

The Effects of Shifting to Transaction Value and Other Issues*

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ABSTRACT

This study takes off from an earlier inquiry on the effects of Home Consumption Value (HCV) Valuation (Medalla et al. 1993). It is intended to assist policymakers in examining the requirements for an effective implementation of the General Agreement on Tariffs and Trade (GATT) Valuation Code (GVC). The study identifies several advantages under GVC regime such as trade facilitation, increased government revenues in the long run and the relative clarity in the determination of dutiable base, among others. However, implementing the GVC is not without potential losses. Among the losses include gross underinvoicing, overinvoicing, and rent-seeking. Nevertheless, based on the findings of the study, the gains from implementing the GVC outweigh the potential losses as long as the legal framework and institutions for the World Trade Organization (WTO) compliance are in place.

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BACKGROUND

In 1947, the General Agreement on Tariffs and Trade (GATT) was signed and put in place. GATT Article VII defines the dutiable basis of imports as the transaction value (i.e., “the price actually paid or payable for imported goods”). This standard valuation was established for the purpose of creating a sense of fairness among exporters and importers. Unfortunately, no multilateral organization was established to implement the GATT, particularly the standard customs valuation defined by Article VII. Unlike the International Monetary Fund (IMF) and International Bank for Reconstruction and Development (IBRD, now called the World Bank), the proposed International Trade Organization (ITO) was never set up.

An effort was made to set a standard customs valuation during the 1953 Convention on the Valuation of Goods for Customs Purposes. The said convention established the Brussels Definition of Value (BDV) system. The BDV system is based on a notional value of the prices of goods on sale in an open market under specified conditions. In practice, the BDV can raise the price of an imported good for purposes of customs valuation and may substantially differ from what was paid or payable. The BDV favored protectionist regimes and countries with huge fiscal deficits and whose major source of financing is tariffs.

In the Philippines customs valuation for seven decades was based on the HCV. As the term implies, in simple terms, HCV is the value of the good being imported (in wholesale prices) in the home market of the exporter. At the outset, some flaws could already be discerned. For one, the HCV could differ substantially from actual prices paid. Indeed, the HCV system was found to further distort the country’s protection structure (Medalla et al. 1993). All this, however, changed in 1994 with the signing of the Agreement on the Implementation of Article VII of GATT, and in 1995 with the creation of the World Trade Organization (WTO). Article VII of the GATT is also referred to as the GATT Valuation Code (GVC). The WTO is the ITO that never was—a multilateral institution empowered to enforce GATT principles.

The GVC is an attachment to the WTO agreement. It was in place in 1979 and, until 1994, was enforced in mostly industrial countries. The GVC assumes that its members engage in "bonafide trade" or, to put it simply, "honest trade." Critics find this difficult to accept because in the real world some may not be as honest as the others.

As a founding member, the Philippines had to align its legal framework for international trade with that of the WTO. On March 28, 1996, Congress approved Republic Act (RA) No. 8181, changing the dutiable base of imported goods from the HCV to the TV effective January 1, 2000. RA 8181 also amended Section 201 of Title II, Part I of Presidential Decree (PD) No. 1464, or the Tariff and Customs Code of the Philippines. However, Section 2 of RA 8181 provided for a transition period before Congress authorized the shift on January 1, 2000. During the transition period, the EV will be used as basis of import duties. The EV is defined as the price "at the time of exportation, the same or identical, like, or similar article is freely offered for sale in the principal export markets of the exporting country for exportation to the Philippines, in the usual wholesale quantities and in the ordinary course of trade." This is different from the HCV, which is defined as "the wholesale price of the commodity in the exporting country." Both the HCV and EV are variants of the BDV, as they could both derived from some other "notional" value of the export than its actual value.

The objectives of the study are as follows:

1. To determine the impact of the change in duty base (i.e., HCV to EV on the incidence of underinvoicing
2. To estimate the government revenue impact of the shift from the EV to the TV as the basis of import duties
3. To discuss the potential impact of the shift on the so-called "suspense regimes" (i.e., customs bonded manufacturers' warehouse, duty-drawbacks, etc.)
4. To assist policymakers as well as the private sector in their task of deciding whether to implement or postpone the adoption of the GVC by January 1, 2000

CONCEPTUAL FRAMEWORK

The rationale behind the GVC, as mentioned earlier, is to establish a standard of valuation to ensure fair treatment of exporters and importers. WTO members will adhere to the same valuation system, and valuation will not be used as a tool to create trade barriers. Also, that trade is undertaken by most, if not all, WTO countries with a relatively high degree of honesty.

Apart from curbing protectionist tendencies, the shift to the TV is expected to greatly facilitate trade transactions and thereby reduce the cost of doing business here in the Philippines. One problem that is always pointed out with the shift to the TV is the possibility of massive underinvoicing. The incidence of underinvoicing is influenced by the following: level of tariffs and other taxes and the dutiable base. Reductions in tariff, other taxes and the dutiable base is expected to result in lower incidence of underinvoicing (i.e., a more honest declarations of import values).

The 1993 Medalla et al. study concluded that the government revenue losses resulting from the shift from the HCV to the TV would be less than expected and even less so with an intermediate shift to the EV. In the long run, increased import volumes resulting from lower importation costs (i.e., tariffs, other taxes, non-tariff barriers, dutiable base) and improved tax administration will compensate for the reduction in tariffs and dutiable value.

More than six years have passed since the estimate was made. Will more recent evidence support such findings? Or will the shift from the present transition valuation, EV, to the ultimate, TV, result in more significant revenue losses than expected?

The shift to the TV as dutiable base would have been less of an issue if the 1997 Asian financial crisis did not occur. The recent financial crisis (despite signs that it has bottomed out) is being used as an excuse to further delay trade reforms (i.e., further tariff reductions, removal of remaining non-tariff barriers (NTBs), shift to the TV). Issues, among others, that could make the decision to shift to the TV by January 1, 2000 a bit difficult are as follows:

- a) *Rising protectionism.* Since the TV is expected to be less than the EV, there are fears that using the former as dutiable base will allow goods to be “dumped” in the country to the detriment of local industries, particularly those that are still reeling from the impact of the recent financial crisis.
- b) *Reduced government revenues.* The shift to the TV will result in lower government revenues, since the TV is expected to be a lower dutiable base compared to the EV. This is bad news, considering the country’s rather large current fiscal deficit.
- c) *Underinvoicing.* Will the shift to the TV substantially increase the incidence of underinvoicing? Importers will be encouraged to declare at the onset an invoice value much lower than the TV. This is to ensure that future shipments will be evaluated on the basis of this initial invoice value. At worst, all declared import prices are expected to fall substantially. Underinvoicing might be difficult to establish.

METHODOLOGY

To assess the impact of the shift in customs valuation from the current BDV-like system (EV) to the GATT valuation code (TV), the basic approach of the study is to measure the gap between the SGS-Clear Report of Finding (CRF) value with that of the declared invoice value. This gap is measured by the HCV/IV AND EV/IV ratios. Such a gap could be interpreted in two ways. One, it could indicate the relative honesty of importers in declaring import value (the lower the gap, the more honest). Two, if indeed the importer was honest in his declaration but was still subjected to an uplift in the valuation, then the gap would represent an additional (implicit) tax. Whether it is one or the other would vary from case to case, and without any hard data, it is difficult to make a definite judgment.

The 1993 Medalla et al. HCV study measured the ratio of the HCV to the IV to assess the impact of the HCV valuation system on protection. The study argued that a valuation base different from the

TV implied a different tax rate. Since the HCV was not merely a pre-audit tool but one meant to uplift import valuation, importers in general pay relatively higher taxes than they should. The effective tax rate was defined by the 1993 Medalla et al. HCV study as:

$$te = t(\text{HCV}/\text{TV}) = t(\text{HCV}/\text{TV}) = t(1+h)$$

where $\text{HCV}/\text{TV} = 1 + h$

Tariff protection is thus increased by $(1+h)$.

It could very well be that the declared IV is also nowhere near its true transaction value. However, there is some difficulty in documenting the true transaction of an imported commodity. Furthermore, as earlier pointed out, whether or not the declared IV is the true transaction value, the shift in valuation would definitely change (in most cases, lower) the customs valuation base from the EV to the IV. Thus, as in the 1993 Medalla et al. HCV study, this one will use the observed HCV/IV (for the earlier period, i.e., from July 1994 to June 1996, when it was effective) and EV/IV (for the latter period which is July 1996 to May 1999) to measure the impact on customs valuation and the attendant impact on government revenues.

In July 1996, RA 8181 mandated the use of the EV as the dutiable base in the transition period before the shift to the transaction value system in January 1, 2000.

The EV is deemed closer to the true TV of the imported commodity than the HCV (i.e., $IV < EV < HCV$) although some variation could actually result since, in practice, the assessed values could feasibly come from similar sources. The HCV, EV, and IV are expressed in "free on board" (FOB) terms.

The HCV/IV ratio will be estimated for the periods July 1994 to June 1995 and July 1995 to June 1996. The EV/IV ratio, on the other hand, will be estimated for the periods July 1996 to June 1997, July 1997 to June 1998, and July 1998 to May 1999. Both ratios will be used to assess the impact of the change in dutiable base on the incidence of underinvoicing.

The ratios will be expressed in simple and weighted averages for each commodity grouping. The weights to be used will be each commodity's share of the total import value. Commodities are classified using the HS code, matched with its corresponding Philippine Standard Commodity Classification Code (PSCC) and UN Standard International Trade Classification (SITC).

Estimating government revenue impact

A major issue relating to the shift to a transaction valuation system is the potential drop in government revenues. This is based on the expectation that using transaction value under the GVC would result in a generally lower customs valuation base. This is primarily due to fears, real or imagined, that all importers—following a simplistic interpretation of transaction value that whatever is declared on the invoice will be accepted—will undervalue at the onset.

As in the 1993 Medalla et al. HCV study, this TV study will determine revenue changes using the trade elasticity estimates of GATT (1985) and Bautista (1977). These are given in Table 1.

The study will look at the case where the shift in dutiable base

Table 1. Elasticity estimates

SITC	GATT			Bautista
	Low	High	Median	
0	- 0.9	- 1.59	- 0.78	- 1.236
1				- 0.462
2	- 0.17	- 1.15	- 0.50	
3	- 0.10	- 2.78	- 0.96	- 1.206
4	(Included in SITC 2)		- 0.015	
5				- 0.383
6				- 4.260
7	- 0.74	- 2.64	- 1.34	- 0.703
8				- 0.422
9				
All	- 0.42	- 1.37	- 1.06	

is from the EV to the IV. As earlier suggested, it is assumed that the IV closely approximates the true transaction value of the commodity. Regardless of whether the gap between the SGS-CRF value and the declared invoice value indicate relative honesty of importers or an additional (implicit) tax, the shift in valuation would definitely change (in most cases, lower) the dutiable base from EV to IV. Thus, in determining the impact of the shift in revenues, it would be appropriate to use the computed EV/IV ratio.

The formulas for estimating the impact on government revenues of the shift to transaction value is shown below:

a) Change in revenue from import of commodity *i*

$$\Delta R_i / R_i = h_i / (1 + h_i) \{ e_{mi} t_i / [1 + (1 + h_i) t_i] - 1 \}$$

where *R* refers to government revenue

h refers to the EV/IV ratio-1

i refers to sector *i*

e refers to import elasticity

t refers to the applicable tariff rate

b) Total percentage change in revenue is estimated by the weighted average percentage change for all commodities using their respective shares in revenues as weights ($w_i = t_i m_i / \sum t_i m_i$). This gives:

$$\Delta R / R = \sum (\Delta R_i / R_i) w_i$$

Annex B gives the derivation of the foregoing formulas.

Average tariffs used in the revenue change estimation are derived by taking the average tariff per HS chapter. The case whereby a 5 percent uniform tariff level is assumed will also be looked into.

Raw data source

Raw data description. The raw data for this study was generated from the Societe Generale de Surveillance (SGS)-Manila Liaison Office (MLO) data warehouse. The data are contained in the Clean Report of Findings (CRFs) being issued by the SGS to importers. About half

the total imports pass through the SGS system of selected pre-shipment inspection, clearance on goods classification, description and valuation. This system is officially referred to as Selected Pre-Shipment Inspection and Advance Clearance System (SPACS). SPACS is a contract between the SGS and the Philippine government through the Department of Finance (DOF), Department of Trade and Industry (DTI), and Bangko Sentral ng Pilipinas (BSP). SGS involvement with the Philippine government began in 1986 with a contract then known as Comprehensive Import Supervision Service (CISS). Imports that do not pass through the SGS system per amended Joint Order 1-91, dated March 16, 1998, include the following:

- a) Crude oil and petroleum products in bulk, excluding petrochemicals and their products, petroleum additives, and lubricating oils
- b) Fresh, frozen, or chilled foodstuff and fruits
- c) Live animals
- d) Goods with FOB value of less than US\$500.00 (does not apply to goods declared as off-quality, off-grade, reconditioned, substandard, not of prime quality)
- e) Goods directly imported by the government or any of its corporation, agencies and instrumentalities
- f) Goods imported through export processing zones
- g) All duty- and tax-exempt shipments, including those that go through customs bonded manufacturing warehouses (CBMWs)

A complete list is given in Annex A. Most of the items in the list enjoy import duty exemption or duty drawback privileges.

The raw data provided by SGS covers a five-year period from July 1994 to May 1999. The period covers the shift in July 1996 from the HCV as the dutiable base to the EV. The period covered is broken down as follows: July 1994 to June 1995, July 1995 to June 1996, July 1996 to June 1997, July 1997 to June 1998, and July 1998 to May 1999.

The SGS raw data include the following information on imports on a monthly basis: CRF number, commodity classification using a two-digit HS code, HCV, EV, declared IV, and country of origin. All import values are expressed as FOB.

The SGS opinion on valuation in the CRF (whether HCV or EV) is nothing more than a reference value for the use of the Bureau of Customs (BOC) in its attempt to arrive at a correct import valuation. The BOC is not obligated to automatically adopt the SGS-CRF value. As a result, the SGS-CRF indicates "duties payable," which may not be equal to actual duties paid. According to the SGS, however, of the total imports covered by CISS/SPACS, about 98.5 percent of SGS-CRF estimates on valuation are accepted by the BOC. The remaining 1.5 percent go through the appeals process.

The SGS raw data generated include only CRF line entries (CRFEs) with data on HCV, EV and IV for each period relating to every CRF printed and issued by the SGS. The data excludes cancelled CRFs. The total number of CRFs generated with data on the HCV, EV, and IV total 215,078 accounting for 14.6 percent of the total CRFs processed by SGS (1,470,491) over the period July 1994 to May 1999. Each CRF document may contain several line entries if, for instance, different types of goods are imported by a single importer in a single shipment. The SGS-generated raw data include 786,300 CRFEs for the period July 1994 to May 1999. The breakdown per period is shown in Table 2.

The total number of CRFEs declined substantially (55.2 percent) between July 1997 and June 1998 from the previous period. The decline was due to the following:

- a) The financial crisis that began with the peso devaluation in July 1997

Table 2. Total number of CRFEs by period, July 1994 to May 1999

Period	Total CRFEs
July 1994-June 1995	194,538
July 1995-June 1996	293,884
July 1996-June 1997	154,817
July 1997-June 1998	69,384
July 1998-May 1999	73,677
Total CRFEs	786,300

- b) The deviation of imports to CBMWs and Export Processing Zones/Special Economic Zones; in 1998, the volume of import entries going through warehousing increased by 31.4 percent (BOC Annual Report 1998)
- c) Lumping of shipments in the first half of 1997 (January to June 1997)

Raw data limitations. The SGS-MLO database sources its information on the HCV and EV from affiliates worldwide. One of the SGS affiliates' main tasks is to provide SGS with opinion on the value of specific types of imported commodities. Thus, there are no zero HCV and EV in the raw data field generated. Also, valuation data sourced from affiliates are available up to the eight-digit HS code level of disaggregation. However, they are not mandated to input data on declared invoice value (IV) on a per commodity basis (i.e., eight-digit HS Code). Thus, the occurrence of significant IV=0 in the data field generated on a per commodity basis—64 percent as a proportion of the total CRFes.

The total IV, on the other hand, is available on a per CRF document basis. Note, however, that the IV on CRF documents represents the total import value of a particular shipment by an importer, and may include values of different types of commodities (i.e., different HS codes). The total IV per CRF is determined by sorting the raw data using the CRF document number. Table 3 shows the results and occurrence of zero IV values, resulting from the fact that (as mentioned earlier) SGS affiliates are not mandated to input IV values. The number of CRFs without the total IV value is negligible at 1.26 percent of the total number. CRFs with total IV values account for 98.74 percent of the total number.

The next step is to allocate the computed IV values for each commodity item, defined by its HS code within each CRF and covering more than one HS classification. This is done by computing the share of each commodity's HCV or EV in the total value for each CRF. The percentage share is then used as weights to pro-rate the total IV to each commodity item in each CRF. The

Table 3. CRF documents with and without declared total invoice values, July 1994 to May 1999

Period	CRFs, IV=0	Percent (%) share in total	CRFs, IV>0	Percent (%) share in total	Total CRFs
July 94-June 95	346	0.61	56,613	99.39	56,959
July 95-June 96	805	1.03	77,727	98.97	78,532
July 96-June 97	15	0.05	32,963	99.95	32,978
July 97-June 98	692	1.97	34,514	98.03	35,206
July 98-May 99	856	7.51	10,547	92.49	11,403
Total CRFs	2,714	1.26	212,364	98.74	215,078

raw data are then sorted out by the HS code, the results of which are shown in Table 4. The number of CRFEs without IV values is negligible at 1.7 percent of the total number. CRFEs with IV values account for 98.3 percent of the total number.

STUDY FINDINGS AND ANALYSIS

HCV/IV and EV/IV ratios: incidence of underinvoicing. HCV/IV and EV/IV ratios (R) are computed on a per CRF basis. Assuming that the HCV and later EV values to be the true value of the commodity in question, $R < 1.0$ indicates overinvoicing while $R > 1.0$ denotes underinvoicing. $R = 1.0$ indicates honesty among importers. Cases with extreme ratios were observed, i.e., insignificant ratios ($R < 0.01$) or very large ones ($R > 10$). A subset was created to be used in the study for analysis. This subset is selected by excluding CRFs with $IV = 0$ (i.e., where the invoice

Table 4. CRF line entries with and without declared invoice values, July 1994 to May 1999

Period	CRFEs, IV=0	Percent (%) share in total	CRFEs, IV>0	Percent (%) share in total	Total CRFEs
July 94-June 95	1,533	0.79	193,005	99.21	194,538
July 95-June 96	1,339	0.46	292,545	99.54	293,884
July 96-June 97	137	0.09	154,680	99.91	154,817
July 97-June 98	5,652	8.15	63,732	91.85	69,384
July 98-May 99	4,739	6.43	68,938	93.57	73,677
Total CRFs	13,400	1.70	772,900	98.30	786,300

values were not properly recorded) and CRFs with inexplicable ratios. The latter includes those with ratios less than 0.5 and ratios greater than 5. After such deletion, the number of remaining observations in the subset used is reduced to 165,503 or 77 percent of the total CRFs. Acceptable CRFs cover 77.5 percent of total CRFEs (i.e., 609,120).

The distribution of CRFEs by ratios for the period July 1994 to May 1999 is shown in Table 5. The share of CRFEs with $R > 1.0$ declined albeit slowly beginning July 1996, only to rise to 47.4 percent during the period July 1998 to May 1999—the same share in the period July 1994 to June 1995. Taken by regimes, the share of CRFEs with $R > 1.0$ was more or less constant—ranging from 47.5 percent to 52.6 percent during the HCV regime and 43.0 percent to 49.2 percent during the EV regime. But the degree of honesty improved with the share of CRFEs with $R = 1.0$ increasing to 38.8 percent in the period July 1998 to May 1999 from 33.5 percent between July 1994 and June 1995. The period July 1996 to June 1997 was rather an exception, since there were more instances of overinvoicing than underinvoicing. The share of CRFEs with $R < 1.0$ increased substantially to 40.9 percent from 15.4 percent during the previous period.

The phenomena observed during the period July 1996 to June 1997 can be explained in terms of the impact of the exchange rate on import valuation. The period July 1996 to June 1997 immediately preceded the onset of the Asian financial crisis and the fall of the peso-dollar exchange rate in July 1997. Pressure on

Table 5. CRFEs with ratios $<$, $=$ or $>$ 1.0, July 1994 to May 1999

Period	CRFEs, Percent (%)		CRFEs, Percent (%)		CRFEs, Percent (%)		Total
	R<1	share in total	R=1	share in Total	R>1	share in Total	
HCV Regime:							
July 94-June 95	27,390	19.01	48,215	33.47	68,456	47.52	144,061
July 95-June 96	35,184	15.40	73,058	31.98	120,188	52.61	228,430
EV Regime:							
July 96-June 97	50,636	40.90	12,279	9.92	60,896	49.18	123,811
July 97-June 98	10,573	22.02	16,782	34.95	20,665	43.03	48,020
July 98-May 99	8,904	13.74	25,152	38.82	30,742	47.44	64,798
Total	132,687		175,486		300,947		609,120

the overvalued peso might have been already mounting during this period. If the premium on the exchange rate is higher than the tariff on a particular commodity, a tendency to overinvoice ($R < 1$) is expected. As the Philippine peso stabilized, the incidence of overinvoicing dropped substantially to 13.7 percent between July 1998 and May 1999 from 40.9 percent in the period July 1996 to June 1997.

Acceptable CRFEs were classified by SITC commodity group. The distribution is shown in Table 6. For all periods, "machinery & transport equipment" account for the largest average share at 44.6 percent, followed by "manufactured goods classified chiefly by material" (23.2 percent), and "chemicals & related products, nes" (12.7 percent).

The simple and weighted averages of HCV/IV and EV/IV ratios by SITC commodity group for the period July 1994 to May 1999 are shown in Table 7. Note that the ratios were weighted by the share of commodities in total imports for each commodity group. It is assumed that particular types of commodities are likely to be over- or underinvoiced compared to others. The overall simple average ratios (i.e., for all commodity groups) are higher than the overall weighted average ratios. This implies that larger shipments have relatively lower ratios. This is not surprising, since large global as well as domestic firms are less likely to commit fraud. There is a general tendency to underinvoice (based on the overall weighted average ratios), the extent of which for the five-year period under study ranges from 2.9 percent to 10.1 percent.

A declining trend is observed in the overall weighted average ratios (i.e., for all commodities) for the five-year period under study (Table 7). The overall weighted ratio dropped from 1.10 in the period July 1994 to June 1995 to 1.03 from July 1997 to June 1998. The decline in the said ratios indicates that by reducing tariffs, importers' incentive to underinvoice was dampened. The government's trade reform program (TRP) has reduced the incidence of underinvoicing although not as dramatic as expected. The less than dramatic decline in the overall weighted average ratios can be explained by the fact that certain sectors (e.g., agriculture) still enjoy a significant amount of tariff protection.

Table 6. Distribution of acceptable CRFEs by SITC commodity group

SITC	Description	Number of CRFEs				
		July 1994- June 1995	July 1995- June 1996	July 1996- June 1997	July 1997- June 1998	July 1998- May 1999
		<i>HCV Regime</i>		<i>EV Regime</i>		
0	Food and live animals	2,976	4,269	1,281	1,891	2,932
1	Beverages and tobacco	148	238	74	140	770
2	Crude materials, inedible, except fuels	15,606	16,689	2,199	1,505	946
3	Mineral fuels, lubricants and related mat'ls	191	454	246	231	150
4	Animal and veg. oils, fats and waxes	124	290	81	94	99
5	Chemicals and related products, nes	17,528	27,910	8,498	8,276	9,660
6	Manuf'd goods classified chiefly by mat'l	40,129	58,170	18,834	10,954	16,072
7	Machinery and transport equipment	51,484	95,013	84,230	19,131	24,360
8	Miscellaneous manufactured articles	15,875	25,397	8,368	5,798	9,809
	All commodities	144,061	228,430	123,811	48,020	64,798
SITC	Description	PERCENT SHARE (%)				
		July 1994- June 1995	July 1995- June 1996	July 1996- June 1997	July 1997- June 1998	July 1998- May 1999
		<i>HCV Regime</i>		<i>EV Regime</i>		
0	Food and live animals	2.07	1.87	1.03	3.94	4.52
1	Beverages and tobacco	0.10	0.10	0.06	0.29	1.19
2	Crude materials, inedible, except fuels	10.83	7.31	1.78	3.13	1.46
3	Mineral fuels, lubricants and related mat'ls	0.13	0.20	0.20	0.48	0.23
4	Animal and veg. oils, fats, and waxes	0.09	0.13	0.07	0.20	0.15
5	Chemicals and related products, nes	12.17	12.22	6.86	17.23	14.91
6	Manuf'd goods classified chiefly by mat'l	27.86	25.47	15.21	22.81	24.80
7	Machinery and transport equipment	35.74	41.59	68.03	39.84	37.59
8	Miscellaneous manufactured articles	11.01	11.12	6.76	12.07	15.14
	All commodities	100.00	100.00	100.00	100.00	100.00

Table 7. Simple and weighted HCV/IV AND EV/IV ratios by commodity group, July 1994 to May 1999

SITC	Description	Simple average				
		July 1994- June 1995	July 1995- June 1996	July 1996- June 1997	July 1997- June 1998	July 1998- May 1999
		<i>HCV/Regime</i>		<i>EV/IV</i>		
0	Food and live animals	1.218	1.164	1.212	1.086	1.116
1	Beverages and tobacco	1.157	1.032	1.096	1.235	1.055
2	Crude materials, inedible, except fuels	1.099	1.115	1.149	1.013	1.063
3	Mineral fuels, lubricants, and related mat'ls	1.048	1.085	1.117	1.043	1.009
4	Animal and veg. oils, fats, and waxes	1.141	1.106	1.134	0.994	1.019
5	Chemicals and related products, nes	1.056	1.115	1.061	1.049	1.090
6	Manuf'd goods classified chiefly by mat'l	1.125	1.083	1.062	1.016	1.156
7	Machinery and transport equipment	1.009	0.964	1.074	1.102	1.042
8	Miscellaneous manufactured articles	1.159	1.198	1.188	1.050	1.293
	All commodities	1.127	1.119	1.126	1.048	1.142

SITC	Description	Weighted average				
		July 1994- June 1995	July 1995- June 1996	July 1996- June 1997	July 1997- June 1998	July 1998- May 1999
		<i>HCV Regime</i>		<i>EV Regime</i>		
0	Food and live animals	1.105	1.071	1.037	1.026	1.050
1	Beverages and tobacco	1.117	0.993	1.032	1.078	1.025
2	Crude materials, inedible, except fuels	1.095	1.127	1.087	1.019	1.076
3	Mineral fuels, lubricants and related mat'ls	1.048	1.085	1.117	1.043	1.009
4	Animal and veg. oils, fats and waxes	1.141	1.106	1.134	0.994	1.019
5	Chemicals and related products, nes	1.105	1.159	1.018	1.053	1.081
6	Manuf'd goods classified chiefly by mat'l	1.078	1.105	1.011	1.012	1.065
7	Machinery and transport equipment	1.057	1.052	1.002	1.014	1.050
8	Miscellaneous manufactured articles	1.164	1.161	1.151	1.027	1.183
	All commodities	1.101	1.095	1.065	1.029	1.062

From July 1998 to May 1999, the overall weighted ratio increased to 1.06 from 1.03 in the previous period. This may be a result of protectionist sentiments prevailing at the time and of people getting used to the new system. The resurgence of protectionism is evidenced by increases in tariff on selected commodities albeit temporary. This will be discussed further in the next section.

The overall weighted average HCV/IV ratios for the period July 1994 to June 1996 (i.e., the HCV regime) are higher than the overall weighted average EV/IV ratios for July 1996 to June 1999 (i.e., the EV regime). The overall weighted ratio dropped as the dutiable basis changed from the HCV to the EV in July 1996, that is, from 1.09 to 1.06 (Table 7). This implies that the EV is much closer to the true TV than the HCV. The said ratio is expected to drop further as the BOC implements the necessary supplementary measures and a learning process takes place.

The 1993 Medalla et al. HCV study used a different database such that comparing the results with this study should be done with caution. However, the results of the said HCV study are worth noting. The 1993 HCV study covered the period September 1991 to February 1993. The period was divided into two: September 1991 to March 16, 1992, or the so-called CISS period, and March 17, 1992 to February 1993, or the so-called Global CISS (GCISS) period. The period breakdown was meant to capture the expansion in the country coverage of the SGS CISS contract. The overall weighted average HCV/IV ratios computed were as follows: 1.07 for CISS and 1.11 for GCISS. These ratios are close to the current study's estimates.

The commodity group with the highest ratio for the five-year period is "miscellaneous manufactured articles" at an average weighted average of 1.14 (Table 7), followed by "chemicals and related products" (1.08) and "crude materials, inedible, except fuels" (1.08). During both the HCV and EV regimes, the commodity group with the highest ratio is "miscellaneous manufactured articles" at 1.16 and 1.12, respectively.

The ratios derived by the 1993 HCV study and the current study are crude measures of improvement in relative honesty

among importers. Comparing the results, an improvement in importers' relative honesty is observed (Table 8).

Over the period being studied, underinvoiced commodities are mostly imported from Hong Kong with an average ratio of 1.25 (see Table 8), followed by the ASEAN countries (minus Singapore) (1.17), and China (1.22).

Trade reforms, underinvoicing, and the shift to transaction value

Trade policy reform was pursued further during the 1990s beginning with Executive Order (EO) No. 470, which was issued in July 1991. Trade liberalization in this study refers mostly to tariff reductions. The study's results indicate that trade liberalization policies do indeed reduce the incidence of underinvoicing. In sum:

- a) There was an improvement, albeit small, in the number of CRFEs with $R=1.0$ from 33.5 percent in the period July 1994 to June 1995 to 38.8 percent between July 1998 and May 1999.
- b) The number of CRFEs with $R>1.0$ dropped from 52.6 percent between July 1995 and June 1996 to 43.0 percent from July 1997 to June 1998.

Table 8. Ratios by country of origin of imports, July 1994-May 1999

Country	July 1994-July 1995- June 1995 June 1996		July 1996- June 1997	July 1997- June 1998	July 1998- May 1999	Average
	HCV/IV		EV/IV			
HK	1.153	1.202	1.526	1.125	1.261	1.253
ASEAN-SGP	1.140	1.173	1.078	1.296	1.182	1.174
CHN	1.133	1.132	1.123	1.081	1.142	1.122
USA	1.125	1.104	1.065	1.045	1.091	1.086
TWN	1.089	1.121	0.998	1.125	1.092	1.085
ROW	1.071	1.103	0.956	1.099	1.050	1.056
EU	1.072	1.107	0.981	1.038	1.061	1.052
KOR	1.035	1.060	1.000	1.030	1.081	1.042
JPN	1.054	1.049	0.970	0.969	1.016	1.012
SGP	0.937	0.997	0.928	1.004	1.083	0.990

- c) The overall weighted average ratios showed importers' tendency to underinvoice (i.e., $R > 1.0$). However, a declining trend was observed over the period July 1994 to June 1998.

The Asian financial crisis in mid-1997 awakened protectionist sentiments in most countries, including the Philippines. In January 1998 two EOs—nos. 465 and 486—increased tariffs for 870 lines as against a reduction in 512 lines. Most of the tariff increases (86 percent) were in the following commodity groups: agriculture and food; chemical and chemical products; textile, paper, wood and leather; base metals and non-base metals; and machinery and equipment. Effective tariff protection enjoyed by the agricultural sector to date still remains in place. In January 15, 1999, EO 63 was issued raising tariffs, albeit temporarily, on the following commodity groups: iron and steel; garments and textiles; pulp and paper; automotive battery; disposable lighter; and, petrochemicals. The justification behind the said temporary tariff increases was to cushion the impact of the Asian financial crisis on these supposedly "hard-hit" industries. To quote from EO 63: "Currency depreciation spawned by the crisis requires some action to cushion industries against surges of low-priced imports." The government claims that these industries are, or have potentials of, becoming globally competitive, but their very existence is threatened by unfair trade practices.

Was there a temporary reversal of the government's efforts to liberalize trade? No, according to the Tariff Commission in its 1998 Annual Report, the overall nominal tariff remained almost unchanged at 10.69 percent in 1998, notwithstanding EOs 465 and 486. However, on a sectoral level, the average nominal tariff for manufacturing increased to 9.42 percent from 9.05 percent in 1998. As far as EO 63 is concerned, it can be argued that the tariff increases embodied in it are temporary, having a shelf life of one year. But what does real trade (i.e., international trade in practice) tell us? Increased protection by way of higher tariffs will encourage underinvoicing. The trend in the incidence of underinvoicing was reversed from July 1998 to May 1999 as the overall weighted average ratio increased to 1.06—the same level as in the period just before

the peso devaluation (1.06 during the period July 1996 to June 1997). As can be gleaned from Table 7, underinvoicing in the following commodity groups increased significantly in the periods July 1997 to June 1998 and July 1998 to May 1999, and somehow matches those groups with tariff increases in 1998 and 1999:

- a) Crude materials, inedible, except fuels—from 1.019 to 1.076;
- b) Chemicals and related products, nes—from 1.053 to 1.081;
- c) Manufactured goods classified chiefly by material—from 1.012 to 1.065;
- d) Machinery and transport equipment—from 1.014 to 1.050; and,
- e) Miscellaneous manufactured articles—from 1.027 to 1.183.

Estimating the impact on government revenues of the shift to transaction value

The 1993 HCV study estimated the impact on government revenues of shifting from the HCV to the EV and the HCV to the TV. The IV is assumed to closely approximate the TV. Again, caution should be exercised with respect to comparing the results of the said study with the current one, since different databases were used. Such, however, are worth noting. The estimates of the potential losses in government revenues resulting from a shift to the IV from the HCV were lower than expected (i.e., -3.95 percent with high import elasticity and -6.15 percent with low import elasticity).

The current estimates show that shifting from the EV to the TV (where TV = IV) will indeed result in a decline in government revenues, although much lower than feared. The estimates are shown in Table 9. The study estimates of the decline in government revenues in 2000 (the first year of implementation of the TV) range from -3.3 percent assuming high import elasticity and -5.2 percent with low import elasticity. In case of a uniform tariff level of 5.0 percent instead of weighted average tariffs, the study estimates the decline in government revenues will range from -3.3 percent to -4.6 percent. These figures are lower than the estimates in the 1993 HCV study. This implies that the EV is much closer to the TV than the HCV ever was.

In estimating the impact of a shift to a TV system on government revenues in 2000, two cases were looked into, as follows:

Case 1: Using the average of the EV/IV overall weighted average ratio for the last two (2) periods (i.e., July 1997-June 1998 and July 1998-May 1999).

Case 2: Using the EV/IV overall weighted average ratio for the period July 1998 to May 1999.

Case 2 shows higher government revenue declines relative to Case 1 at -5.2 percent, assuming low import elasticity and -4.5 percent, assuming high import elasticity.

In terms of peso value, the estimated decline in government revenues resulting from the shift to transaction value range from P3.2 billion to P5.2 billion (Table 9A). Assuming a uniform tariff of 5 percent, the estimated drop in government revenues range from P2.7 billion to P3.7 billion. Under Case 1, the estimated drop in government revenues is relatively small, ranging from P3.2 (low import growth assumption; high import elasticity) to P3.7 billion (high import growth assumption; low import elasticity). Under Case 2, the estimated drop is relatively larger ranging from P4.4 billion (low import growth assumption; high import elasticity) to P5.2 billion (high import growth assumption; low import elasticity). It is very difficult to say when government revenues will return to their 1999 level, since numerous economic variables influence the direction of imports. For instance, if the current economic recovery is solid, imports may surpass their projected levels such that the resultant government revenues may not even fall at all. But if the current economic recovery is fragile, imports may remain the same, or, at worst, drop alongside government revenues.

Potential gains and losses under the GVC regime

The main difference between the current valuation scheme and the GVC is where fraud is determined. For the former, it is upon entry while the latter focuses primarily on post-audit in conjunction with efforts at risk assessment. RA 8181, while providing for the final shift to TV by January 1, 2000, does not have a post-audit provision and thus falls short of WTO compliance. While the

Table 9. Estimates of impact on government revenues of a shift to a transaction values (TV) system

Case 1: Average EV/IV for two periods, July 1997-June 1998 & July 1998-May 1999					
SITC	Description	EV/IV	Year 2000		Uniform 5 percent tariff high e
			low e	high e	
0	Food and live animals	1.038	-0.0332	-0.0292	-0.0330
1	Beverages and tobacco	1.051	-0.0464	-0.0428	-0.0471
2	Crude materials, inedible, except fuels	1.047	-0.0449	-0.0430	-0.0425
3	Mineral Fuels, lubricants, and related mat'ls	1.026	-0.0250	-0.0221	-0.0215
4	Animal and veg. oils, fats, and waxes	1.007	-0.0065	-0.0061	-0.0062
5	Chemicals and related products, nes	1.067	-0.0613	-0.0574	-0.0582
6	Manuf goods classified chiefly by mat'ls	1.039	-0.0344	-0.0265	-0.0300
7	Machinery and transport equipment	1.032	-0.0295	-0.0262	-0.0262
8	Miscellaneous Manufactured Articles	1.105	-0.0883	-0.0684	-0.0769
All	commodities	1.046	-0.0376	-0.0326	-0.0334

Case 2: Using EV/IV for July 1998-May 1999					
SITC	Description	EV/IV	Year 2000		Uniform 5 percent tariff high e
			low e	high e	
0	Food and live animals	1.050	-0.0430	-0.0378	-0.0428
1	Beverages and tobacco	1.025	-0.0229	-0.0211	-0.0232
2	Crude materials, inedible, except fuels	1.076	-0.0700	-0.0671	-0.0662
3	Mineral Fuels, lubricants, and related mat'ls	1.009	-0.0088	-0.0077	-0.0075
4	Animal and veg. oils, fats, and waxes	1.019	-0.0189	-0.0176	-0.0180
5	Chemicals and related products, nes	1.081	-0.0730	-0.0683	-0.0692
6	Manuf goods classified chiefly by mat'ls	1.065	-0.0564	-0.0434	-0.0492
7	Machinery and transport equipment	1.050	-0.0456	-0.0404	-0.0405
8	Miscellaneous Manufactured Articles	1.183	-0.1438	-0.1116	-0.1254
All	commodities	1.062	-0.0520	-0.0447	-0.0460

objectives are presumably the same, that is, to arrive at true valuation—the procedures for the two systems are very different. What are the advantages of one system over the other? Do the potential gains outweigh the potential losses when the GVC (GATT Valuation Code) regime is in place? The study identified the following advantages of implementing the GVC:

- a) Trade facilitation
- b) Relative clarity in the determination of dutiable base
- c) Increased government revenues in the long run
- d) Increased self-compliance of both the BOC and importers
- e) Greater possibility of synergistic cooperation between the BOC and the Bureau of Internal Revenue (BIR)

Table 9A. Estimates of impact of government revenues (In million pesos)

	Year 2000		Uniform 5 percent tariff
	low elasticity	high elasticity	
<u>Projected level of imports*</u>			
Low growth assumption	1,603,704.7	1,603,704.7	1,603,704.7
High growth assumption	1,618,753.4	1,618,753.4	1,618,753.4
<u>Projected revenues from imports</u>			
Low growth assumption	98,263.4	98,263.4	80,186.4
High growth assumption	99,185.5	99,185.5	80,938.8
Case 1: Average EV/IV of July 1997-May 1999			
<u>Projected change in revenues</u>			
Low growth assumption	(3,696.7)	(3,203.1)	(2,679.8)
High growth assumption	(3,731.4)	(3,233.1)	(2,704.9)
Case 2: Using EV/IV of July 1998-May 1999			
<u>Projected change in revenues</u>			
Low growth assumption	(5,109.1)	(4,391.6)	(3,690.8)
High growth assumption	(5,157.0)	(4,432.8)	(3,725.5)

*Source of import projection: MTPDP 1999-2004.

- f) Opportunity for the BOC to reinvent itself into a new, clean, and efficient agency

From the point of view of the importer, goods are held hostage at the port under the present system. In contrast, if selected for audit under the GVC regime (using presumably some risk assessment), they will have to open their books at some later date and after their goods have been allowed entry. At the outset, there is a definite trade facilitation under the GVC.

The pre-shipment audit of goods under the present system is but a form of non-tariff barrier delaying the flow of imports. Pre-shipment inspection (PSI) should be liberalized in the sense that it should be market-determined. Importers should decide whether they want PSI on their goods and thus pay for the cost of such a service. Trade is greatly facilitated under the GVC whereby importers are considered innocent of any fraudulent act unless proven guilty under a post-audit system. (Again, note that although RA 8181 provides for the shift to transaction value by January 1, 2000, it does not provide for the establishment of a post-audit system.)

A rather obvious advantage is the change from a notional method of valuation to a relatively more definitive method of assessing dutiable value. A notional method of valuation is subjective and open to manipulation. Guidelines in determining dutiable value reduce the opportunity for arbitrary valuation. The use of the TV to determine dutiable base is only one method indicated in the GVC. If the TV is difficult to ascertain, other methods of assessing dutiable value may apply, which are as follows:

- a) Transaction value of identical goods
- b) Transaction value of similar goods
- c) Deductive method. This is based on domestic sales revenue of the imported good or similar or identical goods less import costs and selling expenses
- d) Computed method. This is based on the sum of production costs, general and selling expenses, and gross profit margin.
- e) Fallback method. This allows the BOC to use any of the above methods that closely approximates transaction value.

In practice, the BOC will probably accept the IV as the TV, or resort to the fallback method. Under the GVC, the BOC cannot determine dutiable value based on:

- a) The selling price of locally produced goods
- b) A system whereby the higher of two alternative values should be used
- c) A domestic price of goods in the exporting country
- d) The export price of the goods to a country other than the importing country
- e) The production costs as opposed to that which is computed for identical or similar goods
- f) Minimum customs values
- g) Arbitrary or fictitious values

The increase in government revenues from import duties could also result from the inclusion of certain items in determining dutiable value, which the present system cannot effectively deal with. These items include "assists," "royalties," and "license fees." Under the BDV, these items may or may not have been included in the price of imported commodities. In the GVC regime, these items should be added back to the invoice value in determining dutiable value if they have not been included in the price of the imported commodities. Resorting these items potentially increases the valuation base. However, it is difficult to determine at this point whether the potential increase will be large enough to offset the extent of potential underinvoicing during the first transaction value year (i.e., 2000) such that estimated government revenue losses will be reduced. Again, the importance of post-audit system in checking the expenses associated with such items as "assists" cannot be overemphasized. In the long run, however, improved honesty among importers in declaring the correct transaction value will raise government revenues.

Implementing the GVC is not without potential losses. Based on the study, these are as follows:

- a) Gross underinvoicing at the onset to establish the transaction value of an imported commodity
- b) Overinvoicing when duty drawbacks exist

- c) Rent-seeking inasmuch as the discretion of Customs is resorted to in some cases

Information is lacking on historical prices of commodities, which are not traded in an open market. For such commodities, there is an incentive for importers to underinvoice to be able to set a transaction value at the onset. Underinvoicing will also be resorted to by importers of commodities that involve assists, royalties, and license fees, since adding back these items increases their dutiable value. On the other hand, importers with duty drawback privileges are encouraged to overinvoice particularly if they perceive that the TV is lower than the current EV. Overinvoicing allows them to maximize the tax credits that they can claim. Both a) and b) above will result in lower-than-expected government revenues.

Cases that allow for the BOC's discretion will increase rent-seeking activities. This is particularly true in instances where the BOC has to decide whether indeed assists, royalties, or license fees are included in the invoice price. Rent-seeking activities diverts funds from the government to private individuals. Again, this reduces government revenues.

As long as the legal framework and institutions for WTO compliance are in place the gains will outweigh the potential losses. The use of TV as the basis for assessing dutiable value combined with lower tariffs will improve relative honesty among importers in the long run. However, it is wishful thinking to assume that under- and overinvoicing can be completely eliminated. There will always be compulsive under- and overinvoicers who will risk committing fraud despite reduced tariffs and a flexible exchange rate regime. The important thing is to be able to profile these so-called compulsive under- and overinvoicers and put in place a viable risk management system.

In sum, what the above discussion implies is that, in time, there is no reason why the GATT valuation system should not result in a more accurate valuation than the present system. This somewhat bolsters our basis for using the EV/IV ratio in estimating the revenue impact of the switch to TV. That is, there is no strong argument for assuming that the declared IV would fall once we abandon the present BDV-like EV system.

CONCLUSIONS AND RECOMMENDATIONS

Based on the study's findings, the following conclusions and recommendations were arrived at:

a) *Need for improved trade database.* The SGS database has been very useful for the study. However, it was not originally designed to be used for statistical and economic research (not yet anyway). Therefore, it has its shortcomings. Furthermore, it does not include all importation into the Philippines. The subset used for this study accounts for only 7 percent of total imports value for the same period. The relative honesty of importers with duty-free and duty-drawback privileges cannot be compared to those who are duty-paying. The need for a reliable and timely trade database cannot be over emphasized.

b) *Trade liberalization cum exchange rate flexibility.* The success of trade reforms is somehow limited with a less than flexible exchange rate. This is evidenced by a sharp increase in the incidence of overinvoicing during the period prior to the peso devaluation in July 1997. During the period July 1996 to June 1997, the number of CRFEs with $R < 1$ rose to 40.9 percent of the total as against 15.4 percent in the previous period (July 1995 to June 1996). As the Philippine peso stabilized, the incidence of overinvoicing dropped substantially to 13.7 percent between July 1998 and May 1999.

c) *Reduced underinvoicing with trade liberalization.* The findings of the study support the argument that trade liberalization in the form of lower tariffs will reduce the incidence of underinvoicing. These findings are summarized below:

- There was an improvement, albeit small, in the number of CRFEs with $R = 1.0$ from 33.5 percent between July 1994 and June 1995 to 38.8 percent in the period July 1998 to May 1999.
- The number of CRFEs with $R > 1.0$ dropped from 52.6 percent in the period July 1995 to June 1996 to 43.0 percent from July 1997 to June 1998.
- Overall weighted average ratios showed a tendency for importers to underinvoice (i.e., $R > 1.0$). However, a declining trend was observed over the period July 1994 to June

1998. The overall weighted average ratio fell from 1.10 in the period July 1994 to June 1995 to 1.03 between July 1997 and June 1998. The decline is less dramatic than expected inasmuch as certain sectors (e.g., agriculture) still enjoyed a significant amount of tariff protection.

- Over the period under study, underinvoiced commodities are mostly imported from the following countries: Hong Kong (1.25), ASEAN countries, excluding Singapore (1.17), and China (1.12).

d) *Minimal decline in government revenues due to the shift to a TV system.* The decline in government revenues due to the shift to a TV system is much less than feared. The study estimates of the decline in government revenues in 2000 (the first TV year) range from -3.3 percent assuming high import elasticity and -5.2 percent with low import elasticity. Assuming a uniform tariff level of 5.0 percent in 2000 instead of using weighted average tariffs, the study estimates of the decline in government revenues range from -3.3 percent to -4.6 percent.

In terms of peso value, the estimated decline in government revenues resulting from the shift to transaction value ranges from P3.2 billion to P5.2 billion. Assuming a uniform tariff of 5 percent, the estimated drop in government revenues ranges from P2.7 billion to P3.7 billion.

e) *Potential superiority of the GVC system to the BDV system.* There is no reason why valuation under the GVC regime will be less accurate than the present system. Note the study's observation of reduced incidence of underinvoicing with the shift to EV from HCV in July 1996. The advantages of the GVC system identified by the study are as follows:

- Trade facilitation
- Relative clarity in the determination of dutiable base
- Increased government revenues in the long run
- Increased self-compliance of both the BOC and importers
- Greater possibility of synergistic cooperation between the BOC and the BIR

- Opportunity for the BOC to reinvent itself into a new, clean, and efficient agency

f) *Changes in the legal framework and institutions.* Implementing the GATT-GVC is but one aspect of the WTO agreement. A wholistic approach to WTO compliance should be taken. The sooner the legal framework is amended to ensure WTO compliance, the less confusion and arbitrariness there will be if and when the Philippines implements the shift to a TV system in January 1, 2000. There is also the issue of how prepared government institutions and local industries are for WTO compliance.

g) *Exports and WTO compliance.* International trade is a two-way affair. One country's imports are another country's exports. There is a need to look into the implications on exports of WTO compliance.

h) *The folly of postponement.* Following RA 8181, a transition period of more than three years was set before implementing the shift to a transaction value system. Policymakers at that time believed that this was sufficient to prepare the Philippines for the eventual shift. There are those who claim that the country is not as prepared as it should be. But WTO compliance is like marriage—how prepared can one be? As long as one is convinced that the benefits outweigh the costs, one takes the plunge and go through the learning experience.

REFERENCES

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- Medalla, E.M., L.C. De Dios, and R. Aldaba. 1993. Effects of HCV Valuation: A Policy Paper. PhilExport/USAID PITO-P.

List of Commodities from SGS CISS
Per Joint Order 1-91, March 16, 1998 (a)

1. Goods imported pursuant to Sec. 105 of the Tariff and Customs Code of the Philippines excluding commercial imports under consignment basis.
2. Crude oil and petroleum products in bulk such as but not limited to crude oil, LPG, naphtha, gasoline, reformates, kerosene, aviation fuel, gas oil, base oil for lubricants, fuel oils, and asphalt; excluding chemicals and their products, petroleum additives and lubricating oils.
3. Shipments of explosives, ammunition, arms and equipment, and other strategic materials certified as such by the Department of National Defense; excluding raw materials such as chemicals for the manufacture of explosives and firearms, and ammunition for commercial use.
4. Precious stones, artifacts, and precious metals
5. Fresh, frozen, or chilled foodstuff and fruits
6. Live animals
7. Works of art
8. Current newspapers and periodicals
9. Parcel post
10. Individually owned motor vehicles qualifying under the provisions of EO 248, Vehicle Development Program, series of 1987, specifically relating to the no-dollar importation of secondhand motor vehicles by returning residents or immigrants
11. Goods whose FOB value is less than US\$500 as declared in the Letter of Credit (L/C) or its equivalent in other currencies at the time of L/C opening or as declared in the total invoice covering the shipment in cases where importation is not financed by an L/C; excluding partial shipments invoiced as less than US\$500 FOB against an L/C whose amount exceeds US\$500
The exemption does extend to goods invoiced or declared in the

shipping documents as off-quality under such descriptive terms as "stock lots," "side runs," "cull rolls," "seconds," "mill lots," "scraps," "off-grade," "reconditioned," "used," "junk," or similar terms conveying or purporting to convey the condition of the article as substandard or not of prime quality.

12. Goods whose consignee is either the government of the Philippines or any of its corporations, agencies, and instrumentalities but excluding those imported in behalf of these entities by the private sector
13. Importation of semiconductor and allied firms subject to the qualification requirements of the Board of Investments
14. Importation by export processing zone firms duly registered as such with the Philippine Export Zone Authority (EPZA)
15. Importation of equipment, machinery, spare parts, and other materials for oil, coal mining, and geothermal operations imported by petroleum, geothermal, and coal service contractors pursuant to PD Nos. 529, 972, and 1442 as certified by the Office of Energy Affairs
16. Importation by member firms of the automotive wiring harness industry
17. Importation of pre-cut fabrics and accessories for processing into finished garment and textile products and export by firms engaged in exporting the same for the last five years. The following conditions, however, must be met:
 - a. The firm and/or any of its officers have not violated any rules and regulations of the Garments Textile Export Board (GTEB) and the BOC governing import/export operations during the last five years, nor have any pending case, whether administrative or judicial, regarding the conduct of importation of its raw materials.
 - b. The firm must not be delinquent in the liquidation of imported raw materials.
 - c. The said pre-cut fabrics and accessories are directly used in the manufacture of the products to be exported.
 - d. The firm must present an exemption certificate issued by the Ad Hoc Committee on the CISS through the GTEB.

18. Importation by firms registered with the Subic Bay Metropolitan Authority (SBMA) and Clark Special Economic Zone (CSEZ), subject to the implementing rules and regulations jointly promulgated by the SBMA, CSEZ, and BOC. Excluded are shipments bound for duty-free shops, outlets or trading warehouses catering to duty-free shops and outlets.
19. All duty- and tax-exempt shipments including those entered under the CBMW.

Notes:

a) CISS refers to Comprehensive Import Supervision Service. A contract that has been entered into by Societe Generale de Surveillance, otherwise known as SGS, with the Philippine government through the Department of Finance, Department of Trade and Industry, and Bangko Sentral ng Pilipinas.

ANNEX B

Estimating the Impact of the Shift to Transaction Value on Government Revenue

What follows is the formula for estimating the impact of the shift to transaction value on government revenue. Its underlying assumption is that the true transaction value is very close to the IV. The formula is taken from the Medalla et al. 1993 HCV study.

- Let $R(0)$ = revenue level when the IV is used
- $R(h)$ = revenue level when the EV is used
- h = ratio of EV and IV less one from
 $(1 + h) = EV/IV$
- m = level of imports
- P_b = import price given by the IV
- t = tariff

$$1) R(h) = t P_b (1 + h) * m$$

Shifting from EV to IV will result in a decline in the valuation base from $P_b(1+h)$ to P_b . The decline in the import price will create an increase in the demand for the commodity. Import levels will change, depending upon the import demand elasticity of the commodity denoted by e_m expressed in absolute values. Thus $R(0)$ is expressed as:

$$2) R(0) = t P_b * (m + \Delta m)$$

where $\Delta m = -e_m * m * \Delta P/P$

or $\Delta m/m = -e_m DP/P$

The change in the import price ($\Delta P/P$) is derived as follows:

Let $P(h)$ = the domestic price of the import commodity when the EV is used

$P(0)$ = the domestic price of the import when the IV is used

$P(h)$ is expressed as,

$$3) P(h) = P_b (1+h)t + P_b = P_b [1 + (1+h)t]$$

$P(0)$ is expressed as,

$$4) P(0) = P_b t + P_b = P_b (1+t)$$

The change in import price, $\Delta P/P$, is expressed as,

$$5) \Delta P/P = \frac{P(0) - P(h)}{P(h)}$$

Substituting equations 3) and 4) into 5)

$$\begin{aligned} 6) \Delta P/P &= \frac{P_b (1+t) - P_b [1 + (1+h)t]}{P_b [1 + (1+h)t]} \\ &= \frac{1+t - 1 - (1+h)t}{1 + (1+h)t} \\ \Delta P/P &= \frac{-ht}{1 + (1+h)t} \end{aligned}$$

Substituting $\Delta P/P$ in equation 6) into 2) gives $\Delta m/m$ as

$$7) \Delta m/m = \frac{e_m h t}{1 + (1+h)t}$$

For $t \neq 0$, the change in the government revenue is derived as,

$$\begin{aligned}
 8) \Delta R/R &= \frac{R(0) - R(h)}{R(h)} \\
 &= \frac{t P_b (m + \Delta m) - t P_b (1+h) m}{t P_b (1+h) m} \\
 &= \frac{m + \Delta m - m - mh}{(1+h) m} \\
 &= \frac{\Delta m/m - h}{1+h}
 \end{aligned}$$

Substituting equation 7) into 8), the change in government revenue is expressed as,

$$9) \frac{\Delta R}{R} = \frac{\frac{e_m h t}{1 + (1h)t} - h}{1+h} = \frac{h}{1+h} \left[\frac{e_m t}{1 + (1+h)t} - 1 \right]$$

Revenue change brought about by each commodity group is computed. For commodity i , the above formula is expressed as,

$$10) \frac{\Delta R_i}{R_i} = \frac{h_i}{1+h_i} \left[\frac{e_{m_i} t_i}{1+(1+h_i)t_i} - 1 \right]$$

If $e_{m_i} = 0$, the above equation is reduced to,

$$\frac{\Delta R_i}{R_i} = \frac{h_i}{1+h_i}$$

The sum of revenue changes due to each commodity group is shown in equation 11), weighted by the share of each commodity group in tariff revenues, which are expressed as,

$$11) \quad \sum_1^9 \left(\frac{\Delta R_i}{R_i} \right) \frac{t_i m_i}{\sum t_i m_i}$$