SOURCES AND METHODS OF GDP COMPILATION

(BASE YEAR 2014)

NATIONAL BUREAU OF STATISTICS
# Table of Contents

Abbreviations .............................................................................................................. 1

1. Introduction ............................................................................................................... 2

2. Overview of methodology and compilation system ............................................... 3

3. Estimation procedures ............................................................................................ 5
   3.1. Constant price to current price ........................................................................... 5
   3.2. Current price to constant price .......................................................................... 6
   3.3. Back casting ....................................................................................................... 6

4. Specific methods used in the industrial value added extrapolation ....................... 8
   4.1. Agriculture ........................................................................................................ 8
   4.2. Fisheries ........................................................................................................... 9
   4.3. Fish preparation ............................................................................................... 10
   4.4. Other Manufacturing ....................................................................................... 12
   4.5. Manufacture of other food products (excluding fish) ....................................... 13
   4.6. Manufacture of beverages ............................................................................... 14
   4.7. Manufacture textiles and of wearing apparel ................................................... 15
   4.8. Manufacture of products of wood and furniture ............................................. 16
   4.9. Printing and services related to printing ......................................................... 17
   4.10. Manufacture of cement products .................................................................... 18
   4.11. Manufacture of Ships ...................................................................................... 19
   4.12. Other Manufacturing ...................................................................................... 20
   4.13. Electricity ........................................................................................................ 21
   4.14. Water and Sewerage ....................................................................................... 22
   4.15. Construction ................................................................................................... 23
   4.16. Trade ............................................................................................................... 24
   4.17. Tourism ......................................................................................................... 25
      4.17.1. Resorts ..................................................................................................... 26
      4.17.2. Other accommodation services ............................................................... 26
         4.17.2.1. Hotels .................................................................................................. 26
         4.17.2.2. Guesthouses ..................................................................................... 27
         4.17.2.3. Safari vessels .................................................................................... 28
Abbreviations

- **BoP** - Balance of Payments
- **CMI** – Construction Material Index
- **CPC**- Central Product Classification
- **CPI**- Consumer Price Index
- **ES**- Economic Survey
- **FISIM**- Financial Intermediation Services Indirectly Measured
- **GDP**- Gross Domestic Product
- **GVA**- Gross Value Added
- **GVAR**- Gross Value Added Ratio
- **IPD**- Implicit Price Deflator
- **ISIC**- International Standard for Industrial Classification of All Economic Activities
- **HIES**- Household Income and Expenditure Survey
- **SNA**- System of National Accounts
- **SUT**- Supply and Use Table
- **NAEA** – National Accounts Economic Statistics Division
- **PPI**- Producer Price Index
- **PSIP**- Public Sector Investment Programme
- **QNA**- Quarterly National Accounts
- **UVI** – Unit Value Index
1. Introduction

The purpose of this report is to provide a detailed description of the procedures used in the GDP compilation, the data sources and methods used in the compilation of the annual national accounts estimates of Maldives.

GDP has been rebased from the year 2003 to the year 2014 using a Supply and Use Table (SUT) compiled for Maldives for the year 2014. This paper provides a description of how the base year 2014 estimates were compiled and the data sources and methodologies used in the series to produce estimates for the subsequent years.

This document first outlines the general procedures used in the GDP compilation and then goes on to a comprehensive explanation of the data sources and compilation methods used for the individual industries and activities. For each activity, the calculation of base year estimates, and how the constant price and current price estimates are derived are explained in detail.

Other documentation includes *GDP rebasing (base year 2014)* which gives details on the rebasing exercises and the resulting changes from the 2003 based series and 2014 based series. Time series data for the years 2003 to 2015 is given in 2014 base year for comparability.

In addition to this a separate document on *Supply and Use Table for Maldives 2014: Methodology and compilation* is also available.

All these documentation are made available on the website of NBS (www.statisticsmaldives.gov.mv)
2. Overview of methodology and compilation system

The benchmark estimate for 2014 is taken from the Maldives SUT 2014. SUT 2014 depicts the changes that have taken place in the structure of the economy since the 2003 benchmark. This was much needed, given the fiscal reforms that have taken place in 2011 by widening the tax base, creating a lot of challenges in estimating the economic growth, using the constant prices of 2003. This is also a step taken forward in implementation of the latest international recommendations (SNA 2008) for compilation of national accounts and improves the quality and comparability of GDP estimates. Although the guidelines of SNA 2008 are broadly followed in preparation of national accounts, gaps still remain in its implementation. In addition the ISIC rev 4 was also adopted and the CPC 2.0.

GDP for the base year 2014 was compiled within the SUT framework. This allows for the derivation of GDP within a coherent and consistent framework, allowing for the validation of all available data from different sources and resulted in the generation of GDP from all three approaches (production, expenditure and income) used for GDP compilation.

Estimates of GDP by expenditure were prepared as part of the 2014 benchmark SUT. However, the SUT was balanced so that there is no statistical discrepancy between the different approaches. Independent estimates of GDP by expenditure for post-benchmark years are compiled to compare them with estimates of GDP by production approach by economic activity in order to assess the statistical discrepancy and the quality of the two measures. GDP by expenditure estimates are not yet of adequate quality to be published separately and hence is used for internal consistency in the national accounts compilation.

The new benchmark coupled with new administrative data sources - Goods and Services Tax (GST) and Business Profit Tax (BPT) introduced in 2011, and financial statements of companies enabled more robust annual GDP estimates. Exploitation of new data sources enabled the application of double deflation in many sectors in the 2014 series. This allows changes in the input-output ratio of these sectors to be reflected in the series.
The existing published 2003 GDP series has been modified in the way it is presented to enhance the comparability between the 2014 series. Since FISIM is compiled in compliance with SNA 2008, and FISIM is distributed to the users in the 2014 GDP series, the FISIM component in the 2003 series is also distributed to the sectors to make it more comparable. Also the new 2003 GDP series (FISIM distributed series, hereafter referred to as 2003 series in the rest of this document) is published at more disaggregated level to allow comparability with the new series, wherever possible.

The GDP rebased 2014 framework has been developed in an Excel spreadsheet, consisting of a number of data input sheets, with links to intermediate work sheets and final estimation sheets. The data in the GDP rebased 2014 framework is entered onto a number of specialised spreadsheets The interlinked series of excel spreadsheets allows for the compilation of GDP and value added by industry at current and constant prices using single deflation and in some cases double deflation method, through the production approach. The spreadsheets include; over 150 short term volume indicators, data from the financial statements of enterprises, price indices such as CPI, PPI, CMI, Wage index, government budget to estimate the production of government administration, health, education and social services, tax and subsidies data (details of all spread sheets used in the compilation are included in the Annex I.).

The actual time series for the new series starts at 2003 so that an overlap with the old series is available. In addition to the constant price series compiled so far, it also includes a full series of GDP estimates in current prices.
3. Estimation procedures

This section summarises some of the methodologies used in the estimation of actual figures in the system. Broadly defining, there are two main procedures for estimating constant and current price values in the system; estimating constant price values first and inflating the value to estimate the current price figure or estimating current price value first and deflating the values to estimate constant price figure. Refer to chapter 4 for a detailed activity wise description of the methodology.

3.1. CONSTANT PRICE TO CURRENT PRICE

In some cases the short term indicators are proxies for volume growth in value added that could be used to move the constant price estimates. Instead of applying the growth rate, volume indices are compiled using volume indicator and these indices are used to derive the constant price estimates for the period.

The current prices are derived using the constant prices estimates by reflating as shown in the formula (1) below.

\[
\text{Current price } (Y_t) = \left[ \frac{P_t}{P_0} \right] \times K_t \quad (1)
\]

where \( P_t \) is the price index in year \( t \), and \( P_0 \) is the price index in the base year (2014) and \( K_t \) is the gross value added in constant prices in the year \( t \).
3.2. CURRENT PRICE TO CONSTANT PRICE

On the other hand, in some cases, gross value added is derived in current price first. In this case, the constant gross value added is derived by deflating the current price estimate using a suitable price index.

The constant gross value added is derived using the illustrated formula (2) below.

\[
\text{Constant price } (Q_t) = \left[ \frac{P_0}{P_t} \right] \times Y_t \tag{2}
\]

where \( P_t \) is the price index in year \( t \), and \( P_0 \) is the price index in the base year (2014) and \( Y_t \) is gross value added in current prices in the year \( t \).

3.3. BACK CASTING

To provide a comparable series of important macroeconomic aggregates, it is very important to construct a linked national accounts series. For users, it is important to have continuous series of national accounts available without breaks due to the change in base year. In linking the 2003 national accounts series to the 2014 series linking is undertaken at the most disaggregated level possible. And the linking of the national accounts series is done for 19 years back to year 1995 and will be published for the benefit of the users.

To link the series from the two benchmark periods, base year 2003 and base year 2014, the revision of the series would be an interpolation exercise between two benchmark estimates (the old base year 2003 and the new base year 2014) taking into account the movements of the vintage dataset. The objective of the linking exercise it to have a long and consistent time series that best uses the available information on levels and growth rates. Therefore,
it is necessary to adjust the intervening years in a smooth way that avoids any discontinuities (the step problem).

The adjustment factor for the intervening years with old and benchmark eleven years apart is calculated as follows:

\[ A = \left( \frac{A_{2014,\text{new}}}{A_{2014,\text{old}}} \right) \left( \frac{A_{2003,\text{new}}}{A_{2003,\text{old}}} \right)^{(t/11)} \]

- \( A_{2014,\text{old}} = \text{the estimate for 2014 using the old base year (2003)} \)
- \( A_{2014,\text{new}} = \text{the estimate for 2014 using the new base year (2014)} \)
- \( A_{2003,\text{old}} = \text{the estimate for 2003 using the old base year (2003)} \)
- \( A_{2003,\text{new}} = \text{the estimate for 2003 using the new base year (2014)} \)
- \( t = \text{number of years from old base} \)

In cases where the new benchmark has adopted a new methodology as in the case of ‘Financial Intermediation’ or where better data are available the estimates are recompiled. In public administration, education, health and social services some changes in classification have been introduced in the new benchmark; therefore the estimates were recompiled according to the revised classifications given that the data are readily available.
4. Specific methods used in the industrial value added extrapolation

In compilation of the 2014 base year series, Industries have been classified according to the “International Standard Industrial Classification of All Economic Activities (ISIC)” revision 4. This was an update over the classification used ISIC rev 3.1 in the 2003 base series. The new base year series classification demonstrates a more detailed version of the industries.

Annex II gives the industry breakdown and economic activities categorised under each industry grouping in the ISIC rev4 and Annex III shows the changes in the classification of the industries for 2014 series compared to that of 2003 series.

4.1. AGRICULTURE

This industry is classified under ISIC section A- Agriculture, forestry and fishing. This Industry includes production of crop products and production of animal products, covers all forms of organic agriculture and also forestry and logging products.

Baseline estimates

Although turnover data of crops sold in Male’ market is collected by the Ministry of Fisheries and Agriculture, the data cannot be used as the coverage of data is unknown. Thus commodity flow approach was used to estimate the gross value added of this sector while input output ratio of Economic Survey 2012 was used. No separate estimate for livestock and forestry is made.
Extrapolation

- **Current Price**

  Estimates for Agriculture are measured by reflate the constant price (refer below) estimates on the basis of *CPI Food and beverages -excluding fish*.

- **Constant Price**

  Constant price estimates are moved on the basis of number of tourists and population of Maldives. Given the lack of monthly or annual volume indicators of production, such as area of cultivated land or quantity produced, it was decided that it could be linked to tourist *bed-nights and population*, which would in theory influence local production of agriculture, marketed to the resorts, restaurant operators and local markets.

**4.2. FISHERIES**

This Industry covers the fishing and production of fishery resources from marine, brackish or freshwater environments, with the goal of capturing or gathering fish, crustaceans, molluscs and other marine organisms and products (e.g. aquatic plants, pearls, sponges etc.).

**Baseline estimates**

The baseline estimate for this sector is estimated mainly using the data collected by the Ministry of Fisheries and Agriculture (MOFA). Output was measured on the basis of total value of fish catch. This figure is derived from the total volume of fish catch multiplied by the average fish prices for each major species. For the estimation of input, the data collected from the Cost and Earning Survey conducted by Ministry of Fisheries and Agriculture in 2015 was used. The disaggregate data of input structure by the size of
vessel is available; the intermediate consumption of the sector is estimated separately for various size of vessels. Later the sample estimates were raised using the number of fishing vessels by type from the fishing vessel registration database of MOFA.

Extrapolation

- **Current Price**

  The current price is derived by using double deflation method.

  \[
  VA = \text{Output} - \text{Intermediate Consumption (IC)}
  \]

  Output estimates are measured by reflating constant price estimates (refer below) on the basis of a *weighted average index* derived using PPI and CPI fish price index. Intermediate Consumption estimates are measured by reflating the constant price estimates (refer below) on the basis of *Diesel price index*.

- **Constant Price**

  *Fish catch* is used as a volume indicator to move the constant price estimate of the output.

  *Intermediate Consumption Ratio (ICR)* of 2014 is used as an indicator to move the constant price estimates for the Intermediate consumption.

4.3. **FISH PREPARATION**

This industry is a sub-industry of ISIC section C – Manufacturing. The manufacturing industry in the Maldives is relatively small. It is therefore not possible to classify the activity at the detailed 3-4 digit ISIC breakdown. However due to its importance to the Maldivian
economy, it is shown separately while all the other manufacturing activities are shown as one industry. Fish preparation consists of fish preservation and processing: freezing, deep-freezing, canning operations by enterprises and small scale traditional fish drying, smoking, salting and fish paste production in the various fishing islands.

Baseline Estimates

Fish preparation consists of large scale fish processing and canning operations by enterprises and small scale traditional fish drying/smoking and fish paste production in the various fishing islands. For the estimation of gross value added of this sector, financial statements and Economic Survey 2012/2013 data was used. Further adjustments to the estimates were made using commodity flow approach. Due to the scale and unavailability of data, no separate indicator is used to estimate the small scale fish processors.

Extrapolation

- **Current Price**
  
  Current price values are estimated by reflating the constant price estimates for Fish preparation on the basis of *PPI Fish preparation*.

- **Constant Price**
  
  The volume measure is estimated using a volume index derived for the volume of fish purchases made by the large scale companies.
4.4. OTHER MANUFACTURING

This industry includes manufacturing of all other products except for fish products. The important activities in this industry is presented in a logical way based on the type of products, the number of units and the value of output, to maximise the analytical value of these activities. Manufacture of food products, beverages, tobacco products, textiles and wearing apparel, furniture and wood products, cement products, printing and related products and other manufacturing miscellaneous activities are included in this sector. The main source of data used for estimation is Economic Survey (ES) and financial statements. In the GDP estimation framework, the value added of this sector is estimated by further disaggregation into the following ISIC sub-categories, but are published at an aggregate level.

<table>
<thead>
<tr>
<th>ISIC sub categories</th>
<th>Activity description</th>
</tr>
</thead>
<tbody>
<tr>
<td>107</td>
<td>Manufacture of other food products &amp; tobacco (excluding fish)</td>
</tr>
<tr>
<td>11</td>
<td>Manufacture of beverages</td>
</tr>
<tr>
<td>13/14</td>
<td>Manufacture of textiles &amp; wearing apparel</td>
</tr>
<tr>
<td>16/31</td>
<td>Manufacture of products of wood &amp; furniture</td>
</tr>
<tr>
<td>181</td>
<td>Printing &amp; services related to printing</td>
</tr>
<tr>
<td>2395</td>
<td>Manufacture of cement products</td>
</tr>
<tr>
<td>301</td>
<td>Manufacture of Ships</td>
</tr>
<tr>
<td>32</td>
<td>Other manufacturing products</td>
</tr>
</tbody>
</table>
4.5. MANUFACTURE OF OTHER FOOD PRODUCTS (EXCLUDING FISH)

This sector includes the production of a variety of food products excluding fish products. Also includes processing of tobacco, into a form suitable for final consumption.

Baseline Estimates

Manufacture of food products are largely operated on a small scale in the Maldives. Thus data from the Economic Survey 2012/2013 is used in addition to the data from financial statements.

Extrapolation

- **Current Price**
  Estimates are measured by reflating the constant price estimates (refer below) on the basis of CPI food and beverages excluding fish.

- **Constant Price**
  Since no direct measure is available, estimates are moved using the Population Index.
4.6. MANUFACTURE OF BEVERAGES

The beverages industry is made up of establishments engaged in the manufacture of beverages, such as non-alcoholic beverages and mineral water.

Baseline Estimates

For the base year estimates, financial statements of the companies engaged in bottling of soft drinks and mineral water were used.

Extrapolation

- **Current Price**

  Estimates are measured by reflating the constant price estimates (refer below) with the PPI beverages index.

- **Constant Price**

  The production of beverages has been linked partly to the development of the tourism industry and partly to the development in the local market. The value added is estimated based on a weighted average index compiled using bednights and population. A weight of 0.6 is given to bednights, reflecting the consumption by the tourists and a weight of 0.4 is given to population, reflecting the local consumption.
4.7. MANUFACTURE TEXTILES AND OF WEARING APPAREL

This sector comprises of preparation or spinning of textile fibres (textile weaving, finishing of textiles and wearing apparel, manufacture of made-up textile articles) and tailoring (ready-to-wear or made-to-measure), in all materials (e.g. leather, fabric, knitted and crocheted fabrics etc.), of all items of clothing (e.g. outerwear, underwear for men, women or children; work, city or casual clothing etc.) and accessories.

Baseline Estimates

This industry comprises primarily of the small scale production in the numerous tailor shops that serve the local market, in addition to thatch making. To estimate the production by this industry, data from Economic Survey 2012/2013 is used.

Extrapolation

- **Current Price**

  To measure the current price estimates, the constant price estimates (refer below) are reflated using average of PPI and CPI wearing apparel price index.

- **Constant Price**

  The value added of production is extrapolated using a volume index derived from population.
4.8. MANUFACTURE OF PRODUCTS OF WOOD AND FURNITURE

This sector includes the manufacture of wood products, such as lumber, plywood, veneers, wood containers, wood flooring, wood trusses, and prefabricated wood buildings and manufacture of furniture. The production processes include sawing, planning, shaping, laminating, and assembling of wood products starting from logs that are cut into bolts, or lumber that may then be cut further, or shaped by lathes or other shaping tools.

Baseline Estimates

This industry was dominated by a number of small establishments, which were mostly engaged in carpentry work. This sector is estimated based on the Economic Survey 2012/2013.

Extrapolation

- **Current Price**

  The constant price estimates are calculated by reflating the constant price estimates (refer below) with *CPI plywood price index*.

- **Constant Price**

  *Construction Volume index* is used as an indicator to move the constant price estimates. Construction volume index is a weighted index computed using three volume indicators with weights; building materials (0.54), building permits (0.04) and expatriate construction labour (0.42). The weights are computed based on the input cost of material and labour cost.
4.9. PRINTING AND SERVICES RELATED TO PRINTING

This sector includes printing of products, such as newspapers, books, periodicals, business forms, greeting cards, and other materials, and associated support activities, such as bookbinding, plate-making services, and data imaging.

Baseline Estimates

To estimate the production of printing industry, data were taken from Economic Survey 2012/2013 for the small scale production, while financial statements were used for the large scale printing segment.

Extrapolation

- **Current Price**
  Estimates are measured with the constant price estimates (refer below) multiplied by the *Average PPI Publishing and Printing index*.

- **Constant Price**
  In constant price this sector is moved using an index compiled for *local population*. 
4.10. MANUFACTURE OF CEMENT PRODUCTS

This sector includes manufacture of precast concrete, cement or artificial stone articles for use in construction and prefabricated structural components for buildings or civil engineering of cement, concrete or artificial stone.

Baseline Estimates

This industry comprises of two large scale companies and small scale establishments engaged in the manufacture of cement products, such as bricks.

- **Current Price**
  Estimates are measured by reflating the constant price estimates (refer below) of the production on basis of the *CPI Cement price index*.

- **Constant Price**
  Since the activity provides products which are used exclusively in construction, the growth of the industry is directly linked to the growth rate of the construction industry. Construction volume index is used as an indicator for the estimation of volume estimate of this industry.
4.11. **MANUFACTURE OF SHIPS**

This sector includes the building of ships, boats and other floating structures for transportation and other commercial purposes.

**Baseline Estimates**

Building and repair of marine vessels were carried out in the small and large scale. Economic Survey 2012/2013 was used for the small scale establishments in the sector, while financial statements were used to cover large scale establishments.

**Extrapolation**

- **Current Price**

  Estimates are measured using the constant price estimates (refer below), reflated by the change in *PPI boat building index*.

- **Constant Price**

  The constant price is estimated based on the *number of vessels made in Maldives*. 
4.12. OTHER MANUFACTURING

This activity is a mix of all manufacturing activities not classified elsewhere.

Baseline Estimates

Small scale establishments engaged in manufacturing of jewellery and souvenirs, which are covered in Economic Survey 2012/2013 and financial statements of large scale manufacturers of structural metal products are used to estimate gross value added of this sector.

Extrapolation

- **Current Price**

  The current price estimate is estimated using a value index of *import of intermediate goods* at current prices.

- **Constant Price**

  Since manufacture of structural metal products dominates this industry, the volume estimate of this sector is measured by deflating the current price estimates (refer above) on the basis of *CPI of other manufacturing products*.
4.13. ELECTRICITY

Industry is classified under ISIC rev.4 section D - Electricity, gas, steam and air conditioning supply. This industry include the activity of generating and distributing electric power in Male’ and atolls.

Baseline Estimates

Data is obtained from the annual financial accounts of the companies providing electricity. An adjustment is made to the compiled estimates for the electricity services provided small scale establishments using the population of those islands.

Extrapolation

- Current Price
  The value added for the industry is calculated, using the value of output and inputs from the income statement and the notes to the statement of companies providing electricity. Thus double-deflation is used to estimate the value added of this industry.

- Constant Price
  The output is deflated by CPI Electricity price Index. A weighted average Index is derived using wage index and fuel. For the volume estimates of input, a weighted average volume index of number of employees and diesel usage is derived. Constant price estimate of the sector is the difference of output and input, in volume terms.
4.14. WATER AND SEWERAGE

This industry comes under the ISIC Rev.4 classification section E- Water supply. From the groups under the activity, two are relevant for Maldives

36 – Water collection, treatment and supply
37 - Sewerage

This industry comprise of the operation of sewerage systems and distribution of water through pipeline. Production of natural mineral waters and other bottled waters are included in 4.4.2.Manufacture of beverages.

Baseline Estimates

In the baseline estimates, financial statements of establishments engaged in the production and distribution of desalinated water to Male’, Villingilli and Hulhumale’ are used. Although resorts have their own desalination plants and water distribution systems within the resort, as provision of water is an ancillary activity to provision of accommodation services, they have been included in the input structure of the resorts.

Extrapolation

- Current Price
  The value added for the industry is calculated, using the value of output and inputs from the income statements of companies providing the water and sewerage service.

- Constant Price
  Volume estimates are derived by deflating current estimates (above) by PPI Water index.
4.15. **CONSTRUCTION**

This activity is classified under section F- Construction of, ISIC Rev.4. This industry includes general construction and specialized construction activities for buildings and civil engineering works. It includes new work, repair, additions, finishing and alterations, the erection of prefabricated buildings or structures on the site and also construction of a temporary nature.

**Baseline Estimates**

Estimates of this sector are based on seven sources of data. Business Profit Tax, input structure from SUT 2003, Government Budget, Import of building materials, financial statements of construction companies and employment data from Census 2014 and Maldives Immigration. The data from BPT does not have sufficient input breakdowns for SUT compilation. Thus input structure from SUT 2003 is used for prorating the input data. Using financial statements of major constructions companies, GVAR is adjusted downwards. This is later compared to the PSIP data from government budget, import of building materials and employment data to verify.

**Extrapolation**

- **Current Price**
  Estimates are calculated by reflating the constant price estimates of number of indicators (refer below) on the basis of *Construction Material Index*.

- **Constant Price**
  Volume estimate is extrapolated based on the changes in the indicators; weighted average index of building materials imports, number of expatriate labour employed in construction and area of buildings approved for construction.
Weights given to the indicators are as follows:

- Weighted average index of building material imports - 54%
- Building permits – 4%
- Expatriate labour - 42%

4.16. TRADE

This industry comes under section G - Wholesale and retail trade; repair of motor vehicles and motorcycles of the ISIC Rev.4 classification. This industry includes wholesale and retail sale (i.e. sale without transformation) of any type of goods and the rendering of services incidental to the sale of these goods. Wholesaling and retailing are the final steps in the distribution of goods.

Baseline estimates

For the Maldives, the wholesale and retail trading sector is made up of a large number of small and medium sized retail establishments, and a handful of large enterprises engaging in both retail and wholesale trade. Those enterprises that engaged in both the activities were classified to wholesale or retail trade based on the principal activity of the enterprise. The output of trade industry is trade margin. Thus, from financial statements of establishments engaged in trading different type of products are analysed. For each type of product classified in SUT 2014, trade margin is computed. Based on the total supply of that product derived in SUT 2014, trade margin for each product is aggregated for total output of the sector. The financial statements are used to compute the GVA of the sector.
Extrapolation

- **Current Price**
  
  Current price estimates are extrapolated based on the changes in the *value of total imports*.

- **Constant Price**
  
  To estimate the constant price, the current price estimates (refer above) are deflated based on the changes in *CPI all groups*. The assumption made here is that the trade volume depends on the volume of imports and vice versa.

4.17. **TOURISM**

In ISIC Rev.4 this industry comes under section, I - Accommodation and food service activities.

This Industry includes the provision of short-stay accommodation for visitors and other travellers. Some establishments may provide only accommodation while others provide a combination of accommodation, meals and/or other facilities.

In reflecting the nature of the industry for the Maldives, the computation of GVA for this sector is done at a disaggregate level.

- Resorts
- Other accommodation services
  - Hotels
  - Guesthouses
  - Safari
4.17.1. RESORTS
This sector includes the provision and accommodation of short-stay in the resorts for visitors and other travellers. In terms of the value addition, 97% of the sector is generated by the tourist resorts.

Baseline Estimates
The baseline estimate was made using T-GST data while the input-output structure used was from 2003 SUT.

Extrapolation
- **Current price**
  Current price estimates are measured by reflating constant price estimates (refer below) on the basis of PPI for Resorts and Hotels.
- **Constant price**
  Resorts bed nights are used as a volume indicator to estimate the constant price estimate.

4.17.2. OTHER ACCOMMODATION SERVICES
This sector includes all types of provisions of short-stay accommodation for visitors and other travellers except for resorts. There are three main types of establishments represented in this sector; hotels, guesthouses and safaris.

4.17.2.1. HOTELS

Baseline Estimates
The baseline estimate was made using T-GST data while the input-output structure used was from 2003 SUT.
Extrapolation

- **Current price**

  Estimates are measured by reflating the constant price estimates (refer below) on the basis of *PPI resorts and hotels*.

- **Constant price**

  *Hotels bed nights* are used as a volume indicator to move the constant price estimate.

### 4.17.2.2. GUESTHOUSES

**Baseline Estimates**

The baseline estimate was made using T-GST data while the input-output structure used was from 2003 SUT.

**Extrapolation**

- **Current price**

  Estimates are measured by reflating the constant price estimates (refer below) on the basis of *CPI guest house price index*.

- **Constant price**

  *Guesthouses bed nights* are used as a volume indicator to move the constant price estimate.
4.17.2.3. SAFARI VESSELS

Baseline Estimates

The baseline estimate was made using T-GST data while the input-output structure used was from 2003 SUT.

Extrapolation

- **Current price**
  
  Estimates are measured by reflating the constant price estimates (refer below) on the basis of PPI resorts and hotels.

- **Constant price**
  
  Safari bed nights are used as a volume indicator to move the constant price estimates.

4.18. FOOD AND BEVERAGE SERVICES

This sector includes food and beverage serving activities providing complete meals or drinks fit for immediate consumption, such as café, hotel, restaurants.

Baseline Estimates

The baseline estimate is based on ES 2012/2013 and financial statements of establishments engaged in providing food and beverage services. The estimate derived for this sector was slightly moved upwards based on the commodity flow approach.
Extrapolation

- **Current price**
  
  Current price is estimated by reflating the constant price estimates using the CPI restaurants and Café price index.

- **Constant Price**
  
  Total resident population growth has been used as an indicator for growth in production of cafés and restaurant services, serving locals.

### 4.19. TRANSPORT

This industry is categorized under ISIC, section H – Transport and storage. This industry includes the provision of passenger or freight transport, whether scheduled or not, by road, water or air and associated activities such as terminal and parking facilities, cargo handling, storage etc. Although Travel agencies were included under this industry in the Rebased 2003 series, travel agencies are classified as a separate industry for 2014 series (refer below 4.25).

For the estimation of GVA, the establishments under this ISIC category are further divided into the following sub-categories:

<table>
<thead>
<tr>
<th>ISIC</th>
<th>Activity description</th>
</tr>
</thead>
<tbody>
<tr>
<td>49</td>
<td>Land transport</td>
</tr>
<tr>
<td>50</td>
<td>Water transport</td>
</tr>
<tr>
<td>51</td>
<td>Air transport</td>
</tr>
<tr>
<td>52</td>
<td>Warehousing and support activities for transportation</td>
</tr>
</tbody>
</table>
4.19.1. Land Transport

This division includes the transport of passengers and freight via road.

Baseline estimate

The baseline estimate for this sector is based on land transport survey. The land transport survey of 2001 was updated based on interviews conducted to drivers about their revenue and cost incurred. The data is then adjusted by the estimated number of vehicles under operation. The number of registered taxis is a good indicator as there is excess demand for land transport than the supply. Thus, the production can only be influenced by increasing the quota on the number of taxis.

Extrapolation

- **Current Price**
  The current price estimates are calculated by reflating the constant price estimates (refer below) based on the changes in CPI Passenger transport by road index.

- **Constant Price**
  The *number of registered taxis* has been selected as a volume indicator to move the constant price production estimates for this industry.

4.19.2. Water Transport

This division includes the transport of passengers or freight over water, whether scheduled or not.

Baseline estimates

Although the Economic Survey 2012/2013 and administrative tax data received from MIRA provides information at broad level of ISIC, it is essential to estimate the transport sector by mode of transportation. Thus, for the baseline estimate of this sector, in order
to fill the data gaps, commodity flow approach is used. The total revenue for the whole transportation sector is obtained from GST. The revenue generated from water transport services is assumed to be the net revenue after deducting the revenues generated from all the other modes of transportation from total transportation. The GVAR used is derived from financial statements while input structure used is from SUT 2003.

Extrapolation

- **Current Price**
  
  Current price estimates are derived by reflating the constant price estimates (refer below) by *PPI sea transport Index*.

- **Constant Price**
  
  The volume estimate is extrapolated based on the changes in a weighted average index compiled by giving equal weights to the volume of imports and population.

4.19.3. Air Transport

This division includes the transport of passengers and freight by air.

Baseline Estimates

The baseline estimate of this sector is compiled using financial statements of the companies operating in the sector.

Extrapolation

- **Current Price**
  
  Current price estimate is computed by reflating the constant price estimates (refer below) based on the *PPI Air Transport index*. 
o **Constant Price**

The *Air craft movement* has been selected as a volume indicator to move the volume estimates for this industry.

### 4.19.4. Warehousing and support activities for transportation

This sector consists of a broad group of activities, from cargo handling, support services for land, air and water transport of passengers and freight, such as terminal facilities, lighthouses or air traffic controls to activities of travel agencies and tour operators, etc. Activities of travel agencies are included as a separate sector [4.25 Travel Agencies](#).

**Baseline Estimates**

The baseline estimates include those establishments engaged in operating airports and seaports. The data used for the estimate the baseline estimate include financial statements of those companies engaged in operation of airports and seaports. In addition to the financial statements, for the value added estimation of the regional airports, government budget data was used.

**Extrapolation**

- **Current Price**

Current price value is computed by reflating the constant price estimates (refer below) on the basis of *PPI air transport index*.

- **Constant Price**

Volume estimate is extrapolated based on the changes in the weighted average of international, domestic passengers and cargo movements.
4.20. **POSTAL AND TELECOMMUNICATION**

Postal is categorised as division 53 - Postal and courier activities under section H - Transportation and storage of ISIC Rev.4. Whereas Telecommunication is categorised as division 61 under section J - Information and communication. Both postal and telecommunication are classified as one sector in GDP as limited number of establishments are engaged in the provision of these services.

4.20.1. **Postal and courier activities**

This sector includes postal and courier activities, such as pickup, transport and delivery of letters and parcels under various arrangements.

**Baseline Estimates**

The base year estimates for 2014 are based on the annual financial statements of the establishments which provide domestic and international post and courier services.

**Extrapolation**

- **Current Price**

  The value added for this industry is estimated by reflating the constant price estimate by *CPI Postal Index*.

- **Constant Price**

  Volume estimate is derived by composite index derived using domestic and international mail handled at Velana International Airport.
4.20.2. Telecommunication and broadcasting

This industry includes the activities of providing telecommunications and related service activities, i.e. transmitting voice, data, text, sound and video. The industry has seen tremendous growth and dynamism between the two base years, and continues to do so, in terms of the range of products and services available, and in terms of population coverage and total usage.

Baseline Estimates

The baseline estimate is compiled using financial statements of telecommunication, internet and cable television providers, and also those establishments operating radio and television channels.

Extrapolation

- **Current Price**

  The value added for the industry is computed using the value of output and inputs from the *income statements* of telecommunication and broadcasting companies.

- **Constant Price**

  Volume estimate are derived by deflating the current price value added by *CPI communication index*. 
4.21. **FINANCIAL INTERMEDIATION**

This industry is categorized under ISIC rev.4, section K – Financial Intermediation, division 64 – Financial service activities, except insurance and pension funding. This industry includes financial service activities of obtaining and redistributing funds other than for the purpose of insurance or pension funding. This industry includes the following three types of financial intermediaries.

- Central Bank
- Deposit banks and other banks
- Non-bank financial intermediaries

**Baseline Estimates**

“Some financial intermediaries are able to provide service for which they do not charge explicitly, by charging different rates of interest to borrowers and lenders” (SNA 93, 6.124). To capture this, SNA proposes an indirect measure - financial intermediation services indirectly measure (FISIM) - of the value of services for which intermediaries do not charge explicitly. FISIM is computed using the following formula.

![FISIM Formula](image)

Other output of financial intermediaries includes revenue from fees and commission charged for ancillary services, such as currency exchange and investment advice.
For the input structure financial statements of the central bank, banks and other financial intermediaries are used.

**Extrapolation**

- **Current Price**
  The current price values are compiled similarly with the baseline estimate (see above).

- **Constant Price**
  Volume estimates are moved on the basis of change in *volume of deposits and loans*.

**4.22. INSURANCE AND ACTIVITIES AUXILIARY TO FINANCIAL INTERMEDIATION**

This industry is categorized under ISIC rev.4; section K – Financial Intermediation, division 65 and 66; Insurance, reinsurance and pension funding, except compulsory social security and Activities auxiliary to financial service and insurance activities.

This industry includes the underwriting of annuities and insurance policies and investing premiums to build up a portfolio of financial assets to be used against future claims. Provision of direct insurance and reinsurance are included. Also includes legal entities (i.e. funds, plans and/or programmes) organized to provide retirement income benefits exclusively for the sponsor’s employees or members. This includes pension plans with defined benefits, as well as individual plans where benefits are simply defined through the member’s contribution. It also includes the activities of stock exchange, brokers and dealers.
Baseline Estimates

The baseline estimates are calculated from the financial accounts of insurance companies and other financial intermediaries including brokers. The output of insurance is compiled according to the recommendation of the SNA 2008 manual. Thus the output is computed by adjusting the claims.

Extrapolation

- **Current Price**
  
  The current price values are compiled similarly with the baseline estimate (refer above).

- **Constant Price**
  
  The volume measure is derived by deflating the current price (refer above) based on changes in CPI all groups.

4.23. **REAL ESTATE AND OWNER OCCUPIED DWELLINGS**

This industry is categorized in ISIC rev.4, category L - Real estate activities.

This Industry includes selling, buying or renting real estate (building of land) and imputed services for owner occupied dwellings. Industry includes two sub-sectors; Real estate and Owner occupied dwellings.
4.23.1. Real estate

Baseline estimate

For the base year, as most of the real estate activities in the corporate sector were carried out as secondary activities by construction companies, therefore these could not be classified under this industry. As neither tax data nor a survey conducted provides sufficient data to make an estimate for this sector. Data from HIES 2009/2010 was adjusted for the increase in the number of households and inflation rate to estimate the level of real estate activities carried out within Maldives. The estimated value was further validated using the commodity flow approach.

Extrapolation

- **Current Price**
  Estimates are measured by reflating the constant price estimates (refer below) on the basis of CPI housing index.

- **Constant Price**
  Water meter index is used as a proxy indicator for the number of dwellings to move the constant price. It is assumed that the number of water meters increase with the increase in the number of rented dwellings.
4.23.2. Owner occupied dwellings

Baseline estimate

The population census 2014 gives proportion of dwellings rented or owner occupied. The imputed rent of owner occupied dwelling is measured using cost basis for the atolls, where there is no or limited market for real estate activities and on market basis for Male’.

- **Current Price**
  
  Current price value is estimated by reflating the constant price (refer below) by CPI housing index.

- **Constant Price**
  
  Population index is used as an indicator to move the constant price.

4.24. PROFESSIONAL SCIENTIFIC AND TECHNICAL ACTIVITIES

This industry is categorized in ISIC rev.4, section M - Professional, scientific and technical activities. This industry includes the provision of specialized professional, scientific and technical services such as legal services, auditing, marketing, architecture, etc. These activities require a high degree of training, and make specialized knowledge and skills available to users.

Baseline estimate

The main sources of data used to estimate this sector is tax data. Among the activities included in this sector, in terms of the revenue generated, tourism related establishments
have the highest share. These include management firms, marketing firms and resort head offices engaged in providing administrative services.

**Extrapolation**

- **Current Price**
  Estimates are measured by reflating the constant price estimates (refer below) on the basis of CPI all groups.

- **Constant Price**
  *Volume of Trade* is used as an indicator to move the constant prices.

### 4.25. TRAVEL AGENCIES AND SUPPORT SERVICES

This industry is categorized as 79- Travel agency, tour operator, reservation service and related activities under section N - Administrative and support service activities, in ISIC rev.4.

This industry includes the activity of selling travel, tour, transportation and accommodation services to the general public and commercial clients and the activity of arranging and assembling tours that are sold through travel agencies or directly by agents such as tour operators, as well as other travel-related services including reservation services provided by head offices.

**Baseline estimate**

From GST data, the level of sales revenue generated by the sector is determined. As the total sales revenue reported by the tour operator will also be reported by the resort, in order to avoid double counting, the output of the travel agency is just the value added by
the agency to the cost of the tour package. Thus GVAR is derived using financial statements while the input structure used is from SUT 2003.

Extrapolation

- **Current Price**
  
  Current price estimates are calculated by reflating the constant price estimates (refer below) by *PPI resorts and hotels*.

- **Constant Price**
  
  Since the major activity covered in this sector consists of travel agencies, total number of international passengers (in and out of the country) is used as an indicator to measure the volume estimates. An *Index of total international passengers* is computed to move the constant price estimates.

4.26. **PUBLIC ADMINISTRATION AND DEFENCE**

This industry is categorized in ISIC rev.4, section 0 - Public administration and defence; compulsory social security.

Activities of a governmental nature are normally carried out by the public administration. This includes the enactment and judicial interpretation of laws and their pursuant regulation, as well as the administration of programmes based on them, legislative activities, taxation, national defence, public order and safety, immigration services, foreign affairs and the administration of government programmes. Compulsory social security activities are also included in this sector.
Baseline estimate

Ministry of Finance and Treasury (MOFT) provides disaggregated income and expenditure details for each business area. The business areas are given CPC codes and consolidated into different sectors according to ISIC rev.4. With regard to the industrial classification of business areas in the government budget, the activities of Ministry of Education and Ministry of Health, which was earlier classified into this sector, is now classified as education and health sector, respectively. The coded data is then aggregated to measure the market output from sales of services and non-market output measured as the sum of total intermediate costs, compensation of employees’ and imputed consumption of fixed capital. Imputed consumption of fixed capital is estimated using a Perpetual Inventory Model (PIM), based on a historical series of purchases of fixed assets, updated with changes in CPI. The government output is estimated on cost basis and intermediate input is deducted to derive the value added of public administration.

Extrapolation

- **Current Price**
  The current price estimates is computed using the same method as the baseline estimate (see above). On cost basis, total GVA is the sum of compensation of employees and consumption of fixed capital.

- **Constant Price**
  To measure the estimates, current price estimates (refer above) are deflated using Government Wage index.
4.27. EDUCATION

This industry comes under section P-Education of ISIC rev 4. This industry includes education at any level or for any profession, oral or written as well as by radio and television or other means of communication. It includes education by the different institutions in the regular school system at its different levels as well as adult education, literacy programmes etc. The sector includes education services provided by the government as well as the private sector.

Baseline estimate

The government is the major provider of educational services, from pre-school education to post graduate studies. Thus the main source of data used for the estimation of GVA of the educational services is provided by the government budget. Estimate for large establishments operating in the private sector is based on the financial statements of the providers of educational services. For the small establishments and individuals who are particularly engaged in providing tuition services, data collected in ES 2012/2013 is used.

Extrapolation

- **Current Price**

Since the provision of education by the government is a non-market service, offered without charge, the *value added* is measured as on cost basis. Thus the sum of wages and salaries and consumption of fixed capital from government budget measures the value added of the government segment of this sector. For estimation of value added by the private sector, *student enrolment in the private schools* and *PPI education price index* is used.
SPECIFIC METHODS USED IN THE INDUSTRIAL VALUE ADDED EXTRAPOLATION

- **Constant Price**

  The volume estimates of for the provision of education by the government is estimated by deflating the GVA at current price by *Education wage index*. For the volume estimate of provision of education by the private sector is estimated using student enrolment of private sector.

### 4.28. HEALTH AND SOCIAL WORK

This industry is categorised in ISIC rev.4, section Q- Human health and social work activities.

This industry includes the provision of health and social work activities. Activities include a wide range of activities, starting from health care provided by trained medical professionals in hospitals and other facilities, over residential care activities that still involve a degree of health care activities to social work activities without any involvement of health care professionals. Industry production consists of the public and private hospitals, clinics, and other services related to medical purposes.

**Baseline estimate**

The data sources used for the base year estimation of production includes the government budget’s expenditure on the health and social services. The budget covered all government owned establishments engaged in the activity. This includes government hospitals and community health centers.

Estimate for large establishments operating in the private sector is based on the financial statements of the providers of health and social work related establishments. For the small
establishments and individuals who are particularly engaged in traditional medicine, data collected in ES 2012/2013 is used.

Extrapolation

- **Current Price**
  Since the provision of health services by the government is a non-market service, offered at prices which are not economically significant, the value added is measured on cost basis. Thus the sum of wages and salaries and consumption of fixed capital from government budget measures the value added of the government segment of this sector.

  Due to lack of data, value added by the provision of health services by the private sector is assumed to grow proportionally to the government health services.

- **Constant Price**
  Constant price estimates for government production are measured by deflating the current price estimates GVA by *Health wage index*.

  The volume estimates for the provision of health services by the private sector is derived by deflating the current estimate by the *PPI health index*.
This industry is a combination of ISIC rev.4 section R - Arts, entertainment and recreation and S - Other service activities. This industry includes a wide range of activities to meet cultural, entertainment and recreational interests, including live performances, operation of museum sites, sports and recreation activities. Industry also includes community services such as waste management services provided by the government.

Baseline estimate

The industry production is estimated by two components, private and government. Private production is by the activities such as diving centers, water sports, spa, etc. Government production includes community and recreation activities provided by the government. The government output is estimated on cost basis and intermediate input is deducted to derive the value added.

The estimate for private sector is based on the TGST as most recreational services such as sports, recreation activities are provided mostly in the resorts. For the community services such as the services provided by the barbers, beauticians etc are estimated by data from ES 2012/2013.

Extrapolation

- **Current Price**

  Since the government output is non-market output, the *gross value added* is the sum of compensation of employees and consumption of fixed capital.

  The value added of the private sector is estimated by reflating the constant price estimate with the *PPI resort index*.
- **Constant Price**

  Constant price estimates for the provision of community and recreational services provided by the government is measured by deflating the current price by *Social Wage Index*.

  As this sector is dominated by the recreational and sports activities provided by the Resorts, *tourist bednights* is used as a volume indicator.
5. GDP at market price

In order to derive GDP at market prices, it is necessary to add import duties and taxes on products and deduct subsidies on products from GDP in basic prices. This has been shown in lines 1 to 5 of table 2, where the GDP in basic prices (line 5) is transferred from the last line (line d) of Table 1.

5.1. IMPORT DUTIES

Baseline
Import duties reported are from the annual government budgets.

Extrapolation

- **Current Price**
  Import duty is actual figures reported as in the government budget.

- **Constant Price**
  The deflated imports value based on unit-value index is used to estimate import duties in volume terms.

5.2. TAXES ON PRODUCTS

Baseline
The taxes for the base year are taken from the government budget. Till recently the only form of taxes on products in the country were the bed tax taken on tourist resorts and import duties on goods.
Under the new GST Act, GST is charged on the value of goods and services sold in the Maldives, since October 2011. This Act brings within its scope the former T-GST regime as well as a General goods and service tax (G-GST).

Extrapolation

- **Current Price**

  Initial estimates for taxes on products are moved with the change in average monthly bed nights for the year.

  As the budget data become available, the actual figures for bed taxes are entered into the system.

  Since 2011, the tax collected from GST would be also added to the taxes on products.

- **Constant Price**

  The current price figure for bed tax (above) is deflated using a bed tax index. The index compares the current tax rate with the base year (2003) tax rate. The most recent change came in 2004, when the tax rate was increased from 6 percent to 8 percent.

  As of yet there are not deflators for GST data.
5.3. SUBSIDIES ON PRODUCTS

Baseline
The subsidies for the base year are taken from the government budget.

Extrapolation
  o **Current Price**
    The subsidies on food, water, preschool and electricity are taken directly from the government budget and given only for years for which data is available.

  o **Constant Price**
    The constant price is derived using volume of staple food imports, water production, school enrolment and electricity production.
Annex: ISIC Revision 4

International Standard Industrial Classification of All Economic Activities, Rev.4

A - Agriculture, forestry and fishing
  o 01 - Crop and animal production, hunting and related service activities
  o 02 - Forestry and logging
  o 03 - Fishing and aquaculture

B - Mining and quarrying
  o 05 - Mining of coal and lignite
  o 06 - Extraction of crude petroleum and natural gas
  o 07 - Mining of metal ores
  o 08 - Other mining and quarrying
  o 09 - Mining support service activities

C - Manufacturing
  o 10 - Manufacture of food products
  o 11 - Manufacture of beverages
  o 12 - Manufacture of tobacco products
  o 13 - Manufacture of textiles
  o 14 - Manufacture of wearing apparel
  o 15 - Manufacture of leather and related products
  o 16 - Manufacture of wood and of products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials
  o 17 - Manufacture of paper and paper products
  o 18 - Printing and reproduction of recorded media
  o 19 - Manufacture of coke and refined petroleum products
  o 20 - Manufacture of chemicals and chemical products
  o 21 - Manufacture of basic pharmaceutical products and pharmaceutical preparations
  o 22 - Manufacture of rubber and plastics products
  o 23 - Manufacture of other non-metallic mineral products
  o 24 - Manufacture of basic metals
  o 25 - Manufacture of fabricated metal products, except machinery and equipment
  o 26 - Manufacture of computer, electronic and optical products
  o 27 - Manufacture of electrical equipment
  o 28 - Manufacture of machinery and equipment n.e.c.
ANNEX

- 29 - Manufacture of motor vehicles, trailers and semi-trailers
- 30 - Manufacture of other transport equipment
- 31 - Manufacture of furniture
- 32 - Other manufacturing
- 33 - Repair and installation of machinery and equipment

D - Electricity, gas, steam and air conditioning supply
- 35 - Electricity, gas, steam and air conditioning supply

E - Water supply; sewerage, waste management and remediation activities
- 36 - Water collection, treatment and supply
- 37 - Sewerage
- 38 - Waste collection, treatment and disposal activities; materials recovery
- 39 - Remediation activities and other waste management services

F - Construction
- 41 - Construction of buildings
- 42 - Civil engineering
- 43 - Specialized construction activities

G - Wholesale and retail trade; repair of motor vehicles and motorcycles
- 45 - Wholesale and retail trade and repair of motor vehicles and motorcycles
- 46 - Wholesale trade, except of motor vehicles and motorcycles
- 47 - Retail trade, except of motor vehicles and motorcycles

H - Transportation and storage
- 49 - Land transport and transport via pipelines
- 50 - Water transport
- 51 - Air transport
- 52 - Warehousing and support activities for transportation
- 53 - Postal and courier activities

I - Accommodation and food service activities
- 55 - Accommodation
- 56 - Food and beverage service activities
ANNEX

J - Information and communication

- 58 - Publishing activities
- 59 - Motion picture, video and television programme production, sound recording and music publishing activities
- 60 - Programming and broadcasting activities
- 61 - Telecommunications
- 62 - Computer programming, consultancy and related activities
- 63 - Information service activities

K - Financial and insurance activities

- 64 - Financial service activities, except insurance and pension funding
- 65 - Insurance, reinsurance and pension funding, except compulsory social security
- 66 - Activities auxiliary to financial service and insurance activities

L - Real estate activities

- 68 - Real estate activities

M - Professional, scientific and technical activities

- 69 - Legal and accounting activities
- 70 - Activities of head offices; management consultancy activities
- 71 - Architectural and engineering activities; technical testing and analysis
- 72 - Scientific research and development
- 73 - Advertising and market research
- 74 - Other professional, scientific and technical activities
- 75 - Veterinary activities

N - Administrative and support service activities

- 77 - Rental and leasing activities
- 78 - Employment activities
- 79 - Travel agency, tour operator, reservation service and related activities
- 80 - Security and investigation activities
- 81 - Services to buildings and landscape activities
- 82 - Office administrative, office support and other business support activities

O - Public administration and defence; compulsory social security
ANNEX

- 84 - Public administration and defence; compulsory social security

P - Education

- 85 - Education

Q - Human health and social work activities

- 86 - Human health activities
- 87 - Residential care activities
- 88 - Social work activities without accommodation

R - Arts, entertainment and recreation

- 90 - Creative, arts and entertainment activities
- 91 - Libraries, archives, museums and other cultural activities
- 92 - Gambling and betting activities
- 93 - Sports activities and amusement and recreation activities

S - Other service activities

- 94 - Activities of membership organizations
- 95 - Repair of computers and personal and household goods
- 96 - Other personal service activities

T - Activities of households as employers; undifferentiated goods- and services-producing activities of households for own use

- 97 - Activities of households as employers of domestic personnel
- 98 - Undifferentiated goods- and services-producing activities of private households for own use

U - Activities of extraterritorial organizations and bodies

- 99 - Activities of extraterritorial organizations and bodies
Glossary

Gross Value Added - Gross value added is the value of output less the value of intermediate consumption; it is a measure of the contribution to GDP made by an individual producer, industry or sector; gross value added is the source from which the primary incomes of the SNA are generated and is therefore carried forward into the primary distribution of income account. (SNA 93, 1.6)

System of National Accounts - The System of National Accounts (SNA) consists of a coherent, consistent and integrated set of macroeconomic accounts; balance sheets and tables based on a set of internationally agreed concepts, definitions, classifications and accounting rules. (SNA 93, 1.1)

GDP by Expenditure Approach - total final expenditures at purchasers’ prices (including the f.o.b. value of exports of goods and services), less the f.o.b. value of imports of goods and services. (SNA 93, 6.235)

GDP by income approach - compensation of employees, plus taxes less subsidies on production and imports, plus gross mixed income, plus gross operating surplus. (SNA 93, 2.222)

GDP by Production approach - is the sum of the gross values added of all resident producers at basic prices, plus all taxes less subsidies on products (SNA 93, 6.237)

Constant prices - are obtained by directly factoring changes over time in the values of flows or stocks of goods and services into two components reflecting changes in the prices of the goods and services concerned and changes in their volumes (i.e. changes
in “constant price terms”); the term “at constant prices” commonly refers to series which use a fixed-base Laspeyres formula. (SNA 93, 16.2)

Gross capital formation - is measured by the total value of the gross fixed capital formation, changes in inventories and acquisitions less disposals of valuables for a unit or sector. (SNA 93, 10.27)

Household final consumption expenditure- consists of the expenditure, including imputed expenditure, incurred by resident households on individual consumption goods and services, including those sold at prices that are not economically significant. (SNA 93, 9.45)

Government final consumption expenditure- consists of expenditure, including imputed expenditure, incurred by general government on both individual consumption goods and services and collective consumption services. (SNA 93, 9.45)

Commodity Flow Approach-Method used to estimate purchases of a commodity by intermediate or final users. The method generally begins with an estimate of the total supply of a commodity available for domestic uses; it then either attributes a fixed percentage of supply to an intermediate or final use, or it adjusts for intermediate purchases and attributes the residual to final uses (Bureau of Economic Analysis, U.S Department of Commerce)

Consumer Price Index-The consumer price index (CPI) measures changes over time in the general level of prices of goods and services that a reference population acquires, uses or pays for consumption. A consumer price index is estimated as a series of summary measures of the period-to-period proportional change in the prices of a fixed set of consumer goods and services of constant quantity and characteristics, acquired,
used or paid for by the reference population. Each summary measure is constructed as a weighted average of a large number of elementary aggregate indices. (ILO, 1987)

Consumption of Fixed Capital - is the decline, during the course of the accounting period, in the current value of the stock of fixed assets owned and used by a producer as a result of physical deterioration, normal obsolescence or normal accidental damage. (SNA 93, 10.27)

Enterprise - An enterprise is an institutional unit in its capacity as a producer of goods and services; an enterprise may be a corporation, a quasi-corporation, a non-profit institution, or an unincorporated enterprise. (SNA 93, 5.17)

Establishments - An establishment is an enterprise, or part of an enterprise, that is situated in a single location and in which only a single productive activity is carried out or in which the principal productive activity accounts for most of the value added. (SNA 93, 5.21)

FISIM - Financial intermediation services indirectly measured (FISIM) is the difference between the rate paid to banks by borrowers and the reference rate plus the difference between the reference rate and the rate actually paid to depositors represent charges for financial intermediation services indirectly. (SNA 2008, 6.163)

Imputed rent of owner occupied housing - Owner occupied housing are dwellings owned by the households that live in them. The dwellings are fixed assets that their owners use to produce housing services for their own consumption. The imputed rents of these housing services should be valued at the estimated rent that a tenant pays for a dwelling of the same size and quality in a comparable location with similar neighbourhood amenities. (ILO, 2004)
NPISH – legal entities which are principally engaged in the production of non-market services for households and whose main resources are voluntary contributions by households. (SNA 93, 2.20)

Other non-market output- Other non-market output consists of goods and individual or collective services produced by non-profit institutions serving households (NPISHs) or government that are supplied free, or at prices that are not economically significant, to other institutional units or the community as a whole.(SNA 93, 6.49)

Principal activities- The principal activity of a producer unit is the activity whose value added exceeds that of any other activity (SNA 2008, 5.8)

Secondary activities- A secondary activity is an activity carried out within a single producer unit in addition to the principal activity and whose output, like that of the principal activity, must be suitable for delivery outside the producer unit. (SNA 2008, 5.10)

Ancillary activities- an ancillary activity is incidental to the main activity of an enterprise. It facilitates the efficient running of the enterprise but does not normally result in goods and services that can be marketed. (SNA 2008, 5.9)

Producer Price Index- A measure of the change in the prices of goods and services either as they leave their place of production or as they enter the production process. A measure of the change in the prices received by domestic producers for their outputs or of the change in the prices paid by domestic producers for their intermediate inputs. (IMF, 2004)
Trade Margin- A trade margin is the difference between the actual or imputed price realised on a good purchased for resale (either wholesale or retail) and the price that would have to be paid by the distributor to replace the good at the time it is sold or otherwise disposed of. (SNA 93, 6.110)

Unit Value Index- A unit value index is a “price” index which measures the change in the average value of units that are not homogeneous and which may therefore be affected by changes in the mix of items as well as by changes in their prices. (SNA 93, 16.13).

Wage Index- An index of wages calculated by setting the base year wage rate equal to 100. The index treats changes in wages and salary payments that arise from the hiring of additional staff, changes in the mix of staff grades and the annual increments as volume changes and only measures the changes in the general levels of wages and salaries. (MPND, 2001)

GDP at basic price- Gross domestic product (GDP) at basic price is equal to the sum of the gross value added of all the institutional units resident in a territory engaged in production. (SNA 2008, A4.24)

GDP at market price - Gross domestic product (GDP) at market prices is equal to the sum of the gross value added of all resident enterprises plus those taxes, less subsidies, on products that are not payable on the values of the outputs of those enterprises, that is, taxes or subsidies on imports plus non-deductible VAT when output is valued at producers’ prices, and all taxes or subsidies on products when output is valued at basic prices. (SNA 2008, 7.10)
Double deflation - gross value added measured in real terms by subtracting intermediate consumption in volume terms from output in volume terms is called “double deflation” method. (SNA 2008, 15.2)

Back casting - Reverse-forecasting technique which starts with a specific future outcome and then works backwards to the present conditions. (http://www.businessdictionary.com)
References

