GDP REBASING

(BASE YEAR 2014)

NATIONAL BUREAU OF STATISTICS

MINISTRY OF FINANCE AND TREASURY

GDP REBASING OF MALDIVES

What is Gross Domestic Product (GDP)

Gross Domestic Products (GDP) is the value of all final goods and services produced within a country in a given period of time. The GDP can be measured using three approaches which are production, expenditure, and income that are presented at current and constant prices.

GDP by production approach (GDP [P])

Y= GVA + (T-S)

is defined as the difference of gross value of goods and services produced less the value of raw material used as input (intermediate consumption) plus any taxes and less any subsidies on products.

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GDP by expenditure approach (GDP [E])

Y = C + I + G + (X − M)

is the sum of consumption expenditures by households ,Non Profit Institutions Serving Households (NPISHs), government expenditures, investments and exports less imports of goods and services.

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GDP by income approach (GDP [Y])

Y= COE + OS + CFC + (T – S)

Is the sum of compensation of employees, net operating surplus, consumption of fixed capital and other taxes less subsidies on production.

GDP at current prices or nominal GDP is estimated by using the prices at the accounting period and aimed to describe the economic structure.

GDP at constant prices or real GDP is estimated using the prices at a reference year and designed to measure the economic growth rate.

Why does Gross Domestic Product (GDP) need to be rebased?

Over the past decade, many changes in the global and local structures have influenced Maldivian economy. The tsunami in December 2004,the global financial crisis occurred in 2008, the implementation tax policies in 2011, and the expansion of financial sector are some examples of changes on economic activities that need to be incorporated in the national accounts statistics.

One of the improvements in the national accounts statistics is to rebase GDP form base year 2003 to 2014 in order to capture current economic condition. It is in line with the United Nations (UN) recommendation on 2008 System of National Accounts (SNA) using the Supply and Use Tables (SUT) as the framework.

What are the benefits of rebasing Gross Domestic Product (GDP) to 2014?

Rebasing GDP provides some benefits such as:

- To describe current economic condition i.e. size and economic growth rate during a given period of time
- To improve the quality of GDP
- To improve the international comparability of the GDP

What are the implications of Gross Domestic Product (GDP) rebasing?

The rebasing of GDP brings some impacts on macro economic indicators such as:

- Increase in nominal GDP, which will lead to an increase in the income group from low into medium or high income country (GDP per capita) and change economic structure.
- Changing the macroeconomic indicators such as tax ratios, debt ratios, investment and saving ratios, current account, and economic growth.
- Changing the data base for modelling and forecasting.

Why is 2014 used as the reference year?

Our current base year is 2003 and 2014 was selected as the new base year due to the following reasons:

- Economy is relatively stable.
- There has been transformation in the economic structure in the past decade, especially in the construction, tourism, manufacturing and trade sector affecting distribution patterns and growth of new sectors .
- UN recommendation to change GDP base year every 5 (five) years.
- The renewal concepts, definition, coverage, and methodology as are recommended by the SNA 2008.
- The availability of new data source to improve quality of GDP such as Population Census 2014, Tax data and economic survey 2012/2013.
- The availability of SUT as the framework that could be used for GDP benchmarking exercise

MALDIVES SUT 2014

What is Supply and Use Table (SUT)?

Supply and Use Table or SUT is a framework that describes the balance between the flows of production and consumption (goods and services) and the generation of income in production activity. It consists of two main tables namely Supply table and Use table.

The SUT framework uses ISIC Rev. 4 classification and the CPC Ver.2.0. The SUT framework has two equations that should be fulfilled:

a. SUPPLY = USE

The value of goods and services provided by domestic industries and import should be equal to the value of goods and services used on production process and final consumption.

b. OUTPUT = INPUT

The value of goods and services produced by domestic industries should be equal to the value of goods and services used on the production process

SUT is a compilation tool for data checking and reconciliation, gap filling, and the best framework for compiling GDP in an integrated approach. When GDP was compiled independently, some statistical discrepancies may occur. It means there

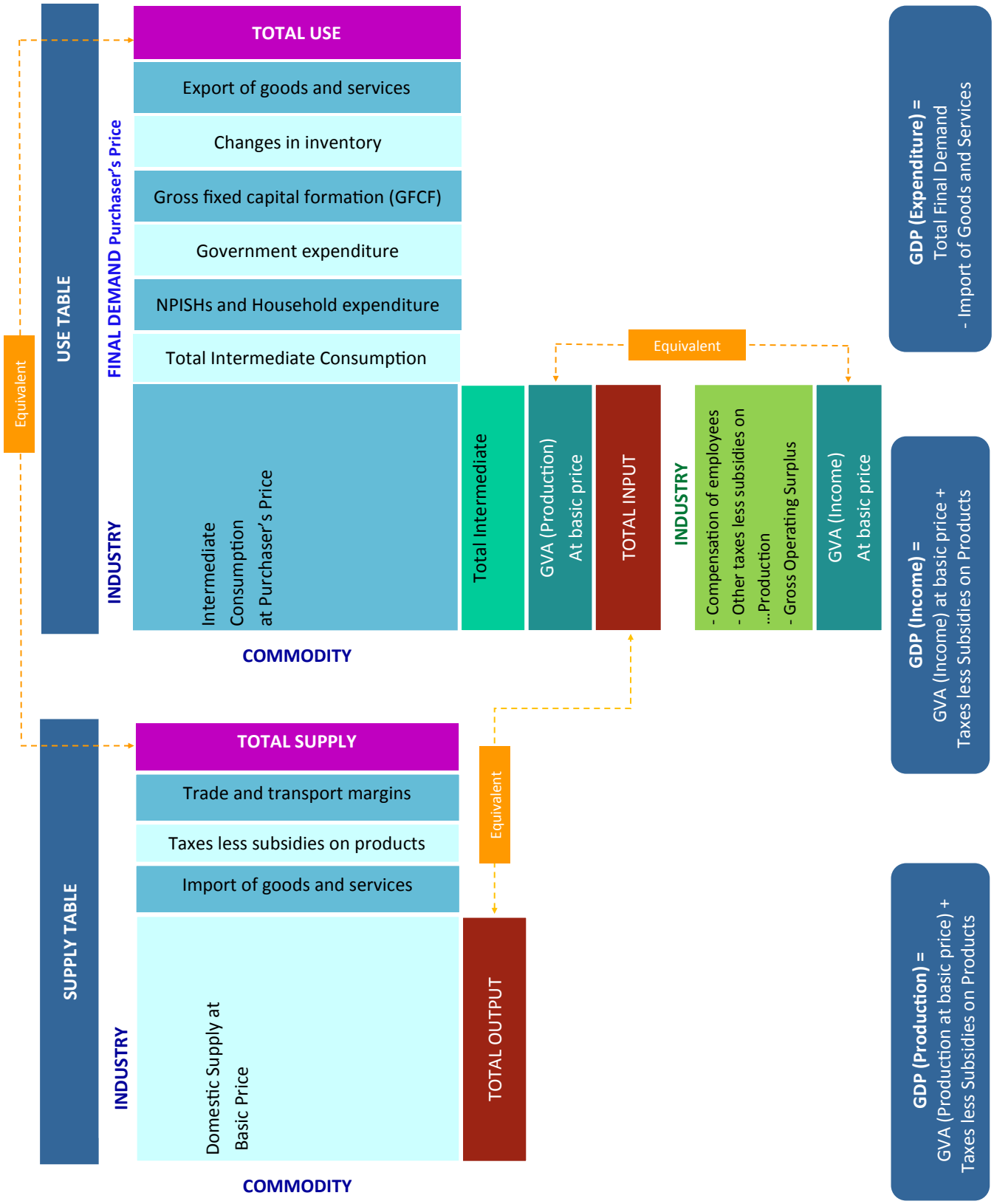


Figure 1. Framework of SUT

THE 2008 SNA IMPLEMENTATION

What is SNA?

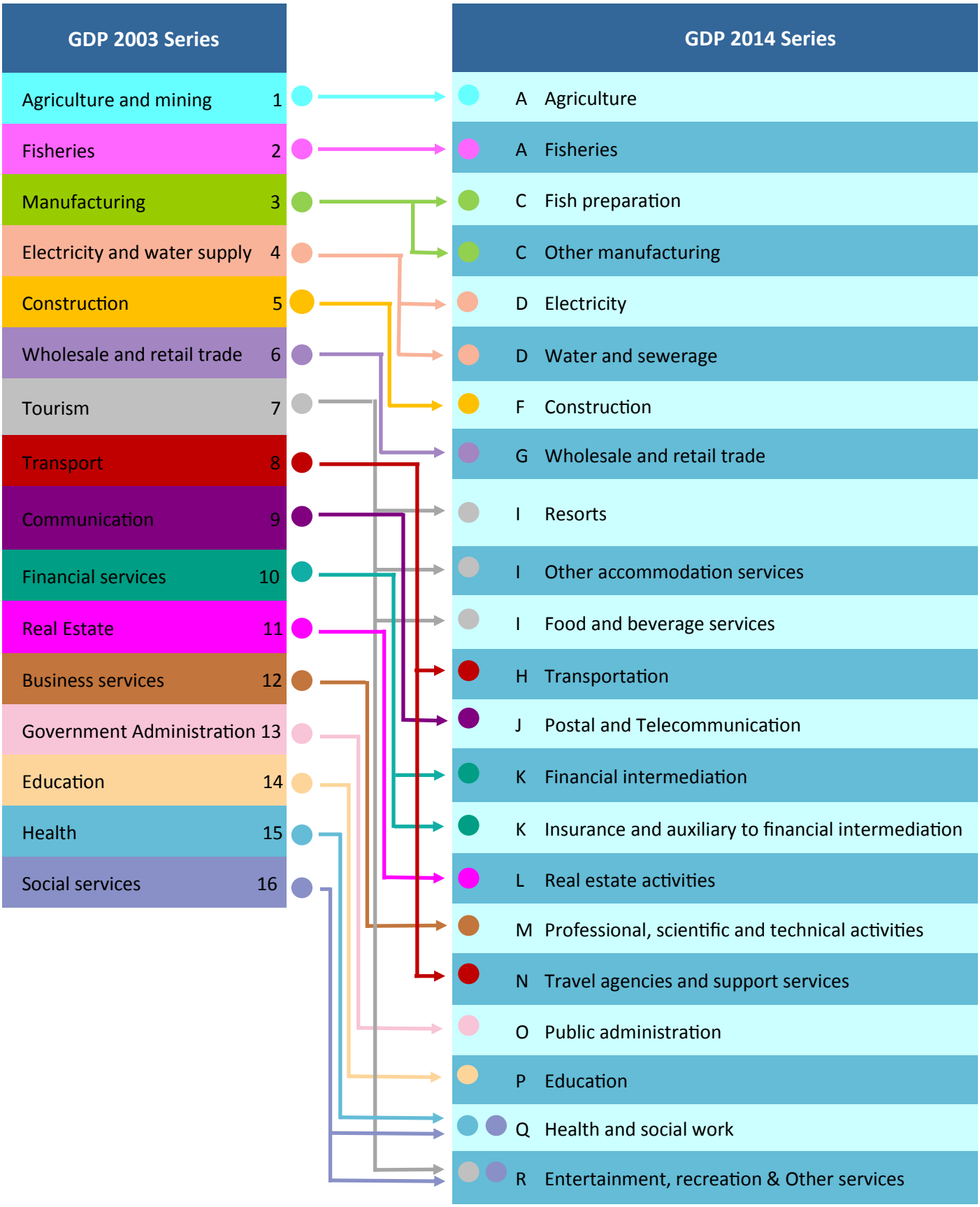
The System of National Accounts is the internationally agreed standard set of recommendations on how to compile measures of economic activity in accordance with strict accounting conventions based on economic principles. The recommendations are expressed in term of a set of concepts, definitions, classifications and accounting rules that comprise the internationally agreed standard for measuring indicators such as GDP.

Previously published GDP estimates are compiled based on SNA 2003. However 2014 SUT was compiled based on the latest version of SNA manual, SNA 2008.

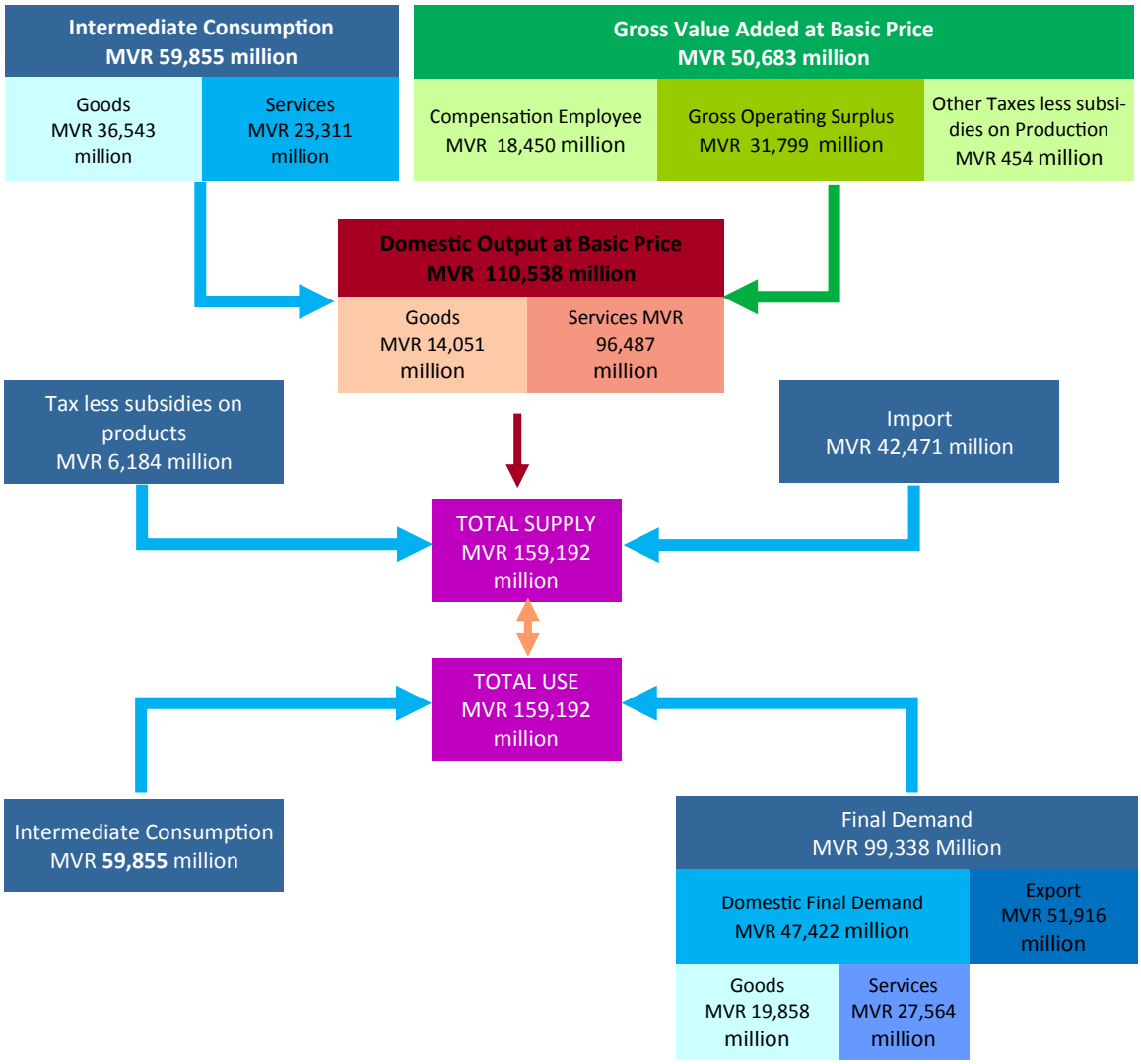
What are changes in the GDP classification?

The GDP classification by industry is based on International Standard Industrial Classifications of all economic activities (ISIC). The GDP 2003 series uses ISIC Rev.2 while classification of 2014 series applies ISIC Rev.4. The comparison of the GDP classification in aggregate level can be seen on the following table.

Figure 2. Comparison of GDP Classification by industries



MAIN RESULT



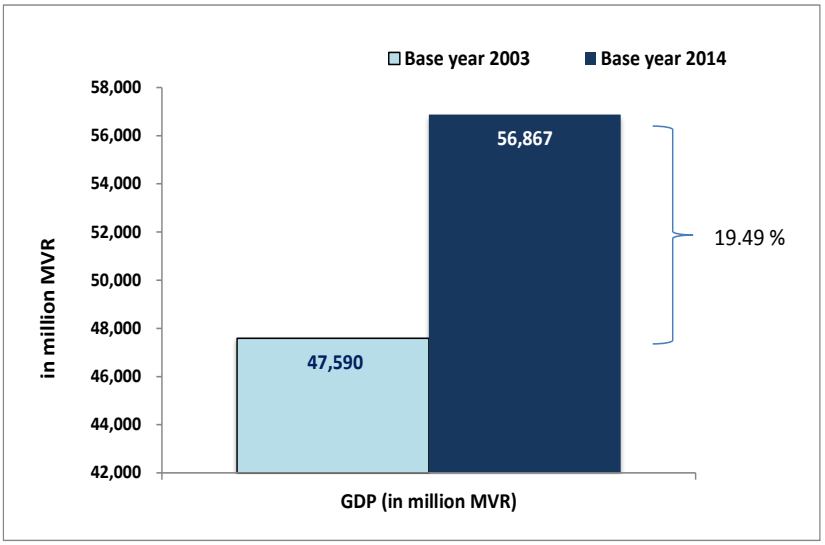
GDP BY INDSUTRY	=	GDP BY INCOME	=	GDP EXPENDITURE	
1. Gross Value Added at Basic Price	50,683	1. Compensation Employee	18,450	1. Domestic Final Demand	47,422
2.Tax less subsidies on Product	6,184	2.Taxes less subsidies on Production	6,637	2.Export	51,916
		3.Net Operating Surplus	24,345	3.Less Import	42,471
		4.Consumption of fixed capital	7,434		
GDP by Industry	56,867	**GDP by Income**	56,867	**GDP by Expenditure**	56,867

Figure 3. Result of SUT 2014

How big is the difference between 2014 nominal GDP based on 2003 rebased series and 2014 rebased series?

GDP at current prices in the year 2014 for 2003 based series is MVR. 47,590 million, while rebased GDP based on SUT 2014 reached MVR 56,867 million, which is a difference of MVR 9,277 million (19.49%).

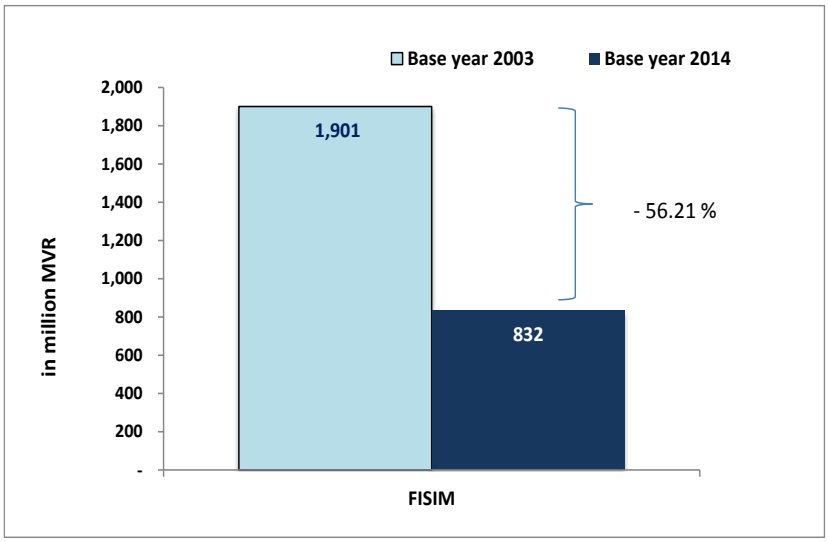
Chart 1. The comparison between GDP 2003 and 2014 base year



What is the effect of the implementation of 2008 SNA for the new re-based GDP 2014 on FISIM?

Implementation of the 2008 SNA decreased the level of FISIM for the 2014 base year by 56.21% compared with the base year 2003. This decrease is due to the changes in the method of calculating FISIM. FISIM in 2014 (base year 2003) is MVR 1,900.8 million, while FISIM of base year 2014 reached MVR 832.4 million, which is a difference of MVR 1068.4 million .

Chart 2. Comparison of 2014 FISIM in two base years (2003 and 2014)



*Financial intermediation services indirectly measured (FISIM) is an indirect measure of the value of financial intermediation services provided but for which financial institutions do not charge explicitly.

How has the GDP by industry changed in the new 2014 base year?

Rebasing GDP effects the nominal level and structure of 2014 GDP by industry as shown in the table below:

Table 1. Comparison of Nominal GDP 2014 by industries in two base year (2003 and 2014)

Industry		2003 Base year		2014 Base year	
		(Million MVR)	(%)	(Million MVR)	(%)
A	Agriculture	814.3	1.7	783.4	1.4
A	Fisheries	490.2	1.0	2,234.6	3.9
C	Fish preparation	1,154.8	2.4	279.2	0.5
C	Other manufacturing products	863.6	1.8	849.6	1.5
D	Electricity	211.0	0.4	482.2	0.8
E	Water and sewerage	233.2	0.5	398.1	0.7
F	Construction	5,294.8	11.1	2,775.6	4.9
G	Wholesale and retail trade	1,532.1	3.2	5,353.7	9.4
I	Resorts and Other accomodation services	10,083.9	21.2	13,902.1	24.4
i	Resorts	*na*	*na*	13,297.1	23.4
i	Other accomodation services	*na*	*na*	605.0	1.1
I	Food and beverage services	631.4	1.3	440.9	0.8
H	Transportation	2,316.2	4.9	3,722.8	6.5
J	Postal and Telecommunication	2,143.8	4.5	1,687.9	3.0
K	Financial intermediation	2,048.5	4.3	2,121.7	3.7
K	Insurance and auxiliary to financial intermediation	54.3	0.1	138.7	0.2
L	Real estate activities	2,348.2	4.9	4,166.3	7.3
M	Professional, scientific and technical activities	361.4	0.8	851.5	1.5
N	Travel agencies and support services	675.2	1.4	1,736.5	3.1
O	Public administration	6,576.0	13.8	4,372.0	7.7
P	Education	1,482.7	3.1	1,704.0	3.0
Q	Health and social work	1,201.2	2.5	1,511.8	2.7
R	Entertainment, recreation & Other services	356.6	0.7	1,170.3	2.1
Gross Value Added at basic price		**40,873.6**	**85.9**	**50,683.2**	**89.1**
Taxes less subsidies on product		**6,716.0**	**14.1**	**6,183.6**	**10.9**
GROSS DOMESTIC PRODUCT		**47,589.6**	**100.0**	**56,866.7**	**100.0**

Note: Breakdown of resorts and other accommodation services were not compiled prior to 2014.

How has the shares of final expenditure changed in the new 2014 base year?

Rebasing GDP effects the expenditure shares as shown in the table below:

Table 2. Comparison of 2003 and 2014 Nominal GDP by expenditure in base year (2003 and 2014)

Component of Expenditure		2003 Base year		2014 Base year	
		(Million MVR)	(%)	(Million MVR)	(%)
1	Household & NPISHs Consumption Expentidure	4,840	36%	20,892	37%
2	Government Consumption Expenditure	2,347	18%	10,686	19%
3	Gross Fixed Capital Formation	3,456	26%	15,201	27%
4	Changes in Inventory	(116)	-1%	643	1%
5	Exports of	9,735	73%	51,916	91%
	A. Goods	1,880	14%	4,657	8%
	B. Services	7,855	59%	47,259	83%
6	Less Imports of	6,906	52%	42,471	75%
	A. Goods	6,247	47%	32,400	57%
	B. Services	659	5%	10,071	18%
GROSS DOMESTIC PRODUCT		13,356	100%	56,867	100%

Chart 3. Comparison of Real GDP Growth rates from 2004 to 2015

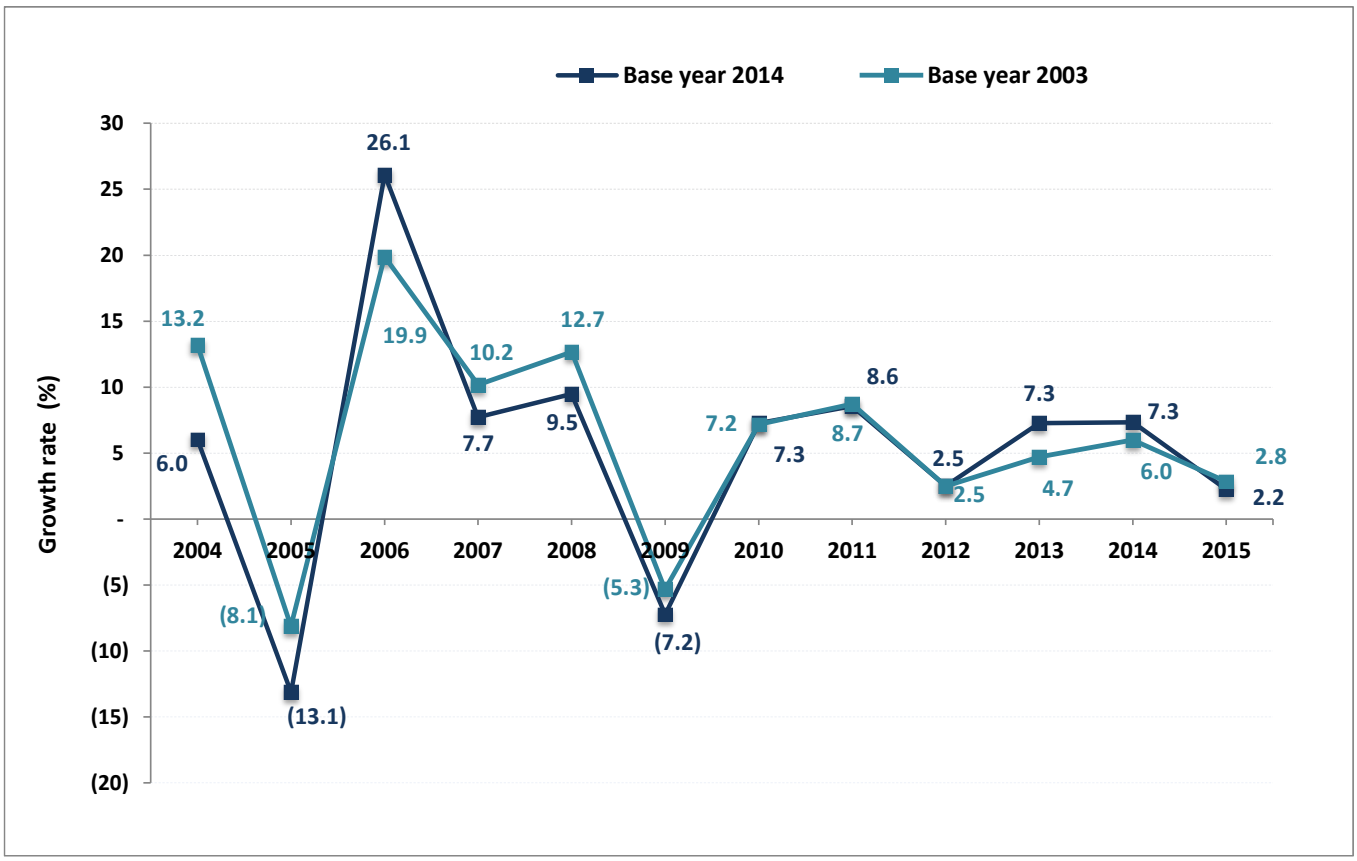


Table 3. Comparison of Nominal and Real GDP of two base years (2003 and 2014)

		2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Nominal GDP														
2014 series	Million MVR	13,467.1	15,703.4	14,891.0	20,162.6	23,915.3	29,077.1	30,019.8	33,128.7	40,511.1	44,345.4	50,633.5	56,866.7	61,565.6
Growth rate	%	-	16.6	(5.2)	35.4	18.6	21.6	3.2	10.4	22.3	9.5	14.2	12.3	8.3
2003 series	Million MVR	13,355.5	15,388.7	14,333.5	18,876.1	22,348.8	27,007.5	27,510.5	29,739.8	35,768.3	38,693.0	42,952.2	47,589.6	52,787.5
Growth rate	%	-	15.2	(6.9)	31.7	18.4	20.8	1.9	8.1	20.3	8.2	11.0	10.8	10.9
Real GDP														
2014 series	Million MVR	32,549.8	34,513.8	29,982.5	37,811.4	40,728.1	44,591.3	41,367.8	44,373.3	48,174.6	49,387.3	52,983.3	56,866.7	58,143.9
Growth rate	%	-	6.0	(13.1)	26.1	7.7	9.5	(7.2)	7.3	8.6	2.5	7.3	7.3	2.2
2003 series	Million MVR	13,355.5	15,113.1	13,885.2	16,646.7	18,340.0	20,664.4	19,563.9	20,966.0	22,791.9	23,361.4	24,458.9	25,925.8	26,663.8
Growth rate	%	-	13.2	(8.1)	19.9	10.2	12.7	(5.3)	7.2	8.7	2.5	4.7	6.0	2.8

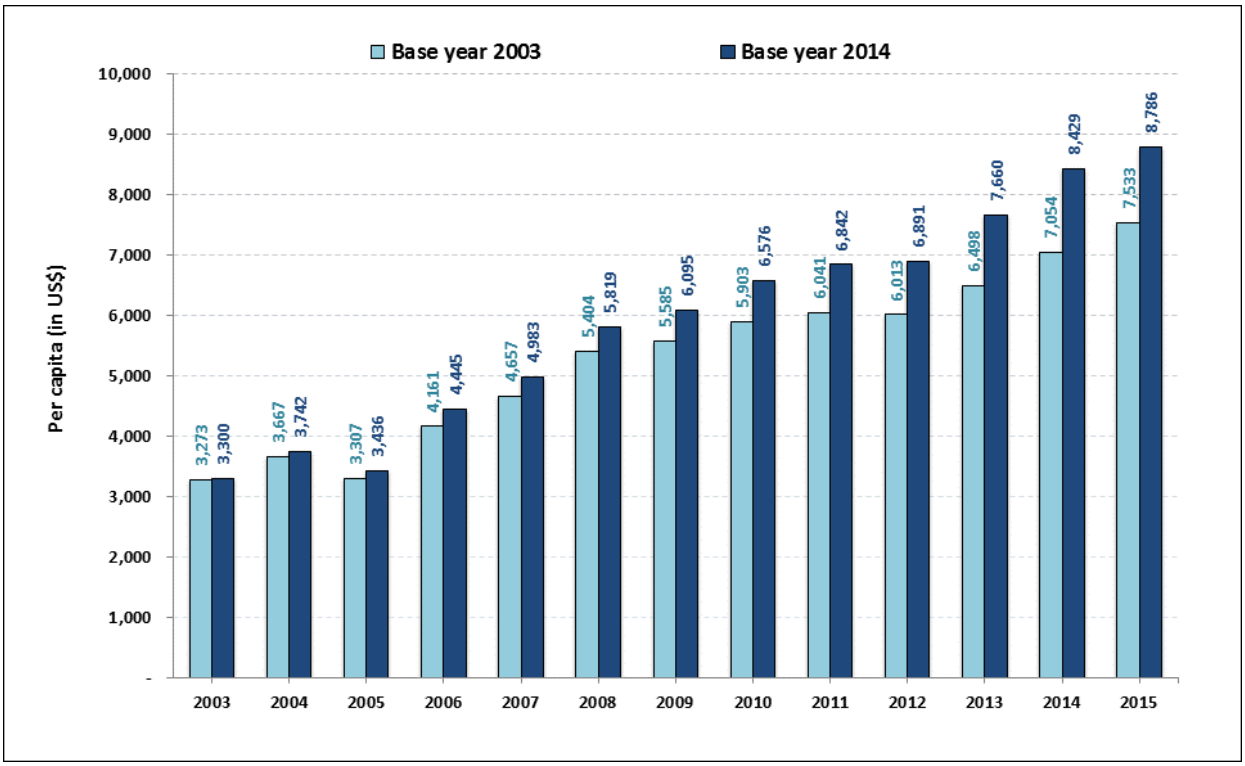
What is the impact of rebasing on the GDP level of other countries?

The effect of rebasing on GDP level are as shown below in the table:

Table 4. Implication of rebasing of GDP in other countries

No	Country	Previous Base Year	Latest Base Year	Nominal Changes of GDP (%)
1	Malaysia	2000	2005	3.2
2	Indonesia	2000	2010	6.5
3	Singapore	2005	2010	1.3
4	Sri Lanka	2002	2010	14.1
5	Ghana	1993	2006	60.0
6	Kenya	2001	2009	25.0
7	Nigeria	1990	2010	59.5
8	Zambia	1994	2010	25.0
9	**Maldives**	**2003**	**2014**	**19.5**
10	**Maldives**	**1995**	**2003**	**34.0**

Chart 4. Comparison of Nominal GDP per capita in two base year (2003 and 2014)



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