

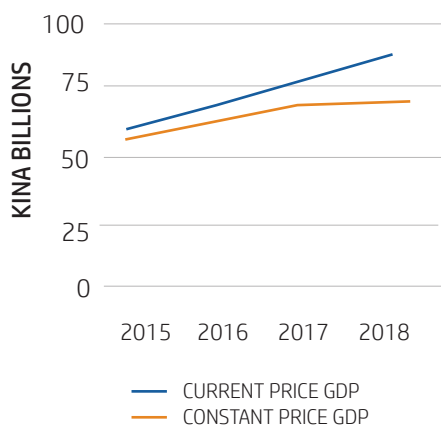


PAPUA NEW GUINEA NATIONAL ACCOUNTS 2011 to 2018

GROSS DOMESTIC PRODUCT AT CURRENT AND CONSTANT PRICE

EMBARGO: 11:30am, Wednesday 11th November, 2020

PNG GDP LEVELS, 2011 to 2018



GDP LEVELS, CURRENT PRICE AND CONSTANT PRICE

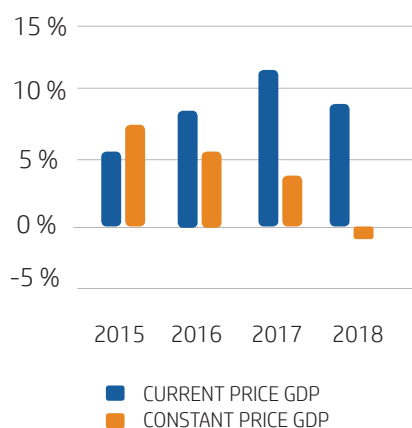
(KINA BILLIONS)

	2015	2016	2017	2018
CURRENT PRICE GDP	60.1	65.0	72.5	79.4
CONSTANT PRICE GDP	57.7	60.9	63.1	62.9

GDP GROWTH, CURRENT PRICE AND CONSTANT PRICE, PERCENTAGE (%) CHANGE

	2015	2016	2017	2018
CURRENT PRICE GDP	5.3%	8.1%	11.5%	9.5%
CONSTANT PRICE GDP	6.6%	5.5%	3.5%	-0.3%

PNG GDP GROWTH, 2011 to 2018



MAIN HIGHLIGHTS OF 2018 GROSS DOMESTIC PRODUCT (GDP)

GDP at Current Prices


Current Price GDP for 2018 is 79.4 billion Kina. This is an increase of 6.9 billion Kina or 9.5% from 2017 Current Price GDP.

GDP at Constant Price

Constant Price GDP for 2018 is 62.9 billion Kina. This was a small fall of 0.2 billion Kina or - 0.3 % from 2017 Constant Price GDP.

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FOREWORD

It is my pleasure to release the Papua New Guinea National Accounts publication on Gross Domestic Product (GDP) at Current and Constant prices for the years 2011 to 2018. The release of this National Accounts series 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. However, more work needs to be done by the NSO and the reporting community as we move towards the annual production of National Accounts for Papua New Guinea.

In the production of this series of National Accounts figures, there were other stakeholders that assisted NSO and I wish to acknowledge their efforts and contribution including other international organisations for the continuous support to NSO. Thus, our sincere gratitude to the Australian Bureau of Statistics (ABS) for the technical assistance provided through their advisors under the partnership arrangement between ABS and PNG NSO in providing advice, guidance, training and mentoring of NSO staff and assistance in the compilation process.

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 discussion team with NSO throughout the whole process.

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 2018; 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 raw financial and non-financial data needed either through NSO's Survey of Business Activities (SBA) or the Business Liaison Survey (BLS) conducted by the Bank of Papua New Guinea. The provision of these data has enabled NSO to produce this National Accounts series, 2011 to 2018.

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 raw data and assurance of integrity and accessibility for users.

Finally, with improved data sources, sound statistical methods, new technologies and strengthened statistical systems, these are critical enablers to better decisions that eventually results in better lives for all of us. As the saying goes: Better Data, Better Lives!

JOHN ASEAVUI IGI TOI
ACTING NATIONAL STATISTICIAN

REVISION ANALYSIS

Current Price Output

The only revision to this publication was in the Education industry due to updated data. This has caused revisions to current price estimates for 2016 and 2017.

Constant Price GDP

The only revision to this publication was in the Mining and Quarrying industry due to updated data. This has caused revisions to constant price estimates for 2015, 2016 and 2017.

OVERVIEW OF PAPUA NEW GUINEA ECONOMY, 2011 to 2018

PNG Gross Domestic Product (GDP), 2011 to 2018

GDP at Current Prices

Current Price GDP for 2018 is 79,405 million Kina, this is an increase of 6,883 million Kina or 9.5% from 2017 Current Price GDP.

Key contributing industries were:

- 2,743 million Kina or 14.2% increase in Mining and Quarrying
- 1,934 million Kina or 16.2% increase in Extraction of Crude Petroleum and Natural Gas
- 809 million Kina or 10.9% increase in other mining
- 893 million Kina or 17.8 % increase in Administrative and Support Service Activities
- 678 million Kina or 5.3 % increase in Agriculture, Forestry and Fishing
- 524 million Kina or 7.7 % increase in Wholesale and Retail Trade.

The main offset to this increase was Manufacturing with a fall of 42 million Kina or -3.0%.

GDP at Constant Price

Constant Price GDP for 2018 is 62,896 million Kina, this is a fall of 176 million Kina or -0.3 % from 2017 Constant Price GDP.

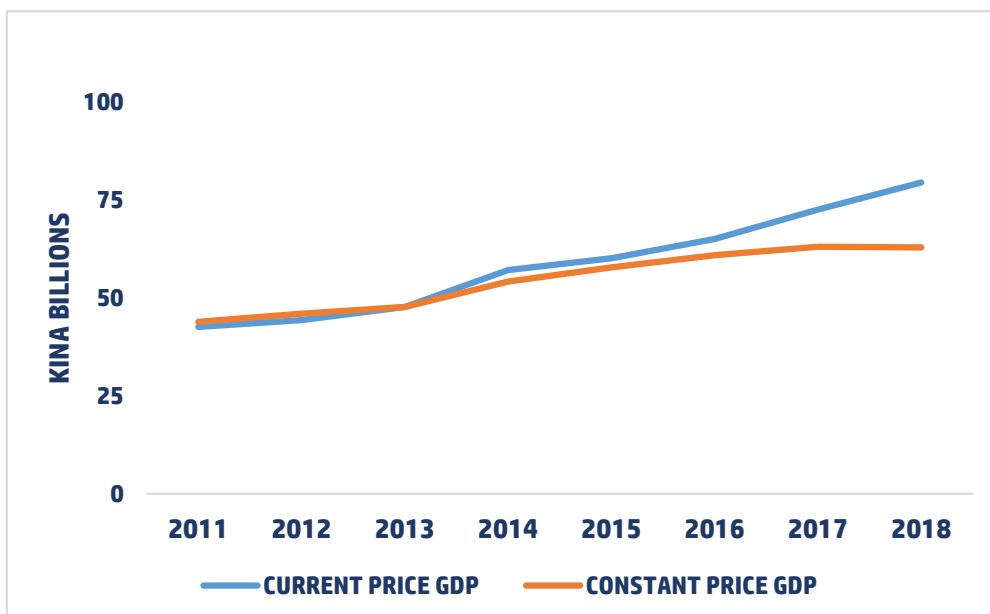
Key contributing industries were:

- 1,892 million Kina or -9.2% fall in Mining and Quarrying
- 2,050 million Kina or -15.3 % fall in Extraction of Crude Petroleum and Natural Gas
- 73 million Kina or -6.7 % fall in Manufacturing
- 57 million Kina or -9.3 % fall in Professional, Scientific and Technical Activities
- 35 million Kina or -0.9 % fall in Construction.

The main offset to this decrease were;

- 516 million Kina or 13.0 % increase in Administrative and Support Service Activities
- 444 million Kina or 4.6 % increase in Agriculture, Fishing and Forestry.

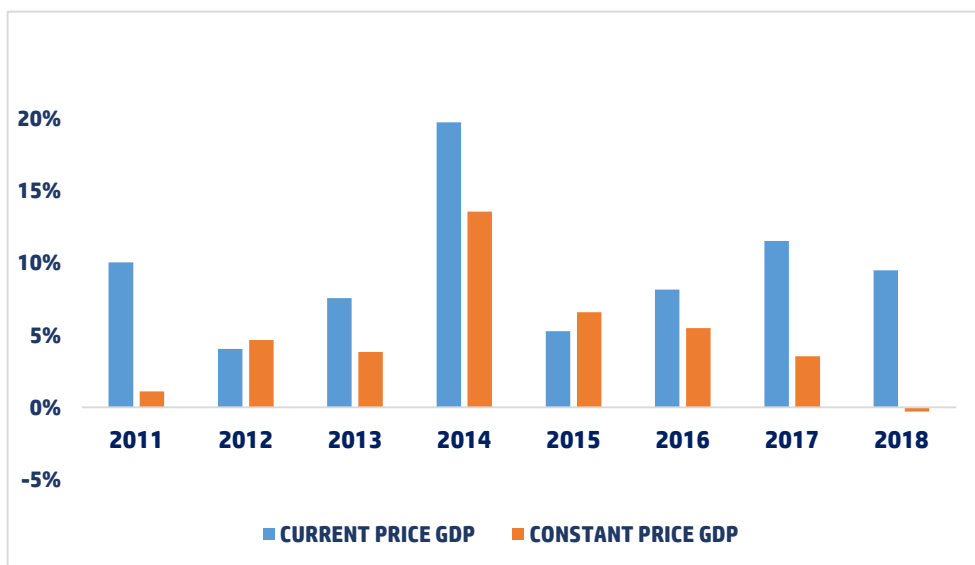
FIGURE 1. GDP LEVELS, 2011 to 2018



The Gross Domestic Product (GDP) in levels show a moderate increase in PNG's economy from years 2011 to 2018 (See Figure 1). The GDP at Current Prices increased from 42.6 billion Kina in 2011 to 79.4 billion Kina in 2018, this is an increase of 36.8 billion Kina or an average annual growth of 9.4 % over the reporting period. Whereas GDP at Constant Prices increased by 19.0 billion Kina or an average growth of 5.3 %, from 43.9 billion Kina to 62.9 billion Kina, 2011 to 2018.

In 2013, the Current and Constant Price GDP figures are the same. It is the base year for the calculation of Constant Price GDP estimates; thus, the Constant Price estimates are all in 2013 prices whereas the Current Price GDP is valued using the prices prevailing in the respective years.

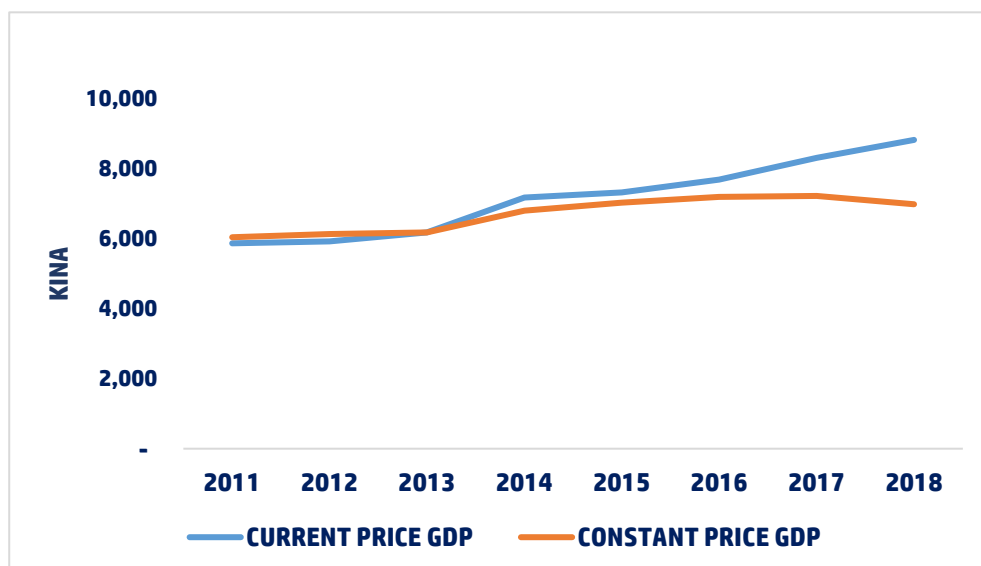
FIGURE 2. PNG GDP GROWTH 2011 to 2018



The Gross Domestic Product (GDP) in Current Price and Constant Price for PNG showed positive growth for all years (2011 to 2017) except in 2018 where the Constant Price saw a small fall of -0.3 % due to the impact of the earth quake in LNG production.

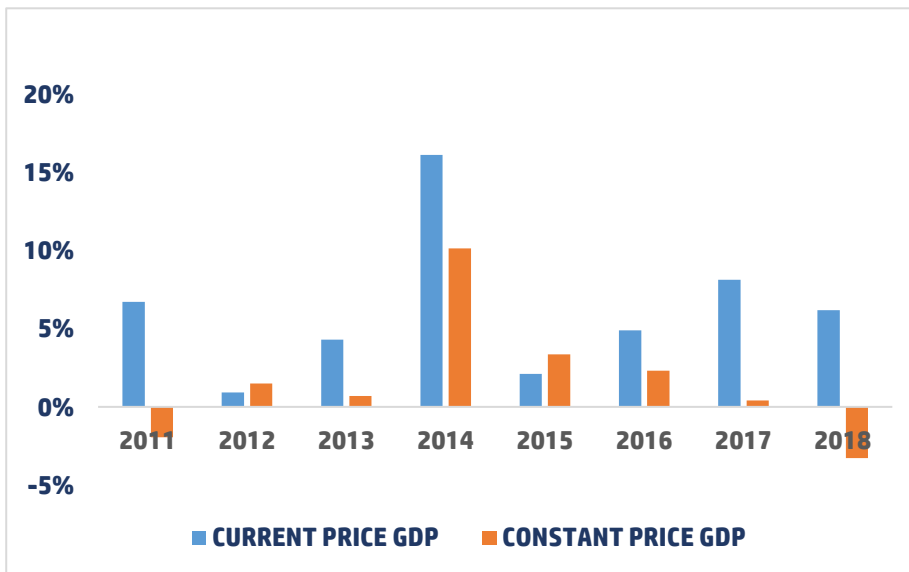
Current Price GDP in 2014 showed that the economy grew by 19.7% which was the result of the commencement of LNG production.

FIGURE 3. GDP PER CAPITA IN LEVELS, KINA, 2011 to 2018



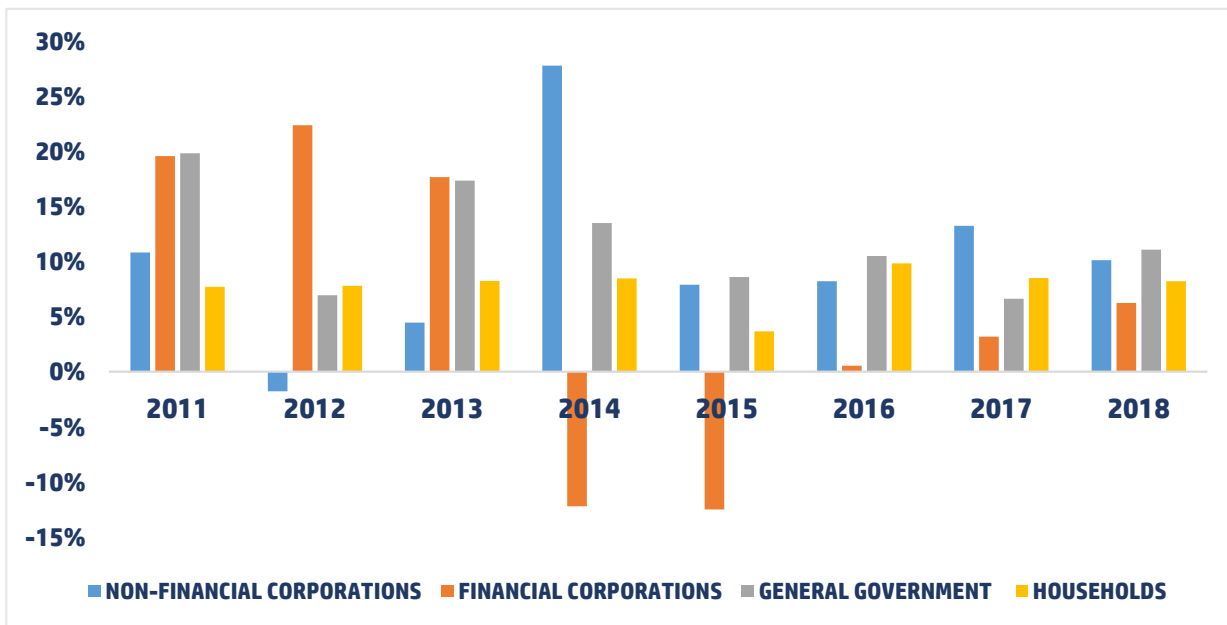
The level of GDP per capita has increased from 5,861 Kina in 2011 to 8,806 Kina in 2018 in Current Price GDP terms or with an average growth rate of 6.0 % in the reporting period.

FIGURE 4. GDP PER CAPITA, PERCENTAGE (%), 2011 to 2018



In Current Prices, GDP per Capita level increased from 8,294 Kina in 2017 to 8,806 Kina in 2018 or a growth of 6.2%.

FIGURE 5. GVA GROWTH BY INSTITUTIONAL SECTORS, 2011 to 2018



The graph above details the growth of four institutional sectors: Non-Financial Corporations, General Government, Financial Corporations and Households.

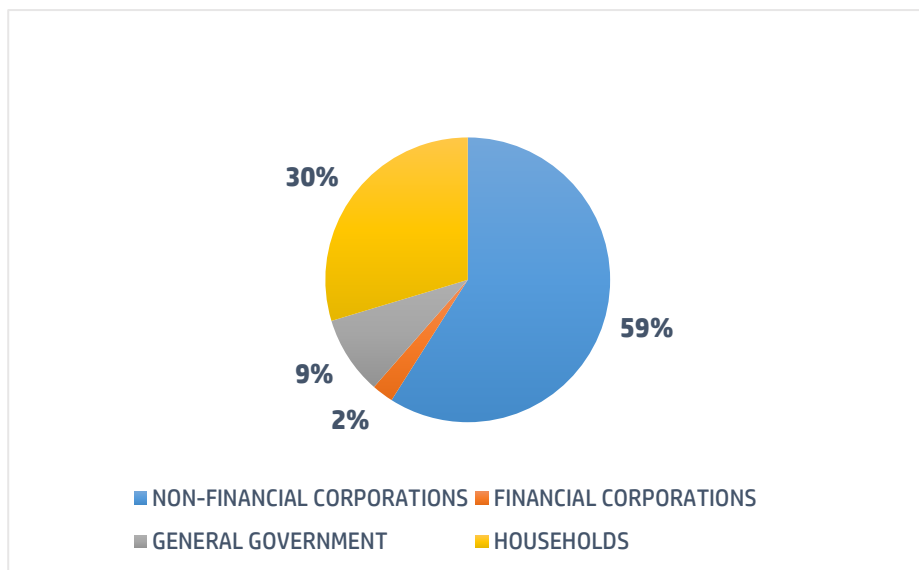
Non-Financial Corporations Sector recorded a growth of 13.2 % in 2017 and 10.1 % in 2018. The Non-Financial Sector highest recorded growth was 27.8 % in 2014 due to the commencement in LNG production.

General Government Sector has shown moderate increases in time over the period (2011 to 2018). The strongest increase was 19.8% in 2011.

The Financial Corporations Sector showed a decline in 2014 and 2015, due to new policies implemented by the Government to the commercial banks to restrict foreign exchange fees and explicit charges.

Household Sector has shown moderate positive increases in time over the period (2011 to 2018). However, 2015 reported a low increase of 3.7% due to the impact of the drought.

FIGURE 6. INSTITUTIONAL SECTOR SHARE, 2018 CURRENT PRICE



Non-Financial Corporations Sector is the largest contributor with a 59% share, followed by Household Sector 30%, General Government 9% and Financial Corporation's 2% share to the total GDP respectively in 2018.

TABLE 1. KEY AGGREGATES

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

	2011	2012	2013	2014	2015	2016	2017	2018
CURRENT PRICE GDP	42.6	44.4	47.7	57.1	60.1	65.0	72.5	79.4
CONSTANT PRICE GDP	43.9	46.0	47.7	54.2	57.7	60.9	63.1	62.9

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

	2011	2012	2013	2014	2015	2016	2017	2018
CURRENT PRICE GDP	10.0%	4.1%	7.5%	19.7%	5.3%	8.1%	11.5%	9.5%
CONSTANT PRICE GDP	1.1%	4.7%	3.8%	13.5%	6.6%	5.5%	3.5%	-0.3%

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

	2011	2012	2013	2014	2015	2016	2017	2018
CURRENT PRICE GDP	5,861	5,915	6,169	7,163	7,314	7,672	8,294	8,806
CONSTANT PRICE GDP	6,037	6,127	6,169	6,794	7,022	7,183	7,212	6,975

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

	2011	2012	2013	2014	2015	2016	2017	2018
CURRENT PRICE GDP	6.7%	0.9%	4.3%	16.1%	2.1%	4.9%	8.1%	6.2%
CONSTANT PRICE GDP	-1.9%	1.5%	0.7%	10.1%	3.4%	2.3%	0.4%	-3.3%

(a) Population estimates from 2000 and 2011 Census and NSO projections.

(b) Percentage change on preceding year.

TABLE 2. INDUSTRY OUTPUT, CURRENT PRICE ESTIMATES

(KINA MILLIONS)

	2011	2012	2013	2014	2015	2016	2017	2018
A AGRICULTURE, FORESTRY AND FISHING	12,192	12,469	13,211	14,792	15,018	16,438	18,663	19,155
B MINING AND QUARRYING - TOTAL	12,197	10,068	10,515	18,640	21,206	21,784	27,232	31,010
Extraction of crude petroleum and natural gas	2,556	2,241	2,447	10,282	13,850	12,382	15,325	17,805
Other Mining	9,641	7,827	8,068	8,358	7,356	9,402	11,907	13,205
C MANUFACTURING	5,536	5,724	6,070	6,317	5,771	6,391	6,988	6,765
D ELECTRICITY,GAS,STEAM AND AIRCONDITIONING SUPPLY	873	984	1,129	1,229	1,264	1,329	1,391	1,502
E WATER SUPPLY, SEWAGE, WASTE MANAGEMENT	252	268	325	361	369	384	404	445
F CONSTRUCTION	10,329	11,971	12,338	13,476	12,590	13,687	12,868	13,316
G WHOLESALE AND RETAIL TRADE	6,715	7,064	7,521	7,964	7,905	8,536	9,049	9,604
H TRANSPORT AND STORAGE	4,372	4,671	5,024	4,532	4,664	4,860	5,067	5,374
I ACCOMODATION AND FOOD SERVICE ACTIVITY	1,375	1,525	1,619	1,700	1,818	1,885	2,008	2,366
J INFORMATION AND COMMUNICATION	1,489	1,634	1,661	2,125	2,239	2,341	2,399	2,598
K FINANCIAL AND INSURANCE ACTIVITIES	2,505	2,888	3,411	3,472	3,209	3,303	3,368	3,589
L REAL ESTATE ACTIVITIES	3,401	3,638	4,040	4,354	4,760	5,353	5,848	6,218
M PROFESSIONAL,SCIENTIFIC AND TECHNICAL ACTIVITIES	1,283	1,365	1,388	1,350	1,170	1,224	1,225	1,161
N ADMINISTRATIVE AND SUP-PORT SERVICE ACTIVITIES	6,246	6,623	6,609	7,080	7,314	7,842	8,304	9,836
O PUBLIC ADMINISTRATION AND DEFENCE, COMPULSO-RY SOCIAL SECURITY	5,954	6,039	7,980	8,013	6,820	7,025	7,486	9,812
P EDUCATION	1,251	1,415	1,840	1,935	2,012	2,249	2,306	2,561
Q HUMAN HEALTH AND SOCIAL WORK ACTIVITIES	1,675	1,889	2,406	3,200	3,138	2,745	2,725	2,927
OTHER SERVICE ACTIVITIES (a)	1,159	1,540	1,691	1,618	1,484	1,538	1,553	1,636
OUTPUT AT BASIC PRICES	78,804	81,773	88,777	102,159	102,749	108,913	118,885	129,876

(a) PNGSIC Sections R, S and T

TABLE 3. INDUSTRY OUTPUT, CURRENT PRICE ESTIMATES - PERCENTAGE (%) CHANGE ^(b)

	2011	2012	2013	2014	2015	2016	2017	2018
A AGRICULTURE, FORESTRY AND FISHING	7.8%	2.3%	6.0%	12.0%	1.5%	9.5%	13.5%	2.6%
B MINING AND QUARRYING - TOTAL	-1.9%	-17.5%	4.4%	77.3%	13.8%	2.7%	25.0%	13.9%
Extraction of crude petroleum and natural gas	9.4%	-12.3%	9.2%	320.1%	34.7%	-10.6%	23.8%	16.2%
Other Mining	-4.5%	-18.8%	3.1%	3.6%	-12.0%	27.8%	26.6%	10.9%
C MANUFACTURING	11.7%	3.4%	6.0%	4.1%	-8.7%	10.7%	9.4%	-3.2%
D ELECTRICITY,GAS,STEAM AND AIRCONDITIONING SUPPLY	13.7%	12.7%	14.8%	8.9%	2.9%	5.1%	4.7%	8.0%
E WATER SUPPLY, SEWAGE, WASTE MANAGEMENT	7.2%	6.3%	21.3%	11.1%	2.2%	4.2%	5.2%	10.0%
F CONSTRUCTION	9.0%	15.9%	3.1%	9.2%	-6.6%	8.7%	-6.0%	3.5%
G WHOLESALE AND RETAIL TRADE	10.9%	5.2%	6.5%	5.9%	-0.7%	8.0%	6.0%	6.1%
H TRANSPORT AND STORAGE	17.1%	6.8%	7.6%	-9.8%	2.9%	4.2%	4.3%	6.1%
I ACCOMODATION AND FOOD SERVICE ACTIVITY	15.7%	10.9%	6.2%	5.0%	6.9%	3.7%	6.5%	17.8%
J INFORMATION AND COMMUNICATION	6.9%	9.7%	1.7%	27.9%	5.4%	4.6%	2.5%	8.3%
K FINANCIAL AND INSURANCE ACTIVITIES	20.3%	15.3%	18.1%	1.8%	-7.6%	2.9%	2.0%	6.6%
L REAL ESTATE ACTIVITIES	10.4%	7.0%	11.0%	7.8%	9.3%	12.5%	9.3%	6.3%
M PROFESSIONAL,SCIENTIFIC AND TECHNICAL ACTIVITIES	95.5%	6.4%	1.7%	-2.7%	-13.3%	4.6%	0.1%	-5.2%
N ADMINISTRATIVE AND SUPPORT SERVICE ACTIVITIES	30.1%	6.0%	-0.2%	7.1%	3.3%	7.2%	5.9%	18.5%
O PUBLIC ADMINISTRATION AND DEFENCE, COMPULSORY SOCIAL SECURITY	27.8%	1.4%	32.2%	0.4%	-14.9%	3.0%	6.6%	31.1%
P EDUCATION	31.3%	13.1%	30.1%	5.2%	4.0%	11.7%	2.6%	11.0%
Q HUMAN HEALTH AND SOCIAL WORK ACTIVITIES	35.3%	12.8%	27.4%	33.0%	-1.9%	-12.5%	-0.7%	7.4%
OTHER SERVICE ACTIVITIES (a)	44.3%	32.9%	9.8%	-4.3%	-8.3%	3.6%	1.0%	5.3%
OUTPUT AT BASIC PRICES	12.9%	3.8%	8.6%	15.1%	0.6%	6.0%	9.2%	9.2%

(a) PNGSIC Sections R, S and T

(b) Percentage change on preceding year.

TABLE 4. INDUSTRY GROSS VALUE ADDED, CURRENT PRICE ESTIMATES

(KINA MILLIONS)

	2011	2012	2013	2014	2015	2016	2017	2018
A AGRICULTURE, FORESTRY AND FISHING	8,187	8,552	9,191	10,108	10,498	11,620	12,800	13,478
B MINING AND QUARRYING - TOTAL	7,954	6,255	6,478	11,959	14,517	15,520	19,382	22,125
Extraction of crude petroleum and natural gas	1,674	1,399	1,515	6,786	9,972	9,658	11,954	13,888
Other Mining	6,281	4,856	4,963	5,173	4,545	5,862	7,428	8,237
C MANUFACTURING	1,070	1,094	1,165	1,216	1,069	1,256	1,411	1,369
D ELECTRICITY,GAS,STEAM AND AIRCONDITIONING SUPPLY	348	386	453	497	514	541	588	638
E WATER SUPPLY, SEWAGE, WASTE MANAGEMENT	77	83	96	112	113	125	138	152
F CONSTRUCTION	3,913	4,417	4,473	4,947	4,720	5,145	4,850	5,035
G WHOLESALE AND RETAIL TRADE	4,791	5,130	5,543	5,887	5,817	6,346	6,845	7,369
H TRANSPORT AND STORAGE	1,256	1,314	1,423	1,304	1,381	1,462	1,615	1,773
I ACCOMODATION AND FOOD SERVICE ACTIVITY	810	879	949	1,007	1,071	1,131	1,212	1,440
J INFORMATION AND COMMUNICATION	714	730	774	966	1,002	1,048	1,074	1,167
K FINANCIAL AND INSURANCE ACTIVITIES	1,648	1,999	2,340	2,083	1,855	1,881	1,951	2,076
L REAL ESTATE ACTIVITIES	2,571	2,753	3,057	3,307	3,632	4,080	4,454	4,741
M PROFESSIONAL,SCIENTIFIC AND TECHNICAL ACTIVITIES	790	853	863	835	676	696	682	647
N ADMINISTRATIVE AND SUPPORT SERVICE ACTIVITIES	3,398	3,888	3,949	4,166	4,317	4,705	5,031	5,924
O PUBLIC ADMINISTRATION AND DEFENCE, COMPULSORY SOCIAL SECURITY	1,953	2,003	2,334	2,737	2,986	3,193	3,358	3,801
P EDUCATION	994	1,124	1,392	1,571	1,697	1,875	1,969	2,113
Q HUMAN HEALTH AND SOCIAL WORK ACTIVITIES	773	869	974	1,052	1,132	1,375	1,436	1,516
OTHER SERVICE ACTIVITIES (a)	353	468	501	493	462	454	472	503
GVA AT BASIC PRICES	41,601	42,796	45,955	54,247	57,459	62,454	69,267	75,867
TAXES LESS SUBSIDIES ON PRODUCT	1,041	1,576	1,766	2,884	2,680	2,584	3,255	3,537
GROSS DOMESTIC PRODUCT (GDP)	42,642	44,372	47,721	57,131	60,139	65,038	72,522	79,405

(a) PNGSIC Sections R, S and T

TABLE 5. INDUSTRY GROSS VALUE ADDED, CURRENT PRICE ESTIMATES - PERCENTAGE (%) CHANGE ^(b)

	2011	2012	2013	2014	2015	2016	2017	2018
A AGRICULTURE, FORESTRY AND FISHING	7.7%	4.5%	7.5%	10.0%	3.9%	10.7%	10.2%	5.3%
B MINING AND QUARRYING - TOTAL	0.6%	-21.4%	3.6%	84.6%	21.4%	6.9%	24.9%	14.2%
Extraction of crude petroleum and natural gas	12.3%	-16.4%	8.3%	347.9%	46.9%	-3.1%	23.8%	16.2%
Other Mining	-2.1%	-22.7%	2.2%	4.2%	-12.1%	29.0%	26.7%	10.9%
C MANUFACTURING	13.1%	2.3%	6.4%	4.4%	-12.1%	17.5%	12.3%	-3.0%
D ELECTRICITY,GAS,STEAM AND AIRCONDITIONING SUPPLY	13.3%	11.0%	17.4%	9.7%	3.4%	5.3%	8.7%	8.5%
E WATER SUPPLY, SEWAGE, WASTE MANAGEMENT	27.7%	6.8%	16.3%	16.5%	0.8%	10.7%	10.5%	10.3%
F CONSTRUCTION	7.7%	12.9%	1.3%	10.6%	-4.6%	9.0%	-5.7%	3.8%
G WHOLESALE AND RETAIL TRADE	10.8%	7.1%	8.1%	6.2%	-1.2%	9.1%	7.9%	7.7%
H TRANSPORT AND STORAGE	15.0%	4.6%	8.4%	-8.4%	5.8%	5.9%	10.4%	9.8%
I ACCOMODATION AND FOOD SERVICE ACTIVITY	12.3%	8.5%	7.9%	6.2%	6.3%	5.6%	7.1%	18.8%
J INFORMATION AND COMMUNICATION	7.8%	2.3%	6.0%	24.8%	3.8%	4.6%	2.5%	8.6%
K FINANCIAL AND INSURANCE ACTIVITIES	18.6%	21.3%	17.0%	-11.0%	-10.9%	1.4%	3.7%	6.4%
L REAL ESTATE ACTIVITIES	9.1%	7.1%	11.0%	8.2%	9.8%	12.3%	9.1%	6.5%
M PROFESSIONAL,SCIENTIFIC AND TECHNICAL ACTIVITIES	97.5%	8.0%	1.2%	-3.3%	-19.1%	2.9%	-1.9%	-5.2%
N ADMINISTRATIVE AND SUP-PORT SERVICE ACTIVITIES	24.3%	14.4%	1.6%	5.5%	3.6%	9.0%	6.9%	17.8%
O PUBLIC ADMINISTRATION AND DEFENCE, COMPULSORY SOCIAL SECURITY	15.9%	2.5%	16.5%	17.3%	9.1%	6.9%	5.2%	13.2%
P EDUCATION	24.4%	13.0%	23.8%	12.9%	8.0%	10.5%	5.0%	7.3%
Q HUMAN HEALTH AND SOCIAL WORK ACTIVITIES	14.3%	12.3%	12.2%	8.0%	7.6%	21.4%	4.5%	5.6%
OTHER SERVICE ACTIVITIES (a)	33.4%	32.4%	7.1%	-1.5%	-6.3%	-1.8%	3.9%	6.6%
GVA AT BASIC PRICES	10.8%	2.9%	7.4%	18.0%	5.9%	8.7%	10.9%	9.5%
TAXES LESS SUBSIDIES ON PRODUCT	-12.8%	51.4%	12.1%	63.3%	-7.1%	-3.6%	26.0%	8.7%
GROSS DOMESTIC PRODUCT (GDP)	10.0%	4.1%	7.5%	19.7%	5.3%	8.1%	11.5%	9.5%

(a) PNGSIC Sections R, S and T

(b) Percentage change on preceding year.

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

	2011	2012	2013	2014	2015	2016	2017	2018
A AGRICULTURE, FORESTRY AND FISHING	19.7%	20.0%	20.0%	18.6%	18.3%	18.6%	18.5%	17.8%
B MINING AND QUARRYING	19.1%	14.6%	14.1%	22.0%	25.3%	24.9%	28.0%	29.2%
C MANUFACTURING	2.6%	2.6%	2.5%	2.2%	1.9%	2.0%	2.0%	1.8%
D ELECTRICITY,GAS,STEAM AND AIRCONDITIONING SUPPLY	0.8%	0.9%	1.0%	0.9%	0.9%	0.9%	0.8%	0.8%
E WATER SUPPLY, SEWAGE, WASTE MANAGEMENT	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%
F CONSTRUCTION	9.4%	10.3%	9.7%	9.1%	8.2%	8.2%	7.0%	6.6%
G WHOLESALE AND RETAIL TRADE	11.5%	12.0%	12.1%	10.9%	10.1%	10.2%	9.9%	9.7%
H TRANSPORT AND STORAGE	3.0%	3.1%	3.1%	2.4%	2.4%	2.3%	2.3%	2.3%
I ACCOMODATION AND FOOD SERVICE ACTIVITY	1.9%	2.1%	2.1%	1.9%	1.9%	1.8%	1.7%	1.9%
J INFORMATION AND COMMUNICATION	1.7%	1.7%	1.7%	1.8%	1.7%	1.7%	1.6%	1.5%
K FINANCIAL AND INSURANCE ACTIVITIES	4.0%	4.7%	5.1%	3.8%	3.2%	3.0%	2.8%	2.7%
L REAL ESTATE ACTIVITIES	6.2%	6.4%	6.7%	6.1%	6.3%	6.5%	6.4%	6.2%
M PROFESSIONAL,SCIENTIFIC AND TECHNICAL ACTIVITIES	1.9%	2.0%	1.9%	1.5%	1.2%	1.1%	1.0%	0.9%
N ADMINISTRATIVE AND SUP-PORT SERVICE ACTIVITIES	8.2%	9.1%	8.6%	7.7%	7.5%	7.5%	7.3%	7.8%
O PUBLIC ADMINISTRATION AND DEFENCE, COMPULSORY SOCIAL SECURITY	4.7%	4.7%	5.1%	5.0%	5.2%	5.1%	4.8%	5.0%
P EDUCATION	2.4%	2.6%	3.0%	2.9%	3.0%	3.0%	2.8%	2.8%
Q HUMAN HEALTH AND SOCIAL WORK ACTIVITIES	1.9%	2.0%	2.1%	1.9%	2.0%	2.2%	2.1%	2.0%
OTHER SERVICE ACTIVITIES (a)	0.8%	1.1%	1.1%	0.9%	0.8%	0.7%	0.7%	0.7%
GVA AT BASIC PRICES	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

(a) PNGSIC Sections R, S and T

(b) Percentage of the total

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

(KINA MILLIONS)

	2011	2012	2013	2014	2015	2016	2017	2018
NON-FINANCIAL CORPORATIONS	23,447	23,031	24,059	30,739	33,165	35,895	40,644	44,752
FINANCIAL CORPORATIONS	1,530	1,872	2,202	1,933	1,692	1,702	1,756	1,865
GENERAL GOVERNMENT	3,335	3,566	4,185	4,749	5,157	5,699	6,076	6,749
HOUSEHOLDS	13,291	14,327	15,510	16,825	17,445	19,159	20,790	22,501
GVA AT BASIC PRICES	41,601	42,796	45,955	54,247	57,459	62,454	69,267	75,867

**TABLE 7B. GROSS VALUE ADDED BY INSTITUTIONAL SECTOR,
CURRENT PRICE, PERCENTAGE (%) CHANGE ^(a)**

	2011	2012	2013	2014	2015	2016	2017	2018
NON-FINANCIAL CORPORATIONS	10.8%	-1.8%	4.5%	27.8%	7.9%	8.2%	13.2%	10.1%
FINANCIAL CORPORATIONS	19.6%	22.4%	17.6%	-12.2%	-12.5%	0.6%	3.2%	6.2%
GENERAL GOVERNMENT	19.8%	7.0%	17.3%	13.5%	8.6%	10.5%	6.6%	11.1%
HOUSEHOLDS	7.7%	7.8%	8.3%	8.5%	3.7%	9.8%	8.5%	8.2%
GVA AT BASIC PRICES	10.8%	2.9%	7.4%	18.0%	5.9%	8.7%	10.9%	9.5%

(a) Percentage change on preceding year.

TABLE 8. INDUSTRY GROSS VALUE ADDED, CONSTANT PRICE ESTIMATES

(KINA MILLIONS)

	2011	2012	2013	2014	2015	2016	2017	2018
A AGRICULTURE, FORESTRY AND FISHING	8,287	8,781	9,191	9,503	9,252	9,497	9,720	10,165
B MINING AND QUARRYING - TOTAL	6,888	6,166	6,478	11,264	16,586	19,124	20,667	18,775
Extraction of crude petroleum and natural gas	1,489	1,463	1,515	6,055	11,249	12,860	13,390	11,340
Other Mining	5,399	4,703	4,963	5,209	5,337	6,264	7,277	7,436
C MANUFACTURING	1,151	1,145	1,165	1,155	1,006	1,043	1,082	1,009
D ELECTRICITY,GAS,STEAM AND AIRCONDITIONING SUPPLY	374	404	453	473	487	512	536	559
E WATER SUPPLY, SEWAGE, WASTE MANAGEMENT	83	86	96	86	87	91	95	105
F CONSTRUCTION	4,206	4,621	4,473	4,644	4,103	4,182	3,739	3,704
G WHOLESALE AND RETAIL TRADE	5,223	5,380	5,543	5,612	5,274	5,363	5,427	5,532
H TRANSPORT AND STORAGE	1,327	1,331	1,423	1,233	1,312	1,344	1,360	1,407
I ACCOMODATION AND FOOD SERVICE ACTIVITY	882	922	949	949	969	972	1,014	1,119
J INFORMATION AND COMMUNICATION	767	764	774	1,049	1,104	1,152	1,180	1,209
K FINANCIAL AND INSURANCE ACTIVITIES	1,773	2,092	2,340	1,980	1,664	1,581	1,556	1,583
L REAL ESTATE ACTIVITIES	2,812	2,889	3,057	3,136	3,234	3,392	3,512	3,582
M PROFESSIONAL,SCIENTIFIC AND TECHNICAL ACTIVITIES	849	892	863	798	653	640	608	551
N ADMINISTRATIVE AND SUP-PORT SERVICE ACTIVITIES	3,657	4,069	3,949	4,023	3,926	3,949	3,969	4,485
O PUBLIC ADMINISTRATION AND DEFENCE, COMPULSORY SOCIAL SECURITY	2,181	2,152	2,334	2,604	2,703	2,749	2,800	3,079
P EDUCATION	1,109	1,206	1,392	1,500	1,552	1,640	1,675	1,726
Q HUMAN HEALTH AND SOCIAL WORK ACTIVITIES	851	924	974	972	965	1,117	1,150	1,215
OTHER SERVICE ACTIVITIES (a)	381	489	501	462	408	400	387	391
GVA AT BASIC PRICES	42,800	44,315	45,955	51,443	55,284	58,747	60,477	60,199
TAXES LESS SUBSIDIES ON PRODUCT	1,118	1,648	1,766	2,741	2,465	2,172	2,595	2,698
GROSS DOMESTIC PRODUCT (GDP)	43,918	45,963	47,721	54,185	57,749	60,919	63,072	62,896

(a) PNGSIC Sections R, S and T

**TABLE 9. INDUSTRY GROSS VALUE ADDED, CONSTANT PRICE ESTIMATES
- PERCENTAGE (%) CHANGE ^(b)**

	2011	2012	2013	2014	2015	2016	2017	2018
A AGRICULTURE, FORESTRY AND FISHING	0.9%	6.0%	4.7%	3.4%	-2.6%	2.7%	2.4%	4.6%
B MINING AND QUARRYING -TOTAL	-15.1%	-10.5%	5.1%	73.9%	47.2%	15.3%	8.1%	-9.2%
Extraction of crude petroleum and natural gas	-13.2%	-1.7%	3.6%	299.6%	85.8%	14.3%	4.1%	-15.3%
Other Mining	-15.7%	-12.9%	5.5%	4.9%	2.4%	17.4%	16.2%	2.2%
C MANUFACTURING	4.6%	-0.5%	1.7%	-0.9%	-12.9%	3.8%	3.7%	-6.7%
D ELECTRICITY,GAS,STEAM AND AIRCONDITIONING SUPPLY	4.7%	8.1%	12.2%	4.5%	2.9%	5.1%	4.6%	4.4%
E WATER SUPPLY, SEWAGE, WASTE MANAGEMENT	17.8%	4.0%	11.2%	-10.9%	1.8%	4.2%	5.2%	10.0%
F CONSTRUCTION	-0.6%	9.9%	-3.2%	3.8%	-11.7%	1.9%	-10.6%	-0.9%
G WHOLESALE AND RETAIL TRADE	4.8%	3.0%	3.0%	1.2%	-6.0%	1.7%	1.2%	1.9%
H TRANSPORT AND STORAGE	7.3%	0.4%	6.9%	-13.4%	6.4%	2.4%	1.2%	3.5%
I ACCOMODATION AND FOOD SERVICE ACTIVITY	6.1%	4.5%	2.9%	0.1%	2.1%	0.3%	4.3%	10.4%
J INFORMATION AND COMMUNICATION	-0.5%	-0.4%	1.3%	35.5%	5.2%	4.4%	2.5%	2.5%
K FINANCIAL AND INSURANCE ACTIVITIES	9.8%	18.0%	11.9%	-15.4%	-16.0%	-5.0%	-1.6%	1.8%
L REAL ESTATE ACTIVITIES	3.8%	2.7%	5.8%	2.6%	3.1%	4.9%	3.5%	2.0%
M PROFESSIONAL,SCIENTIFIC AND TECHNICAL ACTIVITIES	82.3%	5.2%	-3.3%	-7.5%	-18.2%	-2.0%	-5.0%	-9.3%
N ADMINISTRATIVE AND SUPPORT SERVICE ACTIVITIES	15.0%	11.3%	-3.0%	1.9%	-2.4%	0.6%	0.5%	13.0%
O PUBLIC ADMINISTRATION AND DEFENCE, COMPULSORY SOCIAL SECURITY	5.4%	-1.4%	8.5%	11.6%	3.8%	1.7%	1.9%	10.0%
P EDUCATION	13.4%	8.8%	15.4%	7.8%	3.5%	5.7%	2.1%	3.1%
Q HUMAN HEALTH AND SOCIAL WORK ACTIVITIES	4.9%	8.6%	5.4%	-0.2%	-0.8%	15.8%	3.0%	5.6%
OTHER SERVICE ACTIVITIES (a)	24.0%	28.5%	2.4%	-7.8%	-11.6%	-2.1%	-3.2%	1.1%
GVA AT BASIC PRICES	1.8%	3.5%	3.7%	11.9%	7.5%	6.3%	2.9%	-0.5%
TAXES LESS SUBSIDIES ON PRODUCT	-19.5%	47.4%	7.1%	55.2%	-10.1%	-11.9%	19.5%	3.9%
GROSS DOMESTIC PRODUCT (GDP)	1.1%	4.7%	3.8%	13.5%	6.6%	5.5%	3.5%	-0.3%

(a) PNGSIC Sections R, S and T.

(b) Percentage change on preceding year.

TABLE 10. GDP IMPLICIT PRICE INDICES BY INDUSTRY

PRICE INDEXES (2013 = 100.0)	2011	2012	2013	2014	2015	2016	2017	2018
A AGRICULTURE, FORESTRY AND FISHING	98.8	97.4	100.0	106.4	113.5	122.4	131.7	132.6
B MINING AND QUARRYING - TOTAL	115.5	101.4	100.0	106.2	87.5	81.2	93.8	117.8
Extraction of crude petroleum and natural gas	112.4	95.6	100.0	112.1	88.7	75.1	89.3	122.5
Other Mining	116.3	103.2	100.0	99.3	85.2	93.6	102.1	110.8
C MANUFACTURING	93.0	95.6	100.0	105.3	106.3	120.4	130.4	135.7
D ELECTRICITY,GAS AND AIRCONDITIONING	93.0	95.6	100.0	105.0	105.5	105.7	109.8	114.1
E WATER SUPPLY AND WASTE MANAGEMENT	93.1	95.6	100.0	130.7	129.5	137.6	144.5	144.8
F CONSTRUCTION	93.0	95.6	100.0	106.5	115.0	123.0	129.7	135.9
G WHOLESALE AND RETAIL TRADE	91.7	95.3	100.0	104.9	110.3	118.3	126.1	133.2
H TRANSPORT AND STORAGE	94.6	98.7	100.0	105.8	105.2	108.8	118.8	126.0
I ACCOMODATION AND FOOD SERVICE	91.8	95.4	100.0	106.1	110.4	116.3	119.5	128.6
J INFORMATION AND COMMUNICATION	93.1	95.6	100.0	92.1	90.8	91.0	91.0	96.5
K FINANCIAL AND INSURANCE ACTIVITIES	93.0	95.6	100.0	105.2	111.5	119.0	125.4	131.1
L REAL ESTATE ACTIVITIES	91.4	95.3	100.0	105.4	112.3	120.3	126.8	132.4
M PROFESSIONAL AND SCIENTIFIC	93.1	95.6	100.0	104.6	103.5	108.7	112.3	117.4
N ADMINISTRATIVE AND SUPPORT SERVICES	92.9	95.6	100.0	103.6	110.0	119.1	126.7	132.1
O PUBLIC ADMINISTRATION AND DEFENCE	89.5	93.1	100.0	105.1	110.5	116.2	119.9	123.4
P EDUCATION	89.6	93.2	100.0	104.7	109.4	114.3	117.6	122.4
Q HEALTH AND SOCIAL WORK ACTIVITIES	90.8	94.0	100.0	108.2	117.4	123.1	124.8	124.8
OTHER SERVICE ACTIVITIES (a)	92.7	95.5	100.0	106.8	113.2	113.5	121.9	128.6
GVA AT BASIC PRICES	97.2	96.6	100.0	105.4	103.9	106.3	114.5	126.0
TAXES LESS SUBSIDIES ON PRODUCT	93.1	95.6	100.0	105.2	108.7	119.0	125.4	131.1
GROSS DOMESTIC PRODUCT (GDP)	97.1	96.5	100.0	105.4	104.1	106.8	115.0	126.2

(a) PNGSIC Sections R, S and T.

**TABLE 11. GDP IMPLICIT PRICE INDICES - PERCENTAGE (%) CHANGE (b)
BY INDUSTRY**

PRICE INDEXES PERCENTAGE CHANGE

	2011	2012	2013	2014	2015	2016	2017	2018
A AGRICULTURE, FORESTRY AND FISHING	6.8%	-1.4%	2.7%	6.4%	6.7%	7.8%	7.6%	0.7%
B MINING AND QUARRYING - TOTAL	18.6%	-12.2%	-1.4%	6.2%	-17.6%	-7.3%	15.6%	25.7%
Extraction of crude petroleum and natural gas	29.4%	-14.9%	4.6%	12.1%	-20.9%	-15.3%	18.9%	37.2%
Other Mining	16.1%	-11.3%	-3.1%	-0.7%	-14.2%	9.9%	9.1%	8.5%
C MANUFACTURING	8.1%	2.8%	4.6%	5.3%	0.9%	13.3%	8.3%	4.1%
D ELECTRICITY,GAS AND AIRCONDITIONING	8.2%	2.8%	4.6%	5.0%	0.4%	0.2%	3.9%	3.9%
E WATER SUPPLY AND WASTE MANAGEMENT	8.4%	2.7%	4.6%	30.7%	-0.9%	6.3%	5.0%	0.3%
F CONSTRUCTION	8.3%	2.7%	4.6%	6.5%	8.0%	7.0%	5.4%	4.8%
G WHOLESALE AND RETAIL TRADE	5.7%	3.9%	4.9%	4.9%	5.2%	7.3%	6.6%	5.6%
H TRANSPORT AND STORAGE	7.2%	4.3%	1.3%	5.8%	-0.5%	3.4%	9.1%	6.1%
I ACCOMODATION AND FOOD SERVICE	5.8%	3.9%	4.9%	6.1%	4.1%	5.3%	2.7%	7.6%
J INFORMATION AND COMMUNICATION	8.4%	2.7%	4.6%	-7.9%	-1.4%	0.2%	0.0%	6.0%
K FINANCIAL AND INSURANCE ACTIVITIES	8.1%	2.8%	4.6%	5.2%	6.0%	6.7%	5.4%	4.5%
L REAL ESTATE ACTIVITIES	5.1%	4.2%	4.9%	5.4%	6.5%	7.1%	5.4%	4.4%
M PROFESSIONAL AND SCIENTIFIC	8.4%	2.7%	4.6%	4.6%	-1.1%	5.0%	3.3%	4.5%
N ADMINISTRATIVE AND SUPPORT SERVICES	8.0%	2.8%	4.6%	3.6%	6.2%	8.4%	6.4%	4.2%
O PUBLIC ADMINISTRATION AND DEFENCE	9.9%	4.0%	7.5%	5.1%	5.1%	5.1%	3.2%	2.9%
P EDUCATION	9.8%	3.9%	7.3%	4.7%	4.4%	4.6%	2.8%	4.1%
Q HEALTH AND SOCIAL WORK ACTIVITIES	9.0%	3.5%	6.4%	8.2%	8.5%	4.9%	1.4%	-0.1%
OTHER SERVICE ACTIVITIES (a)	7.6%	3.0%	4.7%	6.8%	6.0%	0.3%	7.4%	5.5%
GVA AT BASIC PRICES	8.8%	-0.6%	3.5%	5.4%	-1.4%	2.3%	7.7%	10.0%
TAXES LESS SUBSIDIES ON PRODUCT	8.4%	2.7%	4.6%	5.2%	3.4%	9.4%	5.4%	4.5%
GROSS DOMESTIC PRODUCT (GDP)	8.8%	-0.6%	3.6%	5.4%	-1.2%	2.5%	7.7%	9.8%

(a) PNGSIC Sections R, S and T.

(b) Percentage change on preceding year.

INTRODUCTION

This publication contains National Accounts estimates for the eight years from 2011 to 2018. 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

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

GROSS DOMESTIC PRODUCT

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 2011 through to 2018 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 National Statistical Offices, 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

While SBA information was not available for the estimates of level of economic activity during the compilation of the 2006 - 2017 GDP estimates, this publication has included information collected through SBA for the four (4) industries for 2018. That is; Construction, Manufacturing, Transport and Storage; Administration and Support Service industries. The taxation data, complemented business survey data (the Annual SBA and the quarterly BLS) has been used to calculate the contribution of formal economic activity for the Non-financial corporations' sector

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/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 2007 to 2018 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

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 2012 are valued using 2012 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 2013). It removes the impact of price changes in the time series (2011 to 2018) 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.

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.

Exports of Goods and Services

The value of goods exported and amounts receivable from non-residents for the provision of services by residents.

Financial Corporations (Institutional Units)

Financial corporations consist of all resident corporations that are principally engaged in providing financial services, including banks, insurance and pension funding services, to other institutional units. The provision of financial services is regulated by the Bank of Papua New Guinea.

Fixed Assets

Are defined as produced assets that are used repeatedly, or continuously, in processes of production for more than one year. Fixed assets not only include structures, machinery and equipment and intellectual property products but also cultivated assets such as trees and animals that are used repeatedly or continuously to produce other products such as fruit and dairy products.

Formal (Economic Activity) Sector

Activities (usually production) of businesses, employees or households that are regulated by government laws. These activities are observable to National Statistical Offices, either through administrative data or survey collection activity.

General Government (Institutional Units)

The general government sector consists of institutional units that, in addition to fulfilling their political responsibilities and their role of economic regulation, produce services (and possibly goods) for individual or collective consumption mainly on a non-market basis and redistribute income and wealth (2008 SNA 2.17). In PNG the general government sector includes national, provincial and local government.

Goods and Services Tax

Papua New Guinea introduced a general Goods and Services Tax (GST) of 10% in 2004. The Goods and Services Tax Act specifies activities that are subject to GST, which is paid to the Internal Revenue Commission (IRC) on the sales of goods and services subject to the tax. The Act also specifies activities that are exempt, such as financial services, Public Motor Vehicle (PVM) and Taxi fares. Activities such as exported goods, aid projects and certain export services are also subject to GST but at a zero rate.

Gross Domestic Product (GDP)

Is the total market value of goods and services produced in Papua New Guinea within a given period after deducting the cost of goods and services used up in the process of production but before deducting allowances for the consumption of fixed capital. Thus gross domestic product, as here defined, is 'at market prices'. It is equivalent to gross national expenditure plus exports of goods and services less imports of goods and services. Farm product is that part of gross domestic product which arises from production in agriculture and services to agriculture. It is equivalent to the value added of PNGSIC Agriculture sector plus taxes less subsidies on products primary to this subdivision. Non-farm product arises from production in all other industries.

GDP Per Capita

The ratio of the chain volume estimate of GDP to an estimate of the resident Papua New Guinean population Gross Value Added

The value of output at basic prices minus the value of intermediate consumption at purchasers' prices. The term is used to describe gross product by industry and by sector. Basic prices valuation of output removes the distortion caused by variations in the incidence of commodity taxes and subsidies across the output of individual industries.

Imports of Goods And Services

The value of goods imported and amounts payable to non-residents for the provision of services to residents.

Informal Sector

The SNA 2008 recognises the importance of measuring part of the economy that reflects the efforts of people without formal jobs engaging in some form of monetary economic activity (2008 SNA 25.3). This part of the economy is known as the informal sector and its measurement is important for assessing how the benefits of economic development extent to a country's entire population (compare with Formal sector).

Households (Institutional Units)

Households are primarily consumer units, however, they also engage in production. This production activity is often relatively small scale and includes informal and subsistence activities. When the production units of households are not legal entities they are described as unincorporated enterprises. They remain part of the same institutional unit as the household to which they belong (2008 SNA 4.21). Conceptually the contribution of the household sector to GDP is estimated in the same way as for other sectors, by deducting intermediate consumption from the value of output.

Household Production

In PNG a large proportion of economic activity is undertaken in the household sector. This includes most agricultural production and a significant proportion of retail activity. That production includes production for own consumption and production for sale through informal outlets such as local markets and street vendors.

Household Income and Expenditure Survey (HIES)

The Household Income and Expenditure Survey (HIES), is a survey that collects information on the income, expenditure and production of households. In addition it collects information on household wealth and health outcomes. The recent HIES was conducted between July 2009 and January 2011.

Implicit Price Deflator (IPD)

The IPD is obtained by dividing a current price value by its real counterpart (constant price value). When calculated from the major national accounting aggregates, such as gross domestic product, implicit price deflators relate to a broader range of goods and services in the economy rather than that represented by any other published price indexes. Movements in an IPD reflects both changes in price and changes in composition of the aggregate for which the deflator is calculated.

Institutional Unit

An institutional unit is an economic entity that is capable, in its own right, of owning assets, incurring liabilities, engaging in economic activities and engaging in transactions with other entities (2008 SNA 4.2). In preparing the production measure of GDP estimates for 2009 to 2016, data has been collected and compiled for the following institutional units:

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

Intermediate Consumption

Consists of the value of the goods and services used as inputs by a process of production, excluding compensation of employees and the consumption of fixed capital.

Market Output

Output that is sold at prices that are economically significant or otherwise disposed of on the market, or intended for sale or disposal on the market.

Non-Financial Corporations (Institutional Units)

Non-financial corporations are corporations whose principal activity is the production of market goods or non-financial services (2008 SNA 4.94). As such, they are a major driver of economic activity and growth.

Non-Market Output

Goods and services produced by any institutional unit that are supplied free or at prices that are not economically significant.

Other Subsidies on Production

Consist of all subsidies, except subsidies on products, which resident enterprises may receive as a consequence of engaging in production. Other subsidies on production include: subsidies related to the payroll or workforce numbers, including subsidies payable on the total wage or salary bill, on numbers employed, or on the employment of particular types of persons, e.g. persons with disabilities or persons who have been unemployed for a long period. The subsidies may also be intended to cover some or all of the costs of training schemes organised or financed by enterprises. Subsidies aimed at reducing pollution are also included.

Other Taxes on Production

Consist of all taxes that enterprises incur as a result of engaging in production, except taxes on products. Other taxes on production include: taxes related to the payroll or workforce numbers excluding compulsory social security contributions paid by employers and any taxes paid by the employees themselves out of their wages or salaries; recurrent taxes on land, buildings or other structures; some business and professional licenses where no service is provided by the Government in return; taxes on the use of fixed assets or other activities; stamp duties; taxes on pollution; and taxes on international transactions.

Output

This consists of those goods and services that are produced within an establishment that become available for use outside that establishment, plus any goods and services produced for own final use.

Papua New Guinea Standard Industry Classification

The Papuan New Guinea Standard Industry Classification (PNGSIC) 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. The introduction of the revised classification means that the estimates in respect of some kinds of activity, particularly services, are not directly comparable with earlier published estimates.

An institutional unit is an economic entity that is capable, in its own right, of owning assets, incurring liabilities, engaging in economic activities and engaging in transactions with other entities.

Purchasers' Price

The amount paid by the purchaser, excluding any deductible tax, in order to take delivery of a unit of a good or service at the time and place required by the purchaser. The purchaser's price of a good includes any transport charges paid separately by the purchaser to take delivery at the required time and place.

Survey of Business Activity (SBA)

The Survey of Business Activity is an annual economic survey which collects business income, expenses including wages, capital expenditure information on inventories.

Wages and Salaries

Consist of amounts payable in cash including the value of any social contributions, income taxes, fringe benefits tax, etc., payable by the employee even if they are actually withheld by the employer for administrative convenience or other reasons and paid directly to social insurance schemes, tax authorities, etc., on behalf of the employee. Wages and salaries may be paid as remuneration in kind instead of, or in addition to, remuneration in cash. Separation, termination and redundancy payments are also included in wages and salaries. Wages and salaries are also measured as far as possible on an accrual rather than a strict cash basis.

