WHOLESALE PRICE STATISTICS AS BUSINESS INDICATORS

By

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The important business indicators which are used by statisticians and analysts for purposes of making an estimate of how good or how poor business is and of anticipating or forecasting its trend are the following:

- 1.) goods actually produced from month to month or from year to year which are available for consumption and use.
- 2.) the number of persons employed in the business,
- 3.) amount of money received by businessmen or employees or the amount spent for the purchase of goods and services.

Specifically, the statistical measures involved are physical volume of production, number of wage earners employed in business establishments, wages received by wage earners, freight car loadings or the volume of goods shipped from one part of the country to another, volume of retail trade, retail prices paid by consumers, wholesale prices, and profits.

As the title of my paper indicates, I shall devote my time to a discussion of wholesale price statistics as a business indicator. Probably, you would appreciate the subject more if I give you an idea of how the Central Bank wholesale price index is constructed.

In the absence of a satisfactory and up-to-date information on prices from other government agencies, the Department of Economic Research of the Central Bank of the Philippines, by virtue of the power vested in it in Section 66 of Republic Act No. 265, (See Appendix B) has been constrained to compile index numbers on prices for its own use. The wholesale price

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series currently compiled, which is designed to give an approximate measure of the changes in the general level of commodity prices at the wholesale stage of distribution, was begun in December, 1952. This general wholesale price index contains prices of 158 items classified into 8 sections (in accordance with the Standard International Trade Classification) as follows:

General Wholesale Price Index

Food
Crude Materials
Chemicals
'Machinery and equipment
Beverages and tobacco
Mineral fuels
Manufactured goods
Miscellaneous

The commodities are also classified into three (3) special economic groupings, namely:

- a. Domestic wholesale price index—
 Exports
 Home Consumed
- b. Imports—
 Essentials
 Non-Essentials
- c. Home consumed

In general, the prices included in the indexes are those quoted by manufacturers or producers to wholesalers in the marketing centers in Manila and suburbs. The index gives an approximate measure of changes in the general price levels of wholesale commodity transactions. The index and its components provide a tool for the analysis of business conditions. In conjunction with other data, they indicate the state of balance between aggregate supply and demand at the wholesale market level. The movment in the general price level may be considered dangerous to the economic stability if the factors causing the price behaviour show that the aggregate demand

or flow of expenditures in money terms is greater than the flow of commodities from the nation's productive sector and conversely. Price changes do not always reflect either inflationary or deflationary tendencies. Some changes may be due to outside factors like increase of foreign prices or increase in tariff rates. On the other hand, an increase in the productivity of the farmers may be reflected in substantial declines of the agricultural products.

The wholesale prices of exports and imports are useful in the determination of real incomes from the export and import trade. As the wholesale price of domestic commodities for local consumption reflects the supply and demand situations internally, this can be a descriptive measure of domestic stability. The indexes can also be utilized in planning plant construction, in purchasing some raw materials, and in evaluating inventories. They may be used for adjusting prices in contracts over a period of time. Other uses maybe for the forecasts of future pricing, marketing, sales policies based on historical price developments, and analysis of the price structure of the economy and changing interrelationships among individual commodities. In combination with other data, it is useful in the formulation of long-range economic program.

There are, however, some limitations which analysts should observe in using the wholesale price index currently compiled by the Central Bank. The index measures the price changes of only 158 commodities and others that are very closely related and are specifically defined for pricing both physically and in terms of market structure. It is not an over-all measure of the general price level as it does not include other classes of commodities like real estate, securities, and services including factors of production. Moreover, it does not include transactions at all market levels.

While the weights used have a nationwide coverage, the prices compiled are limited mostly to Manila transactions. This is valid provided the movement of prices in Manila is the same as those in other trading areas in the Philippines.

The index is a weighted arithmetic average of price relatives. The weights or relative importance of each item are

based on the production value and retained importation of the country during the base period 1949. Those weights are based on the compilation by the Bureau of the Census and Statistics and by other government agencies. The wholesale prices that enter into the calculation of the index and its components are obtained from the Bureau of Commerce, Bureau of Fisheries, and private firms.

Recommendations:

In view of the fact that the domestic economic stability concerns the entire country, the price indicator should have a country-wide coverage or should be representative of price movements all over the country: A Central Bank project along this line is in the planning stage. The cooperation of business firms is therefore necessary, specifically, in providing the following data:

- 1) value and volume of sales for each commodity
- 2) movement of the level of inventories from period to period
- 3) value and volume of current production
- 4) distribution of sales to major sectors of the economy, namely, the households, business and government.

The first information will help improve the weighting factor or relative importance of the commodities that enter into the calculation of the index. The second and third information will provide some measure of effective demand and total supply that would serve as causal indicators to wholesale prices and the fourth will make possible a more precise evaluation of price movements.

Bibliography —

- 1. Republic Act No. 265 Act Establishing the Central Bank of the Philippines.
- 2. Bradford, Ernest S. Marketing Research, McGraw-Hill Book Company, Inc., 1951.

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- 3. Central Bank Survey Commission Final Report & Recommendation (Minority Report) April, 1956.
- 4. Supplement to the Monthly Bulletin of Statistics, United Nations, 1954.
- 5. Central Bank of the Philippines Manuals for Compiling Wholesale Prices and Consumer Price Index.

APPENDIX A

CENTRAL BANK OF THE PHILIPPINES Department of Economic Research Manila

INDEX NUMBERS OF PRICES (1949 = 100) 1950-1956

Period	Wholesale price indexes						
	General (All items)	Domestic products				Retail	Consumer
		All items	Home consumed	Exports	Imported items	price inde≭	price index
1950	97.0	92.8	91.6	109.6	121.5	100.2	103.0
1951	109.0	101.3	100.7	113.0	152.8	110.4	111.6
1952	99.7	93.3	94.6	89.9	135.6	106.3	104.4
1953	98.7	93.5	92.8	110.2	128.6	102.9	100.9
1954	93.6	88.2	88.1	96.8	124.7	98.2	99.4
1955	91.1	86.3	86.9	89.2	118.5	95.6	98.4
January	92.3	87.5	87.4	95.8	119.8	98.3	99.8
February	91.4	86.6	86.5	94.7	118.9	95.8	98.4
March	91.3	86.7	86.9	89.8	118.2	93.0	97.7
April	90.7	86.1	86.4	89.3	117.7	92.4	97.5
May	89.9	85.1	85.5	87.1	117.4	93.0	97.4
June	89.3	84.5	85.0	88.3	117.0	93.6	97.5
July	91.8	87.3	87.9	92.6	117.6	94.7	98.0
August	92.0	87.4	88.3	86.2	117.9	94.9	98.4
September	89.3	84.3	84.4	86.6	117.9	94.1	97.9
October	93.1	88.5	89.7	88.2	119.0	94.9	98.3
November	91.5	86.6	87.6	86.1	119.5	95.6	100.4
December	90.5	85.3	86.7	85.9	121.1	94.7	99.9
1956							
January	89.6	83.5	84.2	86.3	124.2	94.3	98.6
February	91.6	85.7	86.4	87.8	125.2	95.1	99.1
March	92.2	86.3	86.9	89.3	126.6	95.4	99.9
April	94.9	89.0	89.7	91.5	128.4	95.3	100.8
May	94.6	88.4	88.8	93.8	130.0	97.7	101.4
June	94.8	88.4	89.3	89.1	131.8	97.9	101.4
July	95.2	88.3	89.5	87.4	132.8	97.4	102.0
August	96.0	89.6	90.8	87.8	132.9	98.3	102.7

SOURCES OF BASIC DATA:

Bureau of Commerce Bureau of Fisheries

Bureau of the Census & Statistics

Private firms

Public markets

APPENDIX B

As guardian of the monetary health of the country, the Central Bank is guided by the following principles of monetary administration which are embodied in Republic Act 265, Section 66:

"Whenever abnormal movements in the money supply or in prices endanger the stability of the Philippine economy or important sectors thereof, the Monetary Board shall:

- "(a) Take such remedial measures as are appropriate and within the powers granted to the Monetary Board and the Central Bank under the provisions of this Act; and
- "(b) Submit to the president of the Philippines and the Congress, and make public, a detailed report which shall include, as a minimum, a description and analysis of:
 - "(1) The causes of the rise or fall of the money supply or of prices;
 - "(2) The extent to which the changes in the money supply or in prices have been reflected in the changes in the level of domestic output, employment, wages and economic activity in general, and the nature and significance of any such changes; and
 - "(3) The measures which the Monetary Board has taken and the other monetary fiscal or administrative measures which it recommends be adopted.

"Whenever the money supply increases or decreases by more than fifteen per cent (15%), or the cost of living index increases by more than ten per cent (10%), in relation to the level existing at the end of the corresponding month of the preceding year, the Monetary Board shall submit the report to which reference is made in subsection (b) of this section, and shall state therein whether, in the opinion of the Board, said changes in the money supply or cost of living represent a

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threat to the stability of the Philippine economy or of important sectors thereof."

"The Monetary Board shall continue to submit periodic reports to the President of the Philippines until it considers that the monetary or price disturbances have disappeared or have been adequately controlled."