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ASEAN Economic Bulletin, Volume 26, Number 1, April 2009, pp. 96-114
(Article)

Published by ISEAS–Yusof Ishak Institute



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Economic Transition and Export Performance in Vietnam

Prema-chandra Athukorala

This paper examines Vietnam's export performance in the process of economic transition. The key theme of analysis is the complementary role of domestic policy shifts and the ongoing changes in world trade patterns in determining trends and patterns of exports. The analysis yields clear evidence that when market forces are unleashed, albeit in a constrained fashion, specialization patterns assert themselves as predicted by the received trade theory. On the contrary, there is no evidence to suggest that the state-mediated attempts in the early stage of reforms to mould the emerging patterns of manufacturing exports had any tangible effect. Vietnam's export performance looks impressive, particularly when we take into account the nature of the reform process, and the constraining effects of the U.S. trade embargo during the first decade of reforms and the historic overwhelming reliance on the Soviet bloc markets.

Keywords: Vietnam, exports, FDI, global production sharing, processed food.

I. Introduction

Export expansion has been a key focus of the reform process in Vietnam over the past one-and-a-half decades. Rapid export expansion is considered pivotal to both sustainability of reforms and economic outcome of reforms. Sustainability of reforms depends crucially on a healthy balance of payments position. Restructuring and expansion of domestic production in line with comparative advantage in international trade is crucial for maintaining economic growth and employment expansion at higher levels than is permitted by domestic demand growth.

The purpose of this paper is to analyse Vietnam's export performance in the reform era with a view to informing the policy debate on designing the future export development strategy. The key theme running through the paper is the complementary role of domestic policy shifts and the ongoing changes in world trade patterns in determining trends and patterns of exports. The analysis is based on data compiled from two complementary sources: export statistics produced and circulated as part of Vietnam's national data base by the General Statistical Office (GSO) and Comtrade database maintained by the United Nations Statistical Office. Data from the former source (henceforth referred to as "country data")

are available on a continuous basis only from 1990, and as yet the classification system adopted does not meet the requirement for a systematic analysis of the changing commodity composition of exports. The latter source (henceforth referred to as “UN data”) provides continuous annual data series from 1975 on the basis of the Standard International Trade Classification (SITC) system, with a time lag of two to three years. The original source of the UN data is the official trade records maintained by the GSO. But the discrepancies between these two sources of data are considerable and are too large to be explained solely by the normal inaccuracies arising from the conversion of data from the original GSO format (Harmonized System (HS) of classification) to the SITC system. The problem seems to stem from deficiencies in the initial HS recording system of the GSO, and the degree of discrepancy has declined in recent years presumably reflecting improvement in the system. In order to maintain consistency, we use country data in analysis of overall export performance and export trends in key primary commodities. The UN data are used mainly for the purpose of analysing changing patterns of the commodity structure of exports. The use of UN data for this purpose is obviously based on the (implicit) assumption that the incidence of recording error is uniformly restricted across various commodity groups.

The paper begins with an overview of export performance, placing Vietnam’s performance in a regional and global context (section II). Section III examines changes in the commodity mix and characteristics of emerging export patterns. Section IV focuses on the geographic profile of exports, paying particular attention to exports to the United States following the signing of the bilateral trade agreement. Section V examines the role of foreign direct investment in the expansion of manufacturing exports. The key findings are summarized in the final section.

II.2 Trends

Export response to Vietnam’s liberalization (*Doi Moi*) reforms initiated in 1986 was swift and

remarkable (Table 1).¹ Value of total merchandise exports (in current US\$) quadrupled between 1985 and 1990 (from US\$699 million to US\$2,404 million) and then surpassed US\$40 billion mark by the middle of the first decade in the new millennium.² Until about 1992 crude petroleum accounted for a large share of export increment, a result of earlier foreign investment in the White Tiger field.³ However from then on there were clear signs of a take-off of non-oil exports, firstly agricultural products and then manufactured goods. During 1990–2006 the value (in current US\$) of total non-oil exports from Vietnam grew at an average annual rate of 18.7 per cent, almost double the average rate of developing countries (9.5 per cent). Vietnam also maintained the highest growth rate in non-oil export among the five ASEAN countries over this period (Table 2).

It is important to note that year-to-year growth rates give an exaggerated picture of export expansion because the initial export spurt occurred against a very low starting base. A better yardstick of comparative export performance is, therefore, the country’s relative position in overall global trade (Table 1, the last two columns). Despite rapid export growth over the past decade, by 2006 Vietnam accounted for a mere 0.34 per cent of total world non-oil exports and 0.9 per cent of non-oil exports from developing countries; a position which falls far short of the countries potential (in terms of the country size and the resource endowment) as a trading nation (Figure 1). Vietnam’s world market share in non-oil exports is still by far the smallest among the six major ASEAN member countries. Another way of placing Vietnam’s export achievement in meaningful comparative perspective is to compare its current export level with that of other successful exporting nations in the region at the formative stage of their export expansion. Exports from both Taiwan and South Korea had surpassed the US\$41 billion mark (the current Vietnamese level) by the early 1980s, Malaysia, Indonesia and Thailand passed this threshold less than a decade later, by the mid-1990s, and the Philippines in 1999.⁴

TABLE 1
Vietnam's Export Performance: Summary Statistics, 1985–2006

	Export value (US\$ million)		Non-oil share in total exports (4)	Manu- facturing share in non-oil exports (5)	Export growth (%)		Vietnam's non-oil export share (%)		Non-oil exports as a ratio of GDP (%) (10)
	Total (1)	Non-oil ^a (2)			Non-oil (6)	Manu- facturing (7)	World (8)	Developing countries ^c (9)	
1985	699	350	50.1	6.2			0.02	0.11	0.0
1990	2,404	1,936	80.5	8.5	27.2	20.8	0.07	0.26	19.4
1991	2,087	1,506	72.2	12.3	22.2	25.1	0.06	0.20	15.7
1992	2,581	1,775	68.8	23.2	17.9	133.1	0.05	0.20	20.2
1993	2,985	2,141	71.7	35.8	20.6	78.2	0.06	0.23	17.3
1994	4,054	3,188	78.6	39.5	48.9	50.1	0.08	0.29	21.5
1995	5,449	4,416	81.0	41.5	38.5	41.0	0.10	0.32	23.5
1996	7,256	5,910	81.4	47.3	33.8	52.0	0.12	0.39	26.4
1997	9,146	7,732	84.5	53.1	30.8	41.4	0.16	0.48	33.7
1998	9,339	8,106	86.8	55.0	4.8	5.8	0.16	0.50	39.5
1999	11,520	9,429	81.8	51.0	16.3	14.4	0.18	0.62	45.8
2000	14,124	10,527	74.5	50.5	11.6	21.3	0.19	0.59	47.8
2001	14,475	11,162	77.1	52.8	6.0	7.3	0.21	0.64	50.6
2002	16,611	13,432	80.9	57.5	20.3	25.0	0.24	0.71	58.5
2003	22,026	18,035	81.9	60.4	34.3	39.1	0.27	0.81	70.7
2004	28,358	22,827	80.5	59.0	26.6	25.9	0.29	0.81	79.0
2005	33,490	26,210	78.3	58.1	14.8	16.2	0.30	0.80	78.5
2006	41,059	32,962	80.3	58.3	25.8	23.0	0.34	0.90	86.6
Averages									
1985–89	1,065	888	83.1	8.1	39.7	35.9	0.04	0.19	0.0
1990–94	2,822	2,109	74.4	23.9	18.5	61.5	0.06	0.24	19.0
1995–99	8,542	7,119	83.1	49.6	24.9	30.9	0.15	0.46	33.8
2000–04	19,119	15,197	79.0	56.0	19.8	23.7	0.24	0.73	62.6
2005–06	37,275	29,586	79.3	58.2	20.3	19.6	0.32	0.85	82.8

NOTES: a. Total merchandise less oil and gas exports (listed under Sections 33 and 34 of the Standard International Trade Classification (SITC)).

b. SITC 5 to 8 less SITC 68 (non-ferrous metals).

c. Based on the UN Standard Country Classification.

SOURCE: Compiled from Vietnam General Statistical Office, *Statistical Yearbook* (various issues) and UN Comtrade database.

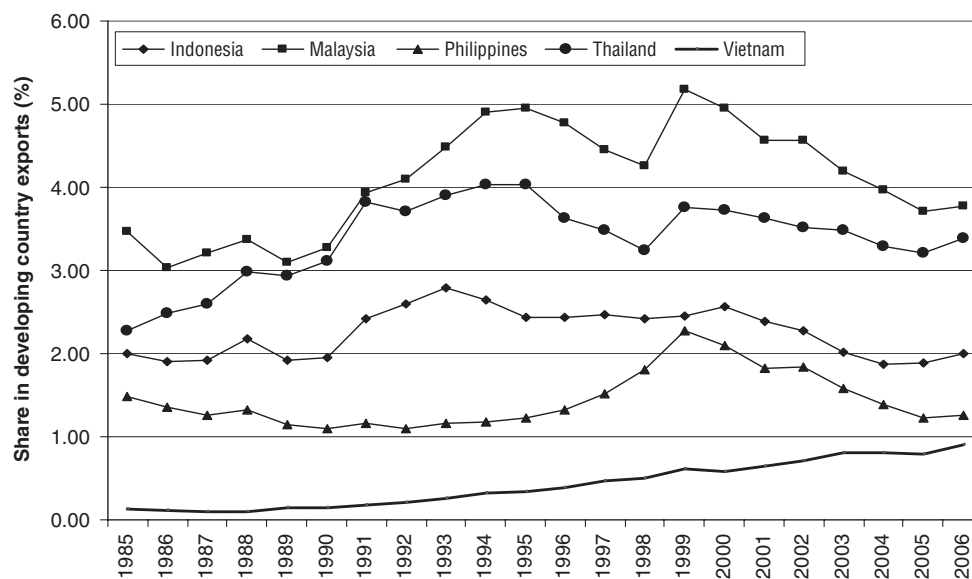
TABLE 2
Growth of Non-oil Merchandise Exports from
Vietnam in Global and Regional Context
(In percentages)

	1990–99 ^a	2000–06 ^a	1990–2006 ^a
World	7.1	9.9	8.3
Developing countries	8.8	13.7	10.8
ASEAN-6	14.5	9.7	12.1
Indonesia	11.5	10.6	11.1
Malaysia	14.6	8.7	12.2
Philippines	16.4	4.6	11.5
Singapore	15.2	5.2	11.6
Thailand	11.6	12	11.8
Vietnam	26.2	20.3	23.8

NOTE: a. Annual average.

SOURCE: Compiled from UN Comtrade database.

FIGURE 1
Non-oil Merchandise Exports from Indonesia, Malaysia, Philippine, Thailand and Vietnam:
The Share in Total Developing Country Exports, 1990–2006



SOURCE: Based on data compiled from UN Comtrade database.

The degree of export orientation of the Vietnamese economy increased continuously from the early 1990s. Export to GDP ratio, the standard indicator of export-orientation, increased from around 5 per cent in the latter half of the 1980s to 47.8 per cent 2000 and then to 86.6 per cent in 2006 (Table 1, column 10). However, this sharp increase in the degree of export orientation needs to be interpreted with caution. In constructing this ratio exports are measured in gross terms (i.e., intermediate material inputs + value added) whereas GDP (and goods GDP) are essentially in value added terms (i.e., net of intermediate material inputs). Hence, the measured increase in export orientation is sensitive to change in import intensity of export production. As we will see later in this paper, over the past decade there has been a palpable shift in the export composition away from primary products and resource-based manufacturing and towards labour-intensive light manufacturing and, more recently, towards component production/assembly within high-tech industries. The increase in measured trade orientation could partly reflect the fact that these new product lines are relatively more input-intensive compared with the former.

III. Commodity Composition

In this section, we first look at the shifts in the commodity composition away from primary products into manufactured, followed by a detailed analysis of changes in the composition of manufactured goods. The central issue under investigation is whether the merging exports patterns are consistent with Vietnam's comparative advantage as a trading nation in the context of evolving global trade patterns. The commodity classification used here has been designed to shed light on the implications of two important developments in world trade that have opened up new export opportunities for developing countries: the emergence of *processed food* as a new dynamic export line within the broader category of food, and the expansion of trade associated with *global production sharing* within vertically integrated production systems (recorded under the

machinery and transport equipment category (SITC 7). Before we turn to analysis of the data, a brief discussion of the rationale for the special treatment of these two phenomena, and their implications for assessing export opportunities for Vietnam, is in order.

III.1 Global Context

Since about the late 1970s there has been a notable compositional shift in world food trade. The relative importance of "classical" food products (coffee, tea, sugar, cocoa, and so on) has been sharply eroded by the rapid expansion of trade in products such as fresh fruit and vegetables, poultry, fish and dairy products, which are exported after being subjected to technologically sophisticated processes ("processed foods").⁵ Powerful forces on both demand and supply sides have underpinned this structural shift (Henderson et al. 1989; Athukorala and Jayasuriya 2003). On the demand side, "internationalisation of food habits" — the increased importance of imported processed items in consumption patterns in developed countries, as well as among large sections of the populace in many developing countries — appears to have played a key role. Factors such as international migration, the communications revolution and international tourism have contributed to this phenomenon. This significant demand-side impetus seems to have been supported by important supply-side developments such as improvements in food technology, refrigeration facilities and transport that have made various processed food products, which are generally highly perishable, internationally tradeable.

The new export opportunities in processed food deserve special attention in the policy debate on export expansion in agricultural-resource rich countries like Vietnam for a number of reasons. First, there is evidence that the degree of income and price elasticity of demand for processed food is very high, presumably higher than that for the conventional labour-intensive manufacturing exports (Islam 1988; Athukorala and Jayasuriya 2003). High income and price elasticities imply

that export diversification into this commodity category could bring rapid export growth with significant improvement in the terms of trade. Second, unlike in the case of further processing of resources such as minerals and timber, final stages of food processing is highly labour-intensive. This implies that the expansion of the processed food sector can have a strong positive effect on employment generation in the typical labour-surplus developing economy. Third, in terms of potential net balance of payments implications, processed food would be even superior to “conventional” manufactured goods because of lower import intensity. Finally, the expansion of these exports is a powerful vehicle for linking the rural economy in a positive way with the ongoing process of economic globalization.

Global production sharing — the geographic separation of the activities involved in producing a good (over service) across two or more countries⁶ — has been one of the defining characteristic of world trade over the past few decades. With a modest start in electronics industry in the late 1960s, global production networks encompassing countries at various stages of development have gradually evolved and spread into many industries such as sport footwear, automobiles, televisions and radio receivers, sewing machines, office equipment, power and machine tools, cameras and watches, pharmaceuticals, and printing and publishing. At the formative stage of global production sharing was predominantly a two-way exchange between the home and host countries; locating small fragments of the production process in a low-cost country and re-importing the assembled components to be incorporated in the final product (in the case of electronics, for example) or for directly selling in the home country market. Over time, production networks have begun to encompass many countries involved in the assembly process at different stages, resulting in multiple-border crossing of product fragments before getting incorporated in the final product (Feenstra 2008; Jones, Kierzkowski, and Lurong 2004).

While the cross-border exchange of parts and components and final (assembled) goods within

global production networks is now a global phenomenon, there is evidence that this international exchange is far more important for economic growth and structural transformation in the East Asian economies than elsewhere (Athukorala 2005; Athukorala and Yamashita 2008). The electronics multinational enterprises (MNEs) based in the United States began the process of linking of East Asia to global production networks in the mid-1960s as a strategic response to import competition from Japanese firms. The involvement of Japanese and Western European MNEs in outsourcing gained importance from the late 1970s. More recently, MNEs based in East Asian newly industrialized economies (NIEs), notably Korea and Taiwan, have also joined this process of internationalization of production. In response to rapid domestic wage increases, the growing reluctance of domestic labour to engage in low-paid blue-collar employment, and stringent restrictions on the importation of labour, firms in the electronics industry and other durable consumer goods industries in the NIEs in East Asia have begun to engage in component and final goods assembly activities in neighbouring countries where labour costs are still low. Vietnam is particularly well placed to benefit from this regional spread of production sharing, given its geography and the availability of relatively low-cost and trainable labour.

III.2 Vietnam's Emerging Trade Patterns

Primary products accounted for nearly a half of non-oil merchandise exports from Vietnam in the mid-1980s (Table 1). This share increased further in early years of the post-reform period as the first positive response to reforms came from agricultural products, mostly rice (Dollar 1992). Until about 1995, both rapid volume expansion and favourable price trends contributed to growth in export earning from agricultural products (Athukorala, Pham, and Thanh 2009, Figure 3). From then on, prices continued to decline, with the rate of decline intensifying in more recent years. Rapid volume expansion continued to compensate

for decline in prices until about 1998 to generate mild, but positive growth in export earnings.

Throughout 1990s, rice was the dominant export earner among agricultural exports (Table 3). The dominance of rice has, however, significantly eroded over the past five years as a result of both declines in export value in absolute terms and the rapid expansion of other traditional agricultural products (mostly coffee and rubber) and, more importantly, processed food. The share of processed food in total non-oil primary exports from Vietnam increased from 17.2 per cent in 1992/93 to 43.3 per cent in 2005/2006, accounting for nearly half of the total export increment during

this period. Processed food exports from Vietnam are heavily concentrated in fish and fish preparations. But over the years the product mix has begun to expand with exports of pig meat, chicken and a variety of vegetables showing impressive growth. Vietnam's performance in processed food exports looks impressive in an international comparison (Table 4); a compound growth rate of 17.8 per cent an average rate of 6.3 per cent for all ASEAN countries and 9.4 per cent for developing countries. However, Vietnam still accounts for only 0.9 per cent of total world processed food exports compared to 3.7 per cent share of the neighbouring Thailand.

TABLE 3
Composition and of Primary Exports from Vietnam, 1992/93–2005/06
(In percentages)

	<i>Composition (%)</i>			<i>Contribution to export growth (%) between:</i>		
	<i>1992/93^a</i>	<i>1999/ 2000^a</i>	<i>2005/06^a</i>	<i>1992/93 and 1999/2000</i>	<i>1999/2000 and 2005/06</i>	<i>1999/2000 and 2005/06</i>
Food beverages and tobacco	74.9	89.2	85.5	96.7	82.8	87.3
Processed food ^b	17.2	32.6	43.3	40.7	51.0	47.7
Traditional	57.6	56.5	42.2	56.0	31.8	39.6
Cashew Nut, Shelled	4.0	4.4	6.8	4.7	8.5	7.3
Cinnamon	0.4	0.2	0.2	0.0	0.1	0.1
Coffee	9.4	17.4	13.2	21.5	10.2	13.8
Ground Nut, Shelled	4.3	1.2	0.3	−0.5	−0.4	−0.4
Pepper	1.4	4.5	2.3	6.2	0.7	2.5
Rice	36.2	27.1	18.1	22.2	11.6	15.0
Tea	2.0	1.8	1.4	1.8	1.1	1.3
Minerals	24.5	10.0	14.4	2.5	17.5	12.6
Agricultural raw material	0.7	0.8	0.1	0.9	−0.3	0.0
Agricultural raw material	7.3	5.8	14.2	5.0	20.4	15.4
Rubber	6.6	5.0	14.1	4.2	20.7	15.4
Total	100	100	100	100.0	100.0	100.0
	1,076	3,128	7,417			

NOTE: 1. Two-year average.

2. Processed food products have been separated using the classification system developed in Athukorala and Jayasuriya (2003).

SOURCE: Compiled from UN Comtrade database.

TABLE 4
Processed Food Exports from Vietnam in Global and Regional Context,
1992/93 and 2005/06

	<i>Share in world exports</i>		<i>Annual compound growth, 1992/93–2005/06</i>
	<i>1992/93</i>	<i>2005/06</i>	<i>Processed food</i>
Developing countries	30.9	37.6	9.4
Developing Asia	14.9	14.6	6.3
ASEAN	6.9	6.2	5.5
Indonesia	1.0	0.7	3.5
Malaysia	0.8	0.8	5.8
Philippines	1.0	0.8	4.1
Thailand	3.4	2.7	5.6
Vietnam	0.3	0.9	17.8

NOTE: — Zero or less than 0.05 per cent.

SOURCE: Compiled from UN Comtrade database.

The share of manufacturing in Vietnamese merchandise exports increased from less than 10 per cent in 1990 to over 58 per cent in 2006 (Table 1). A striking feature of the composition of manufacturing exports from Vietnam is the continued heavy concentration in the traditional labour-intensive manufacturing, in particular apparel, furniture and footwear (classified as miscellaneous manufacturing (Section 8) on the Standard International Trade Classification (SITC) (Table 5 and 6). In 2005/2006 this product group accounted for nearly 70 per cent of total manufacturing export, compared to a regional (ASEAN) average of 15.8 per cent and a developing-country average of 21.3 per cent (Table 6). However, there has been a notable diversification of the commodity composition within this product group, showing a sharp decline in Vietnam's dependence on apparel for export earnings. The share of apparel in total manufacturing exports declined sharply from 55.9 per cent in 1992/93 to 26.1 per cent in 2005/2006. The share of furniture increased from a mere 1.8 per cent to over 10 per cent and footwear from 1.2 per cent to over 12 per cent between these two time points.

Vietnam is not, as yet, a significant player in global production networks, which has been the major source of export dynamism in the other high-performing economies in the region (Table 6). However, we can see clear early signs of Vietnam entering into this process of international exchange (Table 5). The share of machinery and transport equipment in total manufacturing exports of Vietnam increased from 5.1 per cent in 1992/93 to 18 per cent in 2005/2006. Within this product group office machinery, semiconductors, telecommunication and sound recording equipment have recorded notable growth. Disaggregated data show that parts and components, exported mostly to countries in East Asia, accounts for an increasing share of these exports (Figure 2, Table 7). As we will see below, exports in these product categories are likely to grow rapidly in years to come; Vietnam has gone a long way since the late 1990s in creating a domestic investment climate conducive for benefiting from global production sharing. Normalization of economic relations with the United States, significant reforms of investment and trade policy regimes and the accession to the membership of the

TABLE 5
Manufacturing Exports from Vietnam: Composition and Growth, 1992–2006

	Composition (%)				Contribution to export growth (%) between			
	1992/93 ^a		1999/ 2000 ^a		1992/93 and 1999/2000		1999/2000 and 2005/06	
	1992/93 ^a	2000 ^a	1999/ 2000 ^a	2005/06 ^a	1992/93 and 1999/2000	1999/2000 and 2005/06	1999/2000 and 2005/06	1999/2000 and 2005/06
5 Chemicals	1.7	1.8	1.8	2.5	10.20	10.18	10.18	10.18
65 Textiles	5.7	4.4	4.4	3.5	14.01	20.1	18.49	18.49
7 Machinery and transport equipment	5.1	12.9	18	1.5	0.9	1.79	1.55	1.55
71 Power generating machines	0.1	0.8	0.8	1.5	0.73	0.42	0.5	0.5
72 Specialized industrial machine	0.5	0.7	0.7	0.5	-0.01	0.14	0.1	0.1
73 Metal working machine	0.1	0	0.1	0.1	1.1	1.71	1.55	1.55
74 General industrial machinery	0.3	1	1	1.5	0.34	5.38	4.05	4.05
75+76+772+776 ICT products	0.3	6.5	6.5	8.6	10.97	10.38	10.53	10.53
75 Office machines	0	0.3	0.3	3.9	1.69	2.06	1.96	1.96
76 Telecom. and sound recording equipment	0.2	1.5	1.5	1.9	8.81	6.53	7.13	7.13
772+776 Semiconductors/semiconductor devices	0.1	4.7	4.7	2.8	0.47	1.79	1.44	1.44
77-772-776 Electrical good	0.6	3.1	3.1	4.1	4.89	0.23	1.46	1.46
77 Electrical machinery	0.7	7.8	7.8	6.9	5.36	2.02	2.9	2.9
78 Road vehicles	3.1	0.8	0.8	1.5	-0.03	0.28	0.2	0.2
79 Other transport equipment	0.2	0	0	0.2	73.86	66.98	68.8	68.8
8 Miscellaneous manufacturing	79.8	74.6	74.6	69.2	0.23	0.34	0.31	0.31
81 Fabricated building fixtures/ machines	0	0.2	0.2	0.3	6.14	12.51	10.83	10.83
82 Furniture and parts thereof	1.8	5.6	5.6	10.5	20.36	26.63	24.97	24.97
84 Apparel and clothing accessories	55.9	24.8	24.8	26.1	0.43	0.54	0.51	0.51
85 Footwear	1.2	6.2	6.2	12.3	0.37	0.62	1.3	1.3
5 to 8 less 68	100	100	100	100	40.7	23.1	31.9	31.9
Total manufacturing	768	6,151	6,151	21,111				
US\$ million								

NOTES: a. Two-year average b. Period average.

SOURCE: Compiled from UN Comtrade database.

TABLE 6
Composition of Manufacturing Exports: Vietnam in Global Context, 2005/06
(In percentages)

Country/country group	Chemicals (5)	Resource- based manufactures (6)	Machinery and transport equipment (7)				Miscellaneous manufacturing	
			Total	ICT products (75+76+ 772+776)	Electrical goods (7-772- 776)	Road vehicles (78)	Total	Apparel (84)
Developing countries	9.1	15.2	52.1	32.1	5.9	5.8	21.3	7.1
Developing East Asia	6.9	12.8	56.7	40.3	6.4	3.4	23.6	7
ASEAN	9.7	8.8	65.7	53.1	4.3	2.6	15.8	5.5
Indonesia	9.7	23.9	38.7	24.6	6.4	2.5	27.7	12.6
Malaysia	5.9	6.5	78	70.7	3.4	0.6	9.6	2.3
Philippines	1.3	3.1	85.2	74.9	6.4	1.4	10.4	4.9
Singapore	20.7	3.7	67.6	55.6	2.8	0.5	8.0	0.3
Thailand	9.3	13.1	62.1	39.6	5.1	9.0	15.6	4.8
Vietnam	2.5	10.3	18	8.6	4.1	1.5	69.2	26.1

SOURCE: Compiled from UN Comtrade database.

TABLE 7
Direction of Trade in Machinery Parts
and Components^a

<i>Trading partner</i>	<i>Exports</i>	<i>Imports</i>
East Asia	84.9	76.7
Japan	47.5	20.7
Developing East Asia	37.4	53.9
China	3.3	13.0
Hong Kong	4.8	4.4
Korea	1.1	5.6
Taiwan	1.3	9.7
ASEAN	28.3	32.0
Indonesia	0.4	3.4
Malaysia	2.2	3.5
Philippines	8.1	1.1
Singapore	2.1	13.3
Thailand	15.5	8.4
South Asia	0.5	0.5
NAFTA	6.4	2.6
Europe	4.8	12.5
World	100.0	100.0

NOTE: a. Parts and components reported under Section 7 (Machinery and transport equipment) of the Standard International Trade Classification.

SOURCE: Compiled from UN Comtrade database.

World Trade Organization have been instrumental in setting the stage for linking the Vietnamese manufacturing to global production networks. In response, a number of major players involved in global production sharing have already entered Vietnamese manufacturing (Section V).

IV. Direction of Exports

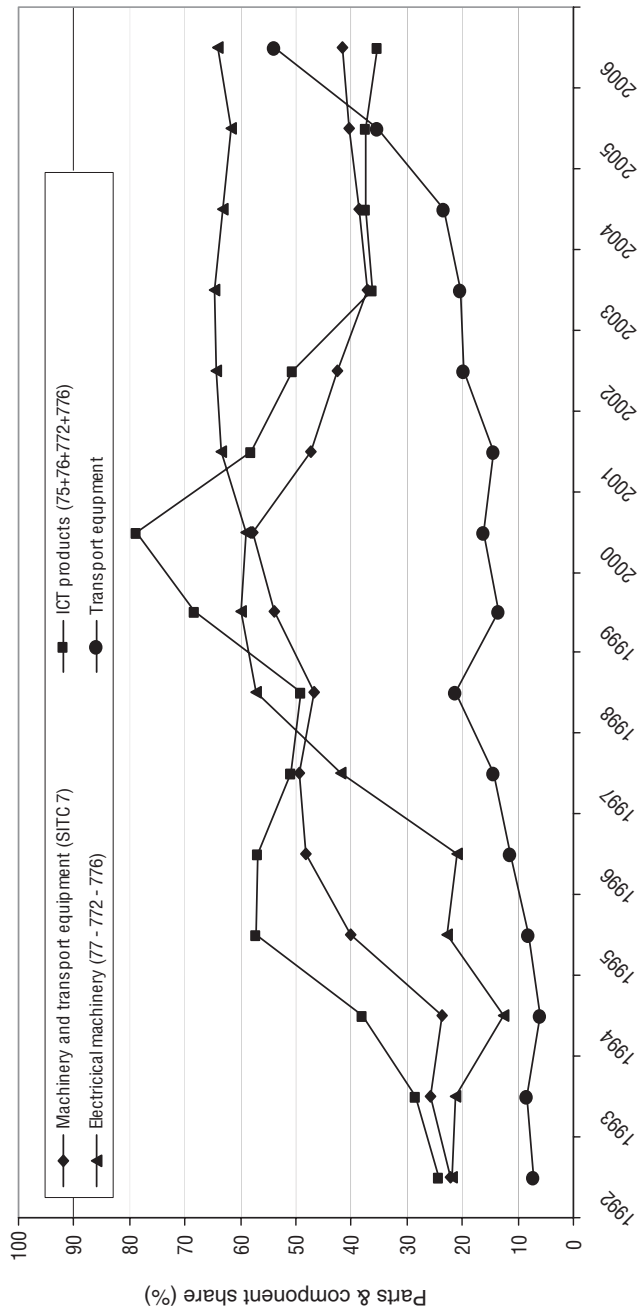
During the pre-reform era Vietnam's geographic patterns of export (and of course foreign trade in general) was characterized by a heavy concentration in countries in central planned economies in the Soviet bloc. By 1985 almost two-thirds of Vietnam's export trade was to these markets.⁷ During the past decade or so, export expansion from Vietnam has been underpinned by

a notable transformation in the geographic profile of exports. The share of total exports going to the Soviet-bloc markets had declined persistently from the late 1980s, reaching 3.7 per cent in 1990/91 and then a mere 1.7 per cent in 2005/2006 (Table 8).

During the early years of the reform period, market diversification was mostly the outcome of rapid expansion in exports to the regional markets. The combined share of exports to East Asian countries increased to 58.9 per cent in 1990/91 and remained virtually unchanged at that level during the ensuing decade. ASEAN countries accounted for about a fifth of total exports from Vietnam during this period. Exports to the European and North American markets began to expand rapidly with a considerable time lag, and gathered momentum from the late 1990s. The combined export share to Europe and North America increased from 29 per cent to 40 per cent between 1999/2000 and 2005/2006. Interestingly, exports to China have expanded rapidly against the backdrop of an overall decline in the relative importance of regional markets. At the beginning of the 1990s, China absorbed less than 1 per cent of total non-oil exports from Vietnam. This figure had increased to 8.7 per cent by 2005/2006.

The entry of Vietnamese products to the United States remained virtually barred by the trade embargo, which lasted until 1994. The U.S. share in total Vietnamese export begun to increase following the lifting of the embargo, reaching 4.8 per cent by 1999/2000. Vietnam-U.S. trade received further impetus for the market entry concession given under the bilateral trading agreement signed in 2001. By 2005/2006, the United States absorbed 21.2 per cent of total merchandise exports from Vietnam. This share is bound to increase rapidly given the recent entry of Intel and a number of other U.S. MNEs into Vietnamese manufacturing. Vietnam's exports to the United States are still dominated by primary products, mainly crude oil and food products (mostly fish). The experience of the other ASEAN countries suggests that U.S. MNE presence is vital for the expansion of manufacturing exports to the U.S. market.

FIGURE 2
Share of Parts and Components in Exports of Machinery and Transport Equipment and Sub-categories (1992–2006)



SOURCE: Based on data compiled from UN Comtrade database.

TABLE 8
Geographic Profile of Vietnamese Exports, 1990–2001

Country/country group	Composition (%)			Contribution to export increment (%) between:		
	1990/91 ^a	1999/ 2000 ^a	2005/06 ^a	1990/91 and 1999/2000	1999/2000 and 2005/06	1990/91 and 2005/06
East Asia	58.9	58.9	45.2	58.9	37.5	45.1
ASEAN	19.4	19.7	16.7	19.8	15.1	16.7
Indonesia	0.7	2.6	2.0	3.0	1.6	2.0
Malaysia	0.4	2.6	3.1	3.0	3.4	3.1
Philippines	1.3	3.3	2.2	3.1	1.6	2.2
Singapore	13.8	6.8	4.9	4.2	3.9	4.9
Thailand	2.5	2.6	2.4	2.7	2.3	2.4
Other East Asia	39.5	39.2	28.4	39.1	22.4	28.4
Taiwan	1.9	5.5	2.6	6.3	1.0	2.6
South Korea	1.7	2.6	2.1	2.8	1.8	2.1
Japan	23.6	16.8	13.2	15.3	11.3	13.2
China	0.6	8.8	8.7	10.5	8.6	8.7
Europe	35.0	24.1	18.6	22.4	15.3	18.6
United Kingdom	0.1	3.5	3.0	4.2	2.8	3.0
Germany	1.1	5.3	3.5	6.2	2.5	3.5
France	4.4	2.8	2.0	2.5	1.5	2.0
Former Soviet Union	3.7	2.1	1.7	1.9	1.5	1.7
Poland	0.3	0.5	0.3	0.5	0.3	0.3
Russian	1.9	0.9	0.9	1.1	0.9	0.9
Ukraine	0.2	0.2	0.1	0.2	0.1	0.1
America	0.7	5.5	21.2	7.2	29.5	21.3
Canada	0.1	0.7	1.1	0.9	1.3	1.1
USA	0.2	4.8	19.0	5.2	27.1	19.1
Oceania	0.3	8.2	8.1	9.4	8.1	8.2
Australia	0.3	8.0	8.8	9.2	9.3	8.8
Other	1.4	1.2	5.1	0.2	8.1	5.1
Total exports	100	100	100	100	100	100

SOURCE: Compiled from Vietnam General Statistical Office, *Statistical Yearbook* (various issues).

V. The Role of FDI in Export Expansion

During the early years of market-oriented reforms, much of foreign direct investment (FDI) in Vietnam was in production for the domestic market (Tran 2007). During 1988–90, less than 20 per cent of total approved projects had export-

output ratios of over 50 per cent. From the late 1990s there has been a notable compositional shift in manufacturing FDI from domestic market-oriented to export-oriented production as approval restriction on foreign ownership share in projects and areas/industry of operation were gradually relaxed. By 2000, over 70 per cent of approved

FIEs in manufacturing had export-output ratios of 50 per cent or more, the majority clustering within 80–100 per cent category. Until about the late 1990, most of the export-oriented FDI projects were in garment, footwear, and furniture and other wood product industries. Over the past five years foreign investors have begun to enter into assembly activities in electrical and electronics industries. The trends in FDI flows to Vietnam over the past one-and-a-half decades largely reflect changes/shifts in the domestic investment climate rather than global trends. There has been significant improvement over the past decade in Vietnam's legal and institutional framework for the approval and monitoring of foreign investment culminating in the promulgation of the 2006 Investment Law. Investment incentives and the tax law have also been revised and streamlined. In particular, reforms over the past six years have set the stage for FDI participation in the economy in line with its comparative advantage in international production (Athukorala and Tran 2009).

The share of foreign-invested enterprises (FIEs) in total manufacturing exports increased from about 20 per cent to over 50 per cent over this period (Figure 3). The increase in FIE share in manufacturing exports has been accompanied by a continuous increase in Vietnam's share in total world manufacturing exports, from 0.07 per cent in the early 1990 to over 0.3 per cent in 2006. This pattern suggests that FIE participation has unequivocally been export creating.

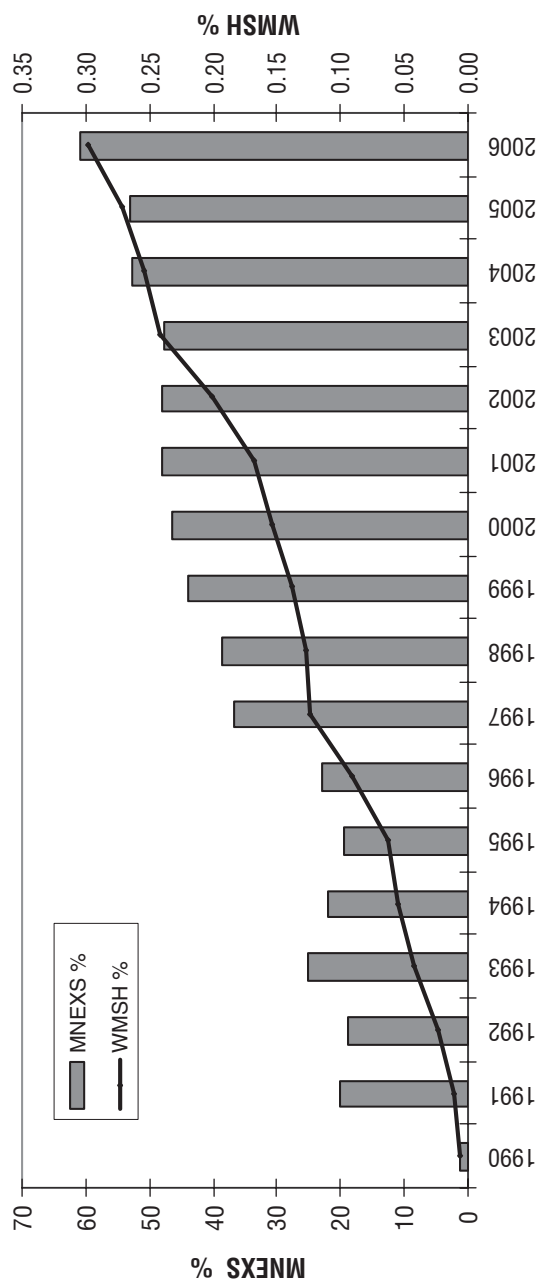
There is evidence that FIEs, in addition to their direct contribution to export expansion, act as conduits for the expansion of exports by local firms (both SOEs and newly emerging private firms) by opening up marketing channels (Kokko and Sjöholm 2006). For instance, following the entry of foreign firms into garments and other light consumer goods industries, many *international buying groups*,⁸ which had long-established market links with these firms, expanded their global procurement networks to cover Vietnam. These buying groups have subsequently begun to procure supplies directly from local firms. Moreover, in some export-

oriented industries MNEs carry out production in Vietnam entirely through sub-contracting arrangements with pure local firms (e.g., Nike in footwear and Ikea in furniture), while directly engaging only in procurement and marketing tasks through liaison offices. Naturally these export activities are not captured in FIE export data depicted in Figure 3.

During the early years of the reform era the standard labour-intensive goods (in particular, textile and garments, footwear and miscellaneous manufactures) dominated the export composition of FIEs. Over the past decade or so, electrical machinery and apparatus have emerged as the single most important export line of FIEs operating in Vietnam (Table 9). This product category predominantly comprises parts and components of information technology products (office, accounting and computing machinery, and electrical machinery and apparatus which fall under Sections 75, 76 and 77 of the Standard International Trade Classification, SITC). So far this product line in Vietnam has been dominated by small- and medium-scale foreign investors (predominantly by Taiwanese firms), the only large global player being Hitachi Corporation from Japan.⁹ However, given the recent move by Intel Corporation, the world's largest semiconductor producer, to set up an assembly and testing plant in Vietnam, network trade based on international production fragmentation is likely to be the prime mover of export-led industrialization in Vietnam in years to come.

On 28 February 2006, Intel Corporation announced that it will invest US\$300 million (subsequently revised to US\$1 billion) to build a semiconductor testing and assembly plant in Ho Chi Minh City as part of its worldwide expansion of production capacity. When completed in 2009 this will be the seventh assembly site of Intel's global network and is projected to employ about 1,200 workers at the first stage of operation. There is evidence from other countries in the region such as Singapore, Thailand and the Philippines that there is something of a herd mentality in the site selection process of electronic multinational firms, particularly if the first entrant is a major player in

FIGURE 3
The Role of FIEs in Manufacturing Export Expansion from Vietnam: FIEs' Share in Exports from Vietnam (FIEXS) (Left Scale)
and Vietnam's Share in World Manufacturing Exports (WMSH) (Right Scale)



SOURCE: Based on data compiled from Vietnam General Statistical Office, Statistical Yearbook (various issues) and UN Comtrade database.

TABLE 9
Commodity Composition of Exports by Foreign Invested Enterprises, 1996–2005

VSIC		1996–98	2002–05
15	Food product and beverages	5.9	6.5
16	Manufacture and tobacco products	0.0	0.0
17	Manufacture of textiles	10.7	4.0
18	Manufacture of wearing apparel	9.5	11.8
19	Manufacture of leather products	30.9	21.3
20	Manufacture of wood and wood products	0.0	0.4
21	Paper and paper products	0.3	0.6
22	Publishing and printing	0.0	0.1
23	Coke and refined petroleum products	0.0	0.0
24	Chemicals and chemical products	2.1	2.9
25	Rubber and plastic product	1.2	2.1
26	Manufacture of other non-metallic mineral products	1.2	0.9
27	Manufacture of basic metals	0.2	0.9
28	Fabricated metal products	1.3	2.2
29	Machinery and equipment	1.0	2.6
30	Office, accounting and computing machineries	0.0	0.2
31	Electrical machinery and apparatus	29.2	32.8
32	Radio, television and communication equipment	2.2	1.4
33	Medical and optical instruments, watches and clocks	0.5	0.6
34	Motor vehicles, trailers and semi-trailers	0.2	1.9
35	Manufacture of other transport equipment	0.4	2.1
36	Manufacture of furniture, manufacturing	3.2	4.7
	Total	100	100
	US\$ million	1,109	3,114

NOTE: VSIC = Vietnam Standard Industry Classification (based on the International Standard Industry Classification, ISIC).

SOURCE: Compiled from data provided by the Ministry of Planning and Investment, Hanoi.

the industry. There is fact evidence that this process has already begun to replay in Vietnam. For instance, the Taiwanese-based Hon Hai Precision Industry Co., the world's biggest electronics contract manufacturer announced in August 2007 its plan to set up a US\$5 billion plant in Vietnam (*Wall Street Journal*, 30 August 2007, p. 1). The other major players in electronics industry which have already appeared in investment approval records of the Ministry of

Planning and Investment include Foxconn, Compal and Nidec. The Saigon Hi-Tech Park has begun to emerge as an investment hub bringing together foreign investors with domestic companies in setting up assembly and testing plants linked to regional production networks (*Wall Street Journal*, 7 October 2007, p. 1).

In sum, the emerging export patterns of FIEs in Vietnam are basically consistent with the country's comparative advantage in international

production. Contrary to the policy-makers' expectations, FIEs in so-called heavy industries such as chemical and chemical products, basic metal products, fabricated metal products and motor vehicles have not contributed to export expansion. There is no evidence to suggest that export performance requirements and the related tax and import duty concessions, which were in force until recently, have had a noticeable impact on the performance of FIEs in these industries. In the early 1990s, there was some increase in exports by import-substituting FIEs engaged in capital intensive industries such as chemical, industrial machinery, transport equipment, possibly reflecting the "strategic behaviour" of FIEs as part of their entry-strategy to the domestic market (see below). But this government-mediated export spurt dissipated in the ensuing years (Table 5).

VI. Concluding Remarks

The trends and patterns of export expansion in Vietnam over the past one-and-a-half decades under market-oriented reforms closely reflect a combination of the country's potential for international specialization (comparative advantage in international trade) and market-oriented policy reforms. It is clearly evident that when market forces are unleashed, albeit in a constrained fashion, specialization patterns assert themselves as predicted by the received trade theory.

During the early years of the reform process, agricultural products played the dominant role in the export takeoff befitting from the significant agricultural price reforms and removal of structures on farmer's production decision. This was followed by an expansion of the traditional labour-intensive manufacturing exports, in particular apparel, footwear and furniture, as the reform process expanded to trade and investment policy regimes related to domestic manufacturing. Over time, there was also a notable diversification of agricultural exports firstly away from rice to

other export crops and then to processed foods. Overall, export performance record during the reform era looks impressive, particularly when we take into account the constraining effects on the trade embargo that prevented entry into the biggest export market (USA) during the first decade and the historic overwhelming concentration of exports in the Soviet-bloc markets.

In the East Asia context, Vietnam's performance in manufacturing exports stands out for the prolonged heavy concentration in traditional labour-intensive manufacturing, in particular apparel, footwear and furniture. Notwithstanding its geography and human-resource endowment, as yet Vietnam is not a significant player in global production networks which has been the major source of export dynamism in the other high-performing economies in the region. However, the analysis of the changing commodity mix of exports and patterns of FDI undertaken in this paper reveals clear early signs of Vietnam entering into this process of international exchange. Normalization of economic relations with the United States, significant reforms of investment and trade policy regimes and the accession to the membership of the World Trade Organization have been instrumental in setting the stage for linking the Vietnamese manufacturing to global production networks. In response, a number of major players involved in global production sharing have already entered Vietnamese manufacturing.

There is clear evidence that under a liberal trade and investment policy regime, which help unleash natural export potential of the country, FDI can play a pivotal role in linking domestic manufacturing to global markets. However, there is no evidence to suggest that the guided industry policy in the early stage of market-oriented policy reforms in Vietnam, in particular state-mediated attempts to engage import-substituting FIEs in export expansion, has had any tangible effect on emerging trends and patterns of manufacturing exports.

NOTES

The author is grateful to Tran Quang Tien for his excellent research assistance.

1. For details on policy reforms in Vietnam, see Athukorala (2006), Riedel and Comer (1997), Thanh (2005). Because of the space constraint we do not discuss here the reform process, but the following discussion assumes that the reader has background knowledge of the nature and timing of key reforms in trade and investment regimes.
2. It is important to note that official trade data up to the late 1980s are believed to understate the level of Vietnam's foreign trade because of the underreporting of barter trade with the communist block countries (Hill 2001).
3. Virtually all of Vietnam's oil production is exported, as the country has no major refinery.
4. Data reported in this paragraph, unless otherwise stated, are from UN Comtrade database.
5. The term "processed food" as used in this paper refers to food items that undergo substantial processing in the country of origin before export, and are typically high value and subject to increasingly stringent food safety standards. While international trade in many of these items is not entirely "new", their trade has experienced very rapid expansion in recent years, and they are often described as "new food exports", or "non-traditional food exports".
6. In the recent international trade literature, an array of alternative terms have been used to describe this phenomenon, including "international production fragmentation", "vertical specialisation", "slicing the value chain" and "outsourcing".
7. This was in sharp contrast to the nature of the geographic profile of trade China inherited from the era of central planning. In China even under central planning there was a heavy emphasis on export market diversification mainly because of the uneasy relations with the Soviet Union. Thus China, unlike Vietnam, started economic opening with a relatively diversified geographic base for export expansion; by the mid-1980s, over 90 per cent of China's export trade was with non-communist block countries (Lardy 1992).
8. International buying groups are worldwide purchasing organizations of large retail chains in developed countries, which specialize in worldwide purchase of consumer goods such as apparel, toys and footwear.
9. Hitachi plant in Ho Chi Minh City commenced operation in 2000. It assembles parts and components for a wide range of consumer electrical goods and currently employs about 4,000 workers.

REFERENCES

- Athukorala, P. "Product Fragmentation and Trade Patterns in East Asia". *Asian Economic Papers* 4, no. 3 (2005): 1–27.
- . "Trade Policy Reforms and the Structure of Protection in Vietnam". *World Economy* 29, no. 2 (2006): 161–87.
- . "Singapore and ASEAN in the New Regional Division of Labour". *Singapore Economic Review* 53, no. 3 (2008).
- Athukorala, P., H. Pham and V. T. Thanh. "Vietnam". In *Distortions to Agriculture in Asia*, edited by Kym Anderson and Will Martin. Washington, D.C.: World Bank, 2009.
- Athukorala, P. and Q. T. Tran. "Foreign Direct Investment and Industrial Transition in Vietnam". In *The Rise of Asia: Trade and Investment in Global Perspective*, edited by Prema-chandra Athukorala. London: Routledge, 2009.
- Athukorala, P. and N. Yamashita. "Patterns and determinants of production fragmentation in world manufacturing trade". In *Globalisation, Regionalism and Economic Interdependence*, edited by Filippo di Mauro, Stephane Dees and Warwick J. McKibbin, pp. 23–45. Cambridge: Cambridge University Press, 2008.
- Athukorala, P. and S. Jayasuriya. "Food safety Issues, Trade and WTO Rules: A Developing Country Perspective". *World Economy* 26, no. 9 (2003): 613–37.
- Dollar, D. "Vietnam: Successes and Failures of Macroeconomic Stabilization". In *The Challenge of Reform in Indochina*, edited by Borje Ljunggren, pp. 207–31. Cambridge, MA: Harvard University Press for Harvard Institute for International Development, 1992.
- Feenstra, R. C. "Offshoring in the Global Economy". The Ohlin Lectures, 2008, presented at the Stockholm School of Economics, 17–18 September 2008. <http://www.econ.ucdavis.edu/faculty/fzfeens/pdf/Feenstra_Ohlin_Lecture_2008.pdf>.

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- Henderson, D. R., C. R. Handy, and S. A. Neff. *Globalisation of the Process Food Market*. Agricultural Economic Report No. 742, U.S. Department of Agriculture, Washington, D.C.), 1996.
- Hill, H. "Export Success Against the Odds: A Vietnamese Case Study". *World Development* 28, no. 2 (2000): 283–300.
- Islam, N. "Fast-growing Agricultural Exports of Developing Countries". *Food Policy* 13, no. 3 (1988): 313–16.
- Jones, R. W., H. Kierzkowski, and C. Lurong. "What does the evidence tell us about fragmentation and outsourcing". *International Review of Economics and Finance* 14, no. 3 (2004): 305–16.
- Kokko, A. and F. Sjöholm. "The Internationalization of Vietnamese Small and Medium Enterprises". *Asian Economic Papers* 4, no. 1 (2006): 152–77.
- Lardy, N. R. *Foreign Trade and Economic Reform in China: 1978–1990*. Cambridge: Cambridge University Press, 1992.
- Riedel, J. and B. Comer. "Transition to a Market Economy in Viet Nam". In *Economies in Transition: Comparing Asia and Eastern Europe*, edited by Wing Thye Woo, Stephen Parker and Jeffrey D. Sachs, pp. 189–213. Cambridge, MA: MIT Press, 1997.
- Thanh, V. T. "Vietnam's Trade Liberalization and International Economic Integration: Evolution, Problems, and Challenges". *ASEAN Economic Bulletin* 22, no. 1 (2005): 75–91.
- Tran, Q. T. "Foreign Direct Investment in Industrial Transition: A Case Study of Vietnam". Unpublished doctoral dissertation, Australian National University, Canberra, 2007.

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