

A MACROECONOMIC OVERVIEW OF PUBLIC ENTERPRISE IN THE PHILIPPINES, 1975-84

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1.0 Objectives of the Study

The purpose of this paper is to provide an overview of the macroeconomic role and impact of public enterprises in the Philippines. More specifically, the study attempts to address the following questions: (1) the economic contribution of the public enterprise sector in terms of value added, investment and employment; (2) the overall deficit of the sector and the impact of the financing of this deficit on the national government budget and borrowings; and (3) the efficiency of the sector as measured by commonly used financial profitability ratios and by factor productivity measures.

2.0 Conceptual and Methodological Issues and Sources of Data

In this section, we discuss some of the problems, both conceptual and practical, in analyzing the macroeconomic role and impact of public enterprises. This study's data sources are also cited.

2.1 *Defining Public Enterprises*

A review of the various definitions of the term "public enterprise" in the literature indicates that two elements are essential to the concept, namely: (1) government ownership and/or control of the enterprise, and (2) production of marketable and marketed goods and services as the enterprise's primary function. Enterprise output is "marketable" if exclusion is feasible and it is "marketed" if it is actually sold for a price. The second condition, thus, excludes

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entities engaged in goods. While some authors favor including the additional dimension that the enterprise's realized revenues cover at least a half or a substantial proportion of costs (Jones 1975; Gillis 1980) others suggest that it is enough that "the organization's output is of the type which, in most countries, revenue is expected to cover a substantial proportion of cost" (Gray 1980; Short 1984). Thus, what emerges are two alternative economic definitions of public enterprise: a broad definition based on the first two conditions discussed above and a limited definition which includes substantial cost recovery as well.

The official government definition of the term "public enterprise" in the Philippines covers only enterprises with particular legal forms and personalities. Thus, the Commission on Reorganization (1972) defined public enterprises as "corporate bodies, stock or non stock, owned or controlled by the government and created by special law under the corporation law for the purpose of performing governmental or proprietary functions which are socio-economic in nature." The official Philippine usage of the term differs from the economic definition outlined in the preceding paragraph in two respects: (1) the former limits the term to those organizations owned and controlled by the government of the corporate legal form, thus excluding departmental ministerial undertakings of the business type, e.g., Bureau of Posts, while the latter does not; and (2) the former includes all government corporations regardless of the nature of the goods and services produced while the latter would exclude those government corporations engaged in the production of public and merit goods, e.g., Boy Scouts of the Philippines, Integrated Bar of the Philippines, and many others in the "other services sector" (see classification in Section 3). Strictly speaking, therefore, the definition by the Commission on Reorganization (now Presidential Commission on Reorganization or PCR) limits itself to government corporations. As of the middle of 1986, the PCB had compiled a list of government corporations that included 96 parent corporations and 149 subsidiaries for a total of 245 (see Appendix Table 1).¹ Empirically, the PCR list is not significantly different from a

1. Not included in this number are some 58 acquired assets. These are corporations which the government has taken on as financially distressed organizations but which it intends to return to the private sector at a later time. If acquired assets are included, the total number of government corporations will reach 303.

list that one might come up with based on an economic definition of public enterprise, e.g., Manasan's (1984) list. Furthermore, the PCR list has been adopted by other government agencies such as the Commission on Audit (COA), Office of Budget and Management (OBM), etc. For pragmatic reasons, therefore, the present paper will use the PCR list despite some of the conceptual discrepancies earlier pointed out.²

2.2 Sectoral Classification and Gross Value Added Estimation

In classifying the government corporations in the PCR inventory by sectors, this study follows the Philippine System of National Accounts (PSNA) convention of using the Philippine Standard Industrial Classification (PSIC).

Gross value added (GVA) is used to measure the economic contribution of government corporations. The PSNA defines GVA as the value of gross output less the sum of all nonfactor costs such as raw materials and supplies, containers and packing materials, advertising costs and other nonindustrial overhead costs. Thus, GVA is equal to the sum of compensation of employees, profits before tax, economic depreciation, indirect taxes less subsidies, interest payments less interest receipts, charitable contributions, etc. GVA estimation may therefore follow either a product flow approach (value of gross output less total value of intermediate inputs) or an income flow approach (addition of factor shares or factor incomes). The estimation methodology used in this study is the income flow approach since it is more convenient to adopt given the available data.

Gross value added estimates for government corporations are based on the financial statements which they submitted to the COA and the Securities Exchange Commission (SEC), as well as on data from a survey conducted by the PCR in 1985. Take note that these GVA estimates based on financial accounts deviate from the "true" economic contribution of government corporations, i.e., one that reflects social opportunity cost due to several reasons. Expenses and revenue losses arising from the pursuit of noncommercial objectives are not reflected in the accounting magnitudes. The policy environ-

2. From hereon in, government corporations and public enterprises are used interchangeably in this study.

ment may be such that the public enterprise is implicitly subsidized by the government either through a tax exemption or via underpriced inputs. For instance, public enterprise output might be sold ex factory at a price which is less than its opportunity cost due to a conscious government policy to subsidize consumers. The market value of output in this case is understated, too. On the other hand, public enterprise input might be underpriced because the public enterprise is exempt from input taxes. In this case, GVA estimates on financial accounts would be overstated. Although these deviations might be corrected by a system of social accounting (Jones 1981) no such attempt is made in this paper.

2.3 *Fiscal Burden of Public Enterprises*

Conceptually, there is a two-way flow of resources between the government and public enterprises. The latter lay claim on the former's resources by requiring government support in the form of explicit subsidies and other current transfers, equity infusions, implicit subsidies and national government loan outlays and advances. Implicit subsidies to government corporations arise (1) when the government provides for the preferential tax treatment of public enterprises; (2) when the government corporate sector enjoys the use of capital at a price below its social opportunity costs;³ and (3) when the government exercises inadequate control over the output price of natural monopolies such that the said enterprises are able to earn supernormal profits or to avoid losses despite gross cost inefficiencies. At the same time, public enterprises also give rise to a flow of resources to the government in the form of financial dividends, repayments of government loans, interest payments, taxes and implicit dividends. Jones (1981) suggests that one way of explicitly dealing with the noncommercial objective of public enterprises is to treat the costs of pursuing the said objectives as implicit dividends paid by the public enterprises to the government. Fiscal

3. In the Philippines, except for a couple or so, government corporations have not paid dividends to the National Government on the government's share in equity. Furthermore, there were instances in the past when net lending, which is equal to loan outlays of the National Government to the government corporate sector less repayments, was converted to equity shares (Amatong 1985).

balance or fiscal burden of public enterprises is defined as the net flow of resources from the government to the public enterprise sector.

In this paper no attempt is made to measure the implicit transfers between the government and the public enterprise sector. Also, there are no readily accessible data on interest and tax payments of government corporations to the national government. Thus, the fiscal burden that is actually measured in this study consists of (1) current budgetary transfers, (2) equity contributions, and (3) net lending. Data on the first two components are from Amatong (1985) while data on the last component are from the OBM.

2.4 Efficiency Measures

Regardless of (1) the impact of the public enterprise sector on key macroeconomic variables such as GDP, investment, employment, fiscal deficit, foreign debt and money supply; (2) the size of the public enterprise sector; (3) whether public enterprises have purely commercial objectives or whether they have noncommercial objectives as well, it is of the utmost importance that the sector should operate efficiently if it is to play a positive role in economic development. For the purposes of this paper, we look at two measures of public enterprise performance: (1) factor productivity measures, and (3) financial profitability ratios.

2.4.1 *Factor Productivity Measures*

Labor productivity may be defined as the ratio of gross output to labor input or as the ratio of gross value added to labor input. Labor input may be measured in terms of its monetary value (i.e., compensation) or in terms of the number of workers. Similarly, capital productivity is defined as the ratio of gross output or gross value added to capital input. Ideally, capital input should be measured as the rate of return on capital times the net capital stock valued at replacement cost. Several investigators, however, have used the depreciated book value of fixed assets primarily because of its ready availability in the statistics. Finally, total productivity may be defined as the ratio of gross output or gross value added to the sum of all factor inputs.

In this paper, we measure labor productivity as the ratio of GVA

to compensation. In the same manner, we measure capital productivity as the ratio of GVA to the book value of fixed assets. Our basic sources of data are the PCR, COA and SEC.

2.4.2 *Financial Profitability Ratios*

Financial profitability is the most commonly used yardstick to measure enterprise performance and to gauge efficiency. Numerous financial profitability ratios exist. In this paper, we concern ourselves with two indicators: (1) ratio of gross profits to total assets, and (2) ratio of net income to net worth. Gross profits in (1) are defined as net income before taxes and interest charges. Net income in (2) is defined as net income after tax and interest charges.

As a measure of public enterprise performance, financial profitability ratios have the following shortcomings: (1) financial profitability does not take the noncommercial objectives of public enterprises into account; (2) in noncompetitive situations, high financial profits may not truly reflect an efficient enterprise operation but may simply result from "above-normal profits" arising from the exploitation of the enterprise's monopoly power; and (3) financial profits do not take into consideration implicit subsidies like tax/tariff concessions granted to the public enterprise. Financial profitability, therefore, should be used with some caution in discussions of public enterprise efficiency.

In estimating these financial ratios we used the data from the Commission on Audit (COA).

3.0 **Macroeconomic Role and Impact of Government Corporations in the Philippines, 1975-84**

3.1 *Number and Sectoral Distribution*

The COA reported that there were 70 government-owned and/or controlled corporations in 1973. In a decade, this number has more than tripled. In mid-1985, the PCR inventory of government corporations included 245 corporations.

In terms of number, the services sector garnered the biggest share with 25.7 percent of government corporations belonging to this heading. The manufacturing sector includes 19.2 percent of government corporations while the financial sector accounts for

15.9 percent. Electricity, gas and water has the least number of government corporations, accounting for only 2.4 percent.

3.2 *Economic Contribution (Gross Value Added)*

In terms of gross value added, the public enterprise sector grew faster than the total economy at 22.14 percent per annum, on the average, over the period compared to 20.9 percent per year for GDP. High growth sectors were led by mining and quarrying with a growth rate of 175.6 percent, followed by electricity, gas and water; transport, communication and storage, which expanded by 58.2 and 34.9 percent annually, respectively. Manufacturing placed fourth with a growth rate of 25.9 percent.

The government corporate sector's share in Gross Domestic Product increased from 3.0 percent in 1975 to 5.6 percent in 1983 but dropped to 3.66 percent in 1984. In terms of share in sectoral GVA, financing was the sector most dominated by government corporations, with public enterprises accounting for 94.97 percent and 84.1 percent of sectoral GVA in 1983 and 1984, respectively. Government corporations in electricity, gas and water contributed 58.4 percent and 85.9 percent of the sector's GVA in 1983 and 1984, respectively (see Table 1).

The GVA of government corporations in financing constituted the bulk (49.84 percent in 1984) of total GVA of the public enterprise sector while government corporations in electricity, gas and water followed next, contributing 30.71 percent of total public enterprise GVA in 1984 (see Table 2). The top 15 nonfinancial government corporations accounted for 42.41 percent of the GVA of all government corporations (equal to 1.6 percent of GDP) in 1984.

3.3 *Impact of the Public Enterprise Sector on Employment and Investment*

The contribution of government corporations to total employment in the economy is very small. In 1976, public enterprise jobs represented 0.59 percent of total employment. This number increased to 0.77 percent in 1982 and settled at 0.66 percent in 1984 (see Table 3). Government corporations in the electricity, gas and water sector accounted for 17.1 percent of sectoral employment in

TABLE 1
PERCENTAGE SHARE OF GOVERNMENT CORPORATIONS TO SECTORAL VALUE ADDED, 1975-84

<i>Sector</i>	<i>1975</i>	<i>1976</i>	<i>1977</i>	<i>1978</i>	<i>1979</i>	<i>1980</i>	<i>1981</i>	<i>1982</i>	<i>1983</i>	<i>1984</i>
I. Agriculture, forestry & fishery	1.10	.82	.34	.49	.48	.40	.37	.53	.50	.72
II. Mining & quarrying	.00	.00	.00	.00	.00	.05	1.33	1.47	2.42	2.51
III. Manufacturing	.53	.83	1.07	.78	.82	1.11	1.28	1.13	1.21	.86
IV. Construction	.00	.00	.00	.00	.00	.09	.04	.03	.04	.03
V. Electricity	9.24	27.91	23.46	33.06	42.63	53.20	56.72	46.70	58.40	85.88
VI. Transportation	.98	2.75	.98	3.36	2.55	2.15	2.16	2.21	3.23	2.50
VII. Trade	-.71	.55	.23	.19	.71	.74	.62	.29	.66	.38
VIII. A. Financing	58.63	62.27	66.26	66.61	65.03	65.37	90.31	95.47	94.97	84.09
B. Real estate	.09	-.11	.15	-.08	.02	.12	.23	.05	.03	.14
Financing & housing	30.09	33.53	36.42	37.00	37.62	39.54	51.46	53.07	51.46	31.79
IX. Services	.99	.14	.30	.43	.31	.10	.33	.11	.31	.30
All industry	2.97	3.49	3.45	3.73	3.90	4.27	5.14	5.25	5.63	3.66

TABLE 2
PERCENT DISTRIBUTION OF GROSS VALUE ADDED OF GOVERNMENT CORPORATIONS, 1974-85, BY SECTOR

	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984
I. Agriculture, forestry & fishery	10.76	6.54	2.70	3.48	3.17	2.20	1.62	2.29	1.96	5.08
II. Mining & quarrying	.00	.00	.00	.00	.00	.04	.58	.50	.79	1.23
III. Manufacturing	4.38	5.77	7.54	5.12	5.05	6.35	6.12	5.25	5.32	6.00
IV. Construction	.00	.00	.00	.00	.00	.17	.07	.05	.06	.05
V. Electricity	2.87	7.27	.629	8.33	10.69	13.00	12.04	10.56	14.20	30.71
VI. Transportation	1.68	4.28	1.55	5.01	3.73	3.12	2.71	2.65	3.64	4.28
VII. Trade	-.33	2.18	.95	.76	2.82	2.77	1.97	.90	2.01	1.90
VIII. Financing	79.81	73.61	79.86	76.13	73.71	72.03	74.07	77.60	71.41	49.84
Real estate	.12	-.12	.15	-.07	.02	.08	.14	.03	.02	.14
Financing and real estate	79.93	73.50	80.01	76.06	73.72	72.11	74.22	77.64	71.43	49.98
IX. Services	3.69	.46	.96	1.24	.82	.25	.68	.17	.59	.77
Grand Total	100	100	100	100	100	100	100	100	100	100

TABLE 3
 SHARE OF GOVERNMENT CORPORATIONS' EMPLOYMENT
 TO TOTAL EMPLOYMENT (ECONOMY)
 (in percent)

	1976	1977	1978	1980	1981	1982	1983	1984
I. Agriculture, forestry	.30	.31	.16	.17	.14	.18	.11	.11
II. Mining and quarrying	.00	.00	.00	.77	6.36	7.69	6.41	4.65
III. Manufacturing	.21	.22	.20	.41	.46	.57	.69	.39
IV. Construction	.00	.00	.00	.03	.04	.05	.05	.03
V. Electricity	17.13	24.08	26.46	24.77	24.62	31.47	20.97	22.00
VI. Transportation	.90	1.54	1.99	1.92	39.58	1.53	1.51	1.45
VII. Trade	.79	1.27	.94	1.03	1.12	1.25	1.03	.90
VIII. Financing and housing	1.11	8.02	8.26	9.62	10.92	9.89	11.23	10.23
IX. Services		.33	.30	.39	.39	.43	.42	.43
Grand Total	.59	.69	.60	.69	.76	.77	.71	.66

1976, 31.5 percent in 1982 and 22.0 percent in 1984. In the financing/housing sector, public enterprises contributed approximately 8.5 percent of sectoral employment in the period. These are the only two sectors where public enterprise employment is significant. In the other sectors the share of government corporations is less than 2 percent of total employment in the sector.

Investment data of government corporations outside of the 15 major nonfinancial government corporations are not available. However, capital expenditures of the 15 major nonfinancial government corporations for 1978-84 are provided in Table 4 from which we observe that fixed investment of this group of government corporations represents 15.7 percent of gross domestic capital formation in this period.

3.4 *Fiscal Budgetary Burden*

Table 5 summarizes the fiscal burden of government corporations and its relationship to key national government budgetary variables and GNP. The fiscal or budgetary burden of public enterprises has expanded very rapidly over the decade under consideration with an average annual rate of growth of 40.9 percent. Compare this with the yearly growth rate of 15.5 percent for national government expenditures, 14.6 percent for national government total receipts and 18.5 percent for GNP. Net lending is the fastest growing component of the fiscal burden. It increased by 63.3 percent per year on the average. Current transfers, on the other hand, barely increased over the period. These movements are reflected in the changing pattern of the percentage distribution of the three components of the fiscal burden of public enterprises. In 1975, current transfers accounted for 30.7 percent, equity infusions for 56.2 percent, and net lending for 13.1 percent of the budgetary burden. In 1984, the share of current transfers stood at 2.1 percent, equity contributions at 48.3 percent and net lending at 49.6 percent (see Table 6). In a sense, what we observe is a shift from a more overt to a more covert way of national government financing of public enterprise deficits. Amatong (1985) has pointed out that the distinction among the three components of the fiscal burden is not well-defined outside of the OBM/National Treasury accounting frameworks. To wit,

TABLE 4
CAPITAL EXPENDITURES OF 15 MAJOR NONFINANCIAL GOVERNMENT
CORPORATIONS AND GROSS DOMESTIC CAPITAL FORMATION,
1978-84
(In million pesos)

<i>Year</i>	<i>Capital expenditures of top 15 government corporations (1)</i>	<i>Gross domestic capital formation (2)</i>	<i>(1)÷(2) (%)</i>
1978	7281	51348	14.18
1979	9518	67687	14.06
1980	11079	81153	13.65
1981	15293	93261	16.40
1982	15028	96521	15.57
1983	19449	102526	18.97
1984	15282	100820	15.16
1978-84	92930	593316	15.66

Source: NEDA.

The reason for treating equity contributions as subsidy is that except for two or three, public enterprises, in general, have not paid dividends to the National Government on the paid-in capital stock; secondly, capital contributions have generally been used by public enterprises to fund operating expenditures which, therefore, does not distinguish it from current contributions. While net lending by the National Government to government corporations, strictly speaking, is expected to be repaid, there were instances in the past that the net lending accounts were transferred or converted into equity contributions.

Looking at the fiscal burden of public enterprises in the different sectors, we observe that financing accounted for the biggest share from 1975 to 1977 (29.1 percent in 1975 to 36.1 percent in 1977), as well as for 1981 (41.57 percent) and 1984 (71.1 percent).

TABLE 5
 FISCAL BURDEN OF GOVERNMENT CORPORATIONS AND ITS RELATIONSHIP TO NATIONAL GOVERNMENT
 EXPENDITURES, NATIONAL GOVERNMENT RECEIPTS, NATIONAL GOVERNMENT FISCAL DEFICIT, AND
 GROSS NATIONAL PRODUCT, 1975-84
 (In million pesos)

Year	Fiscal Burden				Ratio of	Ratio of	Ratio of	Ratio of	Ratio of	Ratio of	Ratio of	Ratio of	Ratio of		
	Cur- rent trans- fers	Equity contri- bution	Net Lending	Total	National govt. budgetary expend. (in percent)	National govt. budgetary receipts (in %)	National govt. total receipts (in %)	National govt. total deficit (in %)	Gross national product	burden to GNP (in %)	to GNP (in %)	Nat. govt. deficit net of fis- cal burden (in MP)	Ratio of simulated deficit/ (sur- plus) to GNP		
1975	285	522	122	929	18259	5.09	16856	5.51	1403	66.22	114438	.81	1.23	474	.41
1976	392	1804	100	2296	20438	11.23	18089	12.69	2349	97.74	134202	1.71	1.75	53	.04
1977	246	2252	45	2543	22811	11.15	19959	12.74	2852	89.17	153255	1.66	1.86	309	.20
1978	632	2245	238	3115	26240	11.87	24073	12.94	2167	143.75	177022	1.76	1.22	-948	-.54
1979	478	3391	853	4722	29812	15.84	29470	16.02	342	1380.70	218032	2.17	.16	-4380	-2.01
1980	505	4739	675	5919	38118	15.53	34731	17.04	3387	174.76	264532	2.24	1.28	-2532	-.96
1981	564	7862	929	9355	48079	19.46	35933	26.03	12146	77.02	303628	3.08	4.00	2791	.92
1982	889	8419	2218	11526	52610	21.91	38205	30.17	14405	80.01	335435	3.44	4.29	2879	.86
1983	586	4821	2393	7800	53063	14.70	46641	16.72	7431	104.97	378745	2.06	1.96	-369	-1.10
1984	429	9819	10086	20334	66689	30.49	57638	35.28	9828	206.90	526300	3.86	1.87	-10506	-2.00
1975- 84	5006	45874	17659	68539	376119	18.22	321595	21.31	121.72	242.12	2605589	2.28	1.96	-12229	.32
Average growth rate, 1975-84	4.6	38.5	63.3	40.9		15.5				14.6	18.5				

Sources: Current Transfers and Equity Contributions are from Amatong (1985).
 Government expenditures, receipts and deficits are from OBM. GNP is from NEDA.

TABLE 6
 PERCENTAGE DISTRIBUTION OF THE COMPONENTS OF THE
 FISCAL BURDEN, 1975-84
 (In percent)

<i>Year</i>	<i>Current transfers</i>	<i>Equity contribution</i>	<i>Net lending</i>	<i>Total</i>
1975	30.68	56.19	13.13	100.00
1976	17.07	78.57	4.36	100.00
1977	9.67	88.56	1.77	100.00
1978	20.29	72.07	7.64	100.00
1979	10.12	71.81	18.06	100.00
1980	8.53	80.06	11.40	100.00
1981	6.03	84.04	9.93	100.00
1982	7.71	73.04	19.24	100.00
1983	7.51	61.81	30.68	100.00
1984	2.11	48.29	49.60	100.00
1975-84	7.30	66.93	25.76	100.00

In the other years, the lion's share of the fiscal burden went to electricity, gas and water (44.04 percent in 1978, 44.2 percent in 1979, 40.3 percent in 1980, 28.6 percent in 1982, and 31.9 percent in 1983). (See Table 7.)

The 15 major nonfinancial government corporations, on the other hand, consistently captured more than two-thirds of the total fiscal burden of public enterprises from 1975 to 1983. Their peak share reached 80.1 percent in 1983. However, in 1984, their share plummeted to 27.6 percent, reflective of the increased national government assistance to the financially-strapped government corporate financial sector in 1984, particularly DBP and PNB.

Government corporations which individually contribute significantly to the fiscal burden of the public enterprise sector are presented in Table 8. The National Power Corporation, the Development Bank of the Philippines, and National Irrigation Administration are the major recipients of the national government contributions in 1975-84.

TABLE 7
FISCAL BURDEN OF GOVERNMENT CORPORATIONS, BY SECTOR, 1975-84
(In thousand pesos)

Year	S E C T O R									Total
	I	II	III	IV	V	VI A.	VII B.	VIII Banks, nonbanks, insurance, & housing	IX Service	
	<i>Agric., forestry & fishery</i>	<i>Manu- facturing</i>	<i>Elect., com. & water</i>	<i>Transp. com. & storage</i>	<i>Trade</i>	<i>Banks, nonbanks, insurance</i>	<i>Housing</i>			
1975										
Level	106498.00	261926.00	119000.00	26353.00	36813.00	228000.00		228000.00	5312.00	905902.00
% to total	11.76	28.91	13.14	2.91	4.06	25.17		25.17	.59	100.00
1976										
Level	283508.00	230570.00	597345.00	60809.00	242914.00	709000.00	11000.00	72000.00	61344.00	2296490.00
% to total	12.35	10.04	26.01	2.65	10.58	30.87	.48	31.35	2.67	100.00
1977										
Level	256278.00	48407.00	877340.00	110500.00	115619.00	887910.00	102000.00	989910.00	62200.00	2505254.00
% to total	10.23	1.93	35.02	4.41	4.62	35.44	4.07	39.51	2.48	100.00
1978										
Level	175190.00	411870.00	1256000.00	125720.00	138380.00	586000.00	99090.00	685090.00	59550.00	3089000.00
% to total	5.67	13.33	40.65	4.07	4.48	18.97	3.21	22.17	1.93	100.00
1979										
Level	374340.00	260370.00	1707000.00	216350.00	168480.00	838000.00	220000.00	1058000.00	76100.00	4713640.00
% to total	7.94	5.52	36.21	4.59	3.57	17.78	4.67	22.45	1.61	100.00

Table 7 (Continued)

Year	S E C T O R									Total
	I	II	III	IV	V	VI	VII	VIII	IX	
	Agric., forestry & fishery	Manu- facturing	Elect., com. & water	Transp. com. & storage	Trade	A. Banks, nonbanks, Insurance	B. Housing	Banks, nonbanks, insurance, & housing	Service	
1980										
Level	533820.00	177390.00	2117000.00	428759.00	242550.00	1433200.00	189600.00	1622800.00	127690.00	5924209.00
% to total	9.00	2.99	35.73	7.24	4.09	24.19	3.20	27.39	2.16	100.00
1981										
Level	1339300.00	391390.00	2142650100	234120.00	195940.00	3900760.00	781300.00	4682140.00	398083.00	9383623.00
% to total	1.27	4.17	22.83	2.49	2.09	41.57	8.33	49.90	4.24	100.00
1982										
Level	2238254.00	197220.00	3353010.00	725244.00	450330.00	3334573.00	015430.00	4350003.00	426943.00	11741004.00
% to total	19.06	1.68	28.56	6.18	3.84	28.40	8.65	37.05	3.64	100.00
1983										
Level	1909843.00	318810.00	2543620.00	422200.00	239263.00	1118190.00	818310.00	1936500.00	616794.00	7987030.00
% to total	23.9	3.99	31.85	5.29	3.00	14.00	10.25	24.25	7.72	100.00
1984										
Level	1230570.00	20080.00	2657550.00	768110.00	267190.00	14578340.00	362960.00	14941300.00	612500.00	20499300.00
\$ to total	6.00	.11	12.96	3.75	1.30	71.12	1.77	72.89	2.99	100.00

TABLE 8
MAJOR CONTRIBUTORS TO THE FISCAL BURDEN OF
PUBLIC ENTERPRISES, 1975-1984
(In million pesos)

<i>Corporation</i>	<i>Current contri- bution</i>	<i>Equity contri- bution</i>	<i>Net* lending</i>	<i>Total</i>
1. National Power Corporation	.00	12478.00	3325.94	15803.94
2. Development Bank of the Philippines	.00	7339.00	6418.53	13757.53
3. National Irrigation Administration	295.50	3599.00	2798.37	6692.87
4. National Development Company	20.00	4137.90	-.55	4157.35
5. National Electrification Administration	.00	1863.00	645.32	2508.32
6. Philippine National Oil Company	984.50	1087.30	-68.22	2003.58
7. National Housing Authority	134.40	1674.90	193.92	2003.22
8. Philippine National Bank	.00	1650.10	348.06	1998.16
9. Metropolitan Waterworks & Sewerage System	.70	1505.00	-35.70	1470.00
10. Human Settlement Development Corporation	.00	1146.80	.00	1146.80

Source: Amatong (1985) for current and equity contribution.

Net Lending data is from 191 to 1984 only. Fiscal Planning Office, Office of Budget Management.

Government corporations have had considerable impact on the fiscal performance of the National Government. The budgetary burden of public enterprise averaged 18.2 percent and 21.3 percent of national government expenditures and revenues, respectively, in the period 1975-80. In 1975, the fiscal burden was 5.1 percent of national government expenditures and 5.5 percent of national government receipts. These ratios increased continuously until they reached 21.9 percent and 30.2 percent in 1982. In 1983, the ratios declined significantly but in 1984 they zoomed up again such that, in that year, the fiscal burden stood at 30.4 percent of total expenditures and 35.3 percent of total receipts (see Table 5).

The budgetary burden of public enterprises may be met by increasing government revenues and/or cutting down on other government expenditures or they may be passed forward into higher government deficits which are then financed by borrowings and/or money creation. In the last decade, the revenue raising performance of the government has deteriorated; thus, the budgetary burden of public enterprises has been translated into: (1) a reduction in relative shares of other expenditure items like personal services and maintenance and operating expenditures, and (2) increased national government deficits.⁴ A comparison of the growth rates of the fiscal burden and government deficits indicates that an increase/decrease in the budgetary burden is usually associated with a corresponding movement in the same direction in the budget deficit. This is true in seven out of the nine years compared. Exceptions are the years 1978 and 1979 (see Table 9).

On the average, in 1975-84 the fiscal burden was 1.22 times the budget deficit. If the budgetary burden of government corporations were netted out of total government expenditures, budget surpluses would have been posted in 1978, 1979, 1980, 1983 and 1984. Also, for the ten-year period under discussion there would have been a budget surplus equal to .3 percent of GNP instead of a budget deficit equal to 2.0 percent of GNP (see Table 5).

The impact of the national government deficit in monetary aggregates in recent years was analyzed by Lamberte and Remolona (1986). To wit:

4. The trends in the distribution of government expenditures are well documented in de Dios et al. (1984) and Lamberte et al. (1985).

TABLE 9
COMPARATIVE GROWTH RATES OF THE FISCAL BURDEN AND
NATIONAL GOVERNMENT DEFICIT, 1975-84
 (In percent)

<i>Year</i>	<i>Fiscal burden</i>	<i>Budget deficit</i>
1976-75	147.15	67.43
1977-76	10.76	21.41
1978-77	22.49	-24.02
1979-78	51.59	-84.22
1980-79	25.35	890.35
1981-80	58.05	258.61
1982-81	23.21	18.60
1983-82	-32.33	-48.41
1984-83	160.69	32.26

In 1980, commercial banks were still financing the bulk of the budget deficit. . . . By 1981, however, in spite of a much larger deficit to finance, commercial banks provided less than half of the 1980 level of financing. . . . the result was still that the government had to resort to currency creation much more than to any other domestic means of financing. . . . The demands the government placed on currency creation, however, far exceeded the willingness of the public to absorb it As a consequence, the increments in base money in 1981 and 1982 fell far short of Central Bank holding to the national government . . . this meant that other sources of base money creation had to suffer. One such other source, Central Bank liquidity credit to commercial banks, did decline somewhat but not nearly enough to accommodate the credit requirements of the national government. As it turned out, the entire burden of accommodation was placed in Central Bank holdings of international reserves . . . leading to the external payments crisis in 1983.

3.5 Other Sources of Financing of Public Enterprise Deficits

In addition to national government contributions, government

corporation deficits are financed by borrowing from the domestic banking system and other domestic sources as well as external/foreign borrowings. Domestic borrowings of public enterprises may replace credit that would otherwise go to the private sector, i.e., crowd out private borrowings. At the same time, public enterprise deficits may also lead to an increase in overall credit creation. On the other hand, foreign borrowings may have grave implications on the foreign debt burden in the long run.

It is unfortunate that statistics on the borrowings of government corporations are not available except those for the 15 major nonfinancial government corporations. However, Prime Minister Virata, in a speech in 1985, gave some indication in this regard: "the government corporate sector has laid claim in recent years to up to about a third of outstanding domestic public debt and about three fourths of outstanding external public debt."

Total financing of the deficits of the 15 major nonfinancial government corporations is presented in Table 10. Total financing of the 15 government corporations is 3.2 percent of GNP. Net external borrowings which averaged at 2.3 percent of GNP constituted more than two thirds of total financing. The contribution of net domestic borrowings is practically nil. Some 90 percent of capital expenditures are financed from outside sources, i.e., from funds that are not internally generated. Amatong (1985) has pointed out that government corporations borrow for reasons other than financing their capital expenditures, e.g., they borrow for their working capital requirement. This appears to be the case in 1982 when total financing of the 15 corporations was 14 percent more than their capital expenditures.

3.6 *Factor Productivity*

We have attempted to measure partial factor productivity indicators for government corporations. These estimates are presented in Table 11 and Table 12. What we initially intended to do was to compare our estimates to existing estimates obtained for the whole economy or subsectors of the economy. However, previous studies on factor productivity do not have the same time frame as the present paper.

In lieu of the original plan, we then looked at the data from the 1981 Census of Establishments and computed factor productivity

TABLE 10
SOURCES OF FINANCING OF 15 MAJOR NONFINANCIAL CORPORATIONS, 1975-84
(In million pesos)

<i>Year</i>	<i>Contribution from national government (fiscal burden)</i>	<i>Ratio of contributions to GNP (in percent)</i>	<i>Net external financing</i>	<i>Ratio of net external financing to GNP (in percent)</i>	<i>Net domestic borrowing</i>	<i>Ratio of net domestic borrowings to GNP (in percent)</i>	<i>Total financing</i>	<i>Ratio of total financing to GNP (in percent)</i>	<i>Capital expenditures</i>	<i>Ratio of total financing to capital expenditures</i>
1978	2235.8	1.3	2512	1.4	907	.05	5644.8	3.2	7281	77.5
1979	3334.5	1.5	5519	2.5	-2253	-1	6600.5	3	9518	69.4
1980	4300	1.6	5680	2.1	16	.01	9996	3.8	11079	90.1
1981	7169.3	2.4	7933	2.6	-514	-.2	14588.3	4.8	15293	95.2
1982	8378.2	2.5	7934	2.4	701	.2	17013.2	5.1	15028	113.6
1983	6402.2	1.7	10557	3.8	600	.2	17559.2	4.6	19448	90.3
1984	5663.5	1.1	10108	1.9	-3320	-.6	12451.5	2.4	15282	81.5
1978-84	37483.5	1.4	50243	2.3	-3863	-.1	83853.5	3.2	92930	90.2

Source: NEDA.

TABLE 11
RATIO OF GROSS VALUE ADDED (GVA) TO COMPENSATION OF GOVERNMENT CORPORATIONS
BY SECTOR, 1975-84
(In thousand pesos)

	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984
I. Agriculture, forestry and fishery	4.02	2.91	1.16	1.69	1.40	1.55	1.32	1.66	1.99	3.54
II. Mining and quarrying	.00	.00	.00	.00	.00	1.24	1.04	1.16	1.39	1.68
III. Manufacturing	2.77	3.83	5.54	5.39	5.93	7.35	6.58	5.53	5.48	4.38
IV. Construction	.00	.00	.00	.00	.31	4.26	2.13	1.89	2.63	2.53
V. Electricity	1.79	5.22	4.36	5.52	5.49	6.67	6.44	5.23	7.63	12.11
VI. Transportation	.86	2.32	1.85	2.69	2.00	2.03	2.22	2.46	3.82	3.41
VII. Trade	-2.99	2.26	.74	.41	1.46	1.55	1.22	.56	1.30	.99
VIII. Financing	7.10	7.57	7.90	6.95	6.70	7.19	8.57	8.82	9.56	5.48
Housing	.92	-.58	.45	-.20	.85	.21	.34	.08	.04	.24
Financing and housing	7.03	7.41	7.73	6.75	6.49	6.92	8.20	8.40	9.04	5.16
IX. Services	4.69	.36	.74	.97	.66	.19	.56	.13	.50	.45
Grand total	4.74	5.22	5.12	4.81	4.66	5.17	5.64	5.55	6.26	4.84

TABLE 12
RATIO OF GVA TO BOOK VALUE OF FIXED ASSETS
OF GOVERNMENT CORPORATIONS
BY SECTOR, 1975-84

<i>Sector</i>	<i>1981</i>	<i>1982</i>	<i>1983</i>	<i>1984</i>
I. Agriculture, forestry, and fishery	.03	1.48	.61	1.16
II. Mining and quarrying	.28	.14	.15	.10
III. Manufacturing	.60	.55	.39	3.79
IV. Construction	2.90	.38	.63	.54
V. Electricity	.06	.04	.05	.06
VI. Transportation	.08	.08	.06	.06
VII. Trade	.14	.03	.03	.03
VIII. A. Financing	2.44	1.34	2.26	.46
B. Housing	.02	.002	.001	.008
Finance and housing	2.0	1.05	1.49	.40
IX. Services	.43	.0001	.0005	.0004
Grand Total	.27	.24	.20	.12

measures based on these (see Table 13). Capital productivity of census establishments is 2.6 times that of government corporations. However, labor productivity of Census Establishments is only slightly over one-half that of government corporations. These results are perhaps due partly to the high capital intensity of government corporations. Total factor productivity of census establishments is 2.2 times that of government corporations. While we are the first to admit that such a one year comparison of factor productivity is risky we are presenting these results to give some indication of how government corporations compare with private corporations using our present data on public enterprises. Hooley (1985) had similar results for the manufacturing sectors:

TFP in private corporations was only 12.4 per cent higher than in government corporations during the fifties. A decade later, however, it was 56.2 per cent higher. So the shift of corporate assets from private to government-controlled must have had a significant downward impact

TABLE 13
FACTOR PRODUCTIVITY OF GOVERNMENT CORPORATIONS
AND CENSUS ESTABLISHMENTS, 1981

GVA (in million pesos)	
Government corporations	16198
Census establishments	105309
Book Value of Fixed Assets (in million pesos)	
Government corporations	48056
Census establishments	122009
Compensation (in million pesos)	
Government corporations	2462
Census establishments	27697
GVA ÷ Fixed Assets Ratio	
Government corporation (1)	.333
Census establishments (2)	.863
(2) - (1) x 100	259.2
GVA ÷ Compensation Ratio	
Government corporations (1)	6.579
Census establishments (2)	3.802
(2) - (1) x 100	57.8
GVA ÷ Fixed Assets plus Compensation (Total factor productivity) Ratio	
Government corporations (1)	.317
Census establishments	.703
(2) - (1) x 100	22.1

a. The data presented here exclude those pertaining to the agricultural sector since agriculture is not included in the 1981 Census of Establishments.

Source: NCSO.

on TFP performance for all corporations taken in the aggregate. Looking further at the partial productivity comparisons, production per worker was essentially the same for private and government corporations in 1950–1960. But from 1960 [to] 1970 the government sector recorded a particularly disappointing performance with production per

worker falling to about one-fourth that in the private sector. On the contrary, it performed better than the private sector with regard to the use of intermediate inputs, and only somewhat more poorly in its use of capital.

3.7 *Financial Performance of Government Corporations*

In this section, we estimate for government corporations two financial profitability indicators, namely: (1) ratio of gross profits (net income before taxes and interests) to total assets, and (2) ratio of net income after tax to net worth (see Table 14 and Table 15). In 1984, the rate of return on assets of all COA audited government corporations was 4.3 percent while their rate of return on net worth was negative 1.4 percent. Government corporations engaged in research, civic, scientific, social and banking activities all registered negative rate of return on assets. Those in agricultural/financing and insurance posted the highest rates of return on assets of 15.0, 12.7 and 9.7 percent, respectively.

Trading exhibited the highest rate of return on equity at 30.7 percent, with the energy sector following next with 18.1 percent. Banking had the lowest rate of return on equity at negative 49 percent.

The rate of return on assets of all the 15 major nonfinancial corporations was below five (5) percent in 1984. LWUA posted the highest rate of return on assets at 4.6 percent. On the other hand, PNR had the lowest at negative 1.2 percent while EPZA and NIA operations likewise resulted in negative rates of return on assets.

Looking at the rate of return on equity, NFA registered the best performance with 27.8 percent followed by PNOC with 18.7 percent. PNR, NPC, EPZA, NIA and HSDC all exhibited negative rates of return on equity.

However, the financial ratios presented above should be used with some caution in judging the performance of public enterprises because of the caveats raised in Section 2.4.2.

4.0 **Conclusions and Recommendations**

Government corporations had expanded rapidly in the last decade in terms of both number and value added contribution. Despite this development, the sector's contribution to employment remains very small. However, the public enterprise sector's share in

TABLE 14
 RATE OF RETURN ON TOTAL ASSETS AND RATE OF
 RETURN ON NET WORTH OF GOVERNMENT
 CORPORATIONS, 1984¹
 (In percent)

	<i>Rate of return on total assets (%)</i>	<i>Rate of return on net worth (%)</i>
Total	4.3	(1.4)
Financial	(0.7)	(5.6)
Banking	(2.0)	(49.03)
Financial	1.6	4.8
Insurance	9.7	10.8
Infrastructure and		
Public Utilities	2.0	(0.2)
Water	0.9	1.4
Transport	2.9	2.5
Energy	2.2	(1.8)
Housing	0.6	0.1
Financing	1.9	0.8
Industrial and Area		
Development	3.0	6.9
Area Development	1.2	(0.9)
Energy	3.6	18.1
Industrial	2.7	2.3
Real Estate	1.6	0.9
Agricultural, Trading		
and Promotional	2.3	9.1
Agricultural	15.0	6.8
Financing	12.7	12.9
Manufacturing	0.1	6.4
Promotional	3.7	3.9
Trading	1.5	30.7
Educational, Social		
Cultural, Scientific,		
and Civic organizations	0.4	0.1
Educational	0.1	(1.6)
Social	(0.2)	1.0
Cultural	2.5	8.6
Scientific	(3.7)	(3.9)
Civic	(1.4)	(3.1)
Research	(7.1)	(7.7)

Source: COA.

1. Uses COA classification.

TABLE 15
 RATE OF RETURN ON TOTAL ASSETS AND RATE OF
 RETURN ON NET WORTH OF TOP 15 MAJOR
 NONFINANCIAL GOVERNMENT CORPORATIONS,
 1984

<i>Top 15 corporations</i>	<i>Rate of return on total assets (%)</i>	<i>Rate of return on net worth (%)</i>
NIA	(0.7)	(1.1)
PNOC	3.6	18.7
MWSS	2.9	4.8
NPC	2.2	(1.8)
PPA	3.9	2.4
PNR	(1.2)	(4.6)
MMTC	3.4	1.8
LRTA	0.6	1.5
NFA	2.6	27.8
EPZA	(0.8)	(1.5)
LWUA	4.6	.6
NEA	1.5	.6
NDC	3.1	2.9
NHA	0.5	.1
HSDC	1.7	(.5)

Source: COA.

investment is quite significant (more than 15 percent of GDCF). We should point out, though, that the sector's real contribution to investment is not as large as this number indicates since only 10 percent of this expenditure was internally financed.

The overall deficit of the public enterprise sector in 1975-84 is large. The 15 major nonfinancial government corporations alone have a combined deficit equal to 3.2 percent of GNP in 1980-84. Although no firm estimates are available, the overall deficit of all government corporations in the last five years may well exceed 5 percent of GNP.

To finance these deficits, government corporations have relied very heavily on foreign borrowings and on national government support. More than 70 percent (representing 2.3 percent of GNP) of the deficit of the 15 major nonfinancial government corporations

in the last five years were financed from external borrowings while the remainder came from national government contributions. The fiscal burden of government corporations amounted to 2.3 percent of GNP in 1975-84 or 20 percent more than the national government deficit.

The large size of the demand of the government corporations on the national government budget, given the sluggish growth in tax collections in the period, has resulted in: (1) a reduction in the relative share of other expenditure items like those on personal services, maintenance and operating expense, etc.; and (2) increased national government borrowings, both from the banking system and the Central Bank. To the extent that the national government deficit is attributable to the public enterprise sector, and to the extent that national budget deficit was financed by money creation, then the government corporate sector may have been a cause of the stabilization problems experienced by the country in the period.

On the other hand, the sizable demand for foreign borrowings by government corporations in the last decade is now seen as a major cause of the present-day fiscal budget and balance of payments difficulties as the foreign debt burden of the public enterprise sector imposes a heavy demand on both foreign exchange and on national government resources/budget.

Finally, the paper suggests that the public enterprise sector has not been an efficient user of scarce resources. Productivity estimates indicate that the sector is a drag on the economy. Total factor productivity of government corporations is only 45 percent that of non-governmental enterprises in 1981. Similarly, the rate of return on total assets of government corporations is low, less than five (5) percent in 1984.

To relieve the financial burden on the national government imposed by the public enterprise sector as well as to raise productivity and promote efficiency, we made the following recommendations:

- (1) The government should rationalize the public enterprise sector by divesting itself of some of its corporate holdings. The identification of the appropriate activities and sectors to be covered by such a privatization program, as well as of the guidelines, mechanics and institutional arrangements that will govern the disposition of government interests in selected enterprises, should be the subject of further study.

- (2) For the government corporations that will remain under the public enterprise umbrella, the government should install measures that will ensure more efficient operations. These measures should include reforms and improvements of the existing systems of (a) external control, (b) internal control, (c) pricing and investment decision making, and (d) performance evaluation.

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