



# Samoa Bureau of Statistics

## Gross Domestic Product

March 2021 Quarter

### Overview

30th June 2021

**NEW!**

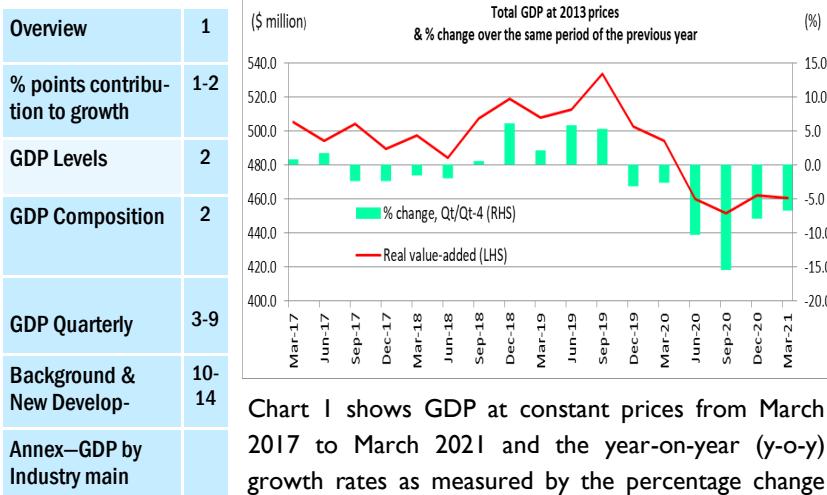
New base year for computing GDP at constant prices is now 2013 replacing the old base year of 2009.

2013 = 100

#### Special points of interest:

- GDP Growth - -7.0%
- GDP at Constant 2013 Prices (real) - WST \$459.6 million
- GDP at Current Prices (nominal) - WST \$509.7 million

#### Inside this issue:



Economic activity, as measured by Gross Domestic Product (GDP) declined by 7.0% in the **March 2021 quarter**, recording a total GDP in real terms of \$459.6 million. The growth in the quarter under review makes it the sixth quarterly decline for the economy which started in December 2019. This follows growth rates of -15.4% and -8.0% in the September and December 2020 quarters respectively. The economy continues to decline due to the impacts of the Covid-19 pandemic affecting economic activity within the March 2021 quarter in terms of international travel restrictions, reduced trade, global control measures and national lockdown. The pandemic has directly affected most sectors of the economy with wholesaling activities, travel and tour related activities, construction, air and land transport, accommodation and restaurant and financial services being the hardest hit.

#### GDP Growth:

Gross Domestic Product for the **March 2021 Quarter** at constant prices amounted to \$459.6 million, decreasing by 7.0% compared to March 2020 quarter. This follows a decrease of 8.0% in December 2020.

**Chart 1: Total GDP at constant prices & growth rates, March 2017 - March 2021**

on the same quarter of the previous year. The economy has now recorded six consecutive quarters of negative growth reflecting the impact of the measles epidemic in December 2019 and the COVID-19 pandemic restrictions on the economy. However, the adverse effects have moderated in the December 2020 and March 2021 quarters as indicated in Chart 1. The 7.0% decrease in the March 2021 quarter reflects an easing of some restrictions as initially enforced by the Government during lockdown. Services industries which make up more than two thirds of the economy fell 7.6 percent. Goods-producing industries declined 8.9 percent, while primary industries went up by 0.7 percent in the March 2021 quarter.

**Chart 2: Percentage-point contributions to GDP growth by industry; March 2021 Quarter**

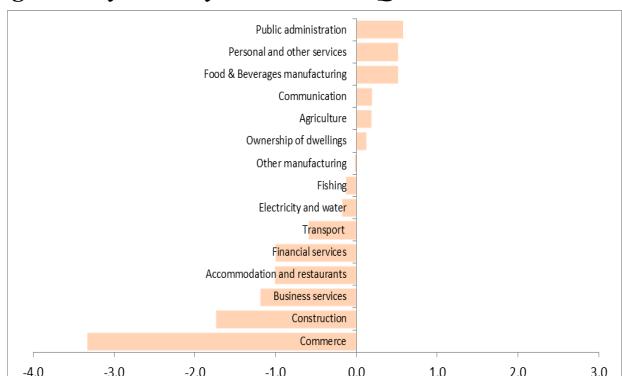


Chart 2 above indicates the percentage-points (pp) contributions of each industry to the overall growth of -7.0% in the March 2021 quarter. The largest contributors to the drop in output came from Commerce, Construction, Business Services, Accommodation and Restaurants, Financial services and Transport with contributions of -3.3 pp, -1.7 pp, -1.2 pp, -1.0 pp, -1.0 pp and -0.6 pp respectively to the overall growth of -7.0% within the period under review.

# Overview cont'd

The Commerce industry was the primary contributor to the decline in GDP as it relapsed in the March 2021 quarter following an increase in the previous quarter. Wholesaling activities related to food, beverages, construction materials and gaseous products decreased in March 2021. Construction also declined by 24.5% on a year-on-year basis; its performance has not improved since the global economic impacts of the COVID-19 pandemic hit the economy since January 2019. Business services also decreased as tourism related activities such as tour operators and travel oriented businesses declined; demand on real estate services also plunged during this period. Although legal and consultancy services increased during the quarter, it was not high enough to offset the negative effect its counterparts have experienced.

But nevertheless, industries that recorded positive growths were Public Administration, Personal & other services, Food & Beverage manufacturing, Communication, Agriculture and Ownership of Dwellings. The overall increase by these six industries was not high enough to offset the rapid decline by the industries recording negative growths in March 2021.

## GDP Levels (Nominal):

Gross Domestic Product at current prices or nominal GDP for the **March 2021 quarter** amounted to \$509.7 million. It decreased by 7.4% compared to the March 2020 quarter.

**Chart 3: Composition of Nominal GDP, March 2021 quarter**

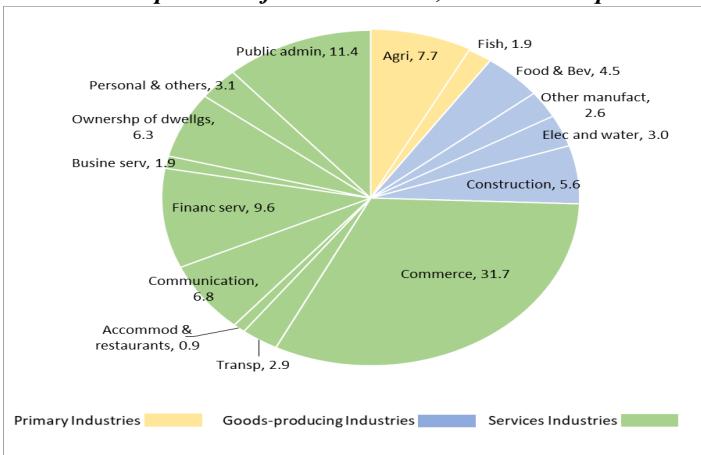


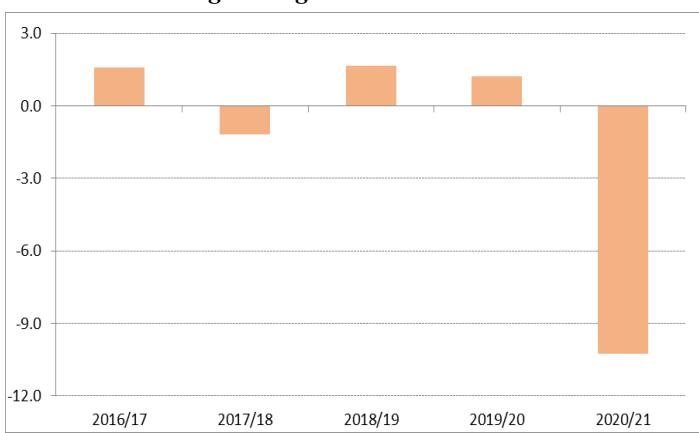
Chart 3 shows the industry composition of GDP at current market prices in the March 2021 quarter. Tertiary sector (services industries) comprising a total share of 74.6% of total nominal GDP went up by 0.4 pp compared to March 2020, due to the increase in Public administration. The goods-producing industries with a share of 15.7% went up by 0.2 pp due to the increase in the manufacturing industries. The Primary sector which accounts for 9.6% of GDP, dropped its share by 0.6 pp. This was driven by the decline in the Agriculture industry.

## Twelve Months Review for the year ended March 2021:

GDP for the year ended March 2021 (April 2020 - March 2021) at current market prices was \$2,016.2 million, decreasing by 9.9% compared to the \$2,237.1 million recorded in the year ended March 2020. At this level, GDP per capita was \$9,936 million decreasing by 10.6% over the year ended March 2020.

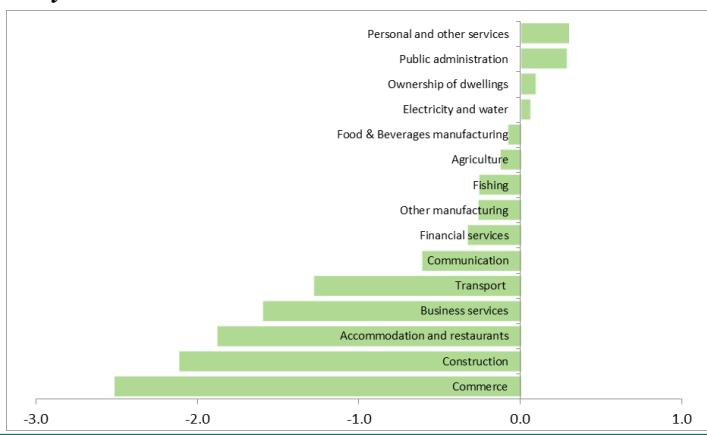
In constant 2013 prices, GDP stood at \$1,833.6 million in the year ended March 2021. On an annual basis, GDP went down by 10.3% compared to the year ending March 2020, the largest annual drop ever recorded since the start of the series.

**Chart 4: Percentage change in Constant Prices 2016-2021**



Depicted in Chart 4 are the real growth rates in the last five years ending March with the current FY having the biggest decrease of 10.3%. The fall in the FY ending March 2021 was mainly driven by the downturn in economic activity in Commerce, Construction, Accommodation and Restaurants, Business services and Transport with respective contributions of -2.5 pp, -2.1 pp, -1.9 pp, -1.6 pp, -1.3 pp each to the overall decline of -10.3% as shown in Chart 5 below. This reflects the negative effects posed by the pandemic on the economy within the year as compared to the pre-pandemic levels.

**Chart 5: Percentage-point contributions to GDP growth for the year ended March 2021**



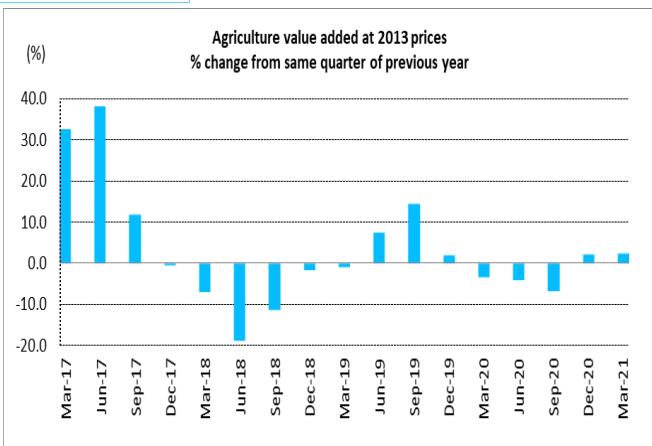
# Individual Industry Quarterly Performance

AGRICULTURE	GDP Mar 2020 Quarter	GDP Dec 2020 Quarter	GDP Mar 2021 Quarter	% change from Dec 2020 quarter (q-o-q)	% change from Mar 2020 quarter (y-o-y)
Value Added (current prices)	46.4	45.0	39.5	-12.2	-14.9
WST (millions)					
Value added (constant 2013 prices)	39.4	41.8	40.3	-3.4	2.3
WST (millions)					
Contribution to aggregate (y-o-y) real growth rate: <i>percentage points</i>	-0.3	0.2	0.2		
Contribution to aggregate nominal GDP: <i>percent</i>	8.4	8.8	7.7		

**Chart 6: Percentage change in Agriculture real value added; March 2017 - March 2021**

Agriculture production in total value added at constant prices for the March 2021 quarter amounted to \$40.3 million. It increased by 2.3% compared to the same quarter of the previous year, making it the second consecutive quarter of positive growth for the industry. This was due to the 4.5% increase in Livestock as well as the increase in exported produce which more than double its volume exported in March 2020, despite the decline in domestic consumption of crops by 7.6%.

Agriculture industry was amongst a few that contributed positively to overall growth, with a contribution of 0.2 percentage-point for the period under review.

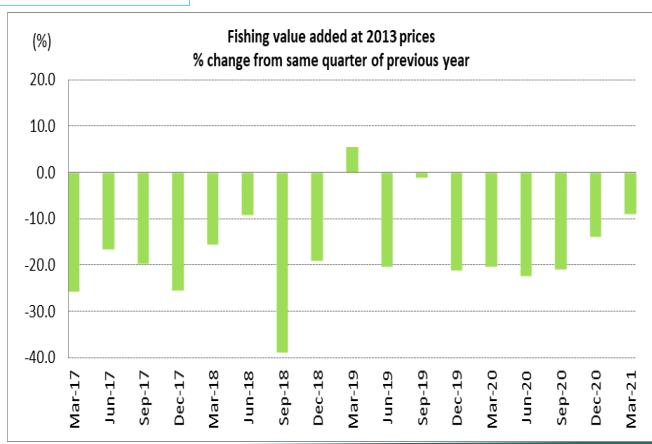


FISHING	GDP Mar 2020 Quarter	GDP Dec 2020 Quarter	GDP Mar 2021 Quarter	% change from Dec 2020quarter (q-o-q)	% change from Mar 2020 quarter (y-o-y)
Value Added (current prices)	9.7	8.9	9.6	8.2	-1.1
WST (millions)					
Value added (constant 2013 prices)	6.9	6.0	6.3	5.0	-9.0
WST (millions)					
Contribution to aggregate (y-o-y) real growth rate: <i>percentage points</i>	-0.3	-0.2	-0.1		
Contribution to aggregate nominal GDP: <i>percent</i>	1.8	1.7	1.9		

**Chart 7: Percentage change in Fishing real value added; March 2017 - March 2021**

Overall, fishing value added in real terms decreased by 9.0% compared to the corresponding period in 2020, making it the eighth consecutive quarter of decreases by the industry. This was driven by the decline of 15.8% of fish domestically consumed in the March 2021 quarter as both inshore and offshore landings supplied to the markets within the country decreased by 20.2% and 89.8% respectively. The increase in fish export was not high enough to counter the decline in the domestic consumption. The industry contributed -0.1 percentage points to the overall real growth rate in March 2021.

In nominal terms, the industry went down by 1.1% on a year-on-year basis.



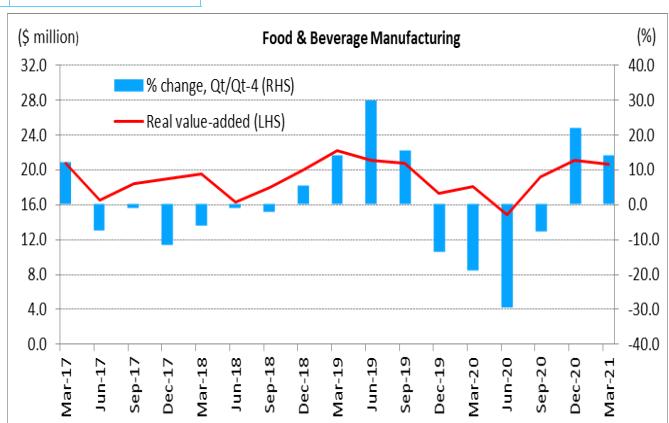
# Individual Industry Quarterly Performance

FOOD & BEVERAGE MANUFACTURING	GDP Mar 2020 Quarter	GDP Dec 2020 Quarter	GDP Mar 2021 Quarter	% change from Dec 2020 quarter (q-o-q)	% change from Mar 2020 quarter (y-o-y)
Value Added (current prices)	19.4	24.4	23.1	-5.2	19.2
WST (millions)					
Value added (constant 2013 prices)	18.1	21.1	20.6	-2.3	14.0
WST (millions)					
Contribution to aggregate (y-o-y) real growth rate: <i>percentage points</i>	-0.8	0.7	0.5		
Contribution to aggregate nominal GDP: <i>percent</i>	3.5	4.8	4.5		

**Chart 8: Food & Beverage Manufacturing quarterly value added at constant prices & % change over the same period of the previous year; March 2017 - March 2021**

Food and Beverage manufacturing produced a total value-added of \$20.6 million, increasing by 14.0% compared to the same quarter of the previous year. This makes it the second quarter of positive growth for the industry following four consecutive quarters of declining performances. The industry contributed 0.5 percentage-points to the overall growth in the period with a 4.5% share to total nominal GDP.

The positive outturn by the industry was in line with the increases in local production of food and beverages by 19.2% and 2.3% respectively in March 2021 in comparison to the March 2020 quarter. Export of food and beverages was more than twice its volume exported in the same quarter of the previous year.

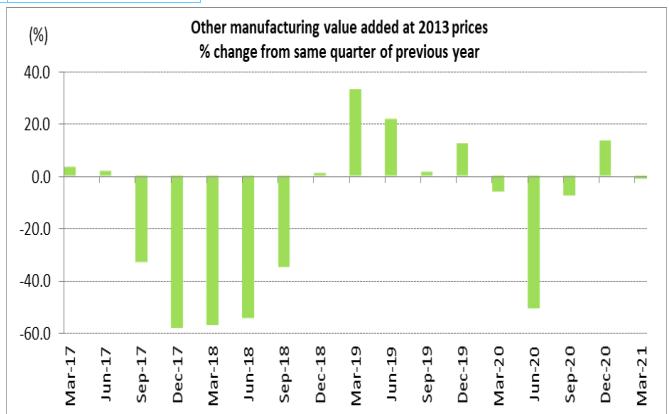


OTHER MANUFACTURING	GDP Mar 2020 Quarter	GDP Dec 2020 Quarter	GDP Mar 2021 Quarter	% change from Dec 2020quarter (q-o-q)	% change from Mar 2020 quarter (y-o-y)
Value Added (current prices)	12.8	14.1	13.2	-6.4	3.0
WST (millions)					
Value added (constant 2013 prices)	10.3	10.9	10.2	-6.3	-1.0
WST (millions)					
Contribution to aggregate (y-o-y) real growth rate: <i>percentage points</i>	-0.1	0.3	0.0		
Contribution to aggregate nominal GDP: <i>percent</i>	2.3	2.8	2.6		

**Chart 9: Percentage change in Other Manufacturing real value added; March 2017 - March 2021**

Other Manufacturing dropped both on a year-on-year and quarter-on-quarter basis by 1.0% and 6.3% respectively, reversing its positive growth from the previous quarter. It recorded a value added of \$10.2 million at constant 2013 prices in March 2021. This was consistent with the decline in employment numbers for the industry as stated in the Employment Report for March 2021.

The industry recorded a total value added of \$13.2 million in nominal terms for the period under review, increasing by 3.0% compared to March 2020 quarter. The industry contributed a share to total nominal GDP of 2.6 percent, increasing by 0.3 percentage points on a y-o-y basis.



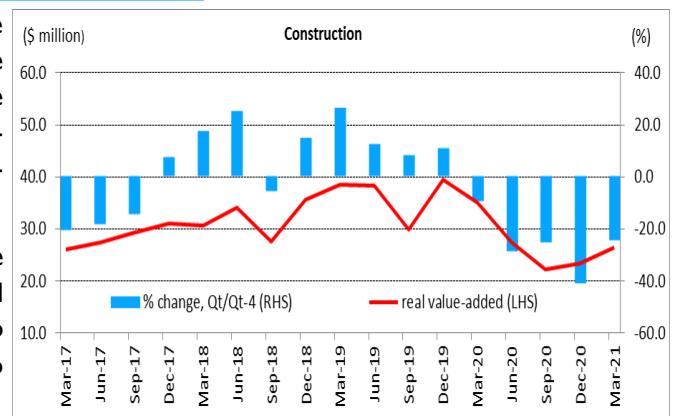
# Individual Industry Quarterly Performance

CONSTRUCTION	GDP Mar 2020 Quarter	GDP Dec 2020 Quarter	GDP Mar 2021 Quarter	% change from Dec 2020 quarter (q-o-q)	% change from Mar 2020 quarter (y-o-y)
Value Added (current prices)	36.7	25.8	28.4	10.0	-22.8
WST (millions)					
Value added (constant 2013 prices)	35.0	23.3	26.4	13.3	-24.5
WST (millions)					
Contribution to aggregate (y-o-y) real growth rate: <i>percentage points</i>	-0.7	-3.2	-1.7		
Contribution to aggregate nominal GDP: <i>percent</i>	6.7	5.0	5.6		

**Chart 10: Construction quarterly value added at constant prices & % change over the same period of the previous year March 2017 - March 2021**

Construction recorded a real value added of \$26.4 million in the March 2021 quarter, decreasing by 24.5% compared to the March 2020 quarter. The drop as expected reflected the decline in construction of public infrastructural works within the country. This was also consistent with the decrease of 11.1% of imported construction materials.

This is the fifth consecutive quarter of negative growth within the industry. Construction contribution to the economy's real growth rate also declined by 1.7 percentage-points compared to the March 2020 quarter. It contributed a share of 5.6 percent to the economy's total nominal GDP for March 2021 quarter.

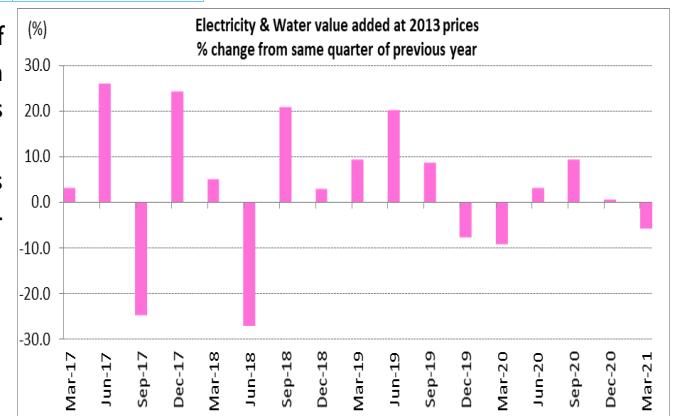


ELECTRICITY AND WATER	GDP Mar 2020 Quarter	GDP Dec 2020 Quarter	GDP Mar 2021 Quarter	% change from Dec 2020quarter (q-o-q)	% change from Mar 2020 quarter (y-o-y)
Value Added (current prices)	16.5	16.4	15.5	-5.1	-5.9
WST (millions)					
Value added (constant 2013 prices)	14.7	14.6	13.8	-5.4	-5.7
WST (millions)					
Contribution to aggregate (y-o-y) real growth rate: <i>percentage points</i>	-0.3	0.0	-0.2		
Contribution to aggregate nominal GDP: <i>percent</i>	3.0	3.2	3.0		

**Chart 11: Percentage change in Electricity & Water real value added; March 2017 - March 2021**

Electricity and Water registered a decrease in real value-added of 5.7% in March 2021 making it the first quarter of negative growth following three consecutive quarters of positive performances which started in June 2020. Total value added in the March 2021 quarter amounted to \$13.8 million in real terms. The industry's performance reflects the 1.9% decline in electricity. Water production also went down by 11.3% in the period.

The industry's share to total nominal GDP was 3.0%.

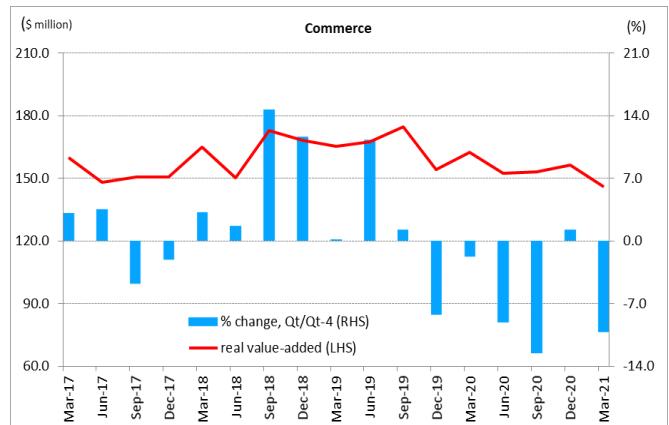


# Individual Industry Quarterly Performance

COMMERCE	GDP Mar 2020 Quarter	GDP Dec 2020 Quarter	GDP Mar 2021 Quarter	% change from Dec 2020 quarter (q-o-q)	% change from Mar 2020 quarter (y-o-y)
Value Added (current prices)	177.7	165.6	161.6	-2.4	-9.1
WST (millions)					
Value added (constant 2013 prices)	162.3	156.4	145.9	-6.7	-10.1
WST (millions)					
Contribution to aggregate (y-o-y) real growth rate: <i>percentage points</i>	-0.6	0.4	-3.3		
Contribution to aggregate nominal GDP: <i>percent</i>	32.3	32.3	31.7		

**Chart 12: Commerce quarterly real value added & % change over the same period of the previous year; March 2017 - March 2021**

Commerce continues to be the biggest industry in the economy holding the largest share of 31.7 percent of total nominal GDP. Its total value added in real terms amounted to \$145.9 million for the March 2021 quarter, decreasing by 10.1% on year-on-year basis. It also went down by 6.7% when compared to the previous quarter. The performance by the industry reflects the decrease in wholesaling activities related to food, stationeries and agricultural equipment. Moreover, remittances as recorded by the CBS for the quarter under review went down by 2.0% when compared to the March 2020 quarter. The industry's share in aggregate nominal GDP also decreased by 0.6 percentage-points when compared to the March 2020 quarter.

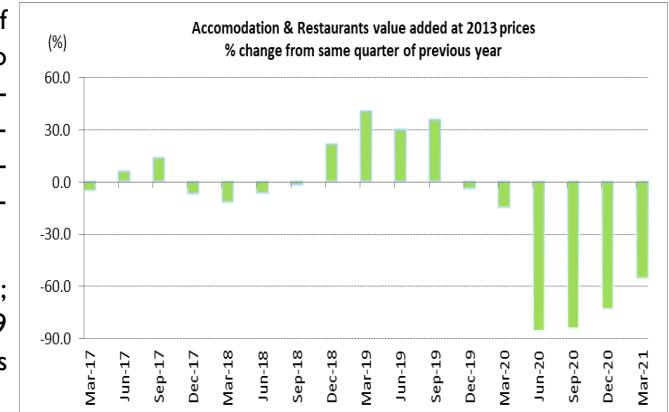


ACCOMMODATION AND RESTAURANTS	GDP Mar 2020 Quarter	GDP Dec 2020 Quarter	GDP Mar 2021 Quarter	% change from Dec 2020quarter (q-o-q)	% change from Mar 2020 quarter (y-o-y)
Value Added (current prices)	10.2	3.9	4.8	24.9	-53.0
WST (millions)					
Value added (constant 2013 prices)	8.9	3.2	4.0	24.8	-55.4
WST (millions)					
Contribution to aggregate (y-o-y) real growth rate: <i>percentage points</i>	-0.3	-1.7	-1.0		
Contribution to aggregate nominal GDP: <i>percent</i>	1.9	0.8	0.9		

**Chart 13: Accommodation & Restaurants, percentage change in real value added over the same period of the previous year; March 2017 - March 2021**

Accommodation and Restaurant recorded a total value added of \$4.0 million in constant prices; decreasing by 55.4% compared to March 2020 quarter. Accommodation fell by 60.2% and Restaurant decreased by 8.2%. This makes it the industry's sixth consecutive quarterly decline as a result of the ongoing closure of international borders with the exception of repatriation flights for returning Samoan citizens.

In nominal terms, it produced a total value added of \$4.8 million; also declined by 53.0%. The industry contributed a share of 0.9 percent to total nominal GDP, declining by 1.0 percentage-points on a year-on-year basis.



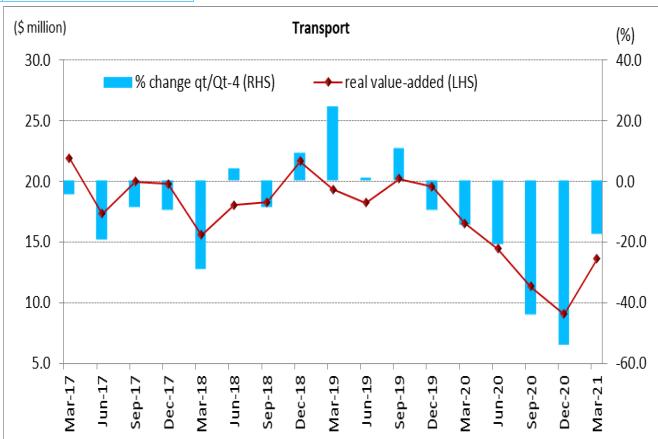
# Individual Industry Quarterly Performance

TRANSPORT	GDP Mar 2020 Quarter	GDP Dec 2020 Quarter	GDP Mar 2021 Quarter	% change from Dec 2020 quarter (q-o-q)	% change from Mar 2020 quarter (y-o-y)
Value Added (current prices)	17.4	9.5	14.6	54.0	-16.5
WST (millions)					
Value added (constant 2013 prices)	16.5	9.0	13.6	50.8	-17.6
WST (millions)					
Contribution to aggregate (y-o-y) real growth rate: <i>percentage points</i>	-0.6	-2.1	-0.6		
Contribution to aggregate nominal GDP: <i>percent</i>	3.2	1.8	2.9		

**Chart 14:** Transport quarterly growth rates with total value added at constant 2013 prices, March 2017 - March 2021

Transport recorded a total value added in real terms of \$13.6 million for the March 2021 quarter, a decrease of 17.6% compared to the March 2020 quarter. Air transport decreased by 76.3% mainly due to the continuing closure of international borders to specific countries. Land transport (down by 10.1%) was driven by the decrease in activities related to warehousing, storage and cargo handling. However, it increased by 50.8% compared to the previous quarter (December 2020).

Value added of \$14.6 million in nominal terms for Transport went down by 16.5% for the period under review compared to the March 2020 quarter.

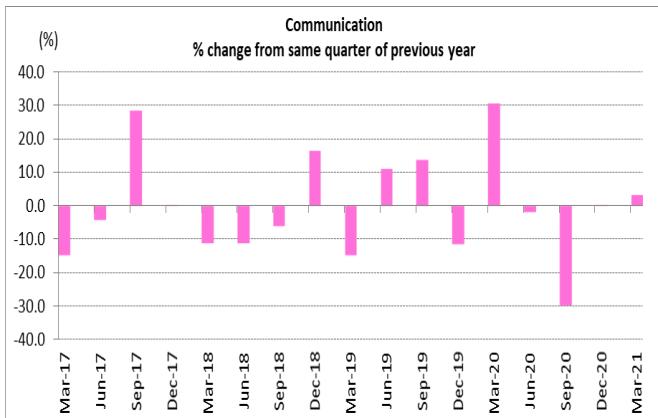


COMMUNICATION	GDP Mar 2020 Quarter	GDP Dec 2020 Quarter	GDP Mar 2021 Quarter	% change from Dec 2020quarter (q-o-q)	% change from Mar 2020 quarter (y-o-y)
Value Added (current prices)	37.2	34.1	34.9	2.4	-6.2
WST (millions)					
Value added (constant 2013 prices)	31.6	31.8	32.6	2.3	3.1
WST (millions)					
Contribution to aggregate (y-o-y) real growth rate: <i>percentage points</i>	1.5	0.0	0.2		
Contribution to aggregate nominal GDP: <i>percent</i>	6.8	6.6	6.8		

**Chart 15:** Communication percentage change in real GDP from the same quarter of the previous year, March 2017– March 2021

Communication generated a real value added of \$32.6 million in the March 2021 quarter, increasing by 3.1% over the March 2020 quarter. The positive performance by the industry during the period under review reflects the rising demand for communication services and digital infrastructure in the face of the pandemic-triggered lockdown. Employment in the Communication industry also increased by 22.6% in the period under review.

The industry contributed a positive 0.2 percentage-points to overall year-on-year growth.

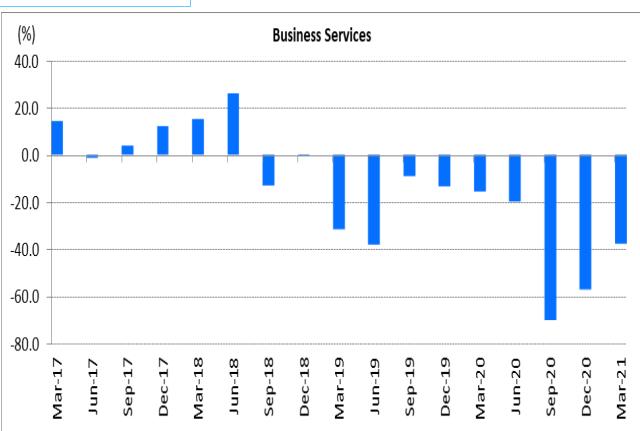


# Individual Industry Quarterly Performance

BUSINESS SERVICES	GDP Mar 2020 Quarter	GDP Dec 2020 Quarter	GDP Mar 2021 Quarter	% change from Dec 2020 quarter (q-o-q)	% change from Mar 2020 quarter (y-o-y)
Value Added (current prices)	15.7	8.6	9.8	13.8	-37.6
WST (millions)					
Value added (constant 2013 prices)	15.6	8.5	9.7	14.1	-37.6
WST (millions)					
Contribution to aggregate (y-o-y) real growth rate: <i>percentage points</i>	-0.6	-2.2	-1.2		
Contribution to aggregate nominal GDP: <i>percent</i>	2.9	1.7	1.9		

Chart 16: Business Services, % change in value-added at constant 2013 prices from March 2017 – March 2021

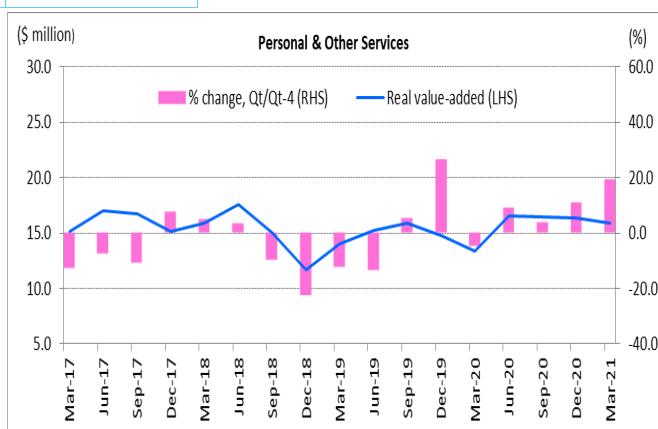
Business services recorded a total value added of \$9.7 million at constant 2013 prices in the March 2021 quarter. A decline of 37.6% was experienced by the industry on a year-on-year basis making this quarter the tenth consecutive negative growth for Business services. The industry continues on in its negative growth with travel restrictions still resuming due to COVID-19, which led to the decline in travel agency activities, renting and leasing of motor vehicles, leasing of intellectual properties and so fourth. Real estate activities also declined in the quarter under review. However, Professional services increased by 75.4% on a y-o-y basis but it was not high enough to offset the decline in the other activities.



PERSONAL & OTHER SERVICES	GDP Mar 2020 Quarter	GDP Dec 2020 Quarter	GDP Mar 2021 Quarter	% change from Dec 2020quarter (q-o-q)	% change from Mar 2020 quarter (y-o-y)
Value Added (current prices)	14.5	16.6	15.8	-4.5	9.5
WST (millions)					
Value added (constant 2013 prices)	13.3	16.4	15.9	-3.2	19.2
WST (millions)					
Contribution to aggregate (y-o-y) real growth rate: <i>percentage points</i>	-0.1	0.3	0.5		
Contribution to aggregate nominal GDP: <i>percent</i>	2.6	3.2	3.1		

Chart 17: Personal & Other Services quarterly value added at constant prices & % change over the same period of the previous year; March 2017– March 2021

Personal & other services recorded an increase in real terms by 19.2 percent on a year-on-year basis. This is the fourth consecutive quarter of positive growth by the industry. It produced a real value added of \$15.9 million, contributing 0.5 percentage-points to overall growth. Activities pertaining to religious organizations, repairs of communication equipment services and educational related activities contributed to the growth experienced by the industry within the period under review. The industry registered an increase of 9.5% in nominal terms compared to the March quarter 2020.



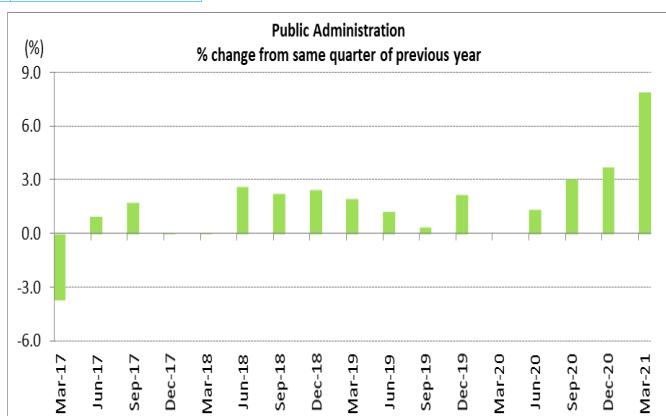
# Individual Industry Quarterly Performance

PUBLIC ADMINISTRATION	GDP Mar 2020 Quarter	GDP Dec 2020 Quarter	GDP Mar 2021 Quarter	% change from Dec 2020 quarter (q-o-q)	% change from Mar 2020 quarter (y-o-y)
Value Added (current prices)	48.6	57.2	58.0	1.5	19.5
WST (millions)					
Value added (constant 2013 prices)	36.1	38.3	38.9	1.6	7.9
WST (millions)					
Contribution to aggregate (y-o-y) real growth rate: <i>percentage points</i>	0.0	0.3	0.6		
Contribution to aggregate nominal GDP: <i>percent</i>	8.8	11.1	11.4		

**Chart 18: Public Administration, % change in value-added at constant 2013 prices from March 2017 – March 2021**

Public administration went up by 7.9% on a year-on-year basis. Its total value added at constant prices amounted to \$38.9 million in the March 2021 quarter. This reflects the increase in general administration activities such as legislative, public order & safety activities, economic and social policy for the community, regulations efficient for operations of businesses etc.

The industry also increased by 9.2% in nominal terms or at current prices. Public Administration is the third largest industry in the economy with a share of 11.4% in nominal terms.

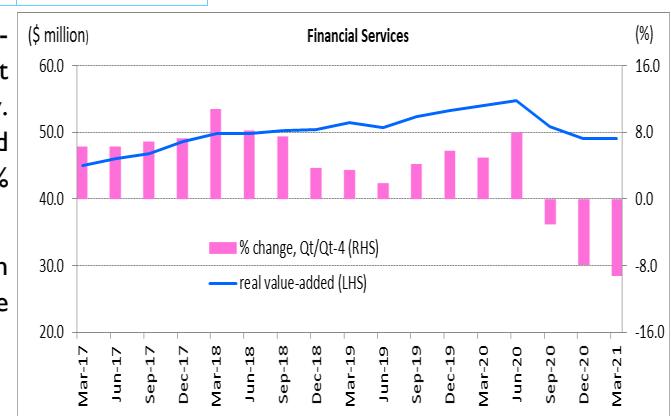


FINANCIAL SERVICES	GDP Mar 2020 Quarter	GDP Dec 2020 Quarter	GDP Mar 2021 Quarter	% change from Dec 2020 quarter (q-o-q)	% change from Mar 2020 quarter (y-o-y)
Value Added (current prices)	53.2	51.1	48.8	-4.5	-8.4
WST (millions)					
Value added (constant 2013 prices)	54.1	49.1	49.1	0.0	-9.1
WST (millions)					
Contribution to aggregate (y-o-y) real growth rate: <i>percentage points</i>	0.5	-0.8	-1.0		
Contribution to aggregate nominal GDP: <i>percent</i>	9.7	9.9	9.6		

**Chart 19: Financial Services value added at constant prices & % change over the same period of the previous year; March 2017 – March 2021**

Financial services recorded a total real value added of \$49.1 million, decreasing by 9.1% in the March 2021 quarter. This makes it the third consecutive quarter of negative growth by the industry. This was driven by the fall in activities of Commercial banks and other financial institutions apart from the Central bank by 38.1% and 6.5% respectively.

The industry recorded a total value added of \$48.8 million in nominal terms. It dropped by 8.4% on a y-o-y basis with its share to nominal GDP decreasing by 0.1 percentage-points.



# NATIONAL ACCOUNTS FRAMEWORK REVIEW & GDP 2013 REBASING

## Background Information

### INTRODUCTION

The compilation of national accounts statistics is a dynamic process, and therefore needs to adapt to reflect a variety of measures and indicators consistent with developments and structural changes in the economy over a period of time. It is therefore expected that revisions and updates are made to the historical series on a quarterly or annual basis as new data sources are brought into the model and as various benchmarks and assumptions are validated and updated.

This quarterly report is the tenth of the new quarterly series of GDP estimates at constant 2013 prices. This report is an ongoing publication and can also be downloaded from our website [www.sbs.gov.ws](http://www.sbs.gov.ws).

### ABOUT GROSS DOMESTIC PRODUCT

Gross domestic product (GDP) is Samoa's official measure of economic growth. GDP is compiled and published using the **production approach**, this approach measures the total value of goods and services produced in Samoa, after deducting the cost of goods and services used in the production process. This is also known as the value-added approach.

**Broad industry groups:** The GDP tables attached to this report follows the broad groupings based on the International Standard Industry Classification (ISIC) Revision 4. Classification of economic activity is important in the determination of the extent and nature of the information collected and the quality of the data compiled.

- primary industries (agriculture and fishing)
- secondary sector or the goods-producing industries (manufacturing, construction, electricity & water);
- Tertiary sector or service industries (wholesale trade; retail trade and accommodation; transport, postal, and warehousing; information media and telecommunications; finance and insurance services; rental, hiring, and real estate services; professional, scientific, technical, administrative, and support services; public administration and safety; education and training; health care and social assistance; arts, recreation, and other services).

### REVISIONS

No revisions in the previously published data in the December 2020 quarter report, however, data in this publication is subject to change in the next report should there be any changes from the sources.



**SBS Vision:**  
**"To strengthen Statistical services  
for the development of  
Samoa"**

National Accounts & Finance Statistics Division  
FMFM II Building, Level 2 PO Box 1151  
Apia, Samoa

Phone: (685) 62006 / 29326 / 62017  
Fax: (685) 24675  
E-mail: [fsd@sbs.gov.ws](mailto:fsd@sbs.gov.ws)

A handwritten signature in blue ink, appearing to read "Aliimuamua Malaefono Taua-T. Faasalaina".

*Aliimuamua Malaefono Taua-T. Faasalaina*  
**GOVERNMENT STATISTICIAN / CEO**

## Background Information

### Overview

This publication is the eighth release for estimates of GDP at constant (2013) prices. In the process of updating the base year from 2009 to 2013 the overall estimation system has been exhaustively reviewed, leading to improved methodologies and the adoption of a range of new data sources and revised benchmarks wherever available. The revised overall estimates have not resulted in significant changes to the picture of the Samoan economy presented by the earlier 2009-based estimates, but it is believed that the revised system is more robust, and will be better able to quickly reflect future disturbances to economic growth. The section below on “General reasons for rebasing estimates at constant prices” sets out the purpose of rebasing estimates, and the nature of the processes involved.

The key features of the overall system review and associated rebase are as follow:

- base year for constant price estimates was updated from 2009 to 2013
- ISIC classification have been upgraded from the ISIC Revision 3.1 to Revision 4 as recommended in the SNA 2008
- an increased reliance on summary data from the VAGST system
- the incorporation of latest benchmarks, including
  - ⇒ Household Income and Expenditure Survey, 2013
  - ⇒ Business Activity Survey, 2013
  - ⇒ Population Census, 2016
  - ⇒ Financial data on the Financial Sector operations
  - ⇒ information from other sources, particularly for Government Finance Statistics, Merchandise trade, Employment and Wage data; SNPF, Commodity prices from CPI, Agriculture volume data, visitor arrivals by purpose, livestock production, and landings of in-shore and off-shore fishing catch.
- more detailed data on industry level have been incorporated hence provide benefits for the detailed analysis, with results only at the aggregated industry level

### General reasons for rebasing estimates

When interpreting movements over time in broadly-based indicators such as GDP, the effects of changing prices make it difficult to see the “real” changes i.e. what would the changes have been if there had been no change in the component prices? If dealing with a single commodity e.g. sales of taro, it is possible to simply look at the quantities sold, and say with some confidence that “real” sales of taro are going up, down, or are flat.

But with an aggregate as complex as GDP, commodities such as taro,

long-line tuna catch, road building, haircuts and financial services are all intermingled, and it is not possible to immediately see the changes in the overall “quantity” of production. In order to aggregate such diverse commodities, it is necessary to express the underlying flows in terms of the prices of a single period (the “base year”). By expressing the detailed flows in monetary terms and at the price of a single period, they can then be aggregated, and the resulting aggregate values of diverse items can then be analysed for the direction and extent of their change “at constant prices”.

This process of valuing the production of detailed commodities at constant prices and then aggregating them is – in principle - directly analogous to the way in which the Consumer Price Index (CPI) is compiled. Whereas the CPI measures **prices** of detailed commodities over time and then weights those prices together by their base-period values to derive an aggregate measure of price, the derivation of constant price estimates measures detailed **quantities** over time and then weights those quantities together by their base-period values to derive an aggregate “quantum” measure.

Just as the CPI is rebased regularly, there is a further analogy between the compilation of the CPI and the necessity to rebase measures at constant prices. As noted in international recommendations:

“....over time the pattern of relative prices in the base period tends to become progressively less relevant to the economic situations of later periods to the point where it becomes unacceptable to continue using them to measure volume changes from one period to the next. It is then necessary to update the weights.”

### **Methodological changes associated with the review of the system for estimating GDP at current and constant prices**

As an integral part of the rebasing to 2013 prices, all benchmarks, assumptions and data sources were evaluated to see if they could be improved. In addition to changes due to the adoption of a more recent base year, the estimates of GDP and its components have been affected by improvements throughout the estimation system.

### **Revised benchmarks**

It is not practicable to undertake all major data collections in every period eg, the work required to conduct and process a national HIES, Business Activity Survey means that conducting these surveys every 5 years as Samoa has been doing is a major achievement. As a result it is often necessary to use **partial indicators** for extrapolating benchmarks, and the quality of the resulting estimates depends on the assumption that the relationship between the indicator and the benchmark remains constant over time.

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When benchmarks are then derived for subsequent periods it is often the case that the relationship between indicator and benchmark has changed, and this leads to revisions between the benchmark periods and into the period before the next benchmark revision. As a specific example of how this can impact on the estimates, when the recent rebasing was conducted in 2013 there was insufficient information on the financial services available to the Bureau to actually reflect the financial services contribution to the economy. This leads to this component of GDP remained low until the detailed information was made available from the CBS during the 2013 rebase estimates. The more detailed information at a subsector level in financial service as well as insurance revealed that there had been strong growth in the sector over the years with its level substantially increased compared to the 2009 series.

Fortunately, the major strengthening of the national statistical system during the last decade has led to a breadth of experience in the use of administrative data sources that are available to supplement censuses and surveys, and more effort is put into strengthening cooperation and coordination amongst the data users and data providers. Furthermore, resources are being allocated to permit more regular data collections than was the case a decade or more ago. As a result, 2018 HIES enumeration is completed, Agriculture Census will be conducted in early 2020 with more developments into the integration of businesses administrative data to facilitate timely and less costly collection on the Business Activities. It is anticipated that future rebases and systems reviews will be far less subject to revision due to benchmarks becoming very much out of date.

### Improved national statistical system:

Any system for estimating GDP is basically a framework for bringing together a wider range of economic and social statistics. The quality of the resulting estimates will be directly dependent on (a) the quality of the component systems, and (b) the extent to which the components are integrated eg, common definitions and classifications. In reviewing the latest system for estimating GDP it was evident that the national statistical system is far more robust and better integrated than it was a decade ago despite challenges

A key example of better integration is that businesses paying VAGST and NPF contributions are now classified to the same industry in both systems – as a result the average earnings measures by industry from NPF data can now be confidently related to the estimates of output by industry from VAGST data, and so provide a directly relevant measure of labour costs associated with that industry output. Other activities to improve this integration further is continuing; with the development of an Integrated Business Information System developed and housed in the Bureau, with data sharing amongst Government Ministries and Corporations like Ministry for Revenue, Ministry of Commerce Industry and Labour as well as National Provident Fund.

Ministry of Agriculture and Fisheries have been supportive during this rebase exercise with the electronic transfer of fishing data especially the

inshore and off-shore data, a great example of a statistical system with strong cooperation.

With the general improvements in the quality of the national statistical system (which includes agencies other than SBS) the need to adjust source data for obvious outliers has been significantly reduced. When the first system was established there were many series which regularly showed unrealistic fluctuations: some were monitored manually, others were so consistently unreliable that automatic checks were built in to keep them within set limits. While the latest system still features some moving averages to allow for known timing problems (eg, 7 paydays in one quarter, 6 in the next) the source data now stand on their own merits. Not only is the revised system now drawing on better quality component data, but it will also be able to more quickly reflect turning points and the effect of shocks such as cyclones.

### New classification—ISIC Revision 3.1 to Revision 4

In compliance with international best practice, one of the major developments was the re-classification of business by the nature of business activities using the ISIC Rev.4 from Rev.3.1 previously used. This is a significant activity in assuring that Samoa's data is comparable to other countries economy, as well in its relation to other systems like Balance of Payments and Government Finance Statistics. This has impacted on the value added levels of some industries like Construction and Business Services; with some establishments that were involved in architectural consultancy more on the services being previously classified under construction but are now in the business services—under architectural and engineering consultancy services.

### Methodological changes:

The general methods remain largely unchanged between 2009 and 2013 except for the opportunity to refine and improve the system as well as incorporation of the new benchmark data from the major surveys.

**Agriculture:** The general methods remain largely unchanged between 2009 and 2013 except for the opportunity to refine and improve the factors that were used in the estimation of the marketed commodities. This was related to the change in coverage of the market survey which previously covers the Fugalei market only, and now expanded to cover other markets and stalls around the islands including the main market in Savaii. The single biggest influence on the change in movements

## Background Information

between the two systems was the introduction of the 2013 HIES benchmarks, and this resulted on 2013-based estimates being lower in 2013 compare to the (2009) previous series.

**Fishing:** Fishing like Agriculture methods remain largely unchanged except for the introduction of the HIES 2013 data as well as the use of the in-shore and off-shore survey data from the Fisheries Division of the Ministry of Agriculture and Fisheries in the system.

### Industries which rely on VAGST data:

Benchmarks from the Business Activity Survey 2013 were considered and adjusted accordingly, in light of the coverage in the BAS for some industries and in comparison with VAGST data.

In many ways the VAGST system is a nearly ideal indicator for measuring value added in many industries:

- its scope is “value added”, the same concept as underlies GDP;
- it is a sub-annual system, with timely reporting;
- returns are monitored closely to ensure compliance;
- good working relation with MFR mean that SBS industry coding is being applied;
- its coverage spans the non-agricultural monetary side of the domestic economy.

As such the VAGST system provides regular, reliable aggregate data for the key items: sales, and purchases. If VAGST did not exist it would require a major (to the point of being impracticable) on-going business survey, at huge cost to both SBS and the reporting business community. Inevitably the results from the VAGST system have been adopted as the primary data source for many industries.

The industries which use only VAGST results in estimating the current price values (CPVs) of monetary value added for that industry are:

- OTHM Manufacturing other than food and beverages
- ELEW – but only the water component, and this will change if we can get good data directly from SWA (water is in VAGST, electricity is not)
- TRAD Commerce
- COMM Communication
- BUSS Business Services
- PERS Personal services
- OTHR Other services

Industries which use VAGST as the primary data source for monetary CPVs but supplement these with data from other sources are:

- FOOD Food and beverage manufacturing (+ exports)
- CONS Construction (+ building material imports as additional indicator);
- TSPT Transport (+ estimates for buses and taxis outside VAGST)

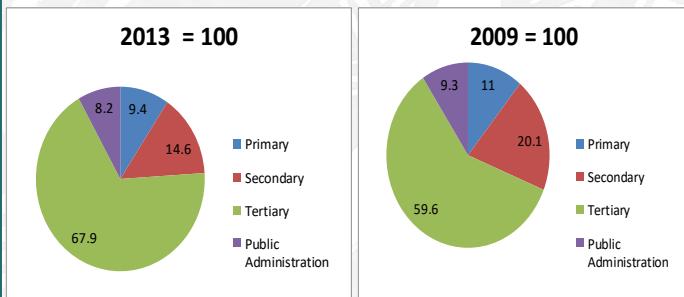
Apart from these VAGST based industries, The Finance Industry main data source is now primarily from the Profit and Loss Statement summary provided by the Central Bank of Samoa. This not only enables the calculation of the FISIM, but also the breakdown of other components of the Finance Sector like Insurance, Central Bank and Other financial institutions.

### Impact of the revised estimates on the economic structure and growth

The combined effect of the rebasing to 2013 prices, revising methodologies and data sources remained unchanged at the aggregated level. However the revised benchmarks as expected led to changes in the value added composition of industries, as well as year on year growth rates. The change saw the Tertiary sector share increased by 8.3 percentage point with Secondary, Primary and the Public Admin sector loosing 5.5, 1.6 and 1.1 percentage points respectively.

Underpinning the change was the Finance sector becoming the second largest industry after Commerce, with Construction moving to sixth and Other Manufacturing to be the smallest in 2018 with 1.8 percent share. The trend is indicative of the changes occurred in the period from 2009 to current with the completion of some major infrastructural projects as well as the effect of the closure of Yazaki in August 2017. Public Administration, Agriculture and Communication sectors were in the 2nd, 3rd and fourth in the ranking .

### Comparison of GDP shares 2018, by broad sectors in 2013 and 2009 prices,

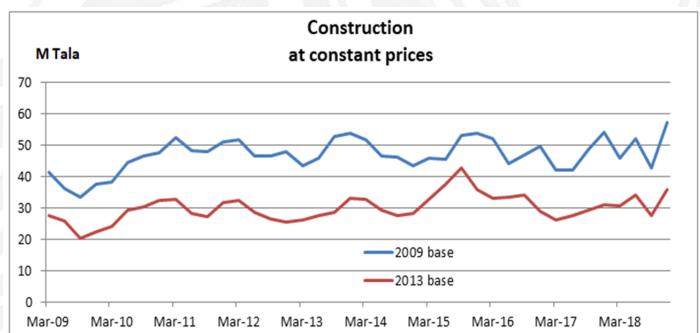
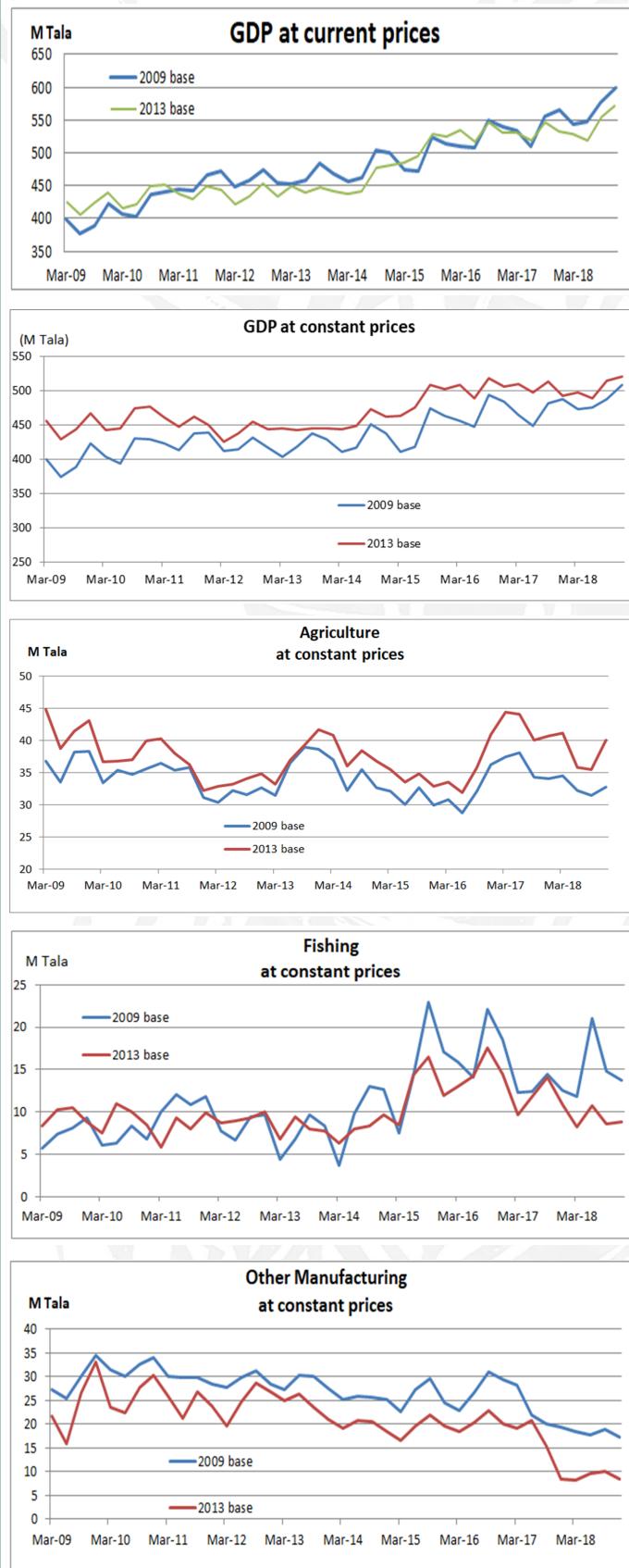


Indicated in the following charts are the industries showing significant change as part of the rebasing exercise:

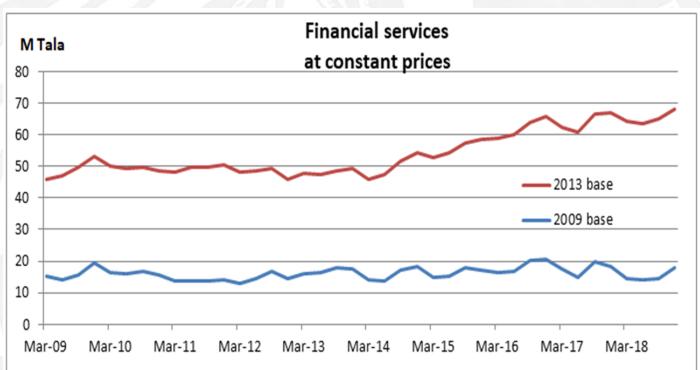
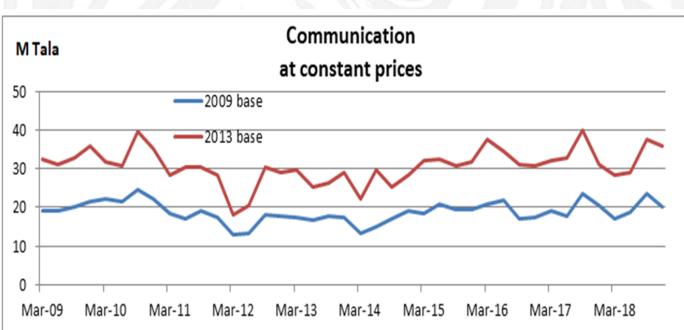
# NATIONAL ACCOUNTS FRAMEWORK REVIEW & GDP 2013 REBASING

## Background Information

Some of the key results for GDP at current and constant 2013 prices compared to 2009 prices;



The gap between the two base periods for the Construction and Other Manufacturing reflects the change in the level of activities in the two periods, with 2013 having a lower end compared to 2009. On the other hand Communication indicated that there have been more activities in the 2013 period compared to 2009.



The gap between the two base periods for the Financial services reflects the change in the level of activities in the two periods, with 2013 having a higher value of activities compared to 2009. This also attributed to improved data sources used for this industry compared to the previous data set.