WHY HAS EMPLOYMENT NOT GROWN MORE QUICKLY IN VIETNAM?

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Abstract A paradox of Vietnam's economic performance in the 1990s has been that despite rapid economic growth, extensive economic reforms, increased openness and significant reductions in poverty, the rate of employment growth has been disappointing. Conventional explanations of the slow growth of employment emphasize the incomplete nature of the economic reform process emphasizing three key areas – trade policy, the role of state-owned enterprises and labour market policies – which have led to resources being misallocated to the detriment of labour-intensive export sectors and the private sector. The paper shows that the slow growth of industrial employment in Vietnam has not been a result of an excessive concentration of resources on capital-intensive industries or state-owned enterprises. It is primarily the changes which have occurred within industries, resulting in increases in labour productivity from the very low levels at the beginning of the 1990s, that have prevented industry from absorbing more workers.

Keywords Vietnam, industry, employment, productivity, linkages.

JEL classifications J21, O14, O53.

1. INTRODUCTION

Increasing the rate of growth of employment in Vietnam is seen as a central part of the country's socio-economic development strategy for the first decade of the new millennium and of the Comprehensive Poverty Reduction and Growth Strategy (CPRGS) (Socialist Republic of Vietnam 2002). A rapidly growing labour force, underemployment in rural areas, fears of rising unemployment in urban areas, and the need to absorb thousands of workers who are likely to be retrenched as a result of the restructuring of state-owned enterprises, all contribute to place employment issues at centre stage. The CPRGS aims to create 1.4 to 1.5 million new jobs every year and to reduce urban unemployment to under 5 per cent by 2010 (Socialist Republic of Vietnam 2002: 39).

This emphasis on employment creation is shared by the international agencies engaged in Vietnam. The *Vietnam Development Report 2001* stresses the need for higher employment creation, particularly in the manufacturing sector (World

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Bank 2001: 12). The Vietnam *Human Development Report 2001* states that 'Employment creation remains one of the greatest challenges for the next decade' (National Centre for Social Sciences and Humanities 2001: 9).

One of the paradoxes of Vietnam's economic performance in the 1990s has been that despite rapid economic growth, extensive economic reforms, increased openness and significant reductions in poverty, the rate of employment growth has been disappointing. The purpose of this paper is to explore the reasons for this. Is it the case, as some have argued, that employment creation in Vietnam has been held back by government policies which have distorted the allocation of resources, so that further economic reforms will lead to increased employment, or are there other more deep-seated causes of this problem?

2. EMPLOYMENT TRENDS

There are a number of estimates of the exact level of employment in Vietnam during the 1990s provided by the Ministry of Labour, Invalids and Social Affairs (MOLISA), the General Statistical Office (GSO), the population census and the *Vietnam Living Standards Survey* (VLSS) (see Table 1). MOLISA and GSO collect their data in quite different ways. MOLISA bases its statistics on the annual *Labour Force Survey* which covers 100,000 households and over 300,000 individuals of working age. GSO figures are based on data collected by the provincial statistical offices from enterprises with an estimate for employment in the household sector.

Despite the differences in sources, the GSO, MOLISA and Population Census

Table 1 Estimates of employment in Vietnam, 1990–2000 ('000)

	GSO	*MOLISA*	*Census*	*VLSS*
1990	29,412	30,004	28,791[a]	
1991	30,135	30,572		
1992	30,856	31,262		
1993	31,579	32,022		36,584[b]
1994	32,303	32,857		
1995	33,031	33,667		
1996	33,761	33,978		
1997	34,493	34,353		
1998	35,233	34,800		40,029[c]
1999	35,976	35,680	36,420	
2000	36,702	36,206		
Growth p.a.	2.2%	1.9%	2.4%	1.8%

Source: GSO (2001: Table 18); MOLISA (2001: Table 18), and data provided directly by MOLISA; Population Census 1989, 1999; VLSS from Bales (2000: Annex 2, Table 1.3).
Notes:
a 1989.
b 1992/93.
c 1997–98.

figures are of the same order of magnitude, although the VLSS gives a rather higher figure. In terms of the main focus of this paper, the estimates of employment growth in the period fall within a fairly narrow range of between 1.8 and 2.4 per cent per annum.

As Table 2 shows, the rate of growth of employment in Vietnam has lagged well behind the rate of growth of GDP in the 1990s. Moreover, the acceleration of GDP growth in the 1990s was accompanied by a slowdown in the rate of growth of employment, so that there was a sharp fall in the elasticity of employment with respect to output after 1990.

Growth of employment in Vietnam has not only lagged behind output growth but also behind the increase in the supply of labour. In recent years it is estimated that 1.2 to 1.4 million new workers enter the labour force each year (Holmström 2001: 6). However, employment has only been increasing at an average of 600,000 or 700,000 per year over the past decade.

What employment growth there has been during this period, has been very unevenly distributed. This is reflected in the changes in the share of the three major economic sectors in employment over the period. The share of agriculture, forestry and fisheries (sector I) fell by 10 per cent from around 73 per cent in the early 1990s to 63 per cent in 2000. The share of the secondary sector (mining, manufacturing, utilities and construction) fluctuated at around 13 per cent, while the service sector (sector III) rose by 10 per cent from 13 per cent in the early 1990s (Figure 1).

The contrast is even more striking if one looks at the contribution made by each sector to the overall growth in employment. Between 1990 and 2000 around 6 million new jobs were created in Vietnam.[1] Of these about 1 million, a sixth, were in agriculture, forestry and fisheries. The secondary sector contributed about 10 per cent, of which about 7 per cent were in industry and 3 per cent in construction. However, the vast majority of new jobs – around three-quarters of the total – were in services. The most important service sector was that comprising wholesale and retail trade and the repair of vehicles, which provided 40 per cent of all new jobs in the country, followed by transport, storage and communications with 10 per cent of the total increase.

Table 2 Output and employment trends, 1986–2000

	Employment growth	*GDP growth*	*Elasticity*
1985–90	2.9%	4.4%	0.66
1990–95	2.3%	8.2%	0.28
1995–2000	1.5%	6.9%	0.22

Source: Nguyen *et al.* (2002: Table B3); MOLISA; Table 1 above.

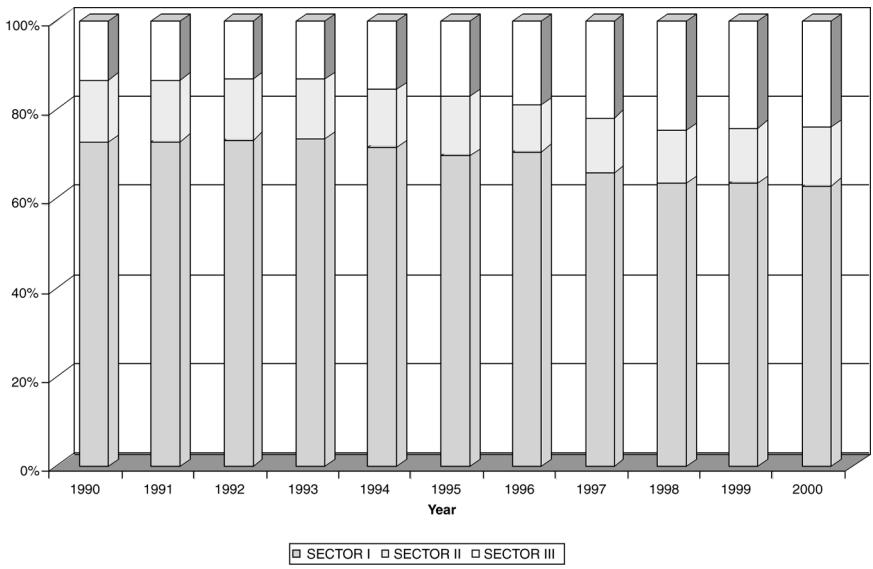

Figure 1 Share of employment by sector, 1990–2000

Much of this employment growth in services over the past decade has been in low-paid jobs or informal self-employment. The most significant service sector in terms of its contribution to employment, trade and repair of vehicles, has been characterized by a significant decline in value-added per person employed during the 1990s. This is not surprising since it is a sector which is likely to contain a significant element of disguised unemployment. Barriers to entry to parts of the sector are relatively low, and in the absence of rapid employment growth in other

Table 3 Employment elasticity of manufacturing output in selected countries

Country	*Period*	*Employment elasticity*
Indonesia	1981–96	0.73
Malaysia	1981–95	0.65
China	1980–96	0.44
Thailand	1986–94	0.77
Vietnam[a]	1990–95	0.23
Vietnam[a]	1995–99	0.20

Source: Ghose (2000: Table 2); for Vietnam, own elaboration from GSO (2000: Tables 46, 47 and 48).
Note:
a The data for Vietnam are based on gross output and employment for the industrial sector including mining, electricity, gas and water, as well as manufacturing.

sectors it is likely to absorb growing numbers of workers at low and declining levels of productivity.

It has been argued that in the future industry needs to make a larger contribution to employment generation (World Bank 2001: 12). In the past, the employment performance of this sector has been disappointing despite significant growth in output. During the 1990s the employment elasticity for the industrial sector in Vietnam was particularly low. This is surprising since trade theory would suggest that the switch from a relatively closed economy, up to the late 1980s, to a much more open one in the 1990s, would have led to a substantial increase in employment. Other countries in the region which adopted outward-oriented policies in the 1980s, or even earlier, grew rapidly through increased integration with the global economy. These countries also experienced significant growth of manufacturing employment and much higher employment elasticities than Vietnam (see Table 3). While the comparator countries had elasticities in the range 0.4 to 0.8, in Vietnam in the 1990s the rate of growth of employment was less than a quarter of the rate of growth of output.

The slow growth of industrial employment in an increasingly open economy during the 1990s presents a paradox. Trade theory predicts that increased openness would lead to specialization in labour-intensive exports in an economy with abundant supplies of unskilled labour such as Vietnam. As a result, employment would grow rapidly. However, in practice the rate of growth of employment has been low and the sectors which have been most involved in the globalization process – manufacturing (and some sectors of agriculture) – have had the smallest impact on employment. The rest of the paper sets out to analyse the impact of the manufacturing sector on employment to explain the relatively limited employment effects of the major transformation from an inward-looking industry to an export-oriented industrial strategy. The next section discusses some of the explanations which have been put forward to account for this paradox.

3. INTERPRETATIONS OF SLOW EMPLOYMENT GROWTH IN VIETNAM

The most common explanations of the slow growth of employment in Vietnam emphasize the incomplete nature of the economic reform process. Despite the liberalization that took place in the 1990s, government policies, it is argued, still tend to misallocate resources, so that the employment benefits of integration with the global economy are not being realized. Three areas are central to this interpretation: trade policy, the role of state-owned enterprises (SOEs) and labour market policies.

(a) Trade policy

Despite the increased openness of the economy, significant elements of protection remain. The failure to generate more jobs in Vietnam, it is argued, is a result of a

continued emphasis on import substitution and the promotion of heavy industry (World Bank 2001: 12–13), and a failure to take advantage of the country's comparative advantage in labour-intensive manufactured goods (Belser 1999). As a result, capital-intensive industries are believed to have grown at a much faster rate than labour-intensive ones in the 1990s (Institute of Economics 2002: 37).

Studies of the effective rate of protection (ERP) in Vietnam have found that there tends to be a negative correlation between the level of ERP and the labour-intensity of production (Institute of Economics 2002: 48). This bias in the structure of protection has meant that investment tends to be concentrated in the more capital-intensive industries and has therefore had a limited impact on employment. Conversely, those sectors which have the greatest potential to generate jobs have faced greatest competition from imports.

A related argument is that, given its factor endowment, Vietnam should have a much higher level of exports of labour-intensive manufactures than it had in the late 1990s. Belser (1999), using data from an international study by Wood and Mayer (1998), shows that Vietnam has a far lower share of manufactures in its export structure than would be predicted by its endowments of land, skill and labour. This suggests that there are opportunities to substantially expand exports of labour-intensive manufactures. Vietnam's failure to specialize according to its comparative advantage, it is argued, has had a negative effect on employment since export industries are far more labour-intensive than its import-substituting industries (Belser 1999: Table 14).

(b) State-owned enterprises

A second line of argument emphasizes that the economy is still dominated by state-owned enterprises (SOEs) despite the economic reforms that have taken place since 1986. Indeed for some authors SOEs are at the heart of the employment problem since they are 'crowding out' private enterprise (Webster and Taussig 1999: 51; ILO 2000: 36). The state sector accounted for around 40 per cent of GDP throughout the 1990s, and for over 50 per cent of manufacturing GDP (GSO). In 2000, SOEs accounted for 31.6 per cent of GDP (with state administration accounting for a further 9 per cent), but were only responsible for 5.2 per cent of total employment (Steer and Taussig 2002: Table 4.1). This reflects the fact that SOEs are generally relatively capital-intensive compared to other sectors.

The other side of the coin is that the private domestic sector is relatively labour intensive and regarded by many as the potential solution to the employment problem (see, for example, ILO 2000; Holmström 2001: 6). However at present, the private sector is relatively small – the formal private sector accounted for only 7.6 per cent of GDP in 2000, the same as in 1996 (Steer and Taussig 2002: Table 5.1). Nevertheless, there is evidence of significant growth of employment in this

sector in the late 1990s, with some claiming that the private sector created almost 250,000 new jobs in 2000 (Steer and Taussig 2002: 27).

On this interpretation, the employment problem is a reflection of the capital-intensive nature of SOEs (and foreign investment), and the obstacles to the growth of the domestic private sector in Vietnam. A number of studies have analysed the constraints facing the private sector (Riedel 1997: Ch. III; Webster and Taussig 1999: Ch. IV; World Bank 1999: 13–21; ILO 2000: 35–8). Those identified include access to capital both for fixed investment and for working capital; knowledge of and access to markets (particularly international markets); problems of access to land; institutional problems and bureaucracy; preferential treatment given to SOEs, for example in terms of access to quotas and credit.[2] Although recent reforms such as the 2000 Enterprise Law have led to an increase in the number of private firms registered, it appears that many of the problems still persist (Steer and Taussig 2002: Ch. VI).

Another SOE-related factor which might account for slow overall growth in employment is the extensive restructuring and reorganization of SOEs and this has led to a decline in the number of workers in many of these firms (Le Xuan Ba *et al.* 2001: 202). Moreover because SOEs were heavily overmanned in the past, they have often been able to increase production without having to take on additional workers by using them more efficiently. As a result, few new workers were recruited except where new skills were required, and retiring workers were not replaced in order to rationalize the labour force. A report for ILO indicates that, 'This situation has contributed in large measure to the slow growth of industrial employment in Vietnam' (ILO 2000: 30).

(c) The labour market

Perhaps the most obvious starting point for any discussion of employment problems is in the functioning of the labour market. It is often argued that labour market distortions (for example, high wages obtained by well-organized trade unions, or legislation which limits the prerogative of firms to hire and fire workers) can have a negative effect on employment.[3] Firms will tend to adopt more capital-intensive techniques when faced with higher wages, or when they fear that they will find it difficult or costly to lay off workers.

In the Vietnamese case some authors have focused on problems in the labour market which tend to limit employment creation (Ronnas and Sjoberg 1995; Hopkins 1999, quoted in ILO 2000; McCarty 1999). The factors identified include the system of labour contracts which prohibits the use of short-term contracts to fill jobs which last more than a year, the role allotted to the trade unions and the minimum-wage legislation. There have also been other policies which have tended to restrict labour mobility such as the social insurance system which makes it difficult for workers to transfer pension rights and other benefits

when they change jobs, and controls on housing and residence which tend to restrict movement to areas with increasing employment opportunities.[4]

Others are more sceptical of the alleged impacts of Vietnamese legislation on the labour market. Nicholson (2001), for example, argues that their impact has been relatively muted since they only apply to a relatively small sector of economic activity and that, 'labour market policies are frequently observed in the breach rather than in practice' (Nicholson 2001: 41). Similarly, Belser (1999) does not regard the labour market as a major obstacle to employment creation. He considers three ways in which the regulation of the labour market in Vietnam might constrain employment. He concludes that the minimum wage for domestic companies is so low as not to be an obstacle, and that even the higher minimum wage which must be paid by foreign invested firms is not likely to have a significant adverse effect on Vietnamese competitiveness. Similarly, non-wage benefits are unlikely to depress employment creation. Belser expresses some concerns over the potential impact of the employment termination and dispute settlement measures in the Labour Code which might, if interpreted too strictly, discourage foreign investors from entering joint ventures with SOEs.

What all three of these explanations have in common is a belief that the slow growth of employment in Vietnam is a result of policy-induced 'distortions'. These distortions have led to resources being misallocated to the detriment of labour-intensive export industries and the private sector. The failure to generate more employment is seen as an indication that the reform process in Vietnam has not yet gone far enough. In the next section the extent to which slow employment growth in Vietnam during the 1990s can be attributed to the sectoral allocation of resources will be examined in detail.

4. DECOMPOSITION OF EMPLOYMENT GROWTH

The growth of industrial employment over a period can be decomposed into three main components: the growth of output, changes in the sectoral composition of output and changes in productivity. The exact formulation will depend on the weighting employed to decompose employment changes.

The change in employment can first of all be decomposed into changes in output and in the average employment coefficient (the amount of labour required to produce one unit of output):

$$\Delta L = l_1 Q_1 - l_0 Q_0 = l_0 \Delta Q + (\Delta l)\, Q_1 \tag{1}$$

where L is total employment, Q is output and l is the employment coefficient, and subscripts 0 and 1 refer to the initial and final year respectively.

The change in the average employment coefficient (Δl) can in turn be broken down into the change in the employment coefficient within each industry and the change in the share of each industry in total output:

$$\Delta l = \sum(s_{i1}l_{i1} - s_{i0}l_{i0}) = \sum(\Delta s_i l_{i0} + s_{i0}\Delta l_i + \Delta s_i \Delta l_i) \quad (2)$$

where subscript i refers to industry i and s_i is the share of industry i in total output. Substituting equation (2) into equation (1) gives:

$$\Delta L = l_0 \Delta Q + Q_1 \sum(\Delta s_i l_{i0} + s_{i0}\Delta l_i + \Delta s_i \Delta l_i) \quad (3)$$

The first term on the right-hand side measures the impact of the overall growth of output on employment. The second term is made up of three parts. The first is the effect of structural change, the second is the effect of changes in productivity, while the final term is a small interaction term. In other words, the change in the employment coefficient is broken down into within- and between-industry changes.

Data for industrial output and employment in Vietnam during the 1990s used different sectoral classifications. Since 1995 the Vietnam Standard Industrial Classification, based on the International Standard Industrial Classification (ISIC Rev. 3) has been used. This contains 23 manufacturing industries, 4 mining and quarrying industries, and 2 utility sectors. Prior to 1995, however, a different classification into 19 two-digit sectors was used. Rather than trying to map one classification onto the other, separate analysis of the sources of employment growth were undertaken for the period 1990–94 and 1995–99. It was not possible to extend the analysis beyond 1999 because of a lack of comparable data on employment by industry for more recent years.

Given the rapid growth of industrial output in Vietnam during the 1990s, it is obvious that in the absence of any structural change or productivity growth then industrial employment would have increased substantially. Table 4 shows that in these circumstances, employment would have increased by just under 1.5 million between 1990 and 1994 and by over 1.6 million between 1995 and 1999. In fact, however, the actual increase in employment was only just over 100,000 between 1990 and 1994 and under 300,000 for the period 1995–99.

This reflects a substantial fall in the employment per unit of output during both periods. What is of particular interest here is the extent to which this fall is due to the differential growth rates between industries, or alternatively can be attributed to changes in output per head within industry. The answer provided in Table 4 is unambiguous. Changes in productivity far outweigh structural change in explaining the low level of employment growth in Vietnamese industry. During the 1990–94 period the effects of changes in the composition of output are minimal, and although these are more significant in the later period, it is increasing output per person employed which has been the main factor in limiting employment growth throughout the 1990s.

This finding casts serious doubt on the conventional wisdom that the misallocation of resources in favour of capital-intensive industries has been the major cause of slow employment growth in Vietnam in recent years.

Table 4 Decomposition of employment growth in industry, 1990–94 and 1995–99

	1990–94	*1995–99*
Output growth	1,484,943	1,665,246
Structural change	–46,064	–252,260
Productivity growth	–1,296,941	–1,123,185
Interaction	–39,708	–1,172
Total employment change	102,229	288,628

Source: Own elaboration from GSO (2000: Tables 44, 45, 47 and 48).

The second argument that has often been advanced for slow employment growth, as was seen in the previous section, was the role played by SOEs in Vietnam. In order to look in more detail at this issue, a second decomposition of employment growth was carried out, this time by type of ownership rather than by industrial sector. Three groups of enterprises were distinguished: state-owned (both central and local), domestically owned (which include cooperatives, private, household and mixed enterprises) and foreign-invested firms. Figure 2 shows the growth of employment in each type of firm during the 1990s. As can be seen, the most rapid increase in employment was among foreign-invested firms which rose from under 10,000 in 1990 to almost 300,000 by the end of the decade. Employment in SOEs fluctuated without a significant trend, while private domestic firms contributed to the increase in employment.

Table 5 breaks down the contribution of each type of firm to the increase in employment during the first and second halves of the 1990s. Looking first at the impact of the changing share of output of each type of firm it can be seen that domestic firms, and to a lesser extent SOEs, have lost out to foreign-invested firms throughout the 1990s. Foreign firms increased their share of total output from just under 10 per cent in 1990 to more than 33 per cent by 1999. Because output per worker was significantly higher in foreign-owned firms, particularly compared to domestic private firms, but also compared to SOEs, then the increasing share of the foreign-invested sector during this period had a negative effect on employment overall.

As in the earlier decomposition, however, productivity changes played a far more significant role in limiting employment growth than sectoral changes. Both SOEs and domestic firms increased output per person employed significantly during the 1990s. In the case of SOEs, this was particularly marked during the first half of the decade when there was a wave of rationalization and total employment in SOEs declined. For domestic firms, the growth of productivity was of continuous significance throughout the period. Paradoxically, output per worker in the foreign-invested sector declined during both periods. This is unlikely to have been the result of falling productivity and is more probably a

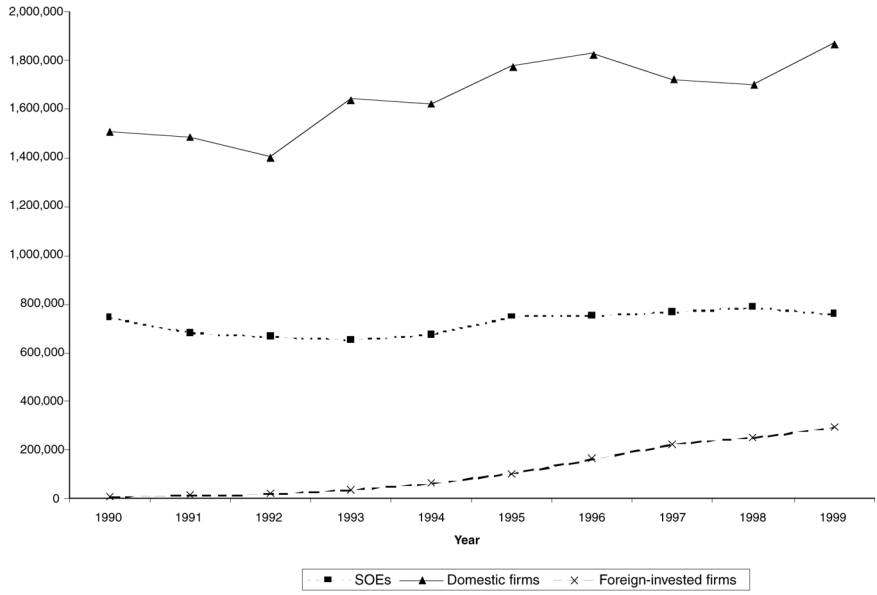

Figure 2 Industrial employment by ownership

Table 5 Decomposition of employment growth by ownership

		Share change	*Productivity change*	*Interaction*
SOEs	1990–95	–16,566	–652,346	7,657
	1995–99	–169,516	–341,382	47,330
Domestic firms	1990–95	–367,085	–819,227	105,166
	1995–99	–311,578	–804,609	86,482
Foreign firms	1990–95	9,288	51,216	25,706
	1995–99	65,586	41,401	15,908
All firms	1990–95	–374,364	–1,420,357	138,529
	1995–99	–415,508	–1,104,591	149,720

Source: GSO (2000: Tables 46, 49 and 50).

reflection of an increasing emphasis on more labour-intensive industries by foreign firms during the 1990s.

Although foreign firms had the highest levels of output per capita, the fact that this was falling during the period, while the share of foreign firms in output was increasing, partly offset the negative impacts of sectoral and productivity

changes on employment. This is indicated by the positive interaction term in Table 5.

This evidence reinforces the emphasis on productivity growth rather than structural changes as the main cause of slow employment growth in Vietnam during the 1990s. In relation to the claim that capital-intensive SOEs have crowded out more labour-intensive private firms, this has not been shown to be the case. Indeed, if any crowding out has played an important role in reducing employment growth, then it is the foreign-invested sector that has crowded out both private Vietnamese firms and SOEs with a negative impact on employment.

The second line of argument concerning SOEs discussed earlier does gain more support from this analysis, particularly during the early 1990s. Reforms introduced in 1989 ended the budgetary subsidies to SOEs, increased interest rates and hardened the budget constraint. The number of SOEs was reduced from over 3,000 in 1989 to just over 2,000 in 1993 (Chandrasiri and de Silva 1996: Table 8). As a result of this major restructuring, nearly 800,000 employees were laid off over a three-year period (Chandrasiri and de Silva 1996: Table 15). Data from the industry survey show that between 1990 and 1993, while the output of SOEs increased by over 40 per cent, employment declined by around 13 per cent (GSO 2000: Tables 49 and 46).

Between 1990 and 1995, the growth of productivity in SOEs reduced the potential number of jobs by 650,000 (see Table 5). This is consistent with the view that retrenchment of SOE workers in the early 1990s contributed to the low rate of growth of employment overall between 1990 and 1995. The loss of jobs attributable to productivity growth among SOEs represented 87.7 per cent of SOE employment in 1990, while the corresponding figure for domestic firms was 54.4 per cent. Between 1995 and 1999, however, there was no difference between the productivity effects for SOEs (45.5 per cent) and for private firms (45.2 per cent). This implies that the ability of SOEs to increase output without taking on additional workers in the late 1990s was no greater than that of other local firms.

5. PRODUCTIVITY GROWTH AND EMPLOYMENT

The previous section showed that the main causes of the slow growth of employment in Vietnamese industry in the 1990s were intra-industry rather than inter-industry changes (see Table 4). In other words, it is the increased output per worker that has occurred within industries that has been the main factor limiting employment growth. Shifts in the structure of production towards more capital-intensive sectors have played a rather minor role.[5] This section will examine further the causes of increased productivity at the industry level.

The Vietnamese manufacturing sector at the beginning of the 1990s was characterized by very low levels of productivity, antiquated machinery and backward technologies. Most of the heavy industry that existed at the time had been built before 1975 and was based on even older technologies from China and

Table 6 Value-added per worker in manufacturing (US$)

	1990	*2000*
Vietnam	971[a]	2,130
China	1,702	5,258
Indonesia	5,155	6,151
Malaysia	10,917	17,149[b]
Thailand	16,005	8,276

Source: Own elaboration from UNIDO database of Industrial Statistics.
Notes:
a Estimated from GSO data and includes mining, electricity, gas and water.
b Data for 1999.

the Soviet bloc (World Bank 1990: 53). The non-state manufacturing sector was in its infancy: 'It was dominated by inefficient and declining collective enterprises on the one hand and a multitude of small household enterprises, plagued by lack of capital and low productivity, on the other hand' (Ronnas 1998: 2–3).

This was reflected in the low level of value-added per person employed in manufacturing in Vietnam compared to other countries in the region.[6] Table 6 shows that productivity in Vietnam was only just over half that of China, less than a fifth of Indonesia's and less than a tenth of Malaysia's and Thailand's.[7] Moreover, since the 1990 figure for Vietnam includes mining and utilities, and these are sectors in which value-added per worker is higher than in manufacturing, the actual productivity gap in manufacturing was probably significantly greater than that reported here.

Table 6 also provides further evidence of the significant increase in productivity in Vietnam during the 1990s. Since the figure for the year 2000 refers only to the manufacturing sector, the growth of manufacturing productivity was even greater than the table suggests. The growth of productivity amongst SOEs in the 1990s was discussed in the previous section in the context of the restructuring that occurred after 1989. Ronnas (1998), based on two surveys of non-state manufacturing enterprises carried out in 1991 and 1997, confirms that growth in the non-state sector during the 1990s was also based much more on increased labour productivity rather than increased employment. The transformation of non-state manufacturing during the 1990s involved two parallel processes – the emergence of new private enterprises that were larger, more capital-intensive and with higher labour productivity than existing firms; and the growth and transformation of existing firms.

Productivity growth was particularly significant amongst the fastest growing enterprises where labour productivity increased by more than 20 per cent per annum on average, while employment grew much more slowly (Ronnas 1998: 32). This rapid increase in labour productivity reflected substantial increases in the

level of assets per worker among the firms surveyed, which more than doubled. As a result, the employment elasticity of growth was low in the non-state manufacturing sector during this period.

Thus an important factor contributing to the low growth in industrial employment during the 1990s was undoubtedly the backwardness of industry at the start of the period. If industry was to survive, particularly in the face of increased international competition as a result of the opening of the economy, it needed to modernize rapidly. As Ronnas (1998: 23–4) shows, a very high rate of capital accumulation was a precondition of growth.

There is considerable evidence to suggest that the shift to greater openness in Vietnam was an important factor leading to increased productivity which limited employment growth. First, the rate of growth of output per capita was significantly higher in the 1990s than in the second half of the 1980s before the economy was opened up and the boom in exports got under way. Second, there are very substantial differences in productivity growth between different sectors. Those sectors that produce traded goods and have therefore been most affected by increased globalization – agriculture and industry – have experienced rapid productivity growth, while sectors producing non-tradables, namely services, have seen labour productivity stagnate. There is also evidence at a more disaggregated level which suggests that increases in the ratio of imports to production in different industrial branches is correlated with productivity growth (Jenkins 2004).

6. LINKAGES

The extent to which an increase in output creates additional employment depends in part on the degree of integration of the local economy. The expansion of output in a particular industry creates an increase in direct employment in that industry. It also increases the demand for a range of inputs from a number of other industries. If these inputs are provided locally then additional indirect employment is created by the initial growth of demand. However, if the industry depends almost entirely on imported inputs, the indirect employment effects will be limited.

In the case of Vietnam it has been argued that many manufacturing industries have a high share of imports to total inputs. As a result there is a significant leakage of expenditure from the manufacturing sector into imports which tends to dampen the multiplier effects (Tarp *et al.* 2002). Thus, one cause of the relatively slow growth of total manufacturing employment in Vietnam has been the lack of integration of the domestic economy. This is another reason why, despite the growth of exports of labour-intensive manufactures, employment has not grown more rapidly. Indeed, some of the key industries in terms of their contribution to exports rely heavily on imported inputs.

Table 7 shows the ratio of imported materials and supplies to sales for the four most important industries, which between them accounted for over 70 per cent of manufactured exports in 1999. Of these, only food and beverages has an import

Table 7 Ratio of imported materials and supplies to sales

Food and beverages	21.7%
Leather and footwear	57.3%
Clothing	48.1%
Textiles	44.1%
Manufacturing average	32.0%

Source: Own elaboration from GSO (2000: Tables 25 and 35).

content of less than the manufacturing average, not surprisingly since this industry uses local agricultural inputs. However, in leather and footwear, clothing and textiles, imported inputs accounted for a substantial share of output.

7. CONCLUSION

The dominant view of the employment problem in Vietnam is that the limited growth of industrial jobs is a result of one or more types of resource misallocation. These reflect a number of biases in favour of:

- import substitution as opposed to exports;
- capital-intensive as opposed to labour-intensive industries;
- SOEs as opposed to private firms.

These are reflected in the government's trade policies, the support given to SOEs, and a labour regime which inhibits flexibility in the labour market.

The policy implication drawn from this view is that in order to generate a faster rate of employment growth, Vietnam needs to further liberalize its economy. This would include further trade reform to remove the bias in favour of capital-intensive industries and the anti-export bias which hinders the development of labour-intensive manufactured exports; further equitization of SOEs and the creation of a 'level playing field' for private enterprise; and reforms to the 1995 Labour Code and the social insurance system to introduce more competition and mobility in the labour market.

The evidence provided here clearly shows that the slow growth of industrial employment in Vietnam during the 1990s has not been a result of an excessive concentration of resources on capital-intensive industries or state-owned enterprises. It is primarily the changes that have occurred within industries, resulting in increases in labour productivity from the very low levels at the beginning of the 1990s, that have prevented industry from absorbing more workers. A further contributory factor has been the high level of imported inputs used in the industrial sector which has limited the multiplier effects of increased output.

Despite the productivity improvements that have taken place over the past decade, manufacturing value-added per person employed in the year 2000 in

Vietnam still lagged behind that of its neighbours. Labour productivity was only around an eighth of that of Malaysia, a quarter of Thailand's and less than half that of China (see Table 6), so that further large increases in productivity are likely to be necessary in the future, which will continue to limit the rate of growth of employment. Moreover, if the planned 'equitization' of SOEs is implemented, this is likely to result in retrenchments which will further reduce the overall employment growth in industry.[8] The industrial sector therefore is unlikely to make a major contribution to resolving the employment problem in Vietnam in the immediate future, even with continued growth of labour-intensive exports. In the longer term, however, once productivity levels begin to approach those of other countries in the region, and if greater domestic linkages can be created, then the employment elasticity of output will tend to rise.

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NOTES

1 The figure of 6 million is taken from the MOLISA data in Table 1. GSO and the Population Census indicate an increase of over 7 million over a decade. The sectoral data discussed in this section were also provided by MOLISA.

2 Riedel (1997: 15) based on a survey of 50 enterprises finds that credit is the main problem facing the private sector in Vietnam. Webster and Taussig (1999: Box 4.1) report that the three most frequently cited problems by 95 larger private manufacturing firms in Vietnam are capital for fixed investment, lack of information and working capital, in that order.

3 In one of the other countries which form part of this project, South Africa, it is often argued (particularly by the World Bank and the IMF) that a major cause of high unemployment and low employment growth in the country is the system of labour relations and the strength of the trade union movement.

4 For a fuller discussion of labour market regulation in Vietnam and the reforms to the Labour Code due to come into force in 2003, see the background paper prepared for this project by Mekong Economics (2002: Sec. 1.3).

5 Although labour-intensive industries such as clothing and footwear have increased their share of manufacturing output, so have some capital-intensive industries such as chemicals, rubber and plastic products, and other transport equipment. The net effect of these changes largely offset each other.

6 I am indebted to Brian van Arkadie for drawing my attention to this point.
7 In order to maintain comparability between countries, these figures do not include output and employment in the household sector. If this had been included, value-added per person in Vietnam would have been less than half of the figure reported here. All figures have been converted to US dollars at the average official exchange rate, which may create some distortions when the exchange rate is over-valued.
8 A recent World Bank study estimates that a quarter of all SOE jobs could be lost over the next five years (Belser and Rama 2002: 29).

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