected directly via the Business Liaison Survey. GST sales (Insurance premiums) were also used in the output compilation.

OUTPUT OF GENERAL GOVERNMENT

The PNG Treasury budget is the principal source of information for output of the general government sector. General government includes the national, provincial and local government levels. The national government is the principal source of funds for provincial governments and transfers to other levels of government are contained in the budget papers. Government services are provided on a non-market basis and are conventionally valued at cost. The value of output is therefore calculated as compensation of employees plus intermediate consumption. Data for these components of government expenditure are sourced directly from the PNG Budget papers.

OUTPUT OF HOUSEHOLDS

A large proportion of economic activity is undertaken in the household sector. This includes most agricultural production and a significant proportion of retail activity, transport and housing services.

Household production includes production for own consumption and production for sale through informal outlets such as local markets and street vendors. Informal outlets are those falling outside the regulatory or tax system and do not attract GST. The principal source of informal production data is the Household Income and Expenditure Survey (HIES) of 2009. Household production was estimated for the 2009 reference year and extrapolated using Consumer Price Indexes and National Statistics Office population estimates.

Information from the 2009 HIES was used to estimate the informal economic contribution of the following informal activities:

- betelnut production and distribution
- payday lending activity
- retailing by street vendors
- the provision of local transport
- household manufacturing activity
- construction of low-cost housing

GROSS VALUE ADDED (GVA)

GVA is calculated by subtracting intermediate consumption from the estimate of output. HIES data contained estimates of the costs associated with household production. These estimates were used to produce an estimate of intermediate consumption for 2009-10. Household intermediate consumption estimates for 2009-10 were extrapolated across the 2014 to 2020 time series using Consumer Price Indexes (CPI) and population estimates produced by the National Statistical Office.



ABBREVIATIONS

ABS	Australian Bureau of Statistics
BLS	Business Liaison Survey
BPNG	Bank of Papua New Guinea
COICOP	Classification of Individual Consumption According to Purpose
CPI	Consumer Price Index
GDP	Gross Domestic Product
GST	Goods and Services Tax
GVA	Gross Value Added
HIES	Household Income and Expenditure Survey
IMF	International Monetary Fund
IRC	Internal Revenue Commission
ISIC	International Standard Industry Classification
NSO	National Statistics Office
OECD	Organisation for Economic Co-operation and Development
PNGSIC	Papua New Guinea Standard Industrial Classification
SBA	Survey of Business Activity
SNA	System of National Accounts
SNA08	System of National Accounts 2008 version

GLOSSARY

Administrative Data

Data collected by government agencies in the process of carrying out regulatory functions such as registering businesses or the population; collecting taxes; running health care or education systems; and undertaking law, order, or justice activities.

Annual Income Tax Returns

Annual taxation data collected on business profits by the Internal Revenue Commission (IRC). The data includes components of business income, wages & salaries and details on business expenditure.

Basic Price

The amount receivable by the producer from the purchaser for a unit of a good or service produced as output, minus any tax payable plus any subsidy receivable, on that unit as a consequence of its production or sale; it excludes any transport charges invoiced separately by the producer.

Bank of Papua New Guinea (BPNG)

The Bank of Papua New Guinea (BPNG) is the central bank for the government of Papua New Guinea. The BPNG has prudential responsibility for the PNG banking system and conducts monetary policy on behalf of the central Government. The BPNG undertakes survey activity such as the Business Liaison Survey as part of its operations.

Business Liaison Survey (BLS)

The Business Liaison Survey is a quarterly economic survey run in cooperation with the Bank of Papua New Guinea. The BLS collects business income, expenses including wages and capital expenditure.

Capital Transfers

Transactions in which the ownership of an asset (other than cash and inventories) is transferred from one institutional unit to another, in which cash is transferred to enable the recipient to acquire another asset or in which the funds realised by the disposal of another asset are transferred. Examples include general government capital transfers to private schools for the construction of science blocks or libraries and transfers to charitable organisations for the construction of homes for the aged.

Collective Consumption

Services provided simultaneously to all members of the community or to all members of a particular section of the community, such as all households living in a particular region. Collective services are automatically acquired and consumed by all members of the community, or group of households in question, without any action on their part.

Typical examples are public administration and the provision of security, either at a national or local level. Collective services are the ‘public goods’ of economic theory. By their nature, collective services cannot be sold to individuals on the market, and they are financed by government units out of taxation or other incomes.

The defining characteristics of collective services are as follows: collective services can be delivered simultaneously to every member of the community or of particular sections of the community, such as those in a particular region; the use of such services is usually passive and does not require the explicit agreement or active participation of all the individuals concerned; and the provision of a collective service to one individual does not reduce the amount available to others in the same community or section of the community, i.e. there is no rivalry in acquisition. See also Individual consumption.

Compensation of Employees

The total remuneration, in cash or in kind, payable by an enterprise to an employee in return for work done by the employee during the accounting period. It is further classified into two sub-components: wages and salaries; and employers’ social contributions.

Compensation of employees is not payable in respect of unpaid work undertaken voluntarily, including the work done by members of a household within an unincorporated enterprise owned by the same household. Compensation of employees excludes any taxes payable by the employer on the wage and salary bill (e.g. payroll tax).

Consumption of Fixed Capital

The reduction in the value of fixed assets used in production during the accounting period resulting from physical deterioration, normal obsolescence or normal accidental damage. Unforeseen obsolescence, major catastrophes and the depletion of natural resources are not taken into account.

Current Prices

Estimates are valued at the prices of the period to which the observation relates. For example, estimates for 2020 are valued using 2020 prices.

Current Transfers

Transfers, other than those classified as capital transfers, in which one institutional unit provides a good, service or cash to another unit without receiving from the latter anything of economic value in return.



Current transfers to Non-Profit Institutions

Transfers for non-capital purposes to private non-profit institutions serving households such as hospitals, independent schools, and religious and charitable organisations.

Constant Prices

Estimates are expressed in the price of a base year (for this publication the base year is 2014). It removes the impact of price changes in the time series (2014 to 2020) and shows the volume change in GDP.

Economically Significant Prices Prices which have a significant influence on both the amounts producers are willing to supply and the amounts purchasers wish to buy.

Economically Significant Prices

Prices which have a significant influence on both the amounts producers are willing to supply and the amounts purchasers wish to buy.

Employers' Social Contributions

Payments by employers which are intended to secure for their employees the entitlement to social benefits should certain events occur, or certain circumstances exist, that may adversely affect their employees' income or welfare – namely work-related accidents and retirement.

