# Changes in Ownership and Producer Concentration after the Implementation of Vietnam's Enterprise Law 

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#### Abstract

In January 2000, Vietnam began implementing a far-reaching Enterprise Law that reduced numerous barriers to private business and weakened policies favoring state-owned enterprises (SOEs), and to a lesser extent, foreign-owned multinational corporations (MNCs). Partially as a result of these institutional changes, the number of private firms more than doubled in 2000-2004, both in manufacturing and non-manufacturing, although they remained much smaller than SOEs or MNCs throughout the period. Private manufacturers were also less profitable than SOEs and MNCs, and new firms, especially new MNCs, also tended to have relatively low profits. Entrenched SOEs and MNCs were thus better positioned to exercise market power than private firms. Moreover, despite a strong trend toward reduced producer concentration during this period, econometric evidence suggests that large SOE and MNC presence or large changes in SOE and MNC presence tended to accelerate increases in producer concentration. Although this evidence does not suggest that SOEs or MNCs should be restricted on the basis of ownership, it does suggest that policy makers should be aware that large or increasing presence of SOEs and MNCs may raise anti-trust issues, especially in industries where competition is weak.


Keywords: producer concentration, ownership, multinational corporations, state-owned enterprises, Vietnam, Enterprise Law
JEL Categories: F23, K22, L11, L32, L33, O53

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## 1. Introduction

In January 2000, Vietnam began implementing a far-reaching Enterprise Law that reduced numerous barriers to private business. This was followed by regulatory reforms and further legal changes such as unification of various enterprise and investment laws in 2006. Partially as a result of these important institutional changes, the number of private firms more than doubled between 2000 and 2004 to 80,693 in the latter year (Table 1) and preliminary estimates suggest another large (25 percent) increase in 2005. ${ }^{1}$ The number of foreign-owned multinational corporations (MNCs) was much smaller but also more than doubled in 2000-2004 to 3,057 in the latter year. The number of state-owned enterprises (SOEs) was also small and declined 20 percent during 2000-2004 to 4,582 in the latter year, partially reflecting efforts to advance privatization. ${ }^{2}$ Although employment and sales also grew most rapidly in private firms (Tables 2, 3), private firms were much smaller than SOEs or MNCs, accounting for only 43 percent of enterprise employment and 37 percent of firm sales in 2004, compared to 91 percent of the number of firms.

An important implication of the enterprise survey data is that SOE shares of enterprise activity

[^0]fell and private shares rose much more rapidly than corresponding shares of the whole economy. For example, the enterprise sales data (Figure 1) imply a rapid fall in the SOE share and a corresponding increase in the private share. ${ }^{3}$ On the other hand, according to national accounts data, SOE and private shares of non-household GDP were almost identical to shares of enterprise sales in 2000, but changed very little by 2004-2005 ${ }^{4}$. Both sources also suggest identical MNC shares of one-fifth or a little more, which increased slightly over time. There are many possible reasons for discrepancies between these two data sources, but the large differences in trends of SOE and private shares are difficult to explain unless there are substantial errors, coverage changes, or definitional differences in one or both of these sources. ${ }^{5}$

Although the institutional and ownership structures of the Vietnamese economy have been analyzed in previous studies, the relationships of these changes to producer concentration and other indicators of competition in Vietnamese markets have not been well examined. ${ }^{6}$ The purpose of this

[^1]paper is to thus examine interactions between ownership structure or changes in ownership structure, on the one hand, and changes in producer concentration in Vietnam's manufacturing industries on the other. ${ }^{7}$ To this end, the paper first reviews Vietnam's Enterprise Law and related reforms (Section 2) and examines patterns observed in ownership structure (Section 3), profitability (Section 4), as well as new competition, exit, and producer concentration (Section 5). Finally, relationships between changes in market structure and ownership structure are analyzed in two different samples of manufacturing industries (Section 6) and some concluding remarks are offered (Section 7).

## 2. Vietnam's Enterprise Law and Related Reforms

Prior to the implementation of the Enterprise Law, private businesses had a weak legal status and faced a myriad of administrative and regulatory barriers that impeded the establishment and operations of private businesses to a much greater extent than they affected SOEs or even MNCs. ${ }^{8}$

This institutional structure was a legacy of the planned economy that prevailed until the doi moi (reforms) of 1986 began the transition toward a market economy. Early in the transition, the

[^2]government was preoccupied with controlling extremely high levels of inflation and insuring the agricultural sector, which still employs the majority of Vietnamese workers, was able to fulfill the population's basic needs. Politicians and bureaucrats explicitly favored SOEs over other enterprises through the mid- to late-1990s. Such favoritism abated after the Enterprise Law's implementation but remains a factor, particularly in so-called key sectors like energy and primary metals.

There were some notable exceptions, however. One of doi moi's distinguishing characteristics was the introduction of a relatively liberal FDI (foreign direct investment) Law early in the reform process (approved in 1987, Van Arkadie and Mallon, p. 109). This law was subsequently amended several times (1990, 1992, 1997, and 2000) and provided the legal underpinning for regulation of MNCs. The law was liberal in the sense that it imposed relatively few formal restrictions on investing MNCs, although it reserved large discretionary power for the government to reject foreign investments it found objectionable. Unlike many other Southeast Asian economies, there have been no formal restrictions on the size of foreign ownership shares. Moreover, even in so-called key sectors where SOEs were generally favored (e.g., energy), MNCs were allowed to invest, especially when they were thought to make contributions (e.g., in terms of technology or marketing know-how) that local firms were incapable of. On the other hand, implementation of this law has not always been smooth and a number of other laws and regulations affecting MNC operations (e.g., regarding land use or construction permits) remained unclear and their implementation uneven. In the mid-1990s, FDI by MNCs also became a large source of foreign exchange. ${ }^{9}$ Correspondingly, during this period,

[^3]Vietnamese authorities also put a high priority on maintaining these flows until the current account turned into surplus in 1999-2001 after the Asian financial crisis.

A similar law governing domestic investment was also promulgated in 1994 and amended in 1998, but there were also separate laws governing the behavior of SOEs (1995) and various forms of private firms (e.g., a law on joint stock companies, limited liability companies, and unlimited liability companies enacted in 1990 and amended in 1994, as well as a law on cooperatives approved in 1996; Van Arkadie and Mallon, p. 109). One of the largest contributions of the 2000 Enterprise Law was to unify many provisions of these laws. However, there is still a plethora of laws and regulations governing private firms, including the Bankruptcy Law (approved 1993), the Commercial Code (approved 1997), the Land Law (approved 1987 and amended in 1993 and 2001), and the Labor Code (approved 1994), as well as several sector specific laws governing firms in mining (1996) and finance (approved 1997), and insurance (approved 2000).

The implementation of the Enterprise Law from 2000 consolidated the legal status of larger private businesses by putting them under the same legal umbrella as SOEs, in addition to facilitating the privatization of SOEs. The Enterprise Law's implementation, though uneven, has improved the climate for private business and is an important factor encouraging the rapid growth of private business after 2000. Nonetheless, one continues to hear stories about how bureaucrats tend to target private firms, especially large and rapidly growing private firms, for various regulatory interventions (inspections, audits, etc.). The size of the problem presented by these regulatory interventions is This more than offset some very large current account deficits, which in turn averaged over 6 percent of GDP during this period.
unclear and the general consensus is that the situation is improving. However, it is equally clear that they continue to affect private firms disproportionately. The large numbers of laws, decrees, and regulations which govern firm behavior have created a complicated situation in which regulators and firms both find it difficult to ascertain the specific regulations that apply to each specific case. Recognition of this legal and regulatory overlap was a major factor behind the promulgation of a single Investment Law governing investment from all sources and a concurrent revision of the Enterprise Law to be consistent with the new Investment Law, which were implemented in 2006. ${ }^{10}$

The 1997 Commercial Law is also particularly important in this context because it contains articles that serve as the basis for Vietnam's limited competition policy. As explained by Vu (2005, pp. 304-306), the law forbids a number of non-competitive practices (e.g., speculation, predatory pricing, slandering or libeling a competitor's reputation, harming a competitor's employees or customers), ensures equal treatment for firms of all ownership types, and guarantees the property and other legal rights of private traders. On the other hand, Vu also emphasizes that the law was drafted when "the government retained a strong central planning mentality". This perspective is reflected in a number of the law's provisions which, for example, set out state guidelines for each sector, highlight the leading role of the state in commercial activities and price management, and encourage

[^4]private firms to form joint ventures with state trading companies.

Vietnam's government has also had substantial power to control prices under the Cabinet's Price Decision of 1992 and later the 2002 Price Ordinance (Vu 2005, pp. 306-307). The 1992 Price Decision was not intended as a tool of commercial policy but rather as a means of central planning and it contained several provisions that were inconsistent with Vietnam's commitments under the ASEAN (Association of Southeast Asian Nations) Free Trade Area (AFTA) agreement and other trade agreements. The 2002 Price Ordinance was designed to address these shortcomings and it contained the first explicit provisions dealing with monopolistic pricing, collusion, and predatory pricing. However, neither the 2002 Price Ordinance nor the 1997 Commercial Law has been used as a basis for implementing a clear competition policy yet. Here again problems arise from both the complexity of related laws, decrees, and regulations, as well as from the ability of the bureaucracy to implement such measures. The Price Ordinance also emphasizes the key role of the state in setting prices of items "important to the people's well being" (Vu 2005, p. 307).

The preceding discussion highlights four important points regarding the Enterprise Law and related reforms. First, the legacy of central planning is still strong in that the government has substantial power to encourage SOEs, control both local and foreign private firms, and regulate prices in so-called key sectors of the economy. Second, the Enterprise Law of 2000 was a major step toward reducing the discretionary power of the government to control firm activity and the major beneficiaries of this change were clearly local private businesses. Third, although the 1997 Commercial Law and the 2002 Price Ordinance establish a legal basis for competition policy,

Vietnam has yet to implement competition policy often or consistently. Fourth, the implementation of these laws as well as related decrees and regulations has been uneven, partially because the plethora of measures have created a complex regulatory environment and partially because many bureaucrats have been slow to discard old practices that favored SOEs and facilitated strong government intervention in private business.

## 3. Changing Ownership Patterns in Vietnamese Manufacturing

As indicated in the introduction, the number of private firms grew extremely rapidly in 2000-2004, though growth was slightly slower in manufacturing (2.1-fold) than overall (Table 1). Increases were particularly rapid (8-fold or more) in recycling, office and computing machinery, and publishing, and were also relatively rapid (3-fold or more) in apparel, basic metals, fabricated metals, general machinery, and radio, television, \& communication machinery. However, in marked contrast to SOEs and MNCs, the majority of private manufacturers were quite small throughout this period. ${ }^{11}$

The number of SOEs fell at a very similar rate in manufacturing (21 percent) and overall (Table 1). In manufacturing, the number fell particularly rapidly ( 30 percent or more) in five industries, beverages, wood, radio, television, and communication machinery, motor vehicles, and miscellaneous manufacturing. Conversely, the number of MNCs more than doubled overall, and

[^5]increased even more rapidly (2.2-fold) in manufacturing. Increases were particularly rapid (3.5-fold or more) in apparel, publishing, office and computing machinery, and furniture.

During 2000-2004, increases in manufacturing employment were most rapid in MNCs (2.7 fold) followed by private firms (2.2-fold). Despite the decrease in the number of manufacturing SOEs, employment continued to rise slightly (6 percent) during this period. SOE employment was also relatively stable, increasing more than 30 percent in only three industries (rubber products, motor vehicles, other transportation equipment) and never declining more than 25 percent (in precision machinery). On the other hand, employment in private firms and MNCs grew relatively rapidly (3-fold or more) in a wide range of industries. ${ }^{12}$

Sales grew especially rapidly among private manufacturers, 3.2 -fold on average, compared to MNCs (2.6-fold) and SOEs (1.9-fold, Table 3). Here again, increases were relatively rapid (4-fold or more) for private manufacturers in about half (13) of the 27 manufacturing industries listed in Table 3. ${ }^{13}$ For SOEs, growth was also relatively rapid compared to the manufacturing average (2.4-fold or more) in about a third of the industries (10) but sales of manufacturing MNCs grew relatively rapidly (3.3-fold or more) in less than a fourth (6) of these industries. ${ }^{14}$

[^6]
## 4. Patterns of Firm Profitability

Firm profitability is an important indicator of firm performance which reflects in part the degree of producer concentration and competition in an industry. This occurs because, ceteris peribus, greater concentration is likely to lead to decreased competition and enhance the ability of large firms to capture rents accruing from imperfect competition. Although it is not a straightforward task, patterns observed in profit data can thus help illuminate the extent of competition and which firm groups (private, SOE, or MNC) are best able to capture rents from imperfect competition. ${ }^{15}$

For example, both gross and operating profit rates (as a ratio to sales) were relatively small for private manufacturers on average (1.0 percent each in 2000 and 1.9-2.1 percent in 2004; Tables 4-5). On the other hand, profit rates were somewhat higher in SOEs (4.1-4.2 percent and 3.3-3.7 percent, respectively). In 2000, gross profit rates were lower for MNCs (2.0 percent) than for SOEs, but operating profit rates were roughly equal ( 4.2 percent) and by 2004 MNCs were clearly the most profitable on average (rates of 5.4 percent each). At the industry level, gross profit rates were also relatively high ( 7.0 percent or more) in a similar number of industries for SOEs (4 of 24) and MNCs (3 of 26) but fewer for private firms (1 of 27). However, operating profits rates exceeded this threshold for MNCs in more industries (6) than for SOEs (3) or private firms (1). By 2004 these differences were even more striking with MNCs earning relatively high gross and operating profits in one third (9 of 27) of these industries, while SOE and private firm profitability exceeded this

[^7]threshold in only one industry each.

High profits were most common in beverages (both measures for SOEs in both years and MNCs in 2004) and precision machinery (both measures for private firms in both years and MNCs in 2004). High profits were also common for MNCs in petroleum products, motor vehicles, and other transportation equipment (both measures in both years) and in radio, television and communication machinery (gross profits in 2004, operating profits in both years). Both MNCs (operating profits in both years and gross profits in 2004) and SOEs (operating profits) also earned high profits in non-metallic mineral products in 2000. Although MNCs had despite relatively high profits on average and in a larger number of industries than private firms or SOEs, negative profit rates were also relatively common among MNCs. ${ }^{16}$

There is thus a rather strong tendency for profits to be highest in MNCs and lowest in private firms. Combined with the fact that private firms tend to be relatively small, this pattern suggests that private firms are generally less able to extract rents from imperfect competition than SOEs or MNCs, as might be expected. Moreover, the data might also suggest that MNCs are better able to extract such rents even though differences in size are often not that large. On the other hand, it must also be recognized that large profits can be the result of producing relatively efficiently and thus at relatively low cost.

[^8]For example, similar to the patterns observed in the profit data, calculations of sales per employee from Tables 1 and 3 suggests that average labor productivity was highest in MNCs (an average of 286 million dong in 2000 and 276 million dong in 2004), followed by SOEs ( 131 million dong and 234 million dong, respectively) and then private firms ( 97 million dong and 154 million dong, respectively). Sales per worker was also highest in MNCs for over two-thirds of the 27 industries ( 20 in 2000, 19 in 2004) but in far fewer industries for SOEs ( 4 in 2000, 7 in 2004) and private firms (3 in 2000, 1 in 2004). Although sales per worker is only a crude measure of productivity, this pattern indicates that high profits in MNCs result at least in part from high productivity and low costs.

## 5. New Competition, Exit, and Producer Concentration

The large increase in enterprise activity described in the previous section highlights the extremely dynamic nature of Vietnam's corporate sector after the implementation of the Enterprise Law. This is underscored by the fact that 65 percent of 2004 sales by private manufacturers were made by new competitors that entered the market between 2001 and 2004 (Table 6). Corresponding shares were much smaller for SOEs and MNCs, but new competitors accounted for over a third of sales by these firms as well. New competitors can be divided into new entrants and old firms changing industries and the category of new entrants is much larger. ${ }^{17}$ Firms that subsequently exited also accounted for about a third of sales in SOEs and private firms in 2000, suggesting

[^9]particularly large turnover in these groups. The large turnover of SOEs seems somewhat strange in view of Vietnam's efforts to privatize SOEs and suggests that SOE restructuring may have led to the simultaneous closing and opening of firms as a result of mergers or other tie ups. ${ }^{18}$

As might be expected, new competitors tended to have lower gross profit rates than all firms in 2004, implying that older, more established firms tended to have relatively high profit rates (Tables 4, 6). On average, the difference between new competitors and all firms was more pronounced for MNCs ( -2.1 percentage points) than for SOEs ( -0.6 percentage points) and private firms ( -0.2 percentage points, Tables 4, 6). Negative differentials between new competitors and all firms were also most common for MNCs (21 of 25 manufacturing industries), and were more common for private firms (17 of 26 industries) than for SOEs (11 of 24 industries). The prevalence of relatively low profits among new competitors that are MNCs reflects the numerous transactions costs that MNCs often encounter when entering new markets. On the other hand, relatively small differentials suggest that such costs are relatively small for most new private firms.

Rapid firm growth and the surge in new competition have also been accompanied by some substantial reductions of producer concentration in Vietnam. For example, the mean 4-firm concentration ratio for the 27 manufacturing industries listed in Tables in the aforementioned tables fell from 42 percent in 2000 to 35 percent in 2004 and the mean Herfindahl index, another common measure of producer concentration, fell a larger percentage, from 0.115 to 0.063 (Table 7). The

[^10]increased level of competition implied by these figures was widespread across industries. The 4-firm concentration ratio fell in 22 of the 27 manufacturing industries listed in Table 7 (and previous tables), while the Herfindahl index declined in 24 of these industries. Moreover, in 2004 the 4 -firm concentration ratio exceeded 40 percent in a third of the industries compared to about half (13) of the industries in 2000. Conspicuous exceptions to the trend toward increased producer competition were observed in tobacco and beverages, two industries with relatively large SOE and MNC presence (c.f., Tables 1-3). ${ }^{19}$

Despite the trend toward lower concentration, 4-firm concentration ratios suggest a relatively high level of producer concentration in a number of industries, even at a rather aggregate level. For example, these ratios exceeded 60 percent in five industries (recycling, office and computing machinery, petroleum products, precision machinery and tobacco) in 2000 and in the first three of these industries in 2004 (Table 7). In 2000, these ratios were moderately high ( $36-51$ percent) in another 11 industries (other transportation machinery, basic metals, motor vehicles, rubber, paper, general machinery, radio, television \& communication machinery, beverages, leather, miscellaneous manufacturing, and footwear). In 2000-2004, 4-firm concentration ratios dropped markedly (9.9 percentage points or more) in three of the most concentrated industries (recycling, petroleum products, and precision machinery) as well as four of the 11 moderately concentrated industries (basic metals, rubber, paper, and miscellaneous manufacturing). Nonetheless, in 2004, the most concentrated five industries (office and computing machinery, petroleum products, tobacco,

[^11]recycling, and beverages) still had 4-firm concentration ratios of 50 percent or more, while nine more industries (precision machinery, leather, other transportation machinery, motor vehicles, radio, television \& communication machinery, basic metals, footwear, rubber, general machinery, and electrical machinery) had ratios of $34-47$ percent.

Despite obvious trends toward reduced producer concentration after the implementation of the Enterprise Law, one cannot be sure that competition has actually increased for several reasons. First, in the industrial organization literature (Martin 2002; Schmalensee 1989) it has generally been most common to define markets in terms of production or sales by firms or plants at a relatively disaggregate level such as the 3- or 4-digit level of Vietnam's Standard Industrial Classification (VSIC), which is very similar to revision 3 of the International Standard Industrial Classification. However, this approach is problematic when large multi-product firms must be classified into a single industry as in this case. Second, the existence of intermediate transactions between firms in different industries also complicates the definition of a market and the meaning of producer concentration. For example, if a manufacturer sells a product to a wholesale trader, who then sells it using the services of a logistics firm to facilitate sale to a retailer, who then makes the sale to the final consumer at a price that includes substantial rents resulting from the exercise of market power, one has to determine how much of the market power is exercised by each of these firms. ${ }^{20}$

Third, the fact that Vietnam is a small, open economy is another important factor complicating

[^12]the definition of markets and the meaning of producer concentration. An extreme example is when there is only one domestic producer but the market is still extremely competitive because of import competition. Although standard approaches to industrial organization (e.g., Martin 2002; Schmalensee 1989) usually ignore this problem by assuming a closed economy, the literature on small, open developing economies such as Thailand and Vietnam (e.g., Athukorarla 2006, Nikomborirak 2005, and Vu 2005) often emphasizes how the degree of competition is closely related to the degree of protection in these economies. Related problems are also very important in Vietnam, where imports of manufactures amounted to over three-fourths of manufacturing sales and manufacturing exports accounted for about one-half or slightly less of related sales (Table 7). Imports and exports were both relatively large relative to sales in a wide range of industries (textiles, apparel, leather and footwear, petroleum products, electrical machinery, radio, television, and communication machinery, and precision machinery). ${ }^{21}$

## 6. Relating Trends in Producer Concentration to Ownership Patterns

This section attempts to analyze the effects of ownership patterns or changes in those patterns

[^13]on changes in producer concentration after controlling for other factors suggested by the standard industrial organization literature (e.g., Levy 1985, p. 61). This approach specifies long-term changes in an industry's producer concentration over a period as a function of two measures of entry barriers (minimum efficient scale for a firm in an industry, the capital requirements of a minimum efficient scale firm in an industry) in the initial year, market growth during the period studied (the growth of industry sales during the period), and the level of concentration in the initial year, which reflects the adjustment toward long-run equilibrium. The entry barrier variables and the adjustment term are all expected to be positively correlated with changes in concentration. ${ }^{22}$ Entry barriers are often expected to be higher in slower growing industries, and if this is the case, the market growth variable will be negatively correlated with changes in concentration. On the other hand, it may also be possible for large firms to expand relatively rapidly in anticipation of higher growth, and if this is the case, the correlation will be positive correlation (Levy p. 57).

The major purpose of the analysis is to examine the relationships among changes in producer concentration and ownership patterns in Vietnamese manufacturing, after removing the influences of the four control variables described above. Relationships between changes in concentration and ownership structure at the beginning of the period are analyzed by adding initial levels of SOE and MNC shares of industry sales to the basic specification (equations 1,3 ), while relationships between

[^14]changes in concentration and changes in ownership structure during the period are analyzed by adding the changes in SOE and MNC shares of industry sales to the basic specification (equations 2, 4). The resulting equations to estimate are thus:
(1) $\Delta C 4_{j, 00-04}=a 0+a 1\left(M S_{j, 00}\right)+a 2\left(K R_{j, 00}\right)+a 3\left(g S L_{j, 00-04}\right)+a 4\left(C 4_{j, 00}\right)+a 5\left(S O E_{j, 00}\right)+a 6\left(M N C_{j, 00}\right)$
(2) $\Delta C 4_{j, 00-04}=b 0+b 1\left(M S_{j, 00}\right)+b 2\left(K R_{j, 00}\right)+b 3\left(g S L_{j, 00-04}\right)+b 4\left(C 4_{j, 00}\right)+b 5\left(\Delta S O E_{j, 00-04}\right)$ $+b 6\left(\Delta M N C_{j, 00-04}\right)$
(3) $\Delta H F_{j, 00-04}=c 0+c l\left(M S_{j, 00}\right)+c 2\left(K R_{j, 00}\right)+c 3\left(g S L_{j, 00-04}\right)+c 4\left(H F_{j, 00}\right)+c 5\left(S O E_{j, 00}\right)+c 6\left(M N C_{j, 00}\right)$
(4) $\Delta H F_{j, 00-04}=d 0+d 1\left(M S_{j, 00}\right)+d 2\left(K R_{j, 00}\right)+d 3\left(g S L_{j, 00-04}\right)+d 4\left(H F_{j, 00}\right)+d 5\left(\Delta S O E_{j, 00-04}\right)$
$$
+d \sigma\left(\Delta M N C_{j, 00-04}\right)
$$
where
$C 4_{j, 00}=4$-firm concentration ratio for industry j in 2000 (percent)
$\Delta C 4_{j, 00-04}=$ change in 4-firm concentration ratio for industry j between 2000 and 2004 (percentage points)
$g S L_{j, 00-04}=$ growth of sales in industry j between 2000 and 2004 (percent)
$H F 4_{j, 00}=$ Herfindahl index for industry j in 2000 (percent [=index* 100])
$\triangle H F 4_{j, 00-04 j}=$ change in 4 -firm concentration ratio for industry j between 2000 and 2004 (percent [=index change*100])
$K R_{00_{j}}=$ absolute capital requirements of firms of minimum efficient scale firm in industry j in 2000 (average fixed assets of the largest firms accounting for a $50 \%$ share of industry sales, trillion current dong)
$M N C_{j, 00}=$ MNC share of sales in industry j in 2000
$\triangle M N C_{j, 00-04}=$ change in MNC share of sales in industry j between 2000 and 2004
$M S_{j, 00}=$ minimum efficient scale for a firm in industry j in 2000 (average sales of the largest firms accounting for a $50 \%$ share of industry sales, trillion current dong)
$S O E_{j, 00}=$ SOE share of sales in industry j in 2000
$\triangle S O E_{j, 00-04}=$ change in SOE share of sales in industry j between 2000 and 2004

Most previous studies (e.g., Levy 1985 and Sleuwaegen and Yamawaki 1988) typically analyze relatively long periods of about a decade or more in samples of 100-200 industries. However, the time span of available data is much shorter and the industry samples ( 27 or 61 ) are also much smaller. Smaller samples result because use of more detailed industry classifications would yield a
number of extremely small industries in the Vietnamese case and it is probably inappropriate to define industries so narrowly when estimating these equations. Although the 27 industry sample shown in previous tables is uncomfortably small, estimates are also performed in this sample, in addition to the 61-industry sample of 3-digit VSIC industries, to check the robustness of the results to the degree of aggregation. Similarly, two measures of changes in concentration, the 4-firm concentration ratio and the change in the Herfindahl index, are used to examine the robustness of the results to alternative definitions of producer concentration. All equations are estimated by ordinary least squares with robust standard errors because it is highly likely that the market barrier variables are a cause of heterscedasticity. ${ }^{23}$

The results in Table 8 first indicate that fits of the equations are much better in the smaller 27 -industry samples, but the results are similar in both samples in a number of important respects. First, the two entry barrier variables are never significant at the standard 5 percent level or even at the weaker 10 percent level in any equation. Second, adjustment coefficients are negative and significant in except equation (1), where they are weakly significant (27 industries) or insignificant (61 industries). Taken together, the above results might suggest that Levy's basic model does not adequately reflect the adjustment process during this period in Vietnamese manufacturing. On the other hand, the apparently perverse sign on the adjustment variable was also observed in several European samples (Sleuwaegen and Yamawaki 1988) and is consistent in all specifications here. Furthermore, this result suggests that producer concentration fell most rapidly in industries that were

[^15]relatively highly concentrated in 2000, and is consistent with the patterns observed in the previous section. Similar to most results in Sleuwaegen and Yamawaki (1988) and a few in Levy (1985), correlations between changes in concentration and the growth of sales were also consistently negative and significant at standard levels in all of the 61 -industry regressions and in the two 27 -industry regressions that examined the relationship between changes in concentration and changes in ownership shares (equations 2, 4).

SOE shares and changes in SOE shares were both positively correlated with changes in concentration in the 27-industry regressions (Table 8). These coefficients were significant at standard levels except in equation (3), where the relationship in question was weakly significant at the 7 percent level. In the 61 -industry regressions, the relationship of changes in concentration to changes to SOE shares was also positive and highly significant (equations 2, 4) but the relationship to initial SOE shares was not significant at standard levels. Changes in concentration were positively and significantly related to initial MNC shares in the 27-industry regressions and to changes in MNC shares in the 61 -indsutry regressions. However relationships to the changes in MNC shares in the 27-industry regressions and to initial MNC shares in the 61 -industry regressions were insignificant. ,

In short, these estimates first suggest that changes in producer concentration were unrelated to initial entry barriers in Vietnamese manufacturing during 2000-2004, but negatively correlated with market growth and initial levels of concentration in most specifications. The results also suggest that correlations between changes in concentration on the one hand, and initial levels of ownership shares or changes in those ownership shares on the other hand, were either positive or statistically
insignificant for both SOEs and MNCs. Significant or weakly significant and positive relationships were more common and consistent across estimates for SOE shares or their changes (6 of 8 estimates) than for MNC shares or their changes (4 of 8 estimates).

## 7. Conclusion

This paper began by emphasizing how the 2000 Enterprise Law, and subsequent revisions to this law and related investment laws, unified laws and regulations governing various types of firms (e.g., SOEs, private firms, MNCs) and removed many of the legal and regulatory barriers that previously constrained the growth of private business. The paper then analyzed changes in ownership structure, emphasizing the large increase in the number of private firms in 2000-2004 and the fact that private firms tended to be extremely small compared to SOEs or MNCs. Private firms also tended to have lower profit rates and average sales per worker. On the other hand, MNCs tended to have the highest profit rates and sales per worker.

After describing the large role of new competitors, the paper then showed how producer concentration has fallen in a wide range of industries after 2000. In this respect, the Enterprise Law and its implementation have apparently achieved one of its more important aims, to stimulate the level of competition in Vietnam. Econometric analyses then indicated that ownership shares or changes in ownership shares tended to be positively related to changes in producer concentration in three-fourths of the estimates for SOEs and half of them for MNCs. These results should be viewed with some skepticism because the basic model describing producer concentration does not perform
as expected. Moreover, the correlations between changes in producer concentration on the one hand, and SOE and MNC shares or changes in those ownership shares on the other, are not consistent across all specifications and samples. Nonetheless, the evidence does consistently indicate that large SOE or MNC presence, or increases in the SOE or MNC presence, did not lead to increased competition in Vietnamese manufacturing during this period and may have led to decreased competition.

There is an important and straightforward implication of this finding for competition policy. Namely, anti-trust authorities need to pay particular attention to the potential for SOEs and MNCs to exercise market power and extract related rents in Vietnamese manufacturing. This is a rather well-known finding for MNCs, who are known to operate in imperfectly competitive markets. It seems sensible for SOEs as well because casual observation suggests that regulations often impede competition in SOE-dominated markets as well. However, as with most anti-trust related issues, it is impossible to make general conclusions that are more specific than this. A key problem in the Vietnamese case is the large role played by international trade and import protection. In this respect, it would be desirable to include changes in trade ratios and tariff levels as explanatory variables as Sleuwaegen and Yamawaki (1988) did for several European firms. ${ }^{24}$

Finally, we must emphasize that the observation of positive correlations between MNC or SOE presence or changes in that presence and changes in producer concentration does not imply that

[^16]Vietnam should restrict or even regulate investing MNCs or SOEs because increased concentration can also lead to increased efficiency. Rather, it simply indicates that Vietnam's policy makers should be aware that MNC and SOE presence can raise anti-trust issues, and that they should carefully evaluate the market power of these firms in the same way they evaluate the activities of large firms in general. On the other hand, one continues to hear stories about how some SOEs and MNCs engage in anti-competitive practices and Vietnam's policy makers can clearly benefit the economy by paying closer attention to finding remedies for such problems.

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## Appendix A: Firm Codes and Duplicates in the Enterprise Data and their Treatment

As indicated above the data sets we received contained a number of duplicate records for a number of firms and years for 2001-2005. We have been told that this results because GSO sometimes receives survey responses from 2 or more branches of the same firm in a given year and assigns the records corresponding to these responses the same firm code. In principle, this is an incorrect practice to adopt in a firm-level data set where all firms should be uniquely identified for each year in the data set. Thus, we have gone though all duplicate records and removed duplicates or created new firm codes for some duplicate records to insure that firm codes are unique for each year. To do this we first pulled out 2000-2005 data for all firms that had duplicates in one or more years. We then arranged the data by firm and year, and examined the nature of the differences in the duplicates by firm and year. This examination revealed three distinct types of records: (1) a few (10) 2005 records containing unusually large numbers which appeared to be obvious input errors when
compared with much smaller values in previous years; (2) records which were part of sets of (usually 2) identical or nearly records, and (3) records which appeared to contain information on different branches of the same firm and all used the same firm code.

Records in the first category were simply deleted from the data set as they were not thought to be credible. For the second category, one record was retained for each set of duplicates. This resulted in the deletion of a relatively large number of records from the 2005 data set (294) but much smaller numbers in other years $(2004=11,2003=8,2002=2,2001=3)$. For the third category, we examined the industry, ownership, location, sales, employment, and fixed assets of each firm and created new firm codes to consistently and uniquely identify firms or firm branches in different locations, industries, and/or of different size. Many if not most of these corrections involved firms that apparently had branches keeping separate books in separate locations and were rather straightforward when 6 years of data were available. For firms with a shorter history, the corrections were sometimes more difficult however. This process resulted in assigning new firm codes to 371 records in 2005, 219 in 2004, 167 in 2003, 105 in 2002, 26 in 2001, and 2 in $2000 .{ }^{25}$

[^17]Table 1: Number of Sample Firms by Industry and Owner

| Industry | SOEs |  | Private |  | MNCs |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2000 | 2004 | 2000 | 2004 | 2000 | 2004 |
| All industries | 5,733 | 4,582 | 34,829 | 80,693 | 1,489 | 3,057 |
| Mining, manufacturing, utilities | 1,775 | 1,439 | 8,079 | 18,954 | 1,050 | 2,330 |
| Manufacturing | 1,570 | 1,247 | 7,761 | 16,524 | 1,035 | 2,304 |
| Food products | 211 | 173 | 2,352 | 2,855 | 116 | 204 |
| Beverages | 89 | 56 | 683 | 1,074 | 31 | 33 |
| Tobacco | 17 | 16 | 4 | 6 | 1 | 3 |
| Textiles | 76 | 59 | 264 | 634 | 67 | 137 |
| Apparel | 112 | 82 | 369 | 1,108 | 94 | 327 |
| Leather | 6 | 7 | 41 | 112 | 19 | 53 |
| Footwear | 43 | 35 | 106 | 190 | 42 | 97 |
| Wood products | 62 | 39 | 635 | 1,321 | 42 | 83 |
| Paper products | 39 | 29 | 324 | 715 | 24 | 59 |
| Publishing | 168 | 163 | 96 | 845 | 6 | 28 |
| Petroleum products | 0 | 1 | 9 | 13 | 2 | 2 |
| Chemicals | 101 | 73 | 219 | 637 | 88 | 161 |
| Rubber products | 17 | 16 | 70 | 144 | 24 | 40 |
| Plastics | 22 | 21 | 273 | 777 | 59 | 139 |
| Non-metallic mineral products | 219 | 176 | 826 | 1,346 | 54 | 91 |
| Basic metals | 21 | 16 | 82 | 275 | 13 | 29 |
| Fabricated metals | 92 | 66 | 440 | 1,828 | 90 | 189 |
| General machinery | 71 | 58 | 134 | 449 | 31 | 71 |
| Office \& computing machinery | 0 | 0 | 1 | 15 | 2 | 8 |
| Electrical machinery | 26 | 25 | 92 | 251 | 47 | 87 |
| Radio, television \& commun. mach. | 30 | 19 | 31 | 118 | 30 | 53 |
| Precision machinery | 8 | 6 | 22 | 41 | 14 | 26 |
| Motor vehicles | 40 | 25 | 109 | 213 | 27 | 69 |
| Other transport equipment | 78 | 66 | 149 | 315 | 37 | 88 |
| Furniture | 16 | 17 | 319 | 929 | 23 | 111 |
| Miscellaneous manufacturing | 6 | 3 | 107 | 279 | 51 | 115 |
| Recycling | 0 | 0 | 4 | 34 | 0 | 1 |
| ADDEDNDUM: PUBLISHED ESTIM |  |  |  |  |  |  |
| All industries | 5,759 | 4,596 | 35,004 | 84,003 | 1,525 | 3,156 |
| Mining, manufacturing, utilities | 1,777 | 1,441 | 8,103 | 19,410 | 1,058 | 2,352 |

Note: Samples include firms reporting positive employment and sales.
Source: Vietnam, General Statistics Office (various years a, various years b)

Table 2: Number of Employees by Industry and Owner (thousands)

| Industry | SOEs |  | Private |  | MNCs |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2000 | 2004 | 2000 | 2004 | 2000 | 2004 |
| All industries | 2,086.8 | 2,247.3 | 1,037.6 | 2,455.9 | 406.7 | 1,043.5 |
| Mining, manufacturing, utilities | 889.0 | 950.1 | 569.1 | 1,233.6 | 363.2 | 973.3 |
| Manufacturing | 717.1 | 757.2 | 523.2 | 1,167.6 | 355.8 | 964.9 |
| Food products | 115.3 | 111.8 | 92.7 | 201.2 | 27.5 | 55.0 |
| Beverages | 16.1 | 16.2 | 8.8 | 19.7 | 7.6 | 5.9 |
| Tobacco | 11.6 | 14.0 | 0.2 | 0.2 | 0.3 | 0.4 |
| Textiles | 72.0 | 67.1 | 26.8 | 57.2 | 23.9 | 43.8 |
| Apparel | 110.8 | 124.8 | 76.0 | 178.0 | 45.0 | 195.0 |
| Leather | 3.8 | 4.7 | 10.4 | 14.5 | 9.7 | 30.0 |
| Footwear | 67.7 | 64.0 | 102.4 | 137.3 | 102.4 | 267.2 |
| Wood products | 18.5 | 15.6 | 35.2 | 76.1 | 9.5 | 16.6 |
| Paper products | 14.8 | 15.0 | 17.6 | 36.3 | 4.2 | 9.4 |
| Publishing | 20.3 | 24.8 | 2.2 | 13.0 | 0.3 | 2.3 |
| Petroleum products | 0.0 | 0.1 | 0.5 | 0.5 | 0.3 | 0.4 |
| Chemicals | 44.2 | 40.7 | 12.0 | 29.5 | 9.0 | 17.2 |
| Rubber products | 11.0 | 19.3 | 2.7 | 6.9 | 5.2 | 9.2 |
| Plastics | 5.7 | 6.7 | 16.7 | 41.2 | 10.0 | 24.3 |
| Non-metallic mineral products | 76.9 | 92.7 | 39.6 | 102.3 | 10.7 | 21.7 |
| Basic metals | 23.0 | 21.4 | 3.5 | 12.9 | 2.0 | 5.3 |
| Fabricated metals | 24.1 | 23.5 | 15.7 | 62.8 | 11.0 | 28.1 |
| General machinery | 21.0 | 22.2 | 4.8 | 21.3 | 5.3 | 11.0 |
| Office \& computing machinery | 0.0 | 0.0 | 0.0 | 0.4 | 3.1 | 5.6 |
| Electrical machinery | 14.0 | 13.1 | 4.5 | 10.8 | 20.7 | 42.5 |
| Radio, television \& commun. mach. | 7.2 | 5.6 | 1.6 | 5.0 | 7.9 | 19.5 |
| Precision machinery | 1.8 | 1.4 | 2.6 | 4.1 | 2.4 | 7.5 |
| Motor vehicles | 7.6 | 10.8 | 3.0 | 7.4 | 5.1 | 15.9 |
| Other transport equipment | 24.2 | 31.4 | 6.6 | 20.8 | 9.4 | 29.9 |
| Furniture | 4.4 | 9.3 | 26.5 | 89.4 | 10.5 | 62.0 |
| Miscellaneous manufacturing | 1.0 | 1.2 | 10.5 | 17.8 | 12.7 | 39.4 |
| Recycling | 0.0 | 0.0 | 0.3 | 0.9 | 0.0 | 0.0 |
| ADDEDNDUM: PUBLISHED ESTIMATES |  |  |  |  |  |  |
| All industries | 2,088.5 | 2,249.9 | 1,040.9 | 2,475.4 | 407.6 | 1,044.9 |
| Mining, manufacturing, utilities | 889.1 | 951.6 | 570.1 | 1,236.8 | 363.5 | 973.6 |

Note: Samples include firms reporting positive employment and sales.
Source: Vietnam, General Statistics Office (various years a, various years b)

Table 3: Sales of Sample Firms by Industry and Owner (trillion dong)

| Industry | SOEs |  | Private |  | MNCs |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2000 | 2004 | 2000 | 2004 | 2000 | 2004 |
| All industries | 444.95 | 729.43 | 203.16 | 639.54 | 160.56 | 382.16 |
| Mining, manufacturing, utilities | 119.93 | 235.96 | 51.15 | 183.42 | 144.08 | 337.65 |
| Manufacturing | 94.03 | 176.87 | 50.53 | 179.80 | 101.76 | 266.04 |
| Food products | 25.91 | 35.37 | 21.49 | 57.84 | 15.22 | 36.24 |
| Beverages | 3.02 | 7.76 | 0.84 | 2.72 | 3.77 | 7.08 |
| Tobacco | 5.02 | 12.92 | 0.04 | 0.07 | 0.07 | 0.09 |
| Textiles | 6.06 | 8.81 | 1.88 | 6.07 | 5.14 | 9.87 |
| Apparel | 5.47 | 9.91 | 2.09 | 7.67 | 3.98 | 12.21 |
| Leather | 0.10 | 0.16 | 0.21 | 0.91 | 0.58 | 2.55 |
| Footwear | 2.45 | 2.32 | 2.33 | 4.63 | 8.65 | 22.28 |
| Wood products | 1.60 | 1.94 | 1.81 | 5.54 | 1.01 | 3.00 |
| Paper products | 4.07 | 3.51 | 2.31 | 7.51 | 0.88 | 3.35 |
| Publishing | 3.78 | 7.93 | 0.22 | 1.98 | 0.05 | 0.24 |
| Petroleum products | 0.00 | 0.09 | 0.27 | 0.64 | 0.64 | 0.97 |
| Chemicals | 8.99 | 14.47 | 2.05 | 8.43 | 7.39 | 22.35 |
| Rubber products | 1.37 | 3.60 | 0.41 | 2.51 | 0.79 | 2.19 |
| Plastics | 1.21 | 3.80 | 3.08 | 11.15 | 2.48 | 7.77 |
| Non-metallic mineral products | 10.67 | 21.80 | 2.50 | 10.80 | 5.55 | 10.36 |
| Basic metals | 2.85 | 9.43 | 1.07 | 9.80 | 4.27 | 9.48 |
| Fabricated metals | 1.71 | 3.35 | 2.22 | 14.80 | 3.41 | 9.76 |
| General machinery | 1.78 | 3.05 | 0.53 | 4.00 | 2.20 | 6.39 |
| Office \& computing machinery | 0.00 | 0.00 | 0.01 | 0.21 | 8.49 | 9.79 |
| Electrical machinery | 2.17 | 10.60 | 0.93 | 4.40 | 4.22 | 14.16 |
| Radio, television \& commun. mach. | 1.48 | 1.80 | 0.19 | 1.38 | 5.58 | 13.83 |
| Precision machinery | 0.10 | 0.14 | 0.18 | 0.50 | 0.77 | 2.09 |
| Motor vehicles | 0.82 | 3.56 | 0.53 | 1.58 | 4.86 | 21.16 |
| Other transport equipment | 3.02 | 8.04 | 1.39 | 4.85 | 9.30 | 26.72 |
| Furniture | 0.33 | 2.17 | 1.29 | 7.82 | 0.59 | 7.41 |
| Miscellaneous manufacturing | 0.04 | 0.33 | 0.62 | 1.80 | 1.88 | 4.69 |
| Recycling | 0.00 | 0.00 | 0.03 | 0.18 | 0.00 | 0.01 |
| ADDEDNDUM: PUBLISHED ESTIMATES |  |  |  |  |  |  |
| All industries | 444.67 | 724.96 | 203.16 | 644.09 | 161.96 | 381.00 |
| Mining, manufacturing, utilities | 119.91 | 224.37 | 51.15 | 184.01 | 144.08 | 334.42 |

Note: Samples include firms reporting positive employment and sales.
Source: Vietnam, General Statistics Office (various years a, various years b)

Figure 1: Enterprise Sales by Ownership (current trillion dong)


Source: Vietnam, General Statistics Office (various years a).
Figure 2: Non-Household GDP by Ownership (current trillion dong)


[^18]Table 4: Gross Profit-Sales Ratios by Industry and Owner (percent)

|  | SOEs |  | Private |  | MNCs |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
|  | 2000 | 2004 | 2000 | 2004 | 2000 | 2004 |
| Allustry industries | 3.95 | 5.24 | 1.01 | 1.28 | 13.43 | 15.34 |
| Mining, manufacturing, utilities | 5.68 | 5.10 | 1.06 | 1.98 | 15.85 | 16.06 |
| Manufacturing | 4.15 | 3.28 | 1.03 | 1.97 | 2.04 | 5.39 |
| Food products | 0.40 | 2.30 | -0.47 | 2.08 | 1.83 | 5.63 |
| Beverages | 25.04 | 16.98 | 2.16 | -1.11 | -4.76 | 10.22 |
| Tobacco | 6.17 | 4.37 | 2.69 | 0.63 | -36.66 | -1.93 |
| Textiles | 0.23 | -0.50 | 1.50 | 1.52 | 4.00 | 1.04 |
| Apparel | 2.37 | 2.60 | 1.01 | 1.71 | 3.07 | -0.08 |
| Leather | 8.19 | 4.56 | -0.32 | 3.17 | -0.94 | -3.02 |
| Footwear | 5.31 | 0.50 | 0.65 | 1.32 | 3.15 | -1.08 |
| Wood products | 3.39 | 2.59 | 1.05 | 1.41 | 2.90 | 5.99 |
| Paper products | 15.08 | -1.90 | 2.07 | 1.49 | -15.15 | 4.06 |
| Publishing | 8.00 | 6.94 | 1.69 | 0.97 | -3.88 | 6.36 |
| Petroleum products | --2.75 | 0.01 | 0.28 | 9.46 | 9.52 |  |
| Chemicals | 3.21 | 5.92 | 5.31 | 3.81 | 3.43 | 6.06 |
| Rubber products | 5.15 | 6.36 | 0.31 | 0.81 | -6.00 | 2.71 |
| Plastics | 1.95 | 1.74 | 0.75 | 0.38 | -7.58 | 3.56 |
| Non-metallic mineral products | 6.49 | 1.98 | 4.66 | 3.40 | -8.12 | 8.24 |
| Basic metals | 2.66 | 1.58 | 0.03 | 0.82 | 4.62 | 4.44 |
| Fabricated metals | 3.02 | 1.64 | 0.71 | 1.57 | -4.07 | 2.46 |
| General machinery | 1.30 | 2.03 | 1.82 | 3.73 | 1.11 | 7.51 |
| Office \& computing machinery | - | - | 0.67 | -3.64 | 1.54 | 1.89 |
| Electrical machinery | 4.88 | 1.13 | 4.82 | 0.67 | 3.19 | 5.66 |
| Radio, television \& commun. mach. | 5.46 | 4.86 | 3.25 | 3.69 | 5.99 | 8.71 |
| Precision machinery | 4.43 | 2.86 | 8.89 | 7.44 | 6.39 | 9.57 |
| Motor vehicles | 1.77 | 2.78 | 2.50 | 3.94 | 7.58 | 8.24 |
| Other transport equipment | 1.96 | 1.88 | 3.78 | 3.54 | 7.22 | 12.70 |
| Furniture | -3.08 | 1.06 | 2.27 | 2.94 | -1.56 | 1.26 |
| Miscellaneous manufacturing | 0.94 | 1.83 | 4.79 | 2.55 | 6.86 | 1.73 |
| Recycling | - | - | -0.04 | 1.24 | - | 22.68 |
| ADDEDNDUM: PUBLISHED ESTIMATES |  |  |  |  |  |  |
| All industries | 3.95 | 5.28 | 1.00 | 1.25 | 13.30 | 15.38 |
| Mining, manufacturing, utilities | 5.68 | 5.36 | 1.06 | 1.97 | 15.85 | 16.22 |

Note: Samples include firms reporting positive employment and sales. Vietnamese definitions of gross profits differ from international norms.
Source: Vietnam, General Statistics Office (various years a, various years b)

Table 5: Operating Profit-Sales Ratios by Industry and Owner (percent)

| Industry | SOEs |  | Private |  | MNCs |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2000 | 2004 | 2000 | 2004 | 2000 | 2004 |
| All industries | 3.25 | 5.05 | 0.97 | 1.35 | 15.38 | 15.16 |
| Mining, manufacturing, utilities | 5.67 | 5.99 | 1.04 | 2.23 | 17.49 | 15.99 |
| Manufacturing | 4.12 | 3.69 | 1.01 | 2.21 | 4.15 | 5.37 |
| Food products | 1.13 | 2.51 | -0.46 | 2.32 | 3.14 | 5.28 |
| Beverages | 22.85 | 13.48 | 2.21 | 0.13 | -1.73 | 9.56 |
| Tobacco | 6.40 | 4.33 | 2.76 | 1.21 | -20.17 | -1.13 |
| Textiles | 2.40 | 0.70 | 1.55 | 1.75 | 4.61 | 1.41 |
| Apparel | 3.01 | 1.83 | 1.09 | 1.73 | 4.20 | 0.39 |
| Leather | 4.78 | 2.17 | -0.40 | 2.52 | 1.15 | -3.87 |
| Footwear | 1.09 | -0.44 | -0.03 | 1.29 | 2.35 | -1.05 |
| Wood products | 2.00 | 2.48 | 1.05 | 1.59 | 3.28 | 6.02 |
| Paper products | 4.25 | 0.99 | 2.13 | 1.39 | -13.02 | 3.92 |
| Publishing | 7.77 | 6.55 | 1.71 | 0.88 | -4.00 | 6.67 |
| Petroleum products | - | 1.73 | 0.69 | 0.14 | 9.00 | 9.02 |
| Chemicals | 3.35 | 5.80 | 4.72 | 4.18 | 5.80 | 6.23 |
| Rubber products | 3.70 | 6.11 | 0.38 | 1.05 | -3.07 | 4.03 |
| Plastics | 2.77 | 2.35 | 0.82 | 0.72 | -6.43 | 3.97 |
| Non-metallic mineral products | 9.29 | 4.99 | 4.67 | 3.85 | 7.09 | 9.50 |
| Basic metals | 3.16 | 2.55 | 0.24 | 0.87 | 9.85 | 5.17 |
| Fabricated metals | 3.07 | 2.84 | 0.67 | 1.88 | -1.69 | 2.90 |
| General machinery | 1.04 | 0.74 | 1.71 | 4.33 | 1.03 | 7.62 |
| Office \& computing machinery | - | - | 0.66 | -3.96 | 1.71 | 2.01 |
| Electrical machinery | 4.88 | 1.74 | 4.94 | 0.88 | 5.50 | 5.49 |
| Radio, television \& commun. mach. | 1.83 | 2.99 | 3.49 | 3.85 | 9.55 | 8.15 |
| Precision machinery | 2.45 | 2.84 | 8.65 | 8.35 | 4.51 | 9.98 |
| Motor vehicles | 1.83 | 3.86 | 2.41 | 3.97 | 9.45 | 7.95 |
| Other transport equipment | 1.65 | 2.05 | 4.06 | 3.68 | 8.20 | 11.88 |
| Furniture | -2.31 | 1.89 | 2.27 | 3.63 | -2.81 | 1.60 |
| Miscellaneous manufacturing | 0.71 | 4.05 | 5.06 | 2.24 | 3.14 | 2.03 |
| Recycling | - | - | -0.04 | 1.37 | - | 12.12 |

Note: Samples include firms reporting positive employment and sales. Vietnamese definitions of operating profits differ from international norms.
Source: Vietnam, General Statistics Office (various years b)

Table 6: 2004 Indicators for New Competitors (New Entrants + Firms Changing into Manufacturing) and 2000 Indicators for Exiting Firms (percent

| Industry | New Competitors 2001-2004, 2004 values |  |  |  |  |  | Firms Exiting after 2000, 2000 values |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Shares of Total Sales |  |  | Gross Profit Rates |  |  | Shares of Total Sales |  |  | Gross Profit Rates |  |  |
|  | SOE | Private | MNC | SOE | Private | MNC | SOE | Private | MNC | SOE | Private | MNC |
| Manufacturing | 35.41 | 64.88 | 37.79 | 2.67 | 1.79 | 3.24 | 33.19 | 32.55 | 13.84 | 2.16 | 0.77 | 1.03 |
| Food products | 39.82 | 56.90 | 46.08 | 1.54 | 2.32 | 5.91 | 38.77 | 35.82 | 31.92 | -0.68 | 0.57 | 3.67 |
| Beverages | 21.52 | 61.89 | 10.20 | 14.94 | -2.58 | -14.32 | 29.35 | 42.67 | 15.77 | 14.51 | 5.27 | -27.01 |
| Tobacco | 31.59 | 68.98 | 40.25 | 2.99 | 0.84 | -23.11 | 36.44 | 65.71 | 68.35 | 3.56 | 2.10 | -2.10 |
| Textiles | 14.21 | 54.23 | 31.06 | -4.15 | 1.02 | -5.70 | 16.28 | 33.19 | 3.23 | 1.36 | 1.62 | -11.70 |
| Apparel | 48.58 | 74.47 | 64.63 | 1.11 | 1.62 | -2.48 | 59.82 | 37.85 | 11.47 | 1.98 | -0.93 | 2.75 |
| Leather | 77.02 | 82.44 | 70.22 | 5.00 | 3.18 | -3.51 | 21.06 | 31.45 | 5.49 | 19.30 | -1.31 | -6.05 |
| Footwear | 49.48 | 23.84 | 29.42 | 0.50 | 1.10 | -5.71 | 49.95 | 18.93 | 7.15 | 2.07 | -2.00 | 3.73 |
| Wood products | 35.73 | 69.69 | 72.23 | 2.30 | 1.33 | 6.81 | 27.75 | 33.02 | 28.56 | 3.65 | 1.25 | -1.13 |
| Paper products | 41.15 | 54.87 | 28.93 | 1.45 | 1.22 | 0.36 | 48.94 | 21.67 | 15.35 | 4.51 | 0.32 | 2.99 |
| Publishing | 34.37 | 92.45 | 76.01 | 4.74 | 0.95 | 5.73 | 40.04 | 64.87 | 39.34 | 4.75 | 2.76 | 0.95 |
| Petroleum products | 100.00 | 80.24 | 0.00 | 1.75 | 0.22 |  | - | 75.05 | 0.00 |  | -0.32 | - |
| Chemicals | 46.10 | 62.68 | 32.55 | 7.82 | 3.71 | 2.84 | 33.57 | 21.60 | 16.77 | 3.76 | 1.75 | 3.06 |
| Rubber products | 32.01 | 75.92 | 26.39 | 19.68 | 0.73 | -0.28 | 3.12 | 50.54 | 7.92 | 1.33 | 0.18 | 0.40 |
| Plastics | 16.83 | 56.70 | 43.34 | 5.10 | -0.01 | 0.48 | 16.41 | 30.05 | 6.29 | -1.09 | 0.85 | -0.37 |
| Non-metallic mineral prod. | 35.94 | 66.99 | 19.11 | -2.76 | 3.14 | -6.66 | 14.86 | 23.52 | 8.81 | 2.94 | 3.31 | -26.83 |
| Basic metals | 16.18 | 93.46 | 41.90 | 1.05 | 0.90 | 1.24 | 6.35 | 37.73 | 30.43 | -1.33 | 0.02 | 1.21 |
| Fabricated metals | 43.53 | 77.15 | 41.73 | 0.89 | 1.40 | 1.59 | 41.87 | 37.71 | 8.94 | 2.62 | 0.32 | 1.27 |
| General machinery | 48.33 | 84.56 | 23.16 | 3.88 | 4.26 | 1.75 | 34.23 | 37.11 | 4.64 | 0.93 | 2.66 | -20.74 |
| Office \& computing machinery |  | 100.00 | 34.80 |  | -3.64 | 2.01 |  | 100.00 | 0.24 |  | 0.67 | -58.00 |
| Electrical machinery | 4.10 | 52.88 | 17.75 | 4.27 | -4.27 | 5.24 | 4.04 | 21.67 | 4.15 | 1.43 | -0.24 | 2.48 |
| Radio, television \& commun. mach. | 46.67 | 81.96 | 43.43 | 3.07 | 3.97 | 13.55 | 36.49 | 33.09 | 11.60 | 4.65 | 7.39 | 3.76 |
| Precision machinery | 90.52 | 38.20 | 34.91 | 3.90 | 4.89 | 6.22 | 79.17 | 5.62 | 6.61 | 4.63 | 5.42 | 12.41 |
| Motor vehicles | 55.55 | 92.75 | 33.19 | 3.39 | 3.99 | 7.80 | 41.20 | 5.34 | 11.04 | 1.76 | 1.63 | -6.76 |
| Other transport equipment | 51.37 | 82.24 | 38.28 | 2.56 | 2.14 | 11.63 | 47.21 | 46.65 | 18.38 | 3.41 | 1.34 | 13.50 |
| Furniture | 93.60 | 68.02 | 81.75 | 1.17 | 3.11 | 0.76 | 49.87 | 24.39 | 3.02 | -2.25 | 0.71 | 1.32 |
| Miscellaneous manufacturing | 64.11 | 72.67 | 37.04 | 2.98 | 0.49 | -2.67 | 16.08 | 15.09 | 2.95 | 2.26 | -1.51 | -17.71 |
| Recycling |  | 98.79 | 100.00 |  | 1.26 | 22.68 |  | 97.23 |  |  | 0.14 |  |

Note: New competitors consist of 14,238 new entrants and 885 firms changing industries into manufacturing categories; see Appendix Tables 6a-6c for more information on these firms and the 4,538 exiting firms; shares of sales refer to the share of total sales by ownership group and industry. Source: Vietnam, General Statistics Office (various years b)

Table 7: Producer Concentration Measures, Import Shares, and Trade-Sales Ratios in Manufacturing
(4-firm concentration ratio [C4] and new competitors' ratios to 2005 values in percent; Herfindahl [HF] is an index)

| Industry | C4 |  |  | HF |  |  | Imports/Sales |  |  | Exports/Sales |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2000 | 2004 | change | 2000 | 2004 | change | 2000 | 2003 | change | 2000 | 2003 | change |
| Manufacturing | 42.05 | 35.28 | -6.77 | 0.1151 | 0.0631 | -0.0520 | 84 | 79 | -4 | 51 | 45 | -6 |
| Food \& bevarages | - | - | - | - | - |  | 6 | 7 | 1 | 27 | 21 | -6 |
| Food products | 12.86 | 9.88 | -2.99 | 0.0091 | 0.0063 | -0.0027 | - | - | - | - | - | - |
| Beverages | 41.93 | 52.10 | 10.16 | 0.0630 | 0.0970 | 0.0340 |  |  |  |  |  |  |
| Tobacco | 61.02 | 74.89 | 13.86 | 0.1226 | 0.1612 | 0.0385 | 20 | 15 | -5 | 2 | 13 | 11 |
| Textiles | 24.55 | 18.77 | -5.77 | 0.0268 | 0.0183 | -0.0085 | 134 | 111 | -22 | 44 | 72 | 28 |
| Apparel | 20.61 | 15.25 | -5.36 | 0.0178 | 0.0099 | -0.0079 | 54 | 55 | 1 | 208 | 195 | -14 |
| Leather \& footwear |  |  | - | - | - |  | 400 | 393 | -8 | 1,319 | 903 | -416 |
| Leather | 39.50 | 43.79 | 4.29 | 0.0572 | 0.0406 | -0.0167 |  |  |  | - |  |  |
| Footwear | 36.15 | 35.84 | -0.31 | 0.0469 | 0.0499 | 0.0031 |  |  |  |  |  |  |
| Wood products | 20.55 | 11.17 | -9.39 | 0.0184 | 0.0086 | -0.0098 | 24 | 29 | 6 | 58 | 54 | -3 |
| Paper products | 45.03 | 18.43 | -26.60 | 0.0753 | 0.0194 | -0.0559 | 57 | 73 | 17 | 7 | 9 | 2 |
| Publishing | 25.71 | 25.84 | 0.13 | 0.0271 | 0.0218 | -0.0053 | 5 | 7 | 2 | 8 | 5 | -3 |
| Petroleum products | 90.96 | 81.10 | -9.86 | 0.2783 | 0.1947 | -0.0836 | 3,271 | 2,327 | -944 | 354 | 166 | -188 |
| Chemicals | 25.01 | 19.49 | -5.53 | 0.0263 | 0.0208 | -0.0055 | 202 | 187 | -15 | 10 | 11 | 1 |
| Rubber \& plastics |  | - | - | - | - | - | 70 | 81 | 11 | 35 | 41 | 6 |
| Rubber products | 48.29 | 35.28 | -13.00 | 0.0676 | 0.0460 | -0.0216 | - | - | - | - | - |  |
| Plastics | 17.82 | 16.61 | -1.21 | 0.0173 | 0.0074 | -0.0099 |  |  |  | - |  |  |
| Non-metallic mineral prod. | 25.80 | 17.14 | -8.66 | 0.0272 | 0.0134 | -0.0139 | 8 | 7 | 0 | 11 | 9 | -2 |
| Basic metals | 50.93 | 38.10 | -12.83 | 0.0823 | 0.0473 | -0.0349 | 198 | 195 | -3 | 11 | 8 | -2 |
| Fabricated metals | 13.32 | 10.06 | -3.26 | 0.0123 | 0.0070 | -0.0053 | 41 | 45 | 4 | 11 | 17 | 6 |
| General machinery | 42.50 | 34.72 | -7.78 | 0.0601 | 0.0353 | -0.0248 | 531 | 495 | -36 | 32 | 27 | -4 |
| Office \& computing machinery | 100.00 | 98.46 | -1.54 | 0.9918 | 0.4792 | -0.5125 | 36 | 57 | 21 | 81 | 108 | 27 |
| Electrical machinery | 29.20 | 34.42 | 5.22 | 0.0369 | 0.0243 | -0.0126 | 108 | 62 | -46 | 49 | 43 | -7 |
| Radio, television \& commun. mach. | 42.29 | 39.60 | -2.69 | 0.0742 | 0.0493 | -0.0249 | 169 | 126 | -43 | 62 | 46 | -16 |
| Precision machinery | 62.49 | 47.64 | -14.85 | 0.1227 | 0.0927 | -0.0300 | 278 | 262 | -16 | 56 | 53 | -3 |
| Motor vehicles | 48.38 | 40.71 | -7.67 | 0.1052 | 0.0750 | -0.0303 | 69 | 82 | 13 | 1 | 3 | 1 |
| Other transport equipment | 51.35 | 43.27 | -8.07 | 0.1090 | 0.0621 | -0.0469 | 104 | 71 | -33 | 10 | 12 | 2 |
| Furniture \& misc. manufacturing | - | - | - |  |  |  | 26 | 23 | -3 | 120 | 62 | -58 |
| Furniture | 20.10 | 12.91 | -7.19 | 0.0205 | 0.0088 | -0.0117 | - | - | - | - | - | - |
| Miscellaneous manufacturing | 39.07 | 24.33 | -14.74 | 0.0569 | 0.0253 | -0.0316 | - | - | - | - | - | - |
| Recycling | 100.00 | 52.71 | -47.29 | 0.5540 | 0.0823 | -0.4717 | - |  | - | - | - | - |

Note: Samples include firms reporting positive employment and sales; for C 4 and HF manufacturing is a mean of the industries listed below.
Source: Vietnam, General Statistics Office (various years b, various years d)

Table 8: Estimating the Relationship between Producer Concentration and Ownership for 2000-2004 Ordinary Least Squares Estimates with Robust Standard Errors

| Variable, statistic | Dependent variable $=\triangle \mathrm{C} 4_{\mathrm{j}, 00-04}$ |  |  |  | Dependent variable $=100 * \Delta \mathrm{HF}_{\mathrm{j}, 00-04}$ |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Equation (1) |  | Equation (2) |  | Equation (3) |  | Equation (4) |  |
|  | Coefficient | p-value | Coefficient | p-value | Coefficient | p-value | Coefficient | p-value |
| Estimates for 27 2\&3-digit Manufacturing Industries |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| C | -29.79362 | 0.03 | 24.52494 | 0.02 | -7.22343 | 0.06 | 8.75609 | 0.01 |
| $\mathrm{MS}_{\mathrm{j}, 00}$ | 0.01682 | 0.44 | 0.02161 | 0.34 | 0.00630 | 0.44 | 0.00816 | 0.32 |
| $\mathrm{KR}_{\mathrm{j}, 00}$ | -0.10140 | 0.53 | -0.13099 | 0.44 | -0.03790 | 0.49 | -0.03171 | 0.57 |
| $\mathrm{gSL}_{\mathrm{j}, 00-04}$ | 0.00941 | 0.56 | -0.04408 | 0.02 | -0.00396 | 0.62 | -0.01755 | 0.02 |
| $\mathrm{C} 4_{\mathrm{j}, 00}$ | -0.19545 | 0.07 | -0.33834 | 0.00 |  | - |  | - |
| $\mathrm{HF}_{\mathrm{j}, 00}$ |  | - | - | - | -0.61511 | 0.00 | -0.74617 | 0.00 |
| $\mathrm{SOE}_{\mathrm{j}, 00}$ | 0.37340 | 0.02 |  |  | 0.11844 | 0.07 | - | - |
| $\Delta \mathrm{SOE}_{\mathrm{j}, 00-04}$ |  | - | 0.93967 | 0.01 | - | - | 0.29590 | 0.01 |
| $\mathrm{MNC}_{\mathrm{j}, 00}$ | 0.40544 | 0.01 |  |  | 0.14426 | 0.00 |  | - |
| $\Delta \mathrm{MNC}_{\mathrm{j}, 00-04}$ | - | - | 0.25486 | 0.16 | - | - | 0.07661 | 0.21 |
| F-test | 10.70 | 0.00 | 5.81 | 0.00 | 69.95 | 0.00 | 566.79 | 0.00 |
| R-squared | 0.589 |  | 0.638 |  | 0.955 |  | 0.962 | - |
| Estimates for 613 -digit Manufacturing Industries |  |  |  |  |  |  |  |  |
| C | 1.55610 | 0.25 | 3.01317 | 0.34 | 15.34099 | 0.20 | 9.63283 | 0.01 |
| $\mathrm{MS}_{\mathrm{j}, 00}$ | 0.00144 | 0.89 | 0.00756 | 0.31 | 0.00431 | 0.68 | 0.01258 | 0.07 |
| $\mathrm{KR}_{\mathrm{j}, 00}$ | 0.02029 | 0.80 | -0.03529 | 0.51 | 0.01767 | 0.82 | -0.05363 | 0.32 |
| $\mathrm{gSL}_{\mathrm{j}, 00-04}$ | -0.00122 | 0.00 | -0.00117 | 0.00 | -0.00291 | 0.00 | -0.00250 | 0.00 |
| $\mathrm{C} 4_{\mathrm{j}, 00}$ | -0.05704 | 0.22 | -0.10042 | 0.03 | - | - | - | - |
| $\mathrm{HF}_{\mathrm{j}, 00}$ | - | - | - | - | -0.27639 | 0.00 | -0.33661 | 0.01 |
| $\mathrm{SOE}_{\mathrm{j}, 00}$ | 0.01662 | 0.83 | - | - | -0.07181 | 0.59 | - | - |
| $\Delta \mathrm{SOE}_{\mathrm{j}, 00-04}$ | - | - | 0.41917 | 0.00 |  | - | 0.65185 | 0.01 |
| $\mathrm{MNC}_{\mathrm{j}, 00}$ | -0.13156 | 0.22 | - | - | -0.22556 | 0.16 | - | - |
| $\Delta \mathrm{MNC}_{\mathrm{j}, 00-04}$ | - | - | 0.40861 | 0.00 | - | - | 0.62939 | 0.01 |
| F-test | 8.60 | 0.00 | 16.35 | 0.00 | 21.20 | 0.00 | 35.30 | 0.00 |
| R-squared | 0.155 | - | 0.290 | - | 0.414 | - | 0.617 | - |

See the text for variable definitions and data explanations, and Appendix Tables 8a and 8b for the data

Appendix Table 1a: Number of SOEs by Industry

| VSIC code, Industry | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| All industries | 5,733 | 5,329 | 5,344 | 4,822 | 4,582 | 4,061 |
| 01 to 05-Agriculture, fishery, forestry | 828 | 758 | 737 | 633 | 607 | 570 |
| 10 to 41-Mining, manufacturing, utilities | 1,775 | 1,615 | 1,619 | 1,501 | 1,439 | 1,245 |
| 10 to 14-Mining | 132 | 116 | 122 | 108 | 98 | 85 |
| 15 to 37-Manufacturing | 1,570 | 1,415 | 1,410 | 1,312 | 1,247 | 1,077 |
| 151 to 154-Food products | 211 | 180 | 195 | 183 | 173 | 162 |
| 155-Beverages | 89 | 83 | 76 | 63 | 56 | 39 |
| 16-Tobacco | 17 | 20 | 18 | 17 | 16 | 16 |
| 17-Textiles | 76 | 71 | 67 | 64 | 59 | 55 |
| 18-Apparel | 112 | 104 | 101 | 93 | 82 | 62 |
| 191-Leather | 6 | 2 | 5 | 6 | 7 | 5 |
| 192-Footwear | 43 | 40 | 39 | 40 | 35 | 29 |
| 20-Wood products | 62 | 59 | 57 | 44 | 39 | 31 |
| 21-Paper | 39 | 33 | 32 | 33 | 29 | 24 |
| 22-Publishing | 168 | 167 | 172 | 159 | 163 | 152 |
| 23-Petroleum products | 0 | 0 | 0 | 0 | 1 | 0 |
| 24-Chemicals | 101 | 86 | 85 | 78 | 73 | 64 |
| 251-Rubber products | 17 | 12 | 14 | 13 | 16 | 10 |
| 252-Plastics | 22 | 24 | 25 | 22 | 21 | 17 |
| 26-Non-metallic mineral products | 219 | 185 | 185 | 181 | 176 | 136 |
| 27-Basic metals | 21 | 21 | 21 | 20 | 16 | 18 |
| 28-Fabricated metals | 92 | 70 | 70 | 60 | 66 | 61 |
| 29-General machinery | 71 | 80 | 70 | 69 | 58 | 45 |
| 30-Office \& computing machinery | 0 | 0 | 0 | 0 | 0 | 0 |
| 31-Electrical machinery | 26 | 24 | 25 | 23 | 25 | 25 |
| 32-Radio, television \& communication | 30 | 21 | 21 | 20 | 19 | 17 |
| 33-Precision machinery | 8 | 7 | 7 | 7 | 6 | 4 |
| 34-Motor vehicles | 40 | 30 | 28 | 25 | 25 | 21 |
| 35-Other transport equipment | 78 | 80 | 79 | 72 | 66 | 66 |
| 361-Furniture | 16 | 14 | 15 | 15 | 17 | 16 |
| 36 less 361-Miscellaneous manufact. | 6 | 2 | 3 | 5 | 3 | 2 |
| 37-Recycling | 0 | 0 | 0 |  | 0 | 0 |
| 40 to 41-Utilities | 73 | 84 | 87 | 81 | 94 | 83 |
| 45-Construction | 997 | 904 | 911 | 866 | 820 | 697 |
| 50 to 52-Trade | 1,196 | 1,062 | 1,044 | 893 | 800 | 665 |
| 55 to 99-Services | 937 | 990 | 1,033 | 929 | 916 | 884 |
| ADDEDNDUM: PUBLISHED ESTIMATES |  |  |  |  |  |  |
| All industries | 5,759 | 5,355 | 5,364 | 4,845 | 4,596 | - |
| 01 to 05-Agriculture, fishery, forestry | 851 | 764 | 743 | 640 | 612 | - |
| 10 to 41-Mining, manufacturing, utilities | 1,777 | 1,619 | 1,622 | 1,509 | 1,441 | - |
| 45-Construction | 998 | 908 | 915 | 867 | 821 | - |
| 50 to 52-Trade | 1,194 | 1,064 | 1,047 | 896 | 803 | - |
| 55 to 99-Services | 939 | 1,000 | 1,037 | 933 | 919 | - |

Note: Samples include firms reporting positive employment and sales.
Source: Vietnam, General Statistics Office (various years a, various years b)

Appendix Table 1b: Number of Private Firms by Industry

| VSIC code, Industry | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| All industries | 34,829 | 41,873 | 53,557 | 62,358 | 80,693 | 100,646 |
| 01 to 05-Agriculture, fishery, forestry | 2,459 | 2,559 | 2,497 | 1,642 | 1,606 | 1,694 |
| 10 to 41-Mining, manufacturing, utilities | 8,079 | 9,467 | 12,249 | 14,336 | 18,954 | 20,992 |
| 10 to 14-Mining | 285 | 455 | 715 | 892 | 1,057 | 1,151 |
| 15 to 37-Manufacturing | 7,761 | 8,952 | 11,443 | 13,281 | 16,524 | 19,720 |
| 151 to 154-Food products | 2,352 | 2,303 | 2,569 | 2,615 | 2,855 | 3,636 |
| 155-Beverages | 683 | 732 | 872 | 953 | 1,074 | 883 |
| 16-Tobacco | 4 | 6 | 4 | 7 | 6 | 5 |
| 17-Textiles | 264 | 310 | 445 | 509 | 634 | 772 |
| 18-Apparel | 369 | 465 | 651 | 803 | 1,108 | 1,293 |
| 191-Leather | 41 | 45 | 57 | 74 | 112 | 151 |
| 192-Footwear | 106 | 131 | 155 | 166 | 190 | 232 |
| 20-Wood products | 635 | 724 | 944 | 1,056 | 1,321 | 1,541 |
| 21-Paper | 324 | 393 | 479 | 587 | 715 | 880 |
| 22-Publishing | 96 | 197 | 366 | 549 | 845 | 1,067 |
| 23-Petroleum products | 9 | 9 | 8 | 8 | 13 | 13 |
| 24-Chemicals | 219 | 295 | 403 | 509 | 637 | 786 |
| 251-Rubber products | 70 | 83 | 108 | 118 | 144 | 155 |
| 252-Plastics | 273 | 355 | 518 | 592 | 777 | 993 |
| 26-Non-metallic mineral products | 826 | 917 | 1,023 | 1,100 | 1,346 | 1,531 |
| 27-Basic metals | 82 | 108 | 169 | 216 | 275 | 356 |
| 28-Fabricated metals | 440 | 635 | 1,005 | 1,323 | 1,828 | 2,249 |
| 29-General machinery | 134 | 198 | 271 | 351 | 449 | 548 |
| 30-Office \& computing machinery | 1 | 3 | 7 | 11 | 15 | 15 |
| 31-Electrical machinery | 92 | 108 | 139 | 180 | 251 | 294 |
| 32-Radio, television \& communication | 31 | 34 | 54 | 76 | 118 | 129 |
| 33-Precision machinery | 22 | 22 | 31 | 33 | 41 | 56 |
| 34-Motor vehicles | 109 | 145 | 196 | 185 | 213 | 272 |
| 35-Other transport equipment | 149 | 173 | 226 | 266 | 315 | 377 |
| 361-Furniture | 319 | 456 | 577 | 761 | 929 | 1,163 |
| 36 less 361-Miscellaneous manufact. | 107 | 95 | 152 | 207 | 279 | 288 |
| 37-Recycling | 4 | 10 | 14 | 26 | 34 | 35 |
| 40 to 41-Utilities | 33 | 60 | 91 | 163 | 1,373 | 121 |
| 45-Construction | 2,911 | 4,320 | 6,549 | 8,459 | 10,811 | 13,693 |
| 50 to 52-Trade | 16,270 | 18,796 | 23,110 | 26,627 | 34,096 | 44,494 |
| 55 to 99-Services | 5,110 | 6,731 | 9,152 | 11,294 | 15,226 | 19,773 |
| ADDEDNDUM: PUBLISHED ESTIMATES |  |  |  |  |  |  |
| All industries | 35,004 | 44,314 | 55,236 | 64,526 | 84,003 |  |
| 01 to 05-Agriculture, fishery, forestry | 2,485 | 2,623 | 2,578 | 1,702 | 1,684 | - |
| 10 to 41-Mining, manufacturing, utilities | 8,103 | 10,072 | 12,536 | 14,682 | 19,410 |  |
| 45-Construction | 2,958 | 4,748 | 6,887 | 8,799 | 11,441 |  |
| 50 to 52-Trade | 16,308 | 19,593 | 23,682 | 27,437 | 35,193 | - |
| 55 to 99-Services | 5,150 | 7,278 | 9,553 | 11,906 | 16,275 | - |

Note: Samples include firms reporting positive employment and sales.
Source: Vietnam, General Statistics Office (various years a, various years b)

Appendix Table 1c: Number of MNCs by Industry

| VSIC code, Industry | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| All industries | 1,489 | 1,778 | 2,200 | 2,542 | 3,057 | 3,510 |
| 01 to 05-Agriculture, fishery, forestry | 38 | 43 | 51 | 59 | 67 | 75 |
| 10 to 41-Mining, manufacturing, utilities | 1,050 | 1,275 | 1,641 | 1,962 | 2,330 | 2,625 |
| 10 to 14-Mining | 9 | 13 | 13 | 14 | 19 | 19 |
| 15 to 37-Manufacturing | 1,035 | 1,256 | 1,622 | 1,941 | 2,304 | 2,601 |
| 151 to 154-Food products | 116 | 130 | 164 | 191 | 204 | 226 |
| 155-Beverages | 31 | 28 | 31 | 34 | 33 | 37 |
| 16-Tobacco | 2 | 1 | 1 | 1 | 3 | 3 |
| 17-Textiles | 67 | 79 | 98 | 121 | 137 | 192 |
| 18-Apparel | 94 | 126 | 207 | 276 | 327 | 305 |
| 191-Leather | 19 | 25 | 31 | 32 | 53 | 47 |
| 192-Footwear | 42 | 47 | 66 | 72 | 97 | 104 |
| 20-Wood products | 42 | 42 | 54 | 68 | 83 | 94 |
| 21-Paper | 24 | 31 | 40 | 47 | 59 | 64 |
| 22-Publishing | 6 | 9 | 15 | 19 | 28 | 35 |
| 23-Petroleum products | 2 | 3 | 4 | 2 | 2 | 2 |
| 24-Chemicals | 88 | 98 | 118 | 144 | 161 | 185 |
| 251-Rubber products | 24 | 26 | 27 | 31 | 40 | 45 |
| 252-Plastics | 59 | 75 | 94 | 115 | 139 | 184 |
| 26-Non-metallic mineral products | 54 | 63 | 73 | 82 | 91 | 96 |
| 27-Basic metals | 13 | 24 | 25 | 26 | 29 | 30 |
| 28-Fabricated metals | 90 | 105 | 131 | 154 | 189 | 230 |
| 29-General machinery | 31 | 33 | 43 | 58 | 71 | 72 |
| 30-Office \& computing machinery | 2 | 2 | 4 | 5 | 8 | 9 |
| 31-Electrical machinery | 47 | 51 | 69 | 77 | 87 | 93 |
| 32-Radio, television \& communication | 30 | 35 | 44 | 47 | 53 | 60 |
| 33-Precision machinery | 14 | 20 | 23 | 23 | 26 | 29 |
| 34-Motor vehicles | 27 | 30 | 44 | 49 | 69 | 78 |
| 35-Other transport equipment | 37 | 56 | 59 | 78 | 88 | 100 |
| 361-Furniture | 23 | 52 | 70 | 92 | 111 | 148 |
| 36 less 361-Miscellaneous manufact. | 51 | 65 | 87 | 97 | 115 | 131 |
| 37-Recycling |  | 0 | 0 | 0 | 1 | 2 |
| 40 to 41-Utilities | 6 | 6 | 6 | 7 | 7 | 5 |
| 45-Construction | 39 | 34 | 36 | 46 | 50 | 55 |
| 50 to 52-Trade | 44 | 60 | 62 | 58 | 75 | 84 |
| 55 to 99-Services | 318 | 366 | 410 | 417 | 535 | 671 |
| ADDEDNDUM: PUBLISHED ESTIMATES |  |  |  |  |  |  |
| All industries | 1,525 | 2,011 | 2,308 | 2,641 | 3,156 |  |
| 01 to 05-Agriculture, fishery, forestry | 42 | 51 | 58 | 65 | 73 | - |
| 10 to 41-Mining, manufacturing, utilities | 1,058 | 1,449 | 1,700 | 2,007 | 2,352 | - |
| 45-Construction | 43 | 37 | 43 | 51 | 53 |  |
| 50 to 52-Trade | 45 | 65 | 65 | 63 | 83 | - |
| 55 to 99-Services | 337 | 409 | 442 | 455 | 595 | - |

Note: Samples include firms reporting positive employment and sales.
Source: Vietnam, General Statistics Office (various years a, various years b)

Appendix Table 1d: Number of Medium-Large SOEs by Industry

| VSIC code, Industry | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| All industries | 5,430 | 5,077 | 5,107 | 4,661 | 4,421 | 3,875 |
| 01 to 05-Agriculture, fishery, forestry | 745 | 697 | 678 | 599 | 574 | 532 |
| 10 to 41-Mining, manufacturing, utilities | 1,742 | 1,581 | 1,583 | 1,478 | 1,412 | 1,215 |
| 10 to 14-Mining | 132 | 115 | 119 | 105 | 96 | 82 |
| 15 to 37-Manufacturing | 1,541 | 1,391 | 1,385 | 1,296 | 1,229 | 1,056 |
| 151 to 154-Food products | 207 | 178 | 193 | 182 | 172 | 160 |
| 155-Beverages | 85 | 79 | 69 | 60 | 53 | 38 |
| 16-Tobacco | 17 | 20 | 18 | 17 | 16 | 16 |
| 17-Textiles | 74 | 70 | 65 | 63 | 59 | 51 |
| 18-Apparel | 111 | 104 | 101 | 93 | 82 | 62 |
| 191-Leather | 6 | 2 | 5 | 6 | 7 | 5 |
| 192-Footwear | 42 | 40 | 39 | 40 | 35 | 29 |
| 20-Wood products | 61 | 59 | 56 | 43 | 38 | 31 |
| 21-Paper | 39 | 33 | 32 | 32 | 29 | 24 |
| 22-Publishing | 163 | 159 | 165 | 154 | 154 | 145 |
| 23-Petroleum products | 0 | 0 | 0 | 0 | 1 | 0 |
| 24-Chemicals | 98 | 85 | 84 | 78 | 73 | 63 |
| 251-Rubber products | 17 | 12 | 14 | 13 | 16 | 8 |
| 252-Plastics | 22 | 24 | 25 | 22 | 21 | 17 |
| 26-Non-metallic mineral products | 218 | 182 | 183 | 180 | 176 | 136 |
| 27-Basic metals | 21 | 21 | 21 | 20 | 16 | 18 |
| 28-Fabricated metals | 90 | 70 | 70 | 60 | 63 | 60 |
| 29-General machinery | 71 | 80 | 70 | 68 | 58 | 45 |
| 30-Office \& computing machinery | 0 | 0 | 0 | 0 | 0 | 0 |
| 31-Electrical machinery | 25 | 23 | 24 | 23 | 25 | 25 |
| 32-Radio, television \& communication | 30 | 21 | 21 | 20 | 19 | 17 |
| 33-Precision machinery | 8 | 7 | 7 | 7 | 6 | 4 |
| 34-Motor vehicles | 36 | 28 | 27 | 24 | 24 | 19 |
| 35-Other transport equipment | 78 | 79 | 78 | 71 | 66 | 65 |
| 361-Furniture | 16 | 13 | 15 | 15 | 17 | 16 |
| 36 less 361-Miscellaneous manufact. | 6 | 2 | 3 | 5 | 3 | 2 |
| 37-Recycling | 0 | 0 | 0 | 0 | 0 | 0 |
| 40 to 41-Utilities | 69 | 75 | 79 | 77 | 87 | 77 |
| 45-Construction | 969 | 895 | 901 | 864 | 817 | 690 |
| 50 to 52-Trade | 978 | 974 | 842 | 750 | 614 |  |
| 55 to 99-Services | 871 | 926 | 971 | 878 | 868 | 824 |

Note: Samples include firms reporting positive employment and sales.
Source: Vietnam, General Statistics Office (various years b)

Appendix Table 1e: Number of Medium-Large Private Firms by Industry

| VSIC code, Industry | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| All industries | 8,054 | 10,680 | 14,325 | 17,600 | 21,843 | 25,593 |
| 01 to 05-Agriculture, fishery, forestry | 390 | 403 | 556 | 497 | 532 | 570 |
| 10 to 41-Mining, manufacturing, utilities | 3,579 | 4,569 | 5,803 | 6,992 | 8,613 | 9,710 |
| 10 to 14-Mining | 196 | 279 | 417 | 539 | 627 | 646 |
| 15 to 37-Manufacturing | 3,380 | 4,286 | 5,383 | 6,445 | 7,944 | 9,057 |
| 151 to 154-Food products | 565 | 676 | 812 | 928 | 1,140 | 1,341 |
| 155-Beverages | 70 | 95 | 110 | 149 | 165 | 152 |
| 16-Tobacco | 1 | 3 | 1 | 3 | 3 | 5 |
| 17-Textiles | 191 | 222 | 283 | 320 | 388 | 463 |
| 18-Aparel | 303 | 380 | 490 | 612 | 800 | 846 |
| 191-Leather | 36 | 36 | 39 | 53 | 68 | 85 |
| 192-Footwear | 96 | 115 | 131 | 130 | 148 | 173 |
| 20-Wood products | 291 | 362 | 457 | 527 | 664 | 713 |
| 21-Paper | 236 | 281 | 323 | 379 | 451 | 523 |
| 22-Publishing | 25 | 56 | 80 | 115 | 169 | 207 |
| 23-Petroleum products | 8 | 7 | 5 | 6 | 6 | 9 |
| 24-Chemicals | 118 | 146 | 198 | 234 | 298 | 331 |
| 251-Rubber products | 37 | 57 | 63 | 66 | 77 | 79 |
| 252-Plastics | 179 | 227 | 315 | 364 | 408 | 497 |
| 26-Non-metallic mineral products | 404 | 521 | 624 | 691 | 871 | 1,006 |
| 27-Basic metals | 57 | 79 | 116 | 144 | 174 | 237 |
| 28-Fabricated metals | 212 | 315 | 443 | 565 | 734 | 843 |
| 29-General machinery | 70 | 114 | 146 | 186 | 229 | 242 |
| 30-Office \& computing machinery | 0 | 2 | 1 | 5 | 4 | 6 |
| 31-Electrical machinery | 58 | 66 | 83 | 102 | 127 | 142 |
| 32-Radio, television \& communication | 19 | 21 | 29 | 33 | 48 | 48 |
| 33-Precision machinery | 16 | 13 | 17 | 18 | 19 | 26 |
| 34-Motor vehicles | 45 | 73 | 92 | 91 | 101 | 107 |
| 35-Other transport equipment | 88 | 104 | 133 | 162 | 177 | 208 |
| 361-Furniture | 193 | 259 | 304 | 439 | 517 | 624 |
| 36 less 361-Miscellaneous manufact. | 60 | 52 | 81 | 112 | 141 | 122 |
| 37-Recycling | 2 | 4 | 7 | 11 | 17 | 22 |
| 40 to 41-Utilities | 3 | 4 | 3 | 8 | 42 | 7 |
| 45-Construction | 1,712 | 2,536 | 3,609 | 4,543 | 5,565 | 6,408 |
| 50 to 52-Trade | 1,107 | 1,615 | 2,295 | 2,977 | 3,835 | 4,790 |
| 55 to 99-Services | 1,266 | 1,557 | 2,062 | 2,591 | 3,298 | 4,115 |

Note: Samples include firms reporting positive employment and sales.
Source: Vietnam, General Statistics Office (various years b)

Appendix Table 1f: Number of Medium-Large MNCs by Industry

| VSIC code, Industry | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| All industries | 1,333 | 1,563 | 1,912 | 2,256 | 2,642 | 2,965 |
| 01 to 05-Agriculture, fishery, forestry | 29 | 32 | 35 | 48 | 58 | 57 |
| 10 to 41-Mining, manufacturing, utilities | 979 | 1,172 | 1,500 | 1,809 | 2,123 | 2,373 |
| 10 to 14-Mining | 9 | 11 | 11 | 13 | 17 | 17 |
| 15 to 37-Manufacturing | 965 | 1,156 | 1,484 | 1,790 | 2,100 | 2,351 |
| 151 to 154-Food products | 110 | 113 | 145 | 173 | 179 | 201 |
| 155-Beverages | 28 | 25 | 27 | 27 | 29 | 31 |
| 16-Tobacco | 2 | 1 | 1 | 1 | 3 | 3 |
| 17-Textiles | 64 | 76 | 90 | 119 | 132 | 182 |
| 18-Apparel | 94 | 121 | 202 | 267 | 318 | 297 |
| 191-Leather | 19 | 24 | 31 | 32 | 51 | 46 |
| 192-Footwear | 41 | 47 | 65 | 72 | 95 | 101 |
| 20-Wood products | 41 | 38 | 51 | 65 | 76 | 84 |
| 21-Paper | 23 | 30 | 36 | 46 | 54 | 57 |
| 22-Publishing | 4 | 5 | 10 | 15 | 21 | 29 |
| 23-Petroleum products | 2 | 2 | 3 | 2 | 2 | 2 |
| 24-Chemicals | 74 | 84 | 96 | 118 | 131 | 140 |
| 251-Rubber products | 22 | 25 | 26 | 31 | 39 | 44 |
| 252-Plastics | 54 | 69 | 87 | 107 | 126 | 162 |
| 26-Non-metallic mineral products | 49 | 59 | 68 | 75 | 81 | 84 |
| 27-Basic metals | 12 | 22 | 22 | 23 | 26 | 26 |
| 28-Fabricated metals | 84 | 92 | 116 | 131 | 168 | 204 |
| 29-General machinery | 26 | 30 | 37 | 46 | 56 | 57 |
| 30-Office \& computing machinery | 2 | 2 | 3 | 5 | 6 | 7 |
| 31-Electrical machinery | 45 | 50 | 58 | 72 | 79 | 83 |
| 32-Radio, television \& communication | 28 | 33 | 42 | 43 | 48 | 57 |
| 33-Precision machinery | 13 | 19 | 20 | 22 | 22 | 25 |
| 34-Motor vehicles | 26 | 28 | 40 | 44 | 62 | 70 |
| 35-Other transport equipment | 34 | 52 | 58 | 74 | 83 | 96 |
| 361-Furniture | 23 | 51 | 70 | 89 | 109 | 146 |
| 36 less 361-Miscellaneous manufact. | 45 | 58 | 80 | 91 | 104 | 117 |
| 37-Recycling | 0 | 0 | 0 | 0 | 0 | 0 |
| 40 to 41-Utilities | 5 | 5 | 5 | 6 | 6 | 5 |
| 45-Construction | 27 | 22 | 27 | 37 | 38 | 45 |
| 50 to 52-Trade | 38 | 45 | 47 | 45 | 52 | 59 |
| 55 to 99-Services | 260 | 292 | 303 | 317 | 371 | 431 |

Note: Samples include firms reporting positive employment and sales.
Source: Vietnam, General Statistics Office (various years b)

Appendix Table 2a: Employment of SOEs by Industry (thousands)

| VSIC code, Industry | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| All industries | 2,086.77 | 2,115.55 | 2,258.28 | 2,261.70 | 2,247.31 | 1,927.23 |
| 01 to 05-Agriculture, fishery, forestry | 224.29 | 220.77 | 219.35 | 211.56 | 211.64 | 212.47 |
| 10 to 41-Mining, manufacturing, utilities | 889.03 | 867.39 | 936.28 | 961.92 | 950.15 | 770.66 |
| 10 to 14-Mining | 100.90 | 93.92 | 107.87 | 104.54 | 101.90 | 113.80 |
| 15 to 37-Manufacturing | 717.12 | 698.10 | 747.64 | 772.80 | 757.20 | 634.88 |
| 151 to 154-Food products | 115.31 | 108.63 | 121.34 | 115.36 | 111.76 | 90.05 |
| 155-Beverages | 16.14 | 15.59 | 15.77 | 19.54 | 16.15 | 13.27 |
| 16-Tobacco | 11.59 | 13.09 | 13.06 | 13.64 | 13.95 | 13.95 |
| 17-Textiles | 72.02 | 75.24 | 76.11 | 76.09 | 67.11 | 62.76 |
| 18-Apparel | 110.79 | 101.87 | 115.93 | 125.46 | 124.78 | 97.50 |
| 191-Leather | 3.82 | 2.16 | 3.78 | 5.30 | 4.69 | 1.81 |
| 192-Footwear | 67.72 | 65.92 | 64.02 | 69.29 | 63.95 | 43.90 |
| 20-Wood products | 18.47 | 17.77 | 16.91 | 15.10 | 15.61 | 14.49 |
| 21-Paper | 14.77 | 12.37 | 13.57 | 13.08 | 15.03 | 14.95 |
| 22-Publishing | 20.34 | 21.41 | 23.11 | 22.52 | 24.80 | 24.37 |
| 23-Petroleum products | 0.00 | 0.00 | 0.00 | 0.00 | 0.12 | 0.00 |
| 24-Chemicals | 44.21 | 40.24 | 40.92 | 39.46 | 40.74 | 35.59 |
| 251-Rubber products | 10.95 | 10.34 | 13.17 | 13.26 | 19.25 | 9.39 |
| 252-Plastics | 5.72 | 6.29 | 6.78 | 7.26 | 6.68 | 4.23 |
| 26-Non-metallic mineral products | 76.94 | 78.46 | 87.40 | 93.59 | 92.67 | 68.65 |
| 27-Basic metals | 23.01 | 21.31 | 21.37 | 22.54 | 21.44 | 21.52 |
| 28-Fabricated metals | 24.10 | 20.43 | 21.88 | 23.74 | 23.45 | 25.32 |
| 29-General machinery | 21.02 | 28.75 | 25.11 | 26.53 | 22.21 | 18.15 |
| 30-Office \& computing machinery | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 31-Electrical machinery | 14.04 | 13.19 | 14.23 | 14.83 | 13.08 | 13.80 |
| 32-Radio, television \& communication | 7.22 | 5.19 | 5.54 | 5.59 | 5.59 | 5.01 |
| 33-Precision machinery | 1.83 | 1.30 | 1.50 | 1.56 | 1.38 | 0.47 |
| 34-Motor vehicles | 7.56 | 8.45 | 10.38 | 10.55 | 10.83 | 9.51 |
| 35-Other transport equipment | 24.21 | 25.45 | 28.66 | 29.27 | 31.38 | 33.78 |
| 361-Furniture | 4.41 | 4.08 | 6.11 | 7.43 | 9.33 | 11.56 |
| 36 less 361-Miscellaneous manufact. | 0.95 | 0.56 | 1.02 | 1.82 | 1.22 | 0.86 |
| 37-Recycling | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 40 to 41-Utilities | 71.02 | 75.37 | 80.77 | 84.58 | 91.05 | 21.99 |
| 45-Construction | 391.75 | 407.69 | 469.68 | 468.39 | 458.07 | 403.84 |
| 50 to 52-Trade | 227.18 | 211.30 | 209.00 | 185.83 | 175.80 | 145.82 |
| 55 to 99-Services | 354.52 | 408.41 | 423.97 | 434.01 | 451.66 | 394.43 |
| ADDEDNDUM: PUBLISHED ESTIMA | TES |  |  |  |  |  |
| All industries | 2,088.53 | 2,114.32 | 2,260.31 | 2,264.94 | 2,249.90 |  |
| 01 to 05-Agriculture, fishery, forestry | 226.35 | 220.97 | 219.66 | 213.42 | 212.35 |  |
| 10 to 41-Mining, manufacturing, utilities | 889.13 | 866.08 | 936.53 | 962.67 | 951.55 |  |
| 45-Construction | 391.74 | 407.97 | 470.13 | 468.44 | 458.11 |  |
| 50 to 52-Trade | 226.77 | 211.00 | 209.11 | 185.95 | 176.09 |  |
| 55 to 99-Services | 354.54 | 408.30 | 424.88 | 434.48 | 451.80 |  |

Note: Samples include firms reporting positive employment and sales.
Source: Vietnam, General Statistics Office (various years a, various years b)

Appendix Table 2b: Employment of Private Firms by Industry (thousands)

| VSIC code, Industry | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| All industries | 1,037.58 | 1,327.40 | 1,694.03 | 2,035.74 | 2,455.91 | 2,957.29 |
| 01 to 05-Agriculture, fishery, forestry | 36.03 | 36.97 | 39.80 | 31.68 | 35.29 | 37.29 |
| 10 to 41-Mining, manufacturing, utilities | 569.10 | 696.25 | 865.21 | 1,041.19 | 1,233.61 | 1,392.03 |
| 10 to 14-Mining | 45.66 | 27.99 | 40.17 | 50.04 | 54.74 | 55.93 |
| 15 to 37-Manufacturing | 523.18 | 666.98 | 824.28 | 989.70 | 1,167.63 | 1,335.20 |
| 151 to 154-Food products | 92.73 | 121.46 | 146.42 | 171.73 | 201.18 | 236.75 |
| 155-Beverages | 8.77 | 11.33 | 15.03 | 17.93 | 19.69 | 19.51 |
| 16-Tobacco | 0.20 | 0.14 | 0.04 | 0.23 | 0.18 | 0.23 |
| 17-Textiles | 26.83 | 35.55 | 44.86 | 51.62 | 57.18 | 68.06 |
| 18-Apparel | 75.96 | 95.24 | 118.02 | 148.01 | 177.96 | 196.31 |
| 191-Leather | 10.45 | 9.35 | 9.12 | 12.23 | 14.54 | 18.44 |
| 192-Footwear | 102.45 | 120.06 | 126.60 | 137.99 | 137.34 | 142.94 |
| 20-Wood products | 35.20 | 43.18 | 56.45 | 62.14 | 76.13 | 80.86 |
| 21-Paper | 17.56 | 21.70 | 27.28 | 31.04 | 36.33 | 44.57 |
| 22-Publishing | 2.18 | 4.27 | 6.68 | 9.51 | 12.98 | 17.20 |
| 23-Petroleum products | 0.46 | 0.51 | 0.51 | 0.49 | 0.54 | 0.88 |
| 24-Chemicals | 11.96 | 16.13 | 20.01 | 24.87 | 29.48 | 34.25 |
| 251-Rubber products | 2.66 | 3.91 | 4.64 | 5.61 | 6.92 | 7.45 |
| 252-Plastics | 16.70 | 21.99 | 31.14 | 35.73 | 41.24 | 52.48 |
| 26-Non-metallic mineral products | 39.58 | 56.95 | 69.23 | 84.18 | 102.28 | 127.99 |
| 27-Basic metals | 3.52 | 4.99 | 7.91 | 10.29 | 12.95 | 16.29 |
| 28-Fabricated metals | 15.68 | 22.10 | 34.50 | 45.00 | 62.83 | 69.56 |
| 29-General machinery | 4.75 | 9.99 | 12.83 | 16.97 | 21.33 | 24.77 |
| 30-Office \& computing machinery | 0.02 | 0.08 | 0.10 | 0.34 | 0.44 | 0.50 |
| 31-Electrical machinery | 4.52 | 5.23 | 6.69 | 9.20 | 10.76 | 12.54 |
| 32-Radio, television \& communication | 1.57 | 1.80 | 3.08 | 3.67 | 4.98 | 4.80 |
| 33-Precision machinery | 2.58 | 3.51 | 3.67 | 3.94 | 4.08 | 2.70 |
| 34-Motor vehicles | 2.98 | 4.72 | 8.19 | 7.09 | 7.44 | 9.31 |
| 35-Other transport equipment | 6.57 | 8.60 | 12.43 | 14.47 | 20.81 | 23.35 |
| 361-Furniture | 26.54 | 35.97 | 47.73 | 70.62 | 89.38 | 106.31 |
| 36 less 361-Miscellaneous manufact. | 10.48 | 7.98 | 10.74 | 14.17 | 17.75 | 15.87 |
| 37-Recycling | 0.29 | 0.24 | 0.39 | 0.65 | 0.95 | 1.31 |
| 40 to 41-Utilities | 0.26 | 1.28 | 0.77 | 1.45 | 11.24 | 0.90 |
| 45-Construction | 133.87 | 218.66 | 319.13 | 384.59 | 468.20 | 589.26 |
| 50 to 52-Trade | 137.96 | 186.05 | 246.13 | 308.49 | 387.79 | 515.24 |
| 55 to 99-Services | 160.62 | 189.48 | 223.76 | 269.79 | 331.02 | 423.47 |
| ADDEDNDUM: PUBLISHED ESTIMA |  |  |  |  |  |  |
| All industries | 1,040.90 | 1,329.62 | 1,706.41 | 2,049.89 | 2,475.45 |  |
| 01 to 05-Agriculture, fishery, forestry | 37.00 | 38.16 | 40.71 | 32.35 | 36.08 | - |
| 10 to 41-Mining, manufacturing, utilities | 570.07 | 696.63 | 868.10 | 1,044.34 | 1,236.77 | - |
| 45-Construction | 134.79 | 216.52 | 323.69 | 388.26 | 474.38 | - |
| 50 to 52-Trade | 138.19 | 186.91 | 248.29 | 311.75 | 392.01 |  |
| 55 to 99-Services | 160.86 | 191.40 | 225.61 | 273.19 | 336.20 | - |

Note: Samples include firms reporting positive employment and sales.
Source: Vietnam, General Statistics Office (various years a, various years b)

Appendix Table 2c: Employment of MNCs by Industry (thousands)

| VSIC code, Industry | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| All industries | 406.70 | 484.11 | 687.31 | 857.75 | 1,043.46 | 1,218.16 |
| 01 to 05-Agriculture, fishery, forestry | 3.64 | 4.05 | 5.03 | 6.14 | 7.58 | 7.69 |
| 10 to 41-Mining, manufacturing, utilities | 363.19 | 439.27 | 633.12 | 798.33 | 973.27 | 1,134.29 |
| 10 to 14-Mining | 6.68 | 6.48 | 7.25 | 7.74 | 7.61 | 8.23 |
| 15 to 37-Manufacturing | 355.77 | 432.07 | 625.16 | 789.82 | 964.92 | 1,125.32 |
| 151 to 154-Food products | 27.47 | 32.34 | 40.33 | 47.15 | 54.97 | 61.51 |
| 155-Beverages | 7.64 | 6.79 | 5.71 | 5.69 | 5.88 | 6.23 |
| 16-Tobacco | 0.33 | 0.22 | 0.26 | 0.28 | 0.42 | 0.42 |
| 17-Textiles | 23.91 | 27.27 | 29.94 | 37.67 | 43.84 | 57.44 |
| 18-Apparel | 45.01 | 56.07 | 121.00 | 161.66 | 194.97 | 216.76 |
| 191-Leather | 9.74 | 13.41 | 17.97 | 22.55 | 30.01 | 29.67 |
| 192-Footwear | 102.42 | 121.01 | 175.55 | 224.57 | 267.17 | 313.90 |
| 20-Wood products | 9.53 | 5.39 | 9.20 | 12.23 | 16.56 | 18.46 |
| 21-Paper | 4.15 | 5.80 | 6.81 | 8.38 | 9.43 | 10.32 |
| 22-Publishing | 0.32 | 0.44 | 0.88 | 1.30 | 2.26 | 2.76 |
| 23-Petroleum products | 0.34 | 0.36 | 0.60 | 0.34 | 0.36 | 0.36 |
| 24-Chemicals | 9.03 | 11.03 | 14.16 | 15.26 | 17.15 | 18.82 |
| 251-Rubber products | 5.23 | 5.30 | 7.01 | 8.50 | 9.18 | 11.03 |
| 252-Plastics | 9.96 | 11.58 | 15.01 | 19.86 | 24.29 | 29.38 |
| 26-Non-metallic mineral products | 10.66 | 13.00 | 16.86 | 18.92 | 21.69 | 23.19 |
| 27-Basic metals | 1.98 | 3.20 | 3.74 | 4.35 | 5.27 | 4.98 |
| 28-Fabricated metals | 11.00 | 12.81 | 17.60 | 20.68 | 28.11 | 34.98 |
| 29-General machinery | 5.32 | 3.70 | 4.50 | 5.82 | 11.05 | 11.24 |
| 30-Office \& computing machinery | 3.06 | 2.26 | 3.50 | 4.20 | 5.58 | 10.67 |
| 31-Electrical machinery | 20.73 | 25.17 | 33.05 | 39.08 | 42.54 | 53.56 |
| 32-Radio, television \& communication | 7.87 | 8.81 | 11.27 | 15.55 | 19.53 | 25.47 |
| 33-Precision machinery | 2.44 | 4.57 | 5.11 | 6.07 | 7.48 | 8.10 |
| 34-Motor vehicles | 5.06 | 6.87 | 9.71 | 11.47 | 15.93 | 17.98 |
| 35-Other transport equipment | 9.43 | 14.72 | 20.96 | 26.40 | 29.86 | 32.64 |
| 361-Furniture | 10.46 | 21.55 | 32.05 | 45.07 | 62.02 | 80.77 |
| 36 less 361-Miscellaneous manufact. | 12.69 | 18.41 | 22.39 | 26.78 | 39.37 | 44.68 |
| 37-Recycling | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.01 |
| 40 to 41-Utilities | 0.74 | 0.72 | 0.71 | 0.76 | 0.74 | 0.75 |
| 45-Construction | 2.80 | 3.09 | 5.11 | 4.93 | 6.65 | 6.03 |
| 50 to 52-Trade | 3.86 | 4.79 | 5.61 | 5.96 | 7.02 | 8.74 |
| 55 to 99-Services | 33.22 | 32.91 | 38.44 | 42.40 | 48.93 | 61.41 |
| ADDEDNDUM: PUBLISHED ESTIMATES |  |  |  |  |  |  |
| All industries | 407.57 | 489.29 | 691.09 | 860.26 | 1,044.85 |  |
| 01 to 05-Agriculture, fishery, forestry | 3.90 | 4.28 | 5.44 | 6.37 | 7.68 |  |
| 10 to 41-Mining, manufacturing, utilities | 363.54 | 443.06 | 636.04 | 799.97 | 973.59 |  |
| 45-Construction | 2.83 | 3.10 | 5.18 | 5.10 | 6.69 |  |
| 50 to 52-Trade | 3.94 | 5.08 | 5.65 | 5.97 | 7.35 |  |
| 55 to 99-Services | 33.36 | 33.76 | 38.79 | 42.85 | 49.55 | - |

Note: Samples include firms reporting positive employment and sales.
Source: Vietnam, General Statistics Office (various years a, various years b)

Appendix Table 2d: Employment of Medium-Large SOEs by Industry (thousands)

| VSIC code, Industry | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| All industries | $2,082.91$ | $2,112.27$ | $2,255.05$ | $2,259.50$ | $2,245.16$ | $1,924.74$ |
| 01 to 05-Agriculture, fishery, forestry | 223.16 | 219.94 | 218.46 | 211.05 | 211.14 | 211.93 |
| 10 to 41-Mining, manufacturing, utilities | 888.64 | 866.93 | 935.80 | 961.62 | 949.82 | 770.28 |
| 10 to 14-Mining | 100.90 | 93.91 | 107.84 | 104.50 | 101.86 | 113.75 |
| 15 to 37-Manufacturing | 716.77 | 697.77 | 747.29 | 772.58 | 756.99 | 634.63 |
| 151 to 154-Food products | 115.26 | 108.60 | 121.31 | 115.35 | 111.75 | 90.03 |
| 155-Beverages | 16.10 | 15.54 | 15.68 | 19.50 | 16.13 | 13.26 |
| 16-Tobacco | 11.59 | 13.09 | 13.06 | 13.64 | 13.95 | 13.95 |
| 17-Textiles | 71.99 | 75.23 | 76.07 | 76.07 | 67.11 | 62.72 |
| 18-Aparel | 110.77 | 101.87 | 115.93 | 125.46 | 124.78 | 97.50 |
| 191-Leather | 3.82 | 2.16 | 3.78 | 5.30 | 4.69 | 1.81 |
| 192-Footwear | 67.70 | 65.92 | 64.02 | 69.29 | 63.95 | 43.90 |
| 20-Wood products | 18.46 | 17.77 | 16.89 | 15.08 | 15.60 | 14.49 |
| 21-Paper | 14.77 | 12.37 | 13.57 | 13.06 | 15.03 | 14.95 |
| 22-Publishing | 20.29 | 21.30 | 23.00 | 22.45 | 24.70 | 24.29 |
| 23-Petroleum products | 0.00 | 0.00 | 0.00 | 0.00 | 0.12 | 0.00 |
| 24-Chemicals | 44.18 | 40.23 | 40.90 | 39.46 | 40.74 | 35.59 |
| 251-Rubber products | 10.95 | 10.34 | 13.17 | 13.26 | 19.25 | 9.35 |
| 252-Plastics | 5.72 | 6.29 | 6.78 | 7.26 | 6.68 | 4.23 |
| 26-Non-metallic mineral products | 76.93 | 78.42 | 87.37 | 93.58 | 92.67 | 68.65 |
| 27-Basic metals | 23.01 | 21.31 | 21.37 | 22.54 | 21.44 | 21.52 |
| 28-Fabricated metals | 24.06 | 20.43 | 21.88 | 23.74 | 23.41 | 25.31 |
| 29-General machinery | 21.02 | 28.75 | 25.11 | 26.52 | 22.21 | 18.15 |
| 30-Office \& computing machinery | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 31-Electrical machinery | 14.04 | 13.18 | 14.22 | 14.83 | 13.08 | 13.80 |
| 32-Radio, television \& communication | 7.22 | 5.19 | 5.54 | 5.59 | 5.59 | 5.01 |
| 33-Precision machinery | 1.83 | 1.30 | 1.50 | 1.56 | 1.38 | 0.47 |
| 34-Motor vehicles | 7.51 | 8.42 | 10.37 | 10.53 | 10.82 | 9.48 |
| 35-Other transport equipment | 24.21 | 25.44 | 28.64 | 29.25 | 31.38 | 33.76 |
| 361-Furniture | 4.41 | 4.07 | 6.11 | 7.43 | 9.33 | 11.56 |
| 36 less 361-Miscellaneous manufact. | 0.95 | 0.56 | 1.02 | 1.82 | 1.22 | 0.86 |
| 37-Recycling | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 40 to 41-Utilities | 70.97 | 75.25 | 80.67 | 84.54 | 90.97 | 21.91 |
| 45-Construction | 391.39 | 407.58 | 469.55 | 468.36 | 458.02 | 403.75 |
| 50 to 52-Trade | 226.01 | 210.17 | 208.08 | 185.15 | 175.14 | 145.07 |
| 55 to 99-Services | 353.72 | 407.65 | 423.17 | 433.33 | 451.03 | 393.71 |

Note: Samples include firms reporting positive employment and sales.
Source: Vietnam, General Statistics Office (various years b)

Appendix Table 2e: Employment of Medium-Large Private Firms by Industry (thousands)

| VSIC code, Industry | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| All industries | 857.16 | $1,102.02$ | $1,399.09$ | $1,688.15$ | $2,001.52$ | $2,384.76$ |
| 01 to 05-Agriculture, fishery, forestry | 16.29 | 16.60 | 21.43 | 20.23 | 24.30 | 25.88 |
| 10 to 41-Mining, manufacturing, utilities | 528.84 | 650.78 | 804.83 | 971.06 | $1,137.73$ | $1,287.02$ |
| 10 to 14-Mining | 44.68 | 26.13 | 37.08 | 46.37 | 50.18 | 50.66 |
| 15 to 37-Manufacturing | 484.07 | 623.75 | 767.61 | 924.41 | $1,086.16$ | $1,236.10$ |
| 151 to 154-Food products | 78.95 | 108.59 | 132.46 | 157.73 | 186.72 | 217.55 |
| 155-Beverages | 4.17 | 6.35 | 8.96 | 11.51 | 12.42 | 13.70 |
| 16-Tobacco | 0.15 | 0.11 | 0.02 | 0.18 | 0.15 | 0.23 |
| 17-Textiles | 26.02 | 34.58 | 43.14 | 49.58 | 54.68 | 65.08 |
| 18-Apparel | 75.23 | 94.38 | 16.32 | 146.06 | 174.89 | 192.01 |
| 191-Leather | 10.39 | 9.27 | 8.94 | 12.00 | 14.07 | 17.77 |
| 192-Footwear | 102.33 | 119.85 | 126.33 | 137.60 | 136.91 | 142.40 |
| 20-Wood products | 32.02 | 39.75 | 51.80 | 56.93 | 69.83 | 73.01 |
| 21-Paper | 16.52 | 20.38 | 25.50 | 28.68 | 33.43 | 40.65 |
| 22-Publishing | 1.49 | 2.95 | 4.02 | 5.60 | 7.25 | 9.98 |
| 23-Petroleum products | 0.46 | 0.50 | 0.48 | 0.46 | 0.47 | 0.84 |
| 24-Chemicals | 10.98 | 14.62 | 18.00 | 22.18 | 26.36 | 30.17 |
| 251-Rubber products | 2.33 | 3.66 | 4.17 | 5.06 | 6.21 | 6.72 |
| 252-Plastics | 15.69 | 20.59 | 28.99 | 33.31 | 37.30 | 47.51 |
| 26-Non-metallic mineral products | 35.01 | 52.46 | 64.77 | 79.54 | 97.10 | 122.37 |
| 27-Basic metals | 3.26 | 4.64 | 7.32 | 9.44 | 11.75 | 14.93 |
| 28-Fabricated metals | 13.26 | 18.70 | 28.63 | 37.18 | 51.89 | 55.94 |
| 29-General machinery | 4.13 | 9.08 | 11.50 | 15.23 | 18.98 | 21.68 |
| 30-Office \& computing machinery | 0.00 | 0.07 | 0.04 | 0.27 | 0.30 | 0.41 |
| 31-Electrical machinery | 4.17 | 4.78 | 6.05 | 8.38 | 9.42 | 11.12 |
| 32-Radio, television \& communication | 1.42 | 1.67 | 2.80 | 3.21 | 4.21 | 3.99 |
| 33-Precision machinery | 2.51 | 3.40 | 3.53 | 3.78 | 3.84 | 2.43 |
| 34-Motor vehicles | 2.33 | 3.99 | 7.10 | 6.08 | 6.25 | 7.63 |
| 35-Other transport equipment | 5.91 | 7.87 | 11.46 | 13.40 | 19.36 | 21.57 |
| 361-Furniture | 25.10 | 33.82 | 44.94 | 67.27 | 85.14 | 100.86 |
| 36 less 361-Miscellaneous manufact. | 10.00 | 7.54 | 10.07 | 13.30 | 16.46 | 14.38 |
| 37-Recycling | 0.27 | 0.17 | 0.29 | 0.49 | 0.77 | 1.16 |
| 40 to 41-Utilities | 0.08 | 0.90 | 0.14 | 0.27 | 1.40 | 0.26 |
| 45-Construction | 121.98 | 200.05 | 289.98 | 344.64 | 416.62 | 520.87 |
| 50 to 52-Trade | 57.86 | 85.12 | 115.66 | 151.93 | 186.43 | 250.02 |
| 55 to 99-Services | 132.20 | 149.47 | 167.20 | 200.30 | 236.44 | 300.97 |

Note: Samples include firms reporting positive employment and sales.
Source: Vietnam, General Statistics Office (various years b)

Appendix Table 2f: Employment of Medium-Large MNCs by Industry (thousands)

| VSIC code, Industry | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| All industries | 404.88 | 481.71 | 684.08 | 854.47 | $1,038.99$ | $1,212.33$ |
| 01 to 05-Agriculture, fishery, forestry | 3.52 | 3.91 | 4.84 | 6.02 | 7.48 | 7.49 |
| 10 to 41-Mining, manufacturing, utilities | 362.33 | 438.00 | 631.42 | 796.46 | 970.96 | $1,131.31$ |
| 10 to 14-Mining | 6.68 | 6.46 | 7.23 | 7.73 | 7.58 | 8.20 |
| 15 to 37-Manufacturing | 354.91 | 430.82 | 623.48 | 787.96 | 962.64 | $1,122.36$ |
| 151 to 154-Food products | 27.41 | 32.13 | 40.12 | 46.94 | 54.66 | 61.25 |
| 155-Beverages | 7.61 | 6.76 | 5.65 | 5.61 | 5.84 | 6.17 |
| 16-Tobacco | 0.33 | 0.22 | 0.26 | 0.28 | 0.42 | 0.42 |
| 17-Textiles | 23.86 | 27.23 | 29.87 | 37.65 | 43.79 | 57.34 |
| 18-Apparel | 45.01 | 56.01 | 120.94 | 161.58 | 194.92 | 216.70 |
| 191-Leather | 9.74 | 13.40 | 17.97 | 22.55 | 29.99 | 29.67 |
| 192-Footwear | 102.42 | 121.01 | 175.54 | 224.57 | 267.15 | 313.86 |
| 20-Wood products | 9.51 | 5.34 | 9.17 | 12.20 | 16.47 | 18.35 |
| 21-Paper | 4.14 | 5.78 | 6.76 | 8.37 | 9.36 | 10.23 |
| 22-Publishing | 0.29 | 0.38 | 0.83 | 1.26 | 2.20 | 2.69 |
| 23-Petroleum products | 0.34 | 0.35 | 0.59 | 0.34 | 0.36 | 0.36 |
| 24-Chemicals | 8.86 | 10.87 | 13.86 | 14.92 | 16.81 | 18.21 |
| 251-Rubber products | 5.21 | 5.29 | 7.00 | 8.50 | 9.18 | 11.02 |
| 252-Plastics | 9.89 | 11.51 | 14.91 | 19.74 | 24.15 | 29.09 |
| 26-Non-metallic mineral products | 10.60 | 12.95 | 16.81 | 18.84 | 21.58 | 23.04 |
| 27-Basic metals | 1.96 | 3.17 | 3.71 | 4.32 | 5.24 | 4.95 |
| 28-Fabricated metals | 10.90 | 12.65 | 17.41 | 20.36 | 27.82 | 34.63 |
| 29-General machinery | 5.26 | 3.68 | 4.41 | 5.68 | 10.87 | 11.04 |
| 30-Office \& computing machinery | 3.06 | 2.26 | 3.49 | 4.20 | 5.56 | 10.65 |
| 31-Electrical machinery | 20.71 | 25.16 | 32.92 | 39.03 | 42.45 | 53.44 |
| 32-Radio, television \& communication | 7.85 | 8.78 | 11.25 | 15.49 | 19.46 | 25.43 |
| 33-Precision machinery | 2.42 | 4.55 | 5.05 | 6.05 | 7.43 | 8.05 |
| 34-Motor vehicles | 5.04 | 6.85 | 9.67 | 11.41 | 15.89 | 17.89 |
| 35-Other transport equipment | 9.41 | 14.67 | 20.95 | 26.34 | 29.80 | 32.59 |
| 361-Furniture | 10.46 | 21.54 | 32.05 | 45.04 | 62.00 | 80.75 |
| 36 less 361-Miscellaneous manufact. | 12.62 | 18.31 | 22.31 | 26.72 | 39.26 | 44.51 |
| 37-Recycling | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 40 to 41-Utilities | 0.74 | 0.71 | 0.71 | 0.76 | 0.74 | 0.75 |
| 45-Construction | 2.67 | 2.96 | 5.00 | 4.82 | 6.48 | 5.91 |
| 50 to 52-Trade | 3.81 | 4.67 | 5.48 | 5.83 | 6.79 | 8.52 |
| 55 to 99-Services | 32.55 | 32.17 | 37.35 | 41.35 | 47.27 | 59.11 |

Note: Samples include firms reporting positive employment and sales.
Source: Vietnam, General Statistics Office (various years b)

Appendix Table 3a: Sales of SOEs by Industry (trillion dong)

| VSIC code, Industry | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| All industries | 444.954 | 482.924 | 622.77 | 680.67 | 729.43 | 795.36 |
| 01 to 05-Agriculture, fishery, forestry | 7.363 | 7.538 | 8.490 | 10.145 | 11.764 | 14.598 |
| 10 to 41-Mining, manufacturing, utilities | 119.935 | 131.676 | 163.509 | 186.257 | 235.960 | 218.817 |
| 10 to 14-Mining | 9.346 | 11.402 | 14.361 | 11.930 | 24.780 | 34.748 |
| 15 to 37-Manufacturing | 94.030 | 100.996 | 125.680 | 144.545 | 176.870 | 180.360 |
| 151 to 154-Food products | 25.911 | 25.925 | 32.814 | 32.774 | 35.369 | 32.224 |
| 155-Beverages | 3.020 | 3.674 | 5.508 | 6.719 | 7.761 | 9.065 |
| 16-Tobacco | 5.023 | 6.361 | 10.768 | 12.556 | 12.922 | 14.764 |
| 17-Textiles | 6.063 | 6.729 | 7.327 | 8.091 | 8.814 | 10.693 |
| 18-Apparel | 5.473 | 5.434 | 6.914 | 7.982 | 9.910 | 8.954 |
| 191-Leather | 0.099 | 0.037 | 0.126 | 0.144 | 0.158 | 0.096 |
| 192-Footwear | 2.453 | 2.146 | 2.053 | 2.483 | 2.321 | 1.874 |
| 20-Wood products | 1.600 | 1.714 | 1.579 | 1.510 | 1.940 | 2.444 |
| 21-Paper | 4.069 | 2.560 | 2.693 | 3.158 | 3.507 | 4.990 |
| 22-Publishing | 3.779 | 4.499 | 5.639 | 6.548 | 7.930 | 8.856 |
| 23-Petroleum products | 0.000 | 0.000 | 0.000 | 0.000 | 0.090 | 0.000 |
| 24-Chemicals | 8.987 | 8.681 | 10.283 | 10.855 | 14.473 | 18.442 |
| 251-Rubber products | 1.373 | 1.410 | 1.762 | 2.409 | 3.598 | 2.667 |
| 252-Plastics | 1.213 | 1.601 | 1.901 | 2.524 | 3.804 | 1.702 |
| 26-Non-metallic mineral products | 10.669 | 12.101 | 14.721 | 18.987 | 21.799 | 20.248 |
| 27-Basic metals | 2.852 | 3.726 | 4.584 | 6.196 | 9.426 | 9.938 |
| 28-Fabricated metals | 1.708 | 1.922 | 2.092 | 2.839 | 3.351 | 5.360 |
| 29-General machinery | 1.776 | 2.783 | 2.518 | 2.899 | 3.048 | 2.779 |
| 30-Office \& computing machinery | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 31-Electrical machinery | 2.168 | 2.543 | 3.214 | 4.031 | 10.599 | 5.535 |
| 32-Radio, television \& communication | 1.478 | 1.314 | 1.852 | 2.162 | 1.801 | 2.380 |
| 33-Precision machinery | 0.104 | 0.105 | 0.124 | 0.133 | 0.142 | 0.066 |
| 34-Motor vehicles | 0.815 | 1.037 | 1.724 | 3.005 | 3.564 | 3.411 |
| 35-Other transport equipment | 3.025 | 4.132 | 4.411 | 4.845 | 8.039 | 10.999 |
| 361-Furniture | 0.329 | 0.524 | 0.990 | 1.261 | 2.169 | 2.544 |
| 36 less 361-Miscellaneous manufact. | 0.044 | 0.039 | 0.083 | 0.435 | 0.332 | 0.329 |
| 37-Recycling | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 40 to 41-Utilities | 16.559 | 19.278 | 23.468 | 29.781 | 34.311 | 3.709 |
| 45-Construction | 38.139 | 44.969 | 51.937 | 65.641 | 62.896 | 63.226 |
| 50 to 52-Trade | 210.583 | 213.955 | 301.281 | 297.742 | 264.300 | 312.051 |
| 55 to 99-Services | 68.934 | 84.787 | 97.550 | 120.882 | 154.512 | 186.668 |
| ADDEDNDUM: PUBLISHED ESTIMATES |  |  |  |  |  |  |
| All industries | 444.673 | 482.447 | 621.172 | 678.735 | 724.962 |  |
| 01 to 05-Agriculture, fishery, forestry | 7.363 | 7.512 | 8.709 | 10.368 | 12.580 | - |
| 10 to 41-Mining, manufacturing, utilities | 119.913 | 131.486 | 158.890 | 181.078 | 224.365 |  |
| 45-Construction | 38.139 | 44.969 | 52.992 | 66.101 | 63.647 | - |
| 50 to 52-Trade | 210.325 | 213.709 | 302.804 | 301.137 | 266.915 |  |
| 55 to 99-Services | 68.933 | 84.771 | 97.777 | 120.050 | 157.455 |  |

Note: Samples include firms reporting positive employment and sales.
Source: Vietnam, General Statistics Office (various years a, various years b)

Appendix Table 3b: Sales of Private Firms by Industry (trillion dong)

| VSIC code, Industry | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| All industries | 203.157 | 276.442 | 365.72 | 486.66 | 639.54 | 856.71 |
| 01 to 05-Agriculture, fishery, forestry | 2.522 | 2.504 | 2.495 | 2.147 | 3.831 | 4.468 |
| 10 to 41-Mining, manufacturing, utilities | 51.147 | 84.832 | 100.005 | 132.845 | 183.420 | 243.871 |
| 10 to 14-Mining | 0.607 | 1.085 | 1.705 | 2.616 | 3.387 | 4.548 |
| 15 to 37-Manufacturing | 50.527 | 83.581 | 98.265 | 130.129 | 179.800 | 239.208 |
| 151 to 154-Food products | 21.488 | 28.372 | 35.440 | 42.239 | 57.839 | 80.493 |
| 155-Beverages | 0.835 | 1.187 | 1.756 | 2.350 | 2.720 | 2.746 |
| 16-Tobacco | 0.039 | 0.073 | 0.045 | 0.092 | 0.068 | 0.093 |
| 17-Textiles | 1.878 | 2.760 | 3.703 | 4.761 | 6.071 | 8.697 |
| 18-Apparel | 2.086 | 2.967 | 4.004 | 5.275 | 7.671 | 8.713 |
| 191-Leather | 0.214 | 0.360 | 0.277 | 0.675 | 0.913 | 1.394 |
| 192-Footwear | 2.335 | 2.975 | 3.838 | 4.014 | 4.635 | 4.991 |
| 20-Wood products | 1.805 | 2.173 | 3.391 | 3.990 | 5.541 | 7.031 |
| 21-Paper | 2.314 | 3.385 | 4.376 | 5.225 | 7.512 | 10.117 |
| 22-Publishing | 0.219 | 0.490 | 0.846 | 1.331 | 1.984 | 2.782 |
| 23-Petroleum products | 0.270 | 0.503 | 0.393 | 0.497 | 0.637 | 1.006 |
| 24-Chemicals | 2.047 | 3.534 | 4.520 | 6.461 | 8.435 | 10.883 |
| 251-Rubber products | 0.409 | 0.508 | 1.079 | 1.550 | 2.514 | 2.635 |
| 252-Plastics | 3.077 | 4.375 | 5.820 | 8.133 | 11.150 | 15.981 |
| 26-Non-metallic mineral products | 2.502 | 15.220 | 6.539 | 8.430 | 10.795 | 15.116 |
| 27-Basic metals | 1.072 | 1.194 | 3.442 | 6.957 | 9.805 | 14.958 |
| 28-Fabricated metals | 2.220 | 3.672 | 6.541 | 9.546 | 14.796 | 17.639 |
| 29-General machinery | 0.530 | 1.441 | 2.417 | 3.288 | 3.996 | 5.004 |
| 30-Office \& computing machinery | 0.014 | 0.056 | 0.059 | 0.068 | 0.208 | 0.169 |
| 31-Electrical machinery | 0.934 | 1.466 | 1.885 | 3.014 | 4.396 | 5.991 |
| 32-Radio, television \& communication | 0.192 | 0.504 | 0.813 | 0.936 | 1.381 | 1.252 |
| 33-Precision machinery | 0.184 | 0.253 | 0.321 | 0.420 | 0.503 | 0.429 |
| 34-Motor vehicles | 0.528 | 0.957 | 0.981 | 0.954 | 1.579 | 2.223 |
| 35-Other transport equipment | 1.390 | 2.618 | 1.794 | 3.147 | 4.847 | 6.447 |
| 361-Furniture | 1.293 | 1.967 | 3.306 | 5.264 | 7.820 | 10.869 |
| 36 less 361-Miscellaneous manufact. | 0.624 | 0.540 | 0.639 | 1.445 | 1.802 | 1.372 |
| 37-Recycling | 0.025 | 0.030 | 0.037 | 0.069 | 0.183 | 0.177 |
| 40 to 41-Utilities | 0.013 | 0.166 | 0.035 | 0.101 | 0.234 | 0.114 |
| 45-Construction | 7.624 | 15.036 | 32.159 | 45.008 | 43.250 | 60.732 |
| 50 to 52-Trade | 130.470 | 157.802 | 204.848 | 273.578 | 364.397 | 483.411 |
| 55 to 99-Services | 11.393 | 16.268 | 26.209 | 33.079 | 44.639 | 64.230 |
| ADDEDNDUM: PUBLISHED ESTIMATES |  |  |  |  |  |  |
| All industries | 203.155 | 273.879 | 364.844 | 485.104 | 644.087 |  |
| 01 to 05-Agriculture, fishery, forestry | 2.522 | 2.465 | 2.487 | 2.156 | 3.848 |  |
| 10 to 41-Mining, manufacturing, utilities | 51.147 | 84.367 | 100.154 | 132.434 | 184.013 |  |
| 45-Construction | 7.624 | 14.686 | 32.198 | 45.509 | 43.433 |  |
| 50 to 52-Trade | 130.469 | 156.145 | 205.000 | 273.427 | 367.044 |  |
| 55 to 99-Services | 11.393 | 16.216 | 25.005 | 31.578 | 45.749 |  |

Note: Samples include firms reporting positive employment and sales.
Source: Vietnam, General Statistics Office (various years a, various years b)

Appendix Table 3c: Sales of MNCs by Industry (trillion dong)

| VSIC code, Industry | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| All industries | 160.559 | 179.750 | 226.32 | 295.96 | 382.16 | 480.23 |
| 01 to 05-Agriculture, fishery, forestry | 0.505 | 0.611 | 0.860 | 1.035 | 1.786 | 1.620 |
| 10 to 41-Mining, manufacturing, utilities | 144.084 | 157.828 | 198.397 | 260.621 | 337.648 | 416.579 |
| 10 to 14-Mining | 40.468 | 38.284 | 41.314 | 57.138 | 69.794 | 91.240 |
| 15 to 37-Manufacturing | 101.764 | 117.169 | 154.787 | 201.565 | 266.045 | 322.993 |
| 151 to 154-Food products | 15.221 | 17.276 | 21.415 | 27.117 | 36.240 | 45.623 |
| 155-Beverages | 3.767 | 3.814 | 5.439 | 6.470 | 7.075 | 8.220 |
| 16-Tobacco | 0.075 | 0.025 | 0.034 | 0.033 | 0.090 | 0.732 |
| 17-Textiles | 5.137 | 5.713 | 6.680 | 8.553 | 9.867 | 16.461 |
| 18-Apparel | 3.980 | 4.155 | 6.641 | 10.174 | 12.211 | 14.702 |
| 191-Leather | 0.584 | 0.618 | 0.761 | 1.236 | 2.555 | 2.668 |
| 192-Footwear | 8.653 | 9.645 | 11.803 | 16.754 | 22.279 | 27.111 |
| 20-Wood products | 1.013 | 0.870 | 1.531 | 1.688 | 3.005 | 3.891 |
| 21-Paper | 0.879 | 1.322 | 1.791 | 2.392 | 3.346 | 3.889 |
| 22-Publishing | 0.048 | 0.068 | 0.122 | 0.167 | 0.245 | 0.427 |
| 23-Petroleum products | 0.637 | 0.710 | 1.620 | 0.826 | 0.971 | 1.146 |
| 24-Chemicals | 7.393 | 9.190 | 12.052 | 17.076 | 22.355 | 25.555 |
| 251-Rubber products | 0.787 | 0.885 | 1.141 | 1.655 | 2.189 | 2.671 |
| 252-Plastics | 2.482 | 2.900 | 4.217 | 5.428 | 7.773 | 9.493 |
| 26-Non-metallic mineral products | 5.553 | 6.779 | 8.472 | 9.444 | 10.359 | 12.220 |
| 27-Basic metals | 4.274 | 5.517 | 7.098 | 8.394 | 9.483 | 9.866 |
| 28-Fabricated metals | 3.406 | 3.656 | 4.963 | 6.276 | 9.762 | 14.077 |
| 29-General machinery | 2.197 | 1.693 | 2.088 | 3.150 | 6.387 | 6.633 |
| 30-Office \& computing machinery | 8.488 | 6.058 | 3.949 | 6.641 | 9.790 | 14.195 |
| 31-Electrical machinery | 4.216 | 6.829 | 9.296 | 12.024 | 14.156 | 18.728 |
| 32-Radio, television \& communication | 5.584 | 6.843 | 8.613 | 10.981 | 13.834 | 16.138 |
| 33-Precision machinery | 0.766 | 1.022 | 1.243 | 1.479 | 2.091 | 1.934 |
| 34-Motor vehicles | 4.855 | 7.598 | 13.011 | 18.544 | 21.159 | 21.317 |
| 35-Other transport equipment | 9.296 | 10.548 | 14.141 | 17.890 | 26.718 | 28.431 |
| 361-Furniture | 0.589 | 1.456 | 4.302 | 4.326 | 7.409 | 11.203 |
| 36 less 361-Miscellaneous manufact. | 1.883 | 1.977 | 2.365 | 2.845 | 4.692 | 5.645 |
| 37-Recycling | 0.000 | 0.000 | 0.000 | 0.000 | 0.007 | 0.016 |
| 40 to 41-Utilities | 1.852 | 2.375 | 2.296 | 1.919 | 1.810 | 2.347 |
| 45-Construction | 0.784 | 0.752 | 1.427 | 1.909 | 2.623 | 3.662 |
| 50 to 52-Trade | 3.764 | 5.884 | 7.309 | 10.854 | 11.867 | 20.053 |
| 55 to 99-Services | 11.421 | 14.675 | 18.327 | 21.540 | 28.231 | 38.321 |
| ADDEDNDUM: PUBLISHED ESTIMATES |  |  |  |  |  |  |
| All industries | 161.957 | 179.890 | 226.218 | 292.932 | 380.998 |  |
| 01 to 05-Agriculture, fishery, forestry | 0.506 | 0.611 | 0.875 | 1.041 | 1.804 |  |
| 10 to 41-Mining, manufacturing, utilities | 144.076 | 157.828 | 198.931 | 259.328 | 334.420 |  |
| 45-Construction | 0.784 | 0.752 | 1.435 | 1.883 | 2.541 |  |
| 50 to 52-Trade | 3.764 | 5.913 | 7.224 | 10.908 | 12.062 |  |
| 55 to 99-Services | 12.827 | 14.786 | 17.753 | 19.772 | 30.171 |  |

Note: Samples include firms reporting positive employment and sales.
Source: Vietnam, General Statistics Office (various years a, various years b)

Appendix Table 3d: Sales of Medium-Large SOEs by Industry (trillion dong)

| VSIC code, Industry | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| All industries | 443.945 | 481.334 | 621.31 | 679.71 | 728.80 | 794.31 |
| 01 to 05-Agriculture, fishery, forestry | 7.297 | 7.081 | 8.395 | 10.101 | 11.731 | 14.566 |
| 10 to 41-Mining, manufacturing, utilities | 119.898 | 131.634 | 163.357 | 186.099 | 235.924 | 218.424 |
| 10 to 14-Mining | 9.346 | 11.397 | 14.359 | 11.926 | 24.776 | 34.743 |
| 15 to 37-Manufacturing | 93.995 | 100.964 | 125.533 | 144.394 | 176.842 | 179.977 |
| 151 to 154-Food products | 25.893 | 25.917 | 32.810 | 32.774 | 35.368 | 32.222 |
| 155-Beverages | 3.017 | 3.673 | 5.503 | 6.718 | 7.760 | 9.063 |
| 16-Tobacco | 5.023 | 6.361 | 10.768 | 12.556 | 12.922 | 14.764 |
| 17-Textiles | 6.062 | 6.727 | 7.205 | 7.956 | 8.814 | 10.367 |
| 18-Apparel | 5.473 | 5.434 | 6.914 | 7.982 | 9.910 | 8.954 |
| 191-Leather | 0.099 | 0.037 | 0.126 | 0.144 | 0.158 | 0.096 |
| 192-Footwear | 2.452 | 2.146 | 2.053 | 2.483 | 2.321 | 1.874 |
| 20-Wood products | 1.599 | 1.714 | 1.578 | 1.509 | 1.936 | 2.444 |
| 21-Paper | 4.069 | 2.560 | 2.693 | 3.157 | 3.507 | 4.990 |
| 22-Publishing | 3.775 | 4.482 | 5.626 | 6.539 | 7.918 | 8.847 |
| 23-Petroleum products | 0.000 | 0.000 | 0.000 | 0.000 | 0.090 | 0.000 |
| 24-Chemicals | 8.985 | 8.681 | 10.282 | 10.855 | 14.473 | 18.440 |
| 251-Rubber products | 1.373 | 1.410 | 1.762 | 2.409 | 3.598 | 2.662 |
| 252-Plastics | 1.213 | 1.601 | 1.901 | 2.524 | 3.804 | 1.702 |
| 26-Non-metallic mineral products | 10.669 | 12.101 | 14.721 | 18.986 | 21.799 | 20.248 |
| 27-Basic metals | 2.852 | 3.726 | 4.584 | 6.196 | 9.426 | 9.938 |
| 28-Fabricated metals | 1.703 | 1.922 | 2.092 | 2.839 | 3.343 | 5.355 |
| 29-General machinery | 1.776 | 2.783 | 2.518 | 2.897 | 3.048 | 2.779 |
| 30-Office \& computing machinery | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 31-Electrical machinery | 2.168 | 2.543 | 3.213 | 4.031 | 10.599 | 5.535 |
| 32-Radio, television \& communication | 1.478 | 1.314 | 1.852 | 2.162 | 1.801 | 2.380 |
| 33-Precision machinery | 0.104 | 0.105 | 0.124 | 0.133 | 0.142 | 0.066 |
| 34-Motor vehicles | 0.812 | 1.036 | 1.723 | 3.004 | 3.563 | 3.379 |
| 35-Other transport equipment | 3.025 | 4.131 | 4.411 | 4.844 | 8.039 | 10.998 |
| 361-Furniture | 0.329 | 0.523 | 0.990 | 1.261 | 2.169 | 2.544 |
| 36 less 361-Miscellaneous manufact. | 0.044 | 0.039 | 0.083 | 0.435 | 0.332 | 0.329 |
| 37-Recycling | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 40 to 41-Utilities | 16.558 | 19.273 | 23.465 | 29.779 | 34.306 | 3.704 |
| 45-Construction | 38.096 | 44.950 | 51.916 | 65.613 | 62.879 | 63.193 |
| 50 to 52-Trade | 209.787 | 212.959 | 300.181 | 297.129 | 263.851 | 311.572 |
| 55 to 99-Services | 68.868 | 84.710 | 97.457 | 120.771 | 154.418 | 186.558 |

Note: Samples include firms reporting positive employment and sales.
Source: Vietnam, General Statistics Office (various years b)

Appendix Table 3e: Sales of Medium-Large Private Firms by Industry (trillion dong)

| VSIC code, Industry | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| All industries | 106.699 | 162.820 | 227.11 | 317.06 | 415.96 | 567.06 |
| 01 to 05-Agriculture, fishery, forestry | 1.506 | 1.451 | 1.479 | 1.480 | 2.828 | 3.426 |
| 10 to 41-Mining, manufacturing, utilities | 42.062 | 75.467 | 88.013 | 120.395 | 165.556 | 220.975 |
| 10 to 14-Mining | 0.557 | 0.978 | 1.505 | 2.342 | 2.955 | 3.986 |
| 15 to 37-Manufacturing | 41.498 | 74.336 | 86.500 | 117.991 | 162.511 | 216.907 |
| 151 to 154-Food products | 14.944 | 22.335 | 29.103 | 37.033 | 51.034 | 71.773 |
| 155-Beverages | 0.467 | 0.767 | 1.093 | 1.784 | 1.997 | 2.340 |
| 16-Tobacco | 0.010 | 0.037 | 0.011 | 0.057 | 0.043 | 0.093 |
| 17-Textiles | 1.701 | 2.608 | 3.476 | 4.475 | 5.542 | 8.045 |
| 18-Aparel | 2.033 | 2.889 | 3.832 | 5.057 | 7.308 | 8.175 |
| 191-Leather | 0.205 | 0.348 | 0.258 | 0.644 | 0.866 | 1.318 |
| 192-Footwear | 2.330 | 2.962 | 3.553 | 3.943 | 4.544 | 4.857 |
| 20-Wood products | 1.498 | 1.820 | 2.875 | 3.150 | 4.458 | 5.553 |
| 21-Paper | 2.163 | 3.144 | 4.067 | 4.724 | 6.923 | 9.342 |
| 22-Publishing | 0.171 | 0.349 | 0.607 | 0.903 | 1.263 | 1.843 |
| 23-Petroleum products | 0.269 | 0.494 | 0.377 | 0.469 | 0.612 | 1.004 |
| 24-Chemicals | 1.926 | 3.272 | 4.224 | 5.999 | 7.848 | 10.183 |
| 251-Rubber products | 0.329 | 0.486 | 0.850 | 1.319 | 2.105 | 2.276 |
| 252-Plastics | 2.848 | 4.111 | 5.387 | 7.536 | 10.227 | 14.417 |
| 26-Non-metallic mineral products | 2.372 | 15.076 | 6.340 | 8.209 | 10.463 | 14.683 |
| 27-Basic metals | 1.029 | 1.126 | 3.350 | 6.723 | 9.317 | 14.502 |
| 28-Fabricated metals | 1.875 | 3.205 | 5.713 | 8.272 | 12.809 | 14.826 |
| 29-General machinery | 0.469 | 1.364 | 2.256 | 3.084 | 3.654 | 4.505 |
| 30-Office \& computing machinery | 0.000 | 0.055 | 0.051 | 0.048 | 0.172 | 0.140 |
| 31-Electrical machinery | 0.894 | 1.321 | 1.784 | 2.894 | 4.044 | 5.615 |
| 32-Radio, television \& communication | 0.183 | 0.491 | 0.781 | 0.889 | 1.328 | 1.174 |
| 33-Precision machinery | 0.181 | 0.247 | 0.313 | 0.404 | 0.472 | 0.389 |
| 34-Motor vehicles | 0.501 | 0.896 | 0.919 | 0.888 | 1.499 | 2.017 |
| 35-Other transport equipment | 1.251 | 2.577 | 1.582 | 3.049 | 4.697 | 6.069 |
| 361-Furniture | 1.226 | 1.823 | 3.064 | 5.026 | 7.429 | 10.376 |
| 36 less 361-Miscellaneous manufact. | 0.597 | 0.506 | 0.605 | 1.361 | 1.696 | 1.239 |
| 37-Recycling | 0.024 | 0.026 | 0.030 | 0.051 | 0.162 | 0.152 |
| 40 to 41-Utilities | 0.008 | 0.153 | 0.008 | 0.062 | 0.090 | 0.081 |
| 45-Construction | 6.221 | 12.898 | 28.259 | 38.244 | 35.551 | 49.157 |
| 50 to 52-Trade | 48.183 | 60.604 | 88.506 | 132.476 | 180.018 | 247.784 |
| 55 to 99-Services | 8.726 | 12.400 | 20.850 | 24.460 | 32.004 | 45.716 |

Note: Samples include firms reporting positive employment and sales.
Source: Vietnam, General Statistics Office (various years b)

Appendix Table 3f: Sales of Medium-Large MNCs by Industry (trillion dong)

| VSIC code, Industry | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| All industries | 159.672 | 178.909 | 225.10 | 294.03 | 379.85 | 477.56 |
| 01 to 05-Agriculture, fishery, forestry | 0.491 | 0.598 | 0.794 | 0.968 | 1.727 | 1.540 |
| 10 to 41-Mining, manufacturing, utilities | 143.844 | 157.436 | 197.823 | 259.388 | 336.362 | 415.495 |
| 10 to 14-Mining | 40.468 | 38.283 | 41.309 | 57.132 | 69.791 | 91.238 |
| 15 to 37-Manufacturing | 101.524 | 116.778 | 154.218 | 200.337 | 264.762 | 321.910 |
| 151 to 154-Food products | 15.212 | 17.239 | 21.293 | 26.872 | 35.964 | 45.489 |
| 155-Beverages | 3.757 | 3.797 | 5.418 | 6.447 | 7.063 | 8.208 |
| 16-Tobacco | 0.075 | 0.025 | 0.034 | 0.033 | 0.090 | 0.732 |
| 17-Textiles | 5.135 | 5.710 | 6.664 | 8.550 | 9.859 | 16.447 |
| 18-Apparel | 3.980 | 4.145 | 6.629 | 10.097 | 12.172 | 14.691 |
| 191-Leather | 0.584 | 0.618 | 0.761 | 1.236 | 2.551 | 2.668 |
| 192-Footwear | 8.639 | 9.645 | 11.803 | 16.754 | 22.276 | 27.105 |
| 20-Wood products | 1.012 | 0.853 | 1.528 | 1.684 | 2.980 | 3.865 |
| 21-Paper | 0.878 | 1.320 | 1.777 | 2.392 | 3.340 | 3.867 |
| 22-Publishing | 0.040 | 0.060 | 0.115 | 0.162 | 0.232 | 0.408 |
| 23-Petroleum products | 0.637 | 0.710 | 1.620 | 0.826 | 0.971 | 1.146 |
| 24-Chemicals | 7.321 | 9.104 | 11.913 | 16.873 | 22.202 | 25.215 |
| 251-Rubber products | 0.782 | 0.883 | 1.140 | 1.655 | 2.189 | 2.671 |
| 252-Plastics | 2.449 | 2.833 | 4.166 | 5.380 | 7.723 | 9.356 |
| 26-Non-metallic mineral products | 5.525 | 6.760 | 8.442 | 9.400 | 10.311 | 12.172 |
| 27-Basic metals | 4.258 | 5.508 | 7.084 | 8.347 | 9.439 | 9.859 |
| 28-Fabricated metals | 3.388 | 3.621 | 4.916 | 6.172 | 9.558 | 13.917 |
| 29-General machinery | 2.194 | 1.678 | 2.065 | 3.112 | 6.331 | 6.608 |
| 30-Office \& computing machinery | 8.488 | 6.058 | 3.948 | 6.641 | 9.790 | 14.180 |
| 31-Electrical machinery | 4.212 | 6.827 | 9.273 | 12.018 | 14.092 | 18.709 |
| 32-Radio, television \& communication | 5.582 | 6.840 | 8.612 | 10.961 | 13.817 | 16.129 |
| 33-Precision machinery | 0.763 | 1.000 | 1.219 | 1.463 | 2.069 | 1.919 |
| 34-Motor vehicles | 4.852 | 7.595 | 12.997 | 18.537 | 21.156 | 21.306 |
| 35-Other transport equipment | 9.295 | 10.538 | 14.139 | 17.750 | 26.512 | 28.418 |
| 361-Furniture | 0.589 | 1.445 | 4.302 | 4.136 | 7.408 | 11.202 |
| 36 less 361-Miscellaneous manufact. | 1.879 | 1.966 | 2.358 | 2.842 | 4.668 | 5.623 |
| 37-Recycling | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 40 to 41-Utilities | 1.852 | 2.375 | 2.296 | 1.918 | 1.809 | 2.347 |
| 45-Construction | 0.652 | 0.671 | 1.352 | 1.820 | 2.532 | 3.568 |
| 50 to 52-Trade | 3.734 | 5.817 | 7.251 | 10.798 | 11.712 | 19.946 |
| 55 to 99-Services | 10.951 | 14.387 | 17.879 | 21.051 | 27.518 | 37.012 |

Note: Samples include firms reporting positive employment and sales.
Source: Vietnam, General Statistics Office (various years b)

Appendix Table 4a: Gross Profits of SOEs by Industry (trillion dong)

| VSIC code, Industry | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| All industries | 17.563 | 20.145 | 25.663 | 27.816 | 38.219 | 43.320 |
| 01 to 05-Agriculture, fishery, forestry | 0.202 | -0.081 | 0.703 | 1.671 | 2.439 | 3.162 |
| 10 to 41-Mining, manufacturing, utilities | 6.812 | 7.245 | 9.359 | 6.389 | 12.031 | 15.857 |
| 10 to 14-Mining | 1.216 | 1.961 | 2.671 | 0.356 | 3.980 | 8.682 |
| 15 to 37-Manufacturing | 3.904 | 3.335 | 4.422 | 4.009 | 5.806 | 6.964 |
| 151 to 154-Food products | 0.105 | 0.220 | 0.599 | 0.234 | 0.814 | 0.943 |
| 155-Beverages | 0.756 | 0.746 | 0.934 | 0.975 | 1.318 | 1.481 |
| 16-Tobacco | 0.310 | 0.361 | 0.430 | 0.451 | 0.565 | 0.647 |
| 17-Textiles | 0.014 | -0.025 | -0.054 | -0.053 | -0.044 | 0.078 |
| 18-Apparel | 0.130 | 0.098 | 0.157 | 0.162 | 0.258 | 0.248 |
| 191-Leather | 0.008 | 0.001 | 0.007 | -0.001 | 0.007 | -0.006 |
| 192-Footwear | 0.130 | 0.011 | 0.016 | 0.007 | 0.012 | -0.037 |
| 20-Wood products | 0.054 | 0.018 | 0.028 | 0.028 | 0.050 | 0.023 |
| 21-Paper | 0.614 | 0.081 | 0.037 | -0.041 | -0.067 | 0.059 |
| 22-Publishing | 0.302 | 0.308 | 0.428 | 0.526 | 0.550 | 0.600 |
| 23-Petroleum products | 0.000 | 0.000 | 0.000 | 0.000 | 0.002 | 0.000 |
| 24-Chemicals | 0.288 | 0.269 | 0.529 | 0.393 | 0.857 | 1.383 |
| 251-Rubber products | 0.071 | 0.031 | 0.030 | 0.029 | 0.229 | 0.003 |
| 252-Plastics | 0.024 | 0.065 | 0.093 | 0.065 | 0.066 | 0.034 |
| 26-Non-metallic mineral products | 0.693 | 0.757 | 0.692 | 0.682 | 0.433 | 0.672 |
| 27-Basic metals | 0.076 | 0.067 | 0.086 | 0.088 | 0.149 | -0.006 |
| 28-Fabricated metals | 0.052 | 0.040 | 0.035 | 0.041 | 0.055 | 0.050 |
| 29-General machinery | 0.023 | 0.043 | 0.040 | 0.024 | 0.062 | 0.132 |
| 30-Office \& computing machinery | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 31-Electrical machinery | 0.106 | 0.077 | 0.093 | 0.099 | 0.120 | 0.161 |
| 32-Radio, television \& communication | 0.081 | 0.065 | 0.103 | 0.110 | 0.088 | 0.137 |
| 33-Precision machinery | 0.005 | 0.001 | 0.002 | 0.001 | 0.004 | -0.006 |
| 34-Motor vehicles | 0.014 | 0.022 | 0.050 | 0.072 | 0.099 | 0.119 |
| 35-Other transport equipment | 0.059 | 0.083 | 0.080 | 0.099 | 0.151 | 0.180 |
| 361-Furniture | -0.010 | -0.005 | 0.007 | 0.010 | 0.023 | 0.066 |
| 36 less 361-Miscellaneous manufact. | 0.000 | 0.000 | -0.001 | 0.007 | 0.006 | 0.004 |
| 37-Recycling | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 40 to 41-Utilities | 1.692 | 1.950 | 2.266 | 2.025 | 2.245 | 0.211 |
| 45-Construction | 0.938 | 1.215 | 1.211 | 1.485 | 1.378 | 1.271 |
| 50 to 52-Trade | 0.068 | -0.650 | 0.121 | 1.563 | -0.970 | 0.824 |
| 55 to 99-Services | 9.543 | 12.416 | 14.270 | 16.708 | 23.342 | 22.206 |
| ADDEDNDUM: PUBLISHED ESTIMATES |  |  |  |  |  |  |
| All industries | 17.566 | 20.146 | 25.959 | 28.193 | 38.282 |  |
| 01 to 05-Agriculture, fishery, forestry | 0.203 | -0.081 | 0.703 | 1.671 | 2.439 |  |
| 10 to 41-Mining, manufacturing, utilities | 6.815 | 7.246 | 9.368 | 6.487 | 12.031 |  |
| 45-Construction | 0.938 | 1.215 | 1.241 | 1.506 | 1.403 |  |
| 50 to 52-Trade | 0.067 | -0.650 | 0.123 | 1.565 | -0.967 |  |
| 55 to 99-Services | 9.543 | 12.416 | 14.524 | 16.963 | 23.376 |  |

Note: Samples include firms reporting positive employment and sales.
Source: Vietnam, General Statistics Office (various years b)

Appendix Table 4b: Gross Profits of Private Firms by Industry (trillion dong)

| VSIC code, Industry | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| All industries | 2.048 | 3.725 | 5.511 | 7.320 | 8.202 | 10.535 |
| 01 to 05-Agriculture, fishery, forestry | 0.167 | 0.179 | 0.207 | 0.153 | 0.274 | 0.098 |
| 10 to 41-Mining, manufacturing, utilities | 0.541 | 1.416 | 2.159 | 3.024 | 3.631 | 3.479 |
| 10 to 14-Mining | 0.020 | 0.044 | 0.080 | 0.080 | 0.087 | 0.031 |
| 15 to 37-Manufacturing | 0.520 | 1.365 | 2.077 | 2.941 | 3.534 | 3.451 |
| 151 to 154-Food products | -0.101 | 0.331 | 0.625 | 0.657 | 1.203 | 1.101 |
| 155-Beverages | 0.018 | 0.052 | 0.040 | 0.018 | -0.030 | -0.041 |
| 16-Tobacco | 0.001 | 0.002 | 0.000 | 0.000 | 0.000 | 0.002 |
| 17-Textiles | 0.028 | 0.048 | 0.069 | 0.068 | 0.092 | 0.096 |
| 18-Apparel | 0.021 | 0.001 | 0.068 | 0.109 | 0.131 | 0.111 |
| 191-Leather | -0.001 | 0.009 | 0.002 | 0.023 | 0.029 | 0.040 |
| 192-Footwear | 0.015 | 0.039 | -0.108 | 0.094 | 0.061 | 0.105 |
| 20-Wood products | 0.019 | 0.020 | 0.065 | 0.072 | 0.078 | 0.099 |
| 21-Paper | 0.048 | 0.039 | 0.049 | 0.060 | 0.112 | 0.094 |
| 22-Publishing | 0.004 | 0.000 | 0.001 | 0.046 | 0.019 | -0.002 |
| 23-Petroleum products | 0.000 | 0.002 | 0.006 | 0.002 | 0.002 | 0.006 |
| 24-Chemicals | 0.109 | 0.145 | 0.210 | 0.287 | 0.321 | 0.436 |
| 251-Rubber products | 0.001 | 0.009 | 0.020 | 0.065 | 0.020 | 0.027 |
| 252-Plastics | 0.023 | 0.047 | 0.092 | 0.099 | 0.043 | 0.268 |
| 26-Non-metallic mineral products | 0.117 | 0.157 | 0.365 | 0.413 | 0.367 | 0.460 |
| 27-Basic metals | 0.000 | -0.004 | 0.007 | 0.071 | 0.081 | -0.030 |
| 28-Fabricated metals | 0.016 | 0.037 | 0.083 | 0.152 | 0.233 | -0.007 |
| 29-General machinery | 0.010 | 0.080 | 0.069 | 0.108 | 0.149 | 0.024 |
| 30-Office \& computing machinery | 0.000 | 0.000 | 0.002 | 0.001 | -0.008 | 0.000 |
| 31-Electrical machinery | 0.045 | 0.065 | 0.084 | 0.111 | 0.030 | 0.153 |
| 32-Radio, television \& communication | 0.006 | 0.023 | 0.069 | 0.050 | 0.051 | 0.036 |
| 33-Precision machinery | 0.016 | 0.014 | 0.030 | 0.022 | 0.037 | 0.011 |
| 34-Motor vehicles | 0.013 | 0.005 | 0.035 | 0.047 | 0.062 | 0.077 |
| 35-Other transport equipment | 0.053 | 0.188 | 0.092 | 0.149 | 0.172 | 0.081 |
| 361-Furniture | 0.029 | 0.051 | 0.086 | 0.114 | 0.230 | 0.249 |
| 36 less 361-Miscellaneous manufact. | 0.030 | 0.006 | 0.016 | 0.099 | 0.046 | 0.055 |
| 37-Recycling | 0.000 | 0.001 | 0.000 | 0.003 | 0.002 | 0.001 |
| 40 to 41-Utilities | 0.001 | 0.008 | 0.002 | 0.004 | 0.010 | -0.004 |
| 45-Construction | 0.161 | 0.449 | 0.549 | 0.577 | 0.733 | 1.079 |
| 50 to 52-Trade | 0.618 | 0.783 | 1.053 | 1.607 | 2.737 | 2.762 |
| 55 to 99-Services | 0.561 | 0.897 | 1.544 | 1.959 | 0.828 | 3.117 |
| ADDEDNDUM: PUBLISHED ESTIMATES |  |  |  |  |  |  |
| All industries | 2.041 | 3.679 | 5.486 | 7.237 | 8.050 |  |
| 01 to 05-Agriculture, fishery, forestry | 0.167 | 0.179 | 0.207 | 0.148 | 0.270 |  |
| 10 to 41-Mining, manufacturing, utilities | 0.541 | 1.407 | 2.156 | 3.021 | 3.624 |  |
| 45-Construction | 0.159 | 0.442 | 0.539 | 0.572 | 0.634 | - |
| 50 to 52-Trade | 0.616 | 0.757 | 1.049 | 1.602 | 2.727 | - |
| 55 to 99-Services | 0.558 | 0.894 | 1.536 | 1.893 | 0.796 | - |

Note: Samples include firms reporting positive employment and sales.
Source: Vietnam, General Statistics Office (various years b)

Appendix Table 4c: Gross Profits of MNCs by Industry (trillion dong)

| VSIC code, Industry | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| All industries | 21.569 | 23.476 | 30.882 | 42.831 | 58.634 | 59.489 |
| 01 to 05-Agriculture, fishery, forestry | 0.012 | -0.043 | 0.079 | 0.056 | 0.083 | 0.169 |
| 10 to 41-Mining, manufacturing, utilities | 22.838 | 24.456 | 30.081 | 41.376 | 54.234 | 53.387 |
| 10 to 14-Mining | 21.246 | 19.993 | 22.066 | 29.997 | 39.724 | 40.219 |
| 15 to 37-Manufacturing | 2.079 | 4.388 | 7.674 | 11.279 | 14.350 | 13.007 |
| 151 to 154-Food products | 0.278 | 1.163 | 0.548 | 1.022 | 2.040 | 2.501 |
| 155-Beverages | -0.179 | 0.206 | 0.312 | 0.369 | 0.723 | 0.929 |
| 16-Tobacco | -0.027 | -0.010 | -0.005 | 0.112 | -0.002 | -0.003 |
| 17-Textiles | 0.205 | 0.004 | 0.086 | 0.245 | 0.102 | -0.432 |
| 18-Apparel | 0.122 | 0.112 | 0.108 | 0.179 | -0.010 | 0.234 |
| 191-Leather | -0.006 | -0.037 | -0.058 | -0.066 | -0.077 | -0.091 |
| 192-Footwear | 0.273 | -0.008 | 0.101 | 0.218 | -0.240 | -0.244 |
| 20-Wood products | 0.029 | 0.000 | 0.076 | 0.076 | 0.180 | 0.149 |
| 21-Paper | -0.133 | -0.296 | -0.031 | 0.055 | 0.136 | 0.089 |
| 22-Publishing | -0.002 | -0.003 | 0.010 | 0.016 | 0.016 | 0.012 |
| 23-Petroleum products | 0.060 | 0.052 | 0.130 | 0.083 | 0.092 | 0.128 |
| 24-Chemicals | 0.254 | 0.506 | 0.847 | 1.077 | 1.354 | 1.069 |
| 251-Rubber products | -0.047 | -0.029 | -0.002 | 0.036 | 0.059 | -0.140 |
| 252-Plastics | -0.188 | 0.072 | 0.147 | 0.206 | 0.276 | 0.313 |
| 26-Non-metallic mineral products | -0.451 | -0.064 | 0.710 | 0.725 | 0.854 | 0.976 |
| 27-Basic metals | 0.198 | 0.345 | 0.418 | 0.270 | 0.421 | -0.202 |
| 28-Fabricated metals | -0.139 | -0.068 | 0.229 | 0.259 | 0.240 | 0.804 |
| 29-General machinery | 0.024 | 0.058 | 0.077 | 0.185 | 0.480 | 0.335 |
| 30-Office \& computing machinery | 0.130 | -0.066 | -0.289 | 0.024 | 0.185 | 0.251 |
| 31-Electrical machinery | 0.134 | 0.361 | 0.879 | 0.886 | 0.802 | 0.781 |
| 32-Radio, television \& communication | 0.334 | 0.427 | 0.400 | 0.887 | 1.205 | 0.862 |
| 33-Precision machinery | 0.049 | -0.011 | -0.037 | -0.007 | 0.200 | 0.121 |
| 34-Motor vehicles | 0.368 | 0.944 | 1.541 | 2.141 | 1.744 | 1.243 |
| 35-Other transport equipment | 0.671 | 0.725 | 1.005 | 2.260 | 3.393 | 3.274 |
| 361-Furniture | -0.009 | -0.016 | 0.385 | -0.014 | 0.094 | -0.001 |
| 36 less 361-Miscellaneous manufact. | 0.129 | 0.022 | 0.087 | 0.036 | 0.081 | 0.053 |
| 37-Recycling | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 | -0.003 |
| 40 to 41-Utilities | -0.486 | 0.076 | 0.340 | 0.099 | 0.160 | 0.161 |
| 45-Construction | -0.036 | -0.024 | 0.075 | 0.021 | 0.012 | 0.114 |
| 50 to 52-Trade | -0.147 | -0.089 | -0.182 | -0.072 | -0.002 | 0.005 |
| 55 to 99-Services | -1.098 | -0.825 | 0.829 | 1.450 | 4.307 | 5.815 |
| ADDEDNDUM: PUBLISHED ESTIMATES |  |  |  |  |  |  |
| All industries | 21.541 | 23.420 | 30.792 | 42.773 | 58.582 |  |
| 01 to 05-Agriculture, fishery, forestry | -0.001 | -0.036 | 0.075 | 0.055 | 0.084 | - |
| 10 to 41-Mining, manufacturing, utilities | 22.836 | 24.449 | 30.060 | 41.374 | 54.229 | - |
| 45-Construction | -0.045 | -0.024 | 0.074 | 0.021 | 0.010 | - |
| 50 to 52-Trade | -0.146 | -0.122 | -0.181 | -0.072 | -0.010 | - |
| 55 to 99-Services | -1.103 | -0.847 | 0.764 | 1.396 | 4.270 | - |

Note: Samples include firms reporting positive employment and sales.
Source: Vietnam, General Statistics Office (various years b)

Appendix Table 4d: Gross Profits of Medium-Large SOEs by Industry (trillion dong)

| VSIC code, Industry | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| All industries | 17.541 | 20.139 | 25.641 | 27.800 | 38.215 | 43.296 |
| 01 to 05-Agriculture, fishery, forestry | 0.199 | -0.081 | 0.698 | 1.667 | 2.437 | 3.163 |
| 10 to 41-Mining, manufacturing, utilities | 6.812 | 7.243 | 9.359 | 6.392 | 12.033 | 15.839 |
| 10 to 14-Mining | 1.216 | 1.959 | 2.671 | 0.356 | 3.980 | 8.682 |
| 15 to 37-Manufacturing | 3.904 | 3.334 | 4.422 | 4.012 | 5.809 | 6.946 |
| 151 to 154-Food products | 0.105 | 0.220 | 0.599 | 0.234 | 0.814 | 0.943 |
| 155-Beverages | 0.756 | 0.746 | 0.934 | 0.975 | 1.318 | 1.482 |
| 16-Tobacco | 0.310 | 0.361 | 0.430 | 0.451 | 0.565 | 0.647 |
| 17-Textiles | 0.014 | -0.025 | -0.054 | -0.053 | -0.044 | 0.081 |
| 18-Aparel | 0.130 | 0.098 | 0.157 | 0.162 | 0.258 | 0.248 |
| 191-Leather | 0.008 | 0.001 | 0.007 | -0.001 | 0.007 | -0.006 |
| 192-Footwear | 0.130 | 0.011 | 0.016 | 0.007 | 0.012 | -0.037 |
| 20-Wood products | 0.054 | 0.018 | 0.028 | 0.028 | 0.050 | 0.023 |
| 21-Paper | 0.614 | 0.081 | 0.037 | -0.040 | -0.067 | 0.059 |
| 22-Publishing | 0.303 | 0.307 | 0.428 | 0.527 | 0.552 | 0.600 |
| 23-Petroleum products | 0.000 | 0.000 | 0.000 | 0.000 | 0.002 | 0.000 |
| 24-Chemicals | 0.288 | 0.269 | 0.529 | 0.393 | 0.857 | 1.360 |
| 251-Rubber products | 0.071 | 0.031 | 0.030 | 0.029 | 0.229 | 0.003 |
| 252-Plastics | 0.024 | 0.065 | 0.093 | 0.065 | 0.066 | 0.034 |
| 26-Non-metallic mineral products | 0.693 | 0.757 | 0.692 | 0.684 | 0.433 | 0.672 |
| 27-Basic metals | 0.076 | 0.067 | 0.086 | 0.088 | 0.149 | -0.006 |
| 28-Fabricated metals | 0.052 | 0.040 | 0.035 | 0.041 | 0.057 | 0.050 |
| 29-General machinery | 0.023 | 0.043 | 0.040 | 0.024 | 0.062 | 0.132 |
| 30-Office \& computing machinery | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 31-Electrical machinery | 0.106 | 0.077 | 0.093 | 0.099 | 0.120 | 0.161 |
| 32-Radio, television \& communication | 0.081 | 0.065 | 0.103 | 0.110 | 0.088 | 0.137 |
| 33-Precision machinery | 0.005 | 0.001 | 0.002 | 0.001 | 0.004 | -0.006 |
| 34-Motor vehicles | 0.014 | 0.022 | 0.050 | 0.072 | 0.099 | 0.119 |
| 35-Other transport equipment | 0.059 | 0.083 | 0.080 | 0.099 | 0.151 | 0.181 |
| 361-Furniture | -0.010 | -0.005 | 0.007 | 0.010 | 0.023 | 0.066 |
| 36 less 361-Miscellaneous manufact. | 0.000 | 0.000 | -0.001 | 0.007 | 0.006 | 0.004 |
| 37-Recycling | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 40 to 41-Utilities | 1.692 | 1.950 | 2.266 | 2.025 | 2.244 | 0.210 |
| 45-Construction | 0.937 | 1.214 | 1.210 | 1.485 | 1.379 | 1.271 |
| 50 to 52-Trade | 0.066 | -0.650 | 0.110 | 1.556 | -0.969 | 0.818 |
| 55 to 99-Services | 9.528 | 12.413 | 14.263 | 16.701 | 23.335 | 22.205 |

Note: Samples include firms reporting positive employment and sales.
Source: Vietnam, General Statistics Office (various years b)

Appendix Table 4e: Gross Profits of Medium-Large Private Firms by Industry (trillion dong)

| VSIC code, Industry | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| All industries | 1.390 | 3.007 | 4.766 | 6.422 | 8.371 | 10.054 |
| 01 to 05-Agriculture, fishery, forestry | 0.072 | 0.083 | 0.117 | 0.134 | 0.207 | 0.157 |
| 10 to 41-Mining, manufacturing, utilities | 0.434 | 1.340 | 2.185 | 2.918 | 3.659 | 3.585 |
| 10 to 14-Mining | 0.019 | 0.039 | 0.073 | 0.069 | 0.079 | 0.094 |
| 15 to 37-Manufacturing | 0.415 | 1.293 | 2.111 | 2.847 | 3.578 | 3.492 |
| 151 to 154-Food products | -0.175 | 0.291 | 0.518 | 0.598 | 1.167 | 1.061 |
| 155-Beverages | 0.002 | 0.033 | 0.021 | 0.002 | -0.039 | -0.028 |
| 16-Tobacco | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.002 |
| 17-Textiles | 0.026 | 0.050 | 0.075 | 0.072 | 0.100 | 0.102 |
| 18-Aparel | 0.022 | 0.001 | 0.069 | 0.109 | 0.135 | 0.126 |
| 191-Leather | -0.001 | 0.009 | 0.002 | 0.021 | 0.030 | 0.043 |
| 192-Footwear | 0.015 | 0.040 | 0.060 | 0.103 | 0.067 | 0.103 |
| 20-Wood products | 0.013 | 0.018 | 0.058 | 0.063 | 0.069 | 0.091 |
| 21-Paper | 0.048 | 0.041 | 0.049 | 0.064 | 0.123 | 0.101 |
| 22-Publishing | 0.005 | 0.000 | 0.001 | 0.047 | 0.028 | 0.014 |
| 23-Petroleum products | 0.000 | 0.001 | 0.007 | 0.001 | 0.002 | 0.006 |
| 24-Chemicals | 0.108 | 0.144 | 0.211 | 0.284 | 0.322 | 0.438 |
| 251-Rubber products | 0.001 | 0.009 | 0.021 | 0.064 | 0.023 | 0.026 |
| 252-Plastics | 0.024 | 0.045 | 0.092 | 0.100 | 0.055 | 0.272 |
| 26-Non-metallic mineral products | 0.110 | 0.154 | 0.360 | 0.420 | 0.363 | 0.456 |
| 27-Basic metals | 0.000 | -0.004 | 0.007 | 0.072 | 0.080 | -0.029 |
| 28-Fabricated metals | 0.014 | 0.034 | 0.080 | 0.137 | 0.229 | -0.009 |
| 29-General machinery | 0.010 | 0.080 | 0.068 | 0.108 | 0.149 | 0.070 |
| 30-Office \& computing machinery | 0.000 | 0.000 | 0.002 | 0.001 | -0.009 | 0.000 |
| 31-Electrical machinery | 0.045 | 0.065 | 0.084 | 0.113 | 0.071 | 0.150 |
| 32-Radio, television \& communication | 0.006 | 0.023 | 0.070 | 0.049 | 0.053 | 0.035 |
| 33-Precision machinery | 0.016 | 0.014 | 0.030 | 0.023 | 0.037 | 0.011 |
| 34-Motor vehicles | 0.013 | 0.004 | 0.034 | 0.045 | 0.063 | 0.076 |
| 35-Other transport equipment | 0.052 | 0.187 | 0.091 | 0.145 | 0.171 | 0.062 |
| 361-Furniture | 0.029 | 0.049 | 0.084 | 0.103 | 0.238 | 0.251 |
| 36 less 361-Miscellaneous manufact. | 0.031 | 0.006 | 0.016 | 0.100 | 0.051 | 0.062 |
| 37-Recycling | 0.000 | 0.001 | 0.000 | 0.002 | 0.001 | 0.000 |
| 40 to 41-Utilities | 0.000 | 0.008 | 0.000 | 0.002 | 0.002 | -0.002 |
| 45-Construction | 0.134 | 0.425 | 0.480 | 0.503 | 0.726 | 1.068 |
| 50 to 52-Trade | 0.258 | 0.346 | 0.556 | 1.044 | 1.787 | 1.980 |
| 55 to 99-Services | 0.493 | 0.813 | 1.429 | 1.823 | 1.992 | 3.264 |

Note: Samples include firms reporting positive employment and sales.
Source: Vietnam, General Statistics Office (various years b)

Appendix Table 4f: Gross Profits of Medium-Large MNCs by Industry (trillion dong)

| VSIC code, Industry | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| All industries | 21.683 | 23.632 | 30.910 | 42.834 | 58.614 | 59.617 |
| 01 to 05-Agriculture, fishery, forestry | 0.017 | -0.039 | 0.073 | 0.063 | 0.087 | 0.177 |
| 10 to 41-Mining, manufacturing, utilities | 22.876 | 24.503 | 30.109 | 41.373 | 54.225 | 53.505 |
| 10 to 14-Mining | 21.246 | 19.997 | 22.066 | 29.997 | 39.722 | 40.219 |
| 15 to 37-Manufacturing | 2.116 | 4.430 | 7.702 | 11.276 | 14.343 | 13.125 |
| 151 to 154-Food products | 0.281 | 1.172 | 0.555 | 1.023 | 2.035 | 2.509 |
| 155-Beverages | -0.178 | 0.207 | 0.316 | 0.373 | 0.726 | 0.929 |
| 16-Tobacco | -0.027 | -0.010 | -0.005 | 0.112 | -0.002 | -0.003 |
| 17-Textiles | 0.207 | 0.005 | 0.084 | 0.245 | 0.104 | -0.420 |
| 18-Apparel | 0.122 | 0.113 | 0.109 | 0.175 | -0.006 | 0.235 |
| 191-Leather | -0.006 | -0.036 | -0.058 | -0.066 | -0.076 | -0.091 |
| 192-Footwear | 0.279 | -0.008 | 0.101 | 0.218 | -0.240 | -0.244 |
| 20-Wood products | 0.029 | 0.002 | 0.076 | 0.075 | 0.180 | 0.152 |
| 21-Paper | -0.133 | -0.296 | -0.030 | 0.056 | 0.137 | 0.097 |
| 22-Publishing | -0.002 | -0.001 | 0.010 | 0.017 | 0.017 | 0.018 |
| 23-Petroleum products | 0.060 | 0.053 | 0.131 | 0.083 | 0.092 | 0.128 |
| 24-Chemicals | 0.259 | 0.507 | 0.846 | 1.070 | 1.352 | 1.105 |
| 251-Rubber products | -0.047 | -0.028 | -0.002 | 0.036 | 0.059 | -0.139 |
| 252-Plastics | -0.181 | 0.076 | 0.149 | 0.206 | 0.274 | 0.324 |
| 26-Non-metallic mineral products | -0.453 | -0.066 | 0.712 | 0.723 | 0.852 | 0.973 |
| 27-Basic metals | 0.199 | 0.352 | 0.424 | 0.269 | 0.425 | -0.199 |
| 28-Fabricated metals | -0.132 | -0.060 | 0.232 | 0.271 | 0.240 | 0.812 |
| 29-General machinery | 0.027 | 0.059 | 0.078 | 0.185 | 0.477 | 0.341 |
| 30-Office \& computing machinery | 0.130 | -0.066 | -0.286 | 0.024 | 0.186 | 0.260 |
| 31-Electrical machinery | 0.135 | 0.361 | 0.880 | 0.887 | 0.805 | 0.784 |
| 32-Radio, television \& communication | 0.335 | 0.427 | 0.401 | 0.886 | 1.204 | 0.860 |
| 33-Precision machinery | 0.049 | -0.012 | -0.037 | -0.007 | 0.202 | 0.122 |
| 34-Motor vehicles | 0.368 | 0.944 | 1.542 | 2.143 | 1.745 | 1.244 |
| 35-Other transport equipment | 0.672 | 0.727 | 1.005 | 2.252 | 3.384 | 3.273 |
| 361-Furniture | -0.009 | -0.017 | 0.385 | -0.015 | 0.094 | -0.001 |
| 36 less 361-Miscellaneous manufact. | 0.132 | 0.026 | 0.086 | 0.036 | 0.077 | 0.055 |
| 37-Recycling | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 40 to 41-Utilities | -0.486 | 0.077 | 0.341 | 0.100 | 0.161 | 0.161 |
| 45-Construction | -0.016 | -0.017 | 0.074 | 0.029 | 0.014 | 0.125 |
| 50 to 52-Trade | -0.146 | -0.094 | -0.183 | -0.074 | -0.003 | 0.004 |
| 55 to 99-Services | -1.047 | -0.721 | 0.837 | 1.442 | 4.290 | 5.806 |

Note: Samples include firms reporting positive employment and sales.
Source: Vietnam, General Statistics Office (various years b)

Appendix Table 5a: Operating Profits of SOEs by Industry (trillion dong)

| VSIC code, Industry | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| All industries | 14.473 | - | 25.805 | 30.175 | 36.846 | 41.051 |
| 01 to 05-Agriculture, fishery, forestry | 0.203 | - | 0.756 | 1.546 | 2.178 | 2.845 |
| 10 to 41-Mining, manufacturing, utilities | 6.805 | - | 9.926 | 8.810 | 14.143 | 15.694 |
| 10 to 14-Mining | 1.335 | - | 2.860 | 0.387 | 4.171 | 8.307 |
| 15 to 37-Manufacturing | 3.875 | - | 4.977 | 4.768 | 6.527 | 7.209 |
| 151 to 154-Food products | 0.293 | - | 0.815 | 0.338 | 0.887 | 0.883 |
| 155-Beverages | 0.690 | - | 0.848 | 0.817 | 1.046 | 1.188 |
| 16-Tobacco | 0.321 | - | 0.450 | 0.463 | 0.559 | 0.649 |
| 17-Textiles | 0.146 | - | 0.072 | 0.052 | 0.062 | 0.157 |
| 18-Apparel | 0.165 | - | 0.143 | 0.154 | 0.181 | 0.128 |
| 191-Leather | 0.005 | - | -0.005 | -0.001 | 0.003 | -0.006 |
| 192-Footwear | 0.027 | - | 0.026 | -0.008 | -0.010 | -0.016 |
| 20-Wood products | 0.032 | - | 0.032 | 0.020 | 0.048 | 0.030 |
| 21-Paper | 0.173 | - | 0.135 | 0.022 | 0.035 | 0.252 |
| 22-Publishing | 0.294 | - | 0.403 | 0.511 | 0.519 | 0.544 |
| 23-Petroleum products | 0.000 | - | 0.000 | 0.000 | 0.002 | 0.000 |
| 24-Chemicals | 0.301 | - | 0.360 | 0.421 | 0.839 | 1.256 |
| 251-Rubber products | 0.051 | - | 0.057 | 0.067 | 0.220 | 0.061 |
| 252-Plastics | 0.034 | - | 0.105 | 0.093 | 0.089 | 0.052 |
| 26-Non-metallic mineral products | 0.991 | - | 0.943 | 1.238 | 1.089 | 1.105 |
| 27-Basic metals | 0.090 | - | 0.154 | 0.108 | 0.241 | 0.074 |
| 28-Fabricated metals | 0.052 | - | 0.062 | 0.083 | 0.095 | 0.046 |
| 29-General machinery | 0.019 | - | 0.006 | 0.041 | 0.023 | 0.100 |
| 30-Office \& computing machinery | 0.000 | - | 0.000 | 0.000 | 0.000 | 0.000 |
| 31-Electrical machinery | 0.106 | - | 0.145 | 0.113 | 0.185 | 0.195 |
| 32-Radio, television \& communication | 0.027 | - | 0.050 | 0.047 | 0.054 | 0.094 |
| 33-Precision machinery | 0.003 | - | 0.003 | 0.002 | 0.004 | -0.006 |
| 34-Motor vehicles | 0.015 | - | 0.051 | 0.053 | 0.138 | 0.082 |
| 35-Other transport equipment | 0.050 | - | 0.106 | 0.099 | 0.165 | 0.247 |
| 361-Furniture | -0.008 | - | 0.014 | 0.018 | 0.041 | 0.085 |
| 36 less 361-Miscellaneous manufact. | 0.000 | - | 0.001 | 0.016 | 0.013 | 0.008 |
| 37-Recycling | 0.000 | - | 0.000 | 0.000 | 0.000 | 0.000 |
| 40 to 41-Utilities | 1.595 | - | 2.089 | 3.655 | 3.444 | 0.177 |
| 45-Construction | 0.671 | - | 1.972 | 1.884 | 1.655 | 1.657 |
| 50 to 52-Trade | 1.007 | -0.306 | 0.899 | -1.659 | 0.157 |  |
| 55 to 99-Services | 5.787 | --13.456 | 17.036 | 20.529 | 20.699 |  |

Note: Samples include firms reporting positive employment and sales.
Source: Vietnam, General Statistics Office (various years b)

Appendix Table 5b: Operating Profits of Private Firms by Industry (trillion dong)

| VSIC code, Industry | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| All industries | 1.975 | - | 5.466 | 7.405 | 8.660 | 11.472 |
| 01 to 05-Agriculture, fishery, forestry | 0.167 | - | 0.205 | 0.139 | 0.273 | 0.100 |
| 10 to 41-Mining, manufacturing, utilities | 0.530 | - | 2.320 | 3.267 | 4.087 | 4.456 |
| 10 to 14-Mining | 0.019 | - | 0.075 | 0.081 | 0.095 | 0.055 |
| 15 to 37-Manufacturing | 0.510 | - | 2.242 | 3.184 | 3.982 | 4.405 |
| 151 to 154-Food products | -0.099 | - | 0.691 | 0.722 | 1.340 | 1.299 |
| 155-Beverages | 0.018 | - | 0.048 | 0.022 | 0.003 | -0.025 |
| 16-Tobacco | 0.001 | - | 0.000 | 0.000 | 0.001 | 0.002 |
| 17-Textiles | 0.029 | - | 0.065 | 0.080 | 0.107 | 0.105 |
| 18-Apparel | 0.023 | - | 0.068 | 0.110 | 0.132 | 0.133 |
| 191-Leather | -0.001 | - | 0.001 | 0.022 | 0.023 | 0.045 |
| 192-Footwear | -0.001 | - | -0.113 | 0.064 | 0.060 | 0.121 |
| 20-Wood products | 0.019 | - | 0.069 | 0.066 | 0.088 | 0.116 |
| 21-Paper | 0.049 | - | 0.046 | 0.073 | 0.104 | 0.148 |
| 22-Publishing | 0.004 | - | 0.003 | 0.049 | 0.017 | 0.019 |
| 23-Petroleum products | 0.002 | - | 0.008 | 0.002 | 0.001 | 0.010 |
| 24-Chemicals | 0.097 | - | 0.223 | 0.304 | 0.352 | 0.507 |
| 251-Rubber products | 0.002 | - | 0.025 | 0.068 | 0.026 | 0.028 |
| 252-Plastics | 0.025 | - | 0.116 | 0.138 | 0.081 | 0.344 |
| 26-Non-metallic mineral products | 0.117 | - | 0.386 | 0.439 | 0.416 | 0.540 |
| 27-Basic metals | 0.003 | - | 0.010 | 0.120 | 0.085 | 0.074 |
| 28-Fabricated metals | 0.015 | - | 0.110 | 0.171 | 0.278 | 0.066 |
| 29-General machinery | 0.009 | - | 0.060 | 0.109 | 0.173 | 0.073 |
| 30-Office \& computing machinery | 0.000 | - | 0.002 | 0.001 | -0.008 | 0.000 |
| 31-Electrical machinery | 0.046 | - | 0.087 | 0.129 | 0.039 | 0.166 |
| 32-Radio, television \& communication | 0.007 | - | 0.060 | 0.049 | 0.053 | 0.035 |
| 33-Precision machinery | 0.016 | - | 0.031 | 0.027 | 0.042 | 0.018 |
| 34-Motor vehicles | 0.013 | - | 0.036 | 0.048 | 0.063 | 0.082 |
| 35-Other transport equipment | 0.056 | - | 0.092 | 0.132 | 0.178 | 0.095 |
| 361-Furniture | 0.029 | - | 0.102 | 0.138 | 0.284 | 0.349 |
| 36 less 361-Miscellaneous manufact. | 0.032 | - | 0.017 | 0.098 | 0.040 | 0.056 |
| 37-Recycling | 0.000 | - | 0.000 | 0.003 | 0.003 | 0.002 |
| 40 to 41-Utilities | 0.001 | -- | 0.002 | 0.002 | 0.010 | -0.003 |
| 45-Construction | 0.156 | --548 | 0.617 | 0.806 | 1.202 |  |
| 50 to 52-Trade | 0.581 | - | 0.907 | 1.493 | 2.764 | 2.798 |
| 55 to 99-Services | 0.541 | --1.486 | 1.888 | 0.731 | 2.915 |  |

Note: Samples include firms reporting positive employment and sales.
Source: Vietnam, General Statistics Office (various years b)

Appendix Table 5c: Operating Profits of MNCs by Industry (trillion dong)

| VSIC code, Industry | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| All industries | 24.695 | - | 32.140 | 43.355 | 57.923 | 58.454 |
| 01 to 05-Agriculture, fishery, forestry | -0.031 | - | 0.081 | 0.052 | 0.065 | 0.160 |
| 10 to 41-Mining, manufacturing, utilities | 25.204 | - | 31.570 | 41.758 | 53.994 | 53.342 |
| 10 to 14-Mining | 21.294 | - | 21.993 | 29.988 | 39.496 | 39.983 |
| 15 to 37-Manufacturing | 4.220 | - | 9.043 | 11.552 | 14.276 | 13.135 |
| 151 to 154-Food products | 0.478 | - | 0.765 | 1.252 | 1.913 | 2.786 |
| 155-Beverages | -0.065 | - | 0.298 | -0.210 | 0.676 | 0.877 |
| 16-Tobacco | -0.015 | - | -0.003 | 0.000 | -0.001 | 0.060 |
| 17-Textiles | 0.237 | - | 0.181 | 0.211 | 0.139 | -0.436 |
| 18-Apparel | 0.167 | - | 0.137 | 0.180 | 0.048 | 0.276 |
| 191-Leather | 0.007 | - | -0.057 | -0.058 | -0.099 | -0.100 |
| 192-Footwear | 0.204 | - | 0.131 | 0.266 | -0.234 | -0.236 |
| 20-Wood products | 0.033 | - | 0.083 | 0.084 | 0.181 | 0.155 |
| 21-Paper | -0.114 | - | 0.019 | 0.052 | 0.131 | 0.076 |
| 22-Publishing | -0.002 | - | 0.010 | 0.015 | 0.016 | 0.011 |
| 23-Petroleum products | 0.057 | - | 0.145 | 0.078 | 0.088 | 0.109 |
| 24-Chemicals | 0.429 | - | 0.987 | 1.169 | 1.393 | 1.339 |
| 251-Rubber products | -0.024 | - | 0.003 | 0.044 | 0.088 | -0.136 |
| 252-Plastics | -0.160 | - | 0.201 | 0.223 | 0.309 | 0.351 |
| 26-Non-metallic mineral products | 0.394 | - | 1.049 | 0.975 | 0.985 | 1.159 |
| 27-Basic metals | 0.421 | - | 0.470 | 0.372 | 0.491 | -0.070 |
| 28-Fabricated metals | -0.058 | - | 0.285 | 0.285 | 0.283 | 0.593 |
| 29-General machinery | 0.023 | - | 0.078 | 0.202 | 0.487 | 0.335 |
| 30-Office \& computing machinery | 0.145 | - | -0.275 | 0.032 | 0.197 | 0.225 |
| 31-Electrical machinery | 0.232 | - | 0.951 | 0.915 | 0.778 | 0.814 |
| 32-Radio, television \& communication | 0.533 | - | 0.587 | 0.899 | 1.128 | 0.578 |
| 33-Precision machinery | 0.035 | - | -0.025 | 0.068 | 0.209 | 0.116 |
| 34-Motor vehicles | 0.459 | - | 1.495 | 2.108 | 1.683 | 1.139 |
| 35-Other transport equipment | 0.763 | - | 1.100 | 2.352 | 3.174 | 3.004 |
| 361-Furniture | -0.017 | - | 0.368 | -0.016 | 0.118 | 0.065 |
| 36 less 361-Miscellaneous manufact. | 0.059 | - | 0.060 | 0.053 | 0.095 | 0.046 |
| 37-Recycling | 0.000 | - | 0.000 | 0.000 | 0.001 | -0.003 |
| 40 to 41-Utilities | -0.310 | - | 0.534 | 0.217 | 0.222 | 0.224 |
| 45-Construction | -0.036 | - | 0.072 | 0.013 | 0.010 | 0.111 |
| 50 to 52-Trade | -0.091 | - | -0.209 | -0.110 | -0.124 | -0.168 |
| 55 to 99-Services | -0.351 | - | 0.625 | 1.643 | 3.978 | 5.008 |

Note: Samples include firms reporting positive employment and sales.
Source: Vietnam, General Statistics Office (various years b)

Appendix Table 5d: Operating Profits of Medium-Large SOEs by Industry (trillion dong)

| VSIC code, Industry | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| All industries | 14.457 | - | 25.784 | 30.163 | 36.840 | 41.052 |
| 01 to 05-Agriculture, fishery, forestry | 0.200 | - | 0.753 | 1.543 | 2.177 | 2.846 |
| 10 to 41-Mining, manufacturing, utilities | 6.805 | - | 9.927 | 8.812 | 14.144 | 15.696 |
| 10 to 14-Mining | 1.335 | - | 2.860 | 0.387 | 4.170 | 8.308 |
| 15 to 37-Manufacturing | 3.874 | - | 4.977 | 4.771 | 6.530 | 7.211 |
| 151 to 154-Food products | 0.293 | - | 0.815 | 0.338 | 0.887 | 0.883 |
| 155-Beverages | 0.690 | - | 0.848 | 0.817 | 1.046 | 1.189 |
| 16-Tobacco | 0.321 | - | 0.450 | 0.463 | 0.559 | 0.649 |
| 17-Textiles | 0.146 | - | 0.072 | 0.052 | 0.062 | 0.158 |
| 18-Apparel | 0.165 | - | 0.143 | 0.154 | 0.181 | 0.128 |
| 191-Leather | 0.005 | - | -0.005 | -0.001 | 0.003 | -0.006 |
| 192-Footwear | 0.027 | - | 0.026 | -0.008 | -0.010 | -0.016 |
| 20-Wood products | 0.032 | - | 0.032 | 0.020 | 0.048 | 0.030 |
| 21-Paper | 0.173 | - | 0.135 | 0.022 | 0.035 | 0.252 |
| 22-Publishing | 0.294 | - | 0.403 | 0.512 | 0.521 | 0.544 |
| 23-Petroleum products | 0.000 | - | 0.000 | 0.000 | 0.002 | 0.000 |
| 24-Chemicals | 0.301 | - | 0.360 | 0.421 | 0.839 | 1.256 |
| 251-Rubber products | 0.051 | - | 0.057 | 0.067 | 0.220 | 0.061 |
| 252-Plastics | 0.034 | - | 0.105 | 0.093 | 0.089 | 0.052 |
| 26-Non-metallic mineral products | 0.991 | - | 0.943 | 1.239 | 1.089 | 1.105 |
| 27-Basic metals | 0.090 | - | 0.154 | 0.108 | 0.241 | 0.074 |
| 28-Fabricated metals | 0.053 | - | 0.062 | 0.083 | 0.096 | 0.046 |
| 29-General machinery | 0.019 | - | 0.006 | 0.041 | 0.023 | 0.100 |
| 30-Office \& computing machinery | 0.000 | - | 0.000 | 0.000 | 0.000 | 0.000 |
| 31-Electrical machinery | 0.106 | - | 0.145 | 0.113 | 0.185 | 0.195 |
| 32-Radio, television \& communication | 0.027 | - | 0.050 | 0.047 | 0.054 | 0.094 |
| 33-Precision machinery | 0.003 | - | 0.003 | 0.002 | 0.004 | -0.006 |
| 34-Motor vehicles | 0.015 | - | 0.051 | 0.053 | 0.138 | 0.082 |
| 35-Other transport equipment | 0.050 | - | 0.106 | 0.099 | 0.165 | 0.247 |
| 361-Furniture | -0.008 | - | 0.014 | 0.018 | 0.041 | 0.085 |
| 36 less 361-Miscellaneous manufact. | 0.000 | - | 0.001 | 0.016 | 0.013 | 0.008 |
| 37-Recycling | 0.000 | - | 0.000 | 0.000 | 0.000 | 0.000 |
| 40 to 41-Utilities | 1.595 | - | 2.089 | 3.655 | 3.444 | 0.177 |
| 45-Construction | 0.671 | - | 1.971 | 1.884 | 1.656 | 1.657 |
| 50 to 52-Trade | 1.007 | -0.317 | 0.895 | -1.659 | 0.154 |  |
| 55 to 99-Services | 5.773 | --13.450 | 17.029 | 20.523 | 20.700 |  |

Note: Samples include firms reporting positive employment and sales.
Source: Vietnam, General Statistics Office (various years b)

Appendix Table 5e: Operating Profits of Medium-Large Private Firms by Industry (trillion dong)

| VSIC code, Industry | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| All industries | 1.323 | - | 4.761 | 6.555 | 8.804 | 10.979 |
| 01 to 05-Agriculture, fishery, forestry | 0.072 | - | 0.115 | 0.121 | 0.205 | 0.160 |
| 10 to 41-Mining, manufacturing, utilities | 0.427 | - | 2.343 | 3.155 | 4.091 | 4.536 |
| 10 to 14-Mining | 0.018 | - | 0.069 | 0.069 | 0.085 | 0.116 |
| 15 to 37-Manufacturing | 0.409 | - | 2.274 | 3.085 | 4.005 | 4.420 |
| 151 to 154-Food products | -0.170 | - | 0.584 | 0.663 | 1.309 | 1.256 |
| 155-Beverages | 0.003 | - | 0.029 | 0.006 | -0.006 | -0.013 |
| 16-Tobacco | 0.000 | - | 0.000 | 0.000 | 0.001 | 0.002 |
| 17-Textiles | 0.028 | - | 0.071 | 0.083 | 0.113 | 0.108 |
| 18-Apparel | 0.023 | - | 0.069 | 0.110 | 0.134 | 0.147 |
| 191-Leather | -0.001 | - | 0.001 | 0.020 | 0.024 | 0.047 |
| 192-Footwear | -0.001 | - | 0.056 | 0.067 | 0.060 | 0.120 |
| 20-Wood products | 0.012 | - | 0.063 | 0.057 | 0.078 | 0.107 |
| 21-Paper | 0.050 | - | 0.046 | 0.077 | 0.111 | 0.153 |
| 22-Publishing | 0.005 | - | 0.003 | 0.051 | 0.026 | 0.034 |
| 23-Petroleum products | 0.002 | - | 0.008 | 0.001 | 0.001 | 0.010 |
| 24-Chemicals | 0.096 | - | 0.223 | 0.302 | 0.353 | 0.507 |
| 251-Rubber products | 0.002 | - | 0.025 | 0.065 | 0.029 | 0.027 |
| 252-Plastics | 0.026 | - | 0.115 | 0.137 | 0.088 | 0.344 |
| 26-Non-metallic mineral products | 0.111 | - | 0.382 | 0.447 | 0.411 | 0.537 |
| 27-Basic metals | 0.002 | - | 0.009 | 0.120 | 0.083 | 0.071 |
| 28-Fabricated metals | 0.013 | - | 0.106 | 0.157 | 0.274 | 0.060 |
| 29-General machinery | 0.009 | - | 0.059 | 0.109 | 0.173 | 0.119 |
| 30-Office \& computing machinery | 0.000 | - | 0.002 | 0.001 | -0.010 | 0.000 |
| 31-Electrical machinery | 0.046 | - | 0.086 | 0.130 | 0.080 | 0.162 |
| 32-Radio, television \& communication | 0.006 | - | 0.061 | 0.049 | 0.055 | 0.035 |
| 33-Precision machinery | 0.016 | - | 0.031 | 0.027 | 0.042 | 0.018 |
| 34-Motor vehicles | 0.012 | - | 0.035 | 0.046 | 0.063 | 0.080 |
| 35-Other transport equipment | 0.056 | - | 0.091 | 0.128 | 0.178 | 0.075 |
| 361-Furniture | 0.029 | - | 0.101 | 0.129 | 0.291 | 0.351 |
| 36 less 361-Miscellaneous manufact. | 0.032 | - | 0.017 | 0.099 | 0.045 | 0.063 |
| 37-Recycling | 0.000 | - | 0.000 | 0.002 | 0.002 | 0.000 |
| 40 to 41-Utilities | 0.000 | - | 0.000 | 0.001 | 0.002 | -0.001 |
| 45-Construction | 0.129 | - | 0.478 | 0.542 | 0.788 | 1.184 |
| 50 to 52-Trade | 0.220 | - | 0.423 | 0.955 | 1.777 | 1.964 |
| 55 to 99-Services | 0.476 | - | 1.401 | 1.782 | 1.944 | 3.136 |

Note: Samples include firms reporting positive employment and sales.
Source: Vietnam, General Statistics Office (various years b)

Appendix Table 5f: Operating Profits of Medium-Large MNCs by Industry (trillion dong)

| VSIC code, Industry | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| All industries | 24.793 | - | 32.210 | 43.353 | 57.941 | 58.587 |
| 01 to 05-Agriculture, fishery, forestry | -0.027 | - | 0.075 | 0.059 | 0.069 | 0.167 |
| 10 to 41-Mining, manufacturing, utilities | 25.233 | - | 31.599 | 41.752 | 54.004 | 53.455 |
| 10 to 14-Mining | 21.294 | - | 21.993 | 29.989 | 39.494 | 39.983 |
| 15 to 37-Manufacturing | 4.248 | - | 9.072 | 11.545 | 14.288 | 13.247 |
| 151 to 154-Food products | 0.478 | - | 0.770 | 1.252 | 1.916 | 2.794 |
| 155-Beverages | -0.064 | - | 0.303 | -0.206 | 0.680 | 0.877 |
| 16-Tobacco | -0.015 | - | -0.003 | 0.000 | -0.001 | 0.060 |
| 17-Textiles | 0.238 | - | 0.179 | 0.210 | 0.141 | -0.424 |
| 18-Apparel | 0.167 | - | 0.138 | 0.176 | 0.051 | 0.278 |
| 191-Leather | 0.007 | - | -0.057 | -0.058 | -0.098 | -0.100 |
| 192-Footwear | 0.209 | - | 0.131 | 0.266 | -0.234 | -0.236 |
| 20-Wood products | 0.033 | - | 0.083 | 0.083 | 0.181 | 0.158 |
| 21-Paper | -0.114 | - | 0.020 | 0.053 | 0.132 | 0.084 |
| 22-Publishing | -0.002 | - | 0.010 | 0.016 | 0.018 | 0.018 |
| 23-Petroleum products | 0.057 | - | 0.146 | 0.078 | 0.088 | 0.109 |
| 24-Chemicals | 0.431 | - | 0.988 | 1.162 | 1.392 | 1.372 |
| 251-Rubber products | -0.024 | - | 0.003 | 0.044 | 0.088 | -0.135 |
| 252-Plastics | -0.152 | - | 0.202 | 0.222 | 0.306 | 0.362 |
| 26-Non-metallic mineral products | 0.393 | - | 1.051 | 0.974 | 0.983 | 1.159 |
| 27-Basic metals | 0.421 | - | 0.474 | 0.369 | 0.492 | -0.067 |
| 28-Fabricated metals | -0.052 | - | 0.289 | 0.298 | 0.285 | 0.597 |
| 29-General machinery | 0.025 | - | 0.079 | 0.203 | 0.489 | 0.341 |
| 30-Office \& computing machinery | 0.145 | - | -0.273 | 0.032 | 0.197 | 0.232 |
| 31-Electrical machinery | 0.232 | - | 0.952 | 0.917 | 0.780 | 0.817 |
| 32-Radio, television \& communication | 0.533 | - | 0.588 | 0.898 | 1.129 | 0.576 |
| 33-Precision machinery | 0.035 | - | -0.025 | 0.068 | 0.211 | 0.118 |
| 34-Motor vehicles | 0.459 | - | 1.496 | 2.109 | 1.683 | 1.141 |
| 35-Other transport equipment | 0.764 | - | 1.100 | 2.343 | 3.167 | 3.003 |
| 361-Furniture | -0.017 | - | 0.368 | -0.017 | 0.118 | 0.065 |
| 36 less 361-Miscellaneous manufact. | 0.061 | - | 0.061 | 0.055 | 0.094 | 0.049 |
| 37-Recycling | 0.000 | - | 0.000 | 0.000 | 0.000 | 0.000 |
| 40 to 41-Utilities | -0.309 | - | 0.535 | 0.218 | 0.223 | 0.224 |
| 45-Construction | -0.017 | - | 0.070 | 0.019 | 0.011 | 0.121 |
| 50 to 52-Trade | -0.090 | - | -0.211 | -0.112 | -0.125 | -0.166 |
| 55 to 99-Services | -0.305 | - | 0.677 | 1.636 | 3.982 | 5.010 |

Note: Samples include firms reporting positive employment and sales.
Source: Vietnam, General Statistics Office (various years b)

Appendix Table 6a: 2004 Characteristics of New Entrants into Manufacturing 2001-2004 (2004 data for firms entering in 2001-2004)

| Industry | Number |  |  | Employment (thousands) |  |  | Sales (trillion dong) |  |  | Gross Profits (tril. dong) |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | SOEs | Private | MNCs | SOEs | Private | MNCs | SOES | Private | MNCs | SOEs | Private | MNCs |
| 15-37: Manufacturing | 436 | 12,345 | 1,491 | 243.35 | 677.06 | 468.76 | 49.194 | 104.146 | 86.563 | 1.437 | 1.879 | 2.338 |
| 15 x -Food products | 52 | 1,689 | 118 | 26.72 | 116.71 | 21.73 | 9.230 | 30.547 | 14.123 | 0.200 | 0.741 | 0.808 |
| 155-Beverages | 23 | 719 | 11 | 6.12 | 12.25 | 0.63 | 1.640 | 1.471 | 0.330 | 0.253 | -0.008 | -0.038 |
| 16-Tobacco | 6 | 4 | 2 | 5.96 | 0.15 | 0.13 | 4.083 | 0.044 | 0.034 | 0.122 | 0.000 | -0.008 |
| 17-Textiles | 11 | 491 | 87 | 7.10 | 30.78 | 16.71 | 0.929 | 2.974 | 2.519 | -0.006 | 0.035 | -0.157 |
| 18-Apparel | 38 | 912 | 250 | 52.62 | 123.26 | 141.04 | 4.607 | 5.539 | 7.817 | 0.055 | 0.094 | -0.196 |
| 191-Leather | 2 | 93 | 37 | 0.59 | 10.30 | 17.03 | 0.031 | 0.711 | 1.741 | 0.000 | 0.024 | -0.061 |
| 192-Footwear | 15 | 123 | 64 | 25.30 | 27.04 | 103.78 | 0.845 | 0.846 | 6.415 | -0.001 | 0.004 | -0.388 |
| 20-Wood products | 13 | 1,009 | 55 | 4.66 | 48.99 | 10.12 | 0.423 | 3.542 | 1.972 | 0.018 | 0.045 | 0.143 |
| 21-Paper | 12 | 523 | 40 | 1.98 | 20.46 | 5.03 | 0.440 | 3.870 | 0.968 | 0.016 | 0.051 | 0.003 |
| 22-Publishing | 48 | 777 | 25 | 8.15 | 11.19 | 1.84 | 2.948 | 1.651 | 0.170 | 0.152 | 0.016 | 0.010 |
| 23-Petroleum products | 1 | 11 | 0 | 0.12 | 0.41 | 0.00 | 0.090 | 0.511 | 0.000 | 0.002 | 0.001 | 0.000 |
| 24-Chemicals | 29 | 502 | 94 | 17.65 | 17.45 | 6.06 | 5.680 | 4.904 | 5.752 | 0.502 | 0.193 | 0.079 |
| 251-Rubber products | 7 | 102 | 21 | 4.45 | 4.63 | 2.83 | 0.754 | 1.799 | 0.473 | 0.056 | 0.011 | -0.011 |
| 252-Plastics | 3 | 612 | 94 | 1.46 | 25.21 | 13.92 | 0.694 | 5.825 | 3.051 | 0.004 | 0.014 | -0.006 |
| 26-Non-metallic mineral products | 70 | 892 | 51 | 35.48 | 61.77 | 10.92 | 6.389 | 5.981 | 1.980 | -0.232 | 0.196 | -0.132 |
| 27-Basic metals | 5 | 229 | 14 | 2.81 | 9.94 | 2.14 | 1.244 | 8.563 | 3.018 | 0.016 | 0.071 | -0.026 |
| 28-Fabricated metals | 19 | 1,558 | 123 | 6.47 | 47.71 | 15.23 | 0.780 | 9.753 | 3.667 | 0.006 | 0.141 | 0.059 |
| 29-General machinery | 19 | 358 | 50 | 8.10 | 13.95 | 3.11 | 1.133 | 2.615 | 1.318 | 0.044 | 0.092 | 0.010 |
| 30-Office \& computing machinery | 0 | 15 | 7 | 0.00 | 0.44 | 2.76 | 0.000 | 0.208 | 3.407 | 0.000 | -0.008 | 0.068 |
| 31-Electrical machinery | 3 | 194 | 51 | 0.69 | 6.32 | 7.35 | 0.297 | 1.405 | 2.034 | 0.014 | -0.085 | 0.086 |
| 32-Radio, television \& communication | 8 | 102 | 28 | 2.86 | 3.76 | 5.08 | 0.503 | 1.081 | 5.818 | 0.017 | 0.045 | 0.805 |
| 33-Precision machinery | 4 | 30 | 14 | 1.23 | 1.71 | 2.06 | 0.129 | 0.165 | 0.537 | 0.005 | 0.006 | 0.072 |
| 34-Motor vehicles | 17 | 159 | 41 | 8.09 | 5.05 | 5.81 | 1.980 | 1.286 | 3.931 | 0.067 | 0.058 | 0.187 |
| 35-Other transport equipment | 24 | 239 | 59 | 12.49 | 14.34 | 12.91 | 3.805 | 3.455 | 9.049 | 0.105 | 0.075 | 1.053 |
| 361-Furniture | 6 | 748 | 86 | 1.90 | 50.60 | 43.45 | 0.329 | 4.270 | 5.379 | 0.015 | 0.062 | 0.026 |
| 36x-Miscellaneous manufacturing | 1 | 223 | 68 | 0.34 | 11.76 | 17.09 | 0.213 | 0.963 | 1.053 | 0.006 | 0.001 | -0.050 |
| 37-Recycling | 0 | 31 | 1 | 0.00 | 0.89 | 0.01 | 0.000 | 0.166 | 0.007 | 0.000 | 0.003 | 0.001 |

Source: Vietnam, General Statistics Office (various years b)

Appendix Table 6b: 2004 Characteristics of Firms Changing Industries into Manufacturing Categories between 2000 and 2004

| Industry | Number |  |  | Employment (thousands) |  |  | Sales (trillion dong) |  |  | Gross Profits (tril. dong) |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | SOEs | Private | MNCs | SOEs | Private | MNCs | SOES | Private | MNCs | SOES | Private | MNCs |
| 15-37: Manufacturing | 102 | 635 | 94 | 58.66 | 55.1 | 28.98 | 13.092 | 11.732 | 11.716 | 0.266 | 0.215 | 0.776 |
| 15x-Food products | 25 | 57 | 6 | 14.75 | 4.37 | 0.93 | 4.839 | 2.126 | 0.773 | 0.018 | 0.023 | 0.032 |
| 155-Beverages | 3 | 22 | 2 | 1.81 | 1.21 | 0.78 | 0.167 | 0.195 | 0.391 | 0.010 | -0.037 | -0.066 |
| 16-Tobacco | 0 | 1 | 0 | 0.00 | 0.01 | 0.00 | 0.000 | 0.003 | 0.000 | 0.000 | 0.000 | 0.000 |
| 17-Textiles | 3 | 19 | 5 | 0.99 | 3.59 | 1.26 | 0.311 | 0.316 | 0.392 | -0.045 | -0.001 | -0.009 |
| 18-Apparel | 4 | 22 | 5 | 5.90 | 3.56 | 0.88 | 0.210 | 0.173 | 0.058 | -0.001 | -0.002 | 0.001 |
| 191-Leather | 3 | 4 | 2 | 2.74 | 0.36 | 0.31 | 0.085 | 0.042 | 0.053 | 0.006 | 0.000 | -0.002 |
| 192-Footwear | 2 | 9 | 1 | 2.70 | 3.73 | 1.32 | 0.232 | 0.259 | 0.140 | 0.009 | 0.009 | 0.014 |
| 20-Wood products | 5 | 66 | 4 | 1.28 | 3.35 | 1.02 | 0.270 | 0.291 | 0.198 | -0.002 | 0.005 | 0.004 |
| 21-Paper | 3 | 22 | 0 | 1.00 | 1.62 | 0.00 | 0.162 | 0.230 | 0.000 | 0.000 | -0.001 | 0.000 |
| 22-Publishing | 4 | 29 | 1 | 0.57 | 0.77 | 0.13 | 0.125 | 0.184 | 0.016 | 0.007 | 0.002 | 0.001 |
| 23-Petroleum products | 0 | 0 | 0 | 0.00 | 0.00 | 0.00 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 24-Chemicals | 3 | 22 | 5 | 2.54 | 0.76 | 0.73 | 0.993 | 0.383 | 1.525 | 0.020 | 0.003 | 0.128 |
| 251-Rubber products | 2 | 13 | 2 | 4.09 | 0.81 | 0.46 | 0.406 | 0.110 | 0.105 | 0.170 | 0.003 | 0.009 |
| 252-Plastics | 5 | 33 | 6 | 0.90 | 1.85 | 1.25 | 0.436 | 0.497 | 0.318 | 0.031 | -0.014 | 0.022 |
| 26-Non-metallic mineral products | 7 | 47 | 0 | 4.71 | 6.86 | 0.00 | 1.390 | 1.217 | 0.000 | 0.011 | 0.030 | 0.000 |
| 27-Basic metals | 2 | 11 | 5 | 0.56 | 0.58 | 1.00 | 0.281 | 0.626 | 0.953 | 0.000 | 0.011 | 0.076 |
| 28-Fabricated metals | 10 | 71 | 5 | 2.54 | 2.49 | 0.87 | 0.679 | 1.205 | 0.085 | 0.007 | 0.011 | -0.010 |
| 29-General machinery | 8 | 43 | 2 | 4.98 | 2.44 | 0.40 | 0.343 | 0.764 | 0.146 | 0.013 | 0.052 | 0.016 |
| 30-Office \& computing machinery | 0 | 0 | 0 | 0.00 | 0.00 | 0.00 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 31-Electrical machinery | 2 | 16 | 4 | 0.30 | 0.98 | 1.02 | 0.137 | 0.914 | 0.479 | 0.004 | 0.001 | 0.046 |
| 32-Radio, television \& communication | 0 | 6 | 3 | 0.00 | 0.31 | 0.73 | 0.000 | 0.051 | 0.190 | 0.000 | -0.001 | 0.009 |
| 33-Precision machinery | 0 | 1 | 1 | 0.00 | 0.05 | 2.12 | 0.000 | 0.027 | 0.261 | 0.000 | 0.003 | -0.015 |
| 34-Motor vehicles | 0 | 18 | 10 | 0.00 | 1.25 | 3.21 | 0.000 | 0.178 | 3.093 | 0.000 | 0.001 | 0.361 |
| 35-Other transport equipment | 3 | 17 | 7 | 0.58 | 3.13 | 1.92 | 0.325 | 0.531 | 1.179 | 0.001 | 0.010 | 0.136 |
| 361-Furniture | 8 | 62 | 8 | 5.72 | 8.35 | 3.81 | 1.702 | 1.048 | 0.679 | 0.009 | 0.103 | 0.020 |
| 36x-Miscellaneous manufacturing | 0 | 22 | 10 | 0.00 | 2.63 | 4.85 | 0.000 | 0.347 | 0.684 | 0.000 | 0.005 | 0.003 |
| 37-Recycling | 0 | 2 | 0 | 0.00 | 0.04 | 0.00 | 0.000 | 0.015 | 0.000 | 0.000 | 0.000 | 0.000 |

Note: Totals include firms changing from non-manufacturing or other manufacturing categories into the listed categories.
Source: Vietnam, General Statistics Office (various years b)

Appendix Table 6c: 2000 Characteristics of Manufacturing Firms which Ceased Operations by 2004

| Industry | Number |  |  | Employment (thousands) |  |  | Sales (trillion dong) |  |  | Gross Profits (tril. dong) |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | SOEs | Private | MNCs | SOEs | Private | MNCs | SOEs | Private | MNCs | SOEs | Private | MNCs |
| 15-37: Manufacturing | 722 | 3,654 | 222 | 258.52 | 159.7 | 41.86 | 31.211 | 16.446 | 14.087 | 0.673 | 0.127 | 0.145 |
| 15 x -Food products | 103 | 1,185 | 34 | 39.21 | 27.70 | 6.94 | 10.045 | 7.697 | 4.858 | -0.068 | 0.044 | 0.178 |
| 155-Beverages | 53 | 325 | 8 | 7.06 | 3.57 | 1.55 | 0.886 | 0.356 | 0.594 | 0.129 | 0.019 | -0.160 |
| 16-Tobacco | 7 | 3 | 1 | 5.20 | 0.18 | 0.16 | 1.830 | 0.026 | 0.051 | 0.065 | 0.001 | -0.001 |
| 17-Textiles | 26 | 123 | 15 | 12.63 | 10.52 | 1.96 | 0.987 | 0.623 | 0.166 | 0.013 | 0.010 | -0.019 |
| 18-Apparel | 68 | 171 | 17 | 60.95 | 29.85 | 6.49 | 3.274 | 0.790 | 0.457 | 0.065 | -0.007 | 0.013 |
| 191-Leather | 2 | 20 | 4 | 0.60 | 4.28 | 0.84 | 0.021 | 0.067 | 0.032 | 0.004 | -0.001 | -0.002 |
| 192-Footwear | 20 | 43 | 9 | 27.34 | 13.78 | 5.04 | 1.225 | 0.442 | 0.619 | 0.025 | -0.009 | 0.023 |
| 20-Wood products | 27 | 317 | 9 | 5.54 | 15.14 | 4.40 | 0.444 | 0.596 | 0.289 | 0.016 | 0.007 | -0.003 |
| 21-Paper | 21 | 141 | 4 | 4.59 | 5.26 | 1.41 | 1.991 | 0.501 | 0.135 | 0.090 | 0.002 | 0.004 |
| 22-Publishing | 55 | 50 | 3 | 7.01 | 1.30 | 0.07 | 1.513 | 0.142 | 0.019 | 0.072 | 0.004 | 0.000 |
| 23-Petroleum products | 0 | 6 | 0 | 0.00 | 0.26 | 0.00 | 0.000 | 0.203 | 0.000 | 0.000 | -0.001 | 0.000 |
| 24-Chemicals | 46 | 89 | 23 | 17.43 | 2.74 | 1.89 | 3.017 | 0.442 | 1.240 | 0.114 | 0.008 | 0.038 |
| 251-Rubber products | 7 | 30 | 5 | 1.00 | 0.99 | 0.60 | 0.043 | 0.207 | 0.062 | 0.001 | 0.000 | 0.000 |
| 252-Plastics | 7 | 112 | 12 | 1.28 | 5.42 | 0.80 | 0.199 | 0.925 | 0.156 | -0.002 | 0.008 | -0.001 |
| 26-Non-metallic mineral products | 102 | 389 | 13 | 24.11 | 12.19 | 2.92 | 1.586 | 0.589 | 0.489 | 0.047 | 0.020 | -0.131 |
| 27-Basic metals | 9 | 36 | 3 | 1.90 | 1.42 | 0.33 | 0.181 | 0.405 | 1.301 | -0.002 | 0.000 | 0.016 |
| 28-Fabricated metals | 42 | 191 | 14 | 9.39 | 5.85 | 1.44 | 0.715 | 0.837 | 0.304 | 0.019 | 0.003 | 0.004 |
| 29-General machinery | 32 | 64 | 9 | 9.23 | 1.81 | 0.35 | 0.608 | 0.197 | 0.102 | 0.006 | 0.005 | -0.021 |
| 30-Office \& computing machinery | 0 | 1 | 1 | 0.00 | 0.02 | 0.26 | 0.000 | 0.014 | 0.021 | 0.000 | 0.000 | -0.012 |
| 31-Electrical machinery | 5 | 38 | 11 | 0.91 | 1.28 | 0.67 | 0.088 | 0.202 | 0.175 | 0.001 | 0.000 | 0.004 |
| 32-Radio, television \& communication | 15 | 17 | 7 | 4.26 | 0.98 | 0.78 | 0.539 | 0.063 | 0.648 | 0.025 | 0.005 | 0.024 |
| 33-Precision machinery | 5 | 8 | 3 | 1.53 | 0.23 | 0.30 | 0.082 | 0.010 | 0.051 | 0.004 | 0.001 | 0.006 |
| 34-Motor vehicles | 26 | 37 | 3 | 5.00 | 0.73 | 0.43 | 0.336 | 0.028 | 0.536 | 0.006 | 0.000 | -0.036 |
| 35-Other transport equipment | 32 | 70 | 4 | 10.16 | 2.47 | 1.25 | 1.428 | 0.648 | 1.709 | 0.049 | 0.009 | 0.231 |
| 361-Furniture | 10 | 142 | 2 | 2.08 | 6.95 | 0.21 | 0.164 | 0.315 | 0.018 | -0.004 | 0.002 | 0.000 |
| 36x-Miscellaneous manufacturing | 2 | 43 | 8 | 0.14 | 4.55 | 0.79 | 0.007 | 0.094 | 0.055 | 0.000 | -0.001 | -0.010 |
| 37-Recycling | 0 | 3 | 0 | 0.00 | 0.28 | 0.00 | 0.000 | 0.024 | 0.000 | 0.000 | 0.000 | 0.000 |

Notes: $\mathrm{N}=$ number of firms, $\mathrm{E}=$ number of employees, $\mathrm{S}=$ sales in trillion dong, $\mathrm{S} / \mathrm{E}=$ sales per employee in billion dong,
GP/S \& OP/S=ratios of gross \& operating profits to sales in percent
Source: Vietnam, General Statistics Office (various years b)

Appendix Table 7a: Sales of 4 Largest Firms in Manufacturing Industries (trillion dong)

| VSIC code, Industry | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| 15x-Food products | 8.070 | 10.052 | 11.531 | 10.788 | 12.816 | 16.506 |
| 155-Beverages | 3.149 | 3.806 | 6.458 | 7.488 | 9.000 | 10.626 |
| 16-Tobacco | 3.134 | 3.755 | 7.343 | 8.501 | 9.795 | 11.266 |
| 17-Textiles | 3.210 | 3.105 | 3.461 | 4.246 | 4.646 | 7.414 |
| 18-Apparel | 2.378 | 2.268 | 3.137 | 3.440 | 4.542 | 4.527 |
| 191-Leather | 0.349 | 0.407 | 0.416 | 0.845 | 1.563 | 1.265 |
| 192-Footwear | 4.863 | 5.336 | 6.126 | 8.685 | 10.498 | 12.052 |
| 20-Wood products | 0.908 | 0.939 | 0.704 | 0.851 | 1.171 | 1.521 |
| 21-Paper | 3.270 | 2.005 | 1.887 | 2.028 | 2.649 | 4.403 |
| 22-Publishing | 1.040 | 1.479 | 1.754 | 2.151 | 2.625 | 2.887 |
| 23-Petroleum products | 0.825 | 0.963 | 1.757 | 1.096 | 1.377 | 1.601 |
| 24-Chemicals | 4.610 | 4.733 | 5.903 | 6.671 | 8.820 | 11.327 |
| 251-Rubber products | 1.211 | 1.388 | 1.667 | 2.210 | 2.842 | 2.833 |
| 252-Plastics | 1.218 | 1.902 | 2.497 | 2.808 | 3.815 | 3.000 |
| 26-Non-metallic mineral products | 4.831 | 14.705 | 6.095 | 6.721 | 7.362 | 7.810 |
| 27-Basic metals | 4.175 | 4.873 | 5.847 | 7.597 | 10.939 | 12.794 |
| 28-Fabricated metals | 0.977 | 1.148 | 1.413 | 1.868 | 2.806 | 3.767 |
| 29-General machinery | 1.914 | 1.484 | 1.766 | 2.182 | 4.663 | 4.568 |
| 30-Office \& computing machinery | 8.503 | 6.114 | 4.004 | 6.658 | 9.844 | 14.209 |
| 31-Electrical machinery | 2.137 | 3.170 | 4.200 | 5.107 | 10.033 | 6.378 |
| 32-Radio, television \& communication | 3.067 | 3.422 | 4.408 | 5.240 | 6.738 | 7.220 |
| 33-Precision machinery | 0.659 | 0.703 | 0.843 | 0.922 | 1.303 | 1.268 |
| 34-Motor vehicles | 2.999 | 4.753 | 7.122 | 10.610 | 10.707 | 11.886 |
| 35-Other transport equipment | 7.040 | 6.412 | 10.228 | 11.707 | 17.140 | 18.644 |
| 361-Furniture | 0.475 | 0.844 | 3.008 | 1.561 | 2.279 | 2.635 |
| 36x-Miscellaneous manufacturing | 0.937 | 0.952 | 1.017 | 1.302 | 1.599 | 1.584 |
| 37-Recycling | 0.025 | 0.026 | 0.024 | 0.032 | 0.100 | 0.097 |

Note: Samples include firms reporting positive employment and sales.
Source: Vietnam, General Statistics Office (various years b)

Appendix Table 7b: Sales of 8 Largest Firms in Manufacturing Industries (trillion dong)

| VSIC code, Industry | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| 15x-Food products | 12.444 | 14.813 | 17.388 | 18.036 | 20.971 | 26.102 |
| 155-Beverages | 4.227 | 5.079 | 8.004 | 9.312 | 10.734 | 12.748 |
| 16-Tobacco | 4.244 | 5.229 | 9.405 | 10.946 | 11.623 | 13.538 |
| 17-Textiles | 5.063 | 5.049 | 5.706 | 6.652 | 6.982 | 10.998 |
| 18-Apparel | 3.377 | 3.445 | 4.645 | 5.338 | 6.673 | 7.059 |
| 191-Leather | 0.496 | 0.567 | 0.604 | 1.132 | 2.042 | 2.032 |
| 192-Footwear | 7.112 | 7.656 | 8.720 | 11.606 | 14.588 | 17.364 |
| 20-Wood products | 1.401 | 1.460 | 1.300 | 1.399 | 2.002 | 2.775 |
| 21-Paper | 3.914 | 2.660 | 2.685 | 2.936 | 3.864 | 6.008 |
| 22-Publishing | 1.555 | 2.020 | 2.558 | 3.130 | 4.068 | 4.371 |
| 23-Petroleum products | 0.901 | 1.204 | 2.004 | 1.319 | 1.693 | 2.124 |
| 24-Chemicals | 5.956 | 6.334 | 8.059 | 9.577 | 13.136 | 16.399 |
| 251-Rubber products | 1.657 | 1.746 | 2.232 | 3.135 | 4.144 | 3.746 |
| 252-Plastics | 2.037 | 2.896 | 3.523 | 4.467 | 5.860 | 4.782 |
| 26-Non-metallic mineral products | 7.812 | 18.691 | 10.222 | 11.484 | 12.351 | 13.023 |
| 27-Basic metals | 5.870 | 7.126 | 8.793 | 11.885 | 15.225 | 17.846 |
| 28-Fabricated metals | 1.677 | 1.934 | 2.437 | 3.150 | 4.773 | 6.243 |
| 29-General machinery | 2.369 | 2.264 | 2.464 | 3.063 | 5.831 | 5.790 |
| 30-Office \& computing machinery | 8.503 | 6.114 | 4.008 | 6.690 | 9.964 | 14.297 |
| 31-Electrical machinery | 3.156 | 4.613 | 6.101 | 7.734 | 13.774 | 10.696 |
| 32-Radio, television \& communication | 4.259 | 4.821 | 6.014 | 7.457 | 9.359 | 10.496 |
| 33-Precision machinery | 0.846 | 1.000 | 1.140 | 1.320 | 1.789 | 1.729 |
| 34-Motor vehicles | 4.405 | 6.857 | 10.586 | 15.666 | 16.074 | 16.257 |
| 35-Other transport equipment | 8.773 | 8.762 | 12.322 | 14.501 | 21.461 | 23.641 |
| 361-Furniture | 0.729 | 1.208 | 3.757 | 2.434 | 3.630 | 4.439 |
| 36x-Miscellaneous manufacturing | 1.456 | 1.461 | 1.496 | 2.010 | 2.555 | 2.565 |
| 37-Recycling | 0.025 | 0.030 | 0.032 | 0.049 | 0.136 | 0.130 |

Note: Samples include firms reporting positive employment and sales.
Source: Vietnam, General Statistics Office (various years b)

Appendix Table 7d: Herfindahl Indices in Manufacturing Industries

| Industry | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| 15x-Food products | 0.00906 | 0.00962 | 0.00884 | 0.00753 | 0.00636 | 0.00634 |
| 155-Beverages | 0.06302 | 0.07008 | 0.09757 | 0.09019 | 0.09117 | 0.09698 |
| 16-Tobacco | 0.12264 | 0.11074 | 0.14187 | 0.13979 | 0.17574 | 0.16116 |
| 17-Textiles | 0.02677 | 0.02097 | 0.01916 | 0.01818 | 0.01633 | 0.01830 |
| 18-Apparel | 0.01785 | 0.01539 | 0.01419 | 0.01122 | 0.01066 | 0.00994 |
| 191-Leather | 0.05724 | 0.05258 | 0.05987 | 0.06146 | 0.06181 | 0.04056 |
| 192-Footwear | 0.04685 | 0.04535 | 0.04416 | 0.05162 | 0.04961 | 0.04992 |
| 20-Wood products | 0.01841 | 0.01759 | 0.00974 | 0.00857 | 0.00856 | 0.00858 |
| 21-Paper | 0.07527 | 0.02922 | 0.02048 | 0.01545 | 0.01451 | 0.01938 |
| 22-Publishing | 0.02709 | 0.03163 | 0.02952 | 0.02873 | 0.02572 | 0.02176 |
| 23-Petroleum products | 0.27830 | 0.21363 | 0.26891 | 0.24230 | 0.21586 | 0.19469 |
| 24-Chemicals | 0.02627 | 0.02424 | 0.02371 | 0.02145 | 0.02070 | 0.02081 |
| 251-Rubber products | 0.06758 | 0.07122 | 0.05577 | 0.05704 | 0.04272 | 0.04598 |
| 252-Plastics | 0.01728 | 0.01920 | 0.01682 | 0.01378 | 0.01328 | 0.00743 |
| 26-Non-metallic mineral prod. | 0.02720 | 0.10852 | 0.01876 | 0.01635 | 0.01447 | 0.01335 |
| 27-Basic metals | 0.08226 | 0.07236 | 0.05422 | 0.04977 | 0.05171 | 0.04734 |
| 28-Fabricated metal | 0.01229 | 0.01053 | 0.00846 | 0.00747 | 0.00741 | 0.00700 |
| 29-General machinery | 0.06009 | 0.02548 | 0.02351 | 0.02122 | 0.04062 | 0.03530 |
| 30-Office \& computing machinery | 0.99177 | 0.98101 | 0.80610 | 0.53877 | 0.51718 | 0.47925 |
| 31-Electrical machinery mfg. | 0.03687 | 0.03447 | 0.03445 | 0.03053 | 0.05711 | 0.02427 |
| 32-Radio, television \& commun. mach. | 0.07424 | 0.06269 | 0.05392 | 0.05124 | 0.05289 | 0.04934 |
| 33-Precision machinery mfg. | 0.12274 | 0.09829 | 0.09070 | 0.07834 | 0.07749 | 0.09274 |
| 34-Motor vehicles | 0.10523 | 0.09315 | 0.07969 | 0.08364 | 0.06595 | 0.07498 |
| 35-Other transport equipment | 0.10905 | 0.06208 | 0.08893 | 0.07275 | 0.06328 | 0.06211 |
| 361-Furniture | 0.02052 | 0.01878 | 0.06901 | 0.01177 | 0.01081 | 0.00885 |
| 36x-Miscellaneous manufacturing | 0.05690 | 0.05212 | 0.04075 | 0.03490 | 0.02952 | 0.02530 |
| 37-Recycling | 0.55403 | 0.34735 | 0.14277 | 0.08224 | 0.10001 | 0.08231 |

Note: Samples include firms reporting positive employment and sales.
Source: Vietnam, General Statistics Office (various years b)

Appendix Table 8a: Regression Data for 27 2\&3-digit Manufacturing Industries (MS and KR in billion dong, HF is an index, all others in percent)

| Industry | $\Delta \mathrm{C4} \mathrm{j}_{\mathrm{j}, 00-04}$ | $\Delta \mathrm{HF}_{\mathrm{j}, 00-04}$ | $\mathrm{MS}_{\mathrm{j}, 00}$ | $\mathrm{KR}_{\mathrm{j}, 00}$ | $\mathrm{gSL}_{\mathrm{j}, 00-04}$ | $\mathrm{C} 4_{\mathrm{j}, 00}$ | $\mathrm{HF}_{\mathrm{j}, 00}$ | $\mathrm{SOE}_{\mathrm{j}, 00}$ | $\Delta \mathrm{SOE}_{\mathrm{j}, 00-04}$ | $\mathrm{MNC}_{\mathrm{j}, 00}$ | $\triangle \mathrm{MNC}_{\mathrm{j}, 00-04}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 15x-Food products | -2.986 | -0.00272 | 46.471 | 13.194 | 106.722 | 12.865 | 0.00906 | 41.378 | -14.055 | 24.307 | 3.689 |
| 155-Beverages | 10.165 | 0.03397 | 18.724 | 12.715 | 130.337 | 41.932 | 0.06302 | 39.619 | 4.590 | 49.426 | -9.126 |
| 16-Tobacco | 13.865 | 0.03852 | 400.568 | 47.374 | 154.654 | 61.022 | 0.12264 | 97.784 | 1.011 | 1.458 | -0.770 |
| 17-Textiles | -5.773 | -0.00847 | 63.100 | 42.072 | 89.262 | 24.545 | 0.02677 | 46.361 | -10.753 | 39.278 | 0.586 |
| 18-Apparel | -5.362 | -0.00791 | 38.816 | 14.680 | 158.168 | 20.607 | 0.01785 | 47.431 | -14.166 | 34.489 | 6.498 |
| 191-Leather | 4.288 | -0.01669 | 24.399 | 7.009 | 304.110 | 39.502 | 0.05724 | 11.063 | -6.706 | 65.129 | 5.331 |
| 192-Footwear | -0.311 | 0.00307 | 135.428 | 67.441 | 117.509 | 36.149 | 0.04685 | 18.248 | -10.308 | 64.380 | 11.826 |
| 20-Wood products | -9.386 | -0.00983 | 11.592 | 2.818 | 137.381 | 20.555 | 0.01841 | 36.212 | -17.712 | 22.925 | 5.730 |
| 21-Paper | -26.595 | -0.05589 | 36.093 | 12.786 | 97.831 | 45.027 | 0.07527 | 56.030 | -31.617 | 12.105 | 11.189 |
| 22-Publishing | 0.130 | -0.00533 | 28.626 | 8.095 | 151.031 | 25.706 | 0.02709 | 93.390 | -15.334 | 1.197 | 1.213 |
| 23-Petroleum products | -9.856 | -0.08361 | 148.404 | 65.071 | 87.265 | 90.960 | 0.27830 | 0.000 | 5.313 | 70.230 | -13.061 |
| 24-Chemicals | -5.528 | -0.00547 | 88.063 | 24.502 | 145.630 | 25.015 | 0.02627 | 48.768 | -16.792 | 40.121 | 9.268 |
| 251-Rubber products | -13.004 | -0.02160 | 44.783 | 20.255 | 223.154 | 48.288 | 0.06758 | 53.446 | -10.097 | 30.619 | -4.249 |
| 252-Plastics | -1.210 | -0.00986 | 36.571 | 20.985 | 235.574 | 17.818 | 0.01728 | 17.912 | -1.173 | 36.648 | -2.446 |
| 26-Non-metallic mineral products | -8.660 | -0.01385 | 33.821 | 44.612 | 129.391 | 25.799 | 0.02720 | 56.980 | -6.228 | 29.656 | -5.540 |
| 27-Basic metals | -12.828 | -0.03492 | 137.374 | 41.148 | 250.234 | 50.926 | 0.08226 | 34.785 | -1.956 | 52.134 | -19.110 |
| 28-Fabricated metals | -3.263 | -0.00529 | 22.909 | 15.183 | 280.504 | 13.318 | 0.01229 | 23.291 | -11.284 | 46.442 | -11.465 |
| 29-General machinery | -7.784 | -0.02479 | 36.771 | 17.595 | 198.260 | 42.500 | 0.06009 | 39.437 | -16.741 | 48.784 | -1.232 |
| 30-Office \& computing machinery | -1.544 | -0.51252 | 4,244.076 | 619.428 | 17.594 | 100.000 | 0.99177 | 0.000 | 0.000 | 99.830 | -1.914 |
| 31-Electrical machinery | 5.221 | -0.01260 | 85.710 | 41.028 | 298.363 | 29.197 | 0.03687 | 29.626 | 6.735 | 57.612 | -9.052 |
| 32-Radio, television \& communication | -2.691 | -0.02490 | 152.317 | 63.346 | 134.595 | 42.288 | 0.07424 | 20.378 | -9.793 | 76.979 | 4.320 |
| 33-Precision machinery | -14.847 | -0.03000 | 43.937 | 32.448 | 159.471 | 62.490 | 0.12274 | 9.861 | -4.670 | 72.690 | 3.731 |
| 34-Motor vehicles | -7.670 | -0.03025 | 69.275 | 35.627 | 324.313 | 48.378 | 0.10523 | 13.154 | 0.396 | 78.325 | 2.122 |
| 35-Other transport equipment | -8.072 | -0.04693 | 102.104 | 38.006 | 188.855 | 51.347 | 0.10905 | 22.062 | -1.763 | 67.802 | -0.339 |
| 361-Furniture | -7.192 | -0.01168 | 11.942 | 3.681 | 686.928 | 20.099 | 0.02052 | 14.896 | -2.429 | 26.637 | 15.949 |
| 36x-Miscellaneous manufacturing | -14.741 | -0.03160 | 30.143 | 13.053 | 167.461 | 39.067 | 0.05690 | 1.726 | 3.136 | 73.805 | -5.070 |
| 37-Recycling | -47.288 | -0.47172 | 8.144 | 0.721 | 657.209 | 100.000 | 0.55403 | 0.000 | 0.000 | 0.000 | 3.473 |

Source: Vietnam, General Statistics Office (various years b)

Appendix Table 8b: Regression Data for 61 3-digit Manufacturing Industries (MS and KR in billion dong, HF is an index, all others in percent)

| Industry | $\Delta \mathrm{C} 4_{\mathrm{j}, 00-04}$ | $\Delta \mathrm{HF}_{\mathrm{j}, 00-04}$ | $\mathrm{MS}_{\mathrm{j}, 00}$ | $\mathrm{KR}_{\mathrm{j}, 00}$ | $\mathrm{gSL}_{\mathrm{j}, 00-04}$ | $\mathrm{C} 4{ }_{\mathrm{j}, 00}$ | $\mathrm{HF}_{\mathrm{j}, 00}$ | $\mathrm{SOE}_{\mathrm{j}, 00}$ | $\Delta \mathrm{SOE}_{\mathrm{j}, 00-04}$ | $\mathrm{MNC}_{\mathrm{j}, 00}$ | $\triangle \mathrm{MNC}_{\mathrm{j}, 00-04}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 151 | -3.579 | -0.00458 | 90.238 | 8.994 | 113.874 | 16.963 | 0.01713 | 58.942 | -20.491 | 8.473 | 1.197 |
| 152 | -4.978 | -0.13134 | 523.988 | 123.352 | 70.978 | 98.427 | 0.51530 | 69.017 | -14.107 | 30.515 | 2.575 |
| 153 | 0.509 | 0.00083 | 21.124 | 3.071 | 106.542 | 23.432 | 0.02021 | 8.497 | 0.081 | 32.905 | 9.772 |
| 154 | -10.154 | -0.01734 | 64.923 | 50.286 | 104.489 | 30.729 | 0.03908 | 41.419 | -18.753 | 40.177 | 2.762 |
| 155 | 9.947 | 0.03448 | 18.724 | 12.715 | 130.337 | 41.315 | 0.06266 | 39.619 | 4.590 | 49.426 | -9.126 |
| 160 | 13.865 | 0.05310 | 400.568 | 47.374 | 154.654 | 61.022 | 0.12264 | 97.784 | 1.011 | 1.458 | -0.770 |
| 171 | -4.315 | -0.01008 | 108.623 | 74.680 | 69.436 | 29.608 | 0.03779 | 47.521 | -5.857 | 41.789 | -1.688 |
| 172 | -7.731 | -0.01297 | 21.469 | 12.586 | 212.883 | 26.246 | 0.03373 | 33.417 | -15.377 | 29.450 | 8.044 |
| 173 | -24.668 | -0.08181 | 16.884 | 7.333 | 95.777 | 61.100 | 0.13620 | 64.596 | -45.694 | 19.454 | 28.511 |
| 181 | -5.452 | -0.00738 | 38.968 | 14.724 | 158.776 | 20.816 | 0.01818 | 47.911 | -14.388 | 34.204 | 6.662 |
| 182 | -7.973 | 0.04826 | 22.825 | 9.316 | 98.069 | 97.014 | 0.29230 | 0.000 | 0.000 | 62.654 | -5.953 |
| 191 | 4.154 | 0.00703 | 24.399 | 7.009 | 304.110 | 38.941 | 0.05726 | 11.063 | -6.706 | 65.129 | 5.331 |
| 192 | -0.275 | 0.00250 | 135.428 | 67.441 | 117.509 | 36.183 | 0.04683 | 18.248 | -10.308 | 64.380 | 11.826 |
| 201 | -17.352 | -0.04734 | 8.990 | 1.829 | 73.727 | 42.710 | 0.07195 | 48.229 | -19.055 | 24.615 | -22.491 |
| 202 | -8.665 | -0.01199 | 13.222 | 3.412 | 165.752 | 23.089 | 0.02418 | 30.856 | -15.466 | 22.172 | 14.214 |
| 210 | -26.591 | -0.06075 | 36.093 | 12.786 | 97.831 | 45.027 | 0.07527 | 56.030 | -31.617 | 12.105 | 11.189 |
| 221 | -4.217 | 0.00494 | 37.284 | 3.503 | 161.199 | 59.483 | 0.10701 | 96.702 | -3.572 | 2.965 | -2.865 |
| 222 | 2.347 | -0.00454 | 26.080 | 9.399 | 149.346 | 29.769 | 0.03680 | 92.100 | -20.481 | 0.494 | 2.863 |
| 224 | -0.266 | -0.12917 | 19.521 | 7.392 | -27.860 | 100.000 | 0.80775 | 89.227 | -7.868 | 0.000 | 11.777 |
| 231 | -0.087 | 0.04736 | 6.318 | 0.275 | -88.958 | 100.000 | 0.31857 | 0.000 | 0.000 | 0.000 | 0.000 |
| 232 | -11.888 | -0.07494 | 206.245 | 95.549 | 91.414 | 93.102 | 0.29138 | 0.000 | 5.320 | 71.884 | -14.637 |
| 241 | -11.615 | -0.03994 | 82.911 | 23.932 | 105.824 | 52.342 | 0.09830 | 73.091 | -4.194 | 19.748 | 0.590 |
| 242 | 0.696 | -0.00557 | 90.604 | 24.637 | 160.988 | 24.221 | 0.03577 | 38.985 | -18.646 | 48.342 | 10.420 |
| 243 | 0.000 | -0.02944 | 2.169 | 0.078 | 2,197.003 | 100.000 | 0.72069 | 0.000 | 0.000 | 0.000 | 0.000 |
| 251 | -12.886 | -0.02842 | 44.783 | 20.255 | 223.154 | 47.126 | 0.07151 | 53.446 | -10.097 | 30.619 | -4.249 |
| 252 | -1.193 | -0.00369 | 36.571 | 20.985 | 235.574 | 17.981 | 0.01693 | 17.912 | -1.173 | 36.648 | -2.446 |
| 261 | -22.498 | -0.10447 | 56.782 | 77.558 | 61.175 | 78.070 | 0.21795 | 16.125 | -3.799 | 74.325 | -22.807 |
| 269 | -9.782 | -0.01457 | 32.686 | 42.850 | 134.844 | 27.861 | 0.03033 | 60.246 | -7.386 | 26.086 | -3.473 |
| 271 | -9.967 | -0.02518 | 223.632 | 64.382 | 221.064 | 54.194 | 0.09271 | 32.448 | 2.742 | 55.025 | -23.621 |
| 272 | -13.771 | -0.07410 | 55.173 | 19.354 | 265.892 | 97.104 | 0.29597 | 97.104 | -56.342 | 0.000 | 40.320 |
| 273 | 13.517 | 0.05090 | 9.480 | 6.205 | 1,272.162 | 43.894 | 0.07337 | 37.766 | -27.402 | 16.238 | 27.818 |

Appendix Table 8b (continued)

| Industry | $\Delta \mathrm{C} 4_{\mathrm{j}, 00-04}$ | $\Delta \mathrm{HF}_{\mathrm{j}, 00-04}$ | $\mathrm{MS}_{\mathrm{j}, 00}$ | $\mathrm{KR}_{\mathrm{j}, 00}$ | $\mathrm{gSL}_{\mathrm{j}, 00-04}$ | $\mathrm{C} 4{ }_{\mathrm{j}, 00}$ | $\mathrm{HF}_{\mathrm{j}, 00}$ | $\mathrm{SOE}_{\mathrm{j}, 00}$ | $\Delta \mathrm{SOE}_{\mathrm{j}, 00-04}$ | $\mathrm{MNC}_{\mathrm{j}, 00}$ | $\triangle \mathrm{MNC}_{\mathrm{j}, 00-04}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 281 | -18.381 | -0.02939 | 30.703 | 23.385 | 213.989 | 32.241 | 0.04227 | 17.673 | -2.556 | 57.997 | -22.280 |
| 289 | 0.039 | -0.00112 | 19.392 | 11.487 | 327.317 | 15.216 | 0.01474 | 27.245 | -16.846 | 38.310 | -3.715 |
| 291 | 23.671 | 0.20949 | 18.143 | 10.125 | 444.484 | 35.553 | 0.05657 | 58.363 | -46.085 | 15.567 | 46.141 |
| 292 | -37.890 | -0.10751 | 45.273 | 18.077 | 79.076 | 57.763 | 0.12823 | 46.691 | 2.336 | 46.275 | -28.985 |
| 293 | -2.043 | -0.06901 | 43.159 | 27.265 | 343.805 | 66.352 | 0.20204 | 7.998 | -4.380 | 77.419 | -9.723 |
| 301 | -0.123 | -0.04312 | 4,244.076 | 619.428 | -60.051 | 100.000 | 0.99177 | 0.000 | 0.000 | 99.830 | -2.461 |
| 311 | -5.465 | -0.03705 | 121.571 | 69.817 | 156.605 | 68.762 | 0.17892 | 31.211 | -1.685 | 62.652 | -13.119 |
| 312 | -11.781 | -0.03492 | 30.095 | 10.858 | 160.529 | 75.265 | 0.20933 | 48.871 | -4.834 | 39.089 | -3.229 |
| 313 | -6.734 | -0.02790 | 120.437 | 63.974 | 155.696 | 55.813 | 0.10978 | 13.686 | 8.111 | 72.330 | -17.924 |
| 314 | 6.485 | 0.03110 | 85.148 | 21.803 | 81.689 | 84.191 | 0.23637 | 55.422 | -6.493 | 32.788 | 16.347 |
| 315 | 8.984 | 0.54359 | 74.943 | 35.538 | 1,111.429 | 87.931 | 0.24947 | 62.871 | 31.728 | 11.450 | -6.965 |
| 319 | -20.723 | -0.08657 | 36.708 | 10.957 | 923.767 | 72.753 | 0.17789 | 34.794 | -31.972 | 51.294 | 29.541 |
| 321 | -15.520 | -0.03513 | 60.383 | 39.800 | 190.952 | 62.394 | 0.12226 | 13.077 | -9.028 | 83.384 | -1.778 |
| 322 | 20.763 | 0.08487 | 100.879 | 27.111 | 177.254 | 39.928 | 0.07086 | 55.047 | -26.073 | 41.219 | 23.330 |
| 323 | -0.164 | -0.04143 | 267.966 | 111.574 | 107.277 | 66.193 | 0.16743 | 10.593 | -6.016 | 87.336 | 1.289 |
| 331 | -14.037 | -0.03918 | 38.781 | 31.652 | 133.859 | 65.603 | 0.13114 | 14.496 | -9.593 | 63.709 | 1.331 |
| 332 | -8.078 | -0.24752 | 111.702 | 68.625 | 146.021 | 99.759 | 0.63207 | 0.000 | 7.460 | 94.375 | -1.835 |
| 333 | 20.009 | 0.69758 | 4.068 | 1.029 | 1,243.226 | 78.964 | 0.19203 | 17.018 | -17.018 | 16.139 | 78.101 |
| 341 | -15.054 | -0.08386 | 177.279 | 107.554 | 354.644 | 70.122 | 0.19893 | 5.265 | 3.763 | 94.170 | -8.016 |
| 342 | -3.077 | 0.01671 | 6.260 | 5.861 | 817.269 | 86.191 | 0.22925 | 78.639 | -43.979 | 17.129 | 38.187 |
| 343 | -37.400 | -0.09333 | 62.933 | 18.458 | 174.742 | 67.702 | 0.13509 | 25.916 | -20.712 | 47.648 | 40.650 |
| 344 | 10.884 | 0.21574 | 4.484 | 1.007 | 1,001.956 | 64.563 | 0.17617 | 69.720 | 13.061 | 0.000 | 0.100 |
| 351 | 7.886 | 0.01089 | 30.786 | 39.253 | 216.657 | 35.606 | 0.05227 | 65.994 | 5.372 | 17.751 | 0.545 |
| 352 | 0.377 | 0.00335 | 47.286 | 4.992 | 91.648 | 99.295 | 0.30622 | 99.295 | 0.377 | 0.000 | 0.000 |
| 353 | 0.115 | 0.01682 | 37.773 | 20.282 | -21.985 | 99.885 | 0.25463 | 76.353 | 9.178 | 23.647 | -9.178 |
| 359 | -9.848 | -0.07076 | 199.737 | 35.780 | 187.991 | 63.710 | 0.16547 | 10.633 | -3.275 | 80.156 | -0.397 |
| 361 | -8.391 | -0.00967 | 11.942 | 3.681 | 686.928 | 21.488 | 0.02064 | 14.896 | -2.429 | 26.637 | 15.949 |
| 369 | -13.308 | -0.02467 | 30.143 | 13.053 | 167.461 | 36.728 | 0.05309 | 1.726 | 3.136 | 73.805 | -5.070 |
| 371 | -35.673 | -0.85653 | 0.668 | 0.579 | 22,597.156 | 100.000 | 1.00000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 372 | -23.908 | -0.37138 | 11.869 | 0.947 | 57.321 | 100.000 | 0.58399 | 0.000 | 0.000 | 0.000 | 17.172 |

Source: Vietnam, General Statistics Office (various years b)


[^0]:    See Appendix Table 1c. We use data for 2000 and 2004 because of the need to conserve space and because our copy of the 2005 data contains many more duplicate records and apparent errors than the data for previous years (Appendix A). Our data are compilations from firm-level data (General Statistics Office, various years b) that underlie official, published estimates (General Statistics Office, various years a). Our samples are generally smaller than the samples in published estimates, primarily because we dropped some duplicates and firms reporting zero employment or sales.
    ${ }^{2}$ Preliminary estimates indicate trends in the number of SOEs (a 10 percent decline) and MNCs (a 15 percent increase) continued in 2005 (Appendix Tables 1b, 1c, 1d, 1e). The definition of SOEs used in this paper is similar to those in official Vietnamese compilations (Table 1). It includes state-controlled limited companies, in addition to SOEs which are directly managed by the central or local governments. However, it excludes the increasing number of joint stock companies that are financed at least in part by state funds ( 305 in 2000 and 815 in 2004 according to official compilations; General Statistics Office, various years a).

[^1]:    ${ }^{3}$ The SOE share fell from 55 percent in 2000 to 42 percent in 2004 and 37 percent in 2005, while the private share rose from 25 percent to 37 percent and 44 percent, respectively.
    ${ }^{4}$ SOE and private shares were 57 percent and 23 percent, respectively, in 2000 and very similar in 2004-2005 (to 55-56 percent and 22 percent, respectively. Because the private household sector is large and excluded from the enterprise surveys, the most meaningful comparison of the enterprise survey data and the national accounts data is the comparison of shares of enterprise sales and shares of non-household GDP. Shares of sales differ from shares of GDP because GDP excludes intermediate consumption included in sales, but trends in two shares are usually highly correlated.
    ${ }^{5}$ Discrepancies in trends over time could result if the coverage of the enterprise surveys has changed markedly over time or if the GDP estimates have failed to account for the extent to which the private sector has grown and the SOE sector shrunk. It is also possible that different definitions of state-ownership are used in national accounts and the enterprise surveys. For example, joint stock corporations with capital from the state are private firms in the enterprise surveys, but may be classified as SOEs in the national accounts. However, these firms are small (1.3 percent of all firm sales in 2000 and 3.6 percent in 2004; General Statistics Office, various years a) and cannot account for the large discrepancies observed between Figures 1 and 2.
    ${ }^{6} \mathrm{Vu}(2005)$ is the only known study examining the extent of competition and competition policy in Vietnam. However, he does not analyze the relationship between ownership structure and the extent of competition. On the other hand, there are numerous studies examining various issues related to the

[^2]:    ownership structure of the Vietnamese economy (e.g., Phan and Ramstetter 2004, Van Arkadie and Mallon 2003, pp. 103-175).
    ${ }^{7}$ It would be a mistake to attribute all the growth of private firms to the institutional changes because Vietnam is a rapidly growing low-income economy in which the corporate sector is growing more rapidly than the rest of the economy. For example, enterprise employment grew almost 6 times faster than overall employment in 2000-2004 and the ratio of enterprise employment to total employment increased from 9.4 percent in 2000 to 14 percent in 2004 (Table 2; General Statistics Office various years c). It is also important to realize that firms accounted for much larger shares of employment if agriculture, forestry \& fisheries, industries dominated by households not covered in the enterprise surveys, are excluded ( 25 percent in 2000, 32 percent in 2004).
    ${ }^{8}$ See Van Arkadie and Mallon (2003) for a very detailed analysis of the doi moi process (pp. 65-102), institutional changes and the business environment (pp. 103-121), as well as the roles of SOEs (pp. $122-152$ ) and private businesses ( $\mathrm{pp} .153-175$ ) through the early $21^{\text {st }}$ century.

[^3]:    ${ }^{9}$ In 1994-1998, FDI averaged US\$1.7 billion per year according to balance of payments' estimates.

[^4]:    ${ }^{10}$ The new laws were primarily designed to satisfy World Trade Organization (WTO) requirements for equal treatment of foreign and domestic firms, as well as streamline the regulatory framework governing firm behavior. Although the WTO recognized these revisions as sufficient for WTO membership, the new Investment Law preserves some of the distinctions between foreign and domestic investment while eliminating others. The revised Investment and Enterprise Laws also emphasize that firms of various ownership types should in principle be subject to equal treatment, but here again significant problems relating to the implementation of these laws, as well as related decrees and regulations, remain.

[^5]:    ${ }^{11}$ Over half of private manufacturers had less than 20 employees ( 56 percent in 2000 and 52 percent in 2004, Appendix Tables $1 \mathrm{~b}, 1 \mathrm{e}$ ). In marked contrast, the vast majority of manufacturing SOEs ( $98-99$ percent) and MNCs ( $91-93$ percent) had 20 or more workers (Appendix Tables 1a, 1c, 1d, 1f). Sales per firm were also much smaller in private manufacturers, 11 percent or less of corresponding levels in SOEs and MNCs in these two years (Tables 1,3).

[^6]:    ${ }^{12}$ For private firms, rapidly growing industries were publishing, basic metals, fabricated metals, general machinery, office and computing machinery, other transportation machinery, furniture, and recycling. For MNCs, the industries were apparel, leather, publishing, precision machinery, motor vehicles, other transportation equipment, furniture, and miscellaneous manufacturing.
    ${ }^{13}$ These were leather, publishing, chemicals, rubber, non-metallic mineral products, basic metals, fabricated metals, general machinery, office \& computing machinery, electrical machinery, and radio, television, and communication machinery, furniture, and recycling.
    ${ }^{14}$ For SOEs, rapidly growing industries were beverages, tobacco, rubber, plastics, basic metals, electrical machinery, motor vehicles, other transportation equipment, furniture, and miscellaneous manufacturing. For MNCs, they were leather, paper, publishing, electrical machinery, motor vehicles, and furniture

[^7]:    ${ }^{15}$ Problems arise because accounting profits differ from economic profits by including much of the return to capital. Difficulties related to the measure of profits are compounded in the Vietnamese case because of weak accounting standards and enforcement infrastructure, as well as strong motives for firms to underreport profits to avoid taxation and regulatory scrutiny.

[^8]:    ${ }^{16}$ Among MNCs, profits were negative in 10 (gross) or 8 (operating) of 26 manufacturing industries in 2000, and 4 (gross) or 3 (operating) of 27 industries in 2004 (Tables 4, 5). In SOEs there were negative profits in only 1 or 2 of 24 industries by either measure in both years. Meanwhile, for private firms, gross profits were negative in 3 of 27 industries in 2000 and 2 of 27 in 2004, while operating profits were negative in 4 industries in 2000 and only 1 industry in 2004.

[^9]:    ${ }^{17}$ New entrants accounted for 88-90 percent of new competitor sales for MNCs and private firms, and 79 percent for SOEs (Appendix Tables 6a-6b).

[^10]:    ${ }^{18}$ We have been told that when two SOEs merge, the new firm is assigned the firm code of the largest firm involved in the merger. However, the large number of new SOEs ( 436 between 2000 and 2004) and their relatively large size (average sales per firm of 113 billion dong) suggests that this principle may have not been implemented consistently (Appendix Table 6a).

[^11]:    ${ }^{19}$ There was also a small increase in the Herfindahl footwear, but this increase was very small and the 4 -firm concentration ratio fell slightly in this industry.

[^12]:    ${ }^{20}$ Moreover, if the firms involved are related (e.g., a motorcycle manufacturer selling to its wholesale firm and then a related retailer), defining the firm or group of firms to analyze is not always straightforward.

[^13]:    ${ }^{21}$ Ratios exceeding 100 percent are particularly common on the import side reflecting high important dependence for many manufactures and the fact that firms in an industry are not the only consumers of imports of that industry. On the other hand, if all exports originate in surveyed firms, export-sales ratios should in principle be 100 percent or less. The observation of ratios exceeding this threshold (in apparel, leather and footwear, petroleum products, office and computing machinery, and furniture and miscellaneous manufacturing) thus implies that some exports of manufactures did not originate in surveyed manufacturers. This could occur if, for example, sales and exports of some manufactures were reported by non-manufacturing firms, survey coverage of manufacturers was incomplete, manufacturing firms underreported sales, or if there were mismatches between the commodity-level trade data and the firm-level sales data.

[^14]:    ${ }^{22}$ This original specification is also cited in Martin's (2002) standard textbook and included a fifth explanatory variable (the advertising-sales ratio). However, these data are not available in the enterprise surveys. One commentator on an earlier draft also suggested using the ratio of research and development expenditures $[\mathrm{R} \mathrm{\& D}]$ to sales as another indicator of entry barriers and this was attempted. However, R\&D is very small in Vietnam and the inclusion of this variable did not affect the results much; results including R\&D are available from the corresponding author.

[^15]:    ${ }^{23}$ Results without robust standard errors are available from the corresponding author.

[^16]:    ${ }^{24}$ Lack of trade data for 2004 and difficulties with constructing a concordance between commodity-level trade and tariff data and the firm-level sales data (see Table 7) have prevented inclusion of these variables in this study. We hope to address this problem in a future study.

[^17]:    ${ }^{25}$ Although no duplicates existed in the original 2000 dataset codes for 2 firms had to be changed to be consistent with corresponding firm codes in other years.

[^18]:    Source: Vietnam, General Statistics Office (various years c).

