

# **Trade Policy Reforms and the Structure of Protection in Vietnam**

**Prema-chandra Athukorala**

Division of Economics

Research School of Pacific and Asian Studies

Australian National University

**Prema-chandra.athukorala@anu.edu.au**

*Abstract:* This paper examines the current state of the trade policy regime in Vietnam against the backdrop of market-oriented policy reforms undertaken over the past one-and-a-half decades. The core of the paper is an in-depth analysis of the structure of protection, focussing on both incentives for import-competing production the bias in the incentive structure against export production compared to import-competing production. It is found that, despite notable reform efforts, the structure of protection in Vietnam is still out of line with that of the major trading nations in the region, in terms of the level and the inter-industry dispersion of nominal and effective protection rates. There is a clear anti-export bias in the incentive structure, even though the degree of the bias has considerably declined over the years. There is no evidence to justify the existing protection structure on grounds of infant industry protection or employment generation.

April 2005

Forthcoming in *World Economy*

## Trade Policy Reforms and the Structure of Protection in Vietnam

### 1. INTRODUCTION

Following the announcement of *doi moi* (renovation) policy in 1986, the trade policy regime in Vietnam has undergone significant changes. With a slow and hesitant start in the late 1980s, significant reforms were undertaken in the first half of the 1990s with a view to reshaping the former closed command economy into a relatively open, market-based economy. The reform process lost momentum during 1996-98 partly due to the East Asian crisis of 1997-98, but partly (perhaps even more so) due to domestic policy ambivalence and complacency resulted from the success of the initial reforms. There has however been a renewed emphasis on completing the unfinished reform agenda over the past three years. The key recent reform measures included dismantling of quantitative import restrictions (on all products except sugar and petroleum products), significant reduction in tariffs leading to some reduction in both the level and dispersion of effective rate of protection, initiatives to expose public sector enterprises to greater market discipline, relaxing restrictions on foreign direct investment, particularly in export-oriented projects, and lifting restrictions on private-sectors participation in foreign trade and setting up business ventures by private entities (individuals and companies).<sup>1</sup>

In recent years the Government of Vietnam (GOVN) has also taken initiatives to 'locking in' domestic (unilateral) liberalisation reforms by committing itself to play an active role in regional, bilateral and multilateral trade liberalisation initiatives. In July 1995 Vietnam became a member of the Association of South East Asian Nations (ASEAN) and the ASEAN Free Trade Area (AFTA). The long-draw trade negotiations between the governments of Vietnam and the USA culminated in the signing of a bilateral trading agreement (the Vietnam–United State Bilateral Trading Agreement, VNUSBTA) in July 2001. The VNUSBTA, which is considered the most comprehensive of all bilateral trading agreements the US has ever signed with a developing country, came into effect on 10 December 2002.

---

<sup>1</sup> For useful surveys of the reform process in Vietnam, see Dollar 1992, Riedel 1993, Riedel and Comer 1997, and Auffret 2003.

Vietnam applied for membership in the WTO in 1995. The GOVN considers the accession to WTO a pivotal step in making the Vietnamese economy an integral part of a ruled-based global trading system. The emphasis on WTO accession has gained added impetus following the China's accession to WTO in 2001. With strong liberalisations undertaken by countries with similar entwinement to that of Vietnam around the world, and by Vietnam's neighbours, both unilaterally and multilaterally, WTO accession is important for Vietnam to gain access to world markets on equal terms. A detailed Memorandum on Vietnamese Foreign Trade and Economic Policy was prepared for the WTO Working Party for examination. Up to now, the Working Party on Vietnam Vietnam's accession has held seven working sessions. At the last session in December 2003, the Working Part decided upon the Elements of the Draft Report on Vietnam's accession. Vietnam has completed its transparency period and is now in the process of substantive market access negotiations with members of the Working Party. The Working Party started work on key 'elements' of a draft working party report on 10 December 2003, the first formal attempt to define the terms of Vietnam's membership.

The purpose of this paper is to examine the trade policy regime in Vietnam in the context of the trade liberalisation and other market-oriented reforms over the past one-and-a-half decades. The study is motivated by the conviction that an appraisal of the existing policy regime is needed to inform both unilateral policy reforms in Vietnam and Vietnam's effective participation in regional and global trade policy negotiations.

The study is based on analysis of secondary data from both national (Vietnamese) and international sources, review of previous studies, and interviews with officials of Ministry of Finance (MOF). The core of the paper is an in-depth analysis of the structure of protection based on fresh estimates of effective rates of protection (ERP) using the latest input-output table (for 2000) and nominal tariff schedule as at mid-2003. Going beyond the conventional practice of examining effective protection for import-substitution production, the paper also focuses on the bias in the incentives structure against export production compared to import-substitution production ('anti-export bias'). Estimates of effective protection and anti-export bias are related to industry level output, export and employment to examine the implications of the policy regime for industrial performance.

The paper is arranged in six main sections. Section 2 surveys policy shifts and the key elements of the trade policy regime. Section 3 looks at the structure of import tariffs, which is the main instrument of trade policy, in comparison with selected countries in Asia. Section 4 examines the overall resource allocation effects of the trade regime through the estimation of effective rates of protection. Section 5 brings together available information on the impact of the structure of protection on the performance of domestic manufacturing. The key findings and policy inferences are summarised in the final section.

## 2. POLICY TRENDS AND KEY ELEMENTS OF TRADE POLICY

Vietnam embarked on market-oriented policy reforms with a predominantly import-substituting manufacturing sector developed under a long-standing protectionist, state-led trade regime. Therefore, from the inception the policy regimes embodied a policy bias in favour of domestic-market oriented industries, which are dominated by state owned enterprises (SOEs). Within this broader policy orientation, attempts have been made in recent years to promote export-oriented industries side by side with the protected trade regime, resulting in a dualistic policy regime. Given the deep-rooted import-substitution bias in the policy regime, the emphasis on export promotion has essentially involved introducing certain counter-balancing measures in support of export-oriented activities with a view to offsetting the anti-export bias embodied in the protectionist regime. The following discussion is arranged in line with this fundamental dualistic characteristic of the trade policy regime. We first look at instruments used for protecting domestic market oriented industries and followed by a discussion on policies implemented to redress anti-export bias.

### **Instruments of Import Protection**

#### *(i) Import tariffs*

During the command-economy era, trade taxes were not important either as a revenue-raising instrument or as a tool of development policy in Vietnam (as in other former centrally-planned economies). The Law on Import and Export Duties introduced on 1 January 1988 marked the beginning of the present trade tax system. The original import

tariff schedule was replaced in 1992 by a detailed, consolidated schedule based on the Harmonised System (HS) of tariff nomenclature. The tariff structure was fine-tuned in subsequent years reflecting a trend towards an increasingly selective protection of consumer goods (cosmetics and some categories of food products), upstream activities related to textiles and garments (silk, cotton, and certain fibres) and some specifically protected intermediate goods (metal products, cements and glass). Following the accession to the ASEAN Free Trade Area (AFTA) and in preparation for the WTO accession, steps have been taken to restructure and rationalise the tariff structure over the past three years (under the Decision 1983 issued by the Ministry of Finance issued on December 11, 1998).

Under the Common Effective Preferential Tariff (CEPT) of the AFTA, Vietnam is committed to reducing tariff on all but few sensitive items from AFTA member countries to less than 5% by the year 2006. Vietnam joined AFTA with a long list of items excluded from tariff reduction (Exclusion List, EL). However, over in the past three years these items have been gradually lifted to the Inclusion List, resulting in a decline in the average tariff applicable to imports from AFTA countries to about 7.3 per cent compared to 12.8 per cent at the time of becoming an AFTA member. The impact of these tariff reductions on the average tariff level of Vietnam remains rather small because the extension of the Inclusion List has been done mostly by declaring goods that are already at zero or low rates and tariff reductions are yet to be announced on products included in the general exception list.

## **(ii) Non-tariff barriers**

After one-and-a-half decades of trade reforms, tariffs are now the major instruments used in regulating imports to Vietnam. However, a number of non-tariff barriers (NTBs) still remains. A discussion that focuses only on the tariff structure cannot, therefore, capture the overall price-raising and resource allocation effects of the Vietnamese trade policy regime.

### *(a) Import Quota*

Import quotas have been used in Vietnam side by side with import tariffs in order to limits imports which directly compete with domestic production by State Owned

Enterprises. By 1998, nine major products were remained under import quotas; petroleum, fertilizer, steel, cement, construction glass, motorcycles, cars of 12 seats, paper, sugar and liquor. These products accounted for approximately 40% of imports (CIE 1999) and over 45% of total manufacturing production (Athukorala 2002a). In 1999 the number of products under quota restrictions was doubled mainly as a temporary measure to avert balance of payments pressure in the wake of the Asian Financial crisis. Over the past two years quotas have been gradually eliminated as part of the new emphasis on speeding up trade liberalization. Currently only two products, namely sugar and petroleum products, are subject to quotas, and the government has committed to lifting quotas on sugar imports by 2005 (Table 1).

**Insert Table 1 about here**

*(b) Tariff Rate Quota*

The latest addition to the list of trade policy instruments in Vietnam is tariff rate quotas (TQRs) (or duty quotas, as they are referred to in Vietnamese policy documents). Seven agricultural commodities were brought under tariff rate quotas (TRQs) with effect from 1 July by the Prime Ministerial Decision No 91/2003/QD issued on 9 may 2003. The products were raw milk (HS 0401), condensed milk (0402), poultry eggs (0407), maize (1005), raw tobacco (2401), salt (2501), and cotton (5201, 5202, 5203). Of these, the last three items were to come under TRQs with effect from 1 July, 2003. The Ministry of Trade was given authority to introduce TRQs on the remaining four commodities depending on conditions of domestic production and foreign trade.

TRQs are obvious less trade distortionary compared to prohibitive tariffs (or general import quotas). However, the market access rules under TQRs generally introduce scope for discriminating in the allocation of TRQs between source countries and domestic importers. In particular, the administration of such quotas tends to legitimise a role for state-owned trading agencies. There is evidence that, when such agencies have selling rights on the domestic market in addition to a monopoly on imports of the given products, they can charge excessive mark-ups and thereby distort domestic prices (Hoeckman and Kosteki 2002, p. 218). For these reasons, trade analysts generally

consider TRQs a relatively covertly element of quantitative management of import trade, which has unfortunately been legitimised under the WTO.

*(c) Import prohibition*

Like in many other countries import prohibitions in Vietnam are based primarily on health and defence considerations, and they do not seem to have a major distortion impact on trade. The current list of prohibited items includes military equipment, toxic chemicals, antiquities, narcotics, firecrackers, poisonous toys, cigarettes, used consumer goods, and right-hand driving automobiles.

*(d) Special authority regulation*

A considerable number of import items (eg pharmaceuticals, some chemicals, some food items, fertilizer, and recording and broadcasting equipment) still require approval from relevant ministries. By 2000, around 10% of imports (in value terms) was subject to this form of regulation. As in many other countries, these regulations are generally maintained for health and security reasons and they do not seem to distort trade patterns.

*(e) Entry Barriers to Import Trade*

As early as the mid-1990s only licensed (authorised) trading companies were allowed to engage in foreign trade. In order to obtain an import/export license, enterprises needed to have a foreign trade contract and a shipping license, and to meet the requirements on minimum working capital (\$ 200,000) and 'skill' in trade. In 1996 the requirements on foreign trade contracts and shipment permission were removed, but the minimum working capital requirement continued to remain a major entry barrier, especially for new enterprises. In 1998 there were only 2400 private sector companies involved in foreign trade compared to over 6000 SOE companies.

Significant changes of requirements for private sector firms to engage in foreign trade were introduced by Decree 57/1998/ND-CP (31 July 1998). The Decree permitted all enterprises with business licenses to engage in foreign trade in the goods specified in their business license without requiring import/export licenses. The number of enterprises registered for foreign trade increased from 2400 in early 1998 to over 5500 (or 55% of

total number of 10000 trading companies) in 2002. However, firms are still allowed to trade only in commodities registered in the business licenses, and it is difficult to move from one kind of business to another without approved modification of the licenses. There is evidence that regulatory requirements demanded by line ministries *de facto* prevent private firms from participating in rice exports and fertilizer imports (Auffret 2003, p. 5).

(f) *The Regulatory Impediments*

In addition to the formal licensing procedures, administrative rigidities and delays in the Customs administration have continued to remain important non-tariff barriers. Firms have to spend long time on clearing Customs procedures. According to a recent survey of 150 firms in textiles and garment industry by IMPR in 2001 approximately 20% of the firms had to spend 5 to 25 days and about 10% firms 15 to 32 days (World Bank 2002). Rigidities and delays in Customs procedures have also naturally given rise to widespread use of unofficial customs fee, which raise opportunity costs of private sector and make customs transactions time consuming and cumbersome. For example, based on interview with managers of footwear exporting companies Boyed (2002) reports that the following 'standard' unofficial fees are required to process incoming shipments: US\$20 for clearing a 20 foot container, US\$40 for a 40 foot container, US\$ 100 late inspection fee'.

This divergence between general policy of the government and detailed implementation documents of line ministries or interested government agencies often defeated the purpose of trade liberalization policy. Greater efforts need to be made to ensure that general policy once decided is not be distracted by implementation regulations. In terms of the law, entry rights of private enterprise in trading are the same as those of SOEs (Decree 57/1998/ND-CP, 31 July 1998). In reality, the export/import conditions required for import of several goods discourage export/import activities of non-state firms. Because of the close relationship between the line ministry in charge and the SOEs under its ownership or sponsorship, the SOE often had influence over setting conditions of participation of others for the good in question. These conditions usually put SOEs in a more advantageous position than non-state firms, as illustrated by the cases of rice and fertilizers.



(g) *Foreign Exchange Restrictions*

From time to time import flows have also been regulated in line with government priorities through regulating the release of foreign exchange by banks for meeting import payments. For instance in late 1998, in face of the widening current account deficit following the onset of the East Asian crisis, the MPI in consultation with the Ministry of Trade and other relevant ministries, resorted to such control on imports of some groups of consumer goods. The two major instrument used were limiting foreign exchange release for imports by foreign invested enterprises to the actual amount of foreign exchange they have brought into the country in the year ('balance' their foreign exchange) and an advanced payment requirement for importing consumer goods.

In September 1998, the State Bank of Vietnam (the Central Bank) imposed a foreign exchange surrender requirement for exporters under which all exporting firms had to sell 80% of their foreign exchange earnings to banks within 15 working days of transfer of these funds into their accounts. The surrender requirement was reduced to 50% in August 1999 and to 40% in May 2001, and finally removed in December 2004. The foreign exchange balancing requirement for FIEs was relaxed in May 2000. From then on FIEs have been able to purchase foreign currency from domestic banks to repay loans obtained from offshore banks. Although in principle all firms can buy foreign exchange from banks, in practice, only large firms, mostly SOEs are able to secure foreign exchange from state-owned commercial banks.

### **Policies to Redress Anti-export Bias**

So far we have discussed the key elements of the trade policy regime that determine profitability of production for the domestic market. As the famous Lerner symmetry theorem stipulates, these restrictions on imports act as a tax on export production. They increase the cost of inputs to all industries thereby reducing relative profitability of exporting compared to production for the domestic market. As many other developing countries which attempts to promote exports in the context of a restrictive trade regime, Vietnam has resorted to a number of measures to redress such anti-export bias.

(i) *Duty free access to Imported Inputs*

When a country attempts to promote exports side by side with a protected trade regime for production for the domestic market, it is important to assure uninterrupted duty-free access to the imported intermediate inputs needed for export production. There are two tools widely used for this purpose: export processing zone and import duty rebate.

The GOVN passed legislation for setting up of FTZs in 1991. So far six EPZs have been set up of which only three EPZs are currently in operation (Linh Trung, and Tan Thuan (both in HCMC) and Numura in the North (Hai Phong). The other 3 have been converted into industrial zones given the poor investor response from pure export-producing foreign investors. Investment in the two zones, both in terms of the number of new firms entering and value of committed investment, has increased notably increased continuously over the past seven years. The share of FTZ enterprises in total non-oil manufactured exports increased from 11% in 1995 to over 22% in 2001. Total employment in the two Zones amounted to over 80,000 thousand by the end of 2002. Firms operating in Vietnamese FTZ have duty free access to all inputs and enjoy various tax concessions comparable to or more attractive than those located in FTZs in other countries in the region (Athukorala 2002b).

The duty rebate scheme in Vietnam was introduced in 1991. In 1993 a duty suspension facility was added to the scheme, enabling export-oriented firms (firms exporting more than 50% of output) to suspend duty payments up to 90 days. The suspension period was further extended to 275 days in 1998 for all enterprises, which import inputs for export production.

The operation of the duty drawback scheme in Vietnam has been examined in detail as part of a recent World Bank study on export policies and performance (World Bank 2002). According to this study the operation of the scheme has improved considerably over the years. The time involved in processing duty rebate claims has become considerably shorter (now around 3-5 weeks compared to over 3 months at the formative stage of the scheme) as the customs officials gained experience in the implementation of the scheme. However, operation of the scheme still has left much to be desired, particularly for firms that export only part of their output or newcomers to exporting. Customs officers often make arbitrary assumptions, and often take long time,

in deciding the proportion exported out of total output and input-output ratios applied in calculating the imports which may be imported duty free. In the absence of clear operational rules as to what evidence is to be supplied by the exporters in support of their application, the customs officers usually make decisions in an arbitrary, unpredictable fashion. If a given import item is not on the tariff schedule, customs officers wait for orders from their superiors, leading to unnecessary delays. These practices have also provided fertile ground for corruption, and favoured treatment of SOEs and well connected firms against other firms (particularly small- and medium scale one).

Compared to the highly successful duty rebate schemes in other Asian countries (Korea, Taiwan, Malaysia and Sri Lanka, in particular), the Vietnamese scheme has two structural limitations. First, it provides only for refunding duties paid by export producers on imported inputs. Local intermediate goods producers who supply inputs to export producers ('indirect exporters') are not eligible for duty rebates on imports used in production (that is, a local producer who supplies textile to producers of garments for export is not eligible for duty rebate on imports of cotton yarn). This essentially creates an the unnecessary bias in favour of using imported inputs, discouraging intermediate processing of inputs for the use in export industries. Second, duty rebates are estimated on a shipment-by-shipment basis based on "used-up ratios" declared and guaranteed by the importer (not on a pre-announced list of duty rebate rates). This practice works well for firms which import on a continuing basis, but problems arise when new and different cases have to be dealt with. In addition to these limitations, there are also other administrative problems with duty drawback system including some unnecessary paper work required by the Customs. For example, exporters are required to submit a certificate of export issued by the overseas importer to get duty refund. There is anecdotal evidence that, because of the rigid implementation procedures of the duty rebate schemes, some private firms (mostly small and medium sized firms) tend to rely on SOEs for exporting their produce and for procuring imported inputs (World Bank 2002).

*(b) Export Duty Removal*

In the early years of market-oriented reforms Vietnam introduced export duties on a number of export items. They were justified at the time on grounds of protecting

environment, natural resources conservation and reserve inputs for domestic production. These duties were subsequently eliminated. By 1998 only two products – crude oil and scrap metal – were subject to export duties.

*(c) Exemption from domestic taxes*

Vietnam has a wide array of domestic taxes: corporate income tax, value added tax (VAT), special sale tax, licence tax, agricultural land use tax, tax on land transfers, and natural resource tax. Concessions are given to exporters relating to corporate income tax and turnover tax, creating a tax wedge in favour of export production over production for the domestic market.

From 1999 to 2003, Vietnam had a two-band corporate income system; industries 25% and services 32%. This was unified at 28% with effect from 1 January 2004. Profit from export production is taxed at concessionary rate depending on the degree of export orientation of production. Firms exporting between 50-80% of production are taxed at 20% for twelve years (from the date when the project commences its production) while firms exporting at least 80% of production are taxed at a more favourable rate of 15% for fifteen years. Non-exporting firms are also eligible to these concessions depending on criteria such as, contribution to employment, size of the work force, use of advanced technology, intensive use of local raw material, investment in rural areas, and contribution to infrastructure construction/development.

VAT was introduced in January 1999 in place of the turnover tax. It has four tax lines: 0% for all exports, 5% for essential goods and services (such as water, fertiliser, insecticides, medicine, educational equipment, baby toys and animal foods); 20% for some specific services; and 10% for all other goods and services. The 20% rate was abolished on 1 January 2004, resulting in a three-band VAT system of 0%, 5% and 10%. Imports are subject to VAT at the same rates as domestically produced goods under each tax bracket.

While the operation of tax administration in Vietnam has improved considerably in recent years, bureaucratic inertia and venality still believed to hinder effective provision of tax concessions for exporting firms, new small and medium scale firms in particular. The lack of clarity and transparency in the law, particularly in relation to tax

inspection and rulings, also create a climate of uncertainty, which makes it impossible for business to predict their tax liabilities (CIEM 1999).

### 3. THE TARIFF STRUCTURE

This section looks at the structure of applied tariffs (nominal protection) in Vietnam, in some comparison with selected countries in East Asia. Clear understanding of the stature of nominal tariff is needed in order to examine the structure of effective protection in the next section. Moreover, this subject is important in its own right for two reasons. First, nominal protection (the price-raising effects of tariff) and other trade interventions are relevant to the consideration of consumption effect (but not the production or protective effects). Second, the level and inter-industry variations in nominal tariffs (not the structure of effective protection) are the major focuses of international tariff negotiations.

The present import duty structure in Vietnam has three different rates of tariffs: (1) Common Effective Preferential Tariff (CEPT) rates applicable to imports from the member countries of the ASEAN Free Trade Association (FTAs) (Common Effective Preferential Tariff. CEPT), (2) Most Favoured Nation (MFN) rates applicable to countries with which Vietnam enjoys the most favoured nation (MFN) status (The European Union, Japan, most Asian countries outside ASEAN, New Zealand, Australia) and (3) general rates (50% above MFN rates) applicable to imports from countries that do not fall under (1) and (2).

Of these three categories of rates, by far the largest share of imports (over 95% in 2002) enters Vietnam under MFN rates (category 2). The CEPT rates are currently applicable to only about 3.5% of total import value (or about 10% of imports from ASEAN countries). Imports under general rates are believed to be negligible. For these reasons, the analysis in this and the following section focuses only on MFN tariffs. It is not possible to capture the incidence of the other two forms of tariffs in an aggregative analysis of this nature.

The distribution of tariff lines at the six-digit level of the harmonised System is summarised for 1995, 1997, 2001 and 2003 in Table 2. The average (unweighted) tariff rate has remained unchanged between 2001 and 2003, following a mild increase from

13.4 to 15.7 between 1997 and 2001. However, the dispersion of tariff rates (measured by the coefficient of variation) has declined persistently over time. What these summary measures reflect is that, while some high rates have been eliminated over the years, there has been virtually no reduction in middle-range tariffs.

### **Table 2 about here**

The maximum tariff rate came down from 200% in 1997 to 120% in 2001 and then to 113% in 2003. In all four years less than one per cent of total tariff lines (accounting for around 5 per cent of import value) had tariff rates above 50%. These high tariff rates remained concentrated in four HS Chapter: Beverages, spirit and vinegar (HS 22); tobacco and manufactured tobacco (HS 24), worn clothing (HS 63), and vehicles and vehicle parts (HS 87)

The decline in the degree of dispersion of tariff in 2003 over the previous years has come predominantly from a compression of rates at the lower end of the rate distribution. For instance tariff lines with rates between 1 –10 percent (inclusive) declined from 23 percent in 1995 to 13 per cent by 2003. This has been accompanied by an increase in the percentage of rates between 10 to 40 per cent (inclusive) from 33% to 50% between the two years. About one-third of the tariff lines had zero tariffs in all four years.

The number of tariff bands in the tariff schedule declined from 36 in 1995 to 15 in 2002. This trend towards simplification of the tariff system seems to have unfortunately reversed in the process of fine-tuning of tariffs over the past two years. By mid 2003, the number of tariff bands stood at 60. This increase has come from the introduction of fractional rates at the lower end, presumably reflecting the government's attempt to respond to lobbying pressure from importers of intermediate goods (mostly SOEs).

An analysis at the HS Chapter level suggests that there is considerable non-uniformity of rates within and between HS chapters (data not reported here for brevity). For example, there are 11 different duty rates for various kinds of animal and vegetable oil (HS 15), 19 rates for plastic products (HS 39), 15 rates for iron and steel products (HS

73), and 41 rates for electrical and non-electrical machinery (HS 84 + 85). The degree of dispersion of rates also varies considerably across HS Chapters. Tariff rates are generally higher for manufacturing compared to agriculture and other primary product sectors. This is consistent with patterns observed in other developing countries and reflects the belief in industrialisation as the road to economic independence and riches. Within manufacturing category, tariff rates are particularly high for food processing and for certain consumer goods (notably garments, footwear, ceramic products and leather goods). Certainly, there are likely to be significant unintended effects of this complex tariff schedule.

A comparison of tariff rates for intermediate goods and final goods across HS chapters provides clear evidence of tariff escalation with the stage of production. At the aggregate level, the weighted-average tariff on final goods in 2003 was 19.8 per cent compared to 11.4 per cent on intermediate goods (Table 3). At the sectoral level, industries producing intermediate goods (chemicals, fertilizer, metal products and construction material, for example) have relatively low rates of tariff protection. By contrast final- goods producing sectors (food and drinks, pharmaceuticals, garments ect.) have relatively high rates of protection. There is also similar tendency within sectors that produce both intermediate and final goods. For example, in the case of metal products (HS 72 through 81), tariffs on intermediate goods varies in the range of 0-8 per cent, whereas most of the final good tariffs are above 20 per cent. It is important to note that, while intermediate goods tariffs are generally lower than tariffs on end products, intermediate goods imported for use as inputs in product sectors where Vietnam has comparative advantage in export trade are much higher than those on inputs to import-competing industries. For instance woven fabric and knitted fabrics imports are taxed at 40%.<sup>2</sup> Most of the zero- or low-tariff rates are on items predominantly used by public sector enterprises (SOEs) as inputs in the production of intermediate goods or final goods for the domestic market.

---

<sup>2</sup> As already noted, Vietnam has a comprehensive duty drawback scheme to compensate exporters for the anti-export bias resulting from these high duties on imported inputs. As discussed below this scheme however seems to work well by and large for established, large-scale exporters. Owing to some

**Table 3 about here**

Vietnam's tariff structure is compared in Table 4 with that of China and four fellow member countries of AFTA, namely Indonesia, Philippines, Malaysia and Thailand.<sup>3</sup> The average (unweighted) tariff rate in Vietnam (16.65) is a little lower compared to China (17.48) and Thailand (18.48), but much higher compared to Indonesia (8.43), Malaysia (10.2) and the Philippines (7.6). The degree of dispersion of tariff rates in Vietnam is much higher compared to China, the Philippine and Thailand, and lower compared to Indonesia and Malaysia. The degree of dispersion of tariff rates (measured by the coefficient of variation, CV) in Malaysia is disproportionately affected by a few extremely high tariff rates for alcohols (1000% or more) and motor vehicles (over 300%). When these items are excluded, the CV decline from 340 to 62. Over a third of tariff lines in Vietnam have above 25 per cent tariffs, compared to 22 per cent in Thailand, 16 per cent in China, 7 per cent in Malaysia and less than 1 per cent in both Indonesia and the Philippines. In sum, in spite of considerable adjustment over the past decade, Vietnam's tariff structure is still out of line with the general patterns of the ASEAN countries and China.

**Table 4 about here**

## 5. EFFECTIVE PROTECTION AND ANTI EXPORT BIAS

As we have seen in the previous sections, the tariff structure in Vietnam is 'cascading' in nature, that is, tariffs are generally higher on final goods than on production inputs. An important implication of this cascading tariff structure is that the nominal tariff rates do not provide an accurate picture of the resource allocation effects of the overall tariff system. Under a cascading tariff structure, the resource allocation effects of the tariff structure on a given product sector depend not only on the tariff rate applicable to that sector but also on tariffs on all other sectors which provide production inputs

---

administrative problems it seems less effective in compensating for small and medium scale firms and new entrants to export arena.

<sup>3</sup> Singapore is not included because it is not an appropriate comparator given its advanced stage of economic transformation and the virtual free-trade status.



(intermediate and capital goods) to the sector, both directly and indirectly. In this section we attempt to examine the overall incentives provided for domestic traded goods production by the tariff structure by combining the tariffs on each sector and tariffs on its input-supplying sectors in the context of input-output linkages within the economy. The analytical tool used for this purpose is the effective rate of protection (ERP) (Corden 1971, Greenaway and Milner 2003).

**(a) The Basic Concept of ERP and Key Insights**

The ERP measures the proportionate increase in per unit value added of a sector due to the complete system of tariffs. More specifically, it takes into account the protection on output and the cost-raising effects of protection on inputs. By definition, the ERP for sector  $j$  can be expressed as followed<sup>4</sup>:

$$ERP_j = \frac{t_j - \sum_{i=1}^n a_{ij}t_i}{1 - \sum_{i=1}^n a_{ij}} \quad (1)$$

where  $t_j$  is the nominal tariff on sector  $j$ ,  $t_i$  nominal tariff on input  $i$ ,  $\sum_{i=1}^n a_{ij}$  the sum of the shares of intermediate inputs (1, ..., n) in the final value of product  $j$ , and  $\sum_{i=1}^n a_{ij}t_i$  tariff on all intermediate inputs used in producing a unit of project  $j$ . Equation (1) tells us that effective protection enjoyed by a given product depends upon tariffs on outputs and inputs and on the free trade input share. Overall protection to value added depends upon the interplay between output and input tariffs ( $t_j$  and  $t_i$ ) and the share of imported inputs in production costs ( $a_{ij}$ ). In other words, the overall tariff structure has both a tax and a subsidy element; whereas tariffs on the final good operate as a subsidy, tariffs on intermediate inputs operate as a tax.

We have so far assumed that tariff measure is the only instrument of trade protection. In practice, countries use other instruments such as subsidies and import quotas in addition to tariffs as instruments of trade intervention. To capture these

---

<sup>4</sup> See details of this formula in Corden (1971) and Greenaway and Milner (2003).

impacts,  $t_j$  should be defined in broader terms to combine the nominal tariff on activity  $j$  and tariff equivalent of subsidies, quantitative restrictions, and other forms of trade intervention.

The conventional practice is to estimate a composite ERP for a given sector incorporating both incentives for export- and import-competing protection. However, in the context of an economy like Vietnam (and most developing countries) where export-promotion policies are pursued along-side import-substitution policies, it is important to estimate ERP for import competing and export-oriented activities separately.

Let us denote ERP for production for domestic market and production for export in the same industry by  $ERP_d$  and  $ERP_e$  respectively. Combining the two measures provide us with a useful summary measure of the export bias embodied in the overall incentive structure.

That is,

$$EBI = \left[ 1 - \frac{(1 + ERP_d)}{(1 + ERP_x)} \right] * 100 \quad (2)$$

where,  $EBI$  = Export bias index

A positive  $EBI$  implies an incentive bias against exporting (that is a bias in favour of import-competing production) and a negative  $EBI$  implies an incentive bias in favour of exporting (a bias against domestic sales). For example an estimated  $EBI$  of 25 for a given industry suggest that under the given structure of protection, value added (returns to primary factors, labour and capital) in production for the domestic market in that industry is 25 per cent higher compared to production for export. By contrast an estimated  $EBI$  of  $-25$  suggest that value added in production for export made possible by the structure of protection is 25% higher than that in production for the domestic market.

#### (b) *Data*

The estimates of ERP reported in this paper are based on the tariff schedule as at mid-2003 provided by the Ministry of Finance and intermediate import coefficient derived from the Input-Output Table for 2000 prepared by the General Statistical Office (GSO).

The nominal rates used in estimation are simply the official applied tariff rates ('ex-ante' rates) summed up at the input-output sector level using import value weights.

The use of ex-ante tariff rates for measuring the price-raising effects of the tariff structure is of course problematic. First, as we have already noted, in Vietnam there are various formal and informal tax exemptions. Moreover tax evasion is also considered a widespread phenomenon (see the discussion below on fiscal implication of import taxation). Thus the ex-ante rates may overstate the pricing rising effects. The 'ex-post' rate derived from actual duty collections and recorded imports appear to offer an adjustment for any potential upward bias. But, disaggregated data on customs collection are not available for Vietnam. In any case, the 'ex-post' rate provides a precise measure of the tariff-inclusive border price only if there is uniform exemption on the ex-ante rates for all importers (and for all sources of import) relating to a given import item. With non-uniformity in the application of exemptions, it will be the marginal rather than the average influence (captured by the weighted rate) that is important. In this case, the 'expost' tariff may be a downwardly biased measure of the price-raising effect of border taxation of imports and the ex-ante rates may more accurately capture the structure of protection (Greenaway and Milner 1991).

Second, ex-ante (as well as ex-post) tariff rates fail to take account of quantitative restrictions and other forms of non-tariff barriers. We have noted above that, while quantitative restrictions are now applied only to sugar (and petroleum products, which are not covered in our calculations of ERP), imports are subject to various forms of non-transparent administrative protections. In the presence of such restrictions, the ex-ante rate tends to understate the price-raising impact of actual border protection. The obvious preferred strategy is to estimate the price-raising effect directly by comparing border (world) prices and domestic prices of the given products. It is not possible to adopt this strategy in Vietnam because data on domestic prices are not readily available. However, the available price comparisons for a limited number of commodities suggest that the wedge between the domestic price and border price are not very different from (and in some cases even lower than) scheduled tariffs (CIE 1999, CIE 2001, Athukorala 2002b).<sup>5</sup>

---

<sup>5</sup> There is anecdotal evidence that the thriving cross-border illicit trade acts as a cushion against the price rising effects of QRs and other non-tariff barriers in Vietnam.

In particular, in the domestic market for sugar, a combination of smuggling and market saturation resulting from surge in domestic production has caused prices to fall to the import parity price after about 1999 (CIE, 2001). Thus, it is unlikely that the use of applied tariffs as the measure of price-raising impact of the trade policy regime would result in a significant downward bias in the estimated incidence of effective production.

Given the paucity of data, precise measurement of incentives for export-competing production ( $ERP_x$ ) is even more difficult than measuring protection for import-competing production ( $ERP_d$ ). Because of this reason, we come up with three alternative *EBI* indices based on three alternative measures of  $ERP_x$ . The first index (*EBI1*) represent the extreme case in which the export producer suffers from higher prices for intermediate goods imports, but is unable to benefit from exemptions of import duties on imported inputs or any other tax exemption (A case of complete failure of various policy measures aimed at cushioning the export producer against the anti-export bias of the protectionist trade regime). Because export-oriented activities are often subject to tariffs on inputs and will not benefit from tariffs on exported output, this case implies an anti export bias across all sectors. Only the magnitude of the bias varies across sectors depending on the output tariffs. The second index (*EBI2*), like *EBI3*, incorporates a tax wedge of 6% but assumes only 80% of the import duties on intermediate imports are reimbursed under the import duty rebate scheme.<sup>6</sup> The third index (*EBI3*) depicts the case in which the duty rebate scheme is fully functional in reimbursing the exporter the total amount of duties paid on imported inputs and the existing tax exceptions creates a price wedge of 6% for export sales compared to domestic market sales (or tax exemptions amount to a 6% net subsidy for export production over production for the domestic market). We believe that *EBI2* depicts closely the experience of the average exporter and *EBI3* the case of well-established, large exporting firms.

(c) *Effective protection for Import-Competing Production*

---

<sup>6</sup> These figures comes from Athukorala 2002a. The first figure (6% tax rebate) is based on returns to a survey of 170 firms recently conducted by the Institute of World Economy, Hanoi. It is also consistent with the findings of a firm-level survey conducted by the ILO and the European Institute of Japanese Studies (Ronnas and Ramamurthy 2001). The second figure (80% duty rebate) is a rather arbitrary choice, but it is broadly consistent with exporters perceptions of the operational involved in the use of the current duty rebate scheme (World Bank 2002)

Effective protection estimates for import-competing production for 2003, together with the underline input and out put tariff and input coefficients, are reported in Table 5. The estimates are summarised for the three major sectors of the economy - agriculture, mining and manufacturing – in Table 6, together with estimates for 1997 and 2000 from a previous study (Athukorala 2002A).

**Table 5 about here**

**Table 6 about here**

The estimated ERP for import-competing production in all traded-goods sectors in 2003 is 25%, compared to 58% in 2001 and 72.2% in 1997 (Table 6). Thus there is evidence that recent changes in tariff policy in Vietnam have reflected in considerable decline in the level of effective protection. A comparison of NRP and ERP estimates for the three years suggests that this decline has come predominantly from *increase* in input tariffs. The NRP (on final goods) has changed only marginally over this period. The degree of dispersion of ERP across sector (measured by the coefficient of variation) increased from 156% in 1997 to 172% in 2001 and then declined to 134 in 2003.

At the sectoral level, ERP for agriculture increased from 7.4% in 2001 to 12.5% in 2003, reflecting a reversal in a mild decline recorded between 1997 and 2001 (from 7.7% to 7.4%). ERP for manufacturing declined persistently from 121% in 1997 to 96% in 2001 and then to 44% in 2003. The mild increase in agricultural protection between 2001 and 2003 has emanated predominantly from increase in output tariff, whereas increase in input tariff seems to have played a key role in the sharp decline in manufacturing protection. The estimates also point to a clear bias against agriculture (and in favour of manufacturing) in the tariff structure. Despite decline in manufacturing protection and a mild increase in agricultural protection, this anti-agricultural bias has remained virtually unchanged across the three years.

The disaggregated estimates for 2003 in Table 5 reveal a high degree of ERP variability in ERP across industries. Three sectors – liquor, and beer and processed rise – have ERPs well over 100%. ERPs for eleven sectors (tea, bricks and tiles, home appliances, textiles, clothing, carpets, plastic products, home appliances, motorcycles,

bicycles, and motor vehicles) range between 50% and 88%. All other sectors have ERPs in the range of 0 to 50% with the majority clustering at the lower end. ERPs for all product sectors in agricultural, forestry and fishing are well below the average protection rate for all traded goods sectors.

The larger the dispersion of rates between sectors; the smaller the inter-industry differences in factor intensities; the lower the possibility of differential factor price effect on resource pulls. Ignoring the desirability or otherwise on the efficiency grounds of this structure of protection, it is unlikely that these estimates could be rationalised in terms of deliberate policy planning (that is, ‘giving as much protection as is necessary to complete’). Very high protection provided to products such as tea, coffee, rice and wearing apparel in which the country has a clear comparative advantage remains a major anomaly in Vietnam’s tariff structure.

The implications of the cascading nature of the tariff structure for the incentive structure for domestic manufacturing is vividly demonstrated by the ERP estimates for individual I-O industries. Since the nominal protection rates (NRP) on final goods are generally higher than those on intermediate goods, the net effect of the nominal tariff structure has been to yield ERPs that exceed the nominal tariff rate in most industries. The rank correlation coefficient between NRP and ERP across the 83 sectors is rather weak (a mere 0.4), pointing to the importance of intermediate tariffs in determining the net protective effect of the tariff structure. As already noted, the significant decline in ERP for manufacturing as well as ERP for total traded good production has come from increase in input tariff introduced with the objective of protecting SOEs involved in intermediate production, rather than from reduction in final good tariffs.

Table 7 compares our ERP estimates for Vietnamese manufacturing with available estimates for seven major East Asian economies. A strict comparison of estimates across the countries is not possible because of significant differences in estimates in terms of the coverage given to various elements of the trade regime in each country. But based on the order of magnitude alone, one can safely infer that *the current level of effective protection to domestic manufacturing in Vietnam is clearly out of line with the protection levels in other countries in the region*. By the mid-1990s, the level of manufacturing ERP in Indonesia, Malaysia and the Philippines was less than half of the

present (mid-2003) level of manufacturing ERP in Vietnam (49%). Thailand's overall manufacturing ERP was a little higher, but this was because of high protection given to automobile industry, which has been scaled down in recent years. But, it is important to note that the current (2003) level of manufacturing protection is higher than the level of protection enjoyed by the Korean manufacturing at the early stage of export-led industrialisation.

**Table 7 about here**

**(d) Export Bias**

In the previous section we have examined the incentives faced by import-competing production in Vietnam. This analysis has implications for export policy because import protection by definition is a tax on export-competing production. However, to get a fuller picture about the nature of relative incentives for export-competing production, it is important to make a direct comparison of returns to domestic sales (or import-competing production) with the returns to export sales (export-competing production) within individual sectors. This is the purpose of this section.

The estimated anti-export bias (*EBI*) indices are presented in Table 8 together with the underlying estimates of effective rates of protection for domestic-market oriented and export production ( $ERP_d$  and  $ERP_x$ ). For obvious reasons our focus here is only on the manufacturing sectors.

**Table 8 about here**

*EBI1*, which assumes the existing export incentive policies (duty rebate and other tax exemptions) to be completely inactive, provides a useful benchmark for our analysis. According to this index all industries suffer significant anti-export bias, with an average anti-export bias of 105% for all industries listed (implying that selling in the domestic market is almost two times profitable compared to exporting). A comparison of *EBI1* with the other indices clearly points to the important role played by the duty rebate and other tax exceptions in mitigating the anti-export bias in the tariff regime. Under the

assumption of 80% import duty refund and a 6% price-wedge arising from other (domestic) tax exceptions (*EBI2*), the average anti-export bias decline from 105% to 58%. Under the assumptions of complete duty exemption a 6% price-wedge arising from domestic tax exemptions (*EBI3*), the measured degree of anti-export bias decline further to 25%.

A key inference from this comparative analysis of the three policy scenarios is that, while various indirect measures to counterbalance the anti-export bias of the protectionist regime seem to have had some effect, they are unlikely to achieve the desired neutrality in the incentive structure even if the efficiency of their implementation is substantially improved. More importantly, even in terms of *EBI3* (which assumes complete duty rebate) there is a considerable bias against exporting in several of the sectors where a country of Vietnam's level of development has ample scope of achieving export success, such as garments, plastic products, leather goods, ceramics and other manufacturing. While there is much room to improve the efficacy of the duty rebate scheme and other tax exceptions, the objective of removing anti-export bias cannot be achieved through these cushioning measures alone, without further actions to rationalise the tariff structure.

Note that the estimated *EBI2* and *ABE3* for a number of product sectors (such as wood products, basic organic chemicals, inorganic chemical fertilizer, pesticide, plastic products, various types of machinery, ferrous metal and animal feed) are negative, implying a *positive* bias in favour of export production. These estimates simply reflect the fact that, given the high defence of imported inputs which are imported at relatively high duty, the existing duty rebate scheme makes export oriented production in these sectors relatively more profitable compared to production for the domestic market (for which producers in these industries have to pay duty on imported inputs). This by no means implies that the existing trade policy regime will be *capable of* making these industries export oriented. Export success depends primarily on the comparative advantage of a given sector in international production. Relative domestic incentives are only a facilitator of export success.

*EBI* for total manufacturing in 2003 is compared with estimates for 2001 in Table 9. There is a clear reduction in the degree of anti-export bias in the incentive structure in



terms of all three alternative measures. It seems that recent tariff reductions on final goods have played an important role in reducing the bias against exporting. This observation needs to be treated with care because, given the presence of an import duty rebate scheme for exporters, an *increase* in import tariffs automatically tilt *EBI2* and *EBI3* in favour of export production. captured in *EBI2* and *EBI3* as a tariff on imported input . However, the decline in anti-export bias is significant even in terms of *EBI1* which does not capture the import duty rebate effect.

**Table 9 about here**

## 6. THE STRUCTURE OF PROTECTION AND MANUFACTURING PERFORMANCE

We have observed in the previous section that tariff policy in Vietnam has been basically derived by protection motive and that the Vietnamese economy has incurred considerable cost of resource misallocation owing to such policy. An obvious related question is whether protection can be justified on grounds of setting the stage for industrial transformation. A definitive analysis of these issues requires in-depth industry level case studies. In this section we simply aim to put together existing evidence to address the issue of whether there is any evidence to suggest that protected industries have played a role in industrial transformation.

Table 10 brings together our effective rate of protection estimates and selected performance indicators for the manufacturing sectors. Given the highly aggregative nature of the data, it is not possible to undertake any meaningful statistical analysis of the relationship between protection and the structure and performance of manufacturing. But, a number of interesting patterns emerge from these data. First, it is clearly evident that high protection rates are generally associated with industries dominated by SOEs and/or foreign invested enterprises (which are mostly joint ventures with SOEs). Most of the industries with greater participation of private enterprises such as leather and leather products, rubber and plastic products and furniture and other manufacturing

operates under relatively low protection. Thus there is no evidence to suggest that the existing structure of protection can be justified on grounds of infant industry protection.

**Table 10 about here**

Second, the price cost margin (an indicator of profitability) is generally higher in highly protected industries (compares columns 1 and 6). This comparison suggests that the existing structure of protection may have enabled certain industries to maintain profit margins at excessively high levels, at the expense of consumer welfare. This is an important aspect of protection-industry performance nexus, which certainly warrant further in-depth study.

Third, capital intensity of production (measured in terms of both value added per worker (column 7) and capital per worker (column 8)) are generally higher those in highly protected industries.<sup>7</sup> This implies that the existing structure of protection is not consistent with the employment generation objective of industrial policy. During 1990-2000, total manufacturing output grew by an impressive 9.5%, but employment grew only by a mere 1.8% reflecting the inherent capital intensity of the growth process. The relative contribution of heavily protected industries such as motor vehicles, other transport equipment, and fabricated metal products to total industrial output and employment has continued to remain low compared to many other sectors enjoying relatively low protection.

Finally, it is pertinent to comment briefly on the implications of the anti-export bias for export performance, an issue which has led to some controversy in the recent policy debate in Vietnam (Parker and Riedel 2002, pp. 11-12). In recent years Vietnam has achieved rapid export growth in industries (in particular wearing apparel, shoes and furniture and electronics) where the incentive bias against exporting under the existing trade regime is very high. Does this mean that the anti-export bias as measured in this study is a misleading indicator of the impact of the incentive structure on export performance? The answer is a definite 'no'.

The anti-export bias is an indicator of the relative profitability of production for the domestic market compared to exporting. It is relevant for the production decision of a firm only if both these two options carry important weights in its marketing decision. Selling in the domestic (Vietnamese) market is not an option for firms (mostly foreign firms) who select Vietnam as an export platform as part of their global sourcing. What is important for these firms is the relative profitability of producing in Vietnam compared to producing in other countries. In fact, the data on the ownership structure of manufacturing exports from Vietnam clearly suggest that much of the recent export expansion has been accounted for by such firms. For instance, the share of foreign invested enterprises in total manufacturing exports increased from 20% in the early 1990s to over 70% by the early 2000s (Athukorala 2002b). The upshot of this emerging export pattern is that Vietnam has so far failed to entice pure local firms, in particular small and medium scale firms (which always have a tendency to place a greater weight on the option of selling in the domestic market) to enter export markets (Athukorala and Matin 2002). It is in explaining this policy failure that we need a clear understanding of the incentive bias embodied in the incentive structure.

## 7. CONCLUSION AND POLICY INFERENCES

Over the past one-and-a-half decades, Vietnam has made significant progress in market-oriented reforms. The transition to a market economy is far from complete, however. Despite some significant recent efforts to rationalise the tariff structure and to remove some QRs, tariffs are still high and non-uniform in Vietnam, and extensive explicit and implicit administrative barriers continue to impact on import flows. The structure of trade protection in Vietnam is clearly out of line with that of the major trading nations in the region, both in terms of the level and the dispersion of nominal and effective protection rates.

Effective rate of protection for traded goods production (manufacturing, in particular) has recorded a significant decline over time. But the level of effective protection is much higher compared to the major East Asian economies. Moreover,

---

<sup>7</sup> The only notable exception to this pattern is the wearing apparel industry, which has grown rapidly (*despite* domestic protection) owing to intrinsic comparative advantage of the country and preferential

increase in import duties on intermediate goods has played a much more important role than reduction in duties on final goods in the recent decline in ERP.

The counterbalancing effect of measures implemented to redress the anti-export bias in the trade regime (duty rebate, turnover tax concession and profit tax concession) is much smaller in magnitude compared to the price-raising impact of the existing import tariff structure. Thus there is a clear anti-export bias in the incentive structure, even though the degree of the bias has considerably declined in recent years. Ironically light manufactured goods industries such as garments, ceramics, footwear and sport goods, which have proved to be cradles for exporters in East Asian countries are among the sectors with above average anti-export bias (owing to very high import duties).

Anti-export bias in the incentive structure hinders the emergence of pure private sector firms (small and medium scale firms in particular) as a powerful vehicle for export expansion. It is not directly relevant for green-field foreign investors in export-oriented production because what is relevant for their profitability assessment is the relative attraction of Vietnam as a low-cost production platform compared to competing locations at the global scale. Protection discourages entrepreneurs to take advantage of international market opportunities. Much of the recent expansion in manufactured exports has come from foreign invested enterprises for which anti-export bias in the domestic incentive structure is not a concern. The share accounted for by pure local firms, in particular small- and medium-scale firms in export expansion has declined in recent years. This emerging dualistic export structure is consistent with the continuing anti-export bias in the incentive structure. Given that tariffs on most intermediate imports have already reduced to low levels and there is limited room for giving further tax concessions and/or introducing new financial incentives for exporters, the only effective strategy available for Vietnam to reduce/eliminate anti-export bias is further tariff reduction.

With tariffs coming down from highly restrictive levels, and QRs to be removed completely in the coming years, it is time to look at the entire tariff structure in totality, and to bring substantial uniformity into it. Apart from the cost of resource misallocation

involved, the multiplicity of rates implies that protectionist lobbies find it easier to lobby for tariffs, whereas, if uniformity is adopted as a policy, it would become relatively unprofitable to lobby for ones' tariff because of two reasons. First, the government could always argue that a specific demand for higher tariff could not be met because it would involve raising all other tariffs, which the government cannot do. Second, the lobbyist's advantage from getting the higher rate, thanks to its own lobbying (which cost money) would be reduced because other tariffs, including of its own rate would rise equally. A move toward uniformity would be an effective way of reducing corruption involved and the arbitrary nature of the tax administration. A move towards a greater uniformity in tariff rates will also help reducing delays and malpractices involved in customs procedures. However, even under the most optimistic scenario for liberalisation reforms in Vietnam, tariffs are unlikely to come down to warrant abolishing the existing duty rebate scheme. As long as there are significant tariffs on intermediate imports there is a clear need for an efficient duty rebate scheme for providing export producers with 'free-trade conditions' in procuring inputs.

## References

- Athukorala, Prema-chandra (2002a), 'Trade Policy Reforms, Export strategies, and the Incentive Structure', Background paper to the World Bank study 'Vietnam's Exports: Policies and Prospects', Hanoi: World Bank Vietnam.
- Athukorala, Prema-chandra (2002b) 'Foreign Direct Investment and Manufacturing Exports: Opportunities and Strategies, Background paper to the World Bank study 'Vietnam's Exports: Policies and Prospects', Hanoi: World Bank Vietnam.
- Athukorala, Prema-chnadra (2005) 'Trade Policy in Malaysia: Liberalisation Process, Structure of Protection and Reform Agenda', *ASEAN Economic Bulletin* (forthcoming)
- Athukorala, Prema-chandra, Juthathip Jogwanich, Archanun Kohpaiboon (2004), Tariff Reform and the Structure of Protection in Thailand, Bangkok: World Bank Thailand (draft report)
- Athukorala, Prema-chandra and Kazi Matin (2002) 'Export Performance in Vietnam', Background paper to the World Bank study 'Vietnam's Exports: Policies and Prospects', Hanoi: World Bank Vietnam.
- Auffret, Philippe (2003), 'Trade Reforms in Vietnam: Opportunities with Emerging Challenges', Policy Research Working Paper 3076, WashingtonDC: World Bank.
- Boyed, Greta R. (2002) 'The Footwear Industry in Vietnam: Trade Policy and Market Opportunities', Background Paper for the World bank Study on Export Policies and Performance in Vietnam, Hanoi: World Bank Vietnam (draft)
- Fane, George and T. Condon (1996), 'Trade Reforms in Indonesia:, 1987-1995', *Bulletin of Indonesian Economic Studies*, 27(1), 105-125.
- CIE (Center for International Economics) (1999), *Non-tariff Barriers in Vietnam: A Framework for Developing a Phase Out Strategy*, Canberra.
- CIE (Centre for International Economics) (2001), *Vietnam Sugar Program: Where Next?*, Canberra: Centre for International Economics.
- CIEM (Central Institute for Economic Management) (1999), FDI and Its Impact on Export Activities in Vietnam, Hanoi: CIEM (Mimeo).
- Corden, W. Max (1971), *The Theory of Protection*, Oxford: Oxford University Press.

- Dawkins, Chris and John Whalley (1996), 'Economic Reform and Performance in Vietnam', in John McMillan and Barry Naughton (eds), *Reforming Asian Socialism: The Growth of Market Institutions*, Ann Arbor: University of Michigan Press, 297-316.
- Dollar, David (1992), 'Vietnam: Successes and Failures of Macroeconomic Stabilization' in Borje Ljunggren (ed), *The Challenge of Reform in Indochina*, Cambridge, Mass: Harvard University Press for Harvard Institute for International Development, 207-231.
- Greenaway, David and Chris Milner (1991), 'Policy Appraisal and the Structure of Protection in Low-Income Developing Countries: problems of measurement and Evaluation in Burundi', *Journal of Development Studies*, 27(1), 22-42.
- Greenaway, David and Chris Milner (2003), 'Effective Protection, Policy Appraisal and Trade Policy Reforms', *World Economy*, 26(4), 441-456.
- Hill, Hal (2000), 'Export Success Against the Odds: A Vietnamese Case Study', *World Development*, 28(2), 283-300.
- Hoekman, Bernard and Michael Kostecki (2002), *The Political Economy of the World Trading System: The WTO and Beyond* (2<sup>nd</sup> edn) Oxford: Oxford University Press.
- Institute of Economics (2002) *The nominal and Effective Rates of Protection by Industry in Vietnam: a tariff-Based Assessment*, Hanoi: Institute of Economics. (Mimeo).
- Kokko, Ari (1997), 'Managing the Transition to Free Trade: Vietnamese Trade Policy for the 21th Century', Stockholm: Stockholm School of Economics (mimeo).
- Panagariya, Aravind (1994), 'East Asia in the New Regionalism in World Trade', *World Economy*, 17(6), 817-839.
- Parker, Stev and James Riedel (2002), 'An Economic Assessment of the Vietnam-United State Bilateral Trade Agreement, Hanoi: UNDP (preliminary draft in progress).
- Riedel, James (1993), 'Vietnam: On the Trails of the Tigers', *World Economy*, 16(4), 401-22.
- Riedel, James and Bruce Comer (1997) 'Transition to a market Economy in Viet nam' in Wing Thye Woo, Stephen Parker and Jeffrey D. Sachs (eds), *Economies in Transition: Comparing Asia and Eastern Europe*, Cambridge, Mass.: MIT Press.

- Ronnas, Peter and Bhargavi Ramamurthy (2001), *Entrepreneurship in Vietnam: Transformation and Dynamics*, Singapore: Institute of Southeast Asian Studies.
- Salleh, Ismail Muhd. and Saha Dhevan Meyanathan (1993), *Malaysia: Growth, Equity, and Structural Transformation*, Washington DC: World Bank.
- World Bank (1993), *The East Asian Miracle: Economic Growth and Public Policy*, New York: Oxford University Press.
- World Bank (2002), Vietnam's Exports: Policies and Prospects, Hanoi: World Bank Vietnam (draft report).
- WTO (World Trade Organisation) (1999), Trade Policy Review: Philippines 1999, Geneva: WTO.



**Table 1: Products subject to Quantitative Restriction (QR)**

1998	1999	2000	2001	2002	2003
Petroleum	Petroleum	Petroleum	Petroleum	Petroleum	Petroleum
Sugar	Sugar	Sugar	Sugar	Sugar	Sugar
Fertilizer	Fertilizer	Steel	Steel	Cement	
Steel	Steel	Cement/Clinker	Cement/Clinker	Motorcycles	
Cement/Clinker	Cement/Clinker	Glass	Motorcycles		
Glass	Glass	Motorcycles	Cars		
Motorcycles	Motorcycles	Cars	Vegetable oil		
Cars	Cars	Paper			
Paper	Paper	Vegetable oil			
	Electric fans				
	Ceramic tiles				
	Porcelain				
	Caustic soda				
	Bicycles				
	Vegetable oil				
	Plastics				
	Plastic packaging				

Sugar: There is complete import prohibition on sugar. licensing, but licences are not issued  
Source: Parker and Riedel (2002), and various World Bank and IMF secondary sources.

**Table 2: Summary of the Import Tariff Structure in Vietnam - 1995, 1997 and 2001**  
(Applied rates)

	May 1995		March 1997		December 20001		December 2003	
	Number	%	Number	%	Number	%	Number	%
0	976	31.1	978	31.3	2049	32.5	1620	31.7
1- 5	645	20.5	697	22.3	1170	18.7	878	17
5-10	299	9.6	301	9.6	540	8.6	412	7.9
10-15	66	2.1	96	3.1	0	0	103	2
15-20	572	18.2	317	10.2	0	0	418	8.2
20-25	40	1.3	46	1.4	3	0	43	0.8
25-30	215	6.9	244	7.8	649	10.3	487	9.5
30-35	49	1.6	26	0.8	0	0	21	0.4
35-40	144	4.5	253	8.1	667	10.6	580	11.4
40-60	104	3.2	152	4.8	586	9.3	513	10
60-80	10	0.3	7	0.3	2	0	9	0.1
80-100	1	0	2	0.1	50	0.8	16	0.3
100 <	14	0.5	6	0.2	8	0.1	7	0.1
Total tariff lines	3135	100	3126	100	5724	90.9	5107	100
Total tariff bands	36		35		15		60	
Range	0 to 200%		0-200%		0 to120%		0-113%	
Mean tariff rate	12.8			13.4	15.7		16.65	
Coefficient of variation (CV)	131			128	116.3		114.77	

Note: CV Standard deviation as a percentage of the mean.

Source: 1995 and 1997: CIE (1997), 2001: Athukorala (2002), and 2003: compiled from the tariff schedule provided by the Ministry of Finance.

**Table 3: Average Tariff on Intermediate, Final and Total Imports, 2003**

	Simple average	Weighted average <sup>1</sup>
Intermediate	11.2	11.4
Final goods	21.9	19.8
Total	16.7	16.1

Notes: (1) Weighted by 2000 import values.

Source: Compiled from Tariff Schedules provided by the Ministry of Finance

**Table 4: Summary of the Tariff Structure in Selected Asian Countries**

Tariff rates	China 2001		Indonesia 2001		Malaysia 2001		Philippines 2001		Thailand 2002		Viet Nam 2003	
	No lines	%	No lines	%	No lines	%	No lines	%	No lines	%	No lines	%
0-5	440	8.6	2,969	58.1	3,077	60.3	2,760	53.99	1,238	24.5	2498	48.9
5-10	1,353	26.5	749	14.7	350	6.9	1,441	28.19	1,279	25.3	55	1.1
10 – 15	1,003	19.7	782	15.3	253	5.0	380	7.43	154	3.0	396	7.8
15 – 20	754	14.8	496	9.7	724	14.2	448	8.76	1,110	22.0	482	9.4
20 – 25	617	12.1	74	1.4	339	6.6	3	0.06	19	0.4	43	0.8
25 – 30	315	6.2	6	0.1	279	5.5	15	0.29	686	13.6	487	9.5
30 – 40	502	9.8	7	0.1	28	0.5	13	0.25	158	3.1	598	11.7
40 – 50	50	1.0	8	0.2	10	0.2	35	0.68	14	0.3	509	10.0
50 – 60	7	0.1	2	0.0	9	0.2	17	0.33	390	7.7	7	0.1
60 – 80	29	0.6	2	0.0	9	0.2	0	0.00	8	0.2	9	0.2
80 – 100	15	0.3	1	0.0	4	0.1	0	0.00	0	0.0	16	0.3
100 <	13	0.3	14	0.3	24	0.5	0	0.00	0	0.0	7	0.1
Total Lines	5,098	100.0	5,110	100	5,106	100	5,112	100	5,056	100	5,107	100
Tariff bands	57		52		45		38		45		60	
Range tariff	1-122		0 - 170		0-1195		0 - 60		0 - 80		0-113	
Average Tariff	17.48		8.43		10.2		7.6		18.48		16.65	
CV	71.3		127.8		340.3		93.9		84.4		114.8	

Source: Compiled from International Economic Data Base, Australian National University.

**Table 5: Effective Rate of protection and its Components, 2003**

I-O code	I-O Industry/Sector	Value added (%)	$\Sigma a_{ij}$	$\Sigma a_{jt}$	NRP	ERP
	<b>Agriculture</b> <sup>1,2</sup>	57.68	23.44	1.52	11.06	12.52
1	Rice	19.01	28.33	1.06	13.84	17.84
2	Natural rubber (piece, sheet or tape)	0.96	18.75	0.48	3.00	3.10
3	Coffee beans	2.35	27.63	0.24	28.60	39.19
4	Sugar cane	1.18	18.70	0.47	0.00	-0.58
5	Tea	0.26	24.76	0.79	50.00	65.41
6	Other crops	15.24	15.00	0.34	1.24	1.05
7	Pig meat (all kinds)	3.42	43.79	3.65	0.00	-6.49
8	Cow (all kinds)	0.28	38.71	2.55	5.00	3.99
9	Poultry	2.03	28.80	2.96	2.50	-0.64
10	Other Livestock	1.63	35.68	2.73	5.20	3.83
13	Forestry	3.27	13.00	0.97	5.00	4.63
14	Sea and aquatic fishing	3.72	20.02	3.72	30.00	32.85
15	Fish farming	4.32	18.30	4.55	30.00	31.15
	<b>Mining</b> <sup>2</sup>	2.19	29.34	3.59	3.55	-0.03
16	Coal	1.25	26.84	2.51	2.47	-0.05
17	Metallic ore	0.10	41.04	1.30	1.22	-0.14
18	Stone/granite	0.41	36.45	6.81	7.56	1.17
19	Sand, Gravel	0.19	24.50	4.17	5.00	1.09
20	Other none-metallic minerals	0.24	29.15	4.17	2.16	-2.84
	<b>Manufacturing</b> <sup>2</sup>	40.14	55.30	11.07	29.23	43.94
22	Processed, preserved meat and by-products)	0.34	60.82	2.92	10.00	18.08
23	Processed vegetable, and animal oils and fats	0.40	56.03	2.81	13.61	24.57
24	Milk, butter and other dairy products	0.61	56.54	11.93	23.76	27.22
25	Cakes, jams, candy, coca, chocolate products	0.43	44.50	11.95	48.17	65.25
26	Processed and preserved fruits and vegetables	0.30	42.71	4.52	34.30	51.98
27	Liquor (excluding beer)	0.17	39.33	10.40	102.15	151.24
28	Beer	1.40	37.62	7.30	100.00	148.60
29	Non-alcoholic beverages	0.48	53.20	9.09	50.00	87.41
30	Sugar of all kind	0.92	58.03	4.37	18.65	34.00
31	Coffee, processed	0.08	53.87	16.57	43.62	58.65
32	Tea, processed	0.19	43.17	20.33	50.00	52.20
33	Cigarettes and other tobacco products	0.59	65.42	15.15	34.28	55.30
34	Processed seafood and by products	2.15	65.77	18.72	31.15	36.31
35	Rice, processed	2.21	85.52	12.17	30.00	123.18
36	Other food manufactures	1.07	71.03	7.24	17.08	33.96
37	Glass and glass products	0.35	38.51	5.62	23.94	29.81
38	Ceramics and by products	0.17	53.31	3.99	23.38	41.53

39	Bricks, tiles	1.32	45.28	10.47	49.96	72.16
40	Cement	1.78	50.30	15.28	40.00	49.73
41	Concrete, mortar and other cement products	0.25	47.11	8.63	25.20	31.32
42	Other building materials	0.24	45.69	8.17	8.32	0.29
43	Paper pulp and paper products and by products	0.87	49.17	6.93	15.62	17.09
44	Processed wood and wood products	1.39	56.29	3.98	4.48	1.15
45	Basic organic chemicals	0.06	35.09	6.78	1.48	-8.18
46	Basic inorganic chemicals	0.19	42.81	1.94	1.99	0.09
47	Chemical fertilizer	0.69	46.32	1.68	0.36	-2.45
48	Other fertilizer (non-chemical)	0.13	41.01	1.89	0.00	-3.21
49	Pesticides	0.20	37.01	2.98	3.20	0.34
50	Veterinary drugs	0.10	38.69	1.78	0.00	-2.91
51	Medicine	0.58	51.10	2.76	4.72	4.01
52	Processed rubber and by products	0.78	46.89	2.99	7.99	9.41
53	Soap, detergents	0.16	64.04	2.41	21.42	52.84
54	Perfumes and other toiletry preparation	0.65	57.78	3.71	18.05	33.99
55	Plastic, original and semi-processed	0.20	56.77	2.03	1.01	-2.36
56	Plastic products	1.23	52.73	3.37	30.98	58.41
57	Paints	0.25	58.54	2.68	3.77	2.63
58	Ink, varnish and other painting materials	0.02	44.37	3.54	4.96	2.55
59	Other chemical products	0.16	50.10	3.72	4.36	1.27
60	Medical instrument and apparatus	0.20	39.00	3.00	0.13	-4.70
61	Precision and optical equipment	0.04	48.70	4.83	7.63	5.46
62	Home appliances and parts	0.21	51.78	10.02	35.97	53.83
63	Motorcycles and accessories	1.26	68.59	32.39	60.00	87.91
64	Bicycles and accessories	0.10	65.88	17.43	30.83	39.27
65	Machine tools	0.15	49.57	5.99	6.44	0.88
66	Other general purpose machinery	0.11	54.06	4.13	6.33	4.79
67	Special –purpose machinery	0.52	56.28	9.18	2.99	-14.15
68	Motor vehicles	1.10	47.22	26.95	68.75	79.22
69	Other transport equipment	0.75	28.17	5.12	24.23	26.60
70	Transformers	0.08	45.33	4.38	11.68	13.35
71	Other electrical machinery and equipment	1.02	59.19	7.22	4.67	-6.26
72	Broadcasting, TV and communication machines	0.56	62.15	11.03	16.11	13.43
73	Non-ferrous metals and products (except machinery equipment)	1.26	61.27	5.44	5.74	0.75
74	Ferrous metals and products (except machinery equipment)	0.50	56.72	14.50	5.43	-20.94
75	Textile	1.10	60.98	10.98	38.67	70.97
76	Fibbers, thread (all kinds)	0.47	43.39	4.20	4.94	1.32
77	Clothing	2.23	65.75	23.24	49.58	76.92
78	Carpets and tapestry textile	0.06	53.57	7.72	40.00	69.51
79	Weaving and embroidery of textile (except carpets)	0.42	43.85	10.35	30.91	36.61
80	Leather (products of tanneries)	0.33	52.59	6.89	7.64	1.60

81	Leather goods	2.30	63.23	13.68	30.08	44.61
82	Animal feeds	0.43	63.11	9.96	10.00	0.12
83	Products of printing industry	0.52	21.34	13.54	8.90	-5.90
84	Publishing	0.23	34.82	4.83	4.77	-0.09
85	Products, unclassified	1.07	26.74	13.78	31.08	23.61
	All traded goods sectors <sup>2</sup>	100	36.38	5.40	18.20	24.87

Note: Agriculture excluding irrigation and agricultural services (I-O sectors 11 and 12)

2. Weighted average (based on value added).

Source: Methodology and data sources are discussed in Section 3

**Table 6: Summary of NRP and ERP Estimates, 1997, 2001 and 2003**

	1997		2001		2003	
	NRP	ERP	NRP	ERP	NRP	ERP
Weighted average						
Agriculture	8.12	7.74	6.28	7.43	11.06	12.52
Mining	9.42	6.05	8.91	16.39	3.55	-0.03
Manufacturing	30.63	121.47	25.28	95.97	29.23	43.94
Total tradables	20.95	72.22	17.92	58.46	18.2	24.87
Simple average	23.32	59.54	20.14	54.1	19.98	26.23
CV	133.81	156.01	149.9	172.34	106.51	134.93

Source: 1997 and 2001: Athukorala (2002), Appendix Table 2; and this paper (Table 5)

**Table 7: Effective Rate of Protection in Manufacturing in Selected East Asian Countries**

	Year	ERP	Source
Indonesia**	1975	74	World Bank (1993)
	1987	70	Fane and Condon (1996)
	1990	59	World Bank (1993)
	1995	25	Fane and Condon (1996)
South Korea	1970	40	World Bank (1993)
	1975	55	World Bank (1993)
	1980	67	World Bank (1993)
	1985	80	World Bank (1993)
	1988	28	Panagariya (1994)
Malaysia	1969	45	Salleh and Meyanadan (1993)
	1979/80	31	Salleh and Meyanadan (1993)
	1988	23	Panagariya (1994)
	2003	16	Athukorala (2005)
Philippines	1992	32	Panagariya (1994)
	1999	10	WTO (1999)*
Thailand	1981	74	World Bank (1993)
	1988	51	Panagariya (1994)
	2002	25.2	Athukorala <i>et al</i> 2004
	2004	22.7	Athukorala <i>et al</i> 2004
Vietnam	1997	121	Athukorala 2002a
	2002	95	---do --
	2003	44	This paper

Notes:

- \* Calculated as the weighted average of estimates by industry reported in the given source. Weighting was done by using value added. data from UNIDO, *Yearbook of Industrial Statistics*.
- \*\* Estimates for non-oil manufacturing.
- # ERP estimate for total manufacturing (72) has been influenced by abnormally high ERP for motor vehicle industry (497) which account for only 8% of total manufacturing value added. When this sector is excluded, the estimates drops to 33.



**Table 8: Anti-Export Bias and Related Data**

Code	Commodities	Export/ output (%)	Export share (%) <sup>2</sup>	<i>EBI1</i>	<i>EBI2</i>	<i>EBI3</i>
22	Processed, preserved meat and by-products)	14.82	0.39	27.59	7.98	2.39
23	Processed vegetable, and animal oils and fats	41.94	0.76	33.07	14.77	9.61
24	Milk, butter and other dairy products	21.25	0.94	75.37	38.52	11.79
25	Cakes, jams, candy, coca, chocolate products	11.40	0.29	110.62	76.59	49.13
26	Processed and preserved fruits and vegetables	24.71	0.39	65.00	45.91	37.57
27	Liquor (excluding beer)	9.17	0.06	203.21	161.22	128.63
28	Beer	1.27	0.09	181.55	147.96	126.79
29	Non-alcoholic beverages	0.60	0.02	132.57	92.64	66.12
30	Sugar of all kind	8.04	0.51	49.59	26.47	17.24
31	Coffee, processed	2.33	0.01	147.60	88.27	40.39
32	Tea, processed	59.83	0.58	136.99	85.76	37.66
33	Cigarettes and other tobacco products	1.66	0.14	176.39	88.70	32.34
34	Processed seafood and by products	81.59	15.62	200.81	84.76	15.98
35	Rice, processed	19.32	9.80	1300.69	200.80	57.78
36	Other food manufactures	8.77	1.11	78.61	33.01	10.98
37	Glass and glass products	13.29	0.20	42.86	26.70	18.27
38	Ceramics and by products	44.26	0.57	54.75	33.50	25.41
39	Bricks, tiles	0.65	0.04	112.91	79.98	55.15
40	Cement	0.29	0.04	116.22	71.17	33.60
41	Concrete, mortar and other cement products	0.00	0.00	56.93	33.61	17.94
42	Other building materials	0.17	0.00	18.04	1.29	-9.69
43	Paper pulp and paper products and by products	9.20	0.59	35.57	16.05	4.73
44	Processed wood and wood products	44.39	4.30	11.29	-4.97	-11.06
45	Basic organic chemicals	27.77	0.08	2.54	-8.98	-15.95
46	Basic inorganic chemicals	24.63	0.20	3.60	-7.14	-9.41
47	Chemical fertilizer	0.09	0.00	0.70	-10.24	-12.26
48	Other fertilizer (non-chemical)	3.72	0.02	0.00	-10.05	-12.15
49	Pesticides	5.77	0.04	5.33	-5.10	-8.39
50	Veterinary drugs	0.00	0.00	0.00	-9.65	-11.56
51	Medicine	11.46	0.34	10.23	-3.48	-7.36
52	Processed rubber and by products	7.65	0.30	15.94	2.45	-1.69
53	Soap, detergents	9.00	0.10	63.84	37.31	30.99
54	Perfumes and other toiletry preparation	6.37	0.24	46.88	25.00	17.32
55	Plastic, original and semi-processed	4.42	0.06	2.45	-11.33	-14.26
56	Plastic products	4.97	0.32	70.56	48.05	40.57
57	Paints	1.52	0.02	9.73	-6.10	-10.34
58	Ink, varnish and other painting materials	0.00	0.00	9.52	-2.97	-7.43
59	Other chemical products	9.73	0.08	9.44	-4.51	-9.60
60	Medical instrument and apparatus	19.67	0.15	0.22	-10.01	-13.24
61	Precision and optical equipment	179.46	0.37	16.42	1.24	-5.58

62	Home appliances and parts	0.00	0.00	94.17	60.54	36.81
63	Motorcycles and accessories	0.32	0.04	--- <sup>(1)</sup>	413.47	57.77
64	Bicycles and accessories	71.51	0.73	184.71	81.54	18.44
65	Machine tools	7.99	0.07	14.49	-1.47	-9.84
66	Other general purpose machinery	10.80	0.07	15.14	-1.02	-7.31
67	Special –purpose machinery	196.64	6.22	8.65	-11.44	-24.51
68	Motor vehicles	0.84	0.04	266.18	154.13	60.92
69	Other transport equipment	9.20	0.29	36.32	23.34	16.84
70	Transformers	117.54	0.46	23.22	8.40	2.14
71	Other electrical machinery and equipment	29.71	2.42	13.90	-6.76	-18.27
72	Broadcasting, TV and communication machines	69.57	3.54	60.06	22.57	-2.09
73	Non-ferrous metals and products (except machinery equipment)	7.31	1.06	17.23	-3.35	-12.76
74	Ferrous metals and products (except machinery equipment)	23.83	0.79	18.88	-9.20	-30.57
75	Textile	15.23	1.54	137.92	84.10	48.18
76	Fibbers, thread (all kinds)	33.46	0.84	9.43	-3.20	-8.39
77	Clothing	78.96	21.44	450.17	179.74	50.55
78	Carpets and tapestry textile	82.63	0.28	103.34	70.17	50.11
79	Weaving and embroidery of textile (except carpets)	1.64	0.03	67.49	42.40	23.42
80	Leather (products of tanneries)	5.77	0.11	18.86	0.56	-9.82
81	Leather goods	60.24	16.49	130.23	67.05	24.32
82	Animal feeds	0.40	0.02	37.13	5.75	-13.89
83	Products of printing industry	0.00	0.00	13.67	0.26	-12.57
84	Publishing	1.19	0.01	7.91	-3.26	-8.51
85	Products, unclassified	60.73	4.72	52.24	32.71	14.25
	Total manufacturing	29.70	100.00	105.04	57.64	24.96

## Notes

- (1) EBI is undefined because value added in export production is negative (implying extremely high (infinite) anti-export bias).
- (2) Sectoral share in total manufacturing exports in 2000.

**Table 9: Summary of Anti-Export Bias Estimates for the Manufacturing Sector , 2003**

Export-bias index	2001	2003
EBI1	483.2	105.4
EBI2	137.1	57.7
EBI3	55.0	25.0

EBI1 Captures the impact of import protection only (effects of duty rebate and domestic tax exemption for exporters set at zero)

EBI2 Import protection + 80% duty rebate + 6% tax wedge for export production over domestic market oriented production

EBI3 Import protection + 100% duty rebate + 6% tax wedge for export production over domestic market oriented production

Source: Athukorala (2002), Table 9 and this paper (Table 8).

Table 10: Effective Protection and Key Indicators of the Structure and Performance of the Manufacturing Sector

Industry code		ERP	SOE share in output	FIE share in output	Employment share (%)	Wage share in value added (%) <sup>1</sup>	Price-cost margin (%) <sup>2</sup>	Value added per worker Dong 'ooo	Capital per worker <sup>3</sup> Dong 'ooo	Import share in total inputs	Growth of output 1990-2000	Growth of employment 1990-2000
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
15	Food, beverages and tobacco	72.98	48.8	39.3	12.2	18.7	21.5	72786	16021	27.5	8.0	-2.2
16	Tobacco products	55.3	98.5	1.5	1	7.9	42.2	244843	8037	54	9.8	-5.0*
17	Textiles	70.97	49.8	43.4	10.5	34.2	20.7	29557	16774	57.8	13.2	-3.1
18	Wearing apparel	70.56	34.2	47.1	15.5	66.5	14.4	15415	4985	59.7	15.4	10.2
19	Leather products	39.15	17.5	67.7	19.2	81.4	5.2	14034	6340	69.3	3.0	38.3
20	Wood and wood products	1.15	31.1	28.5	2.5	45.3	14.7	16866	2179	17.5	12.9	3.8
21	Paper and paper products	17.09	58.6	17.2	2.7	36.9	12.8	30117	9607	39.2	8.3	3.6
22	Printing and publishing	-4.09	97.1	1.1	1.8	29.7	21.7	58422	6648	16.1	-19.8	6.0
23	Coke and petroleum products	2.9	---	76.7	0.1	16.6	14.4	248322	36228	57	14.1	73.7*
24	Chemical and chemical products	9.67	50.8	38.9	4	30.2	15.7	64961	7390	34.1	18.2	4.8*
25	Rubber and plastic products	35.67	47.7	28.5	3.5	34.5	17.4	39448	12583	53.8	13.3	18.1*
26	Non-metallic mineral products	50.83	62.7	29.6	7.1	23.1	27.2	54321	11239	16.8	10.7	-3.6*
27	Base metal products	0.75	40.8	56.5	2.9	32.1	11.3	39391	10071	49.5	15.9	1.5*
28	Fabricated metal products	- 20.94	23.9	58.4	2.3	44.5	13.1	37773	10668	42.9	13.5	8.8*
29	Machinery and equipment	-8.58	43	36.6	2.8	36.6	19.1	31716	4215	35.7	14.6	3.0*
30	Office, accounting and computing machines	- 14.15	---	100	0.3	15.4	4.2	91518	49647	35.6	20.4	42.7*
31	Electrical machinery	13.15	47.7	40.8	2.4	42.9	15.4	40786	8311	54.7	12.6	-9.0
32	Television and communication equipment	13.43	15.1	82.9	1.4	21.5	16.6	90708	32202	65.2	12.0	-10.6
33	Medical and optical equipment, and watches	-2.95	22.9	71.5	0.4	49.9	14.5	38484	13987	55.3	13.1	15.5*

34	Motor vehicle	79.22	18.2	77	1	24.2	25.6	69045	12880	52.7	19.9	16.1*
35	Other transport equipment	28.1	24.1	70.8	2.3	39.1	11.8	37835	4106	55.5	13.2	7.5*
36	Furniture and other manufactures	23.61	8.5	60.7	4	60.7	10.2	16272	3542	37.3	12.2	4.4*
37	Total	43.9	43.6	45.4	100	33.1	18	37700	10169	39.3	9.5	1.8

**Change last two columns. First row last**

- (1) Total wage bill as a share of total value added.  
(2) Price cost margin = [(gross output – material input – wages)/gross output]\*100.  
(3) End-of-year stock of machinery and equipment investment divided by the number of employees.  
\* Data for 1995-2000.  
--- Zero or negligible.

Source: Column 1: Table 10 above; Columns 2-9: compiled from, Statistical Publishing House (2000), *Analysing the Results of the Industrial Survey of Vietnam – 1999*, Hanoi, and Columns 10 and 11: Compiled from General Statistical Office, *Statistical Yearbook*, Hanoi (various issues)

