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SCHOOL OF ECONOMICS
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**A PROPOSED METHOD OF CORRECTING THE
CONSTRUCTION ENTRIES IN THE 2006 PHILIPPINE INPUT-
OUTPUT TABLE**

ALBERT E. LAMBERTE, KRISTA DANIELLE YU, AND

CAESAR CORORATON

DISCUSSION PAPER

A PROPOSED METHOD OF CORRECTING THE CONSTRUCTION ENTRIES IN THE 2006 PHILIPPINE INPUT-OUTPUT TABLE

Abstract

The construction of national input-output (IO) tables follows internationally acceptable standards such as the United Nations Systems of National Accounts (UN SNA) and European System of Accounts (ESA). These standards are used to ensure tractability and coherence between country tables. The 2006 Philippine IO table published by the Philippine Statistics Authority (PSA) assumes that the construction sector does not provide any input to the production of output for any economic sector. With the booming infrastructure development in the Philippines, this assumption that intermediate demand for construction output has a value of zero is unreasonable. This study proposes a corrective approach to determine the entries for the construction sector by utilizing the sectoral shares of intermediate demand from the 2000 Philippine IO table. This yields a more realistic inter-industry transactions matrix that will provide better insights for economic planning and impact analysis.

CORRECTION OF THE CONSTRUCTION ENTRIES IN THE 2006 PHILIPPINE INPUT-OUTPUT TABLE

A. Lamberte¹, K.D. Yu², C. Cororaton³

Introduction

Input-output (IO) analysis was developed by W. Leontief (1936) as a systematic tool for analysing the interdependencies between economic sectors for which he won the Nobel Prize. The rows of the IO table show the monetary value of each sector and each agent's consumption for a specific sector, which sums up to the total output of the specific sector. The columns of the IO table present the monetary value of a sector's demand for each of the other sectors' output, which is used as an input for its production, or the total input. It should be noted that total input and total output are equal at all times.

National statistics offices are usually tasked to publish official IO tables for each country. These serve as a basis for economic planning as well as regional and global analysis with the emergence of multi-regional tables. Hence, there is a need to ensure that national IO tables satisfy internationally acceptable standards such as the United Nations Systems of National Accounts (UN SNA) and European System of Accounts (ESA).

Each country publishes its IO tables at varying frequencies. For example, developed countries such as the United States, Japan, and European Union countries publish IO tables on an

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annual basis (United States Bureau of Economic Analysis, n.d.; EUROSTAT, n.d.). Due to the costly nature of constructing such database, developing countries publish IO tables less frequently. In the case of Singapore, once every three years (Department of Statistics Singapore, n.d.), in Malaysia, once every five years (Department of Statistics Malaysia, n.d.) and in the Philippines, it is published on an irregular basis (Philippine Statistics Authority, 2016).

IO analysis has also been used to show the economic contributions of a sector to the economic growth and tax collections (Katz & Koutroumpis, 2012). Technical coefficients can also be used to observe structural changes over time. Soliven, Villaquer, and Zozobrado (2004) analysed the transformation of the Philippine IO tables across 25-year period. Aside from inter-industry transaction analysis, IO analysis is also useful for assessing policy impacts on employment. Magtibay-Ramos, Estrada, and Felipe (2007) used IO analysis to estimate the employment generation and output expansion resulting from influx of business process outsourcing sector activities. Beyond the traditional IO analyses, IO tables also serve as a fundamental input to the construction of a social accounting matrix (SAM). The SAM is a comprehensive dataset that includes income and expenditure of various economic agents (Round, 2003). Integrating the SAM with a computable general equilibrium (CGE) model will yield insights for policy impact evaluation such as imposing quantitative restrictions on rice (Cororaton, 2004), using agricultural crops for biofuel feedstock (Rodriguez & Cabanilla, 2008), and increasing infrastructure spending (Savard, 2010) among others. Further extensions on the IO model to account for disruptions to the economy resulting from natural hazards (Yu, Tan, Aviso, Promentilla, & Santos, 2014; Aviso et al., 2015a; Yu, Aviso, Promentilla, Santos, & Tan, 2016) and mandatory biodiesel blending (Aviso et al., 2015b) have also been implemented.

The volume of economic studies hinged on IO data is growing in number. While the latest Philippine IO table published by PSA is for the year 2006, previous studies remain to use the 2000 Philippine IO table. According to PSA (2014), the 2006 Philippine IO table adapts the 2008 SNA standards and takes into account the emergence of new industries, which result in new sector classifications. It should be noted that for all sectors, it has been assumed that the Construction sector does not contribute to the production of all other sectors including itself given that the entire row which sums up to intermediate demand has a value of zero. Despite this, the column entries of the Construction industry have a total of PhP 4,206.9 Million, while the row entries yield the same total amount, satisfying the basic assumption that the row sum should equal the column sum for each sector. Furthermore, in the 2006 Philippine IO database, gross fixed capital formation (GFCF) was disaggregated into four categories such as Construction, Durable Equipment, Breeding Stock & Orchard Development, and Intellectual Property Products (PSA, 2013). Since total output of each sector is the sum of intermediate demand and final demand, and intermediate demand for the Construction sector was assumed to be zero, the row sum and column sum remains equal as the GFCF for construction of the Construction sector amounts to PhP 545,199 million. Revisiting the definition of GFCF in the 2008 SNA as the “total value of a producer’s acquisitions, less disposals, of fixed assets during the accounting period plus certain specified expenditure on services that adds to the value of non-produced assets” (United Nations, European Commission, International Monetary Fund, Organisation for Economic Co-operation and Development, & World Bank, 2009, p. 623). In Paragraph 10.54, the definition of GFCF excludes assets that take some time to produce such as construction projects and some cultivated biological resources, only if these assets are on their own account will they count as GFCF (United Nations et al., 2009). While some firms have the capacity to

engage in construction activities on their own, most firms will employ other firms to build such assets, which under the 2008 SNA definition will count as intermediate consumption from the Construction sector.

This paper proposes a simple procedure to reconcile the 2006 Philippine IO table entries and account for the contributions of the Construction sector to the production process of other sectors in the Philippine economy. The succeeding sections are organized as follows: Part 2 discusses the procedure, Part 3 shows the correction of the Construction sector and the value-added, and Part 4 presents the conclusion and recommendations.

Procedure

The paper proposes a simple way of adjusting the entries for the Construction row. The 2000 Philippine IO table is used as a reference value for the inter-industry dependence of the other sectors to the Construction sector. The total value of the intermediate demand for the Construction sector in 2000 is PhP 19,873.82 million. The share of each sector is computed using Equation (1):

$$SecShare_i = \frac{ID_j}{TID} \quad (1)$$

where $SecShare_i$ is the share of the intermediate demand of sector i from the total output produced by the Construction sector; ID_j is the monetary value of intermediate demand of sector j for the output of the Construction sector; and finally, TID is the total intermediate demand of the Construction sector. Note that the ID_j and TID are in monetary values while the $SecShare_i$ is in percentage.

The computed share of the intermediate demand for each sector from the 2000 Philippine IO table is then used in computing for the row entries in the 2006 Philippine IO table. The value of the intermediate demand, ID_j , is determined using Equation (2).

$$ID_j = TID_{2006} \cdot SecShare_j \quad (2)$$

It is assumed that the GFCF for the Construction sector is the total intermediate demand for the Construction sector in 2006 TID_{2006} , which is approximately PhP 545,199 million.

However, it was also observed that some of the sectors in the 2000 Philippine IO table are not present in the 2006 IO model and vice-versa. Majority of these sectors were found specifically in the manufacturing/industrial sectors (i.e. manufacturing of motors, wood furniture, etc.). This may be explained by the emergence of some major sectors and the decrease in economic activities that contribute to the economy between the years 2000-2006. In the procedure done, some sectors were either aggregated or disaggregated in the 2006 Philippine IO table to be able to match the 2000 Philippine IO table. However, some disaggregated sectors in 2006 Philippine IO table were assumed to have an equal share from the 2000 Philippine IO table for simplicity purposes. Figure 1 shows the summary of the procedure.

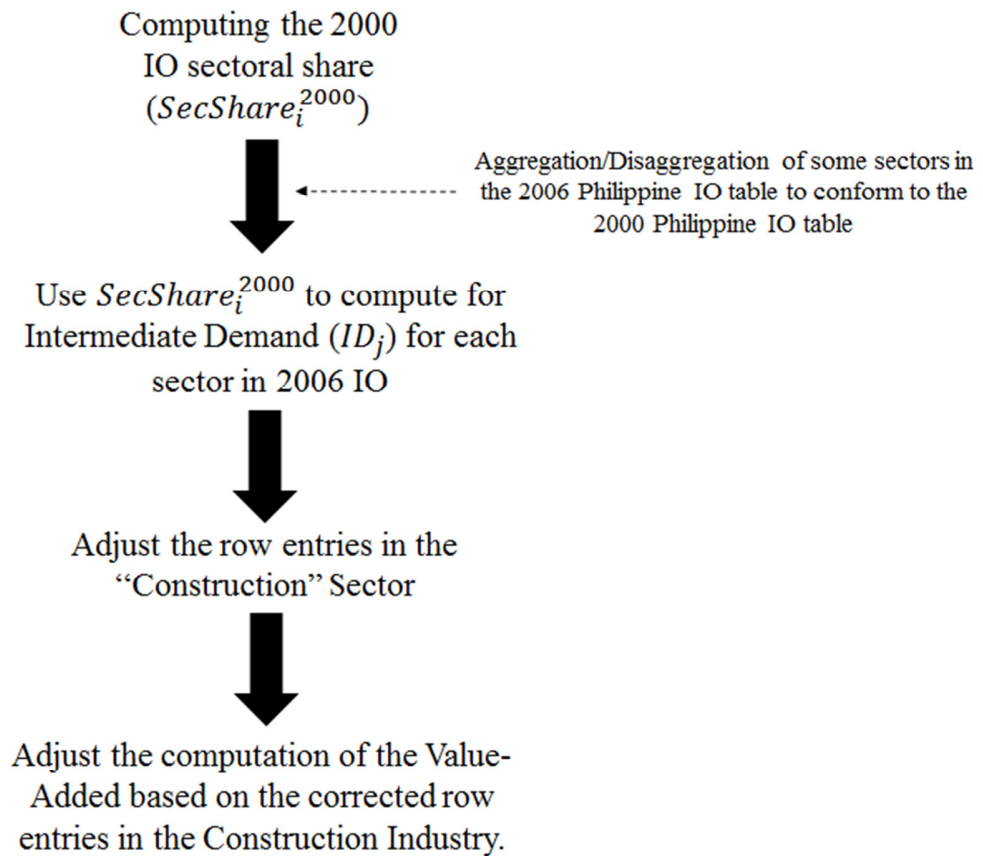


Figure 1: Summary of the procedure.

Adjusting the Construction Industry and the Value-Added

In the 2006 Philippine IO table, it was assumed that the total intermediate demand of the Construction sector is PhP 545 billion. Each sector's intermediate demand was computed from the 2000 Philippine IO table to adjust the missing entries in the 2006. The sectoral share is then multiplied to PhP 545 billion to get the corresponding monetary value for each sector. Table 1 presents the sectoral share of the top five highest intermediate demands for Construction output. Annex 1 shows the sectoral share of all sectors and the corresponding aggregation or disaggregation of some sectors in the 2006 Philippine IO table.

Table 1

Top Five Sectors with the Highest Intermediate Demand for Construction Output in Million PhP

Sector	Sector no.	% share	Intermediate Demand for Construction in million PhP	Corresponding sector in 2000 IO
Public Administration and Defense	221	46.17%	251,712.96	Public Administration and Defense
Construction	174	8.72%	47,564.58	Construction
Ownership of Dwellings	220	8.50%	46,344.53	Ownership of Dwellings
Banking Institutions	197	5.17%	28,198.20	Banking
Public Education Services	222	5.030%	27,426.59	Public Education Services

It was found that the Public Administration and Defense has the highest intermediate demand for construction output, which has a value of approximately PhP 251.7 billion. The second highest intermediate demand for construction output is the Construction industry itself, which has a value of approximately PhP 47.6 billion. The third highest intermediate demand for construction output is the Ownership of Dwellings sector, or those who are in the construction or home-improvement of houses, which has a value of approximately PhP 46.3 billion. The fourth highest intermediate demand for construction output is the Banking Institutions, which has a value of approximately PhP 28.2 billion. Lastly, the fifth highest intermediate demand for construction output is the Public Education Services, which has a value of approximately PhP 27.4 billion.

After adjusting the row entries of the Construction sector, the next step is to revisit the calculation for value-added in the 2006 Philippine IO table. Value-added is composed of the following: (1) Compensation of Employees, (2) Consumption of Fixed Capital, (3) Indirect taxes less subsidies, (4) Operating Surplus, and (5) Total Primary inputs. Table 2 shows the adjusted

values of the top five sectors with the highest intermediate demand and their corresponding revised value-added components. Annex 2 shows the revised values of the value-added for all sectors in the 2006 IO.

Table 2

Revised Value-Added Computation of the Sectors with the Top Five Highest Intermediate Demand in Million PhP

Sector	Sector no.	Compensation of Employees (CE)	Consumption of Fixed Capital (CFC)	Indirect Taxes Less Subsidies (IT-S)	Operating Surplus (OS)	Total (value-added)
Wholesale & Retail trade	195	272,526.16	95,968.71	50,529.99	596,105.99	1,015,130.85
Ownership of Dwellings	220	0.0	0.0	11,041.97	257,514.08	268,556.05
Manufacture of semi-conductor devices and other electronic components	150	72,450.69	37,234.70	21,742.76	130,650.89	262,079.04
Construction	174	118,066.78	34,995.57	19,810.79	87,774.53	260,647.67
Generation, collection, & Distribution of electricity	175	25,119.31	39,777.52	19,996.42	109,179.91	194,073.16

In the revised 2006 Philippine IO table, the total final demand expenditure, which is also equal to the gross value added, has an approximate value of PhP 5.73 trillion. This was found to be lower than the original uncorrected 2006 Philippine IO table, which had a value of PhP 6.27 trillion, a 9.52% discrepancy. This discrepancy is relatively large, considering the error is almost 10% and that the values of the value-added are reported in millions of pesos.

Conclusions and Recommendations

Databases are constructed under certain assumptions. However, when inappropriate assumptions are made, adjustments can be considered to improve the quality of the data. The most recently released 2006 Philippine IO table was constructed under the assumptions of the 2008 SNA, but were unable to account for the exemptions for GFCF. Hence, the need to review and adjust the database.

This study proposed a simple procedure to address the problem, with the assumption that some sectors were either aggregated or disaggregated in the 2006 Philippine IO in comparison with the 2000 Philippine IO table. This assumption preserves the consistency of the sectors that are present in both the 2000 and the 2006 Philippine IO tables.⁴ Equal weights for some of the aggregated/disaggregated sectors were assumed, given the limited information from the given IO tables so such assumption was made to make the adjustment easier. If information on which sectors were either aggregated/disaggregated in the 2006 Philippine IO tables and their exact share of the intermediate demands had been provided, the exact weights could have been correctly computed during the process of correcting the 2006 Philippine IO Table. Unfortunately, the PSA does not provide any technical discussions or notes on sector aggregation; hence, the assumption of equal weights was done by taking the average of the values, which may yield a safer approximation of the shares of intermediate demand for Construction output of the aggregated/disaggregated sectors. Other methods may be adopted in correcting the 2006 Philippine IO table, especially in examining further the sectors that have to be further aggregated

⁴ Some of the sectors in 2000 Philippine IO table were noted to be either not present or probably aggregated with some sectors in the 2006 IO. Consequently, some sectors that were present in the 2006 Philippine IO table were not represented in the 2000 IO.

or disaggregated and deriving the exact shares of these aggregated/disaggregated sectors to achieve the actual percentage share of each sector.

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ANNEX 1

**SECTORAL SHARE AND DISAGGREGATION/AGGREGATION OF SECTORS FOR
THE CONSTRUCTION ENTRIES**

<u>Sector No.</u>	<u>Sector Name (2006)</u>	<u>% Share</u>	<u>Intermediate Demand for Construction in Million PhP</u>	<u>Corresponding Sector from 2000 IO Table</u>
001	Palay	0.03124%	170.33	Palay
002	Corn	0.00662%	36.08	Corn
003	Coconut	0.02784%	151.78	Coconut including copra making in the farm
004	Sugarcane including muscovado sugar-making in the farm	0.00708%	38.60	Sugarcane including muscovado sugar done in the farm
005	Banana	0.46610%	2541.15	Banana
006	Mango	0.62286%	3395.81	Mango
007	Pineapple	0.45496%	2480.47	Pineapple
008	Coffee	0.02340%	127.58	Coffee
009	Cassava	0.20792%	1133.57	*Other vegetables, tubers and root crops / 2
010	Rubber	0.00558%	30.41	Rubber
011	Sweet potato	0.20792%	1133.57	*Other vegetables, tubers, and root crops /2
012	Citrus Fruits	0.37142%	2024.96	Citrus fruits
013	Abaca	0.00193%	10.53	Abaca
014	Tobacco	0.00096%	5.23	Tobacco
015	Papaya	0.00412%	22.49	*Other fruits and nuts/2
016	Other fruits, n.e.c.	0.00412%	22.49	*Other fruits and nuts/2
017	Leafy and stem vegetable	0.66279%	3613.51	Leafy and stem vegetables
018	Horticultural specialties and nursery products	0.00486%	26.52	Ornamental/Horticultural plants/Herbal plants
019	Cacao	0.00030%	1.65	Cacao
020	Other agricultural crops, n.e.c.	0.01001%	54.60	*Other agri. crops + other fibercrops
021	Hog farming	0.00827%	45.07	Hog
022	Cattle farming (including feed lot fattening)	0.07135%	389.00	*Cattle + Carabao
023	Livestock farming (including feed lot services), n.e.c.	0.00000%	0.00	*No 2000 I-O entry; assumed to be zero

024	Other animal including dairy production	0.00361%	19.66	Other livestock including dairy production
025	Chicken	0.00272%	14.83	Chicken
026	Poultry farming (except chicken)	0.00071%	3.85	Other poultry
027	Egg production	0.08147%	444.18	Egg production
028	Agricultural, Forestry, and Fishing Activities and Services	0.00942%	51.35	*Agricultural services (irrigation and pesticides, artificial insemination, n.e.c.)
029	Forestry	0.03104%	169.24	Forestry
030	Ocean fishing (including fish corals)	0.04887%	266.46	Ocean fishing (including fish corals)
031	Inland and coastal fishing	0.31455%	1714.94	Inland and coastal fishing
032	Prawn culture and Operation of fish farms and nurseries	0.36956%	2014.85	Shrimp, prawns, and other aquaculture (including marine culture)
033	Pearl culture and pearl shell gathering	0.87454%	4767.99	Pearl culture and pearl shell gathering
034	Seaweeds farming	0.02933%	159.92	Seaweeds
035	Mollusks and other crustacean farm operations (except prawn farm operations) and other fishing activities, n.e.c	0.31455%	1714.94	*Inland and Coastal fishing
036	Copper mining	0.42180%	2299.66	Copper mining
037	Gold mining	1.59930%	8719.38	Gold mining
038	Chromite mining	0.01828%	99.68	Chromite mining
039	Nickel mining	0.07054%	384.61	Nickel mining
040	Other metallic mining (including silver mining)	0.01716%	93.57	Other metallic mining (including silver mining)
041	Crude oil and natural gas	0.04606%	251.10	Crude oil and natural gas
042	Stone quarrying, clay, and sand pits	0.00000%	0.00	Stone quarrying, clay, and sand pits
043	Coal mining	0.11774%	641.91	Coal mining
044	Other non-metallic mining (including salt mining)	0.13868%	756.11	Other non-metallic mining (including salt mining)
045	Slaughtering and meat packing	0.00000%	0.00	Slaughtering and meat packing
046	Production, processing, and preserving of meat and meat products	0.14658%	799.13	*Meat and meat products processing
047	Canning/packing of fish and other marine products	0.09908%	540.20	*Fish Canning

048	Other types of processing of fish and other marine products	0.02722%	148.40	*Fish Drying, smoking, and manufacturing of other seafood products
049	Processing and preserving of fruits and vegetables	0.10578%	576.73	*Canning and preserving of fruits and vegetables
050	Processing of milk and cream (including milk-based infants' and dietetic foods)	0.05135%	279.94	*milk processing
051	Manufacture of butter and cheese	0.04521%	246.48	Butter and cheese manufacturing
052	Manufacture of ice cream and sherbet, ice drop, ice candy, and other flavored ices	0.15735%	857.89	Ice cream, sherbets, and other flavored ices
053	Manufacture of other dairy products, n.e.c.	0.02743%	149.54	Other dairy products
054	Rice/corn milling	0.33502%	1826.51	Rice and corn milling
055	Manufacture of bakery products	0.03076%	167.69	Manufacture of bakery products except noodles
056	Manufacture of sugar	0.14333%	781.43	*Sugar Milling and refining
057	Production of crude vegetable oil, cake, and meals, other than crude coconut oil, copra cake, meals, and pellets	0.00874%	47.65	*Manufacture of refined coconut oil and veg oil
058	Other vegetable and animal oil and fats (including refined coconut and other vegetable oil [including corn oil] and margarine, etc.)	0.00138%	7.55	*Other crude veg oil, fish, and other marine oils and fats (except coconut oil)
059	Manufacture of starches and starch products	0.00881%	48.06	Manufacture of starch and starch products
060	Production of prepared animal feeds	0.04198%	228.86	Manufacture of animal feeds
061	Manufacture of grain and vegetable mill products, except rice and corn	0.01262%	68.80	*Flours, cassava, and other grains milling
062	Production of crude coconut oil, copra cake, meals, and pellets	0.01783%	97.23	Production of crude coconut oil, copra cake, and meal
063	Manufacture of cocoa, chocolate, and sugar confectionery	0.03414%	186.14	Manufacture of cocoa, chocolate, and sugar confectionery products

064	Manufacture of macaroni, noodles, couscous, and similar farinaceous products	0.00089%	4.83	*noodles manufacturing
065	Manufacture of desiccated coconut and "nata de coco"	0.00579%	31.54	Manufacture of desiccated coconut
066	Coffee roasting and processing	0.01281%	69.84	Coffee roasting and processing
067	Manufacture of ice, except dry ice	0.01461%	79.65	Manufacture of ice, except dry ice
068	Manufacture of flavoring extracts, food coloring, mayonnaise, salad dressing, sandwich spread, and similar products	0.00006%	0.31	Manufacture of flavoring extracts, mayonnaise, and food coloring products
069	Manufacture of food products, n.e.c.	0.04260%	232.24	Miscellaneous food products
070	Alcoholic liquors and wine	0.02159%	117.70	Alcoholic liquors and wine
071	Malt liquors and malt	0.03754%	204.64	Malt liquors and malt
072	Manufacture of soft drinks	0.09201%	501.65	Soft drinks and carbonated water
073	Manufacture of drinking water	0.09387%	511.79	Bottling of Mineral Water
074	Manufacture of cigarettes	0.04265%	232.55	Cigarette manufacturing
075	Manufacture of cigars and chewing and smoking tobacco, snuff	0.00706%	38.50	Cigar, chewing, and smoking tobacco
076	Tobacco leaf flue-curing and redrying and other tobacco manufacturing, n.e.c.	0.03370%	183.75	Tobacco leaf flue-curing and redrying
077	Spinning, weaving, and finishing of textiles	0.25287%	1378.63	Textile, spinning, weaving, texturizing, and finishing
078	Manufacture of made-up textile articles, except wearing apparel	0.00191%	10.39	Manufacture of made-up textile goods except wearing apparel
079	Manufacture of carpets and rugs	0.01101%	60.03	Manufacture of carpets and rugs
080	Manufacture of cordage, rope, twine, and netting	0.00095%	5.18	Cordage, rope, twine and net manufacturing
081	Manufacture of other textiles, n.e.c.	0.01729%	94.28	*Manufacture of fiber batting, padding, upholstery fillings including coir, linoleum, and other hard surfaced floor coverings

082	Manufacture of knitted and crocheted fabrics	0.00708%	38.58	*Fabric knitting mills
083	Manufacture of knitted or crocheted hosiery, underwear, and outerwear when knitted or crocheted directly into shape	0.02592%	141.29	Hosiery, underwear, and outerwear (knitted)
084	Manufacture of knitted and crocheted articles, n.e.c.	0.00000%	0.00	*No Entry in 2000 IO; assumed to be zero.
085	Manufacture of embroidered fabrics	0.00182%	9.90	*Embroidery establishments /2
086	Ready-made garments manufacturing (excluding embroidered garments)	0.05670%	309.11	Manufacture of ready-made clothing
087	Ready-made embroidered garments manufacturing	0.00182%	9.90	*Embroidery establishments /2
088	Custom tailoring and dressmaking and articles of fur	0.01818%	99.09	Custom tailoring and dressmaking shops
089	Manufacture of other wearing apparel n.e.c	0.02856%	155.70	*Manufacture of other wearing apparel except footwear
090	Tanning and dressing of leather	0.00022%	1.21	Tanneries and leather finishing
091	Manufacture of products of leather and imitation leather	0.01323%	72.15	*Manufacture of artificial leather and impregnated and coated fabrics + Manufacture of articles made of native materials + Manufacture of products of leather and leather substitutes except footwear and wearing apparel
092	Manufacture of shoes	0.00036%	1.97	*Manufacture of leather footwear and footwear parts
093	Manufacture of other footwear, n.e.c.	0.01361%	74.22	*Manufacture of rubber footwear
094	Manufacture of veneer sheets and plywoods	0.05203%	283.68	Manufacture of veneer and plywood
095	Sawmilling and planing of wood	0.00368%	20.09	Sawmills and planing of wood
096	Manufacture of laminboard, particle board, and other panels and board	0.00005%	0.30	Manufacture of hardboard and particle board
097	Manufacture of builders' carpentry and joinery; millworking	0.00458%	24.95	*Millwork plants
098	Manufacture of wood carvings	0.00146%	7.97	Manufacture of wood carvings

099	Manufacture of other products of wood, except furniture, n.e.c.	0.10219%	557.15	*Manufacture and repair of wooden furniture including upholstery + Wood drying and preserving plants
100	Manufacture of products of bamboo, cane, rattan and the like, and plaiting materials except furniture	0.00833%	45.40	*Manufacture of misc. wood, cork, and cane products + Manufacture of wooden and cane containers and small cane wares
101	Manufacture of pulp, paper and paperboard	0.07745%	422.26	Manufacture of pulp, paper, and paperboard
102	Manufacture of containers and boxes of paper and paperboard	0.01370%	74.68	Manufacture of paper and paperboard containers
103	Manufacture of other articles of paper and paperboard	0.00035%	1.90	Manufacture of articles of paper and paperboard
104	Publishing	0.01640%	89.41	*Newspapers and periodicals
105	Printing and service activities related to printing	0.04499%	245.29	*Printing and publishing of books and pamphlets + Commercial and job printing and other allied industries
106	Reproduction of recorded media	0.00000%	0.00	*No entry in 2000 I-O; assumed to be zero
107	Manufacture of refined petroleum products	0.36747%	2003.46	*Petroleum refineries including LPG
108	Manufacture of other petroleum products	0.00318%	17.34	*Manufacture of asphalt, lubricants, and miscellaneous products of petroleum and coal
109	Manufacture of fertilizers and nitrogen compounds	0.00000%	0.00	*Manufacture of Fertilizers
110	Manufacture of pesticides and other agro- chemical products	0.00846%	46.12	*Manufacture of pesticides, insecticides, etc.
111	Manufacture of pharmaceuticals, medicinal chemicals, and botanical products	0.16670%	908.85	*Manufacture of drugs and medicines
112	Manufacture of soap and detergents, cleaning and polishing preparations, perfumes and toilet preparations	0.08767%	478.00	*Manufacture of soap and detergents + Manufacture of perfumes, cosmetics, and other toilet preparations
113	Manufacture of basic chemicals except fertilizers and nitrogen compounds	0.05293%	288.56	*Manufacture of basic industrial chemicals
114	Manufacture of plastics in primary forms and of synthetic rubber	0.00286%	15.62	*Manufacture of synthetic resins, plastic materials, and other man-made fiber except glass / 2

115	Manufacture of paints, varnishes, and similar coatings, printing ink and mastics	0.02320%	126.46	Manufacture of paints, varnishes, and lacquers
116	Manufacture of other chemical products, n.e.c.	0.02081%	113.47	*Manufacture of miscellaneous chemical products
117	Manufacture of man-made fibers	0.00286%	15.62	*Manufacture of synthetic resins, plastic materials, and other man-made fiber except glass / 2
118	Manufacture of rubber products	0.00823%	44.87	*Rubber tire and tube manufacturing
119	Manufacture of other rubber products	0.00352%	19.18	Manufacture of other rubber products, n.e.c.
120	Manufacture of plastic products	0.01539%	83.91	*Manufacture of plastic furniture, plastic footwear, and other fabricated plastic products
121	Manufacture of cement	0.08943%	487.55	Cement manufacture
122	Manufacture of flat glass (including float glass)	0.01624%	88.52	Manufacture of flat glass
123	Manufacture of glass containers	0.03856%	210.25	Manufacture of glass container
124	Manufacture of glass and glass products, n.e.c.	0.00000%	0.00	Manufacture of other glass and glass products
125	Manufacture of non-structural, non-refractory ceramic ware	0.00215%	11.71	*Manufacture of pottery, china, and earthenwares
126	Manufacture of structural, non-refractory clay, and ceramic products, lime, and plaster	0.06410%	349.50	*Manufacture of structural clay products + Manufacture of structural concrete products
127	Manufacture of other non-metallic mineral products, n.e.c.	0.00000%	0.00	Manufacture of other non-metallic mineral products, n.e.c.
128	Manufacture of basic iron and steel	0.00000%	0.00	*No entry in 2000 I-O; assumed to be zero
129	Casting/foundry of Iron and steel	0.02563%	139.76	*Iron and steel foundries
130	Manufacture of basic precious and non-ferrous metals	0.06280%	342.39	*Non-ferrous smelting and refining plants, rolling, drawing, and extrusion mills
131	Non-ferrous metal casting	0.00000%	0.00	Non-ferrous foundries
132	Manufacture of structural metal products	0.02114%	115.27	Structural metal products
133	Manufacture of tanks, reservoirs, and containers, of metal	0.02719%	148.26	*Manufacture of metal containers

134	Forging, pressing, stamping and roll-forming of metal, Treatment and coating of metals; general mechanical engineering on a fee or contract basis	0.01856%	101.19	*Blast furnace and steel making furnace, steel works, and rolling mills + Metal stamping, coating, engraving mills
135	Manufacture of cutlery, hand tools, and general hardware	0.01105%	60.27	Cutlery, hand tools, general hardware
136	Manufacture of other fabricated metal products, n.e.c.	0.00637%	34.74	*Manufacture of fabricated metal products except machinery and equipment
137	Manufacture of engines and turbines, except aircraft, vehicle, and cycle engines	0.01063%	57.97	Manufacture of engines and turbines, except for transport equipment and special industrial machinery and equipment
138	Manufacture of pumps, compressors, taps, and valves	0.00807%	43.99	Manufacture of pumps, compressors, blowers, and airconditioners
139	Manufacture of other general purpose machinery	0.00397%	21.65	*Manufacture of wire nails + Manufacture of non-electric lighting and heating fixtures
140	Manufacture of agricultural and forestry machinery	0.00365%	19.92	*Manufacture of agricultural machinery and equipment
141	Manufacture of other special purpose machinery	0.00744%	40.54	*Manufacture of metal and wood-working machinery + Manufacture of other fabricated wire and cable products except insulated wire and cable
142	Manufacture of household appliances, n.e.c.	0.00333%	18.15	Manufacture of appliances and housewares
143	Rebuilding or repairing of various kinds of machinery and equipment and associated parts/accessories (machine shops)	0.00069%	3.76	*Machine shops and manufacture of non-electrical machinery and equipment, n.e.c.
144	Manufacture of Office, Accounting, and Computing Machinery	0.22487%	1226.01	Manufacture, assembly, and repair of office, computing, and accounting machines
145	Manufacture of electric motors, generators, and transformers and electric generating sets	0.40217%	2192.65	*Manufacture of electrical, industrial machinery, and apparatus
146	Manufacture of electricity distribution and control apparatus	0.02171%	118.34	*Manufacture of current-carrying wiring devices, conduits, and fittings

147	Manufacture of insulated wires and cables	0.17575%	958.19	Insulated wires and cables
148	Manufacture of accumulators, primary cells, and primary batteries	0.00330%	17.98	*Manufacture of primary cells and batteries and electric accumulators
149	Manufacture of lighting equipment and electric lamps and other electrical equipment , n.e.c	0.04331%	236.13	Manufacture of electrical lamps, fluorescent tubes, and other electrical apparatus and supplies, n.e.c.
150	Manufacture of semi-conductor devices and other electronic components	0.00000%	0.00	*Manufacture of semi-conductor devices
151	Manufacture of electronic valves and tubes	0.01868%	101.82	*Manufacture of parts and supplies for radio, TV, and communication
152	Manufacture of apparatus for line telephony and line telegraphy	0.03544%	193.21	*Manufacture of communication and detection equipment
153	Manufacture of television and radio transmitters, receivers, sound or video recording or reproducing apparatus, and associated goods	0.27662%	1508.11	*Manufacture of radio and TV receiving sets, sound recording, and reproducing equipment including records and tapes
154	Manufacture of Motor Vehicles, Trailers, and Semi-Trailers	0.06163%	336.01	*Manufacture and assembly of motor vehicles + Rebuilding and major alteration of motor vehicles
155	Building and repairing of ships and boats	0.26186%	1427.67	*Shipyards and boatyards
156	Manufacture of railway and tramway locomotives and rolling stock	0.00204%	11.15	*Manufacture, assembly, rebuilding, and major alteration of railroad equipment, aircraft, and animal and hand-drawn vehicle /2
157	Manufacture of aircraft and spacecraft	0.00204%	11.15	*Manufacture, assembly, rebuilding and major alteration of railroad equipment, aircraft, and animal and hand-drawn vehicle /2
158	Manufacture of motorcycles, bicycles and invalid carriages	0.00843%	45.98	Manufacture, assembly of motorcycles and bicycles
159	Manufacture of other transport equipment, n.e.c.	0.00544%	29.66	*Manufacture of motor vehicles parts and accessories
160	Manufacture and repair of wood and rattan furniture (reed, wicker, and cane)	0.10269%	559.85	*Manufacture and repair of rattan furniture including upholstery

161	Manufacture of plastic furniture	0.01539%	83.91	*Manufacture of plastic furniture, plastic footwear, and other fabricated plastic products
162	Manufacture and repair of furniture and fixtures of metal	0.00134%	7.32	Manufacture and repair of furniture and fixtures, made primarily of metal
163	Manufacture and repair of other furniture and fixtures, n.e.c.	0.00007%	0.39	Manufacture and repair of other furnitures and fixtures, n.e.c.
164	Manufacture of medical and surgical equipment and orthopedic appliances	0.00637%	34.71	Manufacture of surgical, dental, medical, and orthopedic supplies
165	Manufacture of professional, scientific measuring, industrial process, and controlling equipment	0.00932%	50.79	Manufacture of professional, scientific measuring, and controlling equipment
166	Manufacture of photographic and optical instruments	0.03854%	210.13	Manufacture of photographic and optical instruments
167	Manufacture of watches and clocks	0.00418%	22.80	Manufacture of watches and clocks
168	Recycling	0.00000%	0.00	*No entry in 2000 I-O; assumed to be zero
169	Manufacture of jewelry and related articles	0.00442%	24.12	Manufacture of jewelry and related articles
170	Manufacture of musical instruments	0.00188%	10.27	Manufacture of musical instruments
171	Manufacture of sports goods	0.00770%	42.00	Manufacture of sporting and athletic goods
172	Manufacture of games and toys	0.00311%	16.96	*Manufacture of toys and dolls except rubber and plastic toys
173	Miscellaneous manufacturing, n.e.c	0.04328%	235.95	*Manufacture of ophthalmic goods + Manufacture of stationers', artists' and office supplies + Miscellaneous manufacturing
174	Construction	8.72426%	47564.58	Construction
175	Generation, collection, and distribution of electricity	0.36546%	1992.46	Electricity
176	Steam and hot water supply	0.07375%	402.10	Steam
177	Collection, purification, and distribution of water	0.80740%	4401.97	Water
178	Bus line operation	0.33006%	1799.47	Bus line operation
179	Jeepney and other land transport services	0.45145%	2461.30	Jeepney, tricycles (motorized and non-motorized), and other road transport
180	Railway transport	0.00000%	0.00	Railway transport

181	Public utility cars and taxicab operation	0.00388%	21.16	Public utility cars and taxicab operation
182	Tourist buses and cars including chartered and rent-a-car	0.03919%	213.67	Tourist buses and cars including chartered and rent-a-car
183	Road freight transport	0.09839%	536.43	Road freight transport
184	Sea and coastal water transport	0.02069%	112.80	Sea and coastal water transport
185	Inland water transport (including renting of ship with operator) and other water transport services	0.03431%	187.08	Inland water transport (including renting of ship with operator)
186	Air transport	0.27393%	1493.46	Air transport
187	Supporting services to transport	0.24271%	1323.24	Supporting services to transport
188	Storage and warehousing	0.04173%	227.52	Storage and warehousing
189	Tour and travel agencies and tour operators; tourist assistance activities, n.e.c.	0.00571%	31.14	Tour and travel agencies
190	Activities of other transport agencies (including custom brokerage, n.e.c)	0.34111%	1859.72	Activities of other transport agencies (including custom brokerage, n.e.c)
191	Postal and courier activities	0.02804%	152.89	Postal and courier activities
192	Telephone service includes telegraphs	0.59078%	3220.90	Telephone service includes telegraphs
193	Wireless telecommunications	0.17563%	957.56	Wireless telecommunications
194	Telecommunication services, n.e.c	0.12531%	683.18	Telecommunication services, n.e.c
195	Wholesale and retail trade	0.76142%	4151.26	Wholesale and retail trade
196	Repairs of motor vehicles, motorcycles, personal, and household goods	0.00000%	0.00	Repairs of motor vehicles and personal and household goods
197	Banking Institutions	5.17209%	28198.20	Banking
198	Investment, financing, and other non-banking services except pawnshops	0.00000%	0.00	Investment, financing, and other non-banking services except pawnshops
199	Pawnshops	0.00000%	0.00	Pawnshops
200	Life insurance	0.00000%	0.00	Life insurance
201	Non-life and other insurance activities	0.00000%	0.00	Non-life and other insurance activities
202	Activities auxilliary to financial intermediation	0.00000%	0.00	*No entry in the 2000 I-O; assumed to be zero

203	Real Estate Activities	4.08562%	22274.78	Real estate activities with own or leased property and contract basis
204	Renting of Machinery and Equipment Without Operator; Personal and Household Goods	0.00000%	0.00	Renting of equipment
205	Hardware consultancy	0.00000%	0.00	Computer hardware consultancy
206	Software consultancy and supply	0.00000%	0.00	Computer software consultancy including computer supply
207	Maintenance and repair of office accounting and computing machinery	0.00000%	0.00	Maintenance and repair of office, accounting, and computing machinery
208	Other computer and related activities	0.00000%	0.00	Other computer related activities
209	Research and Development	0.00000%	0.00	*No entry in 2000 I-O; assumed to be zero
210	Call center activities	0.00000%	0.00	Call/Contact centers, Business Processing outsourcing and other IT-based services
211	Legal activities	0.00000%	0.00	Legal activities
212	Accounting, bookkeeping, and auditing activities; tax consultancy	0.00000%	0.00	Accounting, bookkeeping, and auditing activities; tax consultancy
213	Market research and public opinion polling	0.00000%	0.00	*No entry in 2000 I-O. Assumed to be zero
214	Business and management consultancy activities	0.00000%	0.00	Business and management consultancy activities
215	Architectural, engineering and other technical activities	0.00000%	0.00	Architectural and engineering activities
216	Advertising	0.00000%	0.00	Advertising activities
217	Labor recruitment and provision of personnel	0.00000%	0.00	Labor recruitment and provision of personnel
218	Investigation and security activities	0.00000%	0.00	Investigation and security activities
219	Miscellaneous business activities, n.e.c	0.00000%	0.00	Miscellaneous business activities, n.e.c.
220	Ownership of Dwellings	8.50047%	46344.53	Ownership of dwellings
221	Public Administration and Defense	46.16898%	251712.96	Public Administration and Defense
222	Public Education Services	5.03056%	27426.59	Public Education Services
223	Private education services	0.00000%	0.00	Private education services
224	Public medical, dental, and other health activities	4.35303%	23732.68	Public Health and Welfare Services

225	Private medical, dental, and other health activities	0.00000%	0.00	Private medical, dental, and other health services
226	Other hospital activities and medical and dental practices including veterinary services, n.e.c.	0.00000%	0.00	Other hospital activities and medical and dental practices, including veterinary services
227	Social Work Activities	0.00000%	0.00	Social Work
228	Hotels and motels	0.00000%	0.00	Hotels and motels
229	Other accommodation services	0.00000%	0.00	Other short-stay accommodation,
230	Restaurants, bars, canteens, and other eating and drinking places	0.00000%	0.00	n.e.c.
231	Motion picture and video production and distribution	0.00000%	0.00	Restaurants, bars, canteens, and other eating and drinking places
232	Motion picture audio and video projection	0.00000%	0.00	Motion picture and video production and distribution
233	Radio and television activities	0.00000%	0.00	Motion picture projection
234	Other Recreational, Cultural, and Sporting Activities	0.00000%	0.00	Radio and television activities
235	Sewage and Refuse Disposal Sanitation and Similar Activities	0.00000%	0.00	Other recreational and cultural services
236	Washing and (dry-) cleaning of clothing and textile	0.00000%	0.00	Sewage and refuse disposal, sanitation and similar activities
237	Funeral and related activities	0.00000%	0.00	Washing and drycleaning of clothing and textile
238	Beauty treatment and personal grooming activities	0.00000%	0.00	*No Entry in 2000 IO; assumed to be zero.
239	Sauna, steam bath, slendering, and body building activities	0.00000%	0.00	Hairdressing and other beauty treatment
240	Other service activities, n.e.c.	0.00000%	0.00	*No Entry in 2000 IO; assumed to be zero.
Total Intermediate Demand		100.00000%	545199.314	

ANNEX 2

CORRECTED VALUE-ADDED VALUES PER SECTOR

<u>Sector No.</u>	<u>Sector Name (2006)</u>	<u>Compensation of Employees (CE)</u>	<u>Consumption of Fixed Capital (CFC)</u>	<u>Indirect Taxes less Subsidies (IT-S)</u>	<u>Operating Surplus (OS)</u>	<u>Total (value-added)</u>
001	Palay	68,502.08	6,887.18	17,585.94	50,967.90	143,943.09
002	Corn	25,256.60	1,551.47	6,443.11	12,761.65	46,012.82
003	Coconut	20,069.60	2,753.64	1,463.91	22,879.97	47,167.12
004	Sugarcane including muscovado sugar-making in the farm	6,940.68	1,578.78	1,474.97	10,125.03	20,119.46
005	Banana	17,115.08	4,382.17	2,337.59	12,777.27	36,612.10
006	Mango	2,106.44	1,142.49	388.13	11,137.64	14,774.69
007	Pineapple	590.17	30.30	36.32	4,076.22	4,733.01
008	Coffee	2,081.45	13.39	305.86	2,235.43	4,636.13
009	Cassava	2,015.64	57.69	16.74	6,041.15	8,131.22
010	Rubber	7,567.59	604.97	154.52	3,150.44	11,477.51
011	Sweet potato	542.37	12.33	2.55	1,155.34	1,712.59
012	Citrus Fruits	4,494.67	54.08	24.49	10,897.39	15,470.64
013	Abaca	393.82	47.58	3.22	203.48	648.10
014	Tobacco	625.52	34.86	8.07	845.38	1,513.83
015	Papaya	528.31	12.52	3.43	2,516.22	3,060.48
016	Other fruits, n.e.c.	5,196.81	51.25	16.22	12,006.79	17,271.06
017	Leafy and stem vegetable	230.89	10.99	1.28	1,365.69	1,608.84
018	Horticultural specialties and nursery products	308.34	36.82	11.77	961.21	1,318.13
019	Cacao	25.23	2.93	0.95	1,401.21	1,430.32

020	Other agricultural crops, n.e.c.	834.88	36.97	34.38	1,201.84	2,108.06
021	Hog farming	31,881.85	9,902.09	8,496.22	37,322.16	87,602.32
022	Cattle farming (including feed lot fattening)	3,668.28	1,741.35	631.03	5,773.88	11,814.54
023	Livestock farming (including feed lot services), n.e.c.	2,888.46	1,371.16	496.88	4,546.59	9,303.10
024	Other animal including dairy production	385.94	141.10	114.44	2,124.47	2,765.95
025	Chicken	19,280.64	7,514.87	4,967.68	22,745.69	54,508.89
026	Poultry farming (except chicken)	764.10	159.44	198.33	959.02	2,080.90
027	Egg production	4,206.30	3,260.67	3,284.84	5,848.09	16,599.90
028	Agricultural, Forestry, and Fishing Activities and Services	39,322.94	3,640.78	-	20,768.58	26,604.37
029	Forestry	731.04	340.79	558.66	3,325.92	4,956.41
030	Ocean fishing (including fish corals)	10,193.73	3,756.23	1,759.38	24,338.24	40,047.60
031	Inland and coastal fishing	9,780.12	3,310.55	1,235.81	23,228.44	37,554.91
032	Prawn culture and Operation of fish farms and nurseries	8,383.48	4,752.06	3,262.44	20,947.58	37,345.56
033	Pearl culture and pearl shell gathering	-	-	-	-	-
		31.94	18.10	12.43	79.81	142.28
034	Seaweeds farming	1,061.54	601.72	413.10	2,652.52	4,728.87
035	Mollusks and other crustacean farm operations (except prawn farm operations) and other fishing activities, n.e.c	1,161.57	658.42	452.02	2,902.37	5,174.38
036	Copper mining	96.19	52.25	111.93	273.01	533.38
037	Gold mining	2,533.84	758.64	2,471.56	9,271.11	15,035.14
038	Chromite mining	16.57	5.66	8.99	37.63	68.86
039	Nickel mining	884.11	909.37	769.23	1,864.37	4,427.09
040	Other metallic mining (including silver mining)	36.47	6.89	32.47	146.14	221.97

041	Crude oil and natural gas	665.93	4,632.46	5,760.43	21,335.28	32,394.10
042	Stone quarrying, clay, and sand pits	1,602.62	270.18	1,294.58	2,785.39	5,952.77
043	Coal mining	768.49	129.77	612.70	1,315.55	2,826.52
044	Other non-metallic mining (including salt mining)	500.94	84.59	399.39	857.54	1,842.46
045	Slaughtering and meat packing	6,900.66	3,986.21	2,922.71	11,459.98	25,269.57
046	Production, processing, and preserving of meat and meat products	15,477.47	3,988.08	5,949.64	21,665.05	47,080.25
047	Canning/packing of fish and other marine products	8,279.86	3,426.53	2,419.77	9,283.94	23,410.10
048	Other types of processing of fish and other marine products	4,114.97	1,740.11	2,394.63	8,574.38	16,824.09
049	Processing and preserving of fruits and vegetables	12,870.80	4,246.39	3,283.12	33,743.22	54,143.53
050	Processing of milk and cream (including milk-based infants' and dietetic foods)	1,328.92	507.44	3,035.01	8,363.42	13,234.80
051	Manufacture of butter and cheese	533.32	465.00	356.89	962.70	2,317.91
052	Manufacture of ice cream and sherbet, ice drop, ice candy, and other flavored ices	338.87	428.59	383.40	1,813.68	2,964.54
053	Manufacture of other dairy products, n.e.c.	1,808.21	1,593.51	904.25	3,689.52	7,995.49
054	Rice/corn milling	16,738.79	4,482.72	12,706.20	72,986.89	106,914.60
055	Manufacture of bakery products	16,438.11	5,435.75	4,017.54	28,900.33	54,791.74
056	Manufacture of sugar	11,193.82	4,209.88	4,537.22	6,362.52	26,303.45
057	Production of crude vegetable oil, cake and meals, other than crude coconut oil, copra cake, meals, and pellets	1,414.01	1,736.37	2,621.70	9,764.79	15,536.86
058	Other vegetable and animal oil and fats (including refined coconut and other vegetable oil (including	3,161.75	1,060.93	1,589.65	15,551.47	21,363.81

	corn oil) and margarine, etc.)					
059	Manufacture of starches and starch products	1,121.50	1,112.70	719.17	2,483.87	5,437.25
060	Production of prepared animal feeds	3,601.07	2,405.36	1,720.04	5,593.35	13,319.83
061	Manufacture of grain and vegetable mill products, except rice and corn	3,697.92	634.81	554.68	8,772.95	13,660.36
062	Production of crude coconut oil, copra cake, meals, and pellets	347.14	222.31	492.83	2,681.00	3,743.28
063	Manufacture of cocoa, chocolate, and sugar confectionery	3,763.15	1,435.61	890.13	6,479.59	12,568.48
064	Manufacture of macaroni, noodles, couscous, and similar farinaceous products	2,567.57	639.90	857.01	4,245.67	8,310.14
065	Manufacture of desiccated coconut and "nata de coco"	4,062.78	2,256.66	1,654.78	11,538.41	19,512.63
066	Coffee roasting and processing	2,488.63	902.22	1,185.33	4,045.33	8,621.51
067	Manufacture of ice, except dry ice	283.50	134.26	66.03	403.85	887.63
068	Manufacture of flavoring extracts, food coloring, mayonnaise, salad dressing, sandwich spread and similar products	2,728.30	1,114.97	2,717.59	5,578.80	12,139.66
069	Manufacture of food products, n.e.c.	2,101.53	2,654.20	3,793.22	11,349.44	19,898.39
070	Alcoholic liquors and wine	772.10	762.77	3,839.91	4,224.96	9,599.73
071	Malt liquors and malt	1,684.05	1,271.21	5,449.69	10,094.59	18,499.54
072	Manufacture of soft drinks	2,679.34	1,210.60	2,593.99	5,844.21	12,328.15
073	Manufacture of drinking water	741.21	328.37	396.46	1,806.99	3,273.04
074	Manufacture of cigarettes	836.49	480.52	5,064.22	1,986.77	8,368.00
075	Manufacture of cigars and chewing and smoking tobacco, snuff	264.06	30.70	856.80	546.47	1,698.04

076	Tobacco leaf flue-curing and redrying and other tobacco manufacturing, n.e.c.	155.83	111.96	825.17	244.18	1,337.14
077	Spinning, weaving and finishing of textiles	5,441.58	1,439.10	2,371.84	13,589.77	22,842.29
078	Manufacture of made-up textile articles, except wearing apparel	2,677.15	112.32	195.94	3,689.40	6,674.80
079	Manufacture of carpets and rugs	1,410.58	65.21	68.48	946.88	2,491.14
080	Manufacture of cordage, rope, twine, and netting	1,182.88	90.30	252.05	2,212.98	3,738.21
081	Manufacture of other textiles, n.e.c.	523.75	132.94	71.54	270.91	999.13
082	Manufacture of knitted and crocheted fabrics	2,408.56	195.34	314.40	1,680.93	4,599.22
083	Manufacture of knitted or crocheted hosiery, underwear, and outerwear when knitted or crocheted directly into shape	965.89	319.35	204.12	3,024.81	4,514.17
084	Manufacture of knitted and crocheted articles, n.e.c.	1,144.46	34.43	89.70	440.84	1,709.42
085	Manufacture of embroidered fabrics	374.15	196.46	16.64	820.95	1,408.20
086	Ready-made garments manufacturing (excluding embroidered garments)	22,265.46	1,422.09	1,023.07	6,042.58	30,753.19
087	Ready-made embroidered garments manufacturing	3,536.08	405.20	189.76	616.91	4,747.95
088	Custom tailoring and dressmaking and articles of fur	6,580.79	404.33	268.06	2,860.06	10,113.24
089	Manufacture of other wearing apparel n.e.c	3,361.97	77.65	255.58	985.73	4,680.93
090	Tanning and dressing of leather	347.64	96.00	84.71	120.51	648.85
091	Manufacture of products of leather and imitation leather	1,735.37	416.76	868.62	1,523.71	4,544.46
092	Manufacture of shoes	570.08	137.61	78.45	139.27	925.41
093	Manufacture of other footwear, n.e.c.	613.65	72.21	209.23	506.00	1,401.10
094	Manufacture of veneer sheets and plywoods	943.07	98.16	439.03	1,708.06	3,188.31

095	Sawmilling and planing of wood	986.51	108.20	652.29	3,023.99	4,770.99
096	Manufacture of laminboard, particle board, and other panels and board	183.39	8.21	126.56	174.62	492.79
097	Manufacture of builders' carpentry and joinery; millworking	2,507.62	313.21	134.94	899.25	3,855.02
098	Manufacture of wood carvings	1,243.04	55.40	199.22	1,619.15	3,116.81
099	Manufacture of other products of wood, except furniture, n.e.c.	321.35	31.97	171.11	242.79	767.23
100	Manufacture of products of bamboo, cane, rattan, and the like, and plaiting materials except furniture	465.91	83.85	126.70	280.89	957.35
101	Manufacture of pulp, paper, and paperboard	1,019.20	405.96	155.50	3,856.48	5,437.13
102	Manufacture of containers and boxes of paper and paperboard	618.23	79.33	414.87	1,176.50	2,288.93
103	Manufacture of other articles of paper and paperboard	1,252.66	116.42	390.29	1,078.50	2,837.87
104	Publishing	2,124.50	421.01	511.70	1,587.94	4,645.15
105	Printing and service activities related to printing	952.49	197.11	241.59	1,827.89	3,219.08
106	Reproduction of recorded media	985.16	183.03	234.00	2,360.91	3,763.09
107	Manufacture of refined petroleum products	6,760.74	7,367.99	2,702.94	68,618.83	85,450.50
108	Manufacture of other petroleum products	3,825.65	938.70	29.29	15,091.95	19,885.61
109	Manufacture of fertilizers and nitrogen compounds	818.21	249.97	128.53	7,610.64	8,807.34
110	Manufacture of pesticides and other agro- chemical products	937.74	655.05	536.46	3,380.07	5,509.31
111	Manufacture of pharmaceuticals, medicinal chemicals, and botanical products	6,163.47	995.49	749.89	6,132.42	14,041.27

112	Manufacture of soap and detergents, cleaning and polishing preparations, perfumes, and toilet preparations	4,794.08	547.14	465.67	11,942.61	17,749.49
113	Manufacture of basic chemicals except fertilizers and nitrogen compounds	4,847.56	3,779.84	1,415.85	6,990.46	17,033.71
114	Manufacture of plastics in primary forms and of synthetic rubber	1,168.82	832.70	349.01	2,439.71	4,790.25
115	Manufacture of paints, varnishes, and similar coatings, printing ink and mastics	3,518.80	1,307.00	893.57	2,209.46	7,928.83
116	Manufacture of other chemical products, n.e.c.	2,155.39	543.10	347.05	4,566.87	7,612.42
117	Manufacture of man-made fibers	2,104.54	422.01	332.90	2,349.63	5,209.07
118	Manufacture of rubber products	3,370.30	667.89	811.76	2,519.10	7,369.06
119	Manufacture of other rubber products	577.63	119.54	146.51	1,108.52	1,952.20
120	Manufacture of plastic products	2,152.29	779.15	1,768.46	6,652.02	11,351.93
121	Manufacture of cement	3,407.62	1,724.37	2,462.22	10,167.47	17,761.68
122	Manufacture of flat glass (including float glass)	576.91	104.71	100.22	253.36	1,035.19
123	Manufacture of glass containers	996.95	144.08	335.40	536.70	2,013.14
124	Manufacture of glass and glass products, n.e.c.	681.84	56.41	152.76	527.44	1,418.46
125	Manufacture of non-structural, non-refractory ceramic ware	554.94	50.17	93.50	106.97	805.58
126	Manufacture of structural, non-refractory clay, and ceramic products, lime, and plaster	1,302.03	249.42	357.00	2,572.45	4,480.91
127	Manufacture of other non-metallic mineral products, n.e.c.	517.91	50.66	489.83	348.13	1,406.54
128	Manufacture of basic iron and steel	2,938.34	955.01	962.89	9,058.59	13,914.83
129	Casting/foundry of Iron and steel	413.80	92.15	29.55	523.62	1,059.13

130	Manufacture of basic precious and non-ferrous metals	1,323.37	1,261.53	2,258.01	12,215.99	17,058.89
131	Non-ferrous metal casting	840.50	304.94	270.97	753.31	2,169.71
132	Manufacture of structural metal products	2,536.67	235.43	295.77	3,734.48	6,802.35
133	Manufacture of tanks, reservoirs and containers, of metal	507.43	422.67	448.15	815.47	2,193.71
134	Forging, pressing, stamping and roll-forming of metal, Treatment and coating of metals; general mechanical engineering on a fee or contract basis	949.30	309.61	244.51	907.87	2,411.28
135	Manufacture of cutlery, hand tools, and general hardware	439.48	55.14	177.73	1,608.74	2,281.09
136	Manufacture of other fabricated metal products, n.e.c.	179.64	21.80	174.40	1,986.87	2,362.71
137	Manufacture of engines and turbines, except aircraft, vehicle, and cycle engines	744.64	189.86	138.57	2,356.01	3,429.08
138	Manufacture of pumps, compressors, taps, and valves	233.46	20.96	87.60	2,245.38	2,587.41
139	Manufacture of other general purpose machinery	964.92	483.64	246.78	2,263.42	3,958.76
140	Manufacture of agricultural and forestry machinery	41.15	12.00	8.96	69.10	131.20
141	Manufacture of other special purpose machinery	1,650.90	511.53	358.87	3,612.38	6,133.68
142	Manufacture of household appliances, n.e.c.	1,197.75	126.88	471.70	2,296.41	4,092.74
143	Rebuilding or repairing of various kinds of machinery and equipment and associated parts/accessories (machine shops)	613.60	189.02	8.43	376.37	1,187.42

144	Manufacture of Office, Accounting and Computing Machinery	3,092.08	1,504.98	3,383.91	11,596.69	19,577.66
145	Manufacture of electric motors, generators and transformers, and electric generating sets	1,675.96	813.68	995.74	5,658.26	9,143.64
146	Manufacture of electricity distribution and control apparatus	505.40	125.98	417.03	5,766.37	6,814.77
147	Manufacture of insulated wires and cables	414.88	118.31	242.85	2,190.52	2,966.56
148	Manufacture of accumulators, primary cells, and primary batteries	2,624.69	412.27	545.22	868.65	4,450.84
149	Manufacture of lighting equipment and electric lamps and other electrical equipment, n.e.c	2,083.91	260.53	212.63	527.99	3,085.06
150	Manufacture of semi-conductor devices and other electronic components	72,450.69	37,234.70	21,742.76	130,650.89	262,079.04
151	Manufacture of electronic valves and tubes	1,631.78	737.93	459.53	1,894.71	4,723.95
152	Manufacture of apparatus for line telephony and line telegraphy	1,414.18	287.38	616.89	2,059.97	4,378.42
153	Manufacture of television and radio transmitters, receivers, sound or video recording or reproducing apparatus, and associated goods	632.54	24.86	596.85	453.25	1,707.50
154	Manufacture of Motor Vehicles, Trailers and Semi-Trailers	3,385.62	1,529.16	2,175.98	8,204.65	15,295.41
155	Building and repairing of ships and boats	455.93	315.54	295.44	258.02	1,324.93
156	Manufacture of railway and tramway locomotives and rolling stock	59.05	11.22	17.01	44.69	131.97
157	Manufacture of aircraft and spacecraft	425.41	81.46	85.50	87.06	679.43
158	Manufacture of motorcycles, bicycles and invalid carriages	657.70	140.60	470.18	680.68	1,949.16

159	Manufacture of other transport equipment, n.e.c.	1,551.95	44.63	1,430.61	1,343.85	4,371.04
160	Manufacture and repair of wood and rattan furniture (reed, wicker, and cane)	5,876.26	879.71	607.39	4,738.14	12,101.50
161	Manufacture of plastic furniture	451.61	62.24	89.76	531.09	1,134.71
162	Manufacture and repair of furniture and fixtures of metal	628.15	111.48	96.85	922.88	1,759.36
163	Manufacture and repair of other furniture and fixtures, n.e.c.	414.74	67.90	52.91	1,951.10	2,486.65
164	Manufacture of medical and surgical equipment and orthopedic appliances	2,289.43	944.57	370.34	4,480.30	8,084.64
165	Manufacture of professional, scientific measuring, industrial process, and controlling equipment	1,344.45	221.32	577.31	3,147.96	5,291.03
166	Manufacture of photographic and optical instruments	3,138.39	945.49	371.66	3,363.94	7,819.49
167	Manufacture of watches and clocks	2,402.43	43.76	608.16	1,832.84	4,887.19
168	Recycling	176.04	303.61	134.91	525.36	1,139.91
169	Manufacture of jewelry and related articles	1,399.81	49.09	70.86	1,348.41	2,868.16
170	Manufacture of musical instruments	229.48	15.55	8.70	349.93	603.67
171	Manufacture of sports goods	2,310.05	293.97	154.68	2,257.54	5,016.24
172	Manufacture of games and toys	692.25	43.33	75.96	815.18	1,626.72
173	Miscellaneous manufacturing, n.e.c	232.61	173.75	84.86	788.31	1,279.53
174	Construction	118,066.78	34,995.57	19,810.79	87,774.53	260,647.67
175	Generation, collection, and distribution of electricity	25,119.31	39,777.52	19,996.42	109,179.91	194,073.16
176	Steam and hot water supply	1,021.90	981.93	63.62	6,679.84	8,747.30
177	Collection, purification, and distribution of water	6,630.66	5,344.79	2,923.74	9,783.57	24,682.76
178	Bus line operation					

		19,645.48	15,133.80	3,036.82	10,305.35	48,121.45
179	Jeepney and other land transport services	13,994.75	38,294.15	3,836.33	5,376.26	61,501.50
180	Railway transport	2,990.58	1,813.44	1,240.22	716.34	2,847.45
181	Public utility cars and taxicab operation	2,616.42	494.44	293.26	107.40	3,511.52
182	Tourist buses and cars including chartered and rent-a-car	1,194.89	1,334.49	350.13	514.30	3,393.81
183	Road freight transport	3,730.46	15,460.85	1,925.82	6,916.89	28,034.02
184	Sea and coastal water transport	2,948.69	4,033.65	873.95	11,612.37	19,468.66
185	Inland water transport (including renting of ship with operator) and other water transport services	193.05	262.32	59.07	737.90	1,252.34
186	Air transport	4,594.14	2,191.85	3,822.12	11,843.55	22,451.65
187	Supporting services to transport	4,887.37	3,069.86	1,188.89	7,949.86	17,095.98
188	Storage and warehousing	509.06	639.84	531.99	976.05	2,656.95
189	Tour and travel agencies and tour operators; tourist assistance activities, n.e.c.	1,632.75	1,439.35	600.51	753.87	4,426.49
190	Activities of other transport agencies (including custom brokerage, n.e.c)	3,875.29	3,039.47	1,952.52	8,212.08	17,079.36
191	Postal and courier activities	6,746.95	626.44	63.19	790.60	8,227.17
192	Telephone service includes telegraphs	28,687.53	46,203.72	15,470.86	31,046.04	121,408.16
193	Wireless telecommunications	22,122.76	29,910.70	6,286.76	35,438.00	93,758.22
194	Telecommunication services, n.e.c	1,145.26	2,953.97	736.04	1,514.45	6,349.72
195	Wholesale and retail trade	272,526.16	95,968.71	50,529.99	596,105.99	1,015,130.85
196	Repairs of motor vehicles, motorcycles, personal and household goods	12,582.69	4,269.09	548.50	16,519.28	33,919.56
197	Banking Institutions	17,552.48	19,518.78	10,043.68	92,347.67	139,462.60
198	Investment, financing, and other non-banking services except	20,913.07	4,090.16	12,242.21	100,134.19	137,379.62

	pawnshops					
199	Pawnshops	2,828.19	354.12	612.21	2,747.61	6,542.13
200	Life insurance	7,128.75	1,201.57	6,048.75	32,301.63	46,680.71
201	Non-life and other insurance activities	2,412.27	605.05	1,354.33	9,635.75	14,007.39
202	Activities auxilliary to financial intermediation	5,003.65	724.58	2,000.87	16,866.00	24,595.10
203	Real Estate Activities	14,176.26	10,447.82	4,461.31	50,728.46	79,813.84
204	Renting of Machinery and Equipment Without Operator; Personal and Household Goods	3,110.65	1,891.66	531.27	5,290.68	10,824.26
205	Hardware consultancy	422.61	137.43	60.16	541.38	1,161.58
206	Software consultancy and supply	4,467.21	1,144.53	754.05	3,385.86	9,751.65
207	Maintenance and repair of office accounting and computing machinery	1,037.13	78.92	65.46	1,044.80	2,226.31
208	Other computer and related activities	2,209.05	145.54	408.98	2,197.62	4,961.18
209	Research and Development	2,090.43	656.55	496.18	2,437.46	5,680.62
210	Call center activities	36,925.66	4,813.23	2,744.63	25,030.34	69,513.86
211	Legal activities	2,402.36	386.37	644.85	2,428.92	5,862.49
212	Accounting, bookkeeping, and auditing activities; tax consultancy	1,493.75	114.49	212.05	2,366.49	4,186.78
213	Market research and public opinion polling	853.07	96.69	296.37	1,107.23	2,353.36
214	Business and management consultancy activities	4,712.82	1,175.07	2,209.88	17,954.28	26,052.05
215	Architectural, engineering, and other technical activities	5,034.79	814.20	1,370.89	7,464.54	14,684.42
216	Advertising	6,964.04	873.29	2,247.91	8,745.64	18,830.89
217	Labor recruitment and provision of personnel	6,635.56	802.51	725.73	2,034.60	10,198.39
218	Investigation and security activities	8,919.13	420.55	852.47	3,340.31	13,532.46

219	Miscellaneous business activities, n.e.c	4,029.01	2,112.48	2,465.01	5,632.43	14,238.93
220	Ownership of Dwellings	-	-	11,041.97	257,514.08	268,556.05
221	Public Administration and Defense	7,843.84	619.24	41.33	-	8,504.41
222	Public Education Services	125,652.70	-	16.64	-	125,669.34
223	Private education services	70,315.20	20,510.70	2,011.88	19,510.93	112,348.71
224	Public medical, dental, and other health activities	8,248.99	-	-	-	8,248.99
225	Private medical, dental, and other health activities	18,986.90	15,847.22	1,726.35	18,845.02	55,405.48
226	Other hospital activities and medical and dental practices including veterinary services, n.e.c.	336.51	100.01	1.89	945.33	1,383.74
227	Social Work Activities	44.73	306.30	52.94	271.76	675.73
228	Hotels and motels	17,940.97	10,773.58	5,072.35	12,232.77	46,019.67
229	Other accommodation services	614.30	725.15	19.10	848.19	2,206.75
230	Restaurants, bars, canteens and other eating and drinking places	21,842.97	3,488.46	6,925.81	17,896.40	50,153.64
231	Motion picture and video production and distribution	2,886.32	530.96	194.74	876.11	4,488.13
232	Motion picture audio and video projection	1,039.08	739.83	753.34	223.92	2,756.16
233	Radio and television activities	4,258.37	3,126.74	561.04	9,237.44	17,183.59
234	Other Recreational, Cultural and Sporting Activities	16,403.60	9,458.15	12,031.40	21,541.97	59,435.11
235	Sewage and Refuse Disposal Sanitation and Similar Activities	1,307.55	381.44	31.39	935.22	2,655.59
236	Washing and (dry-) cleaning of clothing and textile	2,539.15	1,099.36	39.10	292.42	3,970.04
237	Funeral and related activities	4,461.42	1,503.44	134.23	3,454.32	9,553.43
238	Beauty treatment and personal grooming activities	6,600.35	749.19	24.77	5,634.13	13,008.43

239	Sauna, steam bath, slendering, and body building activities	4,084.24	1,451.83	42.38	4,061.13	9,639.58
240	Other service activities, n.e.c.	485.79	30.85	5.04	405.19	926.87