Samoa Bureau of Statistics Gross Domestic Product December 2022 Quarter

Overview

31st March 2023



GDP using Production Approach is now compiled at GDP at purchaser prices replacing GDP at market prices. Base year remains at 2013.

Special points of interest:

- GDP Growth: 10.7%
- GDP at Constant 2013 Prices (real): WST \$526.7 million
- GDP at Current Prices (nominal) - WST \$647.7 million

Inside this issue:

Overview	1
% points contribu- tion to growth	1-2
GDP Levels	2
GDP Composition	2
GDP Quarterly	3-9
Background & New Develop-	10- 14
Annex—GDP by Industry main	

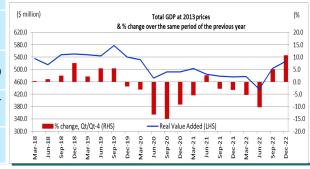
Economic activity, as measured by Gross Domestic Product (GDP) increased by 10.7% in the December 2022 quarter, recording total GDP in real terms of \$526.7 million. GDP recorded a second consecutive quarter of positive growth after four consecutive quarters of negative growth in real terms; this follows revised growth rate of 5.2% in September as well as the 10.1% decline in June 2022. The economy has since the reopening of international borders in August started its recovery phase in all sectors, the resumption of international travel has enabled tourist related businesses to make significant strides towards recovery. The nation's economy is gradually regaining its pre-pandemic position with retailing and wholesaling activities, food and beverage manufacturing, air and sea transport and businesses services which were some of the hardest hit during the pandemic evidently recuperating compared to the December 2021 quarter. As a result, activities in all three sectors (primary, secondary, services) all grew positively on a year-on-year basis.

GDP Growth:

Gross Domestic Product for the **December 2022 Quarter** at constant 2013 purchaser prices amounted to \$526.7 million, increasing by 10.7% compared to the December 2021 quarter. This is the second quarter of positive economic growth following a series of quarterly declines coinciding with the pandemic spread.

Chart I shows GDP at constant prices from March 2018 to December 2022 and the year-on-year (y-o-y) growth rates as measured by the percentage change on

Chart 1: Total GDP at constant prices & growth rates, Mar 2018 - Dec 2022



the same quarter of the previous year. As shown in Chart I, the nations economy has consistently continued to increase its growth for two consecutive quarters; quarterly real value added is gradually recovering heading towards its pre-pandemic economic position. As a result, the services sector which makes up 61.5% of the economy increased by 7.6% on a year on year basis. The goods producing or secondary sector with a total share of 12.3% to aggregated real GDP increased its value added by 4.6% compared to the December 2022 quarter. The primary sector which consists of Agriculture and Fishing industries recorded an increase of 6.6% with a total composition of 8.5% to total real GDP for the reviewed quarter. On the other hand, Taxes less subsidies recorded for December 2022 which comprises of 15.2% of total real GDP increased its value added by 15.2% compared to December 2021 guarter.

Conversely, public administration which accounts for 9.0% of the economy's real composition recorded a decline in value added by 3.0% compared to the same quarter of the previous year.

Chart 2: Percentage-point contributions to GDP growth by industry; December 2022 Quarter

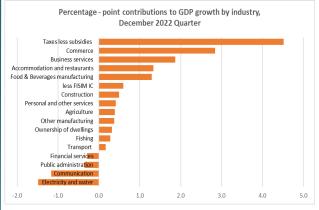


Chart 2 above indicates the percentage-point (pp) contributions of each industry to the overall growth of 10.7% in the December 2022 quarter. The largest contributors to this positive growth were from Taxes less subsidies, Commerce, Business services, Accommodation and Restaurants and Food & Beverage manufacturing with respective contributions of 4.5pp, 2.8pp, 1.9pp, 1.3pp and 1.3pp to the overall growth of 10.7% within the December 2022

Overview cont'd

quarter.

Taxes and subsidies recorded for this period was the main contributor to total GDP growth; it went up by 36.6% with an increase of \$21.5 million on a year-on-year basis. General taxes on goods and services or value added tax which comprises of 64.7% of total tax increased by 23.9% (\$14.8 million) on a year-on-year basis. Excise tax likewise increased by 12.2% with a share to total tax of 34.4% or \$4.5 million. Taxes on international trade and transactions have also recorded an increase of 22.3% compared to December 2021.

Commerce, the biggest industry in the economy continues its upward growth registering another increase in December 2022 on a year-on-year basis being the second consecutive quarter of positive growth. This was fuelled by increased retailing and wholesaling activities related to food, beverages, tobacco, stationaries, construction materials and gaseous products. Commerce performance was consistent with the 7.3% increase in remittances on a year-onyear basis. Business services value added at constant 2013 prices of Conversely, some of the industries that performed negatively in the September 2022 quarter \$17.0 million was the highest value added achieved by the industry since the December 2019 quarter.

On the other hand, industries that declined in quarter under review were Electricity and Water, Communication, Public Administration and Financial services with respective contributions to aggregate constant 2013 prices of -1.5pp, -1.2pp, -0.3pp and -0.3pp.

GDP Levels (Nominal):

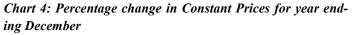
Gross Domestic Product at current prices for the December 2022 quarter amounted to \$647.7 million. It increased by 13.6% with GDP per capita also registering an increase of 12.7% compared to the corresponding quarter of the previous year. Chart 3 shows the industry composition of GDP at current market prices in the December 2022 quarter. Tertiary sector (services industries) comprising 55.9% of total nominal GDP, went up by 13.3% on a year-on-year basis. The Secondary or the goods-producing sector contributing an 11.9% to total nominal GDP went up by 10.7% on a y-o-y basis for the period under review. The Primary sector which accounts for 10.5% of nominal GDP increased its value added by 22.5% compared to December 2022. Public Administrations' share comprising 11.7% of total nominal GDP increased by 1.5% on a y-o-y basis. Taxes less Subsidies and FISIM also increased by 17.9% and 8.49% when compared to the corresponding quarter of the previous year.

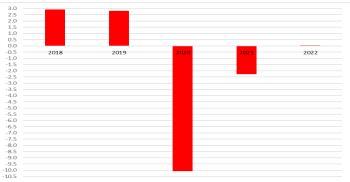


Twelve Months Review for Calendar Year 2022:

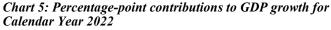
GDP for the **Financial Year ending December 2022** (January - December 2022) at current market prices was \$2,382.5 million (or \$2.4 billion), increasing by 8.7% compared to the \$2,191.4 million (or \$2.2 billion) recorded in the year ending December 2021. At this level, GDP per capita was \$11,578 increasing by 7.9% over the previous year ending December 2021.

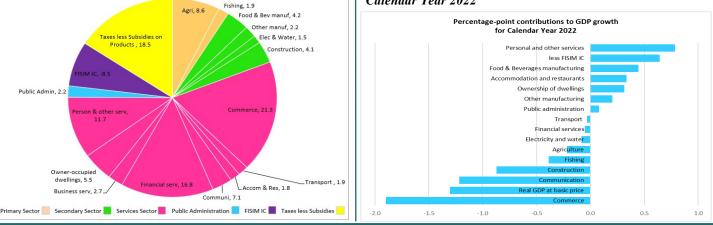
In constant 2013 prices, GDP stood at \$1,943.5 million (or \$1.9 billion) in the year calendar year 2022 increasing by 0.04% over the \$1,942.8 million (or \$1.9 billion) recorded in the year ending December 2021. The calendar year 2022 composed of the first two quarters of negative growth and subsequent quarters which experienced positive growth mainly enabled by the influx of tourists and visiting family and friends from overseas since the opening of the country's borders which has stimulated the economy after experiencing significant declines in the past two years 2021 and 2020.





Depicted in Chart 4 above are the real growth rates in the last five years ending June. The economy recorded a decline in growth for two consecutive years ending December with the year under review at a recorded growth of 0.04%. For the year under review, two quarters experienced negative growths with the September and December 2022 recording a positive growth. This was driven mainly by the increase in Taxes less subsidies, Personal and other services, Business services, FISIM, Food and Beverage manufacturing, and Accommodation and restaurants with respective contributions of 1.2 pp, 0.8 pp, 0.7 pp, 0.6 pp, 0.4 pp and 0.3 pp each to the overall growth of 0.04%.





Page 2

GROSS DOMESTIC PRODUCT

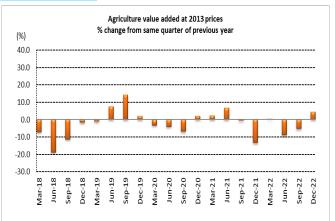
DECEMBER 2022

AGRICULTURE	GDP Dec 2021 Quarter	GDP Sep 2022 Quarter	GDP Dec 2022 Quarter	% change from Sep 2022 quar- ter (q-o-q)	% change from Dec 2021 quar- ter (y-o-y)
Value Added (current prices)	46.6	52.3	55.7	6.5	19.5
Value added (constant 2013 prices) WST (millions)	36.2	35.7	37.9	6.2	4.5
Contribution to aggregate (y-o-y) real growth rate: <i>percentage points</i>	-1.3	-0.5	0.4		
Contribution to aggregate nominal GDP: <i>percent</i>	8.2	8.7	8.6		nge change in Agrici Mar 2018 - Dec 202

Individual Industry Quarterly Performance

Agriculture recorded a total value added of \$37.9 million at constant 2013 prices for the December 2022 quarter increasing by 4.5% on a year on year basis. This outcome reflected the growth in the marketed production of crops domestically by 10.6%; non-marketed produce also recorded an increase by 1.6% compared to December 2021 quarter. The average volume of crops sold in markets such as taro, banana, yam, cucumber, pumpkin, head cabbages and tomatoes increased respectively by 47.7%, 26.1%, 3.4%, 51.5%, 39.4%, 36.2% and 15.1% to name a few. Livestock and Horticulture production also went up by 4.8% and 0.7%.

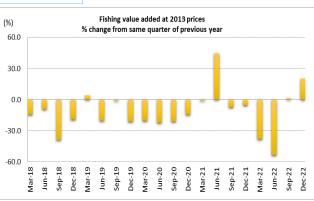
Value added in nominal terms for the industry increased by 19.5% compared to the previous quarter increasing by \$9.1million with a nominal share to total GDP of 8.6 percent.



FISHING	GDP Dec 2021 Quarter	GDP Sep 2022 Quarter	GDP Dec 2022 Quarter	% change from Sep 2022 quar- ter (q-o-q)	% change from Dec 2021 quar- ter (y-o-y)
Value Added (current prices)	8.8	10.4	12.2	17.4	38.4
WST (millions)					
Value added (constant 2013 prices)	5.6	6.3	6.8	6.8	20.4
WST (millions)					
Contribution to aggregate (y-o-y) real growth rate: <i>percentage points</i>	-0.1	0.0	0.3		
Contribution to aggregate nominal GDP: <i>percent</i>	1.5	1.7	1.9		ige change in Fishin Mar 2018 - Dec 202

Fishing recorded a total value added of \$6.8 million in real terms increasing by 20.4% compared to the December 2022 quarter. This is the second quarter of positive growth after four consecutive quarters of negative growth. Recorded increase in exports generated a growth of \$1.4 million mainly through exports of frozen fish for canning. The volume of offshore landings also went up by 34.1% when compared to the same quarter of 2021.Compared to September 2022, real value added went up by 6.8%.

In nominal terms, the industry's value added increased by 38.4% on a year-on-year basis generating \$12.2 million. Its contribution to aggregated nominal GDP increased by 0.4 percentage points compared to the December 2021 quarter.

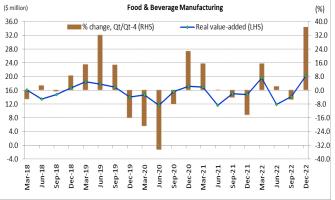


Individual Industry	Quarterly	Performance
---------------------	-----------	-------------

FOOD & BEVERAGE MANUFACTURING	GDP Dec 2021 Quarter	GDP Sep 2022 Quarter	GDP Dec 2022 Quarter	% change from Sep 2022 quar- ter (q-o-q)	% change from Dec 2021 quar- ter (y-o-y)
Value Added (current prices)	17.8	17.2	27.0	56.6	52.0
WST (millions)					
Value added (constant 2013 prices)	14.8	14.2	20.1	42.2	36.5
WST (millions)					
Contribution to aggregate (y-o-y) real growth rate: <i>percentage points</i>	-0.6	-0.2	1.3		Beverage Manufact dded at constant pri
Contribution to aggregate nominal GDP: <i>percent</i>	3.1	2.9	4.2		e same period of th

The Food and Beverage industry generated a total value added of \$20.1 million in real terms for the quarter under review, increasing by 36.5% compared to the December 2021 quarter. Manufactured food went up by 55.1% while beverage manufacturing recorded an increase of 29.6% on a year-on-year basis. When compared to September 2022, real value added went up by 42.2%. Its share to total real growth amount to 1.3 percentage points which saw an increase of 1.9pp when compared to December 2021.

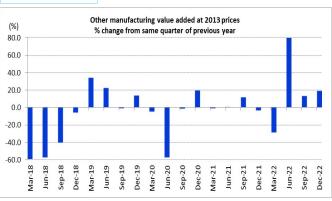
Food and beverage also generated a total value added of \$27.0 million in current prices for the reviewed quarter, increasing by 52.0%. Its contribution to total nominal GDP increased by 1.1 percentage points on a year-on-year basis resulting in a 4.2 percent share to the nominal GDP for the quarter under review.



OTHER MANUFACTURING	GDP Dec 2021 Quarter	GDP Sep 2022 Quarter	GDP Dec 2022 Quarter	% change from Sep 2022 quar- ter (q-o-q)	% change from Dec 2021 quar- ter (y-o-y)
Value Added (current prices) WST (millions)	12.2	13.3	14.2	6.8	16.5
Value added (constant 2013 prices) WST (millions)	8.3	9.3	9.9	6.5	18.8
Contribution to aggregate (y-o-y) real growth rate: <i>percentage points</i>	-0.1	0.3	0.4	Chart 9. Perce	entage change in
Contribution to aggregate nominal GDP: <i>percent</i>	2.1	2.2	2.2	Chart 9: Percentage change in Manufacturing real value added; 2018 - Dec 2022	

In real terms, the industry recorded a total value added of \$9.9 million increasing by 18.8% in comparison to the corresponding quarter of the previous year. It contributed 0.4 percentage points to GDP growth in December 2022. It also recorded a 6.5% growth when compared to the previous quarter. This is the third consecutive quarter of positive growth after two consecutive quarterly declines.

In nominal terms, Other Manufacturing industry recorded a total value added of \$14.2 million increasing by 16.5% compared to the corresponding quarter of the previous year. Additionally, it recorded an increase of 6.8% in current prices when compared to September 2022. Its share to total nominal GDP increased by 0.1 percentage points amounting to 2.2 percent.



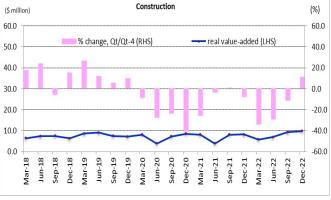
ISSUE 17

Individual Industry	Quarterly	Performance
---------------------	-----------	-------------

CONSTRUCTION	GDP Dec 2021 Quarter	GDP Sep 2022 Quarter	GDP Dec 2022 Quarter	% change from Sep 2022 quar- ter (q-o-q)	% change from Dec 2021 quar- ter (y-o-y)
Value Added (current prices) WST (millions)	22.8	20.5	25.5	29.2	16.5
Value added (constant 2013 prices) WST (millions)	18.8	17.3	20.8	20.2	11.0
Contribution to aggregate (y-o-y) real growth rate: <i>percentage points</i>	-0.4	-0.5	0.5		struction quarterly
Contribution to aggregate nominal GDP: <i>percent</i>	4.0	3.4	4.1	added at constant prices & % change the same period of the previous year	

Construction produced a real value added of \$20.8 million in the December 2022 quarter at constant prices, increasing by 11.0% on a year-on-year basis. It contributed 0.5pp to overall growth for the December 2022 quarter.

The Government Finance Statistics (GFS) December 2022 report recorded an increase of \$1.5 million in the net acquisition of nonfinancial fixed assets on a year-on-year basis. This reflects the recommencement of infrastructural developments and major construction works which were halted or postponed during the pandemic period. Imported building materials increased by 17.5% compared to the December 2022 quarter. This is the second quarter since international borders reopening, it is evident that the industry is slowly recovering. On a quarterly basis, it went up by 20.2% in real terms.

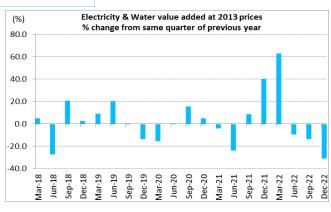


2018 - Dec 2022

ELECTRICITY AND WATER	GDP Dec 2021 Quarter	GDP Sep 2022 Quarter	GDP Dec 2022 Quarter	% change from Sep 2022 quar- ter (q-o-q)	% change from Dec 2021 quar- ter (y-o-y)
Value Added (current prices) WST (millions)	17.1	11.4	9.6	-15.4	-43.9
Value added (constant 2013 prices) WST (millions)	20.1	15.4	13.9	-9.7	-30.8
Contribution to aggregate (y-o-y) real growth rate: <i>percentage points</i>	1.3	-0.6	-1.5	Chaut 11, Dayan	taga ahayga in Flag
Contribution to aggregate nominal GDP: <i>percent</i>	3.0	1.9	1.5		tage change in Elect e added; Mar 2018 -

Electricity and Water generated a total value added of \$13.9 million at constant prices in the December 2022 quarter, decreasing by 30.8% on a year-on-year basis. The industry's performance reflects the decline in water production. Production of Electricity went up by 8.3%; this was mainly driven by the increase in diesel production by 13.9%; employment numbers recorded for the industry also went down by 1.0% as stated in the Employment Statistics Report for December 2022.

The industry's total nominal value added recorded a 43.9% decrease compared to the corresponding quarter of 2021. Its share to total nominal GDP went down to 1.5 percentage points from 3.0 percent in December 2021.



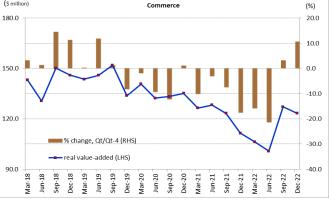
ISSUE 17

Individual Industry	Quarterly	Performance
---------------------	-----------	-------------

COMMERCE	GDP Dec 2021 Quarter	GDP Sep 2022 Quarter	GDP Dec 2022 Quarter	% change from Sep 2022 quar- ter (q-o-q)	% change from Dec 2021 quar- ter (y-o-y)
Value Added (current prices)	120.4	141.5	138.2	-2.3	14.8
Value added (constant 2013 prices) WST (millions)	111.5	127.1	123.3	-3.0	10.6
Contribution to aggregate (y-o-y) real growth rate: <i>percentage points</i>	-5.4	0.9	2.8		
Contribution to aggregate nominal GDP: <i>percent</i>	21.1	23.6	21.3	added & % chang	erce quarterly real ge over the same per ; Mar 2018 - Dec 20

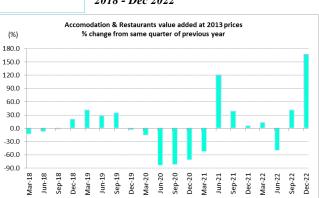
Commerce remains the largest industry in the economy holding a (smillion) share of 21.3% of total nominal GDP. Real value added amounted to \$123.3 million in the period under review generating an increase of 10.6% which registers a second consecutive guarter of positive growth after six consecutive quarters of negative performance.

This positive growth was mainly driven by the increase in retailing activities and wholesaling by 18.5% and 9.8%. This coincides with the notable increase in remittance by \$15.8 million (or 7.3%) during this 120.0 period increasing consumption as mentioned above. Total employment also increased for the commerce industry by 0.2% while female employees increased by 2.6% for the December 2022 guarter. Commerce contributed a share of 2.8 percentage points to total real GDP growth in December 2022.



ACCOMMODATION AND RESTAURANTS	GDP Dec 2021 Quarter	GDP Sep 2022 Quarter	GDP Dec 2022 Quarter	% change from Sep 2022 quar- ter (q-o-q)	% change from Dec 2021 quar- ter (y-o-y)
Value Added (current prices) WST (millions)	4.8	7.2	11.8	63.4	146.5
Value added (constant 2013 prices) WST (millions)	3.3	5.4	8.9	65.0	167.1
Contribution to aggregate (y-o-y) real growth rate: <i>percentage points</i>	0.0	0.4	1.3	Chart 13: Accom	modation & Restau
Contribution to aggregate nominal GDP: <i>percent</i>	0.8	1.2	1.8	percentage change in real value added the same period of the previous year; 2018 - Dec 2022	

Accommodation and Restaurants recorded a real value added of \$8.9 million, increasing significantly by 167.1% compared to the corresponding quarter of the previous year. This performance reflects the industries road to recovery after international borders were opened in August 2022 wherewith an influx of tourists, business partners, visiting families and friends jumped at the opportunity to once again visit our independent island nation. CBS recorded \$16.5million or 8.0% of the total remittance for the December 2022 quarter were in the form of banknotes which is mainly brought in by travelers entering the country. Accommodation recorded an increase in value added by \$4.2million (or 836.0%) with employment increasing by 35.9%; restaurants increased its value added by \$1.4 million (or 48.1%) with employment growing by 5.9% compared to December 2021.



Individual Industry	Quarterly Performance
---------------------	-----------------------

TRANSPORT	GDP Dec 2021 Quarter	GDP Sep 2022 Quarter	GDP Dec 2022 Quarter	% change from Sep 2022 quar- ter (q-o-q)	% change from Dec 2021 quar- ter (y-o-y)
Value Added (current prices) WST (millions)	11.2	14.2	12.1	-15.0	7.8
Value added (constant 2013 prices) WST (millions)	10.4	12.9	11.1	-14.2	6.7
Contribution to aggregate (y-o-y) real growth rate: <i>percentage points</i>	0.4	0.8	0.2	Chart 14: Transp	port quarterly growt
Contribution to aggregate nominal GDP: <i>percent</i>	2.0	2.4	1.9	-	added at constan

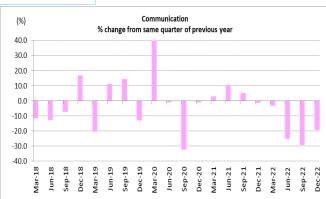
Transport value added at constant 2013 prices for December 2022 stood at \$11.1 million registering an increase of 6.7% on a y-o-y basis. Air and Sea transport industries both increased its value added by \$1.6million and \$1.4million respectively. The industry contributed 0.2 percentage to overall real growth for the quarter under review. Conversely it declined by 14.2% compared to the previous guarter. This coincides with the increase in the industries employment numbers by 2.5% on a y-o-y basis and a decline by 1.5% on a q-o-q basis as reported in the Employment Statistics December 2022 Report.

In nominal terms, transport services recorded a value added of \$12.1 million recording a 7.8% growth compared to the corresponding quarter of the previous year. Its contribution to aggregated nominal GDP amounted to 1.9% decreasing by 0.1pp. It also declined by 15.0% in nominal terms compared to the December 2022 quarter.

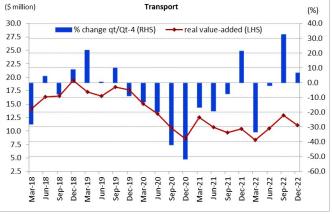
GDP Dec 2021 GDP Sep 2022 GDP Dec 2022 % change from % change from Sep 2022 quar-Dec 2021 quar-Quarter Quarter Quarter COMMUNICATION ter (q-o-q) ter (y-o-y) Value Added (current prices) 27.6 21.0 23.8 13.1 -13.8 WST (millions) Value added (constant 2013 prices) 25.218.1 20.3 12.4 -19.3 WST (millions) -0.1 -1.8 -1.2 Contribution to aggregate (y-o-y) real growth rate: percentage points Chart 15: Communication percentage change in real GDP from the same quarter Contribution to aggregate nominal 4.8 3.5 3.7 of the previous year, Mar 2018 - Dec 2022 GDP: percent

Communication generated a real value added of \$20.3 million decreasing by 19.3% compared to the December 2021 quarter. The industry contributed negatively (-1.2 pp) to the reviewed quarters aggregated real growth rate. This coincides with the -4.3% decline in employment for the industry as indicated in the Employment December 2022 Report. This is the fourth consecutive guarter of negative growth for the industry following three consecutive quarters of positive growth. Compared to September 2022, its real value added increased by 12.4%.

In nominal terms, the industry's value added went down by 13.8% (or \$23.8 million) compared to the December 2022 guarter. Its share to total nominal GDP went down by 1.1pp from 4.8% in December 2021 to 3.7% in the quarter under review.



rates 2013 prices, Mar 2018 - Dec 2022



BUSINESS SERVICES	GDP Dec 2021 Quarter	GDP Sep 2022 Quarter	GDP Dec 2022 Quarter	% change from Sep 2022 quar- ter (q-o-q)	% change from Dec 2021 quar- ter (y-o-y)
Value Added (current prices) WST (millions)	10.1	6.1	17.7	189.3	74.9
Value added (constant 2013 prices) WST (millions)	9.2	5.9	17.0	187.3	84.5
Contribution to aggregate (y-o-y) real growth rate: <i>percentage points</i>	0.2	0.4	1.9	Chant 16. Pusing	ng Samian 9/ akar
Contribution to aggregate nominal GDP: <i>percent</i>	1.8	1.0	2.7		ess Services, % chan Sonstant 2013 prices 122

Individual Industry Quarterly Performance

Business services produced a total value added of \$17.0 million at constant 2013 prices in December 2022; recording an increase of 84.5% on a year-on-year basis. The industry's positive growth was primarily driven by an increase in other business services particularly travel-related businesses such as travel agencies, renting and leasing of vehicles and properties and landscaping & maintenance to name a few. The industry was the second largest positive contributor with its share of 1.9 percentage points to overall real growth of GDP. Employment for the industry recorded an increase of 9.1% on a y-o-y basis.

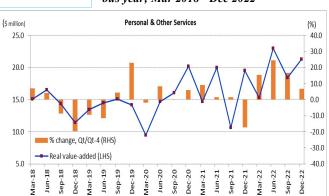
In nominal terms, the industry added \$7.6million (or 74.9%) in the reviewed guarter. Its contribution to total nominal GDP in the December 2022 quarter increased by 0.9 percentage points to 2.7 percent.

PERSONAL & OTHER SERVICES	GDP Dec 2021 Quarter	GDP Sep 2022 Quarter	GDP Dec 2022 Quarter	% change from Sep 2022 quar- ter (q-o-q)	% change from Dec 2021 quar- ter (y-o-y)
Value Added (current prices) WST (millions)	13.1	18.6	14.0	-24.7	6.8
Value added (constant 2013 prices) WST (millions)	19.5	18.4	21.3	15.4	8.9
Contribution to aggregate (y-o-y) real growth rate: <i>percentage points</i>	-0.1	1.9	0.4		al & Other Services
Contribution to aggregate nominal GDP: <i>percent</i>	2.3	3.1	2.2	terly value added at constant prices change over the same period of the p ous year; Mar 2018 - Dec 2022	

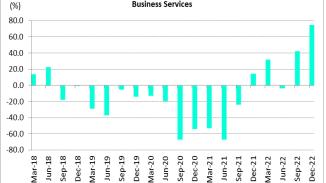
Mar Jun Mar

Personal and other services recorded an increase in constant 2013 prices by 8.9% compared to December 2021 with a total value added of \$21.3 million. This was consistent with the increase in utilization of activities pertaining to education, medical support services and health support services among others. On a quarterly basis, it increased by 15.4%; the industry contributed 0.4 percentage points to total real GDP growth for the reviewed quarter.

Personal & other services generated total nominal GDP of \$14.0 million registering an increase of 6.8% compared to the same quarter of the previous year. It recorded its contribution to aggregated nominal GDP of 2.2% for the December 2022 quarter which declined by 0.1pp compared to the corresponding quarter of 2021.



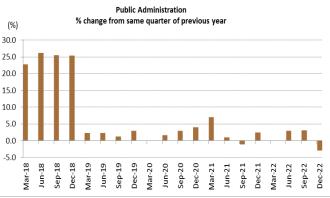
Mar 2018 - Dec 2022 **Business Services**



PUBLIC ADMINISTRATION	GDP Dec 2021 Quarter	GDP Sep 2022 Quarter	GDP Dec 2022 Quarter	% change from Sep 2022 quar- ter (q-o-q)	% change from Dec 2021 quar- ter (y-o-y)
Value Added (current prices) WST (millions)	74.6	78.3	75.7	-3.2	1.5
Value added (constant 2013 prices) WST (millions)	48.9	47.8	47.5	-0.7	-3.0
Contribution to aggregate (y-o-y) real growth rate: <i>percentage points</i>	0.3	0.3	-0.3	Chart 19, Part	
Contribution to aggregate nominal GDP: <i>percent</i>	13.1	13.1	11.7	Chart 18: Public Administration, change in value-added at constant 2 prices from Mar 2018 - Dec 2022	

Public administration produced a total value added in constant terms of \$47.5 million decreasing by 3.0% compared to the same quarter of the previous year. It is the second largest industry in the economy which contributed -0.3 percentage points to aggregated real growth for the period under review. It also recorded a decline of 0.7% in constant 2013 prices when compared to the previous September 2022 guarter.

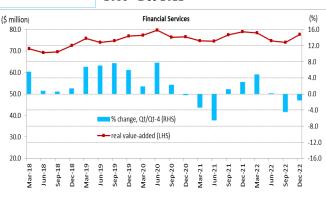
Its contribution to total nominal GDP decreased by 1.4 percentage points from 13.1 percent for December 2021 to 11.7 percent in December 2022. Value added recorded in current prices was \$75.7 million increasing by 1.5% on a year on year basis. Conversely, it went down by 3.2% when compared to the previous September 2022 guarter.



FINANCIAL SERVICES	GDP Dec 2021 Quarter	GDP Sep 2022 Quarter	GDP Dec 2022 Quarter	% change from Sep 2022 quar- ter (q-o-q)	% change from Dec 2021 quar- ter (y-o-y)
Value Added (current prices) WST (millions)	98.9	102.9	108.8	5.7	10.1
Value added (constant 2013 prices) WST (millions)	78.9	74.0	77.7	5.0	-1.5
Contribution to aggregate (y-o-y) real growth rate: <i>percentage points</i>	0.5	-0.8	-0.3		cial Services value
Contribution to aggregate nominal GDP: <i>percent</i>	17.3	17.2	16.8	at constant prices & % change ove same period of the previous year; 2018 - Dec 2022	

Financial services' real value added decreased by 1.5 percent on a (\$ million) year-on-year basis amounting to \$77.7 million. This performance was driven by the decline in growth experienced in non-financial institutions as well as financial intermediation services by 10.3% and 3.4% respectively. It contributed negatively by 0.3 percentage points to total real growth for the December 2022 quarter.

In nominal terms, the industry recorded a 10.1% increase compared to the December 2021 guarter with a total value added in current prices of \$108.8 million. Its share to nominal GDP went down by 0.5 percentage points from 17.3 percent in December 2021 to 16.8 percent recorded for the guarter under review. It also increased by 5.7% when compared to the September 2022 guarter.



NATIONAL ACCOUNTS FRAMEWORK REVIEW & GDP 2013 REBASING Background Information

Overview

This publication is the sixteenth 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 2009based 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
 - \Rightarrow 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.

<u>Revised benchmarks</u>

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.

NATIONAL ACCOUNTS FRAMEWORK REVIEW & GDP 2013 REBASING Background Information

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

NATIONAL ACCOUNTS FRAMEWORK REVIEW & GDP 2013 REBASING 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 inshore 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 addi tional indicator);
- TSPT Transport (+ estimates for buses and taxis out side VAGST)

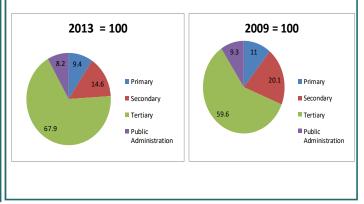
Apart from these VAGST based industries, The Finance Industry main data source is now primarily from the Profit and Loss Statement summary provided by the Central Bank of Samoa. This not only enables the calculation of the FISIM, but also the breakdown of other components of the Finance Sector like Insurance,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

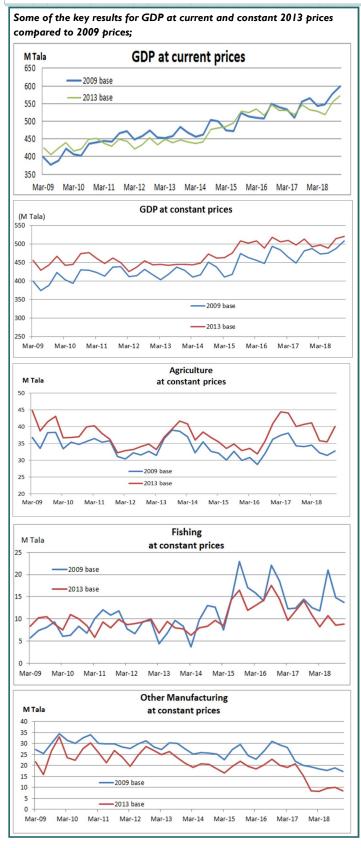
Comparison of GDP shares 2018, by broad sectors in 2013 and 2009 prices,



Page 12

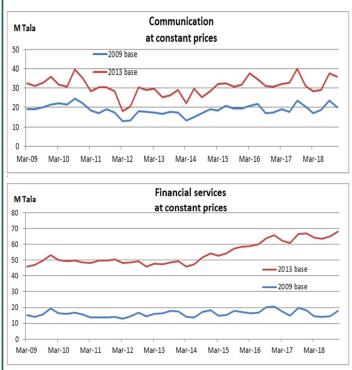
NATIONAL ACCOUNTS FRAMEWORK REVIEW & GDP 2013 REBASING

Background Information





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.

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 twelfth 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.

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 de-ducting 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).

Fiu Ponifasio Vasa ACTING - GOVERNMENT STATISTICIAN



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 Fax: (685) 24675 E-mail: fsd@sbs.gov.ws