



GOVERNMENT OF SAMOA

SAMOA BUREAU OF STATISTICS

1st April, 2019

PRESS RELEASE – GDP 2013 REBASE

In the past 2 years, the Bureau of Statistics has conducted a rebasing exercise to establish 2013 as the new base year for calculating GDP at constant prices. Rebasing of Gross Domestic Product (GDP) means replacing the old base year used for compiling the GDP with a new, more recent, base year for computing constant price estimates. As relative prices and the structure of the **economy** change over time, it is necessary to update the base year on a regular basis (5 years) based on the new information collected from large scale surveys and censuses.

The report attached is the first GDP report based on the new base year of 2013 (2013 = 100). 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 Samoa's economy presented by the earlier 2009-based estimates, but it is believed that the revised system is more robust, and will better reflect future disturbances to economic growth.

The key features of the overall system has been reviewed and associated rebase are as follows:

- ❖ 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; and

- ❖ more detailed data on industry level have been incorporated hence provide benefits for the detailed analysis, with results only at the aggregated industry level

A copy of the report is also available on our [website sbs.gov.ws](http://sbs.gov.ws). Should you require more information, please contact Leota Aliielua Salani on phone number 62006 or email aliielua.salani@sbs.gov.ws, Lilianetelani Leleimalefaga on phone number 62017 or email lilianetelani.hennemann@sbs.gov.ws or Suameli Chan Boon on phone number 62018 or email suameli.chanboon@sbs.gov.ws.

Yours sincerely,



(Aliimua Malaefono Taua-T. Faasalaina)

GOVERNMENT STATISTICIAN



Samoa Bureau of Statistics

Gross Domestic Product

December 2018 Quarter

Overview

29th March 2019



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 - 6.0%
- GDP at Constant 2013 Prices (real) - WST \$518.2 million
- GDP at Current Prices (nominal) - WST \$569.7 million

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Economic Activity, as measured by Gross Domestic Product (GDP) went up by 6.0% in the December 2018 quarter. Real GDP amounted to \$518.2 million making it the highest quarterly level ever reached by the economy in the last 11 years since the new series begun. The growth in the period was driven by good performances in the Tertiary sector or service industries and the Secondary sector. Activity in the tertiary industries rose 7.2 percent, with 7 of the 9 service industries recording increases in the December 2018 quarter. This reflects increases of 12.1% in remittances and 10.9% in tourism earnings over the same quarter of 2017. Moreover, revenue collected from taxes such as VAGST, excises, etc also went up by 12.7%.

GDP Growth:

Gross Domestic Product for the **December 2018 Quarter** at constant prices (real GDP) was \$518.2 million, increasing by 6.0% compared to the December 2017 quarter. This follows an increase of 0.5% in the September 2018 quarter.

Chart 1: Total GDP at constant prices & growth rates, Dec 2013—Dec 2018

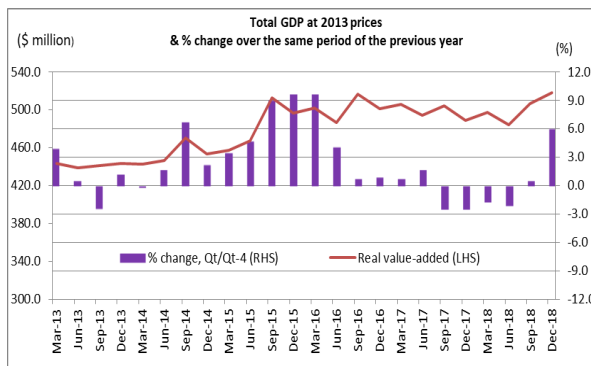


Chart 1 shows the trend in total GDP at constant

2013 prices and growth rate from March 2013 to December 2018 as measured by the percentage change in real value added over the same quarter of the previous year. Overall growth in the level of economic activity in the period was mainly due to the increase in the Commerce industry particularly wholesaling and retailing activities related to food, beverages, gaseous products and durable goods. This was assisted by the increase in heavy and civil construction works, increasing demand for communication, transportation and financial services.

Chart 2: Percentage-point contributions to GDP growth by industry; Dec 2018 Quarter

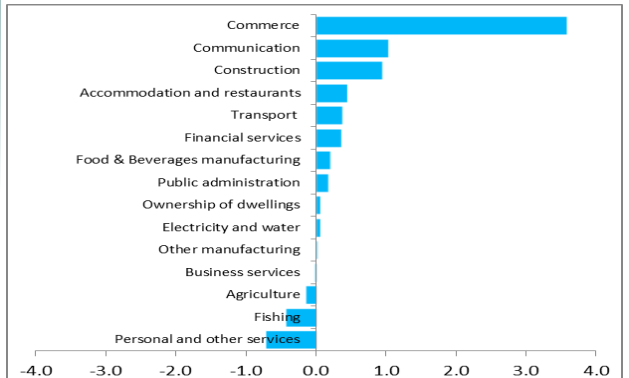


Chart 2 illustrates the percentage-point (pp) contributions of each industry to overall growth of 6.0% in the December 2018 quarter. The major contributors to growth were Commerce (3.6 pp), Communication (1.0 pp), Construction (0.9 pp), Accommodation and Restaurants (0.4 pp), Transport (0.4 pp) and Financial services (0.4 pp). Other positive contributors were Food & Beverages manufacturing, Public administration, Ownership of dwellings and Electricity and Water with respective contributions of 0.2, 0.2, 0.1 and 0.1 each.

Conversely, industries that contracted in December 2018 were Personal & other services, Fishing, Agricul-

Overview cont'd

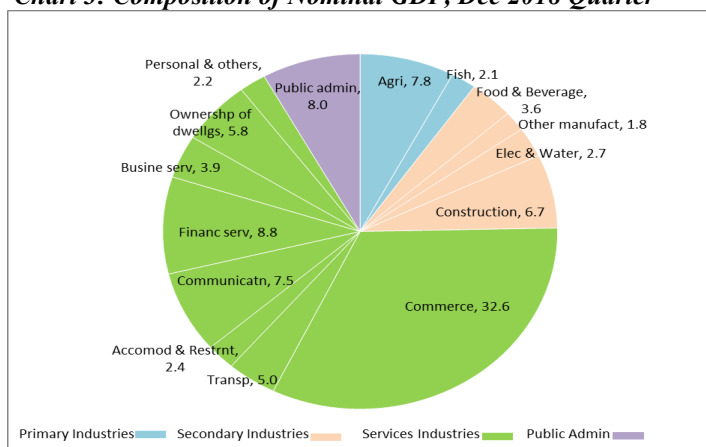
ture and Business services recording contributions of -0.7, -0.4, -0.1 and less than -0.1 percentage points respectively to overall growth.

GDP Levels (Nominal):

GDP at current prices (Nominal GDP) for the December 2018 quarter amounted to \$569.7 million. It increased by 7.9% compared to the corresponding quarter of 2017. This was mainly influenced by the performances by Construction, Communication, Accommodation & Restaurants, Agriculture, Commerce, Transport and Financial services recording respective increases of 18.5%, 17.6%, 17.2%, 16.3%, 13.7%, 7.1% and 6.0% over the December 2017 quarter.

GDP Composition (Nominal):

Chart 3: Composition of Nominal GDP, Dec 2018 Quarter



Depicted in Chart 3 is the industry composition of GDP shares at current prices for the December 2018 quarter. The Tertiary sector remains the biggest sector comprising a total share of 67.2% of total GDP. It went up by 0.8 percentage points (pp) compared to December 2017. This reflects the performance of the Commerce industry which accounted for almost half of the sectors' total share.

The secondary or goods producing sector was the second largest with a share of 14.9%; dropping by 0.3 percentage point. The decline was due to the contraction in the Other manufacturing industry as a result of the closing down of the YAZAKI plant in 2017. The increase in the 3 out of 4 industries in the sector was not high enough to counter the downturn in the Other manufacturing industry.

The Primary sector which has a share of 9.8% of total GDP slightly went up by 0.01 percentage point on a y-o-y basis. Public Administration share decreased by -0.5 percentage point compared to December 2017.

Twelve Months Review: (Jan - December 2018)

GDP for the year ended December 2018 (Jan - Dec 18) at current market prices stood at \$2,156.4 million, increasing by 2.4% compared to the year ended December 2017. At this level, GDP per capita amounted to \$10,906. It increased by 1.7% compared to 2017.

Value added at constant 2013 prices was \$2,005.4 million, it went up by 0.7% compared to the year ended December 2017.

Chart 4: Annual GDP growth rates, 2012—2018

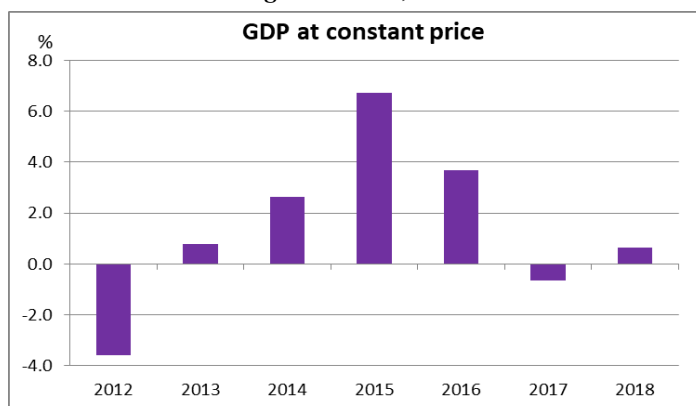


Chart 4 shows the annual growth rates in real GDP from 2012 to 2018. The biggest decline was in 2012 as a result of the destruction caused by Cyclone Evans. The notable increase in 2015 was mainly due to the Commonwealth Youth Games, the historical rugby match between New Zealand and Samoa held in the country as well as preparations leading up to the National Election in 2016.

The slight increase in 2018 was mainly due to the performances by Commerce, Construction, Financial services and Business services in 2018. Commerce was the biggest contributor to overall growth in 2018 with a contribution of 2.4 pp followed by Construction (0.7 pp), Financial services (0.7 pp), Business service (0.3 pp), Ownership of Dwellings (0.1) and Public administration (0.1 pp). However, industries that underperformed in 2018 were Agriculture, Fishing, Other manufacturing and Transport. The volatile performance by the Primary industries was expected considering changing weather conditions and the cyclone which struck the country in February causing extensive damage to crops and prevented some of the large fishing vessels from going out to sea. Other manufacturing has not recorded a single annual positive growth since the closure of one of the biggest manufacturing businesses in the country.

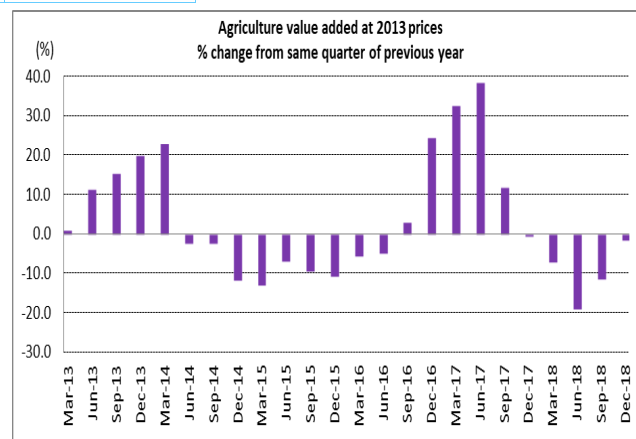
Individual Industry Quarterly Performance

AGRICULTURE	GDP Dec 2017 Quarter	GDP Sep 2018 Quarter	GDP Dec 2018 Quarter	% change from Sep 2018 quarter (q-o-q)	% change from Dec 2017 quarter (y-o-y)
Value Added (current prices) WST (millions)	38.0	38.1	44.2	16.1	16.3
Value added (constant 2013 prices) WST (millions)	40.8	35.5	40.1	12.9	-1.7
Contribution to aggregate (y-o-y) real growth rate: <i>percentage points</i>	0.0	-0.9	-0.1		
Contribution to aggregate nominal GDP: <i>percent</i>	7.2	7.0	7.8		

Chart 5: Percentage change in Agriculture real value added; Dec 2013—Dec 2018

Agriculture recorded a total value added of \$40.1 million in constant 2013 prices, declining by 1.7% compared to the December 2017 quarter.

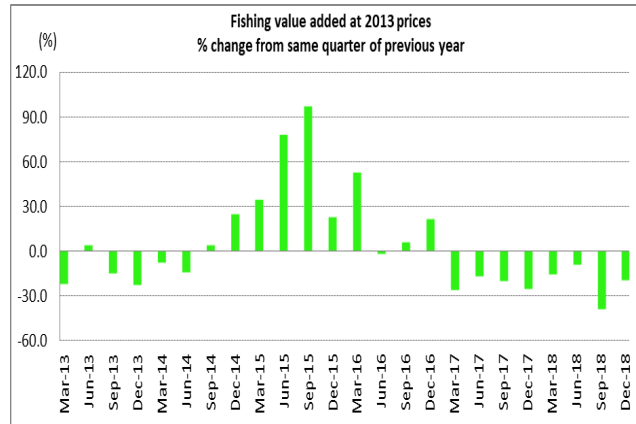
The poor performance by the sector was consistent with the overall decline of 17.8% in the quantity of domestic crops supplied to markets around the country such as taro, banana, taamu, yam, breadfruit, coconut, head cabbage, tomatoes, Chinese cabbage and cucumber. The industry has not recorded a positive growth since September 2017. The sector was badly affected by cyclone Gita in February 2018 and continuous poor weather conditions.



FISHING	GDP Dec 2017 Quarter	GDP Sep 2018 Quarter	GDP Dec 2018 Quarter	% change from Sep 2018 quarter (q-o-q)	% change from Dec 2017 quarter (y-o-y)
Value Added (current prices) WST (millions)	13.8	11.3	11.7	4.1	-14.9
Value added (constant 2013 prices) WST (millions)	10.8	8.6	8.8	1.8	-19.0
Contribution to aggregate (y-o-y) real growth rate: <i>percentage points</i>	-0.7	-1.1	-0.4		
Contribution to aggregate nominal GDP: <i>percent</i>	2.6	2.1	2.1		

Chart 6: Percentage change in Fishing real value added; Dec 2013—Dec 2018

Fishing's total value added in constant prices stood at \$8.8 million in the period under review. The industry recorded a notable decline of 19.0% when compared to the same quarter of the previous year. The unfavorable performance in December 2018 makes it the eighth consecutive quarter of negative growth for the industry. This was consistent with the 25% decline in the inshore landings as well as the 18.4% drop in exports in the period. However when compared to the September 2018 quarter, the industry went up by 1.8%.



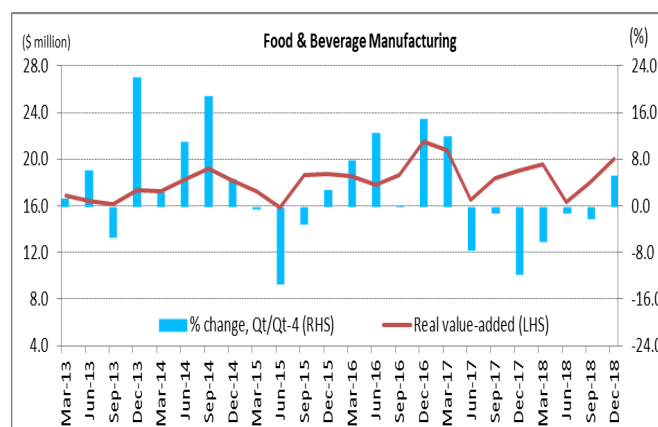
Individual Industry Quarterly Performance

FOOD & BEVERAGE MANUFACTURING	GDP Dec 2017 Quarter	GDP Sep 2018 Quarter	GDP Dec 2018 Quarter	% change from Sep 2018 quarter (q-o-q)	% change from Dec 2017 quarter (y-o-y)
Value Added (current prices) WST (millions)	20.5	19.6	20.6	5.4	0.8
Value added (constant 2013 prices) WST (millions)	19.0	18.0	20.0	11.3	5.3
Contribution to aggregate (y-o-y) real growth rate: <i>percentage points</i>	-0.5	-0.1	0.2		
Contribution to aggregate nominal GDP: <i>percent</i>	3.9	3.6	3.6		

Chart 7: Food & Beverage Manufacturing quarterly value added at constant prices & % change over the same period of the previous year; Dec 2013—Dec 2018

The industry rebounded with a real increase of 5.3% following six consecutive quarters of declining performances. The industry produced a total value added of \$20.0 million, its highest since March 2017. This was consistent with the increase in the volume of food and beverages produced in the December 2018 quarter.

In nominal terms, the sector increased by 0.8% compared to the same quarter of the previous year.

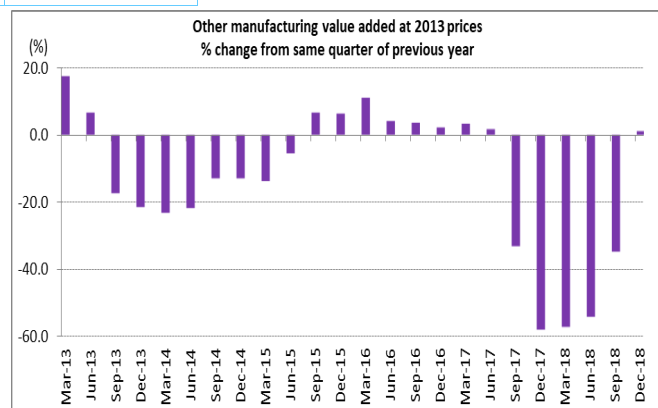


OTHER MANUFACTURING	GDP Dec 2017 Quarter	GDP Sep 2018 Quarter	GDP Dec 2018 Quarter	% change from Sep 2018 quarter (q-o-q)	% change from Dec 2017 quarter (y-o-y)
Value Added (current prices) WST (millions)	12.2	11.8	10.2	-13.6	-16.1
Value added (constant 2013 prices) WST (millions)	8.4	10.0	8.5	-15.0	1.4
Contribution to aggregate (y-o-y) real growth rate: <i>percentage points</i>	-2.3	-1.1	0.0		
Contribution to aggregate nominal GDP: <i>percent</i>	2.3	2.2	1.8		

Chart 8: Percentage change in Other Manufacturing real value added; Dec 2013—Dec 2018

In real terms, Other manufacturing recorded a total value added of \$8.5 million in the period under review. It increased by 1.4% when compared to the December 2017 quarter. The industry has just made a slight recovery following 5 consecutive quarters of negative performances due to the closure of one of the biggest manufacturing businesses in the country.

In nominal terms, the industry recorded a total value added of \$10.2 million accounting for 1.8% of total nominal GDP. It decreased by 16.1% compared to the previous quarter of 2018 in nominal terms.



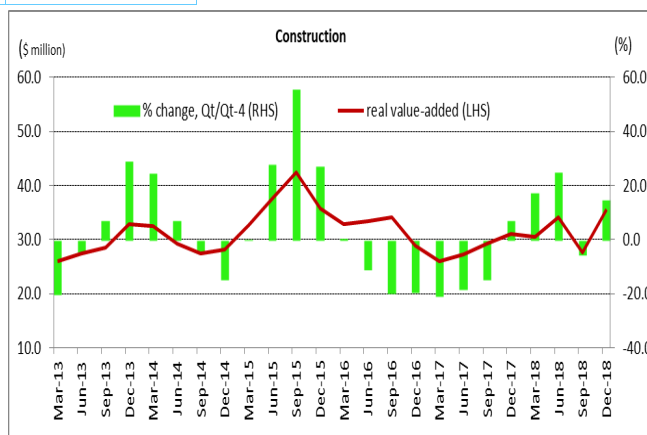
Individual Industry Quarterly Performance

CONSTRUCTION	GDP Dec 2017 Quarter	GDP Sep 2018 Quarter	GDP Dec 2018 Quarter	% change from Sep 2018 quarter (q-o-q)	% change from Dec 2017 quarter (y-o-y)
Value Added (current prices) WST (millions)	32.3	29.1	38.2	31.4	18.5
Value added (constant 2013 prices) WST (millions)	31.1	27.6	35.6	29.3	14.8
Contribution to aggregate (y-o-y) real growth rate: <i>percentage points</i>	0.4	-0.3	0.9		
Contribution to aggregate nominal GDP: <i>percent</i>	6.1	5.3	6.7		

Chart 9: Construction quarterly value added at constant prices & % change over the same period of the previous year; Dec 2013—Dec 2018

The Construction industry rebounded in the December 2018 quarter registering an increase of 14.8% after a negative performance in the previous quarter (September 2018) which was translated into a positive contribution to GDP growth of 0.9 percentage points.

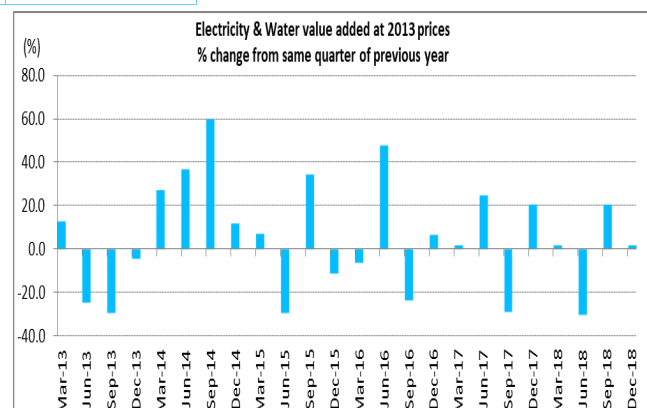
Its real value added amounted to \$35.6 million, the second highest ever reached by the industry since the series begun. Major construction activities such as the new access road and bridge crossing of Mali'oli'o River, the Apia Waterfront Development Project, the Tanumalala Prison and so forth contributed to the industry's good performance. The industry has increased its share from 6.1% to 6.7%.



ELECTRICITY AND WATER	GDP Dec 2017 Quarter	GDP Sep 2018 Quarter	GDP Dec 2018 Quarter	% change from Sep 2018 quarter (q-o-q)	% change from Dec 2017 quarter (y-o-y)
Value Added (current prices) WST (millions)	15.3	13.8	15.6	12.8	2.2
Value added (constant 2013 prices) WST (millions)	14.6	13.2	14.9	13.1	2.0
Contribution to aggregate (y-o-y) real growth rate: <i>percentage points</i>	0.5	0.4	0.1		
Contribution to aggregate nominal GDP: <i>percent</i>	2.9	2.5	2.7		

Chart 10: Percentage change in Electricity & Water real value added; Dec 2013—Dec 2018

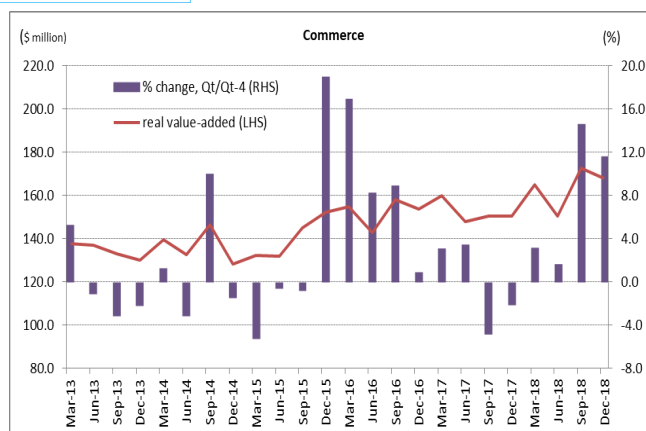
Electricity & Water real value added stood at \$14.9 million increasing by 2.0% on a year-on-year basis. This was translated into a contribution of 0.1 percentage points to the overall GDP growth. The industry's performance reflected the 5.5% increase in electricity produced in the period. This more than offset the 2.2% decline in water production in the December 2018 quarter.



Individual Industry Quarterly Performance

COMMERCE	GDP Dec 2017 Quarter	GDP Sep 2018 Quarter	GDP Dec 2018 Quarter	% change from Sep 2018 quarter (q-o-q)	% change from Dec 2017 quarter (y-o-y)
Value Added (current prices) WST (millions)	163.2	186.2	185.5	-0.4	13.7
Value added (constant 2013 prices) WST (millions)	150.7	172.7	168.2	-2.6	11.6
Contribution to aggregate (y-o-y) real growth rate: <i>percentage points</i>	-0.6	4.4	3.6	Chart 11: Commerce quarterly real value added & % change over the same period of the previous year; Dec 2013—Dec 2018	
Contribution to aggregate nominal GDP: <i>percent</i>	30.9	34.1	32.6		

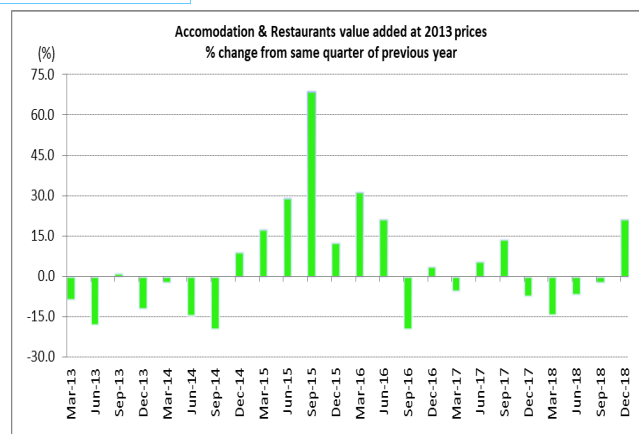
Commerce generated a real value added of \$168.2 million in the period under review, increasing by 11.6% over the December 2017 quarter. The industry was the biggest contributor to GDP growth with a contribution of 3.6 percentage points. Its value added was the second highest ever generated by the industry following the first ever highest value added reached in the previous quarter (September 2018). The industry continues to be the leading contributor to total GDP with a share of 32.6%. The growth in the industry was fueled by the increase in retailing and wholesaling activities related to food, beverages, tobacco, stationeries, gaseous products and durable goods. The performance by the industry was consistent with the increases in remittances and tourism earnings by 12.1% and 10.9% respectively.



ACCOMMODATION AND RESTAURANTS	GDP Dec 2017 Quarter	GDP Sep 2018 Quarter	GDP Dec 2018 Quarter	% change from Sep 2018 quarter (q-o-q)	% change from Dec 2017 quarter (y-o-y)
Value Added (current prices) WST (millions)	11.5	13.4	13.5	0.4	17.2
Value added (constant 2013 prices) WST (millions)	10.1	12.4	12.3	-0.7	21.4
Contribution to aggregate (y-o-y) real growth rate: <i>percentage points</i>	-0.2	-0.1	0.4	Chart 12: Accommodation & Restaurants, percentage change in real value added over the same period of the previous year; Dec 2013—Dec 2018	
Contribution to aggregate nominal GDP: <i>percent</i>	2.2	2.5	2.4		

Accommodation and Restaurants generated a total real value added of \$12.3 million, increasing by 21.4% compared to the same period of the previous year. The industry was amongst the number of industries that contributed positively to overall growth, with a contribution of 0.4 percentage point for the period under review.

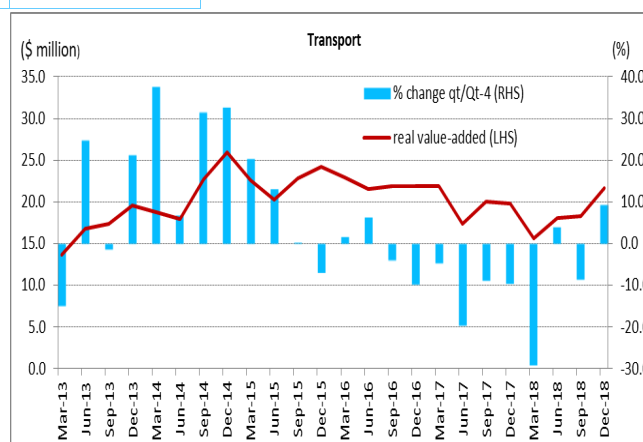
The upturn in the sector reflects the 43.2% increase in the number of visitors in the VFR category (those visiting friends and relatives) compared to the December 2017 quarter. VFR made up more than 40% of the total number of visitors that arrived in the December 2018 quarter.



Individual Industry Quarterly Performance

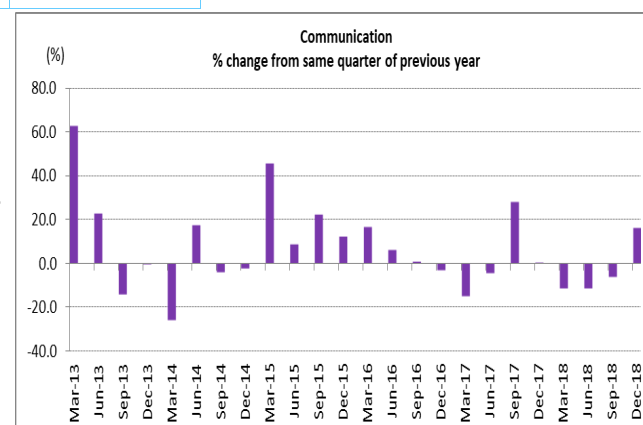
TRANSPORT	GDP Dec 2017 Quarter	GDP Sep 2018 Quarter	GDP Dec 2018 Quarter	% change from Sep 2018 quarter (q-o-q)	% change from Dec 2017 quarter (y-o-y)
Value Added (current prices) WST (millions)	21.6	19.4	23.2	19.6	7.3
Value added (constant 2013 prices) WST (millions)	19.8	18.3	21.6	18.4	9.4
Contribution to aggregate (y-o-y) real growth rate: <i>percentage points</i>	-0.4	-0.3	0.4	Chart 13: Transport quarterly growth rates with total value added at constant 2009 prices, Dec 2013—Dec 2018	
Contribution to aggregate nominal GDP: <i>percent</i>	4.1	3.6	4.1		

Total value added in constant prices for December 2018 amounted to \$21.6 million. Transport registered an increase in real value-added of 9.4% in December 2018 when compared to the same quarter of 2017. The positive outturn was driven by the growth in storage, warehousing and cargo handling activities. When compared to the September 2018 quarter, the industry's real value added went up by 18.4%.



COMMUNICATION	GDP Dec 2017 Quarter	GDP Sep 2018 Quarter	GDP Dec 2018 Quarter	% change from Sep 2018 quarter (q-o-q)	% change from Dec 2017 quarter (y-o-y)
Value Added (current prices) WST (millions)	36.2	43.9	42.5	-3.1	17.6
Value added (constant 2013 prices) WST (millions)	30.9	37.7	36.0	-4.4	16.3
Contribution to aggregate (y-o-y) real growth rate: <i>percentage points</i>	0.0	-0.5	1.0	Chart 14: Communication percentage change in real GDP from the same quarter of the previous year, Dec 2013—Dec 2018	
Contribution to aggregate nominal GDP: <i>percent</i>	6.8	8.0	7.5		

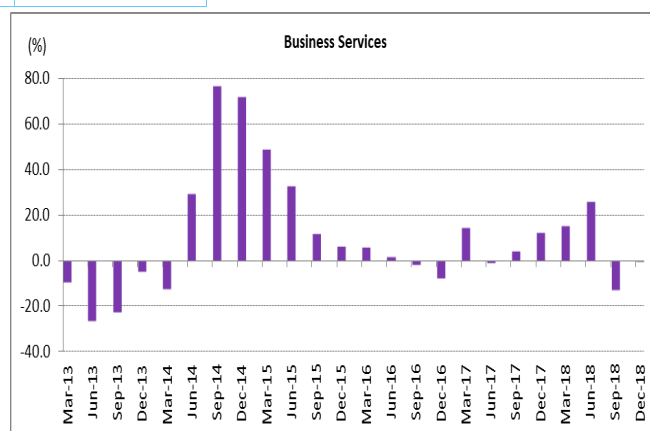
Communication generated a real value added of \$36.0 million in the December 2018 quarter increasing by 16.3% over the December 2017 quarter. The industry contributed a positive 1.0 percentage points to overall growth; increasing its share to total nominal GDP from 6.8% in December 2017 to 7.5% in December 2018. In nominal prices, the industry recorded a value added of \$42.5 million also experiencing an increase of 17.6% on a year-on-year basis. The positive performance by Communication was due to the increasing demand for their products and services during the period under review.



Individual Industry Quarterly Performance

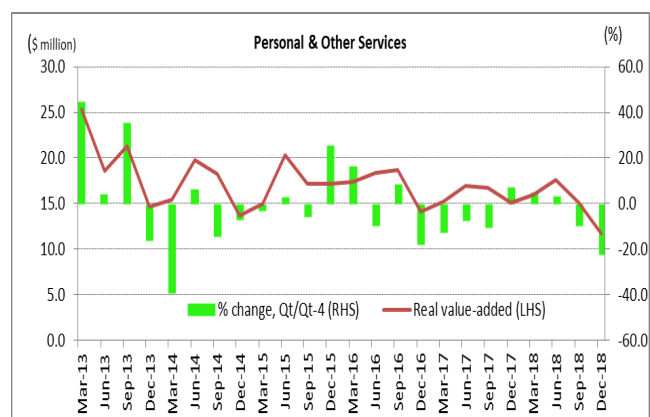
BUSINESS SERVICES	GDP Dec 2017 Quarter	GDP Sep 2018 Quarter	GDP Dec 2018 Quarter	% change from Sep 2018 quarter (q-o-q)	% change from Dec 2017 quarter (y-o-y)
Value Added (current prices) WST (millions)	22.4	18.3	22.3	21.8	-0.5
Value added (constant 2013 prices) WST (millions)	22.7	19.8	22.7	15.1	0.0
Contribution to aggregate (y-o-y) real growth rate: <i>percentage points</i>	0.5	-0.6	0.0	Chart 15: Business Services, % change in value-added at constant 2009 prices from Dec 2013—Dec 2018	
Contribution to aggregate nominal GDP: <i>percent</i>	4.2	3.4	3.9		

Business Services produced a total value added of \$22.7 million in constant prices, slightly down on a y-o-y basis. This makes it the second consecutive negative growth by the industry. The performance by the industry was due to the decrease in real estate activities, travel agency and tour operated activities. The industry's share to total GDP for the period was 3.9%, down by 0.3 percentage points when compared to the same quarter of the previous year.



PERSONAL & OTHER SERVICES	GDP Dec 2017 Quarter	GDP Sep 2018 Quarter	GDP Dec 2018 Quarter	% change from Sep 2018 quarter (q-o-q)	% change from Dec 2017 quarter (y-o-y)
Value Added (current prices) WST (millions)	16.0	15.8	12.5	-20.7	-21.7
Value added (constant 2013 prices) WST (millions)	15.1	15.1	11.7	-22.4	-22.5
Contribution to aggregate (y-o-y) real growth rate: <i>percentage points</i>	0.2	-0.3	-0.7	Chart 16: Personal & Other Services quarterly value added at constant prices & % change over the same period of the previous year; Dec 2013—Dec 2018	
Contribution to aggregate nominal GDP: <i>percent</i>	3.0	2.9	2.2		

Personal and other services declined by 22.5 percent compared to December 2017, making it the second consecutive quarter of negative performances by the industry. The industry recorded a real value added of \$11.7 million making it the lowest quarterly level ever produced by the industry since the series began. It registered a contribution of negative 0.7% percentage points to overall growth. This reflects the decline in education supporting activities in the period. Its share to total GDP dropped from 3.0% to 2.2%.

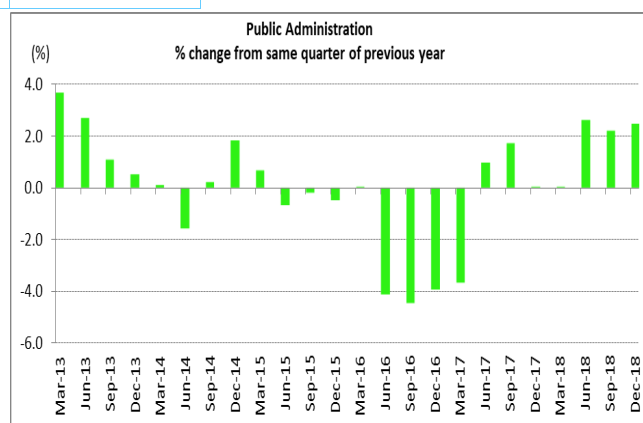


Individual Industry Quarterly Performance

PUBLIC ADMINISTRATION	GDP Dec 2017 Quarter	GDP Sep 2018 Quarter	GDP Dec 2018 Quarter	% change from Sep 2018 quarter (q-o-q)	% change from Dec 2017 quarter (y-o-y)
Value Added (current prices) WST (millions)	45.4	44.7	46.0	2.9	1.5
Value added (constant 2013 prices) WST (millions)	35.3	36.3	36.2	-0.4	2.5
Contribution to aggregate (y-o-y) real growth rate: <i>percentage points</i>	0.0	0.2	0.2	Chart 17: Public Administration, % change in value-added at constant 2009 prices from Dec 2013—Dec 2018	
Contribution to aggregate nominal GDP: <i>percent</i>	8.6	8.2	8.1		

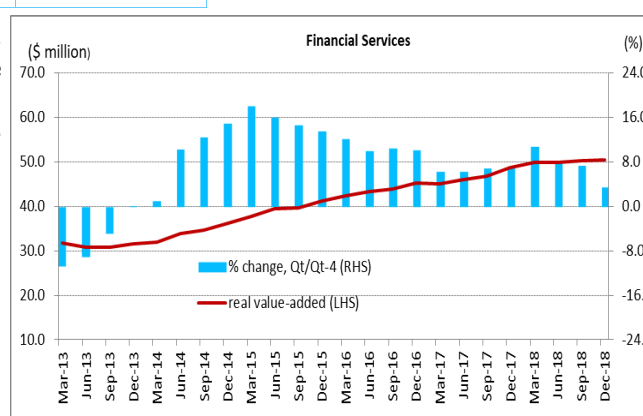
Public administration increased by 2.5% making it the seventh consecutive quarter of positive growth by the industry. It recorded a value added of \$36.2 million in constant 2013 prices, contributing 0.2 percentage points to overall growth. It remains the third largest industry in the economy with a share of 8.1%. The performance in December 2018 reflects the increase in general public administration activities such as executive, legislative, financial administration etc. at all levels of government) and supervision in the field of social and economic life.

In nominal terms, the industry increased by 1.5% as a result of the 2.7% increase in salaries and wages in comparison to the same period of the previous year.



FINANCIAL SERVICES	GDP Dec 2017 Quarter	GDP Sep 2018 Quarter	GDP Dec 2018 Quarter	% change from Sep 2018 quarter (q-o-q)	% change from Dec 2017 quarter (y-o-y)
Value Added (current prices) WST (millions)	47.4	47.9	50.3	4.9	6.0
Value added (constant 2013 prices) WST (millions)	48.6	50.3	50.3	0.1	3.6
Contribution to aggregate (y-o-y) real growth rate: <i>percentage points</i>	0.7	0.7	0.4	Chart 18: Financial Services value added at constant prices & % change over the same period of the previous year; Dec 2013—Dec 2018	
Contribution to aggregate nominal GDP: <i>percent</i>	9.0	8.8	8.8		

Financial services real value added was up by 3.6 percent on a year-on-year basis. This makes it the twenty-first consecutive quarter of positive growth by the industry. Its real value added in December 2018 amounted to \$50.3 million, the highest ever recorded by the industry in the last 11 years. Its performance reflects the increasing demand for financial services such as central banking, financial leasing, insurance and other activities auxiliary to financial intermediation.



Background Information

Overview

This publication presents for the first time 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.

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 (2009 base) 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 remaining 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)

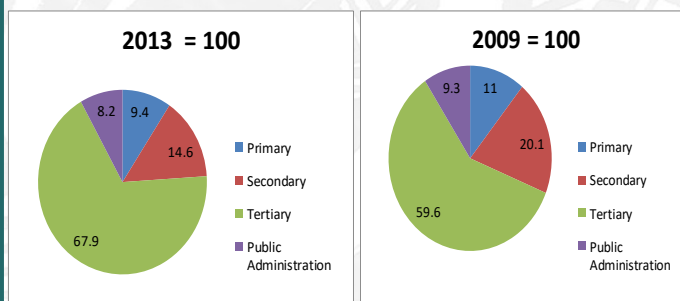
Apart from these VAGST based industries, The Finance Industry main data source is now primarily from the Profit and Loss Statement summary provided by the Central Bank of Samoa. This not only enables the calculation of the FISIM, but also the breakdown of other components of the Finance Sector like Insurance,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

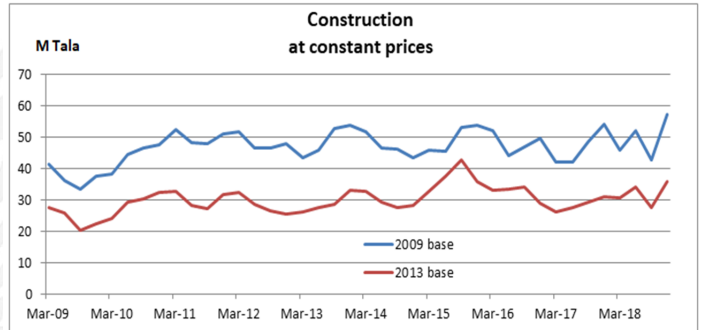
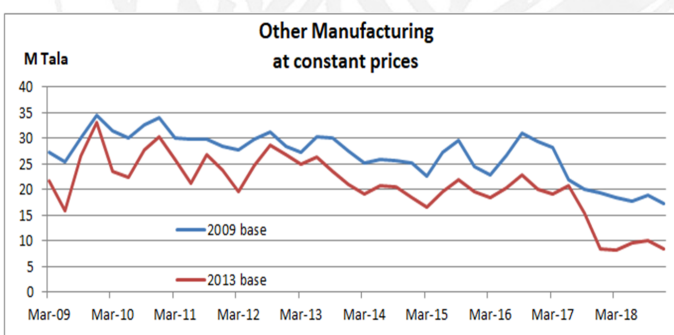
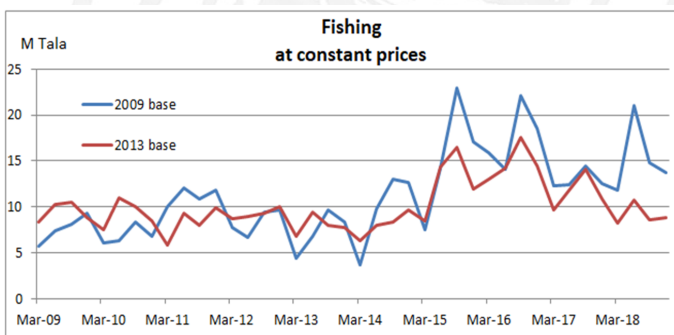
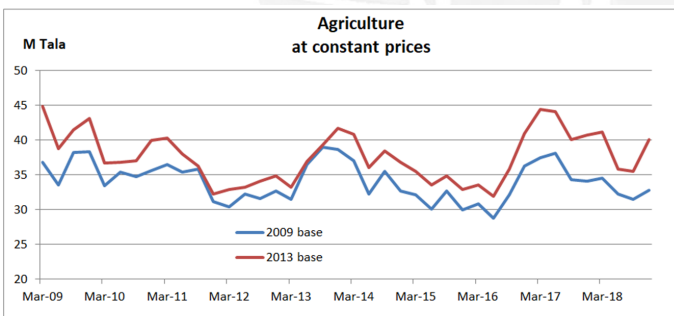
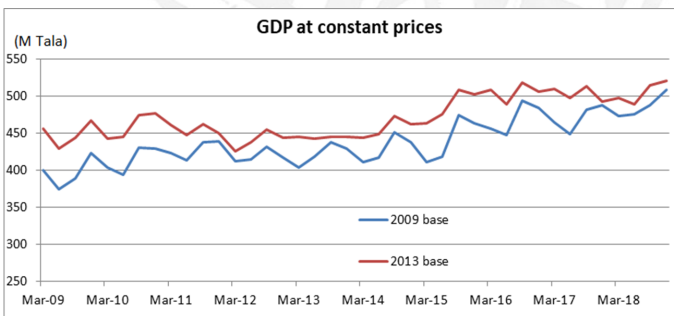
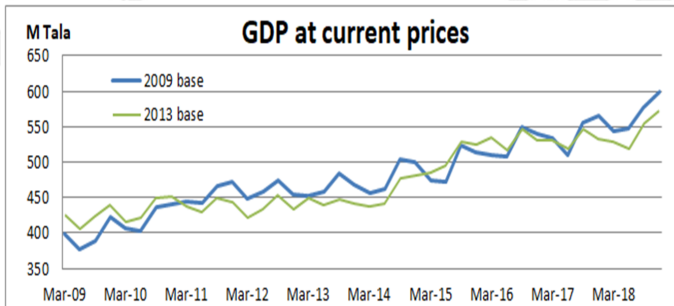


Indicated in the following charts are the industries showing significant change as part of the rebasing exercise:

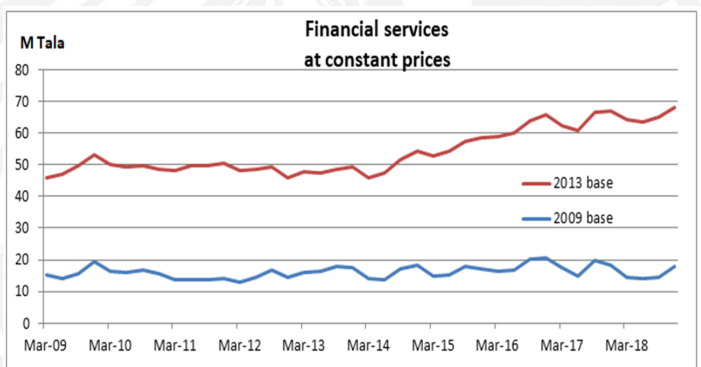
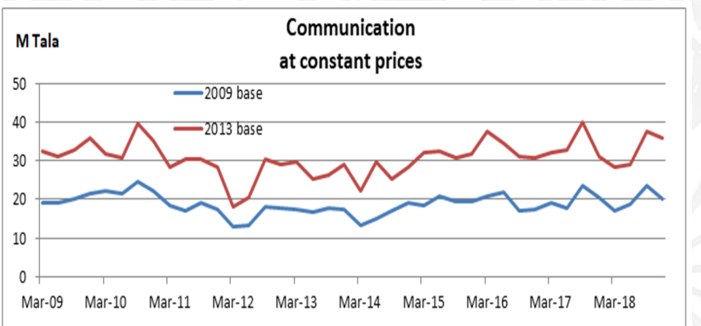
NATIONAL ACCOUNTS FRAMEWORK REVIEW & GDP 2013 REBASING

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.

Background Information

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 or goods-producing industries (manufacturing, construction, electricity & water);
- tertiary 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).



SBS Vision:
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