Analysis of Data Management in Sigi District Statistics Center

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ABSTRACT

This study aims to determine data management on the gross regional domestic product at the Central Bureau of Statistics of Sigi Regency. Management of Sigi Regency Gross Regional Domestic Product data shows several uses of the final product manifested in the form of "final demand." The final demand referred to consists of components of household final consumption expenditure (PK-RT), final consumption expenditure of non-profit institutions serving households (PK-LNPRT), government final consumption expenditure (PK-P), gross fixed capital formation (PMTB), Changes in Inventory (PI), as well as components of exports of goods and services.

Keywords - Management, Data

INTRODUCTION

The Gross Regional Domestic Product (GRDP) generated by each region will vary significantly in terms of measurement approach, type of economic activity, data scope, assumptions used, and data sources (1). The differences that occur between regions will make the GRDP data very dynamic. Therefore, for the consistency of GRDP data at the national and regional levels, it is necessary to implement a system capable of handling this.

The Central Bureau of Statistics of Sigi Regency is a non-ministerial government institution that provides data and information needs for local governments, provincial governments, central government, and the community (2).

The data and information provided are in the form of statistics produced by the central statistical agency as reference material for policies at the local government, provincial government, central government, and the community in the form of references in planning, evaluating and making decisions and deciding the right policy for a region, especially in the district. Sigi Biromaru.

METHODOLOGY

This research's data analysis method is the descriptive method (3). This method is a method of analysis in which data are collected and classified or grouped and then analyzed and interpreted objectively.

This research's data analysis technique is descriptive qualitative data analysis techniques (4). The data obtained and collected are analyzed by categorizing it to make it easier to interpret the data. Each piece of information that has been organized is linked to getting a relationship to conclude. Systematically, in analyzing the research data, the study's data are first recorded and coded so that the data source can be traced (5). After the recording process is complete, the data is collected to be sorted and categorized. According to Lexy (2009: 248), for these categories to have meaning, then the relationships and patterns in the data are sought to make general findings (6).

RESULT

Data management for Gross Regional Domestic Product is one form of displaying economic data in the Sigi Regency area, displaying data on GRDP in business fields, Input-Output Tables, and Socio-Economic Balance Systems, and Funds Flow Balance (7). The economic data framework system in Sigi Regency is a necessary measure that describes the use of goods and services produced through production activities.

In the management of Sigi Regency Gross Regional Domestic Product data, several uses of the end product are manifested in "final demand." The final demand referred to consists of components of household final consumption expenditure (PK-RT), final consumption expenditure of non-profit institutions serving households (PK-LNPRT), government final consumption expenditure (PK-P), gross fixed capital formation (PMTB), Changes in Inventory (PI), as well as components of exports of goods and services.

Household Final Consumption Expenditure (PK-RT)

The household sector has a relatively large role in the economy. This is reflected in the household consumption component's immense contribution to the formation of expenditure GRDP (8). Apart from acting as the final consumer of goods and services, households also serve as producers and providers of production factors for production activities carried out by other institutional sectors (9).

The primary data used to estimate the PK-RT component comes from 1) National / Regional Socio-Economic Survey (Susenas / Suseda), BPS 2) Quarterly Special Household Consumption Survey (SKKRT), BPS 3) Population Census 2010, BPS 4) Data Secondary (inside and outside BPS) 5) Consumer Price Index (CPI), BPS.

Final Consumption Expenditures for Non-Profit Institutions Serving Households (PK-LNPRT)

The Non-Profit Institution Serving Households (LNPRT) sector appears as a separate sector in a region's economy (10). This sector plays a role in providing goods and services to members and certain household groups free of charge or at price levels that are not economically meaningful. An economically insignificant price means the price offered is below the market price level (not following the prevailing market price). Sources of data used in the analysis: 1) Special Survey for Nonprofit Institutions Serving Households (SK-LNP), BPS 2) SK-LNP Quarterly (SK-LNPT), BPS 3) Results of up-dating directory LNPRT, BPS 4) Price Index Consumers, BPS.

Government Final Consumption Expenditure (PK-P)

A government unit is an institutional unit formed through a political process. It has power in the legislative, judicial, and executive fields over other institutional teams within a region or country (11). The government also plays a role as a provider of goods and services for specific individuals or groups of households, collectors, and managers of taxes or other income, and functions to distribute income through transfer activities (12). From another point of view, government units are involved in non-market production.

The primary data used to estimate the annual district/city PK-P are: 1) Annual APBD realization data, the Ministry of Finance and Bappeda, 2) Regional Financial Statistics, BPS Output Bank Indonesia, 3) Bank Indonesia, 4) Salary for Civil Servants, 5) Ministry of Finance and Bappeda, 6) Price Index and Wage Index, BPS, 7) Index of development of quarterly local government expenditure, BPS.

Gross Fixed Capital Formation (PMTB)

PMTB is the addition and reduction of existing capital goods in a production unit within a certain period. The acquisition of capital goods includes the procurement, manufacture, purchase, financial leasing of new domestic capital goods, as well as new capital goods and used capital goods from abroad (including significant repairs, transfers, and bartering), as well as the growth of biological resource assets cultivated (Cultivated Biological Resources / CBR) (13). Meanwhile, the reduction of capital goods includes sales, transfers, or bartering and financial leasing of used capital goods from other parties. If a natural disaster causes a decrease in capital goods, it is not recorded as a reduction (14).

The data sources in the calculation of PMTB: 1) Output of the construction industry, BPS 2) Import value two digits HS, BPS 3) Large Medium Industry Production Index, BPS 4) Company Financial Reports, Secondary Data from outside BPS Medium, BPS 6) Wholesale Price Index (IHPB), BPS 7) Mining and Excavation Statistics Publications (oil and gas and non-oil and gas), BPS 8) Electricity, Gas & Drinking Water Statistics Publications, BPS 9) Construction Statistics Publications, BPS 10) Mineral Exploration Data, Ministry of Energy and Mineral Resources 11) Animal Husbandry Statistics, Directorate General of Animal Husbandry, Ministry of Agriculture.

Inventory Change (PI)

The change in inventory value is the difference between the inventory value at the end of the period and the inventory value at the beginning of the period (accounting) (15). Inventory changes explain inventory item changes, including addition (signed positive) or subtraction (significant negative). For producers, an inventory is needed to maintain the continuity of the production process so that it needs to be reserved, either in the form of raw or auxiliary materials. The uncertainty factor caused by external factors' influence is also a consideration for entrepreneurs to carry out reserves (primarily raw materials). For traders, inventory procurement is more driven by an element of speculation, hoping to get a more significant profit.

The data sources used to estimate the components of inventory changes are: 1) The company's financial statements resulting from the survey activities or the Indonesia Stock

Exchange website (www.IDX.co.id); 2) BUMN/BUMD Company Financial Statements, Secondary Data from outside BPS; 3) Mining commodity data, BPS Mining and Excavation Statistics; 4) Large Medium Industry Annual Publication Inventory Data, BPS; 5) Plantation commodity data; 6) Implicit PDRB price index for selected industries; 7) Selected wholesale price index (IHPB); 8) Data on rice supplies, Bulog; cement data, Indonesian Cement Association; sugar data, Indonesian Sugar Council; and livestock data, Ditjennak Kementan.

Export components of goods and services

Export-import is defined as the transfer of economic ownership (through the activity of selling/buying, bartering, giving, or granting) goods and services between residents of the area and non-residents (who are outside the region or abroad) (16).

The regency/municipality area's export-import value is based on Net Exports' calculation. However, there is often no data to estimate according to the concepts and definitions specified. According to the business field, this condition causes the district / city Net Exports to be treated as a balancing item (residual), namely the difference between GRDP according to expenditure and GRDP. Furthermore, the net exports are separated into exporters and importers using the indirect method.

Based on the calculation of GRDP of Sigi Regency during the 2015-2018 period, the proportion of household consumption expenditure tended to decline, namely 58.76 percent (2015); 58.97 percent (2016); 59.39 percent (2017); 60.91 percent (2017) and 61.33 percent (2019). Sigi is a developing district; in a still-developing community, income is usually used for final expenditure (household institutional expenditures).

The increase in household consumption occurred due to the rise in people's income and increased the supply or supply of various types of goods and services in the domestic market. Such conditions trigger an increase in spending for consumption purposes, including household consumption.

In the 2015-2019 period, we can see that there was an increase in the contribution of household expenditures to expenditure GRDP, which shows households use most of their income to meet their basic (primary) needs compared to meeting other needs (secondary and tertiary) which indicates that on the average income in Sigi Regency is still relatively small.

The processing data on the gross regional domestic product of Sigi Regency at the applicable prices in 2019 increased by 6.56 percent, namely from 8.43 trillion Rupiah to 8.99 trillion Rupiah. Meanwhile, if it is assessed based on constant prices in 2010, we will find a smaller increase in income, namely from IDR 6.02 trillion to IDR 6.26 trillion or 3.91 percent.

Based on data from the Central Statistics Agency of Sigi Regency in the 2015-2019 period, gross regional domestic product based on current prices increased quite significantly, amounting to IDR 6.73 trillion (2015); 7.26 trillion Rupiah (2016); 7.88 trillion Rupiah (2017); 8.43 trillion Rupiah (2018); and 8.99 trillion Rupiah (2019). This increase indicates a change/increase in both price and production volume. The increase in

GDP on the production side will, of course, be followed by the rise in the GRDP from the final demand side or what is often referred to as the expenditure GRDP.

DISCUSSION

Based on the results above, at the Gross Regional Domestic Product's data processing stage, with several indicators, the accuracy, and accuracy of the statistical data generated at the Sigi Regency statistical center agency in concluding the gross regional domestic product.

The computer technology used by the Central Bureau of Statistics of Sigi Regency has been adapted to technological advances, especially the devices used to manage data obtained in the field. Using a personal computer, the office of the Central Bureau of Statistics in Sigi Regency can immediately process data processing, which is a series of activities starting from data collection, then entering raw data into the computer. The data is then sent to the central BPS to be processed into national data. Data processing using personal computers has long been an example of processing applied by technical directorates at the central BPS, especially if the directorate has to publish the survey results.

The Central Bureau of Statistics of Sigi Regency has developed a data entry, editing, validation, tabulation, and analysis program application system using various languages and computer packages to support data processing success. The concept of compiling GRDP data in use describes the behavior and transactions on the demand side. On the demand side, which means used and, on the one hand, expenditure.

In measuring the GRDP data at the Central Bureau of Statistics of Sigi Regency, it takes a long time and a long process so that data organization becomes very important. The organization is rearranging GRDP data, starting from the input process (basic data), the calculation process, and presenting the results and analysis. Thus, simplifying the data in tables makes it easier for various interested parties to understand the GRDP data from the initial process to the results. Tabulation is an advanced process to present the information or GRDP data, a compilation of raw data, processed data, and analysis data into table format. The PDRB data tabulation process is divided into 3 (three) stages. The first is the design of tables related to the necessary data processing of GRDP according to usage. Second, designing tables for recapitulation of the processing of data required of GRDP, and third, preparing analysis tables for further study of GRDP data. The three stages of the tabulation process form a system for processing and presenting PDRB data, especially according to the use (final request) in an integrated manner, interrelated and complementary to one another. The table format in the first process has been outlined in the measurement procedure for each component of GRDP. In contrast, the second and third stages (the recapitulation and analysis process) will be discussed further below.

As part of the process of presenting and analyzing the GRDP data, the GRDP data, which is so many and varies in type and unit, will be designed in a compact and integrated manner into tables. Following the explanation above, the tables will be differentiated

according to processed tables, recapitulation tables, and analysis tables. Processed tables are necessary tables that contain the initial processing of raw data into GRDP data according to usage. The recapitulation table summarizes the data in processed tables, which will produce the primary data on GDP, including the calculation of GRDP at current prices and GRDP constantly. The recap tables will also complement derivative data, which are generally presented in the form of proportions (share) and index (chain and development);. In contrast, the analysis tables contain GRDP primary data, combined with other data or information such as GRDP, population, labor, and household data (cross variable).

CONCLUSION

This study concludes that the data processing presented by the Central Bureau of Statistics of Sigi Regency is in the form of a series of data from 2015 to 2019. This is done to make it easier to describe changes or trends between times. Meanwhile, parameters are presented in different units (Rupiah, index, percentage, ratio, company, etc.) following the analysis's objectives and the characteristics of each data.

SUGGESTION

Recommendations were given to the Central Bureau of Statistics Office of Sigi Regency while maintaining data accuracy and data alignment with the Central Statistics Agency office.

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