

Note on Statistical tables

1. Note on Statistical tables (This note has been applied since quarter 1,1993)

The improvement on the compilation of Thailand's quarterly Gross Domestic Product (QGDGP), this version, has been carried out for the first time. The revision is done on both production and expenditures sides, and corresponds with the annual national income that was revised and published in February, 2012. Key advancement on this series includes adding important economic activities, updating indicators, and upgrading compilation method in accordance to the most recent international framework of System of National Accounts. At most, the chained-linking method (CVM) is applied to the compilation of QGDGP in real terms instead of the present fixed- base year method. This topic has an objective to build in the understanding to the general users by intending to explain the details of the QGDGP statistics that are released. In the future, if there is any development on this kind of statistics which are likely, NAO will carefully follow, and any changes will be explained by NAO staff together with documents involved.

1. System of quarterly accounts

1. Compiling methodology

QGDGP using CVM compilation is carried out under the framework by International Monetary Fund. The technique used to link quarterly data between years is annual overlaps technique. The procedure is as follows:

- Calculate values at current prices both for quarter and annual data.
- Calculate average weighted prices of each year in order to find values of output at average current prices and previous year prices in the next step.
- Calculate values of each quarter and year of the current year using previous weighted prices.
- Use the annual overlaps technique to calculate average quarterly output value of the previous year using average weighted prices of that year.
- Calculate the direct index which is the ratio of the value calculated in step 1.1.3) to the value calculated in step 1.1.4) using annual

overlaps. The direct index is the ratio of a given quarter value of the current year to the average value of the previous year per quarter.

- Create the chain index from direct indexes by using year 2002 as a reference year, for Thailand. That is setting the index of year 2000 equal to 100.
- Calculate values in chain volume measures for each quarter and year by using chain index and the values of GDP at current prices of year 2002 as the reference year.
- Equalize the quarter and annual data by the "Denton least square" method which is practically convenient on the computer program package called "The Canadian Bench Program".
- Calculate seasonally adjusted QGDP by using X-12 program.

2. Main differences from the present fix-based year

In addition adjusting calculation method of the real term values, the improvement on QGDP this time follows the changes of annual national income to CVM as well. This covers increasing coverage of data, improving indicators, and updating accounting method to comply with the System of National Accounts 2008. For this reason, main factors contributed to the differences between the new series of QGDP using CVM and the existing series using fixed based year as follows:

- QGDP is different as a result of the changes in annual values.
Because QGDP values need to be adjusted so that the sum of each activity in four quarters is equal to the annual value of that activity. Therefore, when the annual values of the two series differ, the quarter values inevitably differ.
- The addition of new economic activities and improvement of indicators for QGDP calculation is to comply with the changes in annual national income compilation.
- As a result of the calculation method change from fixed weighted volume measures to CVM, the price structures used in calculation change every year.

The change in QGDP compilation this time, therefore, covers both values at current prices and the real term value, and both for production and expenditure sides.

3. QGDP Dissemination

1. QGDP statistics will only be disseminated in a form of main items. On the production side there will be shown only 16 sectors that compose of the agricultural and non-agricultural sectors. On the expenditure side, only the main groups of expenses and investment will be presented. The items of government expenditure, exports and imports will be released only one item for each of them.

2. Revision and subscript letters

- Data releasing and revision are carried out at least three times a year.

When the estimating process is finished, the first round of dissemination will be a quick release within the time frame.

The second round of data dissemination or the first round of revision, the revision of the previous quarterly QGDP is carried out in according to new or upgraded indices.

The second round of revision is conducted whenever the annual GDP is available. The reason is that the annual statistics are more comprehensive and reliable. This adjustment is actually not based on data but just applying the "Denton least square" method.

- Subscript P and P1.

The subscript P shows the quarterly value that is controlled by the preliminary annual statistics. This is the same as P shown in the National Income Statistics, annually released. In other words, any quarterly value with subscript P implies that its controlled annual value is still preliminary. Thus, any revision on that annual value will also affect directly to the quarterly value.

The subscript P1 identifies the quarterly value that its annual value is not yet available. Therefore, some error may exist.

The degree of error depends on the indicators used. However, the value with the subscript P1 can be revised more than once. The first revision will be conducted whenever the value of indicators is changed. The second revision will be conducted when the annual statistics are available.

3. There are 13 QGDP tables as follows:

- Table 1 Expenditure on gross domestic product at current market prices (original)
- Table 2 Expenditure on gross domestic product, chain volume measures [reference year = 2002] (original)
- Table 2.1 Expenditure on gross domestic product, chain volume measures [reference year = 2002] (original) y-o-y growth rate
Gross Domestic Product (Production)
- Table 3 Gross domestic product at current market prices (original)
- Table 4 Gross domestic product, chain volume measures [reference year = 2002] (original)
- Table 4.1 Gross domestic product, chain volume measures [reference year = 2002] (original) y-o-y growth rate
- Table 5 Gross domestic product at current market prices (seasonally adjusted)
- Table 5.1 Gross domestic product at current market prices (seasonally adjusted) q-o-q growth rate
- Table 6 Gross domestic product, chain volume measures [reference year = 2002] (seasonally adjusted)
- Table 6.1 Gross domestic product, chain volume measures [reference year = 2002] (seasonally adjusted) q-o-q growth rate

Gross Domestic Product (Expenditure)

Private Final Consumption Expenditure

- Table 7 Composition of private final consumption expenditure at current market prices (original)
- Table 8 Composition of private final consumption expenditure, chain volume measures [reference year = 2002] (original)
- Table 8.1 Composition of private final consumption expenditure, chain volume measures [reference year = 2002] (original) y-o-y growth rate
- Table 9 Composition of private final consumption expenditure at current market prices(seasonally adjusted)
- Table 9.1 Composition of private final consumption expenditure at current market prices(seasonally adjusted) q-o-q growth rate
- Table 10 Composition of private final consumption expenditure, chain volume measures [reference year = 2002] (seasonally adjusted)
- Table 10.1 Composition of private final consumption expenditure, chain volume measures [reference year = 2002] (seasonally adjusted) q-o-q growth rate)

Gross Fixed Capital Formation

- Table 11 Gross fixed capital formation at current market prices classified by type of capital goods (original)
- Table 12 Gross fixed capital formation, chain volume measures [reference year = 2002] classified by type of capital goods (original)
- Table 12.1 Gross fixed capital formation, chain volume measures [reference year = 2002] classified by type of capital goods (original) y-o-y growth rate

- Table 13 Gross fixed capital formation at current market prices classified by private and public Institutions (original)
- Table 14 Gross fixed capital formation, chain volume measures [reference year = 2002] classified by private and public Institutions (original)
- Table 14.1 Gross fixed capital formation, chain volume measures [reference year = 2002] classified by private and public Institutions (original) y-o-y growth rate
- Table 15 Gross fixed capital formation at current market prices classified by private and public Institutions (seasonally adjusted)
- Table 15.1 Gross fixed capital formation at current market prices classified by private and public Institutions (seasonally adjusted) q-o-q growth rate
- Table 16 Gross fixed capital formation, chain volume measures [reference year = 2002] classified by private and public Institutions (seasonally adjusted)
- Table 16.1 Gross fixed capital formation, chain volume measures [reference year = 2002] classified by private and public Institutions (seasonally adjusted) q-o-q growth rate
General Government Final Consumption Expenditure
- Table 17 General government final consumption expenditure at current market prices (original)
- Table 18 General government final consumption expenditure, chain volume measures [reference year = 2002] (original)
- Table 18.1 General government final consumption expenditure, chain volume measures [reference year = 2002] (original) y-o-y growth rate
- Table 19 General government final consumption expenditure at current market prices (seasonally adjusted)

- Table 19.1 General government final consumption expenditure at current market prices (seasonally adjusted) q-o-q growth rate
- Table 20 General government final consumption expenditure, chain volume measures [reference year = 2002] (seasonally adjusted)
- Table 20.1 General government final consumption expenditure, chain volume measures [reference year = 2002] (seasonally adjusted) q-o-q growth rate
The Rest of the World
- Table 21 Exports and imports of goods and services at current market prices (seasonally adjusted)
- Table 21.1 Exports and imports of goods and services at current market prices (seasonally adjusted) q-o-q growth rate
- Table 22 Exports and imports of goods and services , chain volume measures [reference year = 2002] (seasonally adjusted)
- Table 22.1 Exports and imports of goods and services , chain volume measures [reference year = 2002] (seasonally adjusted) q-o-q growth rate