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#### "Trade Costs in Malaysia: Issues and Challenges"

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#### **1.** Introduction

Malaysia considers itself a trading nation as international trade occupies an increasing percentage of its Gross Domestic Product (GDP). In 2007, international trade as a percentage of the Gross Domestic Product (GDP) of the country registered 173% while the World Trade Organization (WTO) ranked Malaysia as the 19<sup>th</sup> largest exporter and the 25<sup>th</sup> largest importer in world merchandise trade. Capital flows also play an important part in the international trade of the country. Inward capital flows, for example, accounted for 21% of the Gross Fixed Capital Formation (GFCF) in the country while outward capital flows comprised 27% of the GFCF in 2007. The close links between international trade and capital flows are due to the fact that Malaysia is part of the regional production networks of the multinational corporations (MNCs) operating throughout the East Asian region.

Transportation costs have been shown to affect international trade, both in theory and empirical evidence (De 2009a, 73; Shepherd and Wilson 2009, 369). Transportation costs are an important component of trade costs which in broad terms also covers tariffs and non-tariff barriers, information costs, contract enforcement costs, costs associated with the use of different currencies, legal and regulatory costs, local distribution costs (wholesale and retail) and others. As tariff barriers have been progressively lowered through unilateral, multilateral, regional and bilateral efforts, the other components of trade costs play an increasingly important role in determining the volume of trade of a country. In this regard, lowering trade costs can contribute toward increasing export propensity as well as facilitating the entry of small and medium enterprises into export markets.

However, data on trade costs and their determinants are sparse, both for developed and especially for developing countries like Malaysia despite the on-going research interest in this issue. The objectives of this paper are to profile and analyze the trade costs in Malaysia based on available data and to ascertain the main challenges faced reducing the trade costs in the country, primarily in the export of electronics goods as it is the major manufactured export good of the country. The estimation of trade costs is divided into two parts; port to port costs are estimated using the difference between free-on-board (fob) and the cost, insurance and freight (cif) values while the input-output table is used to estimate the costs from factory to port. Due to the lack of data, especially time series data, the main challenges impeding the lowering trade costs in the country are identified qualitatively through the literature and interviews.

The paper is organized as follows: the profile of the trade costs in the country is analyzed in Section 2. Section 3 discusses the main challenges faced in reducing the trade costs in the country. The conclusion in Section 4 summarizes the main findings of the paper and the way forward for further research in trade costs for the country as well as the main policy lesson from this study.

### 2. Understanding Trade Costs in Malaysia

### 2.1 Definition, measurement and data sources

Anderson and van Wincoop (2004) define trade costs as all costs incurred in moving a good from a producer to a final user other than the cost of producing the good itself. Such costs include transportation costs (freight costs and time costs), trade policy barriers (tariffs and non-tariff barriers), information costs, contract enforcement costs, costs associated with the use of different currencies, legal and regulatory costs, local distribution costs (i.e. wholesale and retail costs). Our focus in the present study is on estimating mainly transportation costs and wholesale and retail costs. An illustration on goods moving from a factory in a country to a final user either in the same country (i.e. for domestic consumption) or located in another country (i.e. for exports) is shown in Appendix 1.

Anderson and van Wincoop (2004) also discuss three main sources of data for transport costs:

- (i) Industry/shipping firm information this is the most direct source where shipping or air freight rates are obtained (Limao and Venables (2001), Hummels (2001) and De (2009b)).
- (ii) The US Census Bureau this source provides a useful time series database on imports of merchandise from various countries in the world to the US. Information on imports valued at f.o.b. (i.e. cumulative cost of goods up to port of departure) and imports valued at c.i.f. (i.e. cost of goods including insurance and freight charges incurred in shipping the goods from country of origin to the US). The difference between imports f.o.b. and imports c.i.f. is the insurance and freight charges incurred.
- (iii)IMF this source provides c.i.f./f.o.b. ratios and is reported to be most widely available but found to be least satisfactory.

To estimate wholesale and retail distribution costs, national input-output tables are widely used in many studies as a source of data (for example Curtis and Chen (2003)). In the present study, we estimate port-to-port transportation costs (i.e. freight and insurance charges) based on data sourced from the US Census Bureau. We use data for US imports from Malaysia, which is equal to Malaysia's exports to the US. Estimation of transport cost from factory to port and wholesale and retail distribution costs are based on data sourced from Malaysia's Input-Output tables.

These two sources are chosen for two main reasons. First, these are published data, hence they are relatively easy to obtain. Second, since the bulk of Malaysia's exports go to the US, the US Census Bureau data source on Malaysia's exports and the freight and insurance charges thus serves a good representation. Data sourced directly from shipping firm such as the database of Maersk Sealand is not adopted here in the present study mainly because at least half of Malaysia's electrical and electronic exports to the US are transported by air (Tham et al, (2009), p169). Using Maersk Sealand database that provides only sea freight rates will leave out air freight charges completely.

There are limitations to these two approaches. As pointed out by De (2009b), using exports, which tend to be concentrated in a few specific goods, may lead to a bias in transport costs estimation. This is likely in the present case as Malaysia's exports to the US concentrates in the electrical and electronic goods. As it is shown in Figure 3, freight and insurance charges are generally lower for these goods (SITC 76 and 77). The average freight and insurance costs estimated are therefore likely to be biased downwards. On using Malaysia's Input-Output tables, one limitation to our analysis is the absence of a time series analysis since Input-Output tables are not published annually. In addition, the appropriate method to estimate transport and wholesale rates is to obtain the difference between exports valued at producers' price (representing factory gate price) and exports at purchasers' value (Curtis and Chen (2003, p976)).We, however, have to use exports at basic values (which show the income received by producers), instead of at producers' values for our estimation due to lack of data on exports at producers' price.

## 2.2 Profile of trade costs in Malaysia

We examine Malaysia's trade costs (the non-tariff components) in three ways. First, time trend analyses are made on freight and insurance costs from 1996 – 2009. Comparison is made between exports to the US and exports to Australia. In 2008, the USA and Australia are, respectively, the second and ninth largest export destination of Malaysia. Comparison with other ASEAN-5 countries is also made. Second, analyses are made to examine if freight and insurance costs vary by type of goods. Finally, we compare the transport costs and wholesale and retail distribution costs incurred among three movements of goods: (i) moving home goods locally, (ii) moving goods to ports for exports and (iii) moving imported goods from ports to inland. To our knowledge, there has been no prior study nor has data compilation on non-tariff trade costs been conducted for the case of Malaysia.

### 2.2.2 Average freight and insurance costs over time

Table 1 shows the average insurance and freight charges of Malaysia's exports to the US and Australia. Two observations can be made. First, average insurance and freight charges are lower in exports to the US than those to Australia. This could be due to the different

composition of export goods to the two countries. As stated earlier, exports to the US concentrates in electrical and electronic (E&E) goods (exports of SITC 7, in which E&E goods fall under this group, was 77% of total exports in 2007) and costs are generally lower in these goods. Hence the average freight and insurance charges to the US is expected to be lower. While exports to Australia are also mainly E&E goods (32% in 2007), the overall composition is more diversified. Exports of other goods such as SITC 3 (minerals fuels, lubricants and related materials; 36% in 2007) are significant too. Second, average freight and insurance charges for exports to Australia decline at a faster rate than those to the US during this time period.

Year	USA	Australia*
1996	2.84	5.4
1997	2.81	5.2
1998	2.72	5.2
1999	3.09	4.6
2000	3.23	4.8
2001	3.29	5.1
2002	3.01	4.3
2003	2.96	4.5
2004	3.07	5.3
2005	2.89	4.8
2006	2.71	4.5
2007	2.79	4.0
2008	2.71	n/a
2009**	2.64	n/a

Table 1 Average Insurance and Freight Charges of Malaysia's exports to the US and Australia, 1996-2009 (%)

Source: Authors' own computation based on data from the U.S. Census Bureau \*Sourdin and Pomfret (2009), p21

Note: \*\* Data for year 2009 is based on cumulative exports up to October 2009

Table 2 (graph plotted in Figure 1) shows average insurance and freight charges of ASEAN-5's exports to the US. On the whole, the average insurance and freight charges fall over time for all five ASEAN countries. Among the five ASEAN countries, Singapore has the lowest average freight and insurance charges, followed by Malaysia. Indonesia has the highest costs among the five countries.

Year	Malaysia	Singapore	Thailand	Indonesia	Philippines
1996	2.84	1.51	4.08	6.44	4.09
1997	2.81	1.50	3.66	6.14	3.47
1998	2.72	1.62	3.99	6.81	3.23
1999	3.09	1.96	5.81	7.97	3.69
2000	3.23	1.93	6.01	7.98	3.71
2001	3.29	1.89	5.69	7.94	3.92
2002	3.01	2.03	5.97	7.69	4.06
2003	2.96	2.19	6.10	7.89	4.32
2004	3.07	1.88	6.08	8.04	4.78
2005	2.89	1.78	5.75	7.74	4.82
2006	2.71	1.64	5.40	6.99	4.55
2007	2.79	1.61	4.57	6.32	4.31
2008	2.71	1.74	4.51	5.78	4.34
2009	2.64	1.21	4.15	5.48	3.84

Table 2 Average Insurance and Freight Charges of ASEAN-5's exports to the US, 1996-2009 (%)

Source: Authors' own computation based on data source from U.S. Census Bureau Note: Data for year 2009 is exports totalled up to October 2009



Figure 2 gives an overall picture on the average insurance and freight charges for goods exported to the US at SITC-2 digit. A closer look at product group SITC 7 and 8 is made in Figure 3 since these two product groups constitutes 86% of Malaysia's exports to the US in 2008 (US Census Bureau) (see Appendix 2 for list of product descriptions).





In the case of Malaysia, average freight and insurance costs tend to be lowest for product groups SITC 7 (Machinery and transport equipments) and SITC 8 (Miscellaneous manufactured articles). The average costs are mostly below 8% of the cost of goods. Average costs for other product groups are significantly higher, particularly for product groups SITC 0 – 4. The average costs for these product groups fluctuate greatly for the three years chosen for comparison (1998, 2003 and 2008).

Since electrical and electronics products constitute 38% of the total exports of the country in 2008, we examine further into these goods at SITC 3 digit. Table 3 (graph plotted in Figure 4) shows average freight and insurance rates for Malaysia's exports of electrical and electronic (E & E) goods at SITC 3 digit to the US over time.

						-		-			-	-		
SITC	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
'761'	2.412	2.906	3.231	4.798	5.812	5.248	5.250	5.800	5.148	7.505	8.447	6.379	2.393	1.852
'762'	2.170	2.176	2.302	3.111	4.049	4.532	3.049	3.879	3.906	3.288	3.371	2.550	2.623	2.031
'763'	1.447	1.415	1.631	2.450	3.540	2.154	2.439	2.613	2.266	2.211	2.247	3.612	2.812	1.006
'764'	2.585	2.172	2.201	2.687	1.886	1.520	1.656	1.283	1.583	0.947	0.936	1.182	1.392	0.996
'771'	4.392	3.234	2.408	2.191	4.034	3.265	3.109	3.184	2.753	3.033	2.831	3.057	2.703	2.692
'772'	4.063	3.649	3.372	3.238	3.233	3.045	4.285	3.810	3.603	3.658	4.485	3.963	3.830	3.173
'773'	6.052	4.967	4.505	5.432	6.519	5.500	8.018	6.346	6.161	7.474	6.709	7.050	5.194	4.841
'774'	1.939	1.506	1.156	1.818	2.197	2.322	1.589	2.687	2.255	1.826	3.045	3.361	3.082	3.229
'775'	4.734	4.414	4.884	7.583	9.086	7.466	6.068	6.689	6.930	6.160	5.984	5.345	5.476	4.092
'776'	1.197	1.212	1.083	1.055	1.005	1.025	0.935	0.853	0.793	0.735	0.844	0.926	0.942	1.011
<b>'778'</b>	2.994	2.157	2.344	3.224	2.954	3.161	3.196	3.549	3.673	3.788	3.675	3.769	4.209	3.421

Table 3 Average freight and insurance rates for Malaysia's E&E exports to the USA, 1996-2009 (%)

Source: Authors' computation based on data from US Census Bureau.



The average freight and insurance costs have declined over time for all E& E goods except for product group of SITC 774 and 778 during the time period 1996 - 2009. Some of the goods experienced a hike in the average costs after 2001, possibly due to a rise in insurance costs after the September 11 incident, while others experienced an increase in the average costs around 2004 - 2006, possibly as a result of oil price hike during that period.

By 2009, all E&E goods have less than 5% of average freight and insurance costs. Some of these goods have average costs of less than 2 % of the cost of goods.

Table 4 Transport and Wholesale Rates in Malaysia's Home goods for domestic consumption, Exports, Imports and Custom Duties for Malaysian Imports (%)

	Home goo	ods for dom. co	nsumption	Exports		Imp	orts	
	Transport							
			and	Transport and			Transport and	
	Transport	Wholesale	Wholesale	Wholesale	Transport	Wholesale	Wholesale	
Year	rates	rates	rates	rates	rates	rates	rates	Duties
1978	1.20	5.06	6.26	~	1.06	14.04	15.10	10.25
1987	1.09	5.00	6.09	11.56	1.03	11.61	12.64	5.83
2000	0.66	2.66	3.32	1.94	0.70	8.40	9.10	1.63

Source: Authors' computation based on Malaysia's Input-Output Tables. Table 1 for home goods and imports and Table 1 and 3 for exports.

#### 2.2.4 Trade costs of moving goods inland

We also analyse the transport costs and wholesale and retail costs for moving goods within the country. These goods can be divided into three types: home goods for domestic consumption, goods produced for exports and goods imported into the country. Table 4 shows the transport and wholesale rates for the year 1978, 1987 and 2000.

We note three interesting observations. First, while all the rates have declined over time, transport and wholesale rates are always higher than import duties for all the three years. Second, wholesale rates are higher than transport rates for all the years and for all three goods. Third, goods that are imported into the country experienced notable higher transport and wholesale rates than the other two goods, due to significant higher wholesale costs incurred. This suggests that distribution of imported goods face higher business and regulatory costs than distribution of home goods in the country. Since Malaysia's imports comprise a lot of intermediate imports for further production, a reduction in wholesale and retail costs for moving imported goods inland in the future will lower total production costs of goods that use such intermediate imported goods for production.

## 3. Challenges in reducing trade costs in Malaysia

While the pattern of trade costs and their composition are helpful in understanding the trade costs of a country, policy decisions require further information on their determinants and barriers. The unfolding literature on this issue indicates infrastructure plays an important role in influencing the variations in trade costs between countries (Limao and Venables (2001) as cited in Pomfret and Sourdin 2009a, 3). Direct monetary outlays, timeliness, risk of damaged cargo and resulting losses and insurance costs as well as accessibility are the four main factors that drive infrastructure's impact on trade costs (Brooks 2009, 5). Haveman et al (2009, 57) provided empirical evidence to support the relationship between infrastructure and trade costs for Asian ports. Specifically, they found that different types of infrastructure investments are highly correlated with reductions in port costs for the selected Asian ports sampled in their study. Other factors that can affect trade costs includes logistical efficiency, distance, scale economies, unbalanced trade, number of shipping lines or airlines as well as their market power, institutional and policy factors such as corruption (Pomfret and Sourdin 2009a, 6-7).

Current empirical evidence on the determinants of trade costs are based mainly on cross country evidence. Using disaggregated Australian import data, Pomfret and Sourdin (2009a, 11) found that distance; bulk and the volume of trade affect trade costs as expected. Good institutions as measured by the Transparency International corruption index are associated with lower trade costs, especially for air freight. Similar results were also obtained for a subset of the Australian data, namely East Asia (Pomfret and Sourdin (2009b, 262). Moreover, the institutional variable is commodity-specific as it is important for manufactured goods but not for primary products. As logistics costs are also part of trade costs, Hollweg and Wong (2009, 29) found evidence of a negative relationship between logistics regulatory restrictiveness and the performance of the logistics sector for the ASEAN Plus Six economies.

In the case of Malaysia, the main manufactured export, namely electrical and electronics goods are exported to both the USA and Australia. It is the main manufactured good exported to both these countries. While electrical goods are mainly exported by sea due to their bulkiness and durability, electronics goods are exported mainly by air as these goods

have higher value to weight ratio and require greater storage care. We therefore focus on the export of electronics goods by air in our discussion in this section.

The main electronics hub in Malaysia is in Penang and the electronics goods leave the factories in Penang and the northern part of Malaysia via the Penang airport, the Kuala Lumpur International Airport (KLIA) as well as Changi airport in Singapore (Tham et al 2009, 171). Malaysia's investment in infrastructure has placed the country in a relatively better position compared to most of her ASEAN neighbors (Table 5). This investment, especially in highways and airports, has contributed to the lowering of transportation costs for the movement of goods from the electronic factories to airports.

Country	1990	2000	2005
Singapore	6	2	3
Malaysia	37	27	29
Thailand	43	38	42
Vietnam	92	75	61
Indonesia	69	63	62
Philippines	76	65	63
Lao PDR	99	84	92
Myanmar	90	91	95
Cambodia	100	93	98

 Table 5 Relative Ranks of ASEAN countries in the World in

 Infrastructure Development

Source: Biswa 2009

As shown in Tham et al (2009, 171), the North-South Highway facilitates the movement of goods as it has shortened the travelling time from the northern part to the Penang airport by about 45 minutes. The highway also provides an alternative for the goods to be shipped out via the KLIA in the event of any problem on the Penang Bridge or for the flexibility of better timing or flight connectivity since timeliness is of paramount importance in the delivery of these goods to the importers. Travelling time from Penang to KLIA has been shortened from eight to about five hours by this highway instead of the old trunk road.

Similarly, the building and upgrading of the Penang airport and the KLIA has also contributed to the export of these goods. There is no data on the electronic goods going through these airports. Data that is available indicate a steady increase in the total cargo handled by the Penang airport and the KLIA. In the case of the former, total cargo handled has increased from 30.3 to over 200,000 thousand tones from 1990 to 2006 before dropping to just around 200,000 thousand tones in 2008 due to the global financial crisis (Ministry of Transport 2009). Similarly, the total number of passengers handled has increased from 1.9 million to 3.4 million from 1990 to 2008. For KLIA, the total cargo handled has increased from 159.6 to more than 650,000 thousand tones from 1990 to 2006 before dropping to less than 650,000 thousand tones in 2008. Total number of passengers handled by the airport has increased from 6.4 million to about 27 million in the same period.

Recent expansion plans for Penang's infrastructure includes a Second Bridge that will link Batu Kawan at Seberang Perai to Batu Maung near Penang airport that will enable cargo moving to Penang airport as well as to the mainland to KLIA to bypass the traffic congestion in the city. Construction works for the Second Bridge are reportedly being undertaken currently. The Prime Minister has also announced an allocation of RM250 million for the expansion of the airport in the Mini-budget announced in March 10, 2009.

However, the availability of good infrastructure needs to be supported by other factors in order to attain efficient trade costs. Maskargo, an air cargo transportation company that is a wholly owned subsidiary of Malaysia Airlines (MAS) and the Airfreight Forwarders Association of Malaysia (AFAM) are of the view that it is the processing of documents that needs improvement in order to lower trade costs in the country. Customs clearance takes a relatively longer time in Malaysia compared to other countries listed in Table 6, with the exception of Myanmar, the Philippines, and Thailand.

Country	Customs clearance (days)
Cambodia	1.00
Indonesia	1.58
Malaysia	1.68
Myanmar	4.48
Philippines	1.82
Thailand	1.92
Vietnam	1.45

 Table 6. Comparative logistics indicators in selected ASEAN countries, 2008

Source: Biswa 2009

Although Malaysia has offered e-trade facilitation services since 1994, it is operated by a monopoly that has exclusive electronic linkage to the Royal Customs Department on matters involving import and export declaration as well as clearance. This may not necessarily increase productivity without some competition in the provision of such facilities. Even though a National Single Window (NSW) systems where all traders can submit the information only once at one time and place to satisfy all the regulatory requirements of the many different agencies involved, has been implemented since 2008 in line with the ASEAN Single Window initiative, its usage is still limited as the Ministry of Finance (MOF) that is in charge of customs has announced that a reduction in tariffs in September 2009 to boost its implementation. It is expected to take time for the Single Window to be fully operational. UNESCAP has found that the effectiveness of national single window systems still depends essentially on strong political leadership and effective inter-agency and public-private sector collaboration (UNESCAP 2009, 134).

Regulatory restrictions are also present as customs brokers need a license to operate and face equity constraints (51% bumiputera equity). Hollweg and Wong (2009, 20) found Malaysia to be among the most restricted economies for logistics services in the ASEAN Plus Six region, along with China, Indonesia, Lao PDR, the Philippines as well as Vietnam. This is unlike Singapore that has no licensing requirements, a fully functional EDI as well customs facilities that are open round the clock. Apart from customs, the need to export electronics goods from the factories in Penang through Changi also indicates the need for better connectivity for the Penang airport and the KLIA. It is reported that as much as 25-30 per cent of airfreight throughput is channeled through neighboring airports (Malaysia 2006, 727). Changi is favored due to its better connectivity so that port-to-port charges for flying out of Changi can be lower than even flying the goods out of Penang airport or the KLIA. This is despite the cost of trucking the goods down to Singapore and the lower labor costs in Malaysia relative to Singapore. Changi Airport has established itself as a major aviation hub in the Asia Pacific region with more than 80 airlines serving more than 180 cities in over 50 countries and an annual handling capacity of more than 70 million passengers. In contrast, KLIA services slightly more than 50 airlines, offering connectivity to around 90 destinations worldwide. Penang airport is even smaller with 15 passenger airlines serving limited destinations mostly in the region.

Last but not least security is an issue as trucks carrying valuable cargo such as semiconductors have been hijacked in the country. Cases of cargo theft in warehouses have compounded the security risks in the country. It was reported from 1999 to 2001, there were 49 cases of hijacking of trucks and 69 incidences of warehouse break-ins. Although these incidences have reduced over time, there is continued need to be vigilant, especially when neighboring competitors do not face such problems.

## 4. Conclusion

Malaysia has experienced an overall decline in non tariff trade costs in the past fifteen years. Among the ASEAN-5, Malaysia is among the lowest in its average freight and insurance charges. Further examinations show that while there has been an overall decline in the transportation costs over time, there are still rooms for further reduction. This is especially so for goods other than the electrical and electronic products and also for the movement of imported goods inland.

Further research in understanding trade costs and their determinants would require substantially better data in terms of both quantity and quality. Improvements in the inputoutput table can help in capturing the components in trade costs in the country while the collection of trade data in both fob and cif will provide some indication of the trade costs of the country. Improved data banks will also encourage further investigations on the impact of trade costs on the pattern and volume of trade. Ultimately, it will contribute toward informed policy choices in terms of improving the competitiveness of an economy that is as trade dependent as Malaysia.

Infrastructure spending in Malaysia has resulted in relatively good infrastructure in the country that has facilitated the movement of goods through the provision of highways and airports. However, the main policy lesson in this paper is that although Malaysia has done relatively well in terms of providing these 'hardware' for improving the trade costs in the country, there is substantial work that needs to be done in terms of the 'software' such as improvements in processing documents can be accelerated through the enhanced and more comprehensive usage of information and communications technology (ICT). Attracting more planes to fly through our airports is another important factor. While the government has provided incentives for this, improving the economic and political climate in the country is of paramount importance in order to attract more people to invest and to build their businesses in this country. In particular, appropriate policies need to be in place to ensure that the Penang electronics cluster does not go into further decline and instead to foster the deepening of this cluster. In this regard, reversing the brain drain and importing skilled labor as a short to medium term measure will help to alleviate the shortage of human capital that is needed to deepen the cluster and at the same time, it will enable Malaysia to move up the value chain in the electronics industry.

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Appendix 1 Diagram of goods moving from factory to final user and types of trade costs incurred at various stages



Appendix 2 SITC trade classification and product description

SITC	
2 digit	Description
'00'	Live animals other than fish, crustaceans, molluscs and aquatic invertebrates of division 03
'01'	Meat and meat preparations
'02'	Dairy products and birds' eggs
	Fish (not marine mammals), crustaceans, molluscs and aquatic invertebrates.
'03'	and preparations thereof
'04'	Cereals and cereal preparations
'05'	Vegetables and fruit
'06'	Sugars, sugar preparations and honey
'07'	Coffee, tea, cocoa, spices and manufactures thereof
'08'	Feeding stuff for animals (not including unmilled cereals)
'09'	Miscellaneous edible products and preparations
'11'	Beverages
'12'	Tobacco and tobacco manufactures
'21'	Hides, skins and furskins, raw
'22'	Oil seeds and oleaginous fruits
'23'	Crude rubber (including synthetic and reclaimed)
'24'	Cork and wood
'25'	Pulp and waste paper
'26'	Textile fibers (other than wool tops and other combed wool) and their wastes (not manufactured into yarn or fabric)
'27'	Crude fertilizers (imports only), except those of division 56, and crude minerals (excluding coal, petroleum and precious stones)
'28'	Metalliferous ores and metal scrap
'29'	Crude animal and vegetable materials, n.e.s.
'32'	Coal, coke and briquettes
'33'	Petroleum, petroleum products and related materials
'34'	Gas, natural and manufactured
'41'	Animal oils and fats
'42'	Fixed vegetable fats and oils, crude, refined or fractionated
'43'	Animal or vegetable fats and oils processed; waxes and inedible mixtures or preparations of animal or vegetable fats or oils, n.e.s.
'51'	Organic chemicals
'52'	Inorganic chemicals
'53'	Dyeing, tanning and coloring materials
'54'	Medicinal and pharmaceutical products
	Essential oils and resinoids and perfume materials; toilet, polishing and cleansing
'55'	preparations
'56'	Fertilizers (exports include group 272; imports exclude group 272)
'57'	Plastics in primary forms
'58'	Plastics in nonprimary forms
'59'	Chemical materials and products, n.e.s.
'61'	Leather, leather manufactures, n.e.s., and dressed furskins
'62'	Rubber manufactures, n.e.s.
'63'	Cork and wood manufactures other than furniture

'64'	Paper, paperboard, and articles of paper pulp, paper or paper board
'65'	Textile yarn, fabrics, made-up articles, n.e.s., and related products
'66'	Nonmetallic mineral manufactures, n.e.s.
'67'	Iron and steel
'68'	Nonferrous metals
'69'	Manufactures of metals, n.e.s.
'71'	Power generating machinery and equipment
'72'	Machinery specialized for particular industries
'73'	Metalworking machinery
'74'	General industrial machinery and equipment, n.e.s., and machine parts, n.e.s.
'75'	Office machines and automatic data processing machines
'76'	Telecommunications and sound recording and reproducing apparatus and equipment
'77'	Electrical machinery, apparatus and appliances, n.e.s., and electrical parts thereof (including nonelectrical counterparts of household type, n.e.s.)
'78'	Road vehicles (including air-cushion vehicles)
'79'	Transport equipment, n.e.s.
'81'	Prefabricated buildings; sanitary, plumbing, heating and lighting fixtures and fittings, n.e.s.
'82'	Furniture and parts thereof; bedding, mattresses, mattress supports, cushions and similar stuffed furnishings
'83'	Travel goods, handbags and similar containers
'84'	Articles of apparel and clothing accessories
'85'	Footwear
'87'	Profssional, scientific and controlling instruments and apparatus, n.e.s.
'88'	Photographic apparatus, equipment and supplies and optical goods, n.e.s.; watches and clocks
'89'	Miscellaneous manufactured articles, n.e.s.
'93'	Special transactions and commodities not classified according to kind
'95'	Coin, including gold coin; proof and presentation sets and current coin
'96'	Coin (other than gold coin), not being legal tender
'97'	Gold, nonmonetary (excluding gold ores and concentrates)
'98'	Estimate of import items valued under \$251 and of other low valued items nonexempt from formal entry
'99'	Estimate of non-canadian low value shipments; compiled low value shipments to canada; and various export shipments not identified by kind