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Vietnam's international trade regime and comparative advantage

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1. Introduction

Over more than the past 10 years there has been significant liberalization of foreign trade regime in Vietnam. Although the foreign trade regime is still considered to be restrictive to protect specific industries, firms and enterprises have automatic trading rights. Non-tariff import restrictions which create trade distortions have been abolished gradually. The most ever favourable mechanism is applied to exports - various export promotion measures were introduced such as allowing private rice exports, the auctioning of garment export quotas, the provision of financial incentives to exporters, the removal of restrictions on foreign invested enterprises to export, the elimination of many export taxes, the establishment of the Trade Promotion Department, etc. Trade reform helps the private sector by enhancing its access to imported inputs and to export outlets. Liberalized trade, as well as easier domestic and foreign private entry, would increase competition and create incentives for increased efficiency. Obviously trade reform not only increases transparency and competition, but also raises returns to exports and agriculture and encourages investors to move into more productive areas in Vietnam.

Vietnam's international economic integration has been increasingly accelerated. In September 2001 the bilateral trade agreement with the United States was concluded. Vietnam is now in the process of finalizing the AFTA road map for phasing out quantitative restrictions and reducing tariffs vis-à-vis ASEAN countries in 2006. And its official accession into the World Trade Organisation is expected to be in 2005. This also means in 2006 the MFN and preferential tariff schedules will replace the much higher current tariff rates. A large world market offers substantial potential for Vietnam to expand its exports in the near future. However, whether Vietnamese exporters will be able to access foreign markets for their products or whether foreign importers will be diverted from other cost sources elsewhere to Vietnamese suppliers will be completely subject to how Vietnamese exporters improve the competitiveness of their products and whether the Vietnamese government succeeds in changing its industrial structure towards more value-added products.

Trade reforms - together with sound macroeconomic management - have led to a certain rapid export and import growth in the past period. However, the Asian crisis interrupted Vietnam's trade expansion in 1998 and the recent slump in exports in 2000 and 2001 have raised more everlasting concerns about competitiveness of Vietnamese leading export commodities and demand for changes in industrial structure. During the 1990s, Vietnam gained certain achievements when it started to exploit its comparative advantage in labour-intensive manufactures such as garments, textiles, footwear and rubber, in addition to traditional exports like agricultural products and crude oil. It is no accidental that many projects, researches, studies or seminars have been held to consider the weaknesses, particularly the limited competitiveness of Vietnamese enterprises and commodities. The question is whether Vietnamese firms are able to take advantage of niche markets when the economy is completely open to the world market in a few years' time. Many enterprises have not yet been fully aware of taking part in a common market of ASEAN. What may happen to Vietnamese enterprises in the coming years as many of their products are of domestic medium- or low-quality (sugar, cement, garments and textiles), and their prices are equal to, or still much higher than those of similar goods made in other ASEAN nations? There are many factors leading to the enterprises' current inefficiency and limited competitiveness in their exports. Psychologically, many managers of enterprises are put in a dilemma due to their limited knowledge and insufficient information. They remain embarrassed to find a sound strategy for their enterprises while international economic integration is drawing closer and closer. Furthermore, they are facing various difficulties: a shortage of funds, a large debt, out-of-date machinery and technology, small consumption markets, etc. Some remain heavily dependent on the State's assistance in terms of both policy and finance.

Like any developing country Vietnam can benefit from international economic integration if sound integration policies, together with a wide range of macroeconomic reforms such as state-owned enterprise reform, creation of an environment of equal competition for all forms of Vietnamese enterprises, etc are implemented in a sound manner. The costs and benefits will largely depend on the efficiency of the economy and the competitiveness of the Vietnamese products. Increasing the competitiveness and efficiency of the economy mainly through creating a favourable incentives environment for export processing industries is obviously the first current priority of the Government's policy now. Investment plans at all levels of the State as well as in state-owned enterprises are meant to be reoriented towards the export objective. Efforts to increase competitiveness of Vietnamese products shall be to focus both on economic efficiency and on product quality.

Regarding the competitiveness of Vietnamese commodities as a consequence of Vietnam's efforts to liberalize and reform its trade regime, the objective of this paper is to assess the pace and quality of Vietnam's trade reform and liberalisation generally by various quantitative analysis indicators. Firstly, the main trade reform policies and their consequences are assessed and then more specific quantitative analyses regarding nominal and effective rates of protection, export similarity, and revealed comparative advantage between Vietnam and other ASEAN members are presented.

2. Vietnam's tariffs and trade policy reform

2.1 The Export-Import Tariff System

Vietnam's law on export-import tariffs was first launched on 1 January 1988. After several adjustments, the current export and import tariff law has been effective since 1 January 1999. It consists of ninety-seven chapters and 6,247 items under eight-digit HS. The current tariff schedule has nineteen different tariff rates of which thirteen are fundamental tariff rates and six are special ones. They range from zero to 100 percent. The maximum tariff rates are imposed on such goods as alcohol, petroleum products, automobiles, motorbikes, cosmetics, glass and glass products. Vietnam utilises an accelerated taxing method by which low or minimum tariff rates are applied mainly to material inputs for production such as machinery, equipment, materials. Thus, real effective rates of protection for final goods are often much higher than nominal ones.

Vietnam's tariff schedule is composed of three tariff rate categories:

- Most-favoured-nation (MFN) tariff rates which are applied to imports from any country that has already had a bilateral trade agreement with Vietnam or in fact has granted MFN treatment to Vietnamese exports;
- Preferential tariff rates are applicable for goods under the CEPT (AFTA) agreement and textile and garments under the Vietnam-EU agreement, and;
- Normal tariff rates that are usually 50 percent higher than the MFN ones are used in other circumstances.

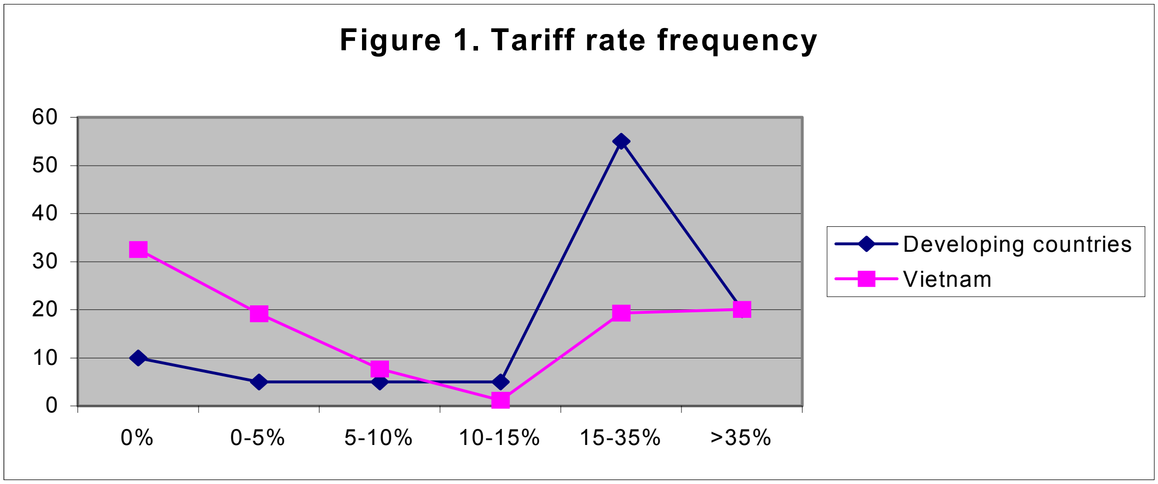
As can be seen from Table 1 the simple average[1] of the MFN is approximately 8 percent higher than the preferential ones. Moreover, the maximum MFN tariff is 100 percent while it is only 45 percent under the preferential tariff scheme, implying that Vietnam encourages competition from ASEAN exporters. Although the maximum tariff rate under the current tariff schedule is quite high, a total number of tariff rates of below 10 percent represents 60 percent (Vietnam-EU Trade and Investment Report, 1999).

Table 1. Summary on Vietnam's Tariff Rates

Item	MFN rates (%)	Preferential Rates (%)
Simple Average	15.98	7.7
Maximum tariff rate	100	45
Minimum tariff rate	0	0
Standard deviation	16.2	8.3
Ratio of standard deviation over simple average	86	107

Source: Vietnam-EU Trade and Investment Report, 1999.

[1] Vietnam's simple MFN average is lower than that of neighboring countries such as Thailand (27.6%); Philippines (24.4%); and Indonesia (18.3%). (ASEAN 1999).



Based on data from Vietnam-EU Trade and Investment Report, 1999.

Figure 1 reveals that the percentage of Vietnam's low tariff rates is higher than that of developing countries' averages while the percentage of Vietnam's high tariff rates is lower than that of developing countries'.

In short, Vietnam's tariff schedule reflects a trend to protect mainly agricultural products, consumer goods and foodstuff and also give low protection to materials, machinery and equipment, especially those are presently not manufactured in Vietnam. Vietnam's low import tariff rates also give an indication of considerable intervention by non-tariff barriers.

Vietnam's trade tax regime also contains provisions for exemptions whereby specific enterprises or users pay no duty or a lower rate of duty in specific areas or activities. These exemptions apply to items covered by incentives offered under the Law on Foreign Investment and the Law on Domestic Investment and specialised goods serving security, defense, scientific research, education and training, gifts and goods supplied under foreign aid. Entities which enjoy import–export tax exemptions include foreign investment enterprises, joint venture partners involved in business cooperation contracts and projects involving oil production distribution contracts. Such entities would all operate under the Law on Foreign Investment. Goods exempted under these provisions include equipment, machine components, spare parts, transport equipment and materials.

2.2 Trade reform in progress

For the longer term direction of Vietnam's trade policy set by the commitments made under AFTA as well as WTO in the future, actions are needed in the short term. Investments are being predicated on the present thrust of policy, and the more that this happens the more difficult it will be to achieve the reforms sought under AFTA and future membership of WTO and APEC. A strong and early signal of a shift away from the currently ambiguous commitment to a liberal trade regime would create an environment for efficient investment and production decisions. It would also make it easier to meet looming AFTA, APEC and WTO obligations. The task of making the transition to a market economy is a very large one, and requires action on many fronts. Trade reform provides both the discipline and the opportunity for real progress.

This is also the reason that the Government of Vietnam took a number of steps over the last three years to reduce these restrictions on trade. These steps have included the freeing of trading rights, the liberalization of exports and the reduction in maximum tariff rate and the number of tariff rates. (See Box 1.). These steps have improved transparency, reduced rents to state enterprises, expanded access for all importers and exporters, as well as increased competition among trading and manufacturing firms.

Box 1. Trade reform measures in 1999

- Issued implementing regulations to free rights of all firms to export and import directly all products listed in firm's business license without requiring license. Exporters were also given rights to export products not listed in their business license;
- Issued implementing regulations to reduce the number of tariff rates to 19 (from 26) and the maximum tariff to 50 percent (from 60) except for six broad categories of goods;
- Permitted private firms to export rice;
- Began auctioning 30% of export quotas for garment-exports;
- Reduced foreign exchange surrender requirement from 80% to 50% of available balances.

Box 2 reveals the Vietnamese Government’s commitment to push further the scheme of trade policy reform and liberalization in the years to come. If implemented, this trade reform agenda will lead to several improvements in Vietnam's trade and incentive regime. First, as trading rights are further liberalized and private firms get a larger share of export quotas, there will be greater competition among trading firms and much greater access of the domestic private small and medium-sized (SMEs) to imported inputs and to export outlets. Second, as non-tariff import barriers, like import-licensing, are removed, the import regime will become more transparent, access to imports by all firms more equal and tradable goods more price-responsive. Third, state-owned enterprises (SOEs) will be exposed to more discipline and competition; they will loose rents from privileged access to licensed imports and face some increases in import competition. Fourth, lower import protection and lower implicit and explicit taxes on exports will improve incentives for investors to move towards processed agriculture and manufactured exports.

Box 2. Three-year Agenda for Trade Policy Reform since 1999

- Adopt, announce and implement the phase-out of all quantitative import restrictions, and replace with transitional tariffs;
- Continue to expand auctioning of garment export quotas and improve the terms of auction, including transferability of quotas among firms;
- Increase the share of rice export quotas allocated to private firms;
- Cease granting of new discretionary exemptions on import-tariffs and of new import restrictions;
- Eliminate remaining restrictions on firms’ importing rights, so that they can import directly all non-restricted products, including those not listed in the firms’ business license;
- Remove the foreign exchange surrender requirement;
- Sign the Vietnam-US trade agreement to expand export markets, and move towards WTO accession.

3. General Assessment of the pace and quality of Vietnam's trade Reform and Liberalization

Trade policy reform is especially complicated in Vietnam. The large, longstanding and pervasive presence of state-owned enterprises (SOEs), their role in policy making and revenue collection and distribution, the role of some barriers to trade as de facto management controls on SOEs all raise issues which are both complex and unusual. They reflect Vietnam's rather special circumstances as an Asian economy making the transition from a centralized planned economy to a market economy. In this sense, the quality or depth of trade liberalization is as much about establishing the market institutions to enable firms and individuals to be able to engage in market transactions across borders as it is about the conditions governing those transactions. The quality of trade reform is also about such things as transparency, consistency and the use of price, rather than quantitative measures.

Some foreign investors have argued that Vietnam's current regime appears to be more restrictive than those of other countries in the region. Such cross-country comparisons are an important gauge of how well Vietnam is doing relative to its neighbours. However, it is also important to look at what has been achieved over what time period in order to get an accurate picture.

3.1 Liberalisation, openness and role of private sector

Indeed, in the mid-1990s some commentators were judging Vietnam's trade regime to be quite open on the grounds that they could not identify legislated restrictions. In recent years the government has acted to codify practices in law and supported greatly increased transparency of the trade regime — and economic policy generally — so that laws, regulations and decrees are available quickly and in the English language. Moreover, various government ministries, including the Ministry of Trade (MOT) have facilitated various trade policy reports and studies documenting and analyzing the regime. The MOT also completed the accession document for WTO membership, which laid out the trade regime in great detail for all WTO members to examine. This transparency and analysis should provide the basis for reforming trade.

Only ten years ago it could be said that there was virtually no trade regime in Vietnam, as most trade decisions were centrally determined. Incentives, taxes and conditions for trade such as licenses and quotas were irrelevant in shaping responses because individuals and firms had no capacity to respond.

Box 3.Indication of trade liberalization

Foreigners visiting major Vietnamese cities now may find it difficult to comprehend the extent of change that has occurred through the 1990's. If the reason for trade liberalization is to expand people's consumption and incomes, then casual, everyday observation of the streets of Hanoi then and now would testify substantial progress in that regard.

Visitors to Hanoi in 1991 would have been able to purchase ample quantities of Heineken beer. They would have seen some former Germany-made Simson motorcycles and a few Lada taxis but apart from that, imported goods would have been few. In case of illness, their access to pharmaceuticals would have been poor; if they had wanted to learn about international events, their access to news would have been limited to local newspapers; and if their luggage got lost, they would have been hard pressed to buy replacement clothing and personal items.

Now the shops in Hanoi boast a wide range of goods. Pharmaceuticals are freely available, as are tools and hardware, refrigerators, televisions, clothes, and sporting goods, not to mention motorcycles, automobiles, telephones and footwear. Computers, software, modems and faxes are widely available at competitive prices and with modern systems of after sales service.

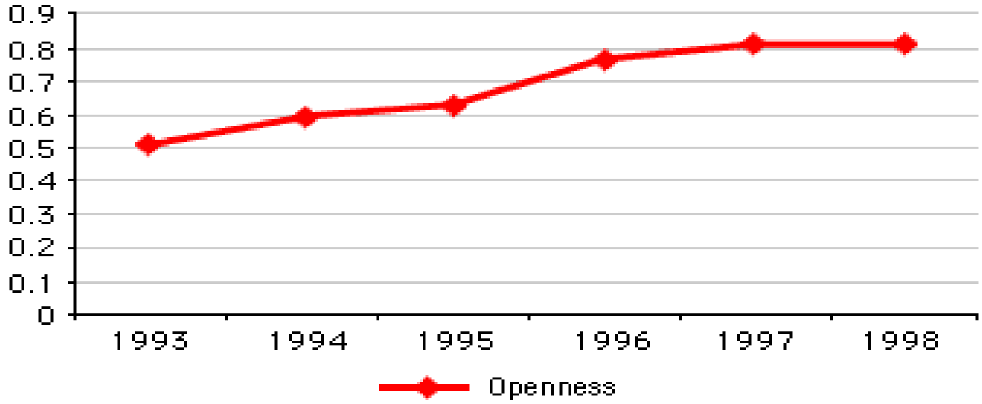
Movement of people also is much easier. Ten years ago, visitors went through a protracted process of obtaining their visas at the airport. Now, visas are quickly processed for both business and tourist purposes at points of departure all around the world. Similarly, Vietnamese citizens can obtain passports for overseas travel much more easily than ten years ago, and many more of them can afford such travel. Access to international telephone, internet and television is readily available.

It seems much more likely that for all the barriers to trade which now exist, agents, producers, traders and consumers in Vietnam have infinitely more scope for buying and selling both domestically and abroad than they had only ten years ago.

In assessing Vietnam's trade regime the emergence of market institutions as a basis for trade needs to be appreciated. Private property, enforceable contracts, access to information about financial markets and the like have developed so that individuals and firms have a greatly enhanced capacity, interest and willingness to engage in trade. It could be argued that the fact that conventional trade barriers as they are understood in a modern market economy now exist and are relevant as an indication of just how far Vietnam has come in liberalizing trade. In June 1999, for example, the Vietnamese National Assembly passed a new business law to be effective in 2000 which clarifies the situation for the private sector. It merges and amends two other laws — the company law and private business law — which previously dealt with the state and the private sector separately. Under the new business law, investors no longer have to apply for a license to establish a business. An investor is required to register an intention to do business with the possibility of inspection there after. The thinking under-pinning the law appears to be a shift towards negative licensing or specifying what cannot be done rather than what can be done.

In addition to Box 3 providing an impressionistic picture of emerging openness, there are a number of more formal measures of openness that tell the same story. For example, an openness index calculated as the ratio of the total value of imports and exports to Gross Domestic Product is presented in Figure 2. This ratio increased steadily from 0.5 to 0.81 between 1993 and 1998.

Figure 2. Vietnam's External Sector



The openness index is calculated as the ratio of the total value of imports and exports to Gross Domestic Product

Box 4 summarizes the ebb and flow nature of trade reform in Vietnam over the past ten years. While the representation has apparently liberalizing actions above the line and backward steps below. For example, in 1999 restricting exports to members of an association would seem to be a retrograde step. But in the early 1990s it was a liberalizing step in that it substantially expanded the number of exporters. Similarly, trade controls for balance of payment reasons make little or no sense in an economy with strong macroeconomic and monetary management. But, in the absence of such things, it could be the case that a blunt and apparently inferior measure is the best or at least the most practical available option. The main points to emerge from Box 4 are:

- trade liberalization has ebbed and flowed in Vietnam over the past ten years;
- by and large the balance of liberalization has been positive; and
- in 1998, 1999 and 2001 a flurry of non-tariff barriers has put this general balance into question.

The freeing-up of trading rights prompted rapid growth in the number of enterprises that export and/or import today, especially private trading firms (see Table 2). Nearly 3,000 additional private firms sought custom-codes within the year of 1999 after freeing trading rights. This implied a jump in the share of domestic private firms in total number of trading firms from 35 percent in 1998 to 58 percent in 1999. Domestic private firms' share in actual exports and imports of 1999 was 15 percent and 14 percent, respectively. Thus the private sector (foreign invested and private small and medium-sized enterprises) accounted for nearly three-quarters of all trading firms and nearly half of all export and import trade.

Box 4. A timeline of Trade Reform, 1989-2001

1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2001
♣ Customs tariff introduced for the first time	♣ Special sales tax introduced ♣ Export-import companies required to register	♣ Import inputs used to produce exports exempt from duty ♣ EPZ regulations introduced ♣ Export duty on rice reduced from 10 to 1 percent ♣ Private companies allowed to engage in interntional trade	♣ HS system introduced ♣ Trade agreement with EU	♣ Export shipments licensing relaxed ♣ Duty rebate system improved ♣ Customs declaration form improved	♣ Import permits eliminated for all but 15 products ♣ GATT observer status ♣ Licensing steps reduced ♣ Export shipments relaxed	♣ Import permit system relaxed ♣ Join ASEAN ♣ Import quota goods reduced to seven ♣ Export quota reduced to one rice	♣ Maximum tariif reduced to 80 percent ♣ AFTA lists promulgated ♣ Managed import goods reduced to six	♣ WTO accession process started ♣ Rice quotas allocated by provincial governments	♣ Management of quota goods shift to tariffs ♣ Private sector exports allowed ♣ Foreign invested enterprises allowed to export not in license ♣ CEPT road map released ♣ 3-schedule tariff introduced	♣ Decree 57 liberalising right to import & export ♣ New tariff with smaller range and rates released	♣ Decree 44 edited Decree 57 whereby all companies can export & import all goods, except those are conditional or banned.
	♣ Export of certain commodities limited to relevant exporter associations					♣ Export taxes raised on 11 products		♣ Imports of sugar prohibited ♣ Temporary prohibitions imposed on consumer goods	♣ Partial surrender requirments imposed ♣ Special sales tax extended	♣ Decision 254 adds to list of conditional imports	
1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2001

Source: Database on legal and state documents for 1945-1998 (It is available in form of CD-ROM). Decree 57/CP, Decree 44/CP and Decision 254 issued by Prime Minister in 1998 and 2001.

Table 2. Private Participation in Foreign Trade

Enterprises	Share of Enterprises in Trade (%)		Share of Exports (%)		Share of Imports (%)	
	Jul-98*	Jul-99	1997	1999**	1997	1999**
State Owned Enterprises	38	27	70	57	68	53
Non State Enterprises	35	58	10	15	4	14
Foreign Invested Enterprises	27	15	20	28	28	33
Total	**5,100 enterprises**	**8,177 enterprises**	**9,145 $ mil.**	**8,175 $ mil.**	**11,622 $ mil.**	**8,225 $ mil.**

* Decree 57/CP/1998 on the implementation of the Trade Law was issued in July 31, 1998 and became effective from August 15, 1998.
** Related to 9 months trade value.
Source: Ministry of Trade and General Department of Customs

Compared with ten years ago, Vietnam's trade regime is more open and most Vietnamese are better off as a result. However, there is still a long road ahead and the stakes are high. As the economy grows and markets play an increasing role in the allocation of resources, it is important that appropriate trade policies continue to develop.

The changes in trade policy since 1986 have allowed a broader range of Vietnamese enterprises to access world markets and also foreign enterprises to access the growing Vietnamese market. A number of sectors such as textiles and garments, agricultural processing, plastics and electronics have flourished because they have access to inputs at world prices and, given the natural advantages of Vietnam, are able to compete successfully with foreign made products in domestic and international markets.

But for a number of key imported and exported commodities, old style trade management practices continue. Imports of products such as steel, cement and fertilizer — all crucial to the further development of Vietnam's economy — are subject to management through quantitative restrictions. Protection is one objective of the government in maintaining these controls. However, in a modern, market economy, these controls, quotas and licensing are inefficient and costly means of achieving that protection.

Vietnam's economy is growing and the consequences of getting it wrong grow with it. In these circumstances and as other economies in the region liberalize their trade policies, it becomes even more important that Vietnam does not get left behind.

3.2 Nominal and Effective Rates of Protection

The effective protection concept is generally ascribed to Corden (1966) and Johnson (1965), although it is in fact explained fully in Meade (1955). Trade policy affects consumers by raising the price of imports/importables relative to other commodities. Thus a 10 percent tariff on imported personal computers (PCs) will raise the price of imported and locally produced computers by 10 per cent. Protection encourages domestic suppliers of import substitutes to increase their output. However, whether they increase their output, and the extent to which they do so, depends not only upon the tariff on personal computers, but on any protection given to inputs used in their manufacture.

In addition, in a market economy, resource allocations are driven by profitable opportunities. Investment is attracted to sectors where the returns on investment are high. Trade policies such as tariffs, quotas and local content schemes distort returns by raising domestic prices and increasing returns to domestic producers. However, because production also typically involves intermediate usage of products (both domestic and imported), protection also harms domestic producers by raising their costs of production. The Effective Rate of Protection (ERP) measure provides a guide to the net impact on producers of trade policies. A positive ERP indicates that the returns to capital and labour are higher than they would have been in the absence of the government policies. A negative ERP could mean that a firm or sector is worse off than under free trade.

The effective rate of protection (ERP) is defined as the percentage change in producers' value-added, as a result of taxes on trade, over the level of value-added that would have prevailed in the absence of those taxes. In other words, the effective rate of protection is the percentage by which a country's trade barriers increase the *value-added* per unit of output (considering the fact that *tariffs on inputs* matter as well as *tariffs on outputs*). (Greenaway & Milner, 1998).

If we consider the case where there is only one input *i* into the production of good *j*. Assuming that Pj is the price of a unit *j*; Cj is the cost of a unit *j*; a_{ij} is the share of input *i* in cost *j*; t_i is the tariff rate on *i* and t_j is the tariff rate on *j*. In the absence of a tariff, V_j, which is the value added per unit of output *j*, is:

$$V_j = P_j - C_j = P_j\,(1-a_{ij})$$

Suppose tariffs are imposed on the output (t_j) and input (t_i). Then the new value-added V'_j is:

$$V'_j = P_j\,[\,(1 + t_j\,) - a_{ij}\,(1 + t_i\,)\,]$$

By definition, the effective rate of protection (ERP) is:

$$ERP = \frac{V'_j - V_j}{V_j} \quad \text{or}$$

$$\text{ERP} = \frac{t_j - a_{ij} t_i}{1 - a_{ij}}$$

From this, we can see that

Condition	Result	Explanation
$t_j = t_i$	ERP = $t_j = t_i$	If the input and output tariffs are the same, the ERP is the same as the tariffs.
$t_i > t_j$	ERP < t_j <t_i	If the input tariff is higher, the ERP is lower than the output tariff.
$t_i < t_j$	ERP > t_j >t_i	The input tariff is lower, the ERP is higher than the output tariff.

In the more general case, the Effective Rate of Protection can be derived in a similar way, and we get the following:

$$ERP = \frac{t_j - \sum_{i=1}^{n} a_{ij} t_i}{1 - \sum_{i=1}^{n} a_{ij}}$$

Table 3. The Structure of Vietnam's Protection[2]

Industry	Nominal Protection of Import Tariff[3]		Effective Rate of Protection (ERP)	
	Simple average (%)	Weighted Average (%)	Simple average (%)	Weighted Average (%)
Paddy Rice	5.0	5.0	6.46	6.45
Raw Coffee	20	20	27.38	27.49
Sugar Cane	10	0	11.06	-0.22
Aquatic Products	24.6	17.0	28.24	29.38
Alcohol & other Beverages	78.6	29.9	98.13	35.37
Sugar	21.75	32.4	54.21	105.53
Processed Coffee	40	50	68.5	80.5
Husking & processing of cereals & food	25.8	27.9	97.63	107.20
Pulp, paper & paper-made products	18.4	17.3	37.90	36.11
Cement	30	31.7	52.66	56.33
Fertiliser	2.6	3.1	4.58	6.25
Pesticide & Veterinary medicine	2.3	0.3	4.36	-0.41
Soap & Detergents	34	33.2	78.82	76.99
Yarn, Fabrics & cloth	26.7	31	41.35	49.59
Clothing	45.4	47.0	66.57	66.75
Carpet weaving	0	0	-15.92	-17.74
Leather goods	47.5	20.9	71.96	27.97
Animal food processing	10	10	3.89	4.43
Processed Tea	50	50	134.58	140.86
Processed animal & vegetable oils and fats	14.9	16.9	18.8	24.09
Total	**25.37**	**22.18**		

Calculations based on data from Ministry of Planning and Investment of Vietnam and General Statistical Office, Statistical Yearbook (1999).

Table 3 shows a summary of Vietnam's tariff protection. The first two columns show the nominal rate or protection (NRP) whereas the second two show the effective rate of protection (ERP). Vietnam's average nominal rate of protection is 25.37 percent if a simple average is taken and 22.18 percent trade-weighted. There is a general tendency for Vietnam's tariff structure to be relatively low in raw materials. This pattern of protection increases the returns to value adding factors in the final goods industries. An indication of the total impact of protection can be obtained using the ERP. The estimated ERPs show some significant spikes in protection across the industries. Alcohol and other beverages, clothing, paper and paper products, processed tea, yarn, fabrics and cloths have a consistently high ERP. When the trade-weighted tariffs are used, sugar, processed coffee, cement, soap and detergents industries also face high ERPs. A

[2] Detailed calculations is shown in Annex 1.

[3] Nominal rates of protection are based upon the 1998 tariff schedule.

number of industries face low or negative rates of protection. These include paddy rice, sugar cane, fertiliser, pesticide and veterinary medicine, and animal food processing.

It should be noted that the ERPs measure the protection accorded to production for the domestic market. In some sectors – agriculture, crude oil and gas, textiles, there is a significant production for export, where the tariff has no direct effect on producers' returns. Effective rates for export-oriented production would be typically lower than for production directed at the domestic market. Secondly, these figures do not include the protective effects of Non-tariff barriers (NTBs). A set of important industries such as cement, paper and sugar is protected by quantitative restrictions rather than tariff.

4. Some measures of Vietnam's competitive position vis-à-vis other ASEAN countries

In order to and assess Vietnam's competitive position in Southeast Asia, two measures are calculated :

1. the export similarity index
2. the index of revealed comparative advantage

4.1 Export Similarity Index

The trade diversion effect of Vietnam's membership of ASEAN is likely to depend on the degree to which the exports of Vietnam and other ASEAN member countries are similar to each other. The export similarity index (ES) is defined as a measure of the similarity of the exports of any two countries to the world market in general or to a specific third market. The export similarity index[4] quantifies the trade diversion effect by measuring the extent to which Vietnam's exports overlap other ASEAN members' exports. The following equation is employed to assess the intensity of competition in exports between various ASEAN member countries to the Japanese market.

$$\mathbf{ES = \Sigma min\ [x_j(ac),\ x_j(bc)]*100}$$

Where *a* is the home country, *b* is the selected comparator country, *c* is the world (or specific) market and x_j is the share of industry *j*'s exports[5] in the country's total exports. If the industry distribution of country *a* and *b*'s exports to market *c* are identical (that is $x_j(ac) = x_j(bc)$ for all *j*), there is total (scaled) similarity and the index will take on a value of 100. If there is total dissimilarity in the product or industry pattern of *a* and *b*'s exports (that is $x_j(ac)$ or $x_j(bc)$ equal 0 for all *j*), the index will take on a value of 0. An export similarity index was first articulated by Finger and Kreinin (1979), and has been employed fairly widely in trade analysis.)

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[5] Note that the exports of each country are scaled relative to total exports and a result the index compares only patterns of trade across product categories and not absolute levels. This is a useful characteristic which makes possible a comparison between countries of different size and stage of development.

Table 4. Similarity Indexes in the Japanese market[6] (all items)

In percent (%)

Year	VN-BRU	VN-IND	VN-MAL	VN-PHI	VN-SIN	VN-THA
1997	30.75	65.74	48.92	33.14	30.44	49.47
1998	21.17	62.58	45.86	38.74	32.40	55.53
1999	19.57	61.44	49.20	41.65	36.71	58.02

Calculations based on data from Japanese Statistics Bureau. Data on Laos PDR, Myanmar and Cambodia are not available.

In terms of total exports, the structure of Vietnam's exports appears to be closer to that of Indonesia, Thailand and Malaysia. In the case of Vietnam-Indonesia, the similarity is substantially accounted for by the shared importance of crude oil exports and foodstuff. However, the index between Vietnam-Indonesia fell gradually from 65.74 per cent in 1997 to 62.58 per cent in 1998 and then 61.44 percent in 1999. In contrast, the overall export similarity between Vietnam-Thailand increased yearly, from 49.47 per cent to 58.02 per cent in 1997 and 1999 respectively. The reason is that Vietnam's export composition has shifted step by step from raw materials to light manufacturing and agricultural and aquacultural products which have been already Thailand's main export items.

Vietnam's export structure seems to be different from that of Singapore and Philippines (just 38.74 per cent and 32.4 per cent, respectively in 1998) since machinery and parts accounts for a large share of the Philippines and Singapore's exports while Vietnam is still weak in this sector. A clear difference between Vietnam's export composition and Brunei's (the ES was only 19.57 per cent in 1999) can be easily understood, as Brunei is a very small country and almost subject to only one export item, SITC 33 (crude oil and petroleum products).

4.2 Revealed Comparative Advantage (RCA) for the ASEAN-6

A country specialises in the trade of a commodity having comparative advantage. The most widely-used method for identifying sectors in which a country enjoys relative competitive strength is the "Revealed Comparative Advantage (RCA)" index proposed by Balassa (1965).

The RCA index is measured by dividing a country's share of world exports of a particular product by the same country's share of world exports of all products.

$$\mathbf{RCA_{ij}\ index = (x_{ij}/x_{wj})/(\sum x_{ij}/\sum x_{wj})}$$

Where x_{ij} is country *i's* export of commodity *j*;

x_{wj} is world's exports of commodity *j*;

$\sum x_{ij}$ is country *i's* total exports;

$\sum x_{wj}$ is the world's total exports.

[6] Export similarity indexes have not been defined for Vietnam-the United States trading relationship because the bilateral trade has been restricted substantially by the unratified bilateral trade agreement. Trade data for the EU market is not available.

Any number in excess of one may be taken as an indicator of the existence of a comparative advantage in that product. The index allows clearer comparisons between countries at any time, and allows changes in comparative advantage to be tracked over time. The measure reflects the underlying comparative advantage of the country in particular commodities as determined by technology and factor endowments, modified by government policies designed to draw resources into favored sectors. Table 5 presents RCAs for 6 ASEAN countries during 1995-1998.

The index reveals that Vietnam's current comparative advantage mainly lies in primary commodities such a cereals, coffee, hides, oil seeds, rubber, fish, coal, wood, and crude oil. Vietnam is also strong in some labour-intensive manufactured goods including travel goods, textiles and clothing, footwear, and furniture.

When the export specialisation of a pair of countries is similar, they are competitive in foreign trade. When countries differ in export specialisation there may be complementary in trade and in that case there is potential for increasing inter-industry trade among them. Vietnam's export structure appears to be more or less complementary with Singapore, Malaysia and Thailand. Vietnam may compete for certain commodities with other ASEAN members such as Indonesia, Philippines.

Table 5. Revealed Comparative Advantage for ASEAN-6* (1995-1998 Average)

SITC	Description	Indonesia	Malaysia	Philippines	Singapore	Thailand	Vietnam
00	Live Animals except Fish	0.262	1.616	0.053	0.0423	0.166	0.003
01	Meat and Preparations	0.060	0.043	0.003	0.025	1.237	0.236
02	Dairy Products and Eggs	0.029	0.249	0.014	0.153	0.162	0.104
03	Fish and Preparations	3.818	0.483	2.249	0.121	9.092	10.55
04	Cereals and Preparations	0.150	0.264	0.163	0.154	6.204	5.89
	(of which 042 rice)	0.005	0.0034	0.000	0.0085	24.518	71.53
05	Fruit and Vegetables	0.426	0.187	1.932	0.212	1.970	0.642
06	Sugar and Pres Honey	0.325	0.289	1.452	0.119	6.167	0.764
07	Coffee Tea Cocoa Spices	4.159	0.663	0.192	0.859	0.423	10.27
	(of which 071 Coffee)	3.929	0.0763	0.0801	0.4754	0.6781	20.69
08	Animal Feeding Stuff	0.721	0.394	0.667	0.12	1.125	0.092
11	Beverages	0.023	0.185	0.091	0.687	0.295	0.121
12	Tobacco and MFRS	0.966	0.374	0.348	2.139	0.322	0.936
21	Hides, Skins, Furs Undrssd	0.021	0.041	0.018	0.122	0.029	1.95
22	Oil seeds, Nuts, Kernels	0.083	0.056	0.077	0.097	0.049	9.06
23	Rubber Crude, Synthetic	14.28	6.885	0.472	1.717	16.64	9.217
24	Wood Lumber and Cork	0.855	4.187	0.193	0.191	0.268	2.728
25	Pulp and Waste Paper	2.874	0.017	0.424	0.168	0.310	0.004
26	Textile Fibres	0.546	0.364	0.249	0.144	0.842	0.815
27	Crude Fertlzr, Minrls Nes	0.810	0.244	0.329	0.195	1.168	0.237
28	Metalliferous Ores, Scrap	4.189	0.186	1.315	0.257	0.223	1.459
29	Crude Animal, Veg Mat Nes	0.596	0.225	1.909	0.686	1.011	2.611
32	Coal, Coke, Briquettes	6.042	0.002	n.a	0.005	na	3.125
33	Petroleum and Products	2.056	0.777	0.144	1.2	0.216	2.636
34	Gas Natural and Manufctd	na	na	na	na	na	n.a

41	Animal Oils and Fats	0.111	0.085	0.006	0.067	0.061	0.004
42	Fixed Vegetables Oil, Fat	7.652	13.86	7.898	0.498	0.149	0.786
43	Processed Anml Veg Oil, etc	7.174	17.63	1.076	1.757	0.289	0.009
51	Chem Elements, Comounds	0.586	0.379	0.098	0.964	0.314	0.000
52	Coal, Petroleum etc Chems	0.331	0.134	0.158	0.254	0.276	0.000
53	Dyes, Tanning, Color Prod	0.239	0.340	0.071	0.71	0.608	0.000
54	Medicinal etc Products	0.061	0.065	0.079	0.33	0.132	0.004
55	Perfume, Cleaning etc Prd	0.554	0.378	0.242	0.783	0.425	0.297
56	Fertilisers Manufactured	1.656	0.403	1.43	0.037	0.082	0.233
57	Explosives, Pyrotech Prod	na	na	na	na	na	n.a
58	Plastic Materials etc	0.086	0.119	0.078	0.123	0.346	0.117
59	Explosives, misc chemical etc	0.206	0.795	0.213	0.793	0.693	0.000
61	Leather, Dressed Fur, etc	0.236	0.207	0.082	0.154	1.834	0.377
62	Rubber Manufactures Nes	0.706	0.703	0.184	0.382	1.230	1.431
63	Wood, Cork Manufactrs	14.807	4.720	1.152	0.274	1.009	1.201
64	Paper, Paperboard and Mfr	1.194	0.195	0.145	0.23	0.360	0.089
65	Textile Yarn, Fabric etc	1.776	0.546	0.425	0.357	1.228	5.203
66	Nonmetal Mineral Mfs Nes	0.349	0.403	0.266	0.273	1.514	0.511
67	Iron and Steel	0.301	0.278	0.085	0.231	0.338	0.194
68	Non-ferrous Metals	0.719	0.544	0.811	0.736	0.193	0.527
69	Metal Manufactures Nes	0.433	0.516	0.273	0.521	0.745	0.100
71	Machinery, Non-Electric	0.154	0.370	0.071	0.545	0.563	0.008
72	Electrical Machinery	0.094	0.232	0.101	0.655	0.152	0.097
73	Transport Equipment	0.020	0.192	0.249	0.483	0.284	0.103
75	Office Machines	0.312	2.632	2.625	5.423	2.604	0.008
81	Plumbg, Heating, Lghtng Equ	0.276	0.302	0.338	0.329	0.809	0.156
82	Furniture	1.590	1.534	1.408	0.152	1.426	1.103
83	Travel Goods, Handbags	0.656	0.177	2.89	0.183	2.815	3.781
84	Clothing	1.939	0.935	2.675	0.370	2.288	2.965
85	Footware	4.484	0.161	0.915	0.159	3.293	11.35
87	Medical Instruments nes	0.036	0.377	0.156	0.798	0.313	0.083
89	Misc Manufctrd Goods Nes	0.800	0.619	0.643	0.780	1.402	0.327
93	Special Transactions	2.666	0.389	0.735	0.842	0.618	n.a

Calculations based on database from International Trade Center (ITC)
n.a. data on this commodity group is not available
* The data for Brunei, Laos PDR, Cambodia and Myanmar is not available.

A weakness of the RCA index is that it measures comparative advantage purely in terms of a country's share of exports in a particular product, thereby ignoring the import side (Grimwade and Mayes 2000). If a country exports some products in a particular commodity group substantially and also imports some others in that group considerably, it is not concluded that the country enjoys an overall comparative advantage in the product category. This is why the ratio of exports to imports (X/M) can be used to identify sectors where a country is actually strong on both the export and import side.

Table 6. Product Categories in which ASEAN-6 have relative strength on both export and import sides (1995-1998 Average)

SITC	Description	Country
03	Fish and Preparations	Vietnam (RCA = 10.55; X/M = 47.56) Thailand (RCA = 9.092; X/M = 5.62)
04	Cereals and Preparations (of which 042 rice)	Vietnam (RCA = 71.53; X/M = 5.29) Thailand (RCA = 24.518; X/M = 8.28)
06	Sugar and Pres Honey	Thailand (RCA = 6.167; X/M = 73.78)
22	Oil seeds, Nuts, Kernels	Vietnam (RCA = 9.06; X/M = 16.47)
23	Rubber Crude, Synthetic	Thailand (RCA = 16.64; X/M = 15.96) Indonesia (RCA = 14.28; X/M = 9.44)
24	Wood Lumber and Cork	Malaysia (RCA = 4.187; X/M = 19.12) Vietnam (RCA = 2.728; X/M = 3.29)
32	Coal, Coke, Briquettes	Indonesia (RCA = 6.042; X/M = 44.71) Vietnam (RCA = 3.125; X/M = 42.89)
33	Petroleum and Products	Vietnam (RCA = 2.636; X/M = 1.30) Indonesia (RCA = 2.056; X/M = 1.86)
42	Fixed Vegetables Oil, Fat	Malaysia (RCA = 13.86; X/M = 26.80) Indonesia (RCA = 7.652; X/M = 20.41) Philippines (RCA = 7.898; X/M = 22.47)
43	Processed Anml Veg Oil, etc	Malaysia (RCA = 17.63; X/M = 40.89) Indonesia (RCA = 7.174; X/M = 13.78)
56	Fertilisers Manufactured	Indonesia (RCA = 1.656; X/M = 1.53)
63	Wood, Cork Manufactrs	Indonesia (RCA = 14.807; X/M = 135.02) Malaysia (RCA = 4.72; X/M = 29.50)
75	Office Machines	Singapore (RCA = 5.423; X/M = 2.17) Malaysia (RCA = 2.632; X/M = 2.63)
82	Furniture	Indonesia (RCA = 1.590; X/M = 22.31) Malaysia (RCA = 1.534; X/M = 11.58)
84	Clothing	Vietnam (RCA = 2.965; X/M = 30.17) Philippines (RCA = 2.675; X/M = 25.47)
85	Footware	Vietnam (RCA = 11.35; X/M = 9.55) Indonesia (RCA = 4.484; X/M = 15.67)

Calculations based on database from International Trade Center (ITC)
The data for Brunei, Laos PDR, Cambodia and Myanmar is not available.

We found that sixteen product categories where ASEAN-6 countries enjoy a strong comparative advantage. Most of these are in the traditional sectors. Vietnam and Indonesia are likely to competitors in SITC 32, 85 and 071 (coffee). In practice, Brazil, Vietnam and Indonesia are now three leading exporters of coffee in the world. Malaysia will also be a main competitor of Vietnam in SITC 42, while in SITC 04 and 042 (rice) Vietnam and Thailand are equally to take advantage of any further opening up of the world markets. In SITC 75, Singapore has a strong competitive advantage. In SITC 82 and 63, the main source of competitive challenge is likely to be Malaysia and Indonesia. Although Singapore seems to have a competitive advantage in SITC 33 (RCA = 1.2), in fact its petroleum refinery industry is considerably subject to imported volumes of crude oil (X/M = 0.7944). This also happens to the Philippines in SITC 56 (RCA = 1.43; X/M = 0.4408).

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