

THE REVISED PHILIPPINE SYSTEM OF NATIONAL ACCOUNTS

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INTRODUCTION

The history of the Philippine System of National Accounts (PSNA), which has been continuously compiled for more than 37 years now, began at the initiative of the Central Bank of the Philippines sometime in the mid-50s. In 1956, the then National Accounts Staff of the Statistical Coordination Office of the National Economic and Development Authority (NEDA) took over the compilation. Since 1987, its successor, the Economic and Social Statistics Office of the National Statistical Coordination Board (NSCB), has pursued the work. As a coherent framework for recording and presenting economic transactions in the country, the PSNA has provided planners and decisionmakers with vital information for national development. As a statistical framework, it has helped the Philippine Statistical System formulate programs to improve economic statistics.

A need for its revision has long been expressed in interagency workshops on national accounts in 1971, 1976, and 1982. In a workshop held on December 12, 1985, the proposal for a comprehensive approach to the PSNA revision was presented. The program of revision considered recommendations of the previous PSNA workshops and 1968 United Nations System of National Accounts (UNSNA). Moreover, the program included changing the base year in response to a resolution by the then Statistical Advisory Board, the forerunner of the NSCB, prescribing the shift from 1972 to 1985 of the National Accounts and other data series.

The National Accounts has undergone several changes over the years in line with an increasing demand of users for new information. However, economic events during the early 1980s effected complexities in various transactions in the economy. This — along with statistical improvements in the country — has prompted the National Accounts Staff to undertake an overall program of revision.

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Economic Changes and Developments

In late 1970s the government's participation in the economy expanded. For one, the number of government-owned and -controlled corporations rose from 74 in 1973 to 245 in 1985. In addition, the government assumed a new role in the financial market of guaranteeing private sector loans granted by the government financial institutions (GFI). When recession followed the second oil shock in 1979 and several corporations underwent deep financial distress, the government took over them. Furthermore, the government bailed out GFI's saddled at that time with nonperforming assets brought about by guaranteed loans extended to private and government corporations. These economic events gave rise to complex transactions unique to the Philippines. Since the UNSNA dealt with concepts, interpreting correctly and translating these transactions into national accounts entries — particularly the assumption of non-performing assets and liabilities of government corporations by the national government — resulted in conceptual and methodological problems for the PSNA. Moreover, pertinent to estimation of Gross National Product are issues on extent of the public debt and contribution of the informal sector. Hence, these problems called for a review of concepts and existing methodologies to assess the capability and responsiveness of accounts in capturing and properly recording these transactions. Likewise, these pointed out the need for more articulation in the accounts.

Statistical Developments

Compilation of national accounts involves a dynamic process. Improving the sources of data to meet requirements of national accounts compilation and the methods of estimation to yield better and more useful information is a never-ending exercise.

Developments in the statistical sphere resulted in availability of new sources of data other than the traditional surveys and censuses conducted by the National Statistics Office (NSO). Data from administrative by-products of regulatory or supervisory government agencies have been used to supplement additional data requirements to come up with a more articulated accounts. In addition, results of past surveys and censuses — unavailable at the time the annual estimates were being compiled — have now become available; hence, the need to revise the past estimates mostly based on trends and unupdated ratios and indicators.

GENERAL FEATURES OF THE NEW SERIES

Revision of the PSNA is focused on the annual compilation of the accounts, initially covering the period 1980 to 1987. The new series is characterized by the expansion in sectoral coverage and the changes in data and estimation methods in the items of certain accounts. With available updated or new data series, the staff expanded the coverage and improved the estimation methods. Coverage expanded in varying degrees, in agriculture, construction, mining, electricity, gas, and water, government services, government consumption expenditures, fixed capital formation, increase in stocks, and foreign trade.

Another feature of the revised PSNA series is the adoption of the recommendation of the 1968 UNSNA and to some extent of the preliminary recommendations of the 1993 USNA. The old PSNA series was basically patterned after the 1953 USNA. Though the 1968 UNSNA was more comprehensive than the 1953 version, the Economic and Social Statistics Office of the NSCB took a long time to shift to this framework because the data system could hardly support the data demands for compiling the accounts based on this revised framework. The United Nations is currently revising its SNA. Some of the problems encountered in implementing the 1968 recommendation are reviewed and to some extent resolved. The new PSNA series incorporated some recommendations in the 1993 UNSNA.

With the adoption of the revised 1968 UNSNA framework and the availability of new information, the new series now features further articulation of transaction flows through additional accounts. In the past, there were no complete and integrated accounts. Now, there is the Consolidated Accounts of the Nation, which includes the Gross Domestic Product and Expenditure, National Disposable Income, Gross Accumulation, and External Transactions Accounts (See Charts 1-4).

The new series has incorporated the Institutional Production and Income and Outlay Accounts for Private Corporations, Public Corporations, General Government and Household and Unincorporated Enterprises (See Charts 5-8). However, the revision has been unable to undertake the estimation of a capital finance account as recommended by the UNSNA pending the development of the data base for this account. Moreover, the new series now estimates GDP by factor shares, compensation of employees, depreciation, operating surplus and indirect taxes net of subsidies, for better articulation between the production account and income and outlay account. Estimates by factor shares are shown both as originating from the economic or institutional sectors.

Chart 1
CONSOLIDATED ACCOUNTS I:
GROSS DOMESTIC PRODUCT AND EXPENDITURE

Transaction Items
1. Compensation of employees
2. Net operating surplus <ul style="list-style-type: none"> A. Interest payment B. Profit
3. Depreciation
4. Indirect taxes
5. Less : Subsidies
GROSS DOMESTIC PRODUCT
6. Personal consumption expenditure
7. General government consumption expenditure
8. Gross domestic capital formation <ul style="list-style-type: none"> A. Fixed capital B. Changes in stocks
9. Exports of goods and services
10. Less: imports of goods and services
11. Statistical discrepancy
EXPENDITURE ON GROSS DOMESTIC PRODUCT

A fifth feature of the PSNA revision is the quantification of the contribution of the unorganized and organized sectors to production. The unorganized sector refers to that part of the economy unreported or undocumented in the establishment surveys. Table 2 shows the GDP structure, consisting of the unorganized and organized sectors for CY 1985-87.

COMPARISON OF THE NEW AND OLD PSNA

Change in Levels

Comparing the new with the old series estimates of Gross Domestic Product (GDP) reflects an apparent decrease in the new series levels on the average by P28.2 billion annually at current prices and P30.3 billion annually at constant prices (Table 1). The new series estimates of Gross National Product (GNP) are likewise lower than the old series on the average by P30.3 billion annually at current prices and P31.8 billion annually at constant prices.

Chart 2
CONSOLIDATED ACCOUNTS II:
NATIONAL DISPOSABLE INCOME AND ITS APPROPRIATION

Transaction Items

1. Personal consumption expenditure
 2. General government consumption expenditure
 3. Net saving
- APPROPRIATION OF NET NATIONAL DISPOSABLE INCOME**
4. Compensation of employees
 - A. From resident producers
 - B. From rest of the world
 - C. Less : to the rest of the world
 5. Net operating surplus
 - A. From resident producers
 - B. From rest of the world
 - C. Less : to the rest of the world
 6. Indirect taxes
 7. Less: Subsidies
 8. Current transfers from the rest of the world
 9. Less: Current transfers to the rest of the world
- NET NATIONAL DISPOSABLE INCOME**
10. Memorandum items:
 - A. Net national income (Net National Product) at factor cost (4+5)
 - B. Net national income (Net National Product) at market prices (10A+6 -7)
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Chart 3
CONSOLIDATED ACCOUNTS III:
GROSS ACCUMULATION

Transaction Items

1. Gross fixed capital formation
 2. Changes in stocks
 3. Net lending to the rest of the world
- GROSS ACCUMULATION**
4. Institutional saving, net
 - A. Private corporations
 - B. Government corporations
 - C. General government
 - D. Households and unincorporated enterprises
 5. Depreciation
 6. Capital transfer from the rest of the world
 7. Less: Statistical discrepancy
- FINANCE OF GROSS ACCUMULATION**
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Chart 4
CONSOLIDATED ACCOUNTS IV:
EXTERNAL TRANSACTIONS

Transaction Items

1. Exports of goods and services
 - A. Merchandise FOB, SNA *
 Merchandise FOB, FTS **
 Less: Special transactions
 Plus: Monetization of gold
 - B. Non-factor services
2. Compensation of employees from the rest of the world
3. Property and entrepreneurial income from the rest of the world
4. Current transfers from the rest of the world
 - A. To general government
 - B. To households

CURRENT RECEIPTS

5. Imports of goods and services
 - A. Merchandise CIF, SNA*
 Merchandise FOB, FTS **
 Plus : Insurance and freight, FTS
 Less : Special transactions
 Plus : Demonetization of gold, CBP***
 - B. Non-factor services
6. Compensation of employees to the rest of the world
7. Property and entrepreneurial income to the rest of the world
8. Government interest payments on public debt
9. Current transfers to the rest of the world
 - A. Government contributions to international organizations
 - B. Households
10. Surplus on current transactions

CURRENT DISBURSEMENTS

11. Surplus on current transactions
 12. Capital transfers from the rest of the world
 13. Net lending to the rest of the world
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* SNA — System of National Accounts.

** Foreign Trade Statistics (NSO)

*** Balance of Payments, Central Bank of the Philippines (CBP).

Chart 5
INCOME AND OUTLAY ACCOUNT I:
PRIVATE CORPORATIONS

Transaction Items

1. Net operating surplus
 2. Property income
 3. Casualty insurance claims
 4. Net casualty insurance premiums
- TOTAL RECEIPTS
5. Interest payments
 6. Dividends
 7. Net casualty insurance premiums
 8. Casualty insurance claims
 9. Direct taxes
 10. Savings
- TOTAL DISBURSEMENTS
-

Chart 6
INCOME AND OUTLAY ACCOUNT II:
GOVERNMENT CORPORATIONS

Transaction Items

1. Net operating surplus
 2. Interest income and dividends
 3. Net casualty insurance premiums
 4. Casualty insurance claims
- TOTAL RECEIPTS
5. Interest payments
 6. Dividends
 7. Casualty insurance claims
 8. Net casualty insurance premiums
 9. Current transfers to households
 10. Direct taxes
 11. Saving
- TOTAL DISBURSEMENTS
-

Change in Growth Rates

In growth, the difference between the new and the old series is insignificant. The average annual growth rates at current prices of both GDP and GNP in the new series are slightly higher by 0.28 and 0.30 percentage points, respectively, than the old series. At constant prices, the average annual growth rate of GDP is lower by 0.09 percentage points while for GNP the percent difference is 0.06 percentage points.

Change in Structure

Gross Domestic Product

In terms of sectoral contribution to GDP, the share of the industry sector to the annual average GDP at current prices in the new series rose to 36.09 percent, or is higher by 2.31 percentage points than in the old series. On the other hand, the share of the services sector fell to 40.54 percent from 42.35 percent in the old series. Likewise, the share of the agriculture, fishery and forestry sector declined to 23.37 percent from 23.87 percent in the old series.

Chart 7
INCOME AND OUTLAY ACCOUNT III:
GENERAL GOVERNMENT

Transaction Items
1. Net operating surplus
2. Property income
3. Compulsory fees and fines
4. Indirect taxes
5. Direct taxes
6. Social security contributions
7. Casualty insurance claims
8. Current transfers
TOTAL RECEIPTS
9. Government consumption expenditure
10. Subsidies
11. Social security benefits
12. Net casualty insurance premiums
13. Interest payment on public debt
14. Other current transfers
15. Saving
TOTAL DISBURSEMENTS

At constant prices, the share of the agriculture sector slightly decreased to 23.38 percent while that of the industry sector went up by 3.27 percentage points to 37.53 percent in the new series. The share of the services sector decreased to 39.09 percent in the new series, or down by 2.06 percentage points from the old series.

Gross Domestic Expenditure

In the new series, Personal Consumption Expenditure (PCE) accounted for 70.0 percent of the annual average expenditure of the GDP at current prices, lower by 3.3 percentage points from the share of PCE in the old series. Meanwhile, increases in the share in the annual average expenditure were registered in General Government Consumption Expenditure (GGCE), Gross Domestic Capital Formation (GDCF), Exports and Imports as well as in Statistical Discrepancy.

Chart 8 INCOME AND OUTLAY ACCOUNT IV: HOUSEHOLDS AND UNINCORPORATED ENTERPRISES

Transaction Items
1. Net operating surplus
2. Compensation of employees
3. Interest on public debt from general government
4. Other interest income
5. Social security benefits
6. Casualty insurance claims
7. Current transfers
TOTAL RECEIPTS
8. Personal consumption expenditure
9. Interest payments on consumer debt
10. Other interest payments
11. Direct taxes
12. Compulsory fees, fines and penalties
13. Social security contribution
14. Net casualty insurance premiums
15. Current transfers
16. Saving
TOTAL DISBURSEMENTS
17. Memorandum item:
Personal disposable income (1 to 6) - (9 to 15) or (8 + 16)

Table 1
RESULTS OF THE REVISION (1980-1990)

<i>A. Change in Levels</i>			
1. Decrease in the estimate of Gross Domestic Product (GDP)			
	Average Annual Difference (Billion P)		Percent Difference*
GDP Current	-28.20		-4.63
GDP Constant	-30.34		-4.53
2. Decrease in the estimate of Gross National Product (GNP)			
	Average Annual Difference (Billion P)		Percent Difference*
GNP Current	-30.29		-5.02
GNP Constant	-31.79		-4.80
<i>B. Change in Growth Rates</i>			
	Average Annual Growth Rates		
	New	Old	Difference
GDP Current	15.90	15.62	.28
GDP Constant	1.57	1.66	-.09
GNP Current	15.95	15.65	.30
GNP Constant	1.62	1.68	-.06
<i>C. Changes in Structure</i>			
1. By economic activity			
	Share in Annual Average GDP CURRENT		
	New	Old	Change
GDP	100.00	100.00	-
Agriculture, fishery and forestry	23.37	23.87	-.50
Industry	36.09	33.78	2.31
Services	40.54	42.35	-1.81

*Computed as new level minus old level, divided by old level.

Table 1 (Continued)

	CONSTANT		
	New	Old	Change
GDP	100.00	100.00	-
Agriculture, fishery and forestry	23.38	24.59	-1.21
Industry	37.53	34.26	3.27
Services	39.09	41.15	-2.06

2. By expenditure shares

	Share in Annual Average GDP CURRENT		
	New	Old	Change
GDP	100.00	100.00	-
Personal consumption expenditure	69.95	73.28	-3.33
Government consumption expenditure	8.61	8.28	0.33
Gross domestic capital expenditure	21.10	19.00	2.10
Exports	25.90	22.56	3.34
Imports	-27.47	-23.76	-3.71
Statistical discrepancy	1.90	0.65	1.25

	CONSTANT		
	New	Old	Change
GDP	100.00	100.00	-
Personal consumption expenditure	69.74	73.03	-3.29
Government consumption expenditure	7.61	7.15	0.46
Gross capital formation	22.13	20.45	1.68
Exports	26.86	21.73	5.13
Imports	-28.94	-25.85	-3.09
Statistical discrepancy	2.60	3.49	-.89

Table 2
GDP STRUCTURE AT CURRENT PRICES

	1985 %	1986 %	1987 %
Organized	54.90	53.80	53.70
Unorganized	45.10	46.20	46.30
Total	100.00	100.00	100.00

At constant prices, the share of PCE decreased to 69.74 percent from the 73.03 percent share in the old series. The share of GGCE, GDCF, Exports and Imports went up in the new series, with exports and imports recording high increases of 5.1 and 3.1 percentage points, respectively, from the old series.

PRODUCTION ACCOUNTS

The revised production account which approaches the estimation of GDP by estimating the Gross Value Added (GVA) of the different production sectors shows marked differences from the old series. Included among them are: generally lower GVA levels at current and constant prices, changes in sectoral contribution to GDP, varying sectoral growth trends at certain periods, particularly for forestry; mining and quarrying; electricity, gas and water; private services; finance and housing. These differences are the combined result of the improvements incorporated in each of the new GVA estimates by sector.

Agriculture, Fishery and Forestry

New estimates for agriculture, fishery and forestry reflect a reduced GVA both at current and constant prices. In terms of growth rate, the new series does not vary significantly from the old series.

The change in the GVA estimates for the sector can be traced to the combined effect of certain improvements carried out in the revision. First, agricultural activities and services which include irrigation services, pest control services, orchidariums, etc. were added as a subsector under agriculture. Second, the following changes in data were adopted: use of Bureau of Agricultural Statistics (BAS) revised production data on other crops, livestock and poultry, which are higher than the old data; application of BAS new price series for some crops, livestock and poultry which are much lower resulting in decreased current value of production in spite of the upward revision in production data; and adoption of updated Gross Value

Added Ratios (GVAR's) based on the 1985 Input-Output table. Generally, the new GVAR's are higher than the old GVAR's.

The revised estimates for forestry considered undercoverage/ underreporting in forestry production. Moreover, the new estimates of real GVA for forestry were based on current-weighted price deflators as against the constant weights used in the old series.

Industry

Effects of the revision on the total GVA for industry are higher GVA levels both at current and constant prices or an average annual difference of 1.87 percent and 4.58 percent, respectively. Growth trends in the two series are basically the same. On the other hand, the effects of the sectoral revision are not the same for the sectors. In mining and quarrying, the revised GVA estimates are lower prior to 1985 but higher from 1985 to 1987. In manufacturing, the revised estimates are lower than the old series, both at current and constant prices. However, for construction and electricity, gas and water, the revision resulted in higher GVA levels.

The above changes reflected in the new series can be attributed to the changes incorporated in the revision for each sector of the industry. In mining, the new output included the production of panned gold, 50 percent of which is considered unaccounted for and goes to the black market. Updated annual GVAR's were applied to come up with the new GVA estimates, using submitted financial statements of mining firms to the Bureau of Mines and Geosciences (BMG). Moreover, the revised series shifted from double to single deflation method to obtain GVA at constant prices for mining.

In manufacturing, the new GVA series used newly available data on output and intermediate input from the Annual Survey of Establishments (ASE) and the Census of Establishments (CE). Improvements in methodology were introduced as follows: the use of the commodity flow approach in estimating output for six subsectors in food manufacturing (rice milling, corn milling, slaughtering, meat preparation, fish preparation and bakery) based on the 1985 input-output ratios on supply and disposition of goods and services; the application of an undercoverage ratio to adjust the reported output for large manufacturing establishments and the estimation of the contribution of the unorganized sector for manufacturing.

On the other hand, construction has expanded its coverage by including own-account capital formation, unorganized construction and repairs and maintenance resulting in a higher gross output for the sector. A major revision to enhance the accuracy of the new estimates was the application of the S-curve method for estimating the gross output of construction. The S-curve represents percentage of the work completed by the month or quarter of an assumed period of time required to complete

a particular construction activity. The method estimates the actual physical accomplishment at a given time.

The revised estimates for electricity, gas and water used new data (financial statements) from the Energy Regulatory Board (ERB), the National Water Resources Board (NWRB), the National Electric Administration (NEA), and the Local Water Utilities Administration (LWUA) as supplement to the data from Meralco and the National Power Corporation (NPC). This resulted in: (a) higher GVA estimates from 1980 to 1985 but lower from 1987 to 1988 at current prices; and (b) higher GVA estimates for 1980 to 1987 at constant prices.

Services

For the whole of Services the new series exhibits lower GVA levels both at current and constant prices, a difference of 8.70 and 9.32 per cent, respectively. In terms of growth rate, the difference is insignificant between the new and old series. The revised GVA estimates however reflected varying differences by sector. The revised estimates for transport, communication and storage and trade show lower levels compared to the old series at both current and constant prices and finance and housing reflected higher GVA levels at both current and constant prices. The revisions in private services resulted in lower revised GVA estimates for the period 1980-1982 and higher estimates for the period 1983-1989. In government services, the revised GVA estimates are higher than the old estimates for current and constant prices (except for 1988). The growth trends by sector show varying degrees of differences at certain periods between the new and old series, particularly for finance and housing and private services.

The differences between the new and old estimates for the Services sectors drew from the changes/improvements undertaken in the revisions by sector. In transport, communication and storage, improvements were applied in the coverage of jeepney operation and air transport. A separate estimate of the contribution of jeepney operation was included to supplement ASE/CE data while basic data for air transport were adjusted to account for output of resident producers only. The revision also involved the use of newly available data from ASE/CE as well as financial statements from the Department of Transportation and Communication (DOTC), National Telecommunications Commission (NTC), Philippine Airlines (PAL) and vehicle registration data from the Land Transportation Office (LTO). In terms of methodology, improvements adopted included estimation of the contribution of the unorganized sector, shift to extrapolation method using revenue passenger kilometers for estimating GVA for air transport at constant prices and use of gross output as weights for the deflator in communication.

The change in the estimates of GVA for the trade sector was brought about largely by the new data from the currently available ASE and CE. To further enhance the accuracy of the new estimates, adjustments for undercoverage were applied separately for wholesale and retail trade and the GVA contribution of the unorganized sector was estimated for the sector.

In the finance and housing sector, the revised GVA estimates were based on such newly available data as financial statements/reports from the Insurance Commission, Government Service and Insurance System (GSIS) and Commission on Audit (COA) Financial Report as compared to the old CE/ASE and Insurance Commission indicators; financial data from the Central Bank for banks; ASE/CE data for non-banks and real estate; data from the 1980 Census of Population and Housing (CPH) and the 1985 Family Income and Expenditure Survey (FIES) to establish benchmark estimates of housing stock and rental income, respectively. In terms of methodology, interest income derived by banks from depositor's money was estimated as a refinement to the computation of imputed bank service charge. Contribution of the unorganized non-bank sub-sector was likewise estimated.

The revised GVA estimates for private services reflect the data taken from the currently available ASE and CE as well as the contribution of the unorganized sector and own-account workers. In government services, the changes were focused on accounting for the depreciation of local government equipment outlay and buildings and national government buildings and use of a weighted average earnings index as a deflator for compensation of employees based on COA data.

EXPENDITURE ACCOUNTS

As a result of changes effected in the new PSNA (changes in coverage, data and estimation methods), the new Gross Domestic Expenditure (GDE) series exhibits lower levels compared to the old GDE series. In distributional pattern, Personal Consumption Expenditure (PCE) gets a smaller share of GDP at constant prices in the new series than in the old, while increases are seen in share of other expenditure items. The difference in the growth rates between the two series is however negligible.

Personal Consumption Expenditure

The new levels of Personal Consumption Expenditure (PCE) are, on the average, only 91 percent of the old levels, but the trends are basically the same, both at current and constant prices.

No change was noted in the coverage of PCE. It includes consumption expenditure on all durable and non-durable goods and services of households and non-profit institutions serving households. The use of revised agricultural production data and updated data on output of the manufacturing sector primarily explains the lower PCE levels registered in the new series.

Changes in the methodology include use of commodity flow method on disaggregated items of expenditure and of direct estimates to arrive at food expenditure at constant prices. Unlike in the old estimates, the revised PCE applied the commodity flow method on quantity rather than value of such disaggregated items of food expenditure as cereals and products; roots and tubers; sugar and syrups; pulse and nuts; vegetables; fruits; meat products; milk and dairy products; eggs; fish and other marine products; fats and oils and other miscellaneous food items.

General Government Consumption Expenditure (GGCE)

The share of the General Government Consumption Expenditure (GGCE) to total GDP in the new series is slightly higher than in the old series. The average annual growth rate is however basically the same. The change can be attributed to the inclusion of depreciation of national and local government buildings and structures and local government durable equipment which were previously not covered by GGCE. Data sources remained unchanged. The financial reports of the Social Security System (SSS) and the cash operation statements of the Bureau of Treasury; the expenditure program of the Department of Budget and Management; and the quarterly survey on employment and compensation of the National Statistics Office provided the data requirements for the expenditure account of the government sector.

Improvements were introduced in estimating GGCE. The weighted average earnings index was used as deflator of compensation of employees and the weighted wholesale price index (WPI) as deflator of expenditure on supplies and materials. Adoption of weighted WPI as deflator instead of the previously used CPI represents a more appropriate measure for valuation since the government makes wholesale purchases.

Gross Domestic Capital Formation (GDCF)

Gross Domestic Capital Formation (GDCF) includes expenditure on construction, durable equipment and increase in stocks. As in the old series, the new GDCF series showed a steady decline in its share to total GDP in the period 1980-1985 and then gradually improved, starting 1986. In levels, the new GDCF estimates at constant prices do not differ from the old estimates by more than 10 percent except in 1984, 1986, 1989 and

1990 when the new GDCF was higher than the old GDCF estimates by as much as 13 to 24 percent.

Construction

Bigger share in expenditure on construction at constant prices is evident in the new series, especially in the latter years. A considerable difference is noted between the growth rates of the sector in the two series, especially in the period 1982 to 1987. Changes in the coverage, data source and methodology all contributed to the variations.

The new series differed from the old primarily because of the exclusion of revaluation of structures which have been fully depreciated but still with service life; and the inclusion of own-account construction and transfer cost of land, which form part of private construction. Own-account construction refers to construction activities done by real owners. Transfer cost of land pertains to dealer's margins, solicitor's fees and other costs incidental to the sale/transfer of land.

Data from private contractors for both residential and non-residential construction were used to generate the S-curve, representing the expected percentage of work completed as of a certain period required to complete a particular construction activity. The new series availed of revised data from the SSS, GSIS and private contractors to estimate construction cost of residential and non-residential structures. Likewise, updated building permits from the National Statistics Office provided data on construction put in place for use in computation of gross output of private construction.

In methodology, changes included separate estimation for residential and non-residential construction, correction for undercoverage and use of the S-curve in determining actual physical accomplishment and valuation. The revised series contained separate estimates for residential and non-residential construction. The segregation of these two types of construction contributed to improvement of estimates as there were differences in costing and period of construction of these two. Another innovation in the new series was correction for undercoverage since not all builders comply with the required building permits, the primary source of data for type of construction and floor area covered. Use of S-curve also contributed to the difference between the new and old estimates in construction expenditure. The S-curve was used to get actual physical accomplishment by applying the percentage distribution of physical accomplishment to the corrected floor area. This is then multiplied by the average cost per square meter to arrive at the value of construction. Residential and non-residential construction requires different S-curves.

Durable Equipment

The new durable equipment's share to total GDP has increased compared to the old estimates. There are also disparities in the growth rates in the two series in 1980 to 1987.

Changes introduced in the new series focused on coverage and estimation. In coverage, the new series included outlays of producing units on additions to reproducible fixed assets. It also included installation cost, transfer cost for second-hand durables, and production of durable equipment intended for own consumption. In estimation, imported commodities identified as capital goods were considered. Excluded were completely-knocked-down parts and accessories for assembly or repairs, and machinery and equipment that are clearly part of construction projects/activities. The new series also availed of updated data on local production of durable equipment, taken from the Annual Survey of Establishments and Census of Establishments of the National Statistics Office. As an improvement in methodology, the revised series applied capital formation ratios to locally-produced durables net of exports. In the old method, ratio was used for gross locally-produced durables. In constant price estimation, the wholesale price index (WPI) rebased to 1985 was used as deflator for local durable equipment.

Increase in Stocks

Changes in coverage, data source and methodology resulted in a significant difference in value between the estimates of the new and the old series for some years.

In coverage, the increase in stocks consists of finished products for sale but not yet sold, raw materials for intermediate consumption but not yet used, work in progress and livestock being raised for slaughter. Government stocks are now also considered in estimating increase in stocks.

New data sources were identified for the sector. These included financial statements from COA which provides data on inventories of national and local government and public corporations as well as the updated data from the Annual Survey of Establishments, used in revising estimates of changes in stocks for non-agricultural sectors.

A new feature in methodology was the use of average farm prices in determining the value of agricultural products. Farm prices were used to estimate the value of the physical change in the agricultural inventory. Another improvement was the use of producers' price in adjusting mining and quarrying and manufacturing inventories. For this purpose, profit ratios derived from the 1983 Input-Output Table were used to appraise inventory at producers' price.

Exports and Imports

Increases were noted in the level and share to GDP of both exports and imports in the new series compared to the old. The annual growth rates are however not significantly different from each other.

Increase in the levels of the new series can be attributed to the inclusion of monetization and demonetization of gold. The peso value of monetized gold by the Central Bank was included in merchandise exports while the value of demonetized gold was included in merchandise imports. In the price indices, expanded items for exports and imports have caused the number of items included in the market basket for both merchandise exports and imports price indices to increase. The constant price estimates of exports and imports have increased.

Changes/additions in data sources also contributed to the difference in the new and old series. The Department of Tourism was tapped as data source on direct purchases in the domestic market by non-resident households. The revised series also used revised data on Balance of Payments (BOP) non-factor services from the Central Bank.

The new series employed the same methodology as in the old, except for one innovation. The revised estimates deflated payments of invisibles — such as transport services, expenditures of non-resident households, miscellaneous commodities, and expenditures of the Philippine government employees abroad — by using a weighted Consumer Price Index (CPI) of selected trading partners of the Philippines.

INSTITUTIONALIZATION

The output of this revision was focused on the annual compilation of the accounts, initially covering 1980 to 1987. To date, the revised series has been updated to 1991. The whole link series from 1946 to 1990 has been completed and is now available. In addition, the revised PSNA series has been linked with the quarterly accounts from 1981 to 1990 and with the regional accounts from 1980 to 1990. Sources and methods, along with a detailed analysis of components of the revised annual accounts, are being finalized for publication.

Chart 9
GROSS DOMESTIC PRODUCT
1980 TO 1990 AT CURRENT PRICES

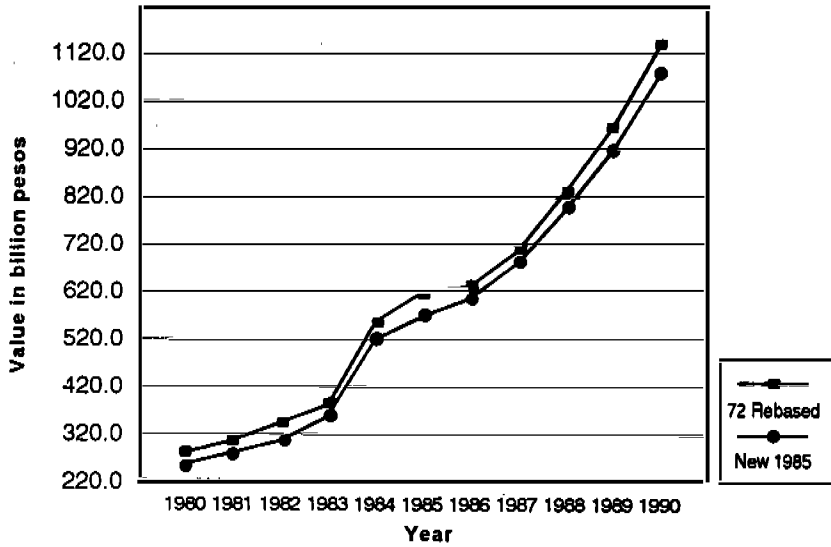


Chart 10
GROSS DOMESTIC PRODUCT
1980 TO 1990 AT CONSTANT PRICES

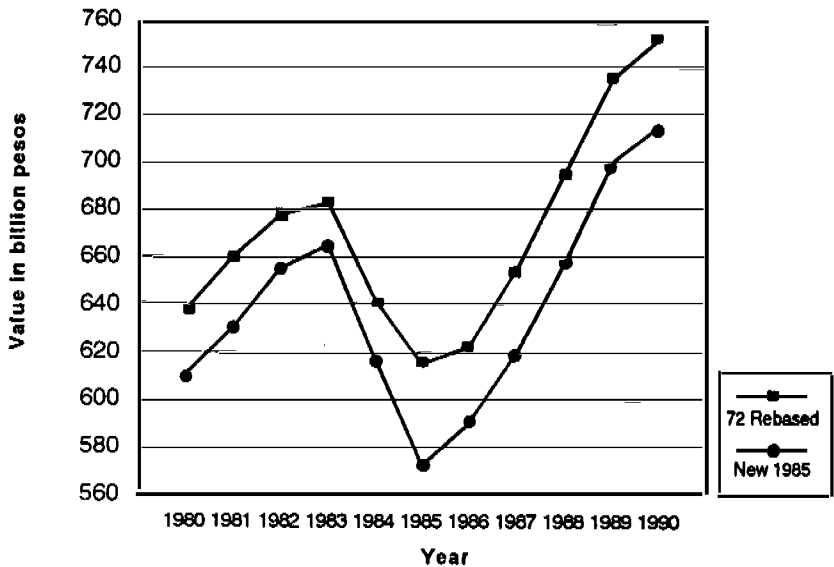


Chart 11
GROSS NATIONAL PRODUCT
1980 TO 1990 AT CURRENT PRICES

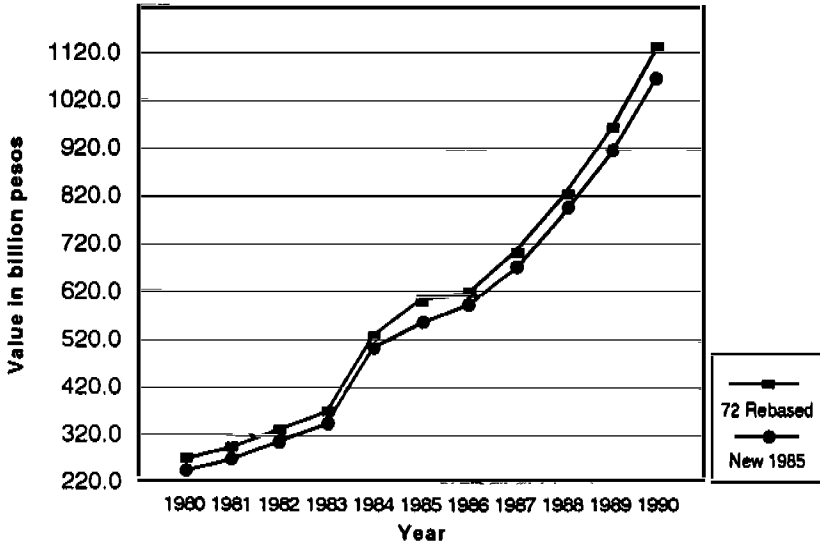


Chart 12
GROSS NATIONAL PRODUCT
1980 TO 1990 AT CONSTANT PRICES

