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Abstract

This paper compares labor productivity and wages among nationality and ownership groups of foreign multinational corporations (MNCs) and local plants in Thai manufacturing for 1996, 1998, and 2000. Disaggregating foreign MNCs by nationality or foreign ownership share revealed a few significant differences in both labor productivity and wages that were not present in more aggregate specifications. In these cases, there was a weak tendency for MNCs from Europe, Japan, and the United States to have relatively high labor productivity and wages, for wholly foreign MNCs to have relatively high labor productivity, and for majority- and wholly foreign MNCs to pay relatively high wages. However, these results suggest that the relationships among labor productivity or wages, on the one hand, and nationality or foreign ownership shares, on the other hand, were generally weak in Thai manufacturing. These results are also consistent with those of previous studies in suggesting that the relationship between labor productivity and foreign ownership in general was also rather weak, though the relationship between wages and foreign ownership was somewhat stronger.

JEL Classification: D24, F23, O53

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1. Introduction

Previous studies of foreign MNCs in Thailand present two puzzles for economists. First, most studies suggest that foreign MNCs have generally had higher labor productivity than local plants or firms but that differences in labor productivity, as well as more general differences in production technology were often insignificant statistically.[2] These results are puzzling because they contrast markedly with the conclusions suggested by theoretical analysis and with similar results obtained for other countries.[3] Second, despite the inability to find statistically significant differences in labor productivity, previous studies suggest that foreign MNCs often paid significantly higher wages. This finding of higher wages in foreign MNCs is more consistent with theoretical predictions and findings from other countries.[4] However, the combined finding of significant differences in wages but insignificant differences in labor productivity is puzzling to the extent that one would expect wage differentials and labor productivity differentials to be correlated in competitive markets. Correspondingly this suggests that labor and/or output markets may not be competitive in Thailand, at least when foreign MNCs are involved.

One reason for the above findings could be that previous analyses omitted important factors from their analyses. Moran (2001), for example, suggests that distinguishing by foreign ownership share is very important and there is a strong theoretical rationale for expecting this distinction to be important as discussed below. A second distinction of potential importance is the nationality of investor, a distinction that was first emphasized by Kojima (1978). Although some previous studies of Thai manufacturing have attempted to account for these factors, no known study has attempted to analyze the effects of nationality and foreign

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[2] These studies include analyses of limited data sets primarily covering firms promoted by the Board of Investment (BOI) for 1973-1974 and 1985-1986 (Ramstetter and Tambunlertchai 1991), 1982-1983 (Khanthachai et al. 1987), and 1990 (Ramstetter 1993, 1994), as well as from analyses of the more comprehensive data sets for 1996 and 1998 similar to those used here (Ramstetter 2001a, 2001b, 2002b).

[3] See, for example, studies of Indonesia (Hill 1988, pp. 107-120; Okamoto and Sjöholm 2000; Sjöholm 1998; Takii 2002; Takii and Ramstetter 2000), Mexico (Blomström 1990, pp. 28-34), and 5 Asian economies (Ramstetter 1999a).

[4] See studies of Thailand for 1990 in Ramstetter (1994) and 1996 in Matsuoka (2001a, 2001b, 2001c). See also studies of Indonesia by Hill (1990), Lipsey and Sjöholm (2001, 2002), and Manning (1993) and 5 Asian economies by Ramstetter (1999a).

ownership shares on both labor productivity and wages in a consistent framework at the industry level.[5] The primary goal of this study is to fill this gap in the literature and see if there are statistically significant differences in labor productivity and wages among nationality and ownership groups of foreign MNCs and local plants, after removing the influences of other determinants such as factor intensities, policy status (proxied by promotion by the Board of Investment or BOI), size, and vintage. A second aim of the paper is to see if labor productivity and wages in European plants, in particular, differ from other foreign plants in Thailand and if so, how. The paper first reviews the theoretical and methodological issues involved (Section 2). It then summarizes important characteristics of the data used and examines the shares of foreign MNCs in Thai manufacturing (Section 3), before reporting the results obtained (Section 4), and offering some concluding remarks (Section 5).

2. Theoretical Principles and Methodology

The theoretical literature on MNCs provides a very simple and important rationale for expecting MNCs to be more efficient than non-MNCs in at least some respects. Namely most theorists agree that MNCs tend to possess firm-specific assets, especially intangible assets related to production techniques and processes, marketing networks, and/or management ability, in relatively large amounts.[6] There is also a large literature documenting the tendency for MNCs to spend relatively large amounts on research and development and advertising, as well as to possess a relatively large number of patents (e.g., Caves 1996; Dunning 1993; Markusen 1991). If foreign MNCs possess relatively large amounts of these firm-specific

[5] Ramstetter (1994, 2001a, 2001b) also investigates differences in labor productivity among nationality and ownership groups of foreign MNCs, including European MNCs, finding that these differences tend to be statistically insignificant in 1990, 1996, and 1998. In contrast, Ramstetter (1994) and Matsuoka (2001c) also report evidence that MNCs from the triad (Europe, Japan, and the United States) paid higher wages than MNCs from 3 of Asia's newly industrializing economies (NIEs: Korea, Singapore, Taiwan; Hong Kong is the other NIE but Hong Kong MNCs are not identified in these data sets) in 1990 and 1996 while Matsuoka (2001c) also reports that 1996 wages tended to be highest in majority-foreign plants, followed by wholly-foreign and minority-foreign plants.

[6] A large body of this literature (e.g., Dunning 1988, 1993; Hymer 1960; Markusen 1991) asserts that the possession of firm-specific assets, is a necessary condition for a firm to become a MNC. Another body of literature (e.g., Buckley and Casson 1992; Casson 1987; Rugman 1980, 1985) disputes this view, asserting that internalization is the sole necessary condition for a firm to become a MNC, and that the possession of firm-specific assets is a sufficient but not a necessary condition for a firm to become a MNC. However, all agree that MNCs tend to possess these assets in relatively large amounts.

assets, then it is likely that other factors of production, including labor, will be more productive in MNCs than in non-MNCs. If labor is more productive in MNCs, it is further likely that wages will be relatively high in MNCs because firms' labor demand is determined in large part by the labor productivity. Another reason that labor productivity and wages may be high in MNCs, especially in foreign MNCs operating in developing economies, is that foreign MNCs tend to be more capital and skill intensive than local firms. Still another reason that foreign MNCs may pay higher wages is because MNCs often have difficulties harmonizing their labor management practices with local norms, which results from differences in business culture in foreign-owned MNCs and local firms, and can create a preference for local firms among workers. This can create a wage premium for workers in MNCs, reflecting the extra payments necessary to woo workers away from local firms that employ more commonly accepted labor management practices.

One of the most obvious and well-documented differences among nationality groups of MNCs is the difference often observed in labor management practices. This has been particularly well documented in the case of Japanese MNCs in Southeast Asia, which have generally employed a number of practices that differ greatly from local firms or their European or U.S. counterparts (e.g., Koike and Inoki 1990; Yamashita 1992). Another question is whether the endowments of firm-specific assets possessed by a MNC are somehow related to the nationality of the MNC. Of particular interest in this context is the idea that MNCs from relatively low-income home economies may possess relatively small amounts of relatively low-quality, firm-specific assets compared to MNCs from richer economies.[7] Several theoreticians have disputed these arguments and it is generally hard to find empirical evidence that labor productivity, wage levels, or other indicators of MNC performance are systematically related to the nationality of MNCs in Asia.[8] Nonetheless, these assertions have stirred interest among academics and policy makers alike and it is certainly possible that there may be differences in MNCs by nationality if the home countries and their

[7] This is implied by Dunning's (1988 ch. 5) investment development cycle that relates a country's net FDI position to the level of development. Kojima's (1978) assertions that Japanese FDI in the 1970s was more trade-oriented because it embodied factor-proportions that better matched the comparative advantages of host Asian economies than U.S. and European FDI, can be interpreted in a similar light.

[8] See Buckley (1985) for a criticism of Kojima's theoretical propositions and Hill and Johns (1985), Naya and Ramstetter (1992); and Ramstetter (1994, 1999a) for empirical evidence.

MNCs differ greatly in important respects, particularly with respect to the quantity and/or nature of the firm-specific assets they control. In the Thai case, this would suggest that European MNCs and U.S. MNCs are likely to resemble each other and perhaps Japanese MNCs as well, while MNCs from poorer home economies might differ.

An important and related point is that parents of MNCs are often though to restrict the access of their foreign affiliates to the MNC's firm-specific assets depending on the degree of control the parent exercises over the affiliate. In this context, it is often argued that MNC parents are more reluctant to share their technology-related assets with minority-owned affiliates than with their majority-owned or wholly-owned affiliates (Chao and Yu 1996; Caves 1996, ch. 3, 7, 9; Dunning 1993, ch 7-9, 11; Moran 2001). Moreover, there is now a growing empirical literature suggesting that parents restrict access to exporting networks, which are another important firm-specific asset controlled by MNCs, in affiliates with relatively small foreign ownership shares in Southeast Asia.[9] However, the corresponding evidence with respect to productivity is much more mixed, at least in Indonesia and Thailand where larger foreign ownership shares are not necessarily correlated with higher productivity (Ramstetter 2001a; Takii 2002). Here it should be recognized that, although MNC parents may be hesitant to share production technology-related assets with minority-owned affiliates for fear of losing control of those assets, MNC parents may also want to share technology in order to generate high productivity and large profits in those same affiliates. The relative importance of these competing motives is an empirical matter. In addition, it is also much more difficult to prevent the spread of production technology through labor turnover, for example, than to prevent access to marketing networks.

This paper focuses on differences in labor productivity and wages, which is only one aspect of productivity and factor payments. The results of productivity and/or factor payment comparisons between foreign MNCs and local firms often differ depending on the productivity or factor payment measure used.[10].

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[9] See evidence for Indonesia, Singapore, and Thailand in Ramstetter (1994, 1998, 1999a, 1999b, 2002a).

[10] For example other productivity measures include capital productivity and the productivity of intangible assets. A lot of economic literature also focuses on total factor productivity, which includes unexplained productivity. Unexplained productivity includes important elements of productivity, for example the productivity of intangible assets that are not measured explicitly, but it also includes errors in productivity

Moreover, productivity and factor payments are only two of several important aspects in which foreign MNCs can be expected to differ from local plants. Although this focus on labor productivity and wages is somewhat limited, it is also meaningful because these are two of the most important aspects in which foreign MNCs affect host economies and their workers.

The simplest method of comparing labor productivity and wages in groups of foreign MNCs and local plants is to calculate mean labor productivity and mean wages for each ownership group and compare those mean values. One could also test for statistical differences among the mean values for various ownership groups using simple t-tests. However, such simple comparisons have the large disadvantage of ignoring other factors affecting labor productivity and wages, such as factor intensity, policy biases, plant size, and vintage. More sophisticated comparisons of labor productivity try to remove the effects of these other factors in order to isolate differences in labor productivity that can be attributed more clearly to differences in ownership and the differences in endowments of firm-specific assets thought to underlie differences in ownership.[11]

Because flexible functional forms are very difficult to implement econometrically when there are a large number of ownership or nationality groups to compare, this paper employs a simpler approach used in several previous studies (e.g., Blomström 1990, pp. 28-34; Ramstetter 1994; Takii and Ramstetter 2000), comparing labor productivity in the context of a Cobb-Douglas function with constant returns to scale and analyzing similar specification of the wage equation.[12] In other words, both average labor productivity and wages are first viewed as a function of skill intensity, proxied by the ratio of non-production workers to all

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measurement that result from the inability to define and measure inputs and outputs with precision, the inability to correctly specify production technology, and/or statistical problems encountered when estimating productivity. Therefore, a focus on total factor productivity can be misleading because it is impossible to distinguish the productivity of unmeasured factors and errors in productivity measurement.

[11] In the case of wages, differences among ownership groups may also reflect the wage premium foreign MNCs must pay to woo workers away from local plants.

[12] This assumption has the drawback of implying some very restrictive assumptions about the production function, namely that the elasticity of substitution is one, there are constant returns to scale, and differences in ownership only affect average labor productivity. However, even slightly more flexible functional forms such as the Cobb-Douglas function with variable returns to scale are difficult to estimate because of apparent multicollinearity, even when there are only three groups of MNCs to compare; see Ramstetter (2001a) for an example. A second advantage this formulation is that estimating labor productivity and wages as a function of factor intensities is the reduced probability that heteroscedasticity will be a problem compared to estimating production as a function of labor and capital in levels, for example.

workers, and physical capital intensity or fixed assets per hour worked. Unfortunately, the measure of skill intensity available in these data sets is very rough, which means that there may be skill-related reasons for differences in productivity and wages that are not captured here. Dummy variables identifying plants promoted by the Thai Board of Investment (BOI), older plants, and large plants are added to these equations are added to account for the effects BOI status, vintage, and size might impart.[13] Dummy variables identifying foreign MNCs, two groupings of foreign MNCs by nationality, and one grouping of foreign MNCs by ownership share are then added to see if average labor productivity differs between foreign MNCs and local plants or among groups of foreign MNCs. The following eight equations are thus estimated:

(1) $\ln(V/E) = a1 + a2[\ln(EN/E)] + a3[\ln(K/E)] + a4(Df) + a5(Dboi) + a6(Dold) + a7(Dlg)$

(2) $\ln(V/E) = b1 + b2[\ln(EN/E)] + b3[\ln(K/E)] + b4(Dftr) + b5(Dfn3) + b6(Dfot) + b7(Dboi) + b8(Dold) + b9(Dlg)$

(3) $\ln(V/E) = c1 + c2[\ln(EN/E)] + c3[\ln(K/E)] + c4(Dfeu) + c5(Dfus) + c6(Dfjp) + c7(Dfn3) + c8\ (Dfot) + c9(Dboi) + c10(Dold) + c11(Dlg)$

(4) $\ln(V/E) = d1 + d2[\ln(EN/E)] + d3[\ln(K/E)] + d4(Dfmn) + d5(Dfmj) + d6(Dfwh) + d7(Dboi) + d8(Dold) + d9(Dlg)$

(5) $\ln(W/E) = e1 + e2[\ln(EN/E)] + e3[\ln(K/E)] + e4(Df) + e5(Dboi) + e6(Dold) + e7(Dlg)$

(6) $\ln(W/E) = f1 + f2[\ln(EN/E)] + f3[\ln(K/E)] + f4(Dftr) + f5(Dfn3) + f6(Dfot) + f7(Dboi) + f8(Dold) + f9(Dlg)$

[13] The BOI dummy is not available in the 1998 dataset and omitted from the 1998 regressions.

(7) $\ln(W/E) = g1 + g2[\ln(EN/E)] + g3[\ln(K/E)] + g4(Dfeu) + g5(Dfus) + g6(Dfjp) + g7(Dfn3) + g8\ (Dfot) + g9(Dboi) + g10(Dold) + g11(Dlg)$

(8) $\ln(W/E) = h1 + h2[\ln(EN/E)] + h3[\ln(K/E)] + h4(Dfmn) + h5(Dfmj) + h6(Dfwh) + h7(Dboi) + h8(Dold) + h9(Dlg)$

where

Dboi=1 if a plant is BOI-promoted, =0 otherwise,

Df=1 if the foreign ownership share of a plant is 1% or greater, =0 otherwise,

Dfeu=1 if the major foreign owner of plant is European, =0 otherwise,

Dfjp=1 if the major foreign owner of plant is Japanese, =0 otherwise,

Dfmj=1 if the foreign ownership share of a plant is 50%-99%, =0 otherwise,

Dfmn=1 if the foreign ownership share of a plant is 1%-49%, =0 otherwise,

Dfn3=1 if the major foreign owner of plant is from 3 Asian Newly Industrializing Economies (NIEs: Korea, Singapore, or Taiwan), =0 otherwise,

Dftr=1 if the major foreign owner if from the triad (Europe, the United States, or Japan), =0 otherwise,

Dfot=Df-Dftr-Dfn3,

Dfus=1 if the major foreign owner of a plant is from the United States, =0 otherwise,

Dfwh=1 if the foreign ownership share of a plant i is 100%, =0 otherwise,

Dlg=1 if a plant's output is larger than mean output for the industry plus one standard deviation, =0 otherwise,

Dold=1 if a plant has been in operation for 11 or more years, =0 otherwise,

E=hours worked by workers in plant i,

K=average book value of fixed assets in a plant multiplied by the percentage of hours used each year

W=employee compensation payments in a plant

V=value added in a plant

3. The Data and Shares of Foreign Multinationals

The data used in this study are the factory-level data that underlie the 1997 industrial census of 1996 data (National Statistical Office 1999), the 1999 industrial survey of 1998 data (National Statistical Office 2001a) and the 2001 manufacturing industry survey of 2000 data (National Statistical Office forthcoming).[14] A major problem with using these data sets for economic analysis in their original form, especially the census data for 1996, is that they contain several duplicate or near-duplicate records. It was thus necessary to eliminate these duplicates and the methodology for eliminating duplicates is detailed in the statistical appendix. It should be noted that the methodology used was biased toward leaving a record in the database if there was some doubt as to whether it was a duplicate. A second problem is that several plants report apparently implausible values for important variables. Correspondingly, plants that had less than 1,000 baht (about US$39 in 1996 and US$24-25 in 1998 and 2000) in purchases of intermediate materials, sales of goods produced, and beginning- or end-of-year fixed asset (=capital) stocks, and plants with non-positive value added were also eliminated from the samples used in this study because such small values do not make economic sense in this context. Third, because comparing very small plants with foreign MNCs, which are generally much larger, is not very meaningful, a large number of predominately local plants with less than 20 persons engaged (employees, unpaid workers, and owners) were eliminated from the samples.

After eliminating duplicates, non-meaningful entries, and plants with less than 20 employees, samples were greatly reduced, with a disproportionately large number of local plants being eliminated. Samples were reduced from 23,677 plants (2,672 foreign MNCs) to 10,494 (1,822) in 1996, from 8,552 (1,124) to 4,773 (1,026) in 1998, and from 9,286 (644) to 2,520 (520) in 2000. The coverage of the

[14] The 2000 manufacturing industry survey also provides data for 1999 (National Statistical Office 2001b) but this survey is not used here because its sample size is even smaller than the relatively small sample size of the 2001 survey (see Ramstetter 2003 for estimates from all surveys).

surveys in 1998 and 2000 is markedly worse than the coverage of the census in 1996 and it is thus very difficult to use these data to analyze changes over time because of these large changes in sample coverage. Samples of large plants with output of 25 million baht or more (about US$0.99 million in 1996, US$0.60-0.62 million in 1998 and 2000) are also used in the analysis below and these samples were even smaller, 5,481 plants (1,509 foreign MNCs) in 1996, 2,729 (885) in 1998, and 1,487 (476). However, even though these samples of large plants included only 16-32 percent of the plants in the original datasets, they accounted for the vast majority of employment and value added of plants in the original datasets, for example, 65 percent and 84 percent, respectively, in 1996, 82 percent and 94 percent, respectively, in 1998, and 79 percent and 110 percent in 2000, the large ratio in 2000 resulting from the fact that a number of plants reported negative value added in the original dataset. Published industrial census/survey-based estimates are also much smaller than corresponding estimates of manufacturing employment in labor force surveys (52 percent of the labor force survey total in 1996, 44 percent in 1998, and 50 percent in 2000) and manufacturing value added in the national accounts (72 percent of the national accounts' total in 1996, 45 percent in 1998, and 49 percent in 2000).[15] In short, the industrial censuses and surveys cover do not appear to cover the manufacturing sector comprehensively and a large number of predominately local plants with very few employees and small or negative value added were eliminated from the samples used in this study.

Foreign MNCs accounted for 42 percent of the employment in all sample plants in 1996 and 45 percent in both 1998 and 2000 (Table 1). Corresponding shares of value added were a bit larger, 52 percent in 1996, 59 percent in 1998, and 47 percent in 2000 (Table 2). These are in-sample shares and foreign shares of total manufacturing activities are probably much lower. For example, in 1996 (the census year),

[15] Publications for survey years (National Statistical Office 2001a, forthcoming) report extrapolated totals that are much larger than the sample totals reported in this study. There are also large variations in census/survey coverage of value added across industries, though it is difficult to be very precise in this respect because of differences in industry definitions between the industrial censuses or surveys and the national accounts. For example, using national accounts estimates as a basis for comparison, census and survey coverage appears to be relatively comprehensive in chemicals, rubber, plastics, and motor vehicles but rather poor in textiles, apparel, leather and footwear, non-metallic mineral products, furniture, and jewelry (see Appendix Tables 2a-2c).

this sample of foreign plants employed 749,129 workers and produced 442 billion baht of value added, which amounts to only 16 percent of total manufacturing employment as estimated in the labor force survey and 32 percent of manufacturing value added as estimated in the national accounts (See Appendix Tables 1a, 2a). Actual shares of foreign MNCs in Thai manufacturing employment and value added were probably very close to these smaller estimates because omitted plants were predominantly local and census coverage of foreign MNCs seems to have been relatively comprehensive.[16] There is also wide variation in foreign shares across industries, with high foreign shares in the machinery industries, especially electric machinery, motor vehicles, and general machinery.

Japanese MNCs were by far the largest by nationality group (Tables 1, 2). In all manufacturing, they accounted for 18 percent of sample plant employment in 1996, 22 percent in 1998, and 20 percent in 2000. Corresponding shares of value added were 30 percent, 32 percent, and 22 percent, respectively. Japanese shares were largest in motor vehicles, general machinery, and electric machinery, followed by metal products, chemicals, and textiles. Japanese shares were smaller in other industries but shares of value added still exceeded double digits in a number of them, for example, food, apparel, rubber, and plastics. Shares of other foreign nationality groups were much smaller. In all manufacturing, MNCs from the 3 Asian NIEs (Korea, Singapore, and Taiwan) were the second largest group in 1996 and 1998 followed by U.S. MNCs. European MNCs, had smaller shares in these two years, 2-3 percent of employment and 4 percent of value added. In 2000, European shares were much larger, 9 and 13 percent, respectively, and larger than shares of MNCs from the 3 Asian NIEs or the United States. The major reason for the increase in the European share in 2000 appears to be poorer coverage of other MNCs and local plants combined with relatively good coverage of European MNCs.[17] By industry European MNCs were relatively large in jewelry, rubber, and chemicals in 1996, and also became relatively large in 1998 in apparel, non-metallic

[16] Comparisons of home country data for Japanese and U.S. MNCs with census data suggest that census coverage of Japanese and U.S. MNCs is relatively comprehensive (Ramstetter 2003).

[17] For example, employment in 1996 (the census year) employment was 40,108 in European plants and 749,129 in all foreign plants. In 2000, these figures were 57,984 and 286,001, respectively. In contrast, home country data for Japan and the United States suggest that these two groups of MNCs alone employed at least 342,126 workers in 1996 and 414,886 workers in 2000 (Ramstetter 2003).

mineral products, and electric machinery. In 2000, European shares were also large in metal products and motor vehicles, in addition to many of the aforementioned industries. Thus, although Japanese MNCs are by far the largest in Thai manufacturing, followed by MNCs from the United States and the 3 Asian NIEs, European MNCs also have a significant presence.

In 1996, minority-foreign plants were the largest group by ownership share, both overall and in most individual industries (Tables 1-2). This partially reflects relatively strict restrictions on foreign ownership shares that existed until the financial crisis in 1997 led Thai authorities to relax those restrictions. In all manufacturing, minority-foreign plants accounted for 24 percent of employment and 32 percent of value added, while corresponding shares were 8 percent and 9 percent, respectively, for majority-foreign plants, and 10 percent and 11 percent, respectively for wholly-foreign plants. Measured in terms of value added, majority-foreign plants were the largest MNC group in chemicals and rubber, while wholly-foreign plants were largest in general machinery and electric machinery, but minority-foreign plants dominated all other industries.

4. Labor Productivity and Wages in Local Plants and Foreign MNCs by Nationality and Ownership Group

The fact that foreign MNCs' shares of employment tend to be smaller than corresponding shares of value added, reflects the fact that average labor productivity (measured as value added per hour worked) tends to be relatively high foreign MNCs (see Appendix Tables 9a-9c and 10a-10c). For example, in all manufacturing plants, mean value added per hour was 165 baht in 1996, 204 baht in 1998, and 110 baht in 2000 in foreign plants, compared to only 106 baht, 103 baht, and 74 baht, respectively, in local plants. Compensation per hour was also higher, 37 baht per hour, 49 baht per hour, and 35 baht per hour, respectively, in foreign plants compared to 27 baht per hour, 44 baht per hour, and 24 baht per hour, respectively, in local plants. However, this pattern is not always observed if similar comparisons are made at the industry level. For example, value added per hour was lower in foreign plants than in local plants in 5 of 14 industries listed in Tables 1-2 in 1996 (food, leather & footwear, nonmetallic mineral products,

furniture, jewelry), 2 industries in 1998 (leather & footwear, furniture), and 1 industry in 2000 (plastics). However, compensation per hour was lower in only 1 industry each in 1996 (rubber) and 1998 (nonmetallic mineral products), and no industries in 2000. Similar patterns are also observed when foreign plants are distinguished by nationality or foreign ownership share. For example, value added per hour was lower in European MNCs than in local plants in 6 industries in 1996 (food, leather & footwear, plastics, motor vehicles, furniture, jewelry), 3 industries in 1998 (leather & footwear, plastics, furniture), and no industries in 2000 (there were no European MNCs in 3 of the 14 industries in 2000). Compensation per hour was lower for European MNCs in 2 industries in 1996 (leather & footwear and rubber), 3 industries in 1998 (leather & footwear, plastics, nonmetallic mineral products), and no industries in 2000. This pattern, where positive differentials in favor of foreign MNCs are more common for wages than for labor productivity, is observed in most other ownership groups as well. In addition, both value added per hour and compensation per hour were lower in wholly foreign plants than in local plants for more industries and than in majority-foreign or minority-foreign plants.[18]

As described in Section 2, labor productivity and wages may vary across ownership groups because of variation in other factors related to labor productivity and wages such as factor intensities, policy status (e.g., BOI promotion), vintage, and size. Thus, before it can be concluded that differences among ownership groups such as those described above are indeed related to differences in ownership, it is first necessary to remove the influences of these related factors. The purpose of estimating equations (1)-(8) is thus to describe variation in labor productivity wages among foreign ownership and nationality groups and local plants, after removing the effects of these factors. The effect of foreign ownership is revealed by the size and sign of the coefficient on foreign ownership dummies. Because the dummy for plant size cannot

[18] For wholly foreign plants value added per hour was lower in 6 industries (leather & footwear, rubber, plastics, nonmetallic mineral products, furniture, jewelry) while compensation per hour was lower in 4 industries (rubber, nonmetallic mineral products, electric machinery, furniture). For majority-foreign plants value added per hour was lower in 4 industries (apparel, nonmetallic mineral products, electric machinery, jewelry) while compensation per hour was lower in 2 industries (rubber, electric machinery). For minority-foreign plants value added per hour was lower in 5 industries (food, leather & footwear, nonmetallic mineral products, jewelry, furniture) but compensation per hour was lower in only 1 industry (leather & footwear).

account for size-related differences in slope coefficients and because comparisons of foreign MNCs and local plants are thought to be more meaningful in more homogenous samples of all plants, estimates are made for two samples, samples of all plants and samples of large plants with output equal to or larger than 25 million baht. When tests for heteroscedasticity indicate the presence of this problem, White's robust standard errors are used for calculating t-tests instead of OLS residuals (Hall and Cummins 1999; White 1980). Also, because behavior differs markedly across industries, as indicated by large differences in slope coefficients estimated with relatively small errors for different industries, it is not practical to pool all industries into one sample. Thus, labor productivity and wage equations are each estimated for two samples (all plants and large plants) in each of the 14 industries listed in Tables 1-2 for three years, 1996, 1998, and 2000. The detailed results of these estimates are very lengthy and presented in Appendix Tables 3-8. Tables 3-8 summarize the most important results in this context, that is the signs and size of the statistically significant coefficients on the foreign ownership dummies in equations (1)-(8), along with a measure of goodness of fit, the adjusted R-squared.

As indicated above, the 1996 samples are by far the most comprehensive and results for this year are probably more reliable than results for subsequent years. The results of estimating equations (1) to (4) for 1996 are also very similar to the results of previous studies (Ramstetter 2001a, 2001b, 2002b), which use more flexible forms of the production function and /or slightly different sets of control variables, in that coefficients on foreign ownership dummies were significantly different than zero in relatively few cases (Table 3). For example, the foreign dummy coefficient was consistently positive and significant in equation (1) in both the sample of all plants and the sample of large plants in only 2 of the 14 industries, chemicals and metal products, and positive and significant in the sample of all plants only in only 1 other industry, jewelry. In the sample of large plants, this coefficient was significantly negative in 2 industries, food and electric machinery. Disaggregating by nationality in equations (2) and (3) suggests that the positive differentials in favor of MNCs were mainly related to activities of European and U.S. MNCs in chemicals, Japanese and other MNCs in metal products, and triad MNCs in jewelry. Likewise the negative differentials were mainly related to activities of Japanese MNCs in food and U.S. MNCs in electric

machinery. However, disaggregating by nationality did not improve the fit of the equations in any of these cases, suggesting that disaggregating by nationality may not be meaningful.[19] In a few other industries, disaggregating by industry improves the fit and suggests significant differentials that are not observed in the aggregate equation (1). These include positive differentials related to European and U.S. MNCs in textiles and European and Japanese MNCs in general machinery, and a negative differential related to U.S. MNCs in apparel. Disaggregating by foreign ownership share in equation (4) improves explanatory power and suggests positive differentials in textiles related to majority- and wholly foreign plants and a negative in differential furniture related to minority-foreign plants, all of which were not observed in the aggregate equation. Other positive differentials also seem closest related to minority- and wholly foreign plants in chemicals and wholly foreign plants only metal products, while other negative differentials were related to minority-foreign plants in food and electric machinery and to majority- and wholly foreign plants in electric machinery.

The results of estimating equations (5) to (8) are also consistent with results from past studies using somewhat different specifications (Matsuoka 2001a, 2001b, 2001c) in suggesting that positive wage differentials were more common than positive labor productivity differentials. Results of the estimating the aggregate equation (5) suggests positive differentials in both samples in 3 industries, apparel, plastics, and non-metallic mineral products, and in samples of all plants in 4 additional industries, food, chemicals, metal products, and jewelry (Table 4). In addition, disaggregating by nationality and foreign ownership revealed positive differentials not observed in equation (5) in 6 more industries, textiles (European MNCs and majority-foreign MNCs), leather & footwear (Japanese MNCs), general machinery, (other MNCs), electric machinery (European MNCs), motor vehicles (Japanese MNCs), and furniture (European MNCs). In short, positive differentials are observed in at least one of the wage equations in all but 1 industry, rubber, where there were negative differentials related to European MNCs and majority- and wholly foreign MNCs.

[19] The hypothesis that disaggregating by nationality or ownership group can be tested with an F-test of coefficient equality and a higher adjusted R-squared in disaggregated equation is a necessary, but not sufficient condition for this F-test to reject the hypothesis of coefficient equality. However, these tests are not valid when there is heteroscedasiticty in one of the equations and this is often the case in estimates of equations (1)-(8).

Moreover, disaggregating by nationality revealed several differentials not observed in the aggregate equation and European MNCs were often seen to pay higher wages than local plants in such cases.

Results for these 1998 differ in that labor productivity is significantly higher in foreign MNCs in a larger number of industries.[20] Estimates of the aggregate equation (1) reveal significantly higher productivity in both samples of all plants and large plants in 4 industries, food, apparel, chemicals, and nonmetallic mineral products, and in another 5 industries in samples of all plants, plastics, general machinery, electric machinery, motor vehicles, and jewelry (Table 5). Disaggregating by nationality also reveals positive differentials related to plants from the 3 Asian NIEs in rubber. This leaves only 2 industries in which labor productivity appears completely unrelated to ownership, textiles and leather & footwear, and 1 industry in which foreign MNCs had significantly lower labor productivity, furniture. By nationality, relatively few of the observed differences are related to European MNCs, for which productivity was significantly higher than local plants in only 3 industries, food, chemicals, and non-metallic mineral products. On the other hand, a much larger number of these productivity differentials are related to Japanese MNCs, though here again, disaggregating by nationality does not improve the explanatory power of the models in most samples. There are also some mixed results in metal products, general machinery, and electric machinery, with signs of foreign ownership dummies changing from sample to sample or differing across nationality groups. In short, these results differ markedly from results for 1996 and from previous results for 1998 using more flexible functional forms and slightly different specifications (e.g., Ramstetter 2001a, 2001b, 2002b), which found far fewer positive productivity differentials.[21]

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[20] One might be tempted to attribute this difference to the effects of the financial crisis, which probably affected local plants more severely than foreign plants and could have created to more productivity differentials. Differences in sample coverage between 1998 and other years mandate caution when making such interpretations, however.

[21] There are several possible causes of these differences. Previous studies sometimes used more flexible forms of the production function creating a greater probability of multicollinearity and used a slightly different set of control variables, including two types of labor (production and non-production workers) and trade propensities. The inclusion of trade propensities as a control variable may be an important difference because yet other studies (e.g., Ramstetter 2002a) show that trade propensities are highly correlated with foreign ownership shares. The inclusion of trade propensities as a control variable may therefore capture some of the effects of foreign ownership, which simultaneously affects trade propensities and productivity, and these controls are omitted from in this study for this reason. On the other hand, if trade propensities should be used as a control, then their omission may bias foreign ownership dummies upwards.

In contrast, results of estimating wage equations for 1998 are very similar to the results for 1996 in suggesting a relatively large number of positive wage differentials. Results of estimating the aggregate equation (5) indicated foreign MNCs paid significantly higher wages in both samples of all and large plants in 5 industries, food, apparel, chemicals, nonmetallic mineral products, and general machinery, in samples of all plants in another 4 industries, plastics, metal products, motor vehicles, and furniture, and in the sample of large plants in 1 more industry, leather & footwear (Table 6). In addition, disaggregating by industry reveals significantly positive differentials in textiles related to European plants. European plants also paid relatively high wages in food and nonmetallic minerals, as well as relatively low wages in furniture. A larger number of positive wage differentials were related to Japanese and U.S. MNCs, but here again the disaggregate equations did not always improve the fit of the equations, suggesting that differences among nationality groups were not always important.

Results of estimating 2000 productivity and wage equations are broadly similar to results for 1996 in that the reveal relatively few significant differences in labor productivity and a relatively large number of significant differences in wages. For example, results of estimating equations (1) reveal significantly positive differences in only 2 of the 14 industries in samples of all plants (leather & footwear, furniture) and in no industries in the sample of large plants (Table 7). Disaggregating by nationality reveals significant and positive differentials in food (NIE MNCs), rubber products (European MNCs), non-metallic mineral products (NIE MNCs), and general machinery (Japanese MNCs), but here again the fit of the disaggregate equations was no better than the aggregate equations in a few cases and there were negative differentials in a few other cases (large European MNCs in food and Japanese MNCs in both samples for electric machinery). In contrast, wages were positively related to at least one foreign ownership dummy most industries, apparel, rubber, metal products, and motor vehicles being the exceptions. Moreover, there were no negative and significant relationships observed between wages and foreign ownership dummies in this year. There were also no significant wage differentials involving Europoean MNCs for this year. Another interesting result from this year is that wage differentials were more often related to heterogeneous category of other MNCs than to specific nationality groups.

5. Conclusion

This paper has compared labor productivity and wages among nationality and ownership groups of foreign multinational corporations (MNCs) and local plants in Thai manufacturing for 1996, 1998, and 2000, paying particular attention to the role of European MNCs. Although European MNCs were relatively small in Thai manufacturing during this period, following Japanese MNCs, which constituted the largest nationality group, as well as MNCs from the 3 Asian NIEs and the United States, European MNCs had substantial presence in a number of industries such as electrical machinery, chemicals, and food. Disaggregating foreign MNCs by nationality or foreign ownership share revealed significant differences in both labor productivity and wages that were not present in more aggregate specifications. In these cases, there was a weak tendency for MNCs from Europe, Japan, and the United States to have relatively high labor productivity and wages, for wholly foreign MNCs to have relatively high labor productivity, and for majority- and wholly foreign MNCs to pay relatively high wages. However, these results suggest that the relationships among labor productivity or wages, on the one hand, and nationality or foreign ownership shares, on the other hand, were generally weak in Thai manufacturing.

This study yields two other important results that are broadly consistent with results from previous studies. First, foreign MNCs do not appear to have had significantly higher labor productivity than local plants in Thai manufacturing in most industries in 1996 and 2000. Results for 1998 differ, however, revealing significant differences in a number of industries. For all years, significant differences in labor productivity were even less common in samples of large plants, in which comparisons of foreign MNCs and local plants are thought to be most meaningful. Second, foreign MNCs pay significantly higher wages in a relatively large number of industries in all years. Here again significant differences are less common in samples of large plants, but differences in wages were always significant in more industries than corresponding differences in labor productivity. In short, the relationship between labor productivity and foreign ownership was rather weak during this period in Thai manufacturing, though the relationship between wages and foreign ownership was somewhat stronger.

Several problems demand caution when interpreting these results. First, the differences in sample coverage over time mean that changes in results from year to year may result not from changes in economic behavior but rather from changes in sampling. In this respect, the results from the 1998 and 2000 samples are should be interpreted with particular caution because these samples are much less comprehensive than the 1996 sample. Second, another problem stems from the fact that 1998 was a very bad year for the Thai economy, during which economic growth plunged in the midst of the Asian economic crisis. Thus, results for 1998 may reflect the special economic circumstances in that year. Third, it is also possible that these results obtain because unduly restrictive assumptions about technology have been imposed, though it is important to note that comparisons of labor productivity in all foreign MNCs and local plants under far less restrictive assumptions yield broadly similar results, and that use of flexible functional forms is probably impossible when disaggregating by nationality or foreign ownership share. Fourth, it is likely that (1) foreign MNCs choose to invest in industries with relatively high productivity and wages and (2) that labor productivity and wages are determined simultaneously. To deal with these problems it would be highly desirable to formulate and estimate a system of equations accounting for this simultaneity, though accounting for aspect (1) would probably be impossible when disaggregating by nationality and/or foreign ownership share. Fifth, one reason for the lack of differences in labor productivity in Thailand may be the existence of substantial spillovers or a strong correlation between productivity in local plants and the presence of foreign MNCs in an industry. It would thus be desirable to examine the issue of spillovers more closely in the Thai case, though such efforts would be complicated by data limitations, namely the inability to create panels which make it easier to deal with the simultaneity issue (1) mentioned above.

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Table 1: Shares of Foreign Plants in the Employment of Sample Plants by Foreign Ownership Share or Foreign Nationality and Industry (percent)

	1996 census									1998 survey						2000 survey					
	For-	By share			By nationality					For-	By nationality					For-	By nationality				
Industry	eign	MN	MJ	WH	EU	US	JP	N3	OT	eign	EU	US	JP	N3	OT	eign	EU	US	JP	N3	OT
Manufacturing	42	24	8	10	2	6	18	8	8	45	3	5	22	8	7	45	9	5	20	7	5
Food	30	24	4	2	3	3	13	4	7	29	2	3	10	7	7	33	9	1	15	4	5
Textiles	42	36	4	2	1	1	18	10	12	34	2	1	8	9	14	21	0	1	5	6	8
Apparel	31	28	2	1	1	2	8	4	17	44	7	0	10	3	24	30	0	5	8	1	15
Leather & footwear	29	19	7	3	1	6	6	13	4	17	0	5	1	5	6	11	0	0	2	6	2
Chemicals & products	37	22	7	8	3	9	12	5	8	40	6	4	17	6	7	49	22	2	17	4	4
Rubber products	43	21	13	9	3	3	9	11	16	42	4	12	12	6	8	42	10	17	7	5	3
Plastics & products	32	18	7	7	1	0	13	6	12	46	1	1	21	10	14	27	4	0	11	1	11
Nonmetallic mineral products	20	13	5	3	1	1	4	10	4	33	4	9	11	6	3	35	12	4	5	13	2
Metal products	38	26	4	7	1	1	13	9	14	31	0	1	19	8	3	40	9	0	17	11	3
General machinery	65	25	10	29	1	1	47	13	3	83	1	2	71	3	6	72	2	0	66	2	2
Electric machinery, etc.	84	20	17	47	5	22	37	14	6	88	7	13	45	19	5	83	20	5	49	8	2
Motor vehicles	57	38	16	2	0	1	54	1	2	65	0	0	62	2	1	63	3	1	54	4	1
Furniture	24	19	3	2	0	3	6	6	8	13	1	1	8	3	1	16	0	3	9	2	2
Jewelry	59	27	22	10	19	9	3	4	24	42	5	17	3	0	17	70	34	0	5	22	9
Other manufacturing industries	34	22	8	4	2	10	10	6	6	37	4	4	17	9	4	42	6	15	8	7	6

Notes: WH=wholly foreign, MJ=50-99% foreign-owned; MN=1-49% foreign owned; EU=Europe; US=United States; JP=Japan; N3=Singapore, Taiwan, or Korea; OT=other.
Employment in sample plants was only 73% of total manufacturing employment as estimated in industrial census/survey publications in 1996, 46% in 1998, and 24% in 2000.
Employment in sample plants was only 38% of total manufacturing employment as estimated in labor force survey publications in 1996, 20% in 1998, and 11% in 2000.
Because these samples cover MNCs much more comprehensively than non-MNCs, these in-sample shares are often much higher actual shares.
Changes over time observed probably result largely from changes in sample coverage, which declines greatly over the sample period.
Sources: Author's calculations from plant-level data underlying National Statistical Office (1999, 2001a, forthcoming) and National Statistical Office (2003).

Table 2: Shares of Foreign Plants in the Value Added of Sample Plants by Foreign Share or Foreign Country and Industry (percent)

	1996 census									1998 survey						2000 survey					
	For-	By share			By country					For-	By nationality					For-	By nationality				
Industry	eign	MN	MJ	WH	EU	US	JP	N3	OT	eign	EU	US	JP	N3	OT	eign	EU	US	JP	N3	OT
Manufacturing	52	32	9	11	4	5	30	6	6	59	4	6	32	7	9	47	13	4	22	5	4
Food	25	19	4	2	2	3	11	3	6	31	2	3	13	5	7	30	3	1	15	5	7
Textiles	57	46	6	5	1	4	31	10	11	45	4	1	15	10	14	40	0	1	11	9	19
Apparel	34	32	2	1	1	0	12	7	13	64	22	0	6	7	29	31	0	4	12	1	14
Leather & footwear	25	13	10	2	1	2	7	11	4	13	0	2	1	4	6	15	0	0	3	11	1
Chemicals & products	58	22	25	11	7	10	29	5	6	57	18	7	18	7	8	49	27	4	13	1	4
Rubber products	47	17	26	4	15	2	13	10	7	61	3	17	22	11	8	58	26	16	6	6	5
Plastics & products	36	20	9	7	0	0	18	5	13	35	2	0	17	9	7	39	5	0	12	2	19
Nonmetallic mineral products	24	17	6	1	2	3	5	10	5	60	13	17	21	5	4	30	18	1	5	5	1
Metal products	60	46	6	8	1	1	29	11	17	50	1	0	35	10	5	56	15	0	20	17	4
General machinery	72	26	14	33	2	0	57	10	3	92	1	1	81	3	5	85	1	0	83	1	1
Electric machinery, etc.	90	21	14	54	4	12	47	20	7	93	3	14	48	22	6	89	22	2	54	10	1
Motor vehicles	89	80	7	1	0	0	87	0	1	93	0	0	92	1	0	91	11	0	79	2	0
Furniture	25	15	7	3	0	1	5	12	7	13	0	0	7	5	0	28	0	4	12	10	2
Jewelry	50	22	13	16	12	7	2	2	27	44	5	18	3	0	19	73	37	0	7	23	5
Other manufacturing industries	27	21	6	1	7	9	5	2	4	44	2	4	14	3	21	25	12	7	2	1	2

Notes: WH=wholly foreign, MJ=50-99% foreign-owned; MN=1-49% foreign owned; EU=Europe; US=United States; JP=Japan; N3=Singapore, Taiwan, or Korea; OT=other.
Value added in sample plants was 86% of total manufacturing value added as estimated in industrial census/survey publications in 1996, 66% in 1998, and 23% in 2000.
Value added in sample plants was only 62% of total manufacturing value added as estimated in national accounts statistics in 1996, 29% in 1998, and 11% in 2000.
Because these samples cover MNCs much more comprehensively than non-MNCs, these in-sample shares are often much higher actual shares.
Changes over time observed probably result largely from changes in sample coverage, which declines greatly over the sample period.
Sources: Author's calculations from plant-level data underlying National Statistical Office (1999, 2001a, forthcoming) and
National Economic and Social Development Board (2001, 2003).

Table 3: Significant Coefficients on Foreign Ownership Dummies and Adjusted R-squared from Estimates of Labor Productivity Equations (1) to (4) for 14 Manufacturing Industries: 1996 Census Samples (all=samples including all plants with viable observations; large=samples of large plants with gross output>=25 million baht)

Coeffi-cents,	Food		Textiles		Apparel		Leather & footwear		Chemicals		Rubber products		Plastics & products		Nonme-tallic mineral pr.		Metal products		General machinery		Electric machinery		Motor vehicles		Furniture		Jewelry	
Adj. R^2	all	large	all	large	all	large	all	large	all	large	all	large	all	large	all	large	all	large	all	large	all	large	all	large	all	large	all	large
Equation 1																												
Df	ns	-0.28	ns	ns	ns	ns	ns	ns	0.44	0.39	ns	ns	ns	ns	ns	ns	0.32	0.28	ns	ns	ns	-0.32	ns	ns	ns	ns	0.33	ns
Adj. R^2	0.15	0.13	0.13	0.02	0.07	0.02	0.00	0.01	0.15	0.12	0.06	0.09	0.06	0.07	0.15	0.08	0.11	0.10	0.13	0.11	0.13	0.15	0.27	0.31	0.32	0.11	0.31	0.25
Equation 2																												
Dftr	ns	ns	0.44	0.51	ns	ns	ns	ns	0.51	0.52	ns	ns	ns	ns	ns	ns	0.41	ns	ns	ns	ns	-0.36	ns	ns	ns	ns	0.39	ns
Dfn3	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	0.47	ns	ns	ns	ns	ns	ns	ns	ns	ns
Dfot	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	1.06	0.87	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns
Adj. R^2	0.15	0.12	0.13	0.03	0.08	0.03	0.00	-0.01	0.15	0.12	0.06	0.09	0.06	0.07	0.15	0.08	0.12	0.10	0.14	0.11	0.13	0.15	0.27	0.32	0.32	0.10	0.31	0.26
Equation 3																												
Dfeu	ns	ns	0.74	ns	ns	ns	ns	ns	0.72	0.68	ns	ns	ns	ns	ns	ns	ns	ns	1.23	1.10	ns	ns	ns	-0.87	ns	ns	ns	ns
Dfus	ns	ns	1.23	1.29	-1.08	ns	ns	ns	ns	ns	ns	ns	ns	ns	-1.35	ns	ns	ns	ns	ns	ns	-0.80	ns	ns	ns	ns	ns	ns
Dfjp	ns	-0.34	ns	ns	ns	ns	ns	ns	0.45	0.49	-0.85	ns	ns	ns	ns	ns	0.47	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns
Dfn3	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	0.44	ns	ns	ns	ns	ns	ns	ns	ns	ns
Dfot	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	1.07	0.87	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns
Adj. R^2	0.15	0.13	0.14	0.03	0.08	0.02	-0.01	-0.02	0.15	0.12	0.07	0.08	0.06	0.07	0.15	0.08	0.12	0.11	0.15	0.13	0.13	0.15	0.27	0.32	0.32	0.10	0.31	0.25
Equation 4																												
Dfmn	ns	-0.30	ns	ns	ns	ns	ns	ns	0.34	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	-0.56	ns	ns
Dfmj	ns	ns	0.68	0.79	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	-0.40	ns	ns	ns	ns	ns	ns
Dfwh	ns	ns	0.88	ns	ns	ns	ns	ns	0.82	0.77	ns	ns	ns	ns	ns	ns	0.63	ns	ns	ns	ns	-0.54	ns	ns	ns	ns	ns	ns
Adj. R^2	0.15	0.13	0.14	0.04	0.07	0.02	0.00	-0.01	0.15	0.12	0.06	0.08	0.06	0.07	0.15	0.08	0.11	0.10	0.13	0.11	0.13	0.15	0.26	0.31	0.32	0.12	0.31	0.24

Notes: ns=coefficient not significant at the 5% level or better.

Coefficients come from ordinary least squares estimates of each equation in firm-level cross sections for samples of all plants and large plants in each industry.

Heteroscedasticity-consistent standard errors used if the White heteroscedasticity test is significant at 0.05 or less.

See Appendix Table 3 for detailed estimatation results.

Table 4: Significant Coefficients on Foreign Ownership Dummies and Adjusted R-squared from Estimates of Wage Equations (5) to (8) for 14 Manufacturing Industries: 1996 Census Samples (all=samples including all plants with viable observations; large=samples of large plants with gross output>=25 million baht)

Coeffi-cents,	Food		Textiles		Apparel		Leather & footwear		Chemicals		Rubber products		Plastics & products		Nonme-tallic mineral pr.		Metal products		General machinery		Electric machinery		Motor vehicles		Furniture		Jewelry	
Adj. R^2	all	large	all	large	all	large	all	large	all	large	all	large	all	large	all	large	all	large	all	large	all	large	all	large	all	large	all	large
Equation 5																												
Df	0.16	ns	ns	ns	0.14	0.12	ns	ns	0.21	ns	ns	ns	0.18	0.19	0.44	0.42	0.14	ns	ns	ns	ns	ns	ns	ns	ns	ns	0.33	ns
Adj. R^2	0.12	0.06	0.15	0.10	0.12	0.06	0.07	0.03	0.17	0.15	0.11	0.11	0.08	0.08	0.15	0.06	0.10	0.07	0.11	0.08	0.10	0.11	0.09	0.11	0.44	0.18	0.28	0.15
Equation 6																												
Dftr	0.18	ns	ns	ns	ns	ns	0.31	ns	0.31	0.30	ns	ns	0.29	0.27	0.49	0.49	0.28	0.21	ns	ns	ns	ns	0.30	ns	0.20	ns	0.40	ns
Dfn3	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	0.46	0.37	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns
Dfot	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	0.58	ns	ns	ns	ns	ns	ns	ns	ns	ns
Adj. R^2	0.11	0.06	0.15	0.10	0.12	0.05	0.07	0.02	0.17	0.16	0.10	0.11	0.09	0.09	0.15	0.06	0.11	0.08	0.12	0.08	0.11	0.12	0.11	0.13	0.43	0.18	0.27	0.13
Equation 7																												
Dfeu	ns	ns	0.66	0.80	ns	ns	ns	ns	ns	ns	-0.84	-0.89	ns	ns	0.59	0.58	ns	ns	ns	ns	0.64	0.57	ns	ns	0.55	0.21	0.33	ns
Dfus	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	0.34	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns
Dfjp	ns	ns	ns	ns	0.21	ns	0.48	0.45	0.27	ns	ns	ns	0.30	0.26	0.51	0.55	0.29	ns	ns	ns	ns	ns	0.27	ns	ns	ns	0.77	ns
Dfn3	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	0.46	0.37	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns
Dfot	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	0.58	ns	ns	ns	ns	ns	ns	ns	ns	ns
Adj. R^2	0.11	0.06	0.16	0.11	0.12	0.05	0.07	0.04	0.17	0.15	0.11	0.11	0.09	0.08	0.15	0.06	0.11	0.08	0.11	0.08	0.13	0.14	0.11	0.13	0.43	0.17	0.28	0.14
Equation 8																												
Dfmn	0.15	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	0.39	0.38	0.18	ns	ns	ns	ns	ns	ns	ns	ns	ns	0.41	ns
Dfmj	ns	ns	0.39	0.47	ns	ns	ns	ns	0.35	ns	-0.29	ns	0.40	0.41	0.73	0.68	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns
Dfwh	ns	ns	ns	ns	0.48	0.45	ns	ns	0.39	0.37	-0.34	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns
Adj. R^2	0.12	0.06	0.16	0.12	0.12	0.06	0.07	0.03	0.17	0.16	0.11	0.11	0.09	0.08	0.15	0.06	0.11	0.07	0.11	0.08	0.12	0.13	0.09	0.10	0.43	0.18	0.28	0.13

Notes: ns=coefficient not significant at the 5% level or better.

Coefficients come from ordinary least squares estimates of each equation in firm-level cross sections for samples of all plants and large plants in each industry.

Heteroscedasticity-consistent standard errors used if the White heteroscedasticity test is significant at 0.05 or less.

See Appendix Table 4 for detailed estimatation results.

Table 5: Significant Coefficients on Foreign Ownership Dummies and Adjusted R-squared from Estimates of Labor Productivity Equations (1) to (3) for 14 Manufacturing Industries: 1998 Survey Samples (all=samples including all plants with viable observations; large=samples of large plants with gross output>=25 million baht)

Coeffi-cents,	Food		Textiles		Apparel		Leather & footwear		Chemicals		Rubber products		Plastics & products		Nonme-tallic mineral pr.		Metal products		General machinery		Electric machinery		Motor vehicles		Furniture		Jewelry	
Adj. R^2	all	large	all	large	all	large	all	large	all	large	all	large	all	large	all	large	all	large	all	large	all	large	all	large	all	large	all	large
Equation 1																												
Df	0.64	0.29	ns	ns	0.81	0.51	ns	ns	0.41	0.36	ns	ns	0.40	ns	0.65	0.50	ns	ns	0.40	ns	0.31	ns	0.86	ns	ns	-0.71	0.94	n<30
Adj. R^2	0.17	0.10	0.33	0.18	0.21	0.25	0.21	0.30	0.19	0.12	0.18	0.13	0.09	0.11	0.18	0.17	0.14	0.16	0.41	0.33	0.17	0.11	0.32	0.29	0.39	0.18	0.27	n<30
Equation 2																												
Dftr	0.79	0.45	ns	ns	0.82	ns	ns	ns	0.50	0.46	ns	ns	0.56	ns	1.06	0.73	ns	ns	0.35	ns	ns	ns	0.97	0.57	ns	-0.79	0.95	n<30
Dfn3	0.49	ns	ns	ns	ns	1.13	ns	ns	ns	ns	0.67	0.69	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	n<30
Dfot	ns	ns	ns	ns	0.81	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	n<30
Adj. R^2	0.17	0.10	0.33	0.18	0.20	0.25	0.20	0.32	0.19	0.12	0.20	0.15	0.09	0.10	0.19	0.19	0.14	0.16	0.40	0.33	0.16	0.10	0.31	0.32	0.38	0.17	0.25	n<30
Equation 3																												
Dfeu	1.03	ns	ns	ns	ns	ns	ns	-	0.93	0.82	ns	ns	ns	ns	1.27	0.95	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	n<30
Dfus	1.67	1.32	ns	ns	-	-	ns	ns	ns	ns	ns	ns	ns	ns	1.04	ns	-2.79	-	ns	-1.12	ns	-0.69	ns	ns	ns	ns	ns	n<30
Dfjp	0.57	ns	ns	ns	0.76	ns	ns	ns	ns	ns	ns	ns	0.56	ns	0.89	ns	0.41	ns	0.36	ns	0.37	ns	0.98	0.59	ns	-0.73	ns	n<30
Dfn3	0.49	ns	ns	ns	ns	1.11	ns	ns	ns	ns	0.65	0.68	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	-	n<30
Dfot	ns	ns	ns	ns	0.83	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	n<30
Adj. R^2	0.18	0.11	0.33	0.17	0.20	0.26	0.22	0.35	0.19	0.12	0.21	0.15	0.08	0.08	0.19	0.18	0.15	0.16	0.41	0.34	0.17	0.14	0.31	0.30	0.38	0.16	0.22	n<30

Notes: ns=coefficient not significant at the 5% level or better; - = no plants in this category; n<30 = sample size smaller than 30.

Coefficients come from ordinary least squares estimates of each equation in firm-level cross sections for samples of all plants and large plants in each industry.

Heteroscedasticity-consistent standard errors used if the White heteroscedasticity test is significant at 0.05 or less.

If White cannot be calculated, heteroscedasticity-consistent standard errors used if the LM heteroscedasticity test is significant at 0.05 or less.

See Appendix Table 5 for detailed estimatation results.

Table 6: Significant Coefficients on Foreign Ownership Dummies and Adjusted R-squared from Estimates of Wage Equations (5) to (7) for 14 Manufacturing Industries: 1998 Survey Samples (all=samples including all plants with viable observations; large=samples of large plants with gross output>=25 million baht)

Coeffi-cents,	Food		Textiles		Apparel		Leather & footwear		Chemicals		Rubber products		Plastics & products		Nonme-tallic mineral pr.		Metal products		General machinery		Electric machinery		Motor vehicles		Furniture		Jewelry	
Adj. R^2	all	large	all	large	all	large	all	large	all	large	all	large	all	large	all	large	all	large	all	large	all	large	all	large	all	large	all	large
Equation 5																												
Df	0.39	0.29	ns	ns	0.38	0.38	ns	0.26	0.31	0.34	ns	ns	0.29	ns	0.48	0.49	0.16	ns	0.25	0.19	ns	ns	0.28	ns	0.50	ns	ns	n<30
Adj. R^2	0.10	0.05	0.24	0.06	0.24	0.17	0.14	0.12	0.11	0.06	0.18	0.07	0.06	0.01	0.14	0.17	0.09	0.07	0.25	0.20	0.08	0.06	0.30	0.44	0.46	0.20	0.44	n<30
Equation 6																												
Dftr	0.41	0.31	ns	ns	ns	ns	ns	ns	0.40	0.41	ns	ns	0.32	ns	0.57	0.53	0.28	ns	0.26	ns	ns	ns	0.39	ns	ns	ns	ns	n<30
Dfn3	0.33	ns	ns	ns	ns	ns	ns	0.39	ns	ns	0.67	ns	ns	ns	0.61	0.71	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	n<30
Dfot	0.42	ns	ns	ns	0.61	0.66	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	1.09	ns	ns	n<30
Adj. R^2	0.10	0.05	0.25	0.07	0.25	0.19	0.13	0.12	0.11	0.06	0.20	0.08	0.05	0.00	0.15	0.20	0.10	0.06	0.24	0.19	0.07	0.06	0.32	0.43	0.46	0.19	0.43	n<30
Equation 7																												
Dfeu	0.54	0.42	ns	0.42	ns	ns	ns	-	ns	ns	ns	ns	ns	ns	0.59	0.58	ns	ns	ns	ns	ns	ns	ns	ns	-0.64	ns	ns	n<30
Dfus	0.98	0.87	ns	ns	-	-	ns	ns	0.60	0.69	ns	ns	ns	0.53	0.90	0.87	ns	-	ns	ns	ns	ns	ns	ns	0.58	ns	ns	n<30
Dfjp	0.27	ns	ns	ns	0.41	ns	0.49	0.55	ns	ns	ns	-0.45	0.32	ns	ns	ns	0.30	ns	0.31	0.24	ns	ns	0.38	ns	ns	ns	ns	n<30
Dfn3	0.32	ns	ns	ns	ns	ns	ns	0.40	ns	ns	0.65	ns	ns	ns	0.61	0.71	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	-	n<30
Dfot	0.42	ns	ns	ns	0.60	0.65	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	1.09	ns	ns	n<30
Adj. R^2	0.11	0.07	0.25	0.06	0.25	0.18	0.13	0.13	0.11	0.07	0.21	0.09	0.04	-0.02	0.15	0.21	0.09	0.05	0.24	0.19	0.10	0.11	0.31	0.43	0.46	0.17	0.41	n<30

Notes: ns=coefficient not significant at the 5% level or better; - = no plants in this category; n<30 = sample size smaller than 30.

Coefficients come from ordinary least squares estimates of each equation in firm-level cross sections for samples of all plants and large plants in each industry.

Heteroscedasticity-consistent standard errors used if the White heteroscedasticity test is significant at 0.05 or less.

If White cannot be calculated, heteroscedasticity-consistent standard errors used if the LM heteroscedasticity test is significant at 0.05 or less.

See Appendix Table 6 for detailed estimatation results.

Table 7: Significant Coefficients on Foreign Ownership Dummies and Adjusted R-squared from Estimates of Labor Productivity Equations (1) to (3) for 14 Manufacturing Industries: 2000 Survey Samples (all=samples including all plants with viable observations; large=samples of large plants with gross output>=25 million baht)

Coeffi-cents,	Food		Textiles		Apparel		Leather & footwear		Chemicals		Rubber products		Plastics & products		Nonme-tallic mineral pr.		Metal products		General machinery		Electric machinery		Motor vehicles		Furniture		Jewelry	
Adj. R^2	all	large	all	large	all	large	all	large	all	large	all	large	all	large	all	large	all	large	all	large	all	large	all	large	all	large	all	large
Equation 1																												
Df	ns	ns	ns	ns	ns	ns	0.98	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	0.96	ns	ns	n<30
Adj. R^2	0.18	0.10	0.32	0.03	0.27	0.00	0.07	0.23	0.34	0.05	0.05	0.01	0.08	0.05	0.08	0.03	0.08	0.01	0.05	-0.01	0.09	0.04	0.21	-0.01	0.57	0.25	0.17	n<30
Equation 2																												
Dftr	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	-0.49	-0.53	ns	ns	ns	ns	ns	n<30
Dfn3	0.58	ns	ns	ns	ns	ns	1.17	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	n<30
Dfot	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	n<30
Adj. R^2	0.18	0.10	0.31	0.03	0.26	-0.06	0.06	0.19	0.33	0.05	0.03	-0.01	0.06	0.03	0.07	0.01	0.09	0.01	0.04	-0.04	0.11	0.06	0.19	-0.02	0.56	0.21	0.21	n<30
Equation 3																												
Dfeu	ns	-0.71	ns	ns	-	-	-	-	ns	ns	1.31	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	-	-	ns	n<30
Dfus	ns	ns	ns	ns	ns	ns	-	-	ns	ns	ns	ns	-	-	ns	ns	-	-	-	-	ns	ns	ns	ns	ns	ns	-	n<30
Dfjp	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	0.86	ns	-0.50	-0.53	ns	ns	ns	ns	ns	n<30
Dfn3	0.57	ns	ns	ns	ns	ns	1.17	ns	ns	ns	ns	ns	ns	ns	0.72	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	n<30
Dfot	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	n<30
Adj. R^2	0.19	0.11	0.30	0.01	0.24	-0.10	0.06	0.19	0.32	0.03	0.09	0.05	0.09	0.06	0.08	0.03	0.09	0.00	0.05	-0.04	0.09	0.04	0.18	-0.06	0.55	0.21	0.20	n<30

Notes: ns=coefficient not significant at the 5% level or better; - = no plants in this category; n<30 = sample size smaller than 30.

Coefficients come from ordinary least squares estimates of each equation in firm-level cross sections for samples of all plants and large plants in each industry.

Heteroscedasticity-consistent standard errors used if the White heteroscedasticity test is significant at 0.05 or less.

If White cannot be calculated, heteroscedasticity-consistent standard errors used if the LM heteroscedasticity test is significant at 0.05 or less.

See Appendix Table 7 for detailed estimatation results.

Table 8: Significant Coefficients on Foreign Ownership Dummies and Adjusted R-squared from Estimates of Wage Equations (5) to (7) for 14 Manufacturing Industries: 2000 Survey Samples (all=samples including all plants with viable observations; large=samples of large plants with gross output>=25 million baht)

Coeffi-cents,	Food		Textiles		Apparel		Leather & footwear		Chemicals		Rubber products		Plastics & products		Nonme-tallic mineral pr.		Metal products		General machinery		Electric machinery		Motor vehicles		Furniture		Jewelry	
Adj. R^2	all	large	all	large	all	large	all	large	all	large	all	large	all	large	all	large	all	large	all	large	all	large	all	large	all	large	all	large
Equation 5																												
Df	0.17	ns	0.31	0.41	ns	ns	0.45	ns	ns	ns	ns	ns	0.48	ns	0.54	0.33	ns	ns	0.41	ns	ns	ns	ns	ns	1.03	0.38	ns	n<30
Adj. R^2	0.19	0.08	0.26	0.03	0.46	0.20	0.10	0.05	0.34	0.15	0.03	0.08	0.12	0.12	0.22	0.14	0.22	0.13	0.23	0.20	0.14	0.14	0.14	0.12	0.47	0.21	0.41	n<30
Equation 6																												
Dftr	ns	ns	ns	0.50	ns	ns	0.59	ns	ns	ns	ns	ns	0.38	ns	0.47	ns	ns	ns	0.46	ns	ns	ns	ns	ns	ns	ns	ns	n<30
Dfn3	0.45	0.38	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	0.54	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	n<30
Dfot	ns	ns	0.44	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	0.82	ns	ns	ns	ns	ns	0.62	ns	ns	ns	ns	0.63	ns	n<30
Adj. R^2	0.19	0.09	0.26	0.02	0.45	0.16	0.08	0.00	0.32	0.15	0.03	0.08	0.10	0.11	0.21	0.13	0.22	0.12	0.22	0.19	0.16	0.17	0.12	0.08	0.46	0.19	0.37	n<30
Equation 7																												
Dfeu	ns	ns	ns	ns	-	-	-	-	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	-	-	ns	n<30
Dfus	ns	ns	0.57	ns	ns	ns	-	-	0.45	ns	ns	ns	-	-	0.93	ns	-	-	-	-	ns	ns	ns	ns	ns	ns	-	n<30
Dfjp	ns	ns	ns	0.57	ns	ns	0.59	ns	ns	0.42	ns	ns	0.51	ns	ns	ns	ns	ns	0.52	ns	ns	ns	ns	ns	ns	ns	ns	n<30
Dfn3	0.45	0.38	ns	ns	ns	ns	0.38	ns	ns	ns	ns	ns	ns	ns	0.53	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	n<30
Dfot	ns	ns	0.43	0.52	ns	ns	ns	ns	ns	ns	ns	ns	0.69	ns	0.81	ns	ns	ns	ns	ns	0.62	ns	ns	ns	ns	0.63	ns	n<30
Adj. R^2	0.19	0.09	0.25	0.01	0.44	0.13	0.08	0.00	0.33	0.20	0.02	0.07	0.10	0.10	0.21	0.12	0.21	0.11	0.22	0.19	0.16	0.17	0.12	0.20	0.45	0.18	0.38	n<30

Notes: ns=coefficient not significant at the 5% level or better; - = no plants in this category; n<30 = sample size smaller than 30.

Coefficients come from ordinary least squares estimates of each equation in firm-level cross sections for samples of all plants and large plants in each industry.

Heteroscedasticity-consistent standard errors used if the White heteroscedasticity test is significant at 0.05 or less.

If White cannot be calculated, heteroscedasticity-consistent standard errors used if the LM heteroscedasticity test is significant at 0.05 or less.

See Appendix Table 8 for detailed estimatation results.

Statistical Appendix: Details from Thailand's Industrial Censuses and Surveys

This appendix first provides details underlying the text tables which could not be included in the main text because of space constraints. Data on employment (Appendix Tables 1a-1f) and value added (Appendix Tables 2a-2f) are first provided for all sample plants (used to construct text Tables 1-2) as well as for samples of large plants. In addition, because many of these compilations have not been published before, these appendix tables contain industry and country details that were not used in the text, but might be useful in future studies. Appendix Tables 3-8 then provide detailed regression results underlying corresponding Tables 3-8 in the text, including all estimated coefficients and significance levels for two-tailed t-tests of the hypothesis that the each coefficient is zero, the adjusted R-squared, the F-statistic testing the hypothesis that all slope coefficients are zero and its significance level, the White test for heteroscedasticity and its significance level, and the number of observations. Finally, details on value added per hour (Appendix Tables 9a-9f), compensation per hour (Appendix Tables 10a-10f), and the number of plants in each sample (Appendix Tables 11a-11f) are provided by industry and ownership group for samples of all plants and samples of large plants.

The second and perhaps more important aim of this appendix is to detail the methodology for removing apparently duplicate entries from the datasets. As indicated in the text, the data used in this study are the factory-level data for that underlie the 1997 industrial census of 1996 data (National Statistical Office 1999), the 1999 industrial survey of 1998 data (National Statistical Office 2001a) and the 2001 manufacturing industry survey of 2000 data (National Statistical Office forthcoming). Before checking for duplicates, plants that reported less than 1,000 baht in purchases of materials and components, sales of goods produced, and beginning- and end-of-year fixed asset (=capital) stocks were removed from the data sets because such small values are not economically meaningful. Plants reporting less than 20 persons engaged were also eliminated because comparisons of these small plants, which are predominately local, with foreign MNCs are not very meaningful. Removal of these plants reduced samples from 23,677 to 13,834 in 1996, 8,552 to 4,946 in 1998, and 9,294 to 2,896 in 2000. The dataset for 1996 contained another 8,812 observations (a total of 32,489 observations) but these observations were marked as non-replying plants and not analyzed.

To check for duplicate records, the data file was first sorted by (a) sales of goods produced, (b) purchases of materials and components, and (c) persons engaged. Duplicate checking was then conducted for 10 variables: (1) industry, (2) capacity utilization=(number of hours in operation per day * number of days in operation in the year)/(24*number of days in the year)*100), (3) number of employees, (4) wage income paid, (5) purchases of materials and components, (6) total intermediate consumption, (7) sales of goods produced, (8) total gross output, (9) fixed assets at the beginning of the year, and (10) fixed assets at year end. The number of duplicates and near duplicates found by this procedure is summarized below:

	1996 data	1998 data	2000 data
10/10 variables are duplicates	3,541 plants	91 plants	2 plants
at least 9/10 variables are duplicates	5,357 plants	124 plants	2 plants
at least 8/10 variables are duplicates	6,266 plants	135 plants	4 plants
at least 7/10 variables are duplicates	6,792 plants	145 plants	7 plants
at least 6/10 variables are duplicates	7,053 plants	163 plants	13 plants
at least 5/10 variables are duplicates	7,167 plants	191 plants	15 plants

Among these duplicate or near-duplicate records, information on plant location was often different while most if not all other variables were identical, which suggests that several plants of multi-plant firms all reported firm-wide information. Likewise information on industry affiliation and ownership often differed in some cases while other information was identical. There were also a number of apparent typographical errors and a number of records that were repeated several times. There is no good way to eliminate duplicates given all these problems but to avoid double counting it is clearly necessary to eliminate (1) all duplicates from data set or (2) all records but one record from each set of duplicates.

Option (2) was chosen because it maximizes the coverage of the samples. Duplicates were eliminated in the following manner. First, for large establishments, data were cross checked with published sources (Advanced Research Group Co. Ltd., 1998, various years; Business Research and Development, various years; The Nation, various years; The Brooker Group, 1996, 1997; Toyo Keizai, various years) and the record thought to be most reliable was retained. Second, if there were 3 or more records in a duplicate set, most commonly observed values were retained in the data set. Third, if a plant was reported as both foreign- and locally-owned, it was assumed to be foreign-owned unless other information to the contrary was available or the above criteria contradicted this one. Fourth, if the year of establishment differed, the older year was used unless other information to the contrary was available or the above criteria were contradictory. Finally, there were a number of records where the choice of

the record to retain was arbitrary.

After duplicate checking was complete, plants that reported non-positive values for value added were also eliminated from the samples used in this study because non-positive values do not make economic sense in this context. As noted in the text, all of these adjustments reduced sample sizes substantially, from 23,677 plants (2,672 foreign MNCs) to 10,494 (1,822) in 1996, from 8,552 (1,124) to 4,773 (1,026) in 1998, and from 9,286 (644) to 2,520 (520) in 2000. Samples of large plants with output of 25 million baht or more were even smaller, 5,481 plants (1,509 foreign MNCs) in 1996, 2,729 (885) in 1998, and 1,487 (476). More detailed data on the number of plants, employment, and ownership group are provided in the Appendix Tables 11a-11f. However, even though these samples are much smaller than the original samples, they cover the majority of employment and value added in the original sample plants as noted in the text (see also Appendix Tables 1a-1f and 2a-2f).

Additional References used in the Statistical Appendix:

Advanced Research Group Co. Ltd., 1998. *Financial Focus*, CD-ROM. Bangkok: Advanced Research Group Co., Ltd.

Advanced Research Group Co. Ltd., various years. *Thailand Company Information*, 1988-1989, 1989-1990, 1990-1991, 1991-1992, 1992-1993, 1993-1994, 1994-1995, 1995-1996, 1996-1997, 1997-1998, 1998-1999, 1999-2000, 2000-2001, 2001-2002 issues. Bangkok: Advanced Research Group Co., Ltd.

Business Research and Development, various years. *Thailand Business Profiles*, 1996-1997 and 1997-1998 issues. Bangkok: Business Research and Development.

The Brooker Group, 1996. *Directory of Supporting Industries in Thailand 1996*. Bangkok: The Brooker Group (including accompanying diskette).

The Brooker Group, 1997. *Profiles of BOI-Promoted Companies and Sectors - 1997*. Bangkok: Board of Investment Welfare (including accompanying diskette).

The Nation, various years. *Top 1000 Companies*, 1997-1998 issues; *Top 1000*, 1999 issue; *1000 Top Companies*, 2000 issue. Bangkok: The Nation.

Toyo Keizai, various years. *Kaigai Shinshutsu Kigyo Soran (A Comprehensive Survey of Firms Overseas)*, CD-ROMs with data from 1998 and 2000 issues (data for 1996, 1998). Tokyo: Toyo Keizai (in Japanese).

Appendix Table 1a: Estimates of Employment in Thai Manufacturing by Foreign Ownership Share or Foreign Nationality and Industry, 1996 (number)

	Industrial Census (average Labor Force Survey Estimate for Manufacturing = 4,682,200)															
		Sample plants														
	Publi-	All	Foreign	Foreign, by nationality										Foreign, by ownership		
Industry	cation	plants	total	EU	US	JP	N3	N3si	N3tw	N3kr	OT	OTch	OTot	MN	MJ	WH
Manufacturing	2,413,325	1,772,616	749,129	40,108	105,200	318,602	139,068	22,382	98,027	18,659	146,151	46,509	99,642	423,422	141,527	184,180
Food	349,034	269,698	79,617	7,332	7,815	34,122	11,692	1,748	8,441	1,503	18,656	9,167	9,489	64,015	10,856	4,746
Textiles	224,860	151,904	63,741	975	1,357	28,010	15,209	536	12,359	2,314	18,190	10,461	7,729	55,047	5,878	2,816
Apparel	175,151	134,854	42,101	1,343	2,270	10,245	5,905	806	4,755	344	22,338	3,035	19,303	37,890	3,016	1,195
Leather & footwear	88,882	54,149	15,720	550	3,106	3,280	6,856	0	3,884	2,972	1,928	33	1,895	10,060	3,964	1,696
Chemicals & products	93,274	67,517	25,160	2,314	5,853	8,282	3,317	968	2,042	307	5,394	2,030	3,364	15,045	4,551	5,564
Rubber products	79,242	63,358	27,023	1,888	2,157	5,986	6,690	1,936	4,492	262	10,302	693	9,609	13,330	8,307	5,386
Plastics & products	113,000	79,616	25,287	483	369	10,265	4,552	939	3,086	527	9,618	1,845	7,773	14,427	5,315	5,545
Non-metallic mineral products	153,973	102,324	20,937	1,120	1,474	3,926	10,571	1,260	9,156	155	3,846	2,137	1,709	13,172	4,910	2,855
Metal products	129,347	88,228	33,184	1,112	567	11,442	8,071	1,619	6,030	422	11,992	9,961	2,031	23,319	3,289	6,576
General machinery	113,280	92,325	59,562	781	519	43,127	12,159	6,693	4,415	1,051	2,976	217	2,759	23,173	9,342	27,047
Electric machinery, etc.	301,917	226,153	190,269	11,925	49,043	84,049	32,646	4,064	23,621	4,961	12,606	304	12,302	45,471	39,476	105,322
Office & computing machinery	78,661	52,119	51,800	0	36,579	4,760	8,914	364	7,970	580	1,547	0	1,547	8,068	4,636	39,096
Miscellaneous electric mach.	84,860	65,160	46,674	268	6,466	27,636	10,568	583	9,807	178	1,736	0	1,736	18,296	15,785	12,593
Radio, TV, communication	113,328	88,193	74,952	6,924	4,455	44,150	12,838	3,117	5,518	4,203	6,585	304	6,281	17,166	15,997	41,789
Precision machinery	25,068	20,681	16,843	4,733	1,543	7,503	326	0	326	0	2,738	0	2,738	1,941	3,058	11,844
Motor vehicles	107,222	80,956	45,803	152	409	43,317	469	0	351	118	1,456	106	1,350	30,557	13,251	1,995
Furniture	86,636	67,460	15,952	241	2,027	4,348	3,880	39	2,993	848	5,456	913	4,543	12,567	1,986	1,399
Jewelry	30,945	24,473	14,399	4,701	2,086	833	964	464	403	97	5,815	98	5,717	6,599	5,354	2,446
Other manufacturing industries	366,562	269,601	90,374	5,191	26,148	27,370	16,087	1,310	11,999	2,778	15,578	5,509	10,069	58,750	22,032	9,592
Beverages	50,161	34,192	19,923	0	16,099	0	90	90	0	0	3,734	0	3,734	19,663	260	0
Tobacco	17,150	14,605	3,080	913	0	0	0	0	0	0	2,167	2,167	0	913	0	2,167
Wood products	58,580	47,223	5,769	552	0	1,576	1,157	689	468	0	2,484	804	1,680	5,166	603	0
Paper products	43,207	31,215	8,264	311	1,405	1,982	2,097	0	1,572	525	2,469	878	1,591	6,565	1,663	36
Printing & publishing	47,570	36,687	7,668	1,625	4,264	784	65	65	0	0	930	0	930	7,571	69	28
Oil, coal, nuclear, etc.	7,413	6,710	4,694	864	2,393	939	350	0	0	350	148	0	148	2,301	2,393	0
Basic metals	43,171	28,062	9,050	428	332	6,229	942	0	498	444	1,119	403	716	8,106	763	181
Misc. transportation machinery	22,296	15,850	3,904	118	0	2,196	791	466	325	0	799	630	169	3,579	205	120
Other misc. manufacturing	77,014	55,057	28,022	380	1,655	13,664	10,595	0	9,136	1,459	1,728	627	1,101	4,886	16,076	7,060

Notes: EU=Europe; US=United States; JP=Japan; N3=N3si+N3tw+N3kr; N3si=Singapore, N3tw=Taiwan, KR=Korea; OT=OTch+OTot; OTch=China; OTot=Others.
WH=wholly foreign, MJ.=50-99% foreign-owned; MN=1-49% foreign owned; .
Sources: National Statistical Office (1999) and author's calculations from plant-level data underlying this publication; National Statistical Office (2003).

Appendix Table 1b: Estimates of Employment in Thai Manufacturing by Foreign Nationality and Industry, 1998 (number)

	Industrial Survey (average Labor Force Survey Estimate for Manufacturing = 4,577,200)												
		Sample plants											
	Publi-	All	Foreign	Foreign, by nationality									
Industry	cation	plants	total	EU	US	JP	N3	N3si	N3tw	N3kr	OT	OTch	OTot
Manufacturing	2,023,020	928,743	417,635	30,024	44,190	203,291	74,551	11,815	53,208	9,528	65,579	17,853	47,726
Food	357,786	181,080	53,307	4,122	5,283	18,981	12,076	2,979	8,889	208	12,845	3,740	9,105
Textiles	201,172	70,614	23,809	1,647	699	5,779	6,022	0	5,718	304	9,662	2,413	7,249
Apparel	141,303	42,973	18,825	3,138	0	4,124	1,364	189	1,175	0	10,199	2,710	7,489
Leather & footwear	80,946	46,675	8,129	49	2,459	459	2,266	0	1,235	1,031	2,896	689	2,207
Chemicals & products	61,355	32,186	12,714	1,875	1,170	5,465	2,039	736	1,303	0	2,165	404	1,761
Rubber products	69,962	44,416	18,660	1,555	5,521	5,224	2,741	334	2,363	44	3,619	607	3,012
Plastics & products	109,802	35,248	16,234	500	197	7,269	3,413	796	2,334	283	4,855	3,973	882
Non-metallic mineral products	130,824	60,506	19,873	2,167	5,352	6,953	3,726	501	3,225	0	1,675	296	1,379
Metal products	106,844	34,648	10,664	100	328	6,722	2,610	566	2,044	0	904	648	256
General machinery	94,228	62,165	51,492	743	1,150	43,909	1,826	374	631	821	3,864	62	3,802
Electric machinery, etc.	260,028	129,232	113,990	9,195	16,286	57,677	24,901	4,040	17,230	3,631	5,931	126	5,805
Office & computing machinery	34,951	22,986	22,485	0	9,289	4,365	8,684	822	7,862	0	147	0	147
Miscellaneous electric mach.	85,922	44,843	37,704	9,050	1,249	17,107	6,869	1,850	5,019	0	3,429	126	3,303
Radio, TV, communication	126,505	52,614	48,289	0	5,384	31,727	8,823	1,368	3,824	3,631	2,355	0	2,355
Precision machinery	12,650	8,789	5,512	145	364	4,478	525	0	525	0	0	0	0
Motor vehicles	78,616	29,235	19,144	75	75	18,026	600	265	335	0	368	77	291
Furniture	72,880	38,480	5,129	220	285	3,179	1,174	0	1,174	0	271	0	271
Jewelry	23,565	7,352	3,070	381	1,253	190	0	0	0	0	1,246	497	749
Other manufacturing industries	233,709	113,933	42,595	4,257	4,132	19,334	9,793	1,035	5,552	3,206	5,079	1,611	3,468
Beverages	21,846	11,551	2,709	0	1,227	86	80	80	0	0	1,316	0	1,316
Tobacco	8,979	4,788	2,022	0	2,022	0	0	0	0	0	0	0	0
Wood products	41,327	24,600	2,907	577	73	714	1,223	558	665	0	320	168	152
Paper products	28,640	13,975	3,742	0	55	993	1,229	41	1,142	46	1,465	190	1,275
Printing & publishing	31,302	6,925	950	280	417	103	150	106	44	0	0	0	0
Oil, coal, nuclear, etc.	1,580	867	106	0	0	106	0	0	0	0	0	0	0
Basic metals	31,559	16,385	5,319	457	49	3,845	332	250	82	0	636	329	307
Misc. transportation machinery	16,679	4,594	2,411	173	0	2,215	23	0	23	0	0	0	0
Other misc. manufacturing	56,800	30,248	22,429	2,770	289	11,272	6,756	0	3,596	3,160	1,342	924	418

Notes: EU=Europe; US=United States; JP=Japan; N3=N3si+N3tw+N3kr; N3si=Singapore, N3tw=Taiwan, KR=Korea; OT=OTch+OTot; OTch=China; OTot=Others.
Sources: National Statistical Office (2001a) and author's calculations from plant-level data underlying this publication; National Statistical Office (2003).

Appendix Table 1c: Estimates of Employment in Thai Manufacturing by Foreign Nationality and Industry, 2000 (number)

	Manufacturing Industry Survey (average Labor Force Survey Estimate for Manufacturing = 5,004,800)												
		Sample plants											
	Publi-	All	Foreign	Foreign, by nationality									
Industry	cation	plants	total	EU	US	JP	N3	N3si	N3tw	N3kr	OT	OTch	OTot
Manufacturing	2,318,752	634,780	286,001	57,984	28,637	129,369	41,274	9,997	26,833	4,444	28,737	5,308	23,429
Food	-	126,152	41,755	10,820	729	18,745	5,379	3,317	2,042	20	6,082	221	5,861
Textiles	233,243	54,396	11,366	135	392	2,982	3,496	0	3,496	0	4,361	539	3,822
Apparel	146,355	19,008	5,635	0	970	1,563	190	0	190	0	2,912	716	2,196
Leather & footwear	105,938	25,193	2,654	0	0	541	1,610	0	956	654	503	0	503
Chemicals & products	86,204	16,729	8,269	3,670	324	2,925	729	207	522	0	621	0	621
Rubber products	-	24,063	10,192	2,466	3,991	1,703	1,277	304	973	0	755	504	251
Plastics & products	-	17,013	4,661	733	0	1,891	218	0	218	0	1,819	494	1,325
Non-metallic mineral products	130,524	34,817	12,241	4,068	1,265	1,797	4,491	574	3,917	0	620	0	620
Metal products	104,250	24,392	9,703	2,197	0	4,196	2,648	544	2,104	0	662	249	413
General machinery	83,285	23,314	16,788	574	0	15,442	405	102	303	0	367	35	332
Electric machinery, etc.	355,445	121,511	101,315	23,866	5,838	59,375	9,991	3,350	6,261	380	2,245	0	2,245
Office & computing machinery	60,686	25,586	24,119	17,428	1,357	4,724	496	0	496	0	114	0	114
Miscellaneous electric mach.	113,093	31,274	24,242	3,020	4,481	13,716	3,025	1,165	1,635	225	0	0	0
Radio, TV, communication	153,457	49,916	43,396	0	0	35,097	6,168	2,185	3,983	0	2,131	0	2,131
Precision machinery	28,209	14,735	9,558	3,418	0	5,838	302	0	147	155	0	0	0
Motor vehicles	102,141	13,683	8,575	429	71	7,424	578	241	337	0	73	0	73
Furniture	-	25,345	4,062	0	660	2,273	614	0	614	0	515	407	108
Jewelry	-	10,394	7,326	3,554	0	562	2,250	0	628	1,622	960	223	737
Other manufacturing industries	-	98,770	41,459	5,472	14,397	7,950	7,398	1,358	4,272	1,768	6,242	1,920	4,322
Beverages	-	19,505	12,541	2,274	10,010	225	0	0	0	0	32	0	32
Tobacco	12,462	9,277	3,392	508	2,223	0	0	0	0	0	661	0	661
Wood products	52,482	13,973	1,128	0	0	179	764	0	174	590	185	185	0
Paper products	44,260	11,766	3,362	64	0	677	811	0	811	0	1,810	0	1,810
Printing & publishing	44,543	8,806	3,182	0	475	47	1,490	1,358	132	0	1,170	0	1,170
Oil, coal, nuclear, etc.	8,003	1,735	568	420	0	0	0	0	0	0	148	0	148
Basic metals	38,591	7,743	3,391	323	287	2,661	0	0	0	0	120	77	43
Misc. transportation machinery	24,597	5,367	2,173	51	0	1,756	0	0	0	0	366	0	366
Other misc. manufacturing	163,182	20,598	11,722	1,832	1,402	2,405	4,333	0	3,155	1,178	1,750	1,658	92

Notes: EU=Europe; US=United States; JP=Japan; N3=N3si+N3tw+N3kr; N3si=Singapore, N3tw=Taiwan, KR=Korea; OT=OTch+OTot; OTch=China; OTot=Others.
Sources: National Statistical Office (forthcoming) and author's calculations from plant-level data underlying this publication; National Statistical Office (2003).

Appendix Table 1d: Estimates of Employment in Large Sample Plants by Foreign Ownership Share or Foreign Nationality and Industry, 1996 (number)

	All	Foreign	Foreign, by nationality										Foreign, by ownership		
Industry	plants	total	EU	US	JP	N3	N3si	N3tw	N3kr	OT	OTch	OTot	MN	MJ	WH
Manufacturing	1,561,569	730,316	38,969	104,399	313,847	132,319	21,802	92,713	17,804	140,782	45,148	95,634	411,607	137,008	181,701
Food	246,125	77,844	7,243	7,755	33,173	11,377	1,672	8,202	1,503	18,296	9,039	9,257	63,055	10,203	4,586
Textiles	136,013	62,073	832	1,357	27,933	14,610	484	11,919	2,207	17,341	10,243	7,098	53,564	5,807	2,702
Apparel	117,631	39,790	1,160	2,123	9,861	5,370	671	4,484	215	21,276	2,839	18,437	36,059	2,673	1,058
Leather & footwear	47,738	15,236	550	3,106	3,170	6,590	0	3,825	2,765	1,820	0	1,820	9,710	3,830	1,696
Chemicals & products	62,538	24,693	2,314	5,762	8,125	3,138	968	1,894	276	5,354	1,990	3,364	14,626	4,503	5,564
Rubber products	60,272	26,422	1,888	2,157	5,839	6,266	1,936	4,068	262	10,272	693	9,579	13,099	7,937	5,386
Plastics & products	69,039	24,051	450	280	9,855	3,987	873	2,587	527	9,479	1,734	7,745	13,742	5,091	5,218
Non-metallic mineral products	80,371	20,074	1,029	1,474	3,883	10,170	1,260	8,910	0	3,518	1,960	1,558	12,704	4,606	2,764
Metal products	71,123	32,029	1,087	428	11,092	7,497	1,556	5,519	422	11,925	9,894	2,031	22,477	3,129	6,423
General machinery	84,203	58,687	745	519	42,722	11,879	6,693	4,135	1,051	2,822	129	2,693	22,464	9,283	26,940
Electric machinery, etc.	219,158	188,748	11,836	48,960	83,268	32,151	4,034	23,200	4,917	12,533	304	12,229	44,514	39,308	104,926
Office & computing machinery	51,936	51,652	0	36,496	4,760	8,849	364	7,905	580	1,547	0	1,547	8,068	4,636	38,948
Miscellaneous electric mach.	61,369	46,179	268	6,466	27,359	10,385	583	9,624	178	1,701	0	1,701	17,907	15,724	12,548
Radio, TV, communication	86,470	74,358	6,924	4,455	43,803	12,591	3,087	5,345	4,159	6,585	304	6,281	16,845	15,927	41,586
Precision machinery	19,383	16,559	4,644	1,543	7,346	326	0	326	0	2,700	0	2,700	1,694	3,021	11,844
Motor vehicles	71,953	45,506	152	409	43,163	439	0	321	118	1,343	106	1,237	30,260	13,251	1,995
Furniture	45,918	15,428	241	2,027	4,157	3,793	0	2,945	848	5,210	804	4,406	12,131	1,898	1,399
Jewelry	20,102	12,809	4,334	1,988	808	895	395	403	97	4,784	98	4,686	6,317	4,340	2,152
Other manufacturing industries	229,385	86,926	5,108	26,054	26,798	14,157	1,260	10,301	2,596	14,809	5,315	9,494	56,885	21,149	8,892
Beverages	32,586	19,923	0	16,099	0	90	90	0	0	3,734	0	3,734	19,663	260	0
Tobacco	11,330	3,080	913	0	0	0	0	0	0	2,167	2,167	0	913	0	2,167
Wood products	35,639	4,948	552	0	1,545	740	689	51	0	2,111	668	1,443	4,485	463	0
Paper products	28,100	7,961	311	1,405	1,982	1,829	0	1,304	525	2,434	843	1,591	6,342	1,619	0
Printing & publishing	30,249	7,550	1,625	4,214	716	65	65	0	0	930	0	930	7,481	69	0
Oil, coal, nuclear, etc.	6,660	4,694	864	2,393	939	350	0	0	350	148	0	148	2,301	2,393	0
Basic metals	24,723	8,727	400	332	6,015	861	0	458	403	1,119	403	716	7,954	676	97
Misc. transportation machinery	13,143	3,719	83	0	2,196	741	416	325	0	699	630	69	3,394	205	120
Other misc. manufacturing	46,955	26,324	360	1,611	13,405	9,481	0	8,163	1,318	1,467	604	863	4,352	15,464	6,508

Notes: EU=Europe; US=United States; JP=Japan; N3=N3si+N3tw+N3kr; N3si=Singapore, N3tw=Taiwan, KR=Korea; OT=OTch+OTot; OTch=China; OTot=Others.
WH=wholly foreign, MJ.=50-99% foreign-owned; MN=1-49% foreign owned; .

Sources: Author's calculations from plant-level data underlying National Statistical Office (1999).

Appendix Table 1e: Estimates of Employment in Large Sample Plantsby Foreign Nationality and Industry, 1998 (number)

Industry	All plants	Foreign total	Foreign, by nationality									
			EU	US	JP	N3	N3si	N3tw	N3kr	OT	OTch	OTot
Manufacturing	831,119	409,423	29,159	43,700	201,247	71,423	11,415	50,731	9,277	63,894	17,107	46,787
Food	166,003	52,552	4,122	5,283	18,695	11,707	2,979	8,520	208	12,745	3,660	9,085
Textiles	62,304	23,382	1,647	699	5,730	5,899	0	5,595	304	9,407	2,386	7,021
Apparel	38,246	18,311	3,138	0	4,124	1,175	0	1,175	0	9,874	2,385	7,489
Leather & footwear	43,519	7,855	0	2,459	438	2,062	0	1,065	997	2,896	689	2,207
Chemicals & products	29,088	12,294	1,875	1,138	5,376	1,825	736	1,089	0	2,080	350	1,730
Rubber products	42,844	18,537	1,555	5,521	5,167	2,675	334	2,297	44	3,619	607	3,012
Plastics & products	31,704	15,491	464	197	7,153	3,165	796	2,086	283	4,512	3,939	573
Non-metallic mineral products	49,256	19,363	1,988	5,352	6,953	3,507	501	3,006	0	1,563	205	1,358
Metal products	28,567	9,636	33	0	6,490	2,305	492	1,813	0	808	615	193
General machinery	58,462	51,310	743	1,150	43,909	1,711	374	516	821	3,797	39	3,758
Electric machinery, etc.	126,339	113,149	9,050	16,286	57,190	24,759	4,014	17,114	3,631	5,864	91	5,773
Office & computing machinery	22,986	22,485	0	9,289	4,365	8,684	822	7,862	0	147	0	147
Miscellaneous electric mach.	43,180	37,355	9,050	1,249	16,830	6,832	1,850	4,982	0	3,394	91	3,303
Radio, TV, communication	51,977	48,038	0	5,384	31,560	8,771	1,342	3,798	3,631	2,323	0	2,323
Precision machinery	8,196	5,271	0	364	4,435	472	0	472	0	0	0	0
Motor vehicles	26,446	19,040	75	75	17,963	600	265	335	0	327	77	250
Furniture	25,007	4,913	220	285	3,068	1,134	0	1,134	0	206	0	206
Jewelry	6,613	2,884	267	1,225	190	0	0	0	0	1,202	453	749
Other manufacturing industries	96,721	40,706	3,982	4,030	18,801	8,899	924	4,986	2,989	4,994	1,611	3,383
Beverages	10,190	2,709	0	1,227	86	80	80	0	0	1,316	0	1,316
Tobacco	3,680	2,022	0	2,022	0	0	0	0	0	0	0	0
Wood products	18,432	2,291	377	0	510	1,107	511	596	0	297	168	129
Paper products	12,971	3,570	0	55	993	1,057	0	1,011	46	1,465	190	1,275
Printing & publishing	6,168	902	255	417	103	127	83	44	0	0	0	0
Oil, coal, nuclear, etc.	867	106	0	0	106	0	0	0	0	0	0	0
Basic metals	13,673	4,978	457	49	3,537	299	250	49	0	636	329	307
Misc. transportation machinery	3,589	2,361	123	0	2,215	23	0	23	0	0	0	0
Other misc. manufacturing	27,151	21,767	2,770	260	11,251	6,206	0	3,263	2,943	1,280	924	356

Notes: EU=Europe; US=United States; JP=Japan; N3=N3si+N3tw+N3kr; N3si=Singapore, N3tw=Taiwan, KR=Korea; OT=OTch+OTot; OTch=China; OTot=Others.
Sources: Author's calculations from plant-level data underlying National Statistical Office (2001a).

Appendix Table 1f: Estimates of Employment in Large Sample Plants by Foreign Nationality and Industry, 2000 (number)

Industry	All plants	Foreign total	Foreign, by nationality									
			EU	US	JP	N3	N3si	N3tw	N3kr	OT	OTch	OTot
Manufacturing	584,792	283,527	57,741	28,637	128,833	40,057	9,855	25,982	4,220	28,259	5,186	23,073
Food	117,451	41,558	10,820	729	18,655	5,272	3,210	2,042	20	6,082	221	5,861
Textiles	49,587	11,189	106	392	2,982	3,428	0	3,428	0	4,281	459	3,822
Apparel	17,141	5,635	0	970	1,563	190	0	190	0	2,912	716	2,196
Leather & footwear	23,218	2,654	0	0	541	1,610	0	956	654	503	0	503
Chemicals & products	15,680	8,066	3,637	324	2,925	559	207	352	0	621	0	621
Rubber products	23,261	10,192	2,466	3,991	1,703	1,277	304	973	0	755	504	251
Plastics & products	15,794	4,459	733	0	1,841	131	0	131	0	1,754	472	1,282
Non-metallic mineral products	30,945	12,036	4,045	1,265	1,773	4,491	574	3,917	0	462	0	462
Metal products	21,461	9,601	2,197	0	4,149	2,613	544	2,069	0	642	229	413
General machinery	21,809	16,674	574	0	15,399	334	102	232	0	367	35	332
Electric machinery, etc.	120,710	101,203	23,866	5,838	59,294	9,991	3,350	6,261	380	2,214	0	2,214
Office & computing machinery	25,586	24,119	17,428	1,357	4,724	496	0	496	0	114	0	114
Miscellaneous electric mach.	30,988	24,242	3,020	4,481	13,716	3,025	1,165	1,635	225	0	0	0
Radio, TV, communication	49,842	43,344	0	0	35,076	6,168	2,185	3,983	0	2,100	0	2,100
Precision machinery	14,294	9,498	3,418	0	5,778	302	0	147	155	0	0	0
Motor vehicles	11,902	8,472	429	71	7,321	578	241	337	0	73	0	73
Furniture	15,800	4,018	0	660	2,273	570	0	570	0	515	407	108
Jewelry	9,710	7,116	3,396	0	535	2,225	0	603	1,622	960	223	737
Other manufacturing industries	90,323	40,654	5,472	14,397	7,879	6,788	1,323	3,921	1,544	6,118	1,920	4,198
Beverages	18,299	12,509	2,274	10,010	225	0	0	0	0	0	0	0
Tobacco	8,711	3,392	508	2,223	0	0	0	0	0	661	0	661
Wood products	12,246	1,041	0	0	128	728	0	138	590	185	185	0
Paper products	11,117	3,156	64	0	677	605	0	605	0	1,810	0	1,810
Printing & publishing	7,689	3,147	0	475	47	1,455	1,323	132	0	1,170	0	1,170
Oil, coal, nuclear, etc.	1,702	568	420	0	0	0	0	0	0	148	0	148
Basic metals	6,820	3,371	323	287	2,641	0	0	0	0	120	77	43
Misc. transportation machinery	4,953	2,173	51	0	1,756	0	0	0	0	366	0	366
Other misc. manufacturing	18,786	11,297	1,832	1,402	2,405	4,000	0	3,046	954	1,658	1,658	0

Notes: EU=Europe; US=United States; JP=Japan; N3=N3si+N3tw+N3kr; N3si=Singapore, N3tw=Taiwan, KR=Korea; OT=OTch+OTot; OTch=China; OTot=Others.
Sources: Author's calculations from plant-level data underlying National Statistical Office (forthcoming).

Appendix Table 2a: Estimates of Value Added in Thai Manufacturing by Foreign Ownership Share or Foreign Nationality and Industry, 1996 (billion baht)

Industry	National accounts	Industrial Census															
		Publication	Sample plants														
			All plants	Foreign total	Foreign, by nationality										Foreign, by ownership		
					EU	US	JP	N3	N3si	N3tw	N3kr	OT	OTch	OTot	MN	MJ	WH
Manufacturing	1,386	998.11	854.70	441.55	34.36	46.72	256.73	54.34	9.12	37.24	7.98	49.40	13.29	36.10	271.17	79.26	91.12
Food	107.95	113.56	98.86	24.66	2.25	3.09	10.83	2.93	0.55	1.94	0.43	5.57	1.68	3.89	18.81	3.56	2.29
Textiles	92.65	46.47	35.32	20.27	0.18	1.47	11.07	3.51	0.09	2.41	1.01	4.05	1.98	2.07	16.33	2.20	1.74
Apparel	161.44	23.94	19.69	6.75	0.27	0.10	2.36	1.40	0.41	0.95	0.04	2.63	0.39	2.23	6.23	0.33	0.19
Leather & footwear	44.04	15.75	9.96	2.53	0.12	0.21	0.73	1.11	0.00	0.39	0.72	0.36	0.01	0.35	1.34	0.95	0.24
Chemicals & products	47.97	58.88	53.29	30.82	3.70	5.36	15.67	2.85	1.60	1.08	0.17	3.22	0.75	2.47	11.86	13.32	5.63
Rubber products	22.42	36.04	33.33	15.83	5.08	0.77	4.23	3.29	2.56	0.69	0.04	2.46	0.37	2.09	5.81	8.69	1.33
Plastics & products	14.16	27.04	19.81	7.17	0.08	0.02	3.65	0.90	0.18	0.49	0.24	2.53	0.38	2.15	3.97	1.86	1.34
Non-metallic mineral products	74.42	65.02	40.60	9.66	0.80	1.02	1.89	3.86	0.25	3.57	0.03	2.09	1.79	0.30	7.08	2.27	0.31
Metal products	37.88	35.21	28.80	17.33	0.32	0.36	8.43	3.23	0.53	2.31	0.39	4.98	2.98	2.00	13.30	1.75	2.28
General machinery	55.79	38.51	33.66	24.37	0.63	0.13	19.30	3.21	1.13	1.34	0.73	1.09	0.02	1.08	8.68	4.58	11.10
Electric machinery, etc.	180.04	127.99	111.64	99.99	4.49	13.56	52.53	22.00	1.37	18.26	2.37	7.42	0.10	7.32	23.74	16.00	60.25
Office & computing machinery	51.64	28.02	24.13	24.04	0.00	8.06	1.60	13.62	0.11	12.96	0.55	0.76	0.00	0.76	3.72	1.94	18.38
Miscellaneous electric machinery	19.55	40.07	32.76	27.89	0.57	3.30	18.92	4.73	0.10	4.45	0.18	0.36	0.00	0.36	11.21	3.42	13.25
Radio, TV, communication	92.51	47.98	43.55	38.00	3.61	1.97	23.03	3.61	1.16	0.81	1.64	5.77	0.10	5.67	8.38	10.12	19.50
Precision machinery	16.34	11.92	11.19	10.07	0.30	0.22	8.98	0.04	0.00	0.04	0.00	0.52	0.00	0.52	0.42	0.53	9.12
Motor vehicles	104.16	139.67	130.56	115.68	0.02	0.34	113.55	0.12	0.00	0.11	0.01	1.65	0.01	1.64	104.47	9.63	1.57
Furniture	36.18	14.42	11.41	2.81	0.03	0.11	0.55	1.31	0.01	0.78	0.52	0.81	0.13	0.67	1.71	0.81	0.30
Jewelry	98.03	9.18	8.15	4.10	0.95	0.54	0.20	0.18	0.09	0.05	0.05	2.23	0.01	2.22	1.79	1.02	1.29
Other manufacturing industries	308.55	246.42	219.62	59.57	15.44	19.65	11.73	4.42	0.34	2.84	1.24	8.32	2.70	5.62	46.03	12.29	1.25
Beverages	86.38	69.67	61.75	13.59	0.00	9.31	0.00	0.09	0.09	0.00	0.00	4.18	0.00	4.18	13.58	0.01	0.00
Tobacco	29.55	30.67	28.64	0.39	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.19	0.19	0.00	0.20	0.00	0.19
Wood products	8.87	14.98	13.59	3.09	1.07	0.00	0.37	0.10	0.06	0.04	0.00	1.54	1.35	0.19	3.01	0.08	0.00
Paper products	22.68	32.12	27.64	16.12	12.39	0.13	2.36	0.61	0.00	0.49	0.12	0.64	0.35	0.29	15.92	0.20	0.01
Printing & publishing	15.89	30.09	26.82	3.63	0.98	2.00	0.48	0.01	0.01	0.00	0.00	0.16	0.00	0.16	3.58	0.04	0.00
Oil, coal, nuclear, etc.	104.90	33.04	31.34	8.36	0.13	7.40	0.64	0.08	0.00	0.00	0.08	0.10	0.00	0.10	0.96	7.40	0.00
Basic metals	20.74	17.82	15.82	7.31	0.61	0.58	4.34	1.41	0.00	1.29	0.12	0.37	0.06	0.31	4.95	2.28	0.09
Misc. transportation machinery	15.86	6.67	5.40	2.41	0.03	0.00	1.43	0.23	0.18	0.05	0.00	0.72	0.70	0.02	2.36	0.03	0.02
Other misc. manufacturing	3.67	11.36	8.63	4.67	0.03	0.23	2.11	1.89	0.00	0.97	0.91	0.41	0.06	0.35	1.47	2.25	0.94

Notes: EU=Europe; US=United States; JP=Japan; N3=N3si+N3tw+N3kr; N3si=Singapore, N3tw=Taiwan, KR=Korea; OT=OTch+OTot; OTch=China; OTot=Others.
WH=wholly foreign, MJ.=50-99% foreign-owned; MN=1-49% foreign owned; .
Sources: National Statistical Office (1999) and author's calculations from plant-level data underlying this publication; National Economic and Social Development Board (2001

Appendix Table 2b: Estimates of Value Added in Thai Manufacturing by Foreign Ownership Share or Foreign Nationality and Industry, 1998 (million baht)

Industry	National accounts	Industrial Survey												
		Publication	Sample plants											
			All plants	Foreign total	Foreign, by nationality									
					EU	US	JP	N3	N3si	N3tw	N3kr	OT	OTch	OTot
Manufacturing	1,451	653.24	427.97	253.17	19.03	25.94	136.32	31.40	6.52	20.58	4.30	40.49	4.61	35.88
Food	140.75	92.46	61.47	18.87	1.43	1.98	8.16	3.07	1.04	1.99	0.05	4.22	0.43	3.79
Textiles	106.25	44.71	22.80	10.21	0.99	0.32	3.52	2.21	0.00	2.03	0.18	3.16	0.32	2.83
Apparel	167.24	21.51	10.90	6.97	2.35	0.00	0.70	0.77	0.00	0.77	0.00	3.15	1.66	1.49
Leather & footwear	52.06	14.36	11.86	1.58	0.00	0.26	0.15	0.52	0.00	0.33	0.19	0.65	0.06	0.59
Chemicals & products	61.23	28.62	27.35	15.64	4.90	1.86	5.00	1.80	0.82	0.98	0.00	2.07	0.16	1.92
Rubber products	28.49	23.16	18.11	11.10	0.54	3.11	4.00	1.95	0.14	1.80	0.02	1.49	0.12	1.37
Plastics & products	16.40	23.13	10.31	3.60	0.17	0.02	1.78	0.90	0.19	0.63	0.09	0.73	0.55	0.18
Non-metallic mineral products	58.56	57.35	35.39	21.40	4.70	5.94	7.60	1.63	0.14	1.49	0.00	1.52	0.09	1.43
Metal products	41.82	21.29	12.60	6.34	0.08	0.01	4.40	1.24	0.28	0.96	0.00	0.62	0.57	0.05
General machinery	48.08	34.98	33.23	30.57	0.47	0.29	27.08	1.04	0.12	0.20	0.71	1.70	0.03	1.66
Electric machinery, etc.	218.11	85.61	61.58	57.14	1.68	8.76	29.79	13.26	2.95	7.99	2.31	3.66	0.04	3.62
Office & computing machinery	82.16	20.34	14.68	14.49	0.00	5.87	3.73	4.84	0.48	4.36	0.00	0.05	0.00	0.05
Miscellaneous electric machinery	24.68	18.87	16.87	14.97	1.67	0.37	6.93	3.62	1.64	1.98	0.00	2.37	0.04	2.33
Radio, TV, communication	93.58	42.35	26.66	25.38	0.00	2.42	17.12	4.60	0.83	1.46	2.31	1.23	0.00	1.23
Precision machinery	17.68	4.05	3.38	2.29	0.01	0.09	2.00	0.19	0.00	0.19	0.00	0.00	0.00	0.00
Motor vehicles	27.88	72.28	35.87	33.34	0.04	0.02	32.93	0.27	0.20	0.07	0.00	0.08	0.01	0.07
Furniture	21.10	9.15	4.46	0.56	0.02	0.02	0.30	0.21	0.00	0.21	0.00	0.01	0.00	0.01
Jewelry	85.68	4.47	2.03	0.90	0.09	0.37	0.06	0.00	0.00	0.00	0.00	0.38	0.10	0.29
Other manufacturing industries	377.64	120.14	80.00	34.94	1.56	2.97	10.84	2.52	0.63	1.13	0.76	17.05	0.47	16.58
Beverages	109.38	69.94	39.45	18.47	0.00	2.59	0.07	0.49	0.49	0.00	0.00	15.32	0.00	15.32
Tobacco	34.67	0.69	0.45	0.10	0.00	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wood products	5.90	5.50	4.71	0.60	0.11	0.01	0.25	0.16	0.04	0.12	0.00	0.07	0.04	0.03
Paper products	31.93	11.70	10.21	3.05	0.00	0.16	1.50	0.42	0.00	0.41	0.01	0.97	0.08	0.90
Printing & publishing	14.77	8.23	3.04	0.19	0.05	0.05	0.02	0.07	0.02	0.04	0.00	0.00	0.00	0.00
Oil, coal, nuclear, etc.	149.39	1.16	0.96	0.08	0.00	0.00	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Basic metals	16.37	9.97	10.50	3.89	0.40	0.02	3.06	0.10	0.08	0.02	0.00	0.31	0.07	0.25
Misc. transportation machinery	10.78	3.99	1.32	1.00	0.09	0.00	0.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other misc. manufacturing	4.45	11.77	9.37	7.57	0.91	0.03	4.97	1.29	0.00	0.54	0.76	0.36	0.28	0.08

Notes: EU=Europe; US=United States; JP=Japan; N3=N3si+N3tw+N3kr; N3si=Singapore, N3tw=Taiwan, KR=Korea; OT=OTch+OTot; OTch=China; OTot=Others.

Sources: National Statistical Office (2001a) and author's calculations from plant-level data underlying this publication; National Economic and Social Development Board (200

Appendix Table 2c: Estimates of Value Added in Thai Manufacturing by Foreign Ownership Share or Foreign Nationality and Industry, 2000 (million baht)

Industry	National accounts	Manufacturing Industry Survey												
		Publication	Sample plants											
			All plants	Foreign total	Foreign, by nationality									
					EU	US	JP	N3	N3si	N3tw	N3kr	OT	OTch	OTot
Manufacturing	1,577	766.83	234.48	111.10	30.58	8.73	51.42	11.56	4.27	6.55	0.74	8.82	0.99	7.83
Food	145.03	-	30.82	9.21	0.91	0.26	4.50	1.49	0.99	0.49	0.02	2.05	0.12	1.93
Textiles	105.84	58.32	10.71	4.26	0.04	0.06	1.20	0.97	0.00	0.97	0.00	1.99	0.11	1.88
Apparel	161.90	21.70	2.62	0.81	0.00	0.10	0.31	0.03	0.00	0.03	0.00	0.37	0.11	0.26
Leather & footwear	60.29	14.73	3.28	0.50	0.00	0.00	0.10	0.36	0.00	0.19	0.17	0.04	0.00	0.04
Chemicals & products	85.49	47.00	10.78	5.24	2.89	0.39	1.39	0.09	0.04	0.05	0.00	0.48	0.00	0.48
Rubber products	-	-	7.67	4.47	2.01	1.22	0.43	0.45	0.08	0.36	0.00	0.37	0.11	0.26
Plastics & products	-	-	3.47	1.34	0.19	0.00	0.41	0.08	0.00	0.08	0.00	0.67	0.07	0.60
Non-metallic mineral products	65.01	48.69	12.43	3.70	2.30	0.11	0.64	0.59	0.10	0.48	0.00	0.06	0.00	0.06
Metal products	48.40	31.91	7.53	4.24	1.16	0.00	1.49	1.30	0.48	0.82	0.00	0.29	0.03	0.26
General machinery	-	28.99	10.78	9.18	0.14	0.00	8.91	0.09	0.02	0.07	0.00	0.06	0.03	0.02
Electric machinery, etc.	-	159.22	43.67	38.89	9.76	0.88	23.51	4.17	2.52	1.61	0.04	0.58	0.00	0.58
Office & computing machinery	-	41.93	13.35	13.22	8.77	0.30	4.04	0.05	0.00	0.05	0.00	0.07	0.00	0.07
Miscellaneous electric machinery	-	38.68	8.89	6.92	0.19	0.58	4.16	2.00	1.27	0.70	0.03	0.00	0.00	0.00
Radio, TV, communication	-	72.90	18.82	17.15	0.00	0.00	14.55	2.09	1.25	0.85	0.00	0.51	0.00	0.51
Precision machinery	-	5.71	2.61	1.59	0.80	0.00	0.76	0.03	0.00	0.02	0.01	0.00	0.00	0.00
Motor vehicles	-	49.93	8.05	7.36	0.86	0.02	6.34	0.13	0.02	0.11	0.00	0.01	0.00	0.01
Furniture	-	-	3.30	0.91	0.00	0.14	0.38	0.32	0.00	0.32	0.00	0.08	0.06	0.01
Jewelry	-	-	2.05	1.50	0.77	0.00	0.14	0.47	0.00	0.22	0.26	0.11	0.05	0.06
Other manufacturing industries	-	-	77.31	19.48	9.57	5.55	1.68	1.02	0.01	0.75	0.26	1.67	0.30	1.37
Beverages	70.39	-	15.29	13.04	8.02	4.99	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tobacco	32.07	32.92	38.91	1.00	0.92	0.06	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.03
Wood products	7.40	8.91	2.63	0.21	0.00	0.00	0.08	0.12	0.00	0.02	0.11	0.01	0.01	0.00
Paper products	33.97	22.48	9.53	1.12	0.01	0.00	0.23	0.24	0.00	0.24	0.00	0.64	0.00	0.64
Printing & publishing	15.22	13.67	2.23	0.50	0.00	0.03	0.02	0.06	0.01	0.05	0.00	0.38	0.00	0.38
Oil, coal, nuclear, etc.	121.48	29.13	1.28	0.21	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.01
Basic metals	15.95	17.57	2.96	0.97	0.13	0.31	0.52	0.00	0.00	0.00	0.00	0.01	0.01	0.01
Misc. transportation machinery	-	4.71	1.40	0.79	0.01	0.00	0.49	0.00	0.00	0.00	0.00	0.29	0.00	0.29
Other misc. manufacturing	-	28.13	3.08	1.64	0.28	0.16	0.32	0.60	0.00	0.44	0.16	0.29	0.28	0.01

Notes: EU=Europe; US=United States; JP=Japan; N3=N3si+N3tw+N3kr; N3si=Singapore, N3tw=Taiwan, KR=Korea; OT=OTch+OTot; OTch=China; OTot=Others.

Sources: National Statistical Office (forthcoming) and author's calculations from plant-level data underlying this publication; National Economic and Social Development Boar

Appendix Table 2d: Estimates of Value Added in Large Sample Plants by Foreign Ownership Share or Foreign Nationality and Industry, 1996 (billion baht)

Industry	Publi-cation	All plants	Foreign total	Foreign, by nationality										Foreign, by ownership		
				EU	US	JP	N3	N3si	N3tw	N3kr	OT	OTch	OTot	MN	MJ	WH
Manufacturing	998.11	834.18	439.83	34.22	46.66	256.30	53.62	9.05	36.67	7.89	49.03	13.16	35.87	270.03	78.94	90.86
Food	113.56	96.65	24.56	2.25	3.09	10.78	2.90	0.55	1.92	0.43	5.55	1.68	3.87	18.75	3.53	2.28
Textiles	46.47	33.91	20.14	0.17	1.47	11.05	3.44	0.08	2.35	1.01	4.01	1.96	2.05	16.22	2.19	1.73
Apparel	23.94	18.08	6.55	0.24	0.09	2.32	1.36	0.40	0.93	0.03	2.53	0.36	2.17	6.08	0.29	0.18
Leather & footwear	15.75	9.28	2.49	0.12	0.21	0.73	1.09	0.00	0.38	0.71	0.34	0.00	0.34	1.31	0.94	0.24
Chemicals & products	58.88	52.66	30.73	3.70	5.35	15.66	2.80	1.60	1.04	0.16	3.21	0.74	2.47	11.79	13.31	5.63
Rubber products	36.04	33.05	15.80	5.08	0.77	4.23	3.28	2.56	0.68	0.04	2.45	0.37	2.09	5.79	8.68	1.33
Plastics & products	27.04	18.56	7.04	0.07	0.01	3.61	0.83	0.18	0.41	0.24	2.51	0.37	2.15	3.89	1.84	1.31
Non-metallic mineral products	65.02	38.46	9.58	0.80	1.02	1.89	3.81	0.25	3.56	0.00	2.06	1.77	0.28	7.03	2.23	0.31
Metal products	35.21	26.88	17.22	0.32	0.35	8.40	3.18	0.53	2.26	0.39	4.97	2.97	2.00	13.23	1.74	2.25
General machinery	38.51	32.66	24.24	0.62	0.13	19.24	3.17	1.13	1.31	0.73	1.08	0.01	1.06	8.58	4.56	11.10
Electric machinery, etc.	127.99	110.77	99.80	4.48	13.55	52.45	21.92	1.37	18.19	2.36	7.41	0.10	7.31	23.62	15.98	60.20
Office & computing machinery	28.02	24.10	24.01	0.00	8.05	1.60	13.60	0.11	12.94	0.55	0.76	0.00	0.76	3.72	1.94	18.35
Miscellaneous electric machinery	40.07	32.28	27.83	0.57	3.30	18.89	4.71	0.10	4.42	0.18	0.36	0.00	0.36	11.17	3.42	13.24
Radio, TV, communication	47.98	43.39	37.93	3.61	1.97	23.00	3.57	1.15	0.78	1.63	5.77	0.10	5.67	8.34	10.10	19.49
Precision machinery	11.92	11.01	10.03	0.29	0.22	8.96	0.04	0.00	0.04	0.00	0.52	0.00	0.52	0.39	0.52	9.12
Motor vehicles	139.67	129.32	115.64	0.02	0.34	113.52	0.12	0.00	0.11	0.01	1.64	0.01	1.63	104.43	9.63	1.57
Furniture	14.42	10.40	2.78	0.03	0.11	0.55	1.29	0.00	0.77	0.52	0.80	0.12	0.67	1.68	0.80	0.30
Jewelry	9.18	7.79	4.00	0.89	0.53	0.20	0.17	0.08	0.05	0.05	2.21	0.01	2.20	1.76	0.99	1.25
Other manufacturing industries	246.42	215.71	59.26	15.42	19.65	11.67	4.26	0.33	2.70	1.23	8.27	2.69	5.58	45.84	12.23	1.19
Beverages	69.67	61.59	13.59	0.00	9.31	0.00	0.09	0.09	0.00	0.00	4.18	0.00	4.18	13.58	0.01	0.00
Tobacco	30.67	28.53	0.39	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.19	0.19	0.00	0.20	0.00	0.19
Wood products	14.98	12.53	3.04	1.07	0.00	0.37	0.08	0.06	0.01	0.00	1.52	1.35	0.18	2.98	0.06	0.00
Paper products	32.12	27.18	16.06	12.39	0.13	2.36	0.55	0.00	0.43	0.12	0.63	0.34	0.29	15.87	0.18	0.00
Printing & publishing	30.09	25.91	3.62	0.98	2.00	0.48	0.01	0.01	0.00	0.00	0.16	0.00	0.16	3.58	0.04	0.00
Oil, coal, nuclear, etc.	33.04	31.33	8.36	0.13	7.40	0.64	0.08	0.00	0.00	0.08	0.10	0.00	0.10	0.96	7.40	0.00
Basic metals	17.82	15.48	7.26	0.60	0.58	4.31	1.40	0.00	1.28	0.11	0.37	0.06	0.31	4.92	2.26	0.08
Misc. transportation machinery	6.67	5.14	2.39	0.02	0.00	1.43	0.22	0.17	0.05	0.00	0.71	0.70	0.01	2.34	0.03	0.02
Other misc. manufacturing	11.36	8.02	4.55	0.03	0.23	2.07	1.83	0.00	0.92	0.91	0.39	0.05	0.34	1.41	2.23	0.91

Notes: EU=Europe; US=United States; JP=Japan; N3=N3si+N3tw+N3kr; N3si=Singapore, N3tw=Taiwan, KR=Korea; OT=OTch+OTot; OTch=China; OTot=Others.
WH=wholly foreign, MJ.=50-99% foreign-owned; MN=1-49% foreign owned; .

Sources: Author's calculations from plant-level data underlying National Statistical Office (1999).

Appendix Table 2e: Estimates of Value Added in Large Sample Plantsby Foreign Ownership Share or Foreign Nationality and Industry, 1998 (million baht)

Industry	Publi-cation	All plants	Foreign total	Foreign, by nationality									
				EU	US	JP	N3	N3si	N3tw	N3kr	OT	OTch	OTot
Manufacturing	653.24	419.86	252.32	18.93	25.90	136.05	31.13	6.49	20.35	4.28	40.30	4.52	35.78
Food	92.46	60.10	18.81	1.43	1.98	8.13	3.06	1.04	1.98	0.05	4.21	0.42	3.79
Textiles	44.71	22.31	10.18	0.99	0.32	3.51	2.20	0.00	2.02	0.18	3.15	0.32	2.83
Apparel	21.51	10.62	6.93	2.35	0.00	0.70	0.77	0.00	0.77	0.00	3.11	1.62	1.49
Leather & footwear	14.36	11.63	1.56	0.00	0.26	0.14	0.51	0.00	0.33	0.18	0.65	0.06	0.59
Chemicals & products	28.62	26.95	15.59	4.90	1.85	4.99	1.78	0.82	0.96	0.00	2.06	0.14	1.92
Rubber products	23.16	17.93	11.08	0.54	3.11	4.00	1.94	0.14	1.79	0.02	1.49	0.12	1.37
Plastics & products	23.13	9.95	3.51	0.16	0.02	1.76	0.87	0.19	0.59	0.09	0.69	0.55	0.14
Non-metallic mineral products	57.35	34.31	21.35	4.68	5.94	7.60	1.62	0.14	1.47	0.00	1.51	0.08	1.43
Metal products	21.29	11.83	6.21	0.06	0.00	4.35	1.19	0.27	0.92	0.00	0.61	0.57	0.04
General machinery	34.98	32.80	30.54	0.47	0.29	27.08	1.02	0.12	0.19	0.71	1.68	0.03	1.65
Electric machinery, etc.	85.61	61.24	57.04	1.67	8.76	29.73	13.24	2.94	7.98	2.31	3.64	0.04	3.61
Office & computing machinery	20.34	14.68	14.49	0.00	5.87	3.73	4.84	0.48	4.36	0.00	0.05	0.00	0.05
Miscellaneous electric machinery	18.87	16.66	14.93	1.67	0.37	6.89	3.62	1.64	1.98	0.00	2.37	0.04	2.33
Radio, TV, communication	42.35	26.57	25.34	0.00	2.42	17.10	4.59	0.82	1.45	2.31	1.23	0.00	1.23
Precision machinery	4.05	3.33	2.28	0.00	0.09	2.00	0.19	0.00	0.19	0.00	0.00	0.00	0.00
Motor vehicles	72.28	35.54	33.32	0.04	0.02	32.92	0.27	0.20	0.07	0.00	0.07	0.01	0.06
Furniture	9.15	4.23	0.54	0.02	0.02	0.29	0.21	0.00	0.21	0.00	0.01	0.00	0.01
Jewelry	4.47	1.95	0.87	0.07	0.36	0.06	0.00	0.00	0.00	0.00	0.38	0.09	0.29
Other manufacturing industries	120.14	78.44	34.78	1.54	2.96	10.81	2.44	0.62	1.07	0.75	17.04	0.47	16.57
Beverages	69.94	39.33	18.47	0.00	2.59	0.07	0.49	0.49	0.00	0.00	15.32	0.00	15.32
Tobacco	0.69	0.39	0.10	0.00	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wood products	5.50	4.14	0.53	0.09	0.00	0.22	0.15	0.04	0.12	0.00	0.07	0.04	0.03
Paper products	11.70	10.10	3.04	0.00	0.16	1.50	0.40	0.00	0.39	0.01	0.97	0.08	0.90
Printing & publishing	8.23	2.92	0.18	0.04	0.05	0.02	0.06	0.02	0.04	0.00	0.00	0.00	0.00
Oil, coal, nuclear, etc.	1.16	0.96	0.08	0.00	0.00	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Basic metals	9.97	10.27	3.88	0.40	0.02	3.05	0.09	0.08	0.01	0.00	0.31	0.07	0.25
Misc. transportation machinery	3.99	1.21	1.00	0.09	0.00	0.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other misc. manufacturing	11.77	9.13	7.51	0.91	0.03	4.97	1.25	0.00	0.50	0.74	0.35	0.28	0.07

Notes: EU=Europe; US=United States; JP=Japan; N3=N3si+N3tw+N3kr; N3si=Singapore, N3tw=Taiwan, KR=Korea; OT=OTch+OTot; OTch=China; OTot=Others.
Sources: Author's calculations from plant-level data underlying National Statistical Office (2001a).

Appendix Table 2f: Estimates of Value Added in Large Sample Plants by Foreign Ownership Share or Foreign Nationality and Industry, 2000 (million baht)

Industry	Publi-cation	All plants	Foreign total	Foreign, by nationality									
				EU	US	JP	N3	N3si	N3tw	N3kr	OT	OTch	OTot
Manufacturing	766.83	230.38	110.85	30.55	8.73	51.35	11.46	4.26	6.48	0.73	8.76	0.97	7.78
Food	-	29.99	9.20	0.91	0.26	4.50	1.48	0.98	0.49	0.02	2.05	0.12	1.93
Textiles	58.32	10.45	4.25	0.04	0.06	1.20	0.96	0.00	0.96	0.00	1.99	0.11	1.88
Apparel	21.70	2.51	0.81	0.00	0.10	0.31	0.03	0.00	0.03	0.00	0.37	0.11	0.26
Leather & footwear	14.73	3.13	0.50	0.00	0.00	0.10	0.36	0.00	0.19	0.17	0.04	0.00	0.04
Chemicals & products	47.00	10.69	5.23	2.89	0.39	1.39	0.09	0.04	0.05	0.00	0.48	0.00	0.48
Rubber products	-	7.59	4.47	2.01	1.22	0.43	0.45	0.08	0.36	0.00	0.37	0.11	0.26
Plastics & products	-	3.33	1.32	0.19	0.00	0.40	0.08	0.00	0.08	0.00	0.66	0.06	0.60
Non-metallic mineral products	48.69	12.09	3.68	2.30	0.11	0.64	0.59	0.10	0.48	0.00	0.05	0.00	0.05
Metal products	31.91	7.07	4.22	1.16	0.00	1.48	1.29	0.48	0.81	0.00	0.28	0.03	0.26
General machinery	28.99	10.62	9.17	0.14	0.00	8.90	0.08	0.02	0.06	0.00	0.06	0.03	0.02
Electric machinery, etc.	159.22	43.54	38.87	9.76	0.88	23.50	4.17	2.52	1.61	0.04	0.57	0.00	0.57
Office & computing machinery	41.93	13.35	13.22	8.77	0.30	4.04	0.05	0.00	0.05	0.00	0.07	0.00	0.07
Miscellaneous electric machinery	38.68	8.84	6.92	0.19	0.58	4.16	2.00	1.27	0.70	0.03	0.00	0.00	0.00
Radio, TV, communication	72.90	18.81	17.14	0.00	0.00	14.55	2.09	1.25	0.85	0.00	0.50	0.00	0.50
Precision machinery	5.71	2.54	1.58	0.80	0.00	0.75	0.03	0.00	0.02	0.01	0.00	0.00	0.00
Motor vehicles	49.93	7.89	7.35	0.86	0.02	6.33	0.13	0.02	0.11	0.00	0.01	0.00	0.01
Furniture	-	3.11	0.91	0.00	0.14	0.38	0.31	0.00	0.31	0.00	0.08	0.06	0.01
Jewelry	-	1.98	1.46	0.74	0.00	0.14	0.47	0.00	0.21	0.26	0.11	0.05	0.06
Other manufacturing industries	-	76.39	19.40	9.57	5.55	1.66	0.98	0.01	0.72	0.25	1.65	0.30	1.35
Beverages	-	15.15	13.04	8.02	4.99	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tobacco	32.92	38.88	1.00	0.92	0.06	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.03
Wood products	8.91	2.44	0.20	0.00	0.00	0.07	0.12	0.00	0.02	0.11	0.01	0.01	0.00
Paper products	22.48	9.45	1.10	0.01	0.00	0.23	0.22	0.00	0.22	0.00	0.64	0.00	0.64
Printing & publishing	13.67	2.07	0.50	0.00	0.03	0.02	0.06	0.01	0.05	0.00	0.38	0.00	0.38
Oil, coal, nuclear, etc.	29.13	1.28	0.21	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.01
Basic metals	17.57	2.83	0.96	0.13	0.31	0.51	0.00	0.00	0.00	0.00	0.01	0.01	0.01
Misc. transportation machinery	4.71	1.36	0.79	0.01	0.00	0.49	0.00	0.00	0.00	0.00	0.29	0.00	0.29
Other misc. manufacturing	28.13	2.93	1.60	0.28	0.16	0.32	0.57	0.00	0.43	0.14	0.28	0.28	0.00

Notes: EU=Europe; US=United States; JP=Japan; N3=N3si+N3tw+N3kr; N3si=Singapore, N3tw=Taiwan, KR=Korea; OT=OTch+OTot; OTch=China; OTot=Others.
Sources: Author's calculations from plant-level data underlying National Statistical Office (forthcoming).

Appendix Table 3: Estimates of Value Added per Hour (dependent variable = ln(V/E)), 1996

Independent Variables, Indicator	All plants								Large plants with Output >=25 million baht							
	Equation 1		Equation 2		Equation 3		Equation 4		Equation 1		Equation 2		Equation 3		Equation 4	
	Coeffi-cients, etc.	Sig-nifi-cance	Coeffi-cients, etc.	Sig-nifi-cance	Coeffi-cients, etc.	Sig-nifi-cance	Coeffi-cients, etc.	Sig-nifi-cance	Coeffi-cients, etc.	Sig-nifi-cance	Coeffi-cients, etc.	Sig-nifi-cance	Coeffi-cients, etc.	Sig-nifi-cance	Coeffi-cients, etc.	Sig-nifi-cance
FOOD																
Constant	2.963	0.00	2.959	0.00	2.957	0.00	2.961	0.00	3.011	0.00	3.010	0.00	3.006	0.00	3.008	0.00
ln(EN/E)	0.128	0.00	0.127	0.00	0.126	0.00	0.128	0.00	0.103	0.03	0.101	0.04	0.098	0.04	0.104	0.03
ln(K/E)	0.321	0.00	0.321	0.00	0.321	0.00	0.321	0.00	0.379	0.00	0.377	0.00	0.377	0.00	0.380	0.00
Df	-0.145	0.18	-	-	-	-	-	-	-0.279	0.02	-	-	-	-	-	-
Dftr	-	-	-0.104	0.43	-	-	-	-	-	-	-0.203	0.14	-	-	-	-
Dfeu	-	-	-	-	0.016	0.95	-	-	-	-	-	-	-0.193	0.43	-	-
Dfus	-	-	-	-	0.381	0.23	-	-	-	-	-	-	0.276	0.37	-	-
Dfjp	-	-	-	-	-0.256	0.10	-	-	-	-	-	-	-0.339	0.04	-	-
Dfn3	-	-	-0.118	0.60	-0.123	0.58	-	-	-	-	-0.346	0.18	-0.351	0.17	-	-
Dfot	-	-	-0.123	0.61	-0.123	0.61	-	-	-	-	-0.214	0.41	-0.215	0.40	-	-
Dfmn	-	-	-	-	-	-	-0.143	0.24	-	-	-	-	-	-	-0.304	0.03
Dfmj	-	-	-	-	-	-	-0.101	0.67	-	-	-	-	-	-	-0.066	0.81
Dfwh	-	-	-	-	-	-	-0.228	0.45	-	-	-	-	-	-	-0.409	0.23
Dboi	0.027	0.81	0.016	0.88	0.028	0.79	0.026	0.82	-0.105	0.37	-0.117	0.32	-0.107	0.36	-0.109	0.39
Dold	0.113	0.10	0.114	0.11	0.110	0.11	0.113	0.11	0.191	0.05	0.187	0.06	0.182	0.06	0.191	0.05
Dlarge	0.549	0.00	0.542	0.00	0.529	0.00	0.550	0.00	0.427	0.01	0.406	0.02	0.407	0.02	0.423	0.02
F-test	44.75	0.00	33.40	0.00	27.10	0.00	33.53	0.00	21.65	0.00	16.05	0.00	13.11	0.00	16.32	0.00
White	34.36	0.06	63.62	0.00	66.50	0.03	42.34	0.18	38.14	0.02	65.25	0.00	69.78	0.02	43.32	0.16
Adj. R-sq.	0.150	-	0.149	-	0.150	-	0.149	-	0.128	-	0.125	-	0.126	-	0.127	-
Obs.	1,483	-	1,483	-	1,483	-	1,483	-	844	-	844	-	844	-	844	-
TEXTILES																
Constant	3.303	0.00	3.308	0.00	3.299	0.00	3.324	0.00	3.954	0.00	3.984	0.00	3.966	0.00	3.970	0.00
ln(EN/E)	0.204	0.00	0.203	0.00	0.201	0.00	0.210	0.00	0.177	0.01	0.181	0.01	0.177	0.01	0.185	0.01
ln(K/E)	0.200	0.00	0.196	0.00	0.197	0.00	0.200	0.00	0.015	0.77	0.008	0.88	0.008	0.88	0.016	0.75
Df	0.090	0.47	-	-	-	-	-	-	0.175	0.25	-	-	-	-	-	-
Dftr	-	-	0.440	0.02	-	-	-	-	-	-	0.506	0.01	-	-	-	-
Dfeu	-	-	-	-	0.745	0.00	-	-	-	-	-	-	0.825	0.12	-	-
Dfus	-	-	-	-	1.233	0.02	-	-	-	-	-	-	1.293	0.02	-	-
Dfjp	-	-	-	-	0.304	0.14	-	-	-	-	-	-	0.385	0.08	-	-
Dfn3	-	-	0.076	0.70	0.076	0.70	-	-	-	-	0.076	0.72	0.081	0.70	-	-
Dfot	-	-	-0.303	0.41	-0.311	0.40	-	-	-	-	-0.114	0.72	-0.121	0.71	-	-
Dfmn	-	-	-	-	-	-	-0.068	0.61	-	-	-	-	-	-	0.006	0.97
Dfmj	-	-	-	-	-	-	0.675	0.01	-	-	-	-	-	-	0.790	0.01
Dfwh	-	-	-	-	-	-	0.877	0.00	-	-	-	-	-	-	0.809	0.05
Dboi	-0.196	0.23	-0.317	0.07	-0.319	0.07	-0.320	0.06	-0.157	0.37	-0.272	0.14	-0.277	0.14	-0.262	0.14
Dold	0.045	0.60	0.052	0.55	0.063	0.46	0.049	0.57	-0.113	0.37	-0.106	0.41	-0.086	0.50	-0.107	0.40
Dlarge	0.170	0.51	0.184	0.45	0.203	0.41	0.270	0.28	0.488	0.07	0.494	0.07	0.498	0.07	0.632	0.02
F-test	18.44	0.00	14.85	0.00	12.27	0.00	15.50	0.00	2.02	0.06	2.21	0.03	2.09	0.02	2.67	0.01
White	58.05	0.00	86.37	0.00	90.67	0.00	61.91	0.00	27.55	0.23	36.48	0.40	40.39	0.63	29.63	0.64
Adj. R-sq.	0.128	-	0.134	-	0.136	-	0.140	-	0.017	-	0.026	-	0.029	-	0.036	-
Obs.	716	-	716	-	716	-	716	-	364	-	364	-	364	-	364	-

Appendix Table 3 (continued, 2/7)

Independent Variables, Indicator	All plants								Large plants with Output >=25 million baht							
	Equation 1		Equation 2		Equation 3		Equation 4		Equation 1		Equation 2		Equation 3		Equation 4	
	Coeffi-cients, etc.	Sig-nifi-cance	Coeffi-cients, etc.	Sig-nifi-cance	Coeffi-cients, etc.	Sig-nifi-cance	Coeffi-cients, etc.	Sig-nifi-cance	Coeffi-cients, etc.	Sig-nifi-cance	Coeffi-cients, etc.	Sig-nifi-cance	Coeffi-cients, etc.	Sig-nifi-cance	Coeffi-cients, etc.	Sig-nifi-cance
APPAREL																
Constant	3.663	0.00	3.670	0.00	3.668	0.00	3.664	0.00	3.901	0.00	3.926	0.00	3.930	0.00	3.906	0.00
ln(EN/E)	0.132	0.00	0.134	0.00	0.134	0.00	0.132	0.00	0.097	0.08	0.101	0.08	0.102	0.07	0.096	0.09
ln(K/E)	0.156	0.00	0.154	0.00	0.153	0.00	0.155	0.00	0.111	0.05	0.100	0.06	0.098	0.07	0.108	0.05
Df	-0.036	0.75	-	-	-	-	-	-	-0.078	0.58	-	-	-	-	-	-
Dftr	-	-	-0.071	0.70	-	-	-	-	-	-	-0.105	0.64	-	-	-	-
Dfeu	-	-	-	-	0.164	0.70	-	-	-	-	-	-	0.118	0.90	-	-
Dfus	-	-	-	-	-1.084	0.05	-	-	-	-	-	-	-0.653	0.25	-	-
Dfjp	-	-	-	-	-0.035	0.87	-	-	-	-	-	-	-0.091	0.71	-	-
Dfn3	-	-	0.234	0.20	0.239	0.19	-	-	-	-	0.303	0.15	0.312	0.14	-	-
Dfot	-	-	-0.299	0.14	-0.298	0.14	-	-	-	-	-0.357	0.17	-0.355	0.17	-	-
Dfmn	-	-	-	-	-	-	-0.030	0.83	-	-	-	-	-	-	-0.038	0.82
Dfmj	-	-	-	-	-	-	-0.214	0.32	-	-	-	-	-	-	-0.486	0.07
Dfwh	-	-	-	-	-	-	0.396	0.12	-	-	-	-	-	-	0.315	0.29
Dboi	-0.114	0.45	-0.102	0.49	-0.119	0.41	-0.138	0.38	-0.217	0.23	-0.207	0.25	-0.218	0.25	-0.218	0.25
Dold	0.092	0.26	0.104	0.19	0.123	0.13	0.090	0.27	-0.056	0.61	-0.035	0.75	-0.021	0.85	-0.064	0.57
Dlarge	0.272	0.05	0.263	0.05	0.275	0.04	0.278	0.05	0.296	0.13	0.286	0.14	0.279	0.15	0.284	0.15
F-test	10.75	0.00	8.62	0.00	7.33	0.00	8.32	0.00	2.20	0.04	2.24	0.02	1.88	0.05	2.08	0.04
White	39.07	0.02	62.68	0.00	68.57	0.01	45.76	0.04	60.46	0.00	100.31	0.00	112.24	0.00	71.17	0.00
Adj. R-sq.	0.073	-	0.076	-	0.079	-	0.073	-	0.019	-	0.026	-	0.023	-	0.023	-
Obs.	743	-	743	-	743	-	743	-	368	-	368	-	368	-	368	-
LEATHER & FOOTWEAR																
Constant	3.941	0.00	3.935	0.00	3.936	0.00	3.946	0.00	3.816	0.00	3.822	0.00	3.830	0.00	3.812	0.00
ln(EN/E)	0.099	0.10	0.097	0.11	0.098	0.11	0.098	0.11	-0.080	0.48	-0.079	0.49	-0.073	0.53	-0.083	0.47
ln(K/E)	0.063	0.23	0.065	0.22	0.066	0.22	0.060	0.25	0.083	0.25	0.083	0.26	0.085	0.25	0.083	0.26
Df	-0.163	0.43	-	-	-	-	-	-	-0.144	0.56	-	-	-	-	-	-
Dftr	-	-	-0.126	0.70	-	-	-	-	-	-	-0.223	0.52	-	-	-	-
Dfeu	-	-	-	-	0.200	0.81	-	-	-	-	-	-	-0.088	0.91	-	-
Dfus	-	-	-	-	-0.349	0.67	-	-	-	-	-	-	-0.584	0.48	-	-
Dfjp	-	-	-	-	-0.151	0.70	-	-	-	-	-	-	-0.173	0.68	-	-
Dfn3	-	-	-0.283	0.29	-0.280	0.30	-	-	-	-	-0.094	0.77	-0.091	0.78	-	-
Dfot	-	-	0.192	0.74	0.191	0.74	-	-	-	-	-0.048	0.95	-0.040	0.96	-	-
Dfmn	-	-	-	-	-	-	-0.344	0.23	-	-	-	-	-	-	-0.070	0.84
Dfmj	-	-	-	-	-	-	0.036	0.91	-	-	-	-	-	-	-0.037	0.92
Dfwh	-	-	-	-	-	-	-0.095	0.83	-	-	-	-	-	-	-0.392	0.37
Dboi	-0.101	0.62	-0.091	0.66	-0.101	0.63	-0.107	0.60	-0.430	0.06	-0.441	0.06	-0.453	0.05	-0.435	0.06
Dold	-0.084	0.62	-0.087	0.61	-0.085	0.62	-0.081	0.64	-0.075	0.77	-0.079	0.76	-0.074	0.78	-0.080	0.76
Dlarge	-0.060	0.85	-0.081	0.80	-0.060	0.85	-0.034	0.92	-0.151	0.73	-0.128	0.77	-0.096	0.83	-0.202	0.65
F-test	1.03	0.41	0.86	0.55	0.71	0.72	0.88	0.53	1.11	0.36	0.84	0.57	0.68	0.74	0.89	0.53
White	19.26	0.69	20.96	0.91	22.03	0.96	28.97	0.67	18.46	0.68	19.65	0.88	21.51	0.94	21.00	0.91
Adj. R-sq.	0.001	-	-0.004	-	-0.010	-	-0.003	-	0.005	-	-0.010	-	-0.025	-	-0.007	-
Obs.	289	-	289	-	289	-	289	-	132	-	132	-	132	-	132	-

Appendix Table 3 (continued, 3/7)

Independent Variables, Indicator	All plants								Large plants with Output >=25 million baht							
	Equation 1		Equation 2		Equation 3		Equation 4		Equation 1		Equation 2		Equation 3		Equation 4	
	Coeffi-cients, etc.	Sig-nifi-cance	Coeffi-cients, etc.	Sig-nifi-cance	Coeffi-cients, etc.	Sig-nifi-cance	Coeffi-cients, etc.	Sig-nifi-cance	Coeffi-cients, etc.	Sig-nifi-cance	Coeffi-cients, etc.	Sig-nifi-cance	Coeffi-cients, etc.	Sig-nifi-cance	Coeffi-cients, etc.	Sig-nifi-cance
CHEMICALS & PRODUCTS																
Constant	3.403	0.00	3.416	0.00	3.419	0.00	3.397	0.00	3.687	0.00	3.711	0.00	3.713	0.00	3.672	0.00
ln(EN/E)	0.117	0.04	0.116	0.05	0.113	0.05	0.119	0.04	0.146	0.06	0.140	0.07	0.137	0.08	0.153	0.05
ln(K/E)	0.239	0.00	0.235	0.00	0.233	0.00	0.242	0.00	0.201	0.00	0.192	0.00	0.189	0.00	0.207	0.00
Df	0.436	0.00	-	-	-	-	-	-	0.390	0.01	-	-	-	-	-	-
Dftr	-	-	0.506	0.00	-	-	-	-	-	-	0.516	0.01	-	-	-	-
Dfeu	-	-	-	-	0.724	0.03	-	-	-	-	-	-	0.682	0.05	-	-
Dfus	-	-	-	-	0.489	0.13	-	-	-	-	-	-	0.437	0.22	-	-
Dfjp	-	-	-	-	0.450	0.02	-	-	-	-	-	-	0.489	0.03	-	-
Dfn3	-	-	0.395	0.08	0.398	0.08	-	-	-	-	0.304	0.24	0.307	0.24	-	-
Dfot	-	-	0.352	0.22	0.355	0.22	-	-	-	-	0.259	0.39	0.260	0.39	-	-
Dfmn	-	-	-	-	-	-	0.340	0.03	-	-	-	-	-	-	0.290	0.11
Dfmj	-	-	-	-	-	-	0.450	0.07	-	-	-	-	-	-	0.344	0.20
Dfwh	-	-	-	-	-	-	0.815	0.00	-	-	-	-	-	-	0.769	0.01
Dboi	-0.429	0.01	-0.441	0.01	-0.440	0.01	-0.420	0.02	-0.449	0.02	-0.469	0.01	-0.464	0.01	-0.433	0.03
Dold	0.142	0.22	0.141	0.22	0.140	0.23	0.144	0.21	0.201	0.15	0.197	0.16	0.201	0.16	0.209	0.14
Dlarge	1.132	0.00	1.129	0.00	1.121	0.00	1.098	0.00	1.148	0.00	1.137	0.00	1.129	0.00	1.130	0.00
F-test	16.40	0.00	12.37	0.00	9.93	0.00	12.63	0.00	9.51	0.00	7.33	0.00	5.88	0.00	7.44	0.00
White	13.24	0.95	17.39	0.99	26.35	0.99	17.94	0.99	13.20	0.95	16.99	0.99	26.86	0.99	17.45	0.99
Adj. R-sq.	0.153	-	0.151	-	0.149	-	0.154	-	0.120	-	0.120	-	0.116	-	0.121	-
Obs.	512	-	512	-	512	-	512	-	374	-	374	-	374	-	374	-
RUBBER PRODUCTS																
Constant	3.499	0.00	3.475	0.00	3.482	0.00	3.463	0.00	3.707	0.00	3.700	0.00	3.701	0.00	3.683	0.00
ln(EN/E)	0.145	0.13	0.157	0.11	0.160	0.10	0.134	0.17	0.197	0.09	0.220	0.07	0.220	0.07	0.188	0.11
ln(K/E)	0.211	0.00	0.228	0.00	0.224	0.00	0.216	0.00	0.260	0.00	0.279	0.00	0.277	0.00	0.262	0.00
Df	-0.301	0.16	-	-	-	-	-	-	-0.335	0.14	-	-	-	-	-	-
Dftr	-	-	-0.591	0.08	-	-	-	-	-	-	-0.562	0.12	-	-	-	-
Dfeu	-	-	-	-	0.065	0.94	-	-	-	-	-	-	-0.172	0.85	-	-
Dfus	-	-	-	-	0.329	0.69	-	-	-	-	-	-	0.152	0.86	-	-
Dfjp	-	-	-	-	-0.846	0.02	-	-	-	-	-	-	-0.759	0.06	-	-
Dfn3	-	-	-0.068	0.84	-0.074	0.83	-	-	-	-	-0.027	0.94	-0.031	0.94	-	-
Dfot	-	-	-0.364	0.23	-0.373	0.22	-	-	-	-	-0.473	0.14	-0.478	0.14	-	-
Dfmn	-	-	-	-	-	-	-0.223	0.35	-	-	-	-	-	-	-0.270	0.30
Dfmj	-	-	-	-	-	-	-0.498	0.23	-	-	-	-	-	-	-0.424	0.33
Dfwh	-	-	-	-	-	-	-0.443	0.33	-	-	-	-	-	-	-0.517	0.27
Dboi	-0.016	0.94	0.004	0.99	0.035	0.87	-0.012	0.96	-0.202	0.42	-0.195	0.44	-0.172	0.50	-0.194	0.43
Dold	0.147	0.44	0.142	0.46	0.153	0.42	0.134	0.49	0.029	0.90	0.025	0.91	0.037	0.87	0.019	0.93
Dlarge	1.213	0.00	1.265	0.00	1.244	0.00	1.244	0.00	1.267	0.00	1.270	0.00	1.253	0.00	1.260	0.00
F-test	4.23	0.00	3.41	0.00	2.99	0.00	3.22	0.00	4.46	0.00	3.57	0.00	2.98	0.00	3.35	0.00
White	20.84	0.59	33.38	0.55	32.24	0.83	32.64	0.53	18.86	0.71	29.42	0.69	31.55	0.83	30.85	0.62
Adj. R-sq.	0.064	-	0.064	-	0.066	-	0.059	-	0.087	-	0.087	-	0.083	-	0.080	-
Obs.	284	-	284	-	284	-	284	-	218	-	218	-	218	-	218	-

Appendix Table 3 (continued, 4/7)

Independent Variables, Indicator	All plants								Large plants with Output >=25 million baht							
	Equation 1		Equation 2		Equation 3		Equation 4		Equation 1		Equation 2		Equation 3		Equation 4	
	Coeffi-cients, etc.	Sig-nifi-cance	Coeffi-cients, etc.	Sig-nifi-cance	Coeffi-cients, etc.	Sig-nifi-cance	Coeffi-cients, etc.	Sig-nifi-cance	Coeffi-cients, etc.	Sig-nifi-cance	Coeffi-cients, etc.	Sig-nifi-cance	Coeffi-cients, etc.	Sig-nifi-cance	Coeffi-cients, etc.	Sig-nifi-cance
PLASTICS & PRODUCTS																
Constant	3.431	0.00	3.448	0.00	3.456	0.00	3.431	0.00	3.382	0.00	3.424	0.00	3.454	0.00	3.363	0.00
ln(EN/E)	0.141	0.00	0.144	0.00	0.147	0.00	0.140	0.00	0.199	0.00	0.203	0.00	0.209	0.00	0.192	0.00
ln(K/E)	0.139	0.00	0.136	0.00	0.136	0.00	0.137	0.00	0.196	0.00	0.188	0.00	0.183	0.00	0.196	0.00
Df	-0.014	0.92	-	-	-	-	-	-	0.001	0.99	-	-	-	-	-	-
Dftr	-	-	0.081	0.67	-	-	-	-	-	-	0.075	0.70	-	-	-	-
Dfeu	-	-	-	-	-0.258	0.62	-	-	-	-	-	-	-0.474	0.45	-	-
Dfus	-	-	-	-	0.315	0.60	-	-	-	-	-	-	-0.234	0.83	-	-
Dfjp	-	-	-	-	0.102	0.55	-	-	-	-	-	-	0.134	0.51	-	-
Dfn3	-	-	-0.067	0.74	-0.063	0.73	-	-	-	-	0.052	0.82	0.057	0.81	-	-
Dfot	-	-	-0.365	0.25	-0.365	0.18	-	-	-	-	-0.475	0.11	-0.475	0.11	-	-
Dfmn	-	-	-	-	-	-	0.001	0.99	-	-	-	-	-	-	0.012	0.95
Dfmj	-	-	-	-	-	-	0.092	0.68	-	-	-	-	-	-	0.132	0.61
Dfwh	-	-	-	-	-	-	-0.229	0.35	-	-	-	-	-	-	-0.271	0.37
Dboi	-0.295	0.09	-0.316	0.07	-0.330	0.02	-0.257	0.07	-0.080	0.64	-0.105	0.55	-0.121	0.50	-0.034	0.85
Dold	0.229	0.02	0.240	0.02	0.243	0.02	0.228	0.02	0.206	0.12	0.219	0.10	0.224	0.09	0.207	0.12
Dlarge	0.534	0.01	0.556	0.00	0.557	0.01	0.525	0.01	0.366	0.16	0.440	0.10	0.439	0.10	0.353	0.18
F-test	7.31	0.00	5.78	0.00	4.67	0.00	5.63	0.00	5.10	0.00	4.20	0.00	3.45	0.00	3.97	0.00
White	38.17	0.02	51.59	0.04	52.61	0.13	45.25	0.11	33.42	0.07	41.12	0.19	42.14	0.30	39.44	0.28
Adj. R-sq.	0.059	-	0.060	-	0.057	-	0.058	-	0.070	-	0.072	-	0.069	-	0.068	-
Obs.	604	-	604	-	604	-	604	-	329	-	329	-	329	-	329	-
NON-METALLIC MINERAL PRODUCTS																
Constant	3.208	0.00	3.212	0.00	3.215	0.00	3.206	0.00	3.456	0.00	3.451	0.00	3.464	0.00	3.456	0.00
ln(EN/E)	0.130	0.00	0.134	0.00	0.134	0.00	0.130	0.00	-0.059	0.41	-0.048	0.51	-0.047	0.53	-0.060	0.40
ln(K/E)	0.297	0.00	0.297	0.00	0.297	0.00	0.298	0.00	0.260	0.00	0.264	0.00	0.262	0.00	0.259	0.00
Df	0.017	0.93	-	-	-	-	-	-	-0.207	0.37	-	-	-	-	-	-
Dftr	-	-	-0.099	0.73	-	-	-	-	-	-	-0.288	0.38	-	-	-	-
Dfeu	-	-	-	-	0.185	0.65	-	-	-	-	-	-	-0.064	0.90	-	-
Dfus	-	-	-	-	-1.348	0.02	-	-	-	-	-	-	-1.379	0.07	-	-
Dfjp	-	-	-	-	-0.153	0.70	-	-	-	-	-	-	-0.295	0.49	-	-
Dfn3	-	-	0.344	0.08	0.343	0.08	-	-	-	-	-0.001	1.00	-0.001	1.00	-	-
Dfot	-	-	-0.860	0.30	-0.883	0.28	-	-	-	-	-0.896	0.49	-0.914	0.49	-	-
Dfmn	-	-	-	-	-	-	-0.007	0.97	-	-	-	-	-	-	-0.194	0.45
Dfmj	-	-	-	-	-	-	0.164	0.59	-	-	-	-	-	-	-0.194	0.64
Dfwh	-	-	-	-	-	-	-0.234	0.60	-	-	-	-	-	-	-0.612	0.23
Dboi	-0.587	0.00	-0.595	0.00	-0.611	0.00	-0.593	0.00	-0.633	0.01	-0.626	0.01	-0.653	0.01	-0.620	0.01
Dold	-0.014	0.87	-0.003	0.97	-0.006	0.95	-0.015	0.87	-0.081	0.56	-0.061	0.67	-0.065	0.64	-0.083	0.55
Dlarge	0.821	0.04	0.858	0.03	0.912	0.02	0.816	0.04	0.415	0.41	0.407	0.42	0.477	0.35	0.409	0.42
F-test	28.70	0.00	22.11	0.00	18.00	0.00	21.53	0.00	6.96	0.00	5.34	0.00	4.45	0.00	5.22	0.00
White	92.78	0.00	100.72	0.00	113.27	0.00	96.46	0.00	60.74	0.00	72.91	0.00	84.66	0.00	65.12	0.00
Adj. R-sq.	0.147	-	0.149	-	0.150	-	0.146	-	0.082	-	0.080	-	0.080	-	0.078	-
Obs.	964	-	964	-	964	-	964	-	400	-	400	-	400	-	400	-

Appendix Table 3 (continued, 5/7)

Independent Variables, Indicator	All plants								Large plants with Output >=25 million baht							
	Equation 1		Equation 2		Equation 3		Equation 4		Equation 1		Equation 2		Equation 3		Equation 4	
	Coefficients, etc.	Significance	Coefficients, etc.	Significance	Coefficients, etc.	Significance	Coefficients, etc.	Significance	Coefficients, etc.	Significance	Coefficients, etc.	Significance	Coefficients, etc.	Significance	Coefficients, etc.	Significance
METAL PRODUCTS																
Constant	3.603	0.00	3.611	0.00	3.609	0.00	3.609	0.00	3.986	0.00	3.981	0.00	3.979	0.00	3.991	0.00
ln(EN/E)	0.111	0.00	0.109	0.00	0.110	0.00	0.116	0.00	0.116	0.02	0.111	0.03	0.111	0.03	0.125	0.01
ln(K/E)	0.202	0.00	0.197	0.00	0.199	0.00	0.202	0.00	0.217	0.00	0.214	0.00	0.214	0.00	0.220	0.00
Df	0.319	0.01	-	-	-	-	-	-	0.283	0.05	-	-	-	-	-	-
Dftr	-	-	0.410	0.04	-	-	-	-	-	-	0.316	0.16	-	-	-	-
Dfeu	-	-	-	-	-0.063	0.88	-	-	-	-	-	-	-0.290	0.71	-	-
Dfus	-	-	-	-	0.598	0.17	-	-	-	-	-	-	0.901	0.16	-	-
Dfjp	-	-	-	-	0.468	0.01	-	-	-	-	-	-	0.352	0.14	-	-
Dfn3	-	-	0.159	0.37	0.163	0.31	-	-	-	-	0.197	0.35	0.199	0.34	-	-
Dfot	-	-	1.064	0.00	1.067	0.00	-	-	-	-	0.870	0.00	0.873	0.00	-	-
Dfmn	-	-	-	-	-	-	0.274	0.06	-	-	-	-	-	-	0.254	0.15
Dfmj	-	-	-	-	-	-	0.181	0.55	-	-	-	-	-	-	0.115	0.72
Dfwh	-	-	-	-	-	-	0.628	0.04	-	-	-	-	-	-	0.527	0.05
Dboi	-0.311	0.07	-0.358	0.04	-0.356	0.02	-0.356	0.07	-0.571	0.00	-0.604	0.00	-0.603	0.00	-0.594	0.00
Dold	0.004	0.96	-0.002	0.98	0.001	0.99	0.010	0.90	-0.186	0.13	-0.189	0.12	-0.183	0.12	-0.176	0.15
Dlarge	0.396	0.07	0.387	0.07	0.351	0.08	0.434	0.05	0.108	0.72	0.099	0.74	0.079	0.78	0.138	0.65
F-test	18.14	0.00	14.66	0.00	11.90	0.00	13.92	0.00	7.83	0.00	6.47	0.00	5.51	0.00	6.06	0.00
White	43.16	0.01	50.48	0.04	59.51	0.07	62.95	0.00	49.66	0.00	61.10	0.00	72.75	0.00	67.41	0.00
Adj. R-sq.	0.110	-	0.116	-	0.116	-	0.111	-	0.099	-	0.105	-	0.108	-	0.098	-
Obs.	831	-	831	-	831	-	831	-	375	-	375	-	375	-	375	-
GENERAL MACHINERY																
Constant	3.447	0.00	3.442	0.00	3.423	0.00	3.440	0.00	3.608	0.00	3.586	0.00	3.557	0.00	3.594	0.00
ln(EN/E)	0.105	0.02	0.107	0.01	0.099	0.02	0.102	0.02	0.120	0.09	0.127	0.07	0.111	0.11	0.109	0.13
ln(K/E)	0.270	0.00	0.268	0.00	0.269	0.00	0.270	0.00	0.313	0.00	0.320	0.00	0.321	0.00	0.310	0.00
Df	0.182	0.16	-	-	-	-	-	-	0.080	0.63	-	-	-	-	-	-
Dftr	-	-	0.109	0.49	-	-	-	-	-	-	-0.043	0.82	-	-	-	-
Dfeu	-	-	-	-	1.232	0.00	-	-	-	-	-	-	1.100	0.02	-	-
Dfus	-	-	-	-	0.116	0.86	-	-	-	-	-	-	-0.166	0.82	-	-
Dfjp	-	-	-	-	-0.048	0.77	-	-	-	-	-	-	-0.187	0.35	-	-
Dfn3	-	-	0.466	0.02	0.443	0.03	-	-	-	-	0.363	0.16	0.335	0.19	-	-
Dfot	-	-	0.475	0.13	0.458	0.15	-	-	-	-	0.215	0.57	0.197	0.60	-	-
Dfmn	-	-	-	-	-	-	0.251	0.07	-	-	-	-	-	-	0.203	0.26
Dfmj	-	-	-	-	-	-	-0.112	0.65	-	-	-	-	-	-	-0.278	0.33
Dfwh	-	-	-	-	-	-	0.065	0.81	-	-	-	-	-	-	-0.091	0.76
Dboi	-0.061	0.70	-0.069	0.66	-0.036	0.82	-0.003	0.99	-0.254	0.18	-0.236	0.20	-0.214	0.24	-0.177	0.38
Dold	0.030	0.76	0.047	0.63	0.038	0.70	0.025	0.80	0.040	0.77	0.062	0.66	0.045	0.75	0.034	0.81
Dlarge	0.071	0.78	0.096	0.71	0.201	0.44	0.100	0.70	-0.041	0.89	-0.036	0.91	0.053	0.86	-0.016	0.96
F-test	12.94	0.00	10.39	0.00	9.40	0.00	9.97	0.00	6.35	0.00	5.08	0.00	4.89	0.00	5.16	0.00
White	13.48	0.94	19.17	0.98	20.09	1.00	16.74	1.00	21.00	0.58	24.98	0.87	26.49	0.96	27.24	0.82
Adj. R-sq.	0.130	-	0.136	-	0.149	-	0.130	-	0.110	-	0.112	-	0.131	-	0.114	-
Obs.	480	-	480	-	480	-	480	-	260	-	260	-	260	-	260	-

Appendix Table 3 (continued, 6/7)

Independent Variables, Indicator	All plants								Large plants with Output >=25 million baht							
	Equation 1		Equation 2		Equation 3		Equation 4		Equation 1		Equation 2		Equation 3		Equation 4	
	Coefficients, etc.	Significance	Coefficients, etc.	Significance	Coefficients, etc.	Significance	Coefficients, etc.	Significance	Coefficients, etc.	Significance	Coefficients, etc.	Significance	Coefficients, etc.	Significance	Coefficients, etc.	Significance
ELECTRIC MACHINERY, ETC. (INCLUDES OFFICE & COMPUTING MACHINERY, PRECISION MACHINERY)																
Constant	3.517	0.00	3.501	0.00	3.513	0.00	3.496	0.00	3.666	0.00	3.639	0.00	3.664	0.00	3.623	0.00
ln(EN/E)	0.100	0.02	0.098	0.02	0.096	0.03	0.093	0.03	0.119	0.07	0.116	0.08	0.115	0.05	0.099	0.09
ln(K/E)	0.269	0.00	0.274	0.00	0.264	0.00	0.270	0.00	0.340	0.00	0.347	0.00	0.334	0.00	0.344	0.00
Df	-0.052	0.68	-	-	-	-	-	-	-0.319	0.04	-	-	-	-	-	-
Dftr	-	-	-0.143	0.38	-	-	-	-	-	-	-0.364	0.03	-	-	-	-
Dfeu	-	-	-	-	-0.060	0.92	-	-	-	-	-	-	-0.364	0.55	-	-
Dfus	-	-	-	-	-0.585	0.09	-	-	-	-	-	-	-0.803	0.03	-	-
Dfjp	-	-	-	-	-0.096	0.54	-	-	-	-	-	-	-0.296	0.08	-	-
Dfn3	-	-	0.000	1.00	-0.004	0.98	-	-	-	-	-0.273	0.15	-0.269	0.11	-	-
Dfot	-	-	-0.042	0.86	-0.039	0.87	-	-	-	-	-0.402	0.16	-0.392	0.11	-	-
Dfmn	-	-	-	-	-	-	0.031	0.84	-	-	-	-	-	-	-0.193	0.30
Dfmj	-	-	-	-	-	-	-0.072	0.66	-	-	-	-	-	-	-0.401	0.03
Dfwh	-	-	-	-	-	-	-0.225	0.17	-	-	-	-	-	-	-0.538	0.00
Dboi	-0.369	0.00	-0.337	0.01	-0.320	0.01	-0.327	0.02	-0.376	0.01	-0.364	0.01	-0.353	0.01	-0.312	0.04
Dold	0.102	0.34	0.101	0.34	0.122	0.26	0.090	0.39	-0.080	0.61	-0.075	0.63	-0.048	0.74	-0.120	0.40
Dlarge	0.728	0.00	0.752	0.00	0.834	0.00	0.767	0.00	0.534	0.02	0.552	0.01	0.655	0.01	0.572	0.02
F-test	14.83	0.00	11.24	0.00	9.35	0.00	11.44	0.00	12.10	0.00	9.16	0.00	7.66	0.00	9.57	0.00
White	41.15	0.01	66.51	0.00	145.36	0.00	62.48	0.00	27.88	0.22	45.09	0.12	132.72	0.00	49.46	0.05
Adj. R-sq.	0.133	-	0.132	-	0.134	-	0.134	-	0.149	-	0.147	-	0.149	-	0.153	-
Obs.	540	-	540	-	540	-	540	-	380	-	380	-	380	-	380	-
MOTOR VEHICLES																
Constant	3.614	0.00	3.635	0.00	3.630	0.00	3.617	0.00	3.593	0.00	3.554	0.00	3.544	0.00	3.587	0.00
ln(EN/E)	0.074	0.13	0.075	0.12	0.074	0.12	0.074	0.13	0.112	0.42	0.095	0.50	0.094	0.51	0.111	0.44
ln(K/E)	0.208	0.00	0.204	0.00	0.204	0.00	0.208	0.00	0.371	0.00	0.373	0.00	0.376	0.00	0.373	0.00
Df	0.070	0.71	-	-	-	-	-	-	-0.247	0.26	-	-	-	-	-	-
Dftr	-	-	0.268	0.24	-	-	-	-	-	-	-0.126	0.62	-	-	-	-
Dfeu	-	-	-	-	-0.311	0.34	-	-	-	-	-	-	-0.866	0.01	-	-
Dfus	-	-	-	-	1.222	0.07	-	-	-	-	-	-	0.741	0.35	-	-
Dfjp	-	-	-	-	0.209	0.38	-	-	-	-	-	-	-0.176	0.49	-	-
Dfn3	-	-	-0.444	0.47	-0.451	0.46	-	-	-	-	-1.157	0.14	-1.171	0.14	-	-
Dfot	-	-	-0.271	0.64	-0.278	0.64	-	-	-	-	0.126	0.85	0.122	0.86	-	-
Dfmn	-	-	-	-	-	-	0.053	0.80	-	-	-	-	-	-	-0.249	0.31
Dfmj	-	-	-	-	-	-	0.073	0.82	-	-	-	-	-	-	-0.211	0.53
Dfwh	-	-	-	-	-	-	0.254	0.24	-	-	-	-	-	-	-0.423	0.08
Dboi	0.319	0.14	0.219	0.35	0.248	0.29	0.324	0.14	0.075	0.77	-0.001	1.00	0.028	0.92	0.067	0.80
Dold	0.155	0.12	0.150	0.13	0.144	0.15	0.155	0.12	0.088	0.57	0.068	0.66	0.055	0.72	0.082	0.59
Dlarge	1.652	0.00	1.552	0.00	1.585	0.00	1.661	0.00	1.698	0.00	1.655	0.00	1.671	0.00	1.696	0.00
F-test	28.52	0.00	21.94	0.00	17.98	0.00	21.31	0.00	15.67	0.00	12.23	0.00	10.14	0.00	11.64	0.00
White	43.56	0.00	66.09	0.00	65.99	0.00	58.11	0.00	46.97	0.00	60.86	0.00	62.02	0.00	60.41	0.00
Adj. R-sq.	0.267	-	0.270	-	0.272	-	0.264	-	0.313	-	0.318	-	0.321	-	0.306	-
Obs.	455	-	455	-	455	-	455	-	194	-	194	-	194	-	194	-

Appendix Table 3 (continued, 7/7)

Independent Variables, Indicator	All plants								Large plants with Output >=25 million baht							
	Equation 1		Equation 2		Equation 3		Equation 4		Equation 1		Equation 2		Equation 3		Equation 4	
	Coeffi-cients, etc.	Sig-nifi-cance	Coeffi-cients, etc.	Sig-nifi-cance	Coeffi-cients, etc.	Sig-nifi-cance	Coeffi-cients, etc.	Sig-nifi-cance	Coeffi-cients, etc.	Sig-nifi-cance	Coeffi-cients, etc.	Sig-nifi-cance	Coeffi-cients, etc.	Sig-nifi-cance	Coeffi-cients, etc.	Sig-nifi-cance
FURNITURE																
Constant	3.440	0.00	3.442	0.00	3.446	0.00	3.442	0.00	3.801	0.00	3.817	0.00	3.855	0.00	3.798	0.00
ln(EN/E)	0.274	0.00	0.276	0.00	0.277	0.00	0.275	0.00	0.056	0.54	0.066	0.48	0.076	0.41	0.054	0.56
ln(K/E)	0.403	0.00	0.405	0.00	0.404	0.00	0.403	0.00	0.213	0.00	0.215	0.00	0.211	0.00	0.211	0.00
Df	-0.210	0.28	-	-	-	-	-	-	-0.333	0.14	-	-	-	-	-	-
Dftr	-	-	-0.144	0.58	-	-	-	-	-	-	-0.272	0.37	-	-	-	-
Dfeu	-	-	-	-	0.049	0.87	-	-	-	-	-	-	-0.473	0.55	-	-
Dfus	-	-	-	-	-0.589	0.60	-	-	-	-	-	-	-0.855	0.29	-	-
Dfjp	-	-	-	-	-0.106	0.73	-	-	-	-	-	-	-0.121	0.74	-	-
Dfn3	-	-	-0.225	0.44	-0.227	0.44	-	-	-	-	-0.271	0.46	-0.264	0.47	-	-
Dfot	-	-	-0.804	0.26	-0.803	0.26	-	-	-	-	-0.866	0.09	-0.868	0.09	-	-
Dfmn	-	-	-	-	-	-	-0.258	0.25	-	-	-	-	-	-	-0.561	0.03
Dfmj	-	-	-	-	-	-	-0.026	0.96	-	-	-	-	-	-	0.412	0.36
Dfwh	-	-	-	-	-	-	-0.150	0.68	-	-	-	-	-	-	-0.145	0.77
Dboi	-0.610	0.00	-0.588	0.00	-0.595	0.00	-0.630	0.00	-0.706	0.00	-0.726	0.00	-0.763	0.00	-0.767	0.00
Dold	-0.295	0.02	-0.293	0.02	-0.292	0.02	-0.291	0.02	0.101	0.58	0.108	0.56	0.110	0.55	0.143	0.43
Dlarge	0.983	0.00	0.990	0.00	1.002	0.00	0.978	0.00	0.556	0.08	0.559	0.09	0.589	0.08	0.519	0.10
F-test	36.95	0.00	28.05	0.00	22.40	0.00	27.64	0.00	4.76	0.00	3.76	0.00	3.07	0.00	4.14	0.00
White	57.72	0.00	67.00	0.00	69.59	0.00	63.74	0.00	22.55	0.49	28.84	0.72	29.51	0.84	24.53	0.86
Adj. R-sq.	0.319	-	0.320	-	0.317	-	0.317	-	0.105	-	0.103	-	0.097	-	0.116	-
Obs.	461	-	461	-	461	-	461	-	193	-	193	-	193	-	193	-
JEWELRY																
Constant	3.747	0.00	3.758	0.00	3.763	0.00	3.746	0.00	4.292	0.00	4.181	0.00	4.177	0.00	4.269	0.00
ln(EN/E)	0.151	0.03	0.154	0.02	0.152	0.03	0.151	0.03	0.161	0.16	0.148	0.19	0.138	0.23	0.158	0.17
ln(K/E)	0.247	0.00	0.247	0.00	0.242	0.00	0.248	0.00	0.226	0.00	0.257	0.00	0.251	0.00	0.232	0.00
Df	0.333	0.04	-	-	-	-	-	-	-0.026	0.90	-	-	-	-	-	-
Dftr	-	-	0.390	0.02	-	-	-	-	-	-	-0.141	0.54	-	-	-	-
Dfeu	-	-	-	-	0.281	0.25	-	-	-	-	-	-	-0.282	0.33	-	-
Dfus	-	-	-	-	0.455	0.13	-	-	-	-	-	-	-0.027	0.93	-	-
Dfjp	-	-	-	-	0.608	0.10	-	-	-	-	-	-	0.004	0.99	-	-
Dfn3	-	-	0.034	0.91	0.036	0.92	-	-	-	-	-0.286	0.47	-0.283	0.47	-	-
Dfot	-	-	0.365	0.16	0.366	0.11	-	-	-	-	0.300	0.26	0.297	0.27	-	-
Dfmn	-	-	-	-	-	-	0.340	0.07	-	-	-	-	-	-	0.012	0.96
Dfmj	-	-	-	-	-	-	0.334	0.22	-	-	-	-	-	-	-0.048	0.88
Dfwh	-	-	-	-	-	-	0.311	0.26	-	-	-	-	-	-	-0.145	0.66
Dboi	-0.157	0.40	-0.179	0.37	-0.184	0.34	-0.153	0.44	0.000	1.00	0.015	0.94	0.011	0.96	0.023	0.91
Dold	-0.075	0.70	-0.083	0.72	-0.082	0.68	-0.078	0.69	0.141	0.52	0.109	0.62	0.109	0.62	0.128	0.57
Dlarge	1.820	0.00	1.852	0.00	1.870	0.00	1.819	0.00	1.705	0.00	1.685	0.00	1.718	0.00	1.712	0.00
F-test	14.43	0.00	10.89	0.00	8.73	0.00	10.70	0.00	6.51	0.00	5.34	0.00	4.28	0.00	4.81	0.00
White	29.01	0.18	49.56	0.04	52.63	0.15	39.75	0.19	11.96	0.96	17.43	0.99	20.87	1.00	16.14	0.99
Adj. R-sq.	0.314	-	0.310	-	0.305	-	0.306	-	0.252	-	0.262	-	0.251	-	0.237	-
Obs.	177	-	177	-	177	-	177	-	99	-	99	-	99	-	99	-

Note: Heteroscedasticity-consistent standard errors used if White is significant at 0.05 or less.

- = not relevant or no plants in this category; n<30 = sample size smaller than 30.

Appendix Table 4: Estimates of Compensation per Hour (dependent variable = ln(W/E)), 1996

Independent Variables, Indicator	All plants								Large plants with Output >=25 million baht							
	Equation 5		Equation 6		Equation 7		Equation 8		Equation 5		Equation 6		Equation 7		Equation 8	
	Coefficients, etc.	Significance	Coefficients, etc.	Significance	Coefficients, etc.	Significance	Coefficients, etc.	Significance	Coefficients, etc.	Significance	Coefficients, etc.	Significance	Coefficients, etc.	Significance	Coefficients, etc.	Significance
FOOD																
Constant	2.645	0.00	2.648	0.00	2.648	0.00	2.644	0.00	2.823	0.00	2.831	0.00	2.831	0.00	2.821	0.00
ln(EN/E)	0.122	0.00	0.122	0.00	0.122	0.00	0.122	0.00	0.109	0.00	0.107	0.00	0.107	0.00	0.110	0.00
ln(K/E)	0.122	0.00	0.121	0.00	0.121	0.00	0.122	0.00	0.092	0.00	0.089	0.00	0.088	0.00	0.093	0.00
Df	0.162	0.01	-	-	-	-	-	-	0.102	0.12	-	-	-	-	-	-
Dftr	-	-	0.185	0.02	-	-	-	-	-	-	0.148	0.07	-	-	-	-
Dfeu	-	-	-	-	0.173	0.35	-	-	-	-	-	-	0.072	0.68	-	-
Dfus	-	-	-	-	0.305	0.15	-	-	-	-	-	-	0.287	0.12	-	-
Dfjp	-	-	-	-	0.159	0.07	-	-	-	-	-	-	0.133	0.19	-	-
Dfn3	-	-	0.126	0.20	0.125	0.21	-	-	-	-	-0.022	0.85	-0.022	0.85	-	-
Dfot	-	-	0.130	0.38	0.130	0.38	-	-	-	-	0.207	0.19	0.207	0.19	-	-
Dfmn	-	-	-	-	-	-	0.153	0.02	-	-	-	-	-	-	0.079	0.28
Dfmj	-	-	-	-	-	-	0.224	0.12	-	-	-	-	-	-	0.268	0.07
Dfwh	-	-	-	-	-	-	0.128	0.37	-	-	-	-	-	-	0.026	0.89
Dboi	-0.041	0.54	-0.041	0.54	-0.039	0.56	-0.043	0.52	-0.037	0.59	-0.038	0.58	-0.038	0.58	-0.041	0.55
Dold	0.089	0.03	0.090	0.02	0.089	0.03	0.089	0.03	0.135	0.01	0.134	0.01	0.133	0.01	0.135	0.01
Dlarge	0.203	0.01	0.206	0.01	0.202	0.01	0.204	0.01	-0.007	0.94	-0.016	0.87	-0.016	0.87	-0.009	0.92
F-test	33.47	0.00	25.06	0.00	20.08	0.00	25.11	0.00	9.41	0.00	7.35	0.00	5.96	0.00	7.25	0.00
White	128.04	0.00	131.95	0.00	139.07	0.00	134.08	0.00	33.14	0.08	35.66	0.44	42.89	0.64	38.98	0.30
Adj. R-sq.	0.116	-	0.115	-	0.114	-	0.115	-	0.056	-	0.057	-	0.056	-	0.056	-
Obs.	1,483	-	1,483	-	1,483	-	1,483	-	844	-	844	-	844	-	844	-
TEXTILES																
Constant	3.142	0.00	3.143	0.00	3.134	0.00	3.149	0.00	3.499	0.00	3.511	0.00	3.501	0.00	3.507	0.00
ln(EN/E)	0.203	0.00	0.203	0.00	0.202	0.00	0.205	0.00	0.259	0.00	0.260	0.00	0.257	0.00	0.260	0.00
ln(K/E)	0.083	0.00	0.082	0.00	0.083	0.00	0.082	0.00	-0.009	0.78	-0.012	0.70	-0.012	0.70	-0.009	0.77
Df	0.017	0.83	-	-	-	-	-	-	0.044	0.61	-	-	-	-	-	-
Dftr	-	-	0.123	0.30	-	-	-	-	-	-	0.180	0.15	-	-	-	-
Dfeu	-	-	-	-	0.657	0.01	-	-	-	-	-	-	0.798	0.02	-	-
Dfus	-	-	-	-	0.217	0.51	-	-	-	-	-	-	0.337	0.26	-	-
Dfjp	-	-	-	-	0.015	0.90	-	-	-	-	-	-	0.087	0.51	-	-
Dfn3	-	-	0.007	0.94	0.001	0.99	-	-	-	-	0.012	0.91	0.011	0.91	-	-
Dfot	-	-	-0.146	0.59	-0.155	0.57	-	-	-	-	0.009	0.98	0.004	0.99	-	-
Dfmn	-	-	-	-	-	-	-0.053	0.51	-	-	-	-	-	-	-0.054	0.56
Dfmj	-	-	-	-	-	-	0.389	0.01	-	-	-	-	-	-	0.467	0.00
Dfwh	-	-	-	-	-	-	0.067	0.85	-	-	-	-	-	-	0.233	0.52
Dboi	-0.241	0.02	-0.276	0.01	-0.266	0.02	-0.277	0.01	-0.140	0.21	-0.190	0.11	-0.188	0.12	-0.191	0.10
Dold	-0.005	0.93	-0.002	0.97	0.002	0.97	-0.007	0.89	0.008	0.92	0.005	0.94	0.010	0.90	0.005	0.95
Dlarge	-0.153	0.23	-0.147	0.25	-0.124	0.33	-0.117	0.35	-0.090	0.60	-0.092	0.58	-0.069	0.68	-0.002	0.99
F-test	22.63	0.00	17.26	0.00	14.44	0.00	18.03	0.00	7.99	0.00	6.27	0.00	5.60	0.00	7.27	0.00
White	128.10	0.00	171.11	0.00	182.65	0.00	178.41	0.00	106.58	0.00	167.05	0.00	179.54	0.00	133.66	0.00
Adj. R-sq.	0.154	-	0.154	-	0.158	-	0.160	-	0.104	-	0.104	-	0.112	-	0.121	-
Obs.	716	-	716	-	716	-	716	-	364	-	364	-	364	-	364	-

Appendix Table 4 (continued, 2/7)

Independent Variables, Indicator	All plants								Large plants with Output >=25 million baht							
	Equation 5		Equation 6		Equation 7		Equation 8		Equation 5		Equation 6		Equation 7		Equation 8	
	Coefficients, etc.	Significance	Coefficients, etc.	Significance	Coefficients, etc.	Significance	Coefficients, etc.	Significance	Coefficients, etc.	Significance	Coefficients, etc.	Significance	Coefficients, etc.	Significance	Coefficients, etc.	Significance
APPAREL																
Constant	3.281	0.00	3.285	0.00	3.284	0.00	3.279	0.00	3.327	0.00	3.328	0.00	3.331	0.00	3.324	0.00
ln(EN/E)	0.132	0.00	0.133	0.00	0.133	0.00	0.132	0.00	0.096	0.00	0.095	0.00	0.096	0.00	0.096	0.00
ln(K/E)	0.084	0.00	0.084	0.00	0.083	0.00	0.085	0.00	0.081	0.00	0.082	0.00	0.081	0.00	0.082	0.00
Df	0.144	0.00	-	-	-	-	-	-	0.124	0.03	-	-	-	-	-	-
Dftr	-	-	0.165	0.06	-	-	-	-	-	-	0.101	0.21	-	-	-	-
Dfeu	-	-	-	-	0.187	0.31	-	-	-	-	-	-	0.147	0.32	-	-
Dfus	-	-	-	-	-0.353	0.27	-	-	-	-	-	-	-0.243	0.16	-	-
Dfjp	-	-	-	-	0.213	0.04	-	-	-	-	-	-	0.124	0.17	-	-
Dfn3	-	-	0.132	0.28	0.134	0.27	-	-	-	-	0.076	0.54	0.081	0.51	-	-
Dfot	-	-	0.080	0.46	0.081	0.45	-	-	-	-	0.121	0.08	0.122	0.08	-	-
Dfmn	-	-	-	-	-	-	0.101	0.14	-	-	-	-	-	-	0.096	0.10
Dfmj	-	-	-	-	-	-	0.233	0.09	-	-	-	-	-	-	0.119	0.41
Dfwh	-	-	-	-	-	-	0.475	0.03	-	-	-	-	-	-	0.447	0.01
Dboi	-0.077	0.34	-0.072	0.39	-0.083	0.32	-0.112	0.19	-0.165	0.14	-0.155	0.17	-0.159	0.16	-0.187	0.10
Dold	0.100	0.02	0.102	0.04	0.112	0.03	0.104	0.04	0.004	0.95	0.003	0.96	0.012	0.86	0.008	0.90
Dlarge	0.063	0.45	0.066	0.48	0.074	0.43	0.085	0.37	0.031	0.79	0.034	0.77	0.029	0.80	0.046	0.70
F-test	18.12	0.00	13.44	0.00	11.06	0.00	14.03	0.00	4.87	0.00	3.48	0.00	2.89	0.00	4.02	0.00
White	42.45	0.01	44.37	0.13	44.84	0.44	43.34	0.07	61.78	0.00	71.00	0.00	71.74	0.00	65.95	0.00
Adj. R-sq.	0.122	-	0.118	-	0.119	-	0.123	-	0.060	-	0.051	-	0.049	-	0.062	-
Obs.	743	-	743	-	743	-	743	-	368	-	368	-	368	-	368	-
LEATHER & FOOTWEAR																
Constant	3.517	0.00	3.517	0.00	3.519	0.00	3.518	0.00	3.415	0.00	3.408	0.00	3.412	0.00	3.438	0.00
ln(EN/E)	0.130	0.00	0.130	0.00	0.133	0.00	0.130	0.00	0.065	0.25	0.064	0.27	0.071	0.21	0.073	0.21
ln(K/E)	0.016	0.46	0.017	0.44	0.020	0.37	0.016	0.48	0.020	0.59	0.021	0.57	0.026	0.48	0.016	0.66
Df	0.126	0.25	-	-	-	-	-	-	0.159	0.20	-	-	-	-	-	-
Dftr	-	-	0.305	0.05	-	-	-	-	-	-	0.235	0.18	-	-	-	-
Dfeu	-	-	-	-	0.109	0.66	-	-	-	-	-	-	0.002	1.00	-	-
Dfus	-	-	-	-	-0.281	0.45	-	-	-	-	-	-	-0.407	0.31	-	-
Dfjp	-	-	-	-	0.477	0.00	-	-	-	-	-	-	0.452	0.03	-	-
Dfn3	-	-	0.019	0.89	0.022	0.88	-	-	-	-	0.137	0.39	0.142	0.37	-	-
Dfot	-	-	0.054	0.90	0.053	0.90	-	-	-	-	-0.111	0.78	-0.101	0.80	-	-
Dfmn	-	-	-	-	-	-	0.047	0.69	-	-	-	-	-	-	0.007	0.97
Dfmj	-	-	-	-	-	-	0.101	0.60	-	-	-	-	-	-	0.259	0.17
Dfwh	-	-	-	-	-	-	0.370	0.10	-	-	-	-	-	-	0.271	0.21
Dboi	-0.178	0.19	-0.163	0.24	-0.175	0.21	-0.182	0.18	-0.150	0.18	-0.142	0.22	-0.156	0.17	-0.147	0.20
Dold	0.103	0.14	0.101	0.16	0.102	0.16	0.108	0.13	0.211	0.10	0.214	0.10	0.225	0.08	0.222	0.09
Dlarge	-0.013	0.93	-0.037	0.79	-0.019	0.90	0.013	0.93	0.083	0.71	0.055	0.80	0.076	0.74	0.111	0.62
F-test	4.45	0.00	3.59	0.00	3.20	0.00	3.54	0.00	1.77	0.11	1.40	0.20	1.58	0.12	1.51	0.16
White	45.67	0.00	51.27	0.01	50.87	0.04	48.08	0.04	8.09	1.00	14.46	0.98	13.91	1.00	9.92	1.00
Adj. R-sq.	0.067	-	0.067	-	0.071	-	0.066	-	0.034	-	0.024	-	0.043	-	0.030	-
Obs.	289	-	289	-	289	-	289	-	132	-	132	-	132	-	132	-

Appendix Table 4 (continued, 3/7)

Independent Variables, Indicator	All plants								Large plants with Output >=25 million baht							
	Equation 5		Equation 6		Equation 7		Equation 8		Equation 5		Equation 6		Equation 7		Equation 8	
	Coeffi-cients, etc.	Sig-nifi-cance	Coeffi-cients, etc.	Sig-nifi-cance	Coeffi-cients, etc.	Sig-nifi-cance	Coeffi-cients, etc.	Sig-nifi-cance	Coeffi-cients, etc.	Sig-nifi-cance	Coeffi-cients, etc.	Sig-nifi-cance	Coeffi-cients, etc.	Sig-nifi-cance	Coeffi-cients, etc.	Sig-nifi-cance
CHEMICALS & PRODUCTS																
Constant	3.488	0.00	3.497	0.00	3.499	0.00	3.480	0.00	3.659	0.00	3.674	0.00	3.674	0.00	3.640	0.00
ln(EN/E)	0.207	0.00	0.205	0.00	0.202	0.00	0.206	0.00	0.248	0.00	0.242	0.00	0.239	0.00	0.249	0.00
ln(K/E)	0.070	0.01	0.066	0.01	0.064	0.02	0.072	0.01	0.061	0.04	0.054	0.07	0.053	0.08	0.066	0.03
Df	0.209	0.02	-	-	-	-	-	-	0.182	0.07	-	-	-	-	-	-
Dftr	-	-	0.308	0.01	-	-	-	-	-	-	0.297	0.02	-	-	-	-
Dfeu	-	-	-	-	0.462	0.07	-	-	-	-	-	-	0.435	0.10	-	-
Dfus	-	-	-	-	0.290	0.20	-	-	-	-	-	-	0.305	0.24	-	-
Dfjp	-	-	-	-	0.270	0.03	-	-	-	-	-	-	0.252	0.08	-	-
Dfn3	-	-	0.135	0.21	0.137	0.21	-	-	-	-	0.076	0.54	0.077	0.53	-	-
Dfot	-	-	0.160	0.33	0.162	0.33	-	-	-	-	0.122	0.45	0.123	0.45	-	-
Dfmn	-	-	-	-	-	-	0.127	0.17	-	-	-	-	-	-	0.087	0.43
Dfmj	-	-	-	-	-	-	0.346	0.04	-	-	-	-	-	-	0.297	0.10
Dfwh	-	-	-	-	-	-	0.385	0.02	-	-	-	-	-	-	0.369	0.04
Dboi	-0.280	0.02	-0.303	0.01	-0.302	0.01	-0.285	0.01	-0.350	0.01	-0.375	0.00	-0.374	0.00	-0.352	0.01
Dold	0.122	0.06	0.118	0.07	0.117	0.07	0.124	0.06	0.119	0.13	0.110	0.16	0.109	0.16	0.124	0.12
Dlarge	0.571	0.01	0.546	0.01	0.540	0.01	0.554	0.01	0.509	0.03	0.487	0.04	0.479	0.04	0.495	0.03
F-test	17.99	0.00	14.02	0.00	11.31	0.00	14.07	0.00	12.19	0.00	9.67	0.00	7.80	0.00	9.67	0.00
White	55.28	0.00	59.39	0.00	64.06	0.04	56.27	0.01	90.88	0.00	98.33	0.00	102.11	0.00	94.52	0.00
Adj. R-sq.	0.166	-	0.169	-	0.168	-	0.170	-	0.153	-	0.157	-	0.154	-	0.157	-
Obs.	512	-	512	-	512	-	512	-	374	-	374	-	374	-	374	-
RUBBER PRODUCTS																
Constant	2.820	0.00	2.826	0.00	2.817	0.00	2.795	0.00	2.876	0.00	2.884	0.00	2.867	0.00	2.854	0.00
ln(EN/E)	0.177	0.00	0.182	0.00	0.182	0.00	0.168	0.01	0.198	0.00	0.208	0.00	0.207	0.00	0.190	0.01
ln(K/E)	0.115	0.00	0.116	0.00	0.119	0.00	0.117	0.00	0.110	0.01	0.114	0.01	0.119	0.00	0.112	0.02
Df	-0.166	0.11	-	-	-	-	-	-	-0.188	0.08	-	-	-	-	-	-
Dftr	-	-	-0.128	0.44	-	-	-	-	-	-	-0.195	0.24	-	-	-	-
Dfeu	-	-	-	-	-0.838	0.05	-	-	-	-	-	-	-0.891	0.03	-	-
Dfus	-	-	-	-	0.226	0.58	-	-	-	-	-	-	0.226	0.57	-	-
Dfjp	-	-	-	-	-0.087	0.64	-	-	-	-	-	-	-0.166	0.37	-	-
Dfn3	-	-	-0.087	0.61	-0.090	0.60	-	-	-	-	-0.059	0.74	-0.066	0.71	-	-
Dfot	-	-	-0.245	0.11	-0.241	0.11	-	-	-	-	-0.267	0.08	-0.259	0.09	-	-
Dfmn	-	-	-	-	-	-	-0.100	0.42	-	-	-	-	-	-	-0.134	0.31
Dfmj	-	-	-	-	-	-	-0.290	0.05	-	-	-	-	-	-	-0.272	0.08
Dfwh	-	-	-	-	-	-	-0.338	0.05	-	-	-	-	-	-	-0.326	0.06
Dboi	-0.067	0.53	-0.074	0.49	-0.091	0.40	-0.060	0.55	-0.061	0.57	-0.067	0.54	-0.084	0.43	-0.056	0.61
Dold	0.254	0.01	0.253	0.01	0.254	0.01	0.244	0.01	0.230	0.03	0.226	0.04	0.229	0.03	0.221	0.04
Dlarge	-0.205	0.25	-0.224	0.22	-0.145	0.44	-0.192	0.14	-0.127	0.50	-0.149	0.44	-0.050	0.80	-0.131	0.38
F-test	6.65	0.00	5.01	0.00	4.41	0.00	5.17	0.00	5.51	0.00	4.20	0.00	3.80	0.00	4.23	0.00
White	24.72	0.37	34.85	0.48	39.30	0.55	48.71	0.05	29.73	0.16	46.15	0.08	50.22	0.13	61.11	0.00
Adj. R-sq.	0.107	-	0.102	-	0.107	-	0.105	-	0.111	-	0.105	-	0.114	-	0.106	-
Obs.	284	-	284	-	284	-	284	-	218	-	218	-	218	-	218	-

Appendix Table 4 (continued, 4/7)

Independent Variables, Indicator	All plants								Large plants with Output >=25 million baht							
	Equation 5		Equation 6		Equation 7		Equation 8		Equation 5		Equation 6		Equation 7		Equation 8	
	Coefficients, etc.	Significance	Coefficients, etc.	Significance	Coefficients, etc.	Significance	Coefficients, etc.	Significance	Coefficients, etc.	Significance	Coefficients, etc.	Significance	Coefficients, etc.	Significance	Coefficients, etc.	Significance
PLASTICS & PRODUCTS																
Constant	3.467	0.00	3.486	0.00	3.490	0.00	3.463	0.00	3.202	0.00	3.246	0.00	3.242	0.00	3.200	0.00
ln(EN/E)	0.265	0.00	0.265	0.00	0.266	0.00	0.262	0.00	0.202	0.00	0.205	0.00	0.204	0.00	0.202	0.00
ln(K/E)	-0.001	0.96	-0.006	0.81	-0.006	0.80	-0.003	0.91	0.026	0.45	0.016	0.65	0.016	0.64	0.026	0.45
Df	0.177	0.02	-	-	-	-	-	-	0.190	0.04	-	-	-	-	-	-
Dftr	-	-	0.295	0.00	-	-	-	-	-	-	0.266	0.02	-	-	-	-
Dfeu	-	-	-	-	0.199	0.49	-	-	-	-	-	-	0.366	0.34	-	-
Dfus	-	-	-	-	0.335	0.00	-	-	-	-	-	-	0.285	0.67	-	-
Dfjp	-	-	-	-	0.304	0.01	-	-	-	-	-	-	0.256	0.04	-	-
Dfn3	-	-	0.105	0.45	0.107	0.45	-	-	-	-	0.259	0.07	0.258	0.07	-	-
Dfot	-	-	-0.260	0.13	-0.260	0.13	-	-	-	-	-0.275	0.13	-0.275	0.13	-	-
Dfmn	-	-	-	-	-	-	0.117	0.19	-	-	-	-	-	-	0.089	0.39
Dfmj	-	-	-	-	-	-	0.397	0.01	-	-	-	-	-	-	0.414	0.01
Dfwh	-	-	-	-	-	-	0.141	0.37	-	-	-	-	-	-	0.279	0.13
Dboi	-0.132	0.13	-0.154	0.15	-0.158	0.15	-0.130	0.16	-0.020	0.84	-0.041	0.68	-0.037	0.72	-0.038	0.72
Dold	0.044	0.51	0.057	0.39	0.057	0.39	0.050	0.46	0.078	0.33	0.089	0.26	0.089	0.27	0.089	0.27
Dlarge	0.007	0.96	0.035	0.81	0.035	0.81	-0.004	0.98	-0.085	0.60	-0.012	0.94	-0.012	0.94	-0.113	0.48
F-test	9.15	0.00	7.65	0.00	6.11	0.00	7.28	0.00	5.67	0.00	5.05	0.00	4.02	0.00	4.75	0.00
White	29.26	0.17	56.43	0.01	62.68	0.01	41.33	0.21	20.16	0.63	28.85	0.72	31.45	0.76	26.01	0.86
Adj. R-sq.	0.083	-	0.090	-	0.087	-	0.085	-	0.079	-	0.090	-	0.084	-	0.084	-
Obs.	539	-	539	-	539	-	539	-	329	-	329	-	329	-	329	-
NON-METALLIC MINERAL PRODUCTS																
Constant	2.996	0.00	2.997	0.00	2.999	0.00	2.993	0.00	3.226	0.00	3.226	0.00	3.235	0.00	3.212	0.00
ln(EN/E)	0.146	0.00	0.146	0.00	0.146	0.00	0.147	0.00	0.121	0.00	0.118	0.00	0.119	0.00	0.122	0.00
ln(K/E)	0.085	0.00	0.084	0.00	0.084	0.00	0.086	0.00	0.055	0.11	0.053	0.08	0.051	0.09	0.059	0.05
Df	0.441	0.00	-	-	-	-	-	-	0.422	0.00	-	-	-	-	-	-
Dftr	-	-	0.491	0.00	-	-	-	-	-	-	0.493	0.00	-	-	-	-
Dfeu	-	-	-	-	0.594	0.00	-	-	-	-	-	-	0.578	0.01	-	-
Dfus	-	-	-	-	-0.216	0.65	-	-	-	-	-	-	-0.273	0.59	-	-
Dfjp	-	-	-	-	0.510	0.01	-	-	-	-	-	-	0.550	0.01	-	-
Dfn3	-	-	0.458	0.00	0.459	0.00	-	-	-	-	0.368	0.04	0.371	0.03	-	-
Dfot	-	-	0.225	0.51	0.215	0.53	-	-	-	-	0.329	0.52	0.320	0.53	-	-
Dfmn	-	-	-	-	-	-	0.390	0.00	-	-	-	-	-	-	0.378	0.00
Dfmj	-	-	-	-	-	-	0.729	0.00	-	-	-	-	-	-	0.680	0.01
Dfwh	-	-	-	-	-	-	0.021	0.96	-	-	-	-	-	-	0.108	0.83
Dboi	-0.077	0.43	-0.089	0.35	-0.102	0.29	-0.090	0.35	-0.146	0.22	-0.157	0.18	-0.181	0.13	-0.159	0.20
Dold	0.049	0.32	0.050	0.31	0.049	0.31	0.048	0.32	0.055	0.51	0.054	0.48	0.053	0.49	0.054	0.48
Dlarge	0.176	0.40	0.203	0.14	0.230	0.10	0.167	0.22	0.019	0.95	0.050	0.78	0.091	0.61	0.001	0.99
F-test	28.42	0.00	21.48	0.00	17.44	0.00	21.83	0.00	5.37	0.00	4.15	0.00	3.58	0.00	4.26	0.00
White	40.60	0.01	43.00	0.14	45.13	0.27	43.20	0.09	37.50	0.03	41.26	0.10	43.66	0.24	38.73	0.16
Adj. R-sq.	0.146	-	0.145	-	0.146	-	0.148	-	0.062	-	0.059	-	0.061	-	0.061	-
Obs.	964	-	964	-	964	-	964	-	400	-	400	-	400	-	400	-

Appendix Table 4 (continued, 5/7)

Independent Variables, Indicator	All plants								Large plants with Output >=25 million baht							
	Equation 5		Equation 6		Equation 7		Equation 8		Equation 5		Equation 6		Equation 7		Equation 8	
	Coefficients, etc.	Significance	Coefficients, etc.	Significance	Coefficients, etc.	Significance	Coefficients, etc.	Significance	Coefficients, etc.	Significance	Coefficients, etc.	Significance	Coefficients, etc.	Significance	Coefficients, etc.	Significance
METAL PRODUCTS																
Constant	3.348	0.00	3.359	0.00	3.357	0.00	3.343	0.00	3.539	0.00	3.558	0.00	3.557	0.00	3.528	0.00
ln(EN/E)	0.125	0.00	0.125	0.00	0.125	0.00	0.122	0.00	0.147	0.00	0.147	0.00	0.147	0.00	0.141	0.00
ln(K/E)	0.072	0.00	0.068	0.00	0.069	0.00	0.071	0.00	0.056	0.03	0.049	0.06	0.049	0.06	0.056	0.03
Df	0.139	0.05	-	-	-	-	-	-	0.100	0.20	-	-	-	-	-	-
Dftr	-	-	0.279	0.00	-	-	-	-	-	-	0.210	0.04	-	-	-	-
Dfeu	-	-	-	-	0.165	0.43	-	-	-	-	-	-	0.062	0.79	-	-
Dfus	-	-	-	-	0.364	0.10	-	-	-	-	-	-	0.492	0.09	-	-
Dfjp	-	-	-	-	0.286	0.00	-	-	-	-	-	-	0.204	0.07	-	-
Dfn3	-	-	0.060	0.46	0.061	0.46	-	-	-	-	0.091	0.39	0.091	0.39	-	-
Dfot	-	-	-0.017	0.92	-0.017	0.92	-	-	-	-	-0.089	0.62	-0.090	0.62	-	-
Dfmn	-	-	-	-	-	-	0.181	0.01	-	-	-	-	-	-	0.141	0.11
Dfmj	-	-	-	-	-	-	0.111	0.41	-	-	-	-	-	-	0.048	0.74
Dfwh	-	-	-	-	-	-	-0.019	0.92	-	-	-	-	-	-	0.002	0.99
Dboi	-0.177	0.07	-0.186	0.02	-0.185	0.02	-0.144	0.17	-0.207	0.04	-0.217	0.04	-0.217	0.04	-0.183	0.05
Dold	0.075	0.08	0.074	0.07	0.075	0.07	0.070	0.10	0.124	0.06	0.125	0.05	0.126	0.05	0.118	0.07
Dlarge	-0.111	0.37	-0.137	0.18	-0.145	0.16	-0.129	0.31	-0.168	0.20	-0.175	0.18	-0.171	0.20	-0.190	0.16
F-test	17.17	0.00	13.67	0.00	10.96	0.00	13.18	0.00	6.03	0.00	5.01	0.00	4.14	0.00	4.63	0.00
White	35.60	0.05	38.49	0.31	53.79	0.17	78.70	0.00	17.15	0.80	18.53	0.99	32.53	0.90	27.19	0.82
Adj. R-sq.	0.105	-	0.109	-	0.107	-	0.105	-	0.075	-	0.079	-	0.077	-	0.072	-
Obs.	831	-	831	-	831	-	831	-	375	-	375	-	375	-	375	-
GENERAL MACHINERY																
Constant	3.449	0.00	3.471	0.00	3.470	0.00	3.462	0.00	3.416	0.00	3.445	0.00	3.435	0.00	3.440	0.00
ln(EN/E)	0.137	0.00	0.141	0.00	0.141	0.00	0.143	0.00	0.132	0.01	0.134	0.01	0.130	0.00	0.144	0.00
ln(K/E)	0.081	0.00	0.077	0.00	0.077	0.00	0.082	0.00	0.119	0.00	0.112	0.00	0.112	0.00	0.120	0.00
Df	0.137	0.11	-	-	-	-	-	-	0.056	0.61	-	-	-	-	-	-
Dftr	-	-	0.096	0.40	-	-	-	-	-	-	0.041	0.75	-	-	-	-
Dfeu	-	-	-	-	0.088	0.80	-	-	-	-	-	-	0.290	0.28	-	-
Dfus	-	-	-	-	0.221	0.39	-	-	-	-	-	-	0.129	0.76	-	-
Dfjp	-	-	-	-	0.090	0.46	-	-	-	-	-	-	0.001	0.99	-	-
Dfn3	-	-	0.103	0.35	0.102	0.36	-	-	-	-	-0.015	0.92	-0.023	0.88	-	-
Dfot	-	-	0.578	0.00	0.577	0.00	-	-	-	-	0.404	0.08	0.397	0.07	-	-
Dfmn	-	-	-	-	-	-	0.137	0.14	-	-	-	-	-	-	0.064	0.59
Dfmj	-	-	-	-	-	-	-0.016	0.91	-	-	-	-	-	-	-0.131	0.44
Dfwh	-	-	-	-	-	-	0.345	0.07	-	-	-	-	-	-	0.249	0.24
Dboi	0.017	0.88	0.007	0.95	0.010	0.93	0.001	0.99	-0.058	0.67	-0.069	0.61	-0.059	0.67	-0.068	0.63
Dold	0.016	0.76	0.011	0.83	0.012	0.82	0.016	0.77	0.041	0.57	0.035	0.65	0.032	0.69	0.038	0.61
Dlarge	-0.291	0.11	-0.239	0.20	-0.236	0.22	-0.338	0.09	-0.345	0.13	-0.297	0.20	-0.276	0.12	-0.399	0.11
F-test	10.61	0.00	9.00	0.00	7.18	0.00	8.51	0.00	4.67	0.00	3.91	0.00	3.23	0.00	3.98	0.00
White	47.98	0.00	65.63	0.00	81.07	0.00	61.82	0.00	35.87	0.04	53.73	0.02	56.07	0.06	50.69	0.04
Adj. R-sq.	0.107	-	0.118	-	0.114	-	0.111	-	0.078	-	0.082	-	0.079	-	0.084	-
Obs.	480	-	480	-	480	-	480	-	260	-	260	-	260	-	260	-

Appendix Table 4 (continued, 6/7)

Independent Variables, Indicator	All plants								Large plants with Output >=25 million baht							
	Equation 5		Equation 6		Equation 7		Equation 8		Equation 5		Equation 6		Equation 7		Equation 8	
	Coefficients, etc.	Significance	Coefficients, etc.	Significance	Coefficients, etc.	Significance	Coefficients, etc.	Significance	Coefficients, etc.	Significance	Coefficients, etc.	Significance	Coefficients, etc.	Significance	Coefficients, etc.	Significance
ELECTRIC MACHINERY, ETC. (INCLUDES OFFICE & COMPUTING MACHINERY, PRECISION MACHINERY)																
Constant	3.428	0.00	3.449	0.00	3.435	0.00	3.404	0.00	3.433	0.00	3.465	0.00	3.436	0.00	3.394	0.00
ln(EN/E)	0.158	0.00	0.158	0.00	0.155	0.00	0.149	0.00	0.185	0.00	0.184	0.00	0.179	0.00	0.165	0.00
ln(K/E)	0.088	0.00	0.082	0.00	0.085	0.00	0.089	0.00	0.108	0.00	0.099	0.01	0.107	0.00	0.111	0.00
Df	0.031	0.69	-	-	-	-	-	-	-0.005	0.96	-	-	-	-	-	-
Dftr	-	-	0.072	0.44	-	-	-	-	-	-	0.037	0.75	-	-	-	-
Dfeu	-	-	-	-	0.636	0.02	-	-	-	-	-	-	0.571	0.05	-	-
Dfus	-	-	-	-	0.166	0.44	-	-	-	-	-	-	0.143	0.55	-	-
Dfjp	-	-	-	-	-0.027	0.77	-	-	-	-	-	-	-0.067	0.55	-	-
Dfn3	-	-	-0.072	0.39	-0.087	0.29	-	-	-	-	-0.121	0.26	-0.140	0.18	-	-
Dfot	-	-	0.185	0.39	0.168	0.43	-	-	-	-	0.133	0.58	0.113	0.64	-	-
Dfmn	-	-	-	-	-	-	0.152	0.08	-	-	-	-	-	-	0.121	0.27
Dfmj	-	-	-	-	-	-	-0.080	0.43	-	-	-	-	-	-	-0.133	0.28
Dfwh	-	-	-	-	-	-	-0.151	0.18	-	-	-	-	-	-	-0.189	0.15
Dboi	-0.233	0.01	-0.240	0.00	-0.216	0.01	-0.170	0.05	-0.204	0.04	-0.208	0.03	-0.185	0.05	-0.138	0.18
Dold	0.099	0.18	0.096	0.19	0.086	0.24	0.079	0.28	0.139	0.15	0.132	0.17	0.118	0.22	0.097	0.31
Dlarge	-0.102	0.40	-0.116	0.34	-0.123	0.31	-0.070	0.57	-0.165	0.22	-0.185	0.18	-0.208	0.12	-0.144	0.29
F-test	11.28	0.00	8.94	0.00	8.70	0.00	9.94	0.00	9.09	0.00	7.21	0.00	6.97	0.00	7.98	0.00
White	71.77	0.00	126.96	0.00	150.96	0.00	90.19	0.00	78.34	0.00	117.50	0.00	137.53	0.00	100.47	0.00
Adj. R-sq.	0.103	-	0.105	-	0.125	-	0.117	-	0.114	-	0.116	-	0.136	-	0.128	-
Obs.	540	-	540	-	540	-	540	-	380	-	380	-	380	-	380	-
MOTOR VEHICLES																
Constant	3.445	0.00	3.468	0.00	3.465	0.00	3.447	0.00	3.495	0.00	3.535	0.00	3.527	0.00	3.492	0.00
ln(EN/E)	0.090	0.00	0.093	0.00	0.092	0.00	0.090	0.00	0.146	0.01	0.150	0.00	0.148	0.01	0.146	0.01
ln(K/E)	0.027	0.09	0.024	0.14	0.024	0.14	0.028	0.09	0.087	0.01	0.080	0.01	0.081	0.01	0.089	0.01
Df	0.140	0.16	-	-	-	-	-	-	0.031	0.79	-	-	-	-	-	-
Dftr	-	-	0.295	0.02	-	-	-	-	-	-	0.148	0.31	-	-	-	-
Dfeu	-	-	-	-	0.283	0.52	-	-	-	-	-	-	0.062	0.88	-	-
Dfus	-	-	-	-	0.579	0.12	-	-	-	-	-	-	0.377	0.38	-	-
Dfjp	-	-	-	-	0.269	0.04	-	-	-	-	-	-	0.129	0.41	-	-
Dfn3	-	-	-0.285	0.24	-0.287	0.23	-	-	-	-	-0.425	0.17	-0.429	0.16	-	-
Dfot	-	-	-0.325	0.41	-0.327	0.41	-	-	-	-	-0.476	0.50	-0.477	0.50	-	-
Dfmn	-	-	-	-	-	-	0.112	0.27	-	-	-	-	-	-	0.014	0.91
Dfmj	-	-	-	-	-	-	0.243	0.27	-	-	-	-	-	-	0.105	0.50
Dfwh	-	-	-	-	-	-	0.023	0.94	-	-	-	-	-	-	-0.192	0.58
Dboi	0.101	0.39	0.027	0.83	0.038	0.77	0.096	0.41	0.026	0.84	-0.040	0.79	-0.030	0.85	0.016	0.89
Dold	0.088	0.12	0.084	0.14	0.083	0.15	0.083	0.14	0.136	0.13	0.134	0.16	0.132	0.17	0.126	0.17
Dlarge	0.267	0.14	0.180	0.30	0.197	0.27	0.264	0.13	0.140	0.47	0.095	0.62	0.103	0.60	0.143	0.47
F-test	8.83	0.00	8.25	0.00	6.69	0.00	6.74	0.00	4.99	0.00	4.76	0.00	3.84	0.00	3.82	0.00
White	35.54	0.03	110.39	0.00	113.10	0.00	68.23	0.00	16.26	0.75	87.53	0.00	89.32	0.00	24.86	0.73
Adj. R-sq.	0.094	-	0.113	-	0.111	-	0.092	-	0.110	-	0.135	-	0.128	-	0.105	-
Obs.	455	-	455	-	455	-	455	-	194	-	194	-	194	-	194	-

Appendix Table 4 (continued, 7/7)

Independent Variables, Indicator	All plants								Large plants with Output >=25 million baht							
	Equation 5		Equation 6		Equation 7		Equation 8		Equation 5		Equation 6		Equation 7		Equation 8	
	Coeffi-cients, etc.	Sig-nifi-cance	Coeffi-cients, etc.	Sig-nifi-cance	Coeffi-cients, etc.	Sig-nifi-cance	Coeffi-cients, etc.	Sig-nifi-cance	Coeffi-cients, etc.	Sig-nifi-cance	Coeffi-cients, etc.	Sig-nifi-cance	Coeffi-cients, etc.	Sig-nifi-cance	Coeffi-cients, etc.	Sig-nifi-cance
FURNITURE																
Constant	3.252	0.00	3.257	0.00	3.255	0.00	3.249	0.00	3.780	0.00	3.784	0.00	3.775	0.00	3.774	0.00
ln(EN/E)	0.393	0.00	0.395	0.00	0.394	0.00	0.392	0.00	0.242	0.00	0.245	0.00	0.242	0.00	0.239	0.00
ln(K/E)	0.326	0.00	0.327	0.00	0.327	0.00	0.326	0.00	0.067	0.05	0.070	0.04	0.071	0.04	0.066	0.05
Df	0.105	0.36	-	-	-	-	-	-	0.012	0.91	-	-	-	-	-	-
Dftr	-	-	0.195	0.04	-	-	-	-	-	-	0.007	0.95	-	-	-	-
Dfeu	-	-	-	-	0.547	0.02	-	-	-	-	-	-	0.206	0.04	-	-
Dfus	-	-	-	-	0.263	0.37	-	-	-	-	-	-	0.050	0.85	-	-
Dfjp	-	-	-	-	0.128	0.24	-	-	-	-	-	-	-0.041	0.80	-	-
Dfn3	-	-	-0.068	0.72	-0.074	0.70	-	-	-	-	0.056	0.77	0.049	0.80	-	-
Dfot	-	-	-0.225	0.57	-0.230	0.56	-	-	-	-	-0.369	0.45	-0.370	0.45	-	-
Dfmn	-	-	-	-	-	-	0.125	0.37	-	-	-	-	-	-	-0.037	0.76
Dfmj	-	-	-	-	-	-	0.136	0.44	-	-	-	-	-	-	0.282	0.18
Dfwh	-	-	-	-	-	-	-0.084	0.74	-	-	-	-	-	-	-0.093	0.69
Dboi	-0.295	0.00	-0.271	0.00	-0.257	0.01	-0.280	0.00	-0.283	0.01	-0.285	0.01	-0.273	0.01	-0.287	0.01
Dold	-0.394	0.00	-0.394	0.00	-0.396	0.00	-0.396	0.00	-0.056	0.51	-0.049	0.61	-0.050	0.59	-0.045	0.60
Dlarge	0.340	0.00	0.363	0.00	0.366	0.00	0.346	0.00	0.110	0.46	0.111	0.43	0.113	0.43	0.097	0.51
F-test	60.29	0.00	45.22	0.00	36.09	0.00	45.08	0.00	7.99	0.00	6.34	0.00	5.07	0.00	6.29	0.00
White	181.94	0.00	188.82	0.00	189.10	0.00	183.47	0.00	22.96	0.46	60.96	0.00	61.42	0.01	28.00	0.71
Adj. R-sq.	0.436	-	0.435	-	0.433	-	0.434	-	0.179	-	0.182	-	0.175	-	0.181	-
Obs.	461	-	461	-	461	-	461	-	193	-	193	-	193	-	193	-
JEWELRY																
Constant	3.601	0.00	3.622	0.00	3.629	0.00	3.577	0.00	4.120	0.00	4.126	0.00	4.144	0.00	4.109	0.00
ln(EN/E)	0.223	0.00	0.226	0.00	0.226	0.00	0.218	0.00	0.246	0.00	0.248	0.00	0.250	0.00	0.242	0.00
ln(K/E)	0.090	0.01	0.083	0.02	0.079	0.02	0.094	0.01	0.017	0.72	0.014	0.73	0.008	0.84	0.017	0.67
Df	0.332	0.00	-	-	-	-	-	-	0.110	0.29	-	-	-	-	-	-
Dftr	-	-	0.397	0.00	-	-	-	-	-	-	0.133	0.32	-	-	-	-
Dfeu	-	-	-	-	0.331	0.04	-	-	-	-	-	-	0.099	0.55	-	-
Dfus	-	-	-	-	0.321	0.10	-	-	-	-	-	-	0.035	0.85	-	-
Dfjp	-	-	-	-	0.771	0.00	-	-	-	-	-	-	0.431	0.06	-	-
Dfn3	-	-	0.365	0.12	0.374	0.11	-	-	-	-	0.181	0.42	0.191	0.40	-	-
Dfot	-	-	0.226	0.14	0.234	0.13	-	-	-	-	0.091	0.55	0.095	0.53	-	-
Dfmn	-	-	-	-	-	-	0.412	0.00	-	-	-	-	-	-	0.127	0.32
Dfmj	-	-	-	-	-	-	0.150	0.41	-	-	-	-	-	-	0.048	0.78
Dfwh	-	-	-	-	-	-	0.252	0.17	-	-	-	-	-	-	0.124	0.51
Dboi	0.008	0.95	-0.003	0.98	-0.033	0.80	0.072	0.59	0.135	0.24	0.129	0.27	0.094	0.43	0.146	0.22
Dold	-0.039	0.76	-0.024	0.85	-0.014	0.91	-0.049	0.71	-0.098	0.47	-0.092	0.47	-0.075	0.55	-0.095	0.45
Dlarge	0.442	0.04	0.454	0.04	0.477	0.03	0.392	0.07	0.296	0.19	0.302	0.18	0.322	0.16	0.288	0.21
F-test	12.13	0.00	9.19	0.00	7.72	0.00	9.35	0.00	3.81	0.00	2.86	0.01	2.57	0.01	2.83	0.01
White	20.33	0.62	31.43	0.59	33.16	0.86	33.43	0.45	34.36	0.05	36.80	0.30	42.54	0.45	41.46	0.12
Adj. R-sq.	0.275	-	0.271	-	0.276	-	0.275	-	0.147	-	0.132	-	0.138	-	0.130	-
Obs.	177	-	177	-	177	-	177	-	99	-	99	-	99	-	99	-

Note: Heteroscedasticity-consistent standard errors used if White is significant at 0.05 or less.

- = not relevant or no plants in this category; n<30 = sample size smaller than 30.

Appendix Table 5: Estimates of Value Added per Hour (dependent variable = ln(V/E)), 1998

Independent Variables, Indicator	All plants						Large plants with Output >=25 million baht					
	Equation 1		Equation 2		Equation 3		Equation 1		Equation 2		Equation 3	
	Coefficients, etc.	Significance	Coefficients, etc.	Significance	Coefficients, etc.	Significance	Coefficients, etc.	Significance	Coefficients, etc.	Significance	Coefficients, etc.	Significance
FOOD												
Constant	3.097	0.00	3.101	0.00	3.110	0.00	3.546	0.00	3.556	0.00	3.572	0.00
ln(EN/E)	0.116	0.00	0.116	0.00	0.115	0.00	0.039	0.35	0.041	0.33	0.037	0.38
ln(K/E)	0.261	0.00	0.260	0.00	0.257	0.00	0.228	0.00	0.226	0.00	0.220	0.00
Df	0.641	0.00	-	-	-	-	0.295	0.01	-	-	-	-
Dftr	-	-	0.794	0.00	-	-	-	-	0.449	0.00	-	-
Dfeu	-	-	-	-	1.028	0.01	-	-	-	-	0.650	0.06
Dfus	-	-	-	-	1.674	0.00	-	-	-	-	1.317	0.00
Dfjp	-	-	-	-	0.566	0.00	-	-	-	-	0.196	0.25
Dfn3	-	-	0.488	0.00	0.486	0.00	-	-	0.105	0.61	0.096	0.64
Dfot	-	-	0.368	0.14	0.367	0.14	-	-	0.038	0.89	0.028	0.92
Dold	0.108	0.17	0.110	0.17	0.107	0.18	0.115	0.21	0.115	0.21	0.106	0.25
Dlarge	0.750	0.00	0.771	0.00	0.783	0.00	0.328	0.09	0.378	0.05	0.425	0.03
F-test	40.81	0.00	29.54	0.00	23.94	0.00	13.09	0.00	9.83	0.00	8.84	0.00
White	66.91	0.00	71.19	0.00	73.34	0.00	13.14	0.73	16.55	0.94	17.87	0.99
Adj. R-sq.	0.172	-	0.172	-	0.177	-	0.099	-	0.101	-	0.114	-
Obs.	960	-	960	-	960	-	549	-	549	-	549	-
TEXTILES												
Constant	3.208	0.00	3.219	0.00	3.211	0.00	3.735	0.00	3.773	0.00	3.765	0.00
ln(EN/E)	0.296	0.00	0.299	0.00	0.299	0.00	0.142	0.10	0.148	0.09	0.149	0.09
ln(K/E)	0.348	0.00	0.352	0.00	0.356	0.00	0.220	0.00	0.220	0.00	0.224	0.00
Df	0.289	0.12	-	-	-	-	0.007	0.97	-	-	-	-
Dftr	-	-	0.255	0.33	-	-	-	-	0.041	0.86	-	-
Dfeu	-	-	-	-	0.611	0.40	-	-	-	-	0.127	0.84
Dfus	-	-	-	-	-0.037	0.95	-	-	-	-	-0.167	0.76
Dfjp	-	-	-	-	0.253	0.39	-	-	-	-	0.065	0.81
Dfn3	-	-	0.070	0.82	0.066	0.83	-	-	-0.341	0.25	-0.342	0.25
Dfot	-	-	0.580	0.07	0.585	0.07	-	-	0.309	0.31	0.313	0.31
Dold	-0.113	0.43	-0.138	0.34	-0.141	0.33	-0.407	0.02	-0.449	0.01	-0.451	0.01
Dlarge	0.740	0.01	0.699	0.01	0.677	0.02	0.788	0.01	0.747	0.01	0.729	0.01
F-test	33.24	0.00	23.91	0.00	18.56	0.00	8.76	0.00	6.68	0.00	5.16	0.00
White	22.50	0.17	25.77	0.53	26.19	0.79	14.80	0.61	31.98	0.23	33.13	0.46
Adj. R-sq.	0.332	-	0.330	-	0.327	-	0.180	-	0.183	-	0.175	-
Obs.	326	-	326	-	326	-	178	-	178	-	178	-

Appendix Table 5 (continued, 2/7)

Independent Variables, Indicator	All plants						Large plants with Output >=25 million baht					
	Equation 1		Equation 2		Equation 3		Equation 1		Equation 2		Equation 3	
	Coeffi-cients, etc.	Sig-nifi-cance	Coeffi-cients, etc.	Sig-nifi-cance	Coeffi-cients, etc.	Sig-nifi-cance	Coeffi-cients, etc.	Sig-nifi-cance	Coeffi-cients, etc.	Sig-nifi-cance	Coeffi-cients, etc.	Sig-nifi-cance
APPAREL												
Constant	3.319	0.00	3.318	0.00	3.303	0.00	3.038	0.00	3.124	0.00	3.046	0.00
ln(EN/E)	0.148	0.10	0.148	0.11	0.145	0.12	-0.125	0.31	-0.095	0.47	-0.107	0.42
ln(K/E)	0.124	0.10	0.123	0.11	0.128	0.10	0.192	0.02	0.179	0.03	0.200	0.02
Df	0.812	0.00	-	-	-	-	0.512	0.02	-	-	-	-
Dftr	-	-	0.818	0.03	-	-	-	-	0.446	0.11	-	-
Dfeu	-	-	-	-	1.212	0.20	-	-	-	-	1.164	0.09
Dfus	-	-	-	-	-	-	-	-	-	-	-	-
Dfjp	-	-	-	-	0.758	0.05	-	-	-	-	0.348	0.22
Dfn3	-	-	0.792	0.13	0.802	0.13	-	-	1.129	0.02	1.107	0.02
Dfot	-	-	0.815	0.03	0.827	0.03	-	-	0.301	0.36	0.356	0.29
Dold	0.579	0.02	0.578	0.02	0.576	0.02	0.330	0.14	0.384	0.09	0.392	0.08
Dlarge	0.983	0.05	0.985	0.06	0.915	0.09	0.679	0.16	0.836	0.10	0.576	0.30
F-test	9.20	0.00	6.48	0.00	5.67	0.00	5.75	0.00	4.52	0.00	4.14	0.00
White	3.24	1.00	6.26	1.00	6.24	1.00	2.52	1.00	11.28	0.98	11.36	0.99
Adj. R-sq.	0.214	-	0.203	-	0.198	-	0.248	-	0.255	-	0.259	-
Obs.	152	-	152	-	152	-	73	-	73	-	73	-
LEATHER & FOOTWEAR												
Constant	3.245	0.00	3.223	0.00	3.147	0.00	3.261	0.00	3.187	0.00	3.141	0.00
ln(EN/E)	0.025	0.74	0.020	0.79	-0.006	0.94	-0.020	0.80	-0.034	0.66	-0.038	0.61
ln(K/E)	0.271	0.00	0.274	0.00	0.283	0.00	0.328	0.00	0.339	0.00	0.355	0.00
Df	0.027	0.90	-	-	-	-	0.006	0.98	-	-	-	-
Dftr	-	-	0.140	0.71	-	-	-	-	0.015	0.96	-	-
Dfeu	-	-	-	-	-1.109	0.26	-	-	-	-	-	-
Dfus	-	-	-	-	-0.769	0.28	-	-	-	-	-0.938	0.07
Dfjp	-	-	-	-	0.894	0.07	-	-	-	-	0.644	0.12
Dfn3	-	-	0.115	0.71	0.126	0.68	-	-	0.329	0.19	0.337	0.17
Dfot	-	-	-0.320	0.47	-0.337	0.45	-	-	-0.572	0.08	-0.587	0.07
Dold	0.555	0.00	0.558	0.00	0.505	0.00	0.555	0.00	0.567	0.00	0.505	0.00
Dlarge	0.170	0.54	0.186	0.51	0.271	0.34	-0.178	0.45	-0.128	0.58	-0.024	0.92
F-test	9.21	0.00	6.64	0.00	5.91	0.00	10.36	0.00	8.34	0.00	8.36	0.00
White	14.29	0.65	36.81	0.08	35.51	0.16	14.13	0.66	26.70	0.42	15.46	0.95
Adj. R-sq.	0.206	-	0.200	-	0.219	-	0.299	-	0.318	-	0.349	-
Obs.	159	-	159	-	159	-	111	-	111	-	111	-

Appendix Table 5 (continued, 3/7)

Independent Variables, Indicator	All plants						Large plants with Output >=25 million baht					
	Equation 1		Equation 2		Equation 3		Equation 1		Equation 2		Equation 3	
	Coeffi-cients, etc.	Sig-nifi-cance	Coeffi-cients, etc.	Sig-nifi-cance	Coeffi-cients, etc.	Sig-nifi-cance	Coeffi-cients, etc.	Sig-nifi-cance	Coeffi-cients, etc.	Sig-nifi-cance	Coeffi-cients, etc.	Sig-nifi-cance
CHEMICALS & PRODUCTS												
Constant	3.833	0.00	3.838	0.00	3.837	0.00	4.356	0.00	4.365	0.00	4.361	0.00
ln(EN/E)	0.158	0.00	0.152	0.00	0.145	0.01	0.105	0.09	0.096	0.12	0.087	0.16
ln(K/E)	0.219	0.00	0.216	0.00	0.216	0.00	0.143	0.01	0.137	0.01	0.138	0.01
Df	0.406	0.01	-	-	-	-	0.360	0.02	-	-	-	-
Dftr	-	-	0.499	0.01	-	-	-	-	0.456	0.02	-	-
Dfeu	-	-	-	-	0.935	0.01	-	-	-	-	0.817	0.02
Dfus	-	-	-	-	0.637	0.08	-	-	-	-	0.556	0.13
Dfjp	-	-	-	-	0.322	0.15	-	-	-	-	0.307	0.16
Dfn3	-	-	0.343	0.15	0.338	0.15	-	-	0.324	0.18	0.319	0.19
Dfot	-	-	0.288	0.24	0.284	0.25	-	-	0.203	0.41	0.198	0.42
Dold	0.052	0.69	0.047	0.72	0.026	0.85	-0.041	0.77	-0.048	0.74	-0.072	0.62
Dlarge	0.685	0.06	0.676	0.06	0.680	0.06	0.621	0.09	0.607	0.10	0.591	0.11
F-test	14.75	0.00	10.59	0.00	8.53	0.00	6.93	0.00	5.06	0.00	4.15	0.00
White	7.50	0.98	25.46	0.55	29.91	0.75	11.13	0.85	30.42	0.25	33.34	0.55
Adj. R-sq.	0.190	-	0.186	-	0.188	-	0.121	-	0.117	-	0.117	-
Obs.	294	-	294	-	294	-	216	-	216	-	216	-
RUBBER PRODUCTS												
Constant	3.571	0.00	3.604	0.00	3.587	0.00	3.534	0.00	3.641	0.00	3.611	0.00
ln(EN/E)	0.109	0.16	0.128	0.06	0.129	0.06	0.031	0.73	0.061	0.49	0.061	0.50
ln(K/E)	0.269	0.00	0.275	0.00	0.282	0.00	0.266	0.00	0.256	0.00	0.264	0.00
Df	0.112	0.52	-	-	-	-	0.097	0.58	-	-	-	-
Dftr	-	-	-0.246	0.32	-	-	-	-	-0.191	0.45	-	-
Dfeu	-	-	-	-	0.225	0.66	-	-	-	-	0.143	0.78
Dfus	-	-	-	-	0.115	0.80	-	-	-	-	0.068	0.89
Dfjp	-	-	-	-	-0.550	0.08	-	-	-	-	-0.425	0.19
Dfn3	-	-	0.666	0.02	0.654	0.02	-	-	0.687	0.02	0.683	0.02
Dfot	-	-	0.048	0.85	0.040	0.87	-	-	-0.047	0.85	-0.052	0.84
Dold	-0.116	0.37	-0.138	0.31	-0.144	0.29	-0.149	0.36	-0.178	0.27	-0.178	0.27
Dlarge	0.272	0.27	0.360	0.14	0.404	0.11	0.081	0.78	0.272	0.36	0.299	0.33
F-test	9.32	0.00	7.84	0.00	6.43	0.00	5.17	0.00	4.68	0.00	3.79	0.00
White	27.77	0.05	36.00	0.12	37.01	0.33	16.52	0.49	25.45	0.49	26.02	0.80
Adj. R-sq.	0.181	-	0.203	-	0.206	-	0.126	-	0.152	-	0.148	-
Obs.	189	-	189	-	189	-	145	-	145	-	145	-

Appendix Table 5 (continued, 4/7)

Independent Variables, Indicator	All plants						Large plants with Output >=25 million baht					
	Equation 1		Equation 2		Equation 3		Equation 1		Equation 2		Equation 3	
	Coeffi-cients, etc.	Sig-nifi-cance	Coeffi-cients, etc.	Sig-nifi-cance	Coeffi-cients, etc.	Sig-nifi-cance	Coeffi-cients, etc.	Sig-nifi-cance	Coeffi-cients, etc.	Sig-nifi-cance	Coeffi-cients, etc.	Sig-nifi-cance
PLASTICS & PRODUCTS												
Constant	2.428	0.00	2.469	0.00	2.461	0.00	2.627	0.00	2.669	0.00	2.667	0.00
ln(EN/E)	-0.082	0.27	-0.075	0.32	-0.075	0.32	-0.019	0.82	-0.015	0.86	-0.019	0.83
ln(K/E)	0.276	0.00	0.267	0.00	0.269	0.00	0.358	0.00	0.348	0.00	0.346	0.00
Df	0.404	0.03	-	-	-	-	0.093	0.63	-	-	-	-
Dftr	-	-	0.562	0.02	-	-	-	-	0.198	0.41	-	-
Dfeu	-	-	-	-	0.694	0.42	-	-	-	-	-0.121	0.91
Dfus	-	-	-	-	0.391	0.74	-	-	-	-	0.183	0.86
Dfjp	-	-	-	-	0.559	0.03	-	-	-	-	0.213	0.40
Dfn3	-	-	0.242	0.40	0.243	0.40	-	-	-0.006	0.98	-0.006	0.99
Dfot	-	-	0.288	0.40	0.287	0.40	-	-	-0.049	0.90	-0.047	0.90
Dold	0.225	0.26	0.247	0.23	0.253	0.22	0.254	0.27	0.268	0.26	0.268	0.28
Dlarge	0.491	0.09	0.489	0.10	0.488	0.10	0.352	0.28	0.379	0.25	0.380	0.26
F-test	4.96	0.00	3.67	0.00	2.83	0.00	3.84	0.00	2.79	0.01	2.14	0.03
White	4.52	1.00	5.24	1.00	5.28	1.00	4.22	1.00	6.49	1.00	6.68	1.00
Adj. R-sq.	0.093	-	0.088	-	0.079	-	0.107	-	0.096	-	0.080	-
Obs.	194	-	194	-	194	-	119	-	119	-	119	-
NON-METALLIC MINERAL PRODUCTS												
Constant	3.196	0.00	3.214	0.00	3.217	0.00	3.309	0.00	3.345	0.00	3.361	0.00
ln(EN/E)	0.082	0.03	0.084	0.03	0.085	0.03	-0.039	0.55	-0.030	0.64	-0.025	0.70
ln(K/E)	0.229	0.00	0.225	0.00	0.225	0.00	0.236	0.00	0.232	0.00	0.231	0.00
Df	0.655	0.00	-	-	-	-	0.505	0.01	-	-	-	-
Dftr	-	-	1.061	0.00	-	-	-	-	0.731	0.00	-	-
Dfeu	-	-	-	-	1.267	0.00	-	-	-	-	0.951	0.01
Dfus	-	-	-	-	1.038	0.04	-	-	-	-	0.655	0.17
Dfjp	-	-	-	-	0.890	0.01	-	-	-	-	0.593	0.07
Dfn3	-	-	0.411	0.18	0.410	0.19	-	-	0.350	0.32	0.351	0.32
Dfot	-	-	-0.414	0.36	-0.418	0.36	-	-	-0.475	0.36	-0.484	0.35
Dold	0.046	0.66	0.050	0.64	0.046	0.66	0.157	0.30	0.151	0.32	0.144	0.34
Dlarge	0.845	0.00	0.777	0.01	0.800	0.01	0.719	0.07	0.706	0.08	0.737	0.07
F-test	22.03	0.00	17.40	0.00	13.56	0.00	9.34	0.00	7.54	0.00	5.89	0.00
White	8.71	0.95	9.81	1.00	12.79	1.00	13.65	0.69	15.17	0.94	17.03	0.99
Adj. R-sq.	0.179	-	0.192	-	0.190	-	0.173	-	0.186	-	0.180	-
Obs.	483	-	483	-	483	-	201	-	201	-	201	-

Appendix Table 5 (continued, 5/7)

Independent Variables, Indicator	All plants						Large plants with Output >=25 million baht					
	Equation 1		Equation 2		Equation 3		Equation 1		Equation 2		Equation 3	
	Coeffi-cients, etc.	Sig-nifi-cance	Coeffi-cients, etc.	Sig-nifi-cance	Coeffi-cients, etc.	Sig-nifi-cance	Coeffi-cients, etc.	Sig-nifi-cance	Coeffi-cients, etc.	Sig-nifi-cance	Coeffi-cients, etc.	Sig-nifi-cance
METAL PRODUCTS												
Constant	3.292	0.00	3.283	0.00	3.326	0.00	3.651	0.00	3.577	0.00	3.595	0.00
ln(EN/E)	0.022	0.71	0.020	0.73	0.020	0.73	-0.025	0.74	-0.037	0.62	-0.041	0.59
ln(K/E)	0.254	0.00	0.256	0.00	0.238	0.00	0.253	0.00	0.267	0.00	0.260	0.00
Df	0.308	0.06	-	-	-	-	0.241	0.16	-	-	-	-
Dftr	-	-	0.306	0.13	-	-	-	-	0.104	0.60	-	-
Dfeu	-	-	-	-	0.555	0.39	-	-	-	-	0.891	0.35
Dfus	-	-	-	-	-2.787	0.01	-	-	-	-	-	-
Dfjp	-	-	-	-	0.409	0.05	-	-	-	-	0.084	0.68
Dfn3	-	-	0.421	0.12	0.439	0.10	-	-	0.478	0.09	0.479	0.09
Dfot	-	-	-0.015	0.97	0.005	0.99	-	-	0.482	0.31	0.481	0.31
Dold	0.078	0.58	0.084	0.55	0.123	0.39	-0.082	0.62	-0.080	0.63	-0.083	0.62
Dlarge	0.488	0.11	0.507	0.10	0.492	0.11	0.142	0.67	0.128	0.70	0.152	0.65
F-test	11.35	0.00	8.19	0.00	7.42	0.00	7.28	0.00	5.43	0.00	4.83	0.00
White	6.65	0.99	8.91	1.00	9.31	1.00	3.88	1.00	5.66	1.00	6.20	1.00
Adj. R-sq.	0.140	-	0.137	-	0.154	-	0.161	-	0.159	-	0.157	-
Obs.	318	-	318	-	318	-	165	-	165	-	165	-
GENERAL MACHINERY												
Constant	3.004	0.00	2.975	0.00	2.968	0.00	3.689	0.00	3.655	0.00	3.695	0.00
ln(EN/E)	0.114	0.04	0.112	0.05	0.105	0.06	0.137	0.03	0.138	0.03	0.131	0.04
ln(K/E)	0.408	0.00	0.415	0.00	0.413	0.00	0.368	0.00	0.377	0.00	0.365	0.00
Df	0.397	0.01	-	-	-	-	0.021	0.88	-	-	-	-
Dftr	-	-	0.348	0.03	-	-	-	-	-0.026	0.86	-	-
Dfeu	-	-	-	-	0.635	0.08	-	-	-	-	0.132	0.67
Dfus	-	-	-	-	-0.619	0.32	-	-	-	-	-1.118	0.03
Dfjp	-	-	-	-	0.359	0.04	-	-	-	-	0.017	0.92
Dfn3	-	-	0.551	0.06	0.552	0.06	-	-	0.344	0.24	0.342	0.24
Dfot	-	-	0.440	0.11	0.445	0.11	-	-	-0.028	0.92	-0.026	0.92
Dold	-0.104	0.42	-0.097	0.45	-0.105	0.41	-0.142	0.32	-0.132	0.35	-0.156	0.27
Dlarge	0.582	0.03	0.598	0.03	0.593	0.03	0.443	0.14	0.477	0.12	0.454	0.13
F-test	31.75	0.00	22.59	0.00	18.01	0.00	14.09	0.00	10.26	0.00	8.71	0.00
White	11.46	0.78	13.64	0.98	16.44	0.99	16.86	0.39	22.61	0.54	33.05	0.32
Adj. R-sq.	0.407	-	0.403	-	0.406	-	0.330	-	0.328	-	0.343	-
Obs.	225	-	225	-	225	-	134	-	134	-	134	-

Appendix Table 5 (continued, 6/7)

Independent Variables, Indicator	All plants						Large plants with Output >=25 million baht					
	Equation 1		Equation 2		Equation 3		Equation 1		Equation 2		Equation 3	
	Coefficients, etc.	Significance	Coefficients, etc.	Significance	Coefficients, etc.	Significance	Coefficients, etc.	Significance	Coefficients, etc.	Significance	Coefficients, etc.	Significance
ELECTRIC MACHINERY, ETC. (INCL. OFFICE & COMPUTING MACHINERY, PRECISION MACHINERY)												
Constant	3.616	0.00	3.604	0.00	3.669	0.00	3.880	0.00	3.867	0.00	4.034	0.00
ln(EN/E)	0.159	0.01	0.156	0.01	0.178	0.01	0.129	0.07	0.125	0.08	0.172	0.02
ln(K/E)	0.259	0.00	0.260	0.00	0.251	0.00	0.249	0.00	0.250	0.00	0.222	0.00
Df	0.310	0.03	-	-	-	-	0.142	0.40	-	-	-	-
Dftr	-	-	0.284	0.08	-	-	-	-	0.125	0.50	-	-
Dfeu	-	-	-	-	0.574	0.21	-	-	-	-	0.810	0.13
Dfus	-	-	-	-	-0.481	0.16	-	-	-	-	-0.688	0.04
Dfjp	-	-	-	-	0.372	0.03	-	-	-	-	0.253	0.18
Dfn3	-	-	0.321	0.09	0.327	0.08	-	-	0.118	0.56	0.141	0.48
Dfot	-	-	0.417	0.16	0.417	0.16	-	-	0.340	0.28	0.360	0.24
Dold	0.002	0.99	0.003	0.99	0.032	0.84	0.043	0.80	0.049	0.78	0.103	0.55
Dlarge	0.443	0.13	0.451	0.12	0.568	0.05	0.346	0.25	0.348	0.25	0.464	0.12
F-test	11.74	0.00	8.36	0.00	7.33	0.00	6.23	0.00	4.50	0.00	4.73	0.00
White	2.54	1.00	17.63	0.89	22.49	0.93	5.62	0.99	21.54	0.71	24.15	0.89
Adj. R-sq.	0.165	-	0.160	-	0.174	-	0.111	-	0.104	-	0.138	-
Obs.	272	-	272	-	272	-	211	-	211	-	211	-
MOTOR VEHICLES												
Constant	4.079	0.00	4.145	0.00	4.146	0.00	5.072	0.00	5.407	0.00	5.427	0.00
ln(EN/E)	0.175	0.03	0.173	0.03	0.173	0.03	0.293	0.00	0.308	0.00	0.307	0.00
ln(K/E)	0.090	0.17	0.067	0.33	0.067	0.33	0.028	0.71	-0.057	0.49	-0.062	0.47
Df	0.860	0.00	-	-	-	-	0.370	0.07	-	-	-	-
Dftr	-	-	0.971	0.00	-	-	-	-	0.570	0.01	-	-
Dfeu	-	-	-	-	0.406	0.69	-	-	-	-	-0.003	1.00
Dfus	-	-	-	-	1.019	0.32	-	-	-	-	0.449	0.57
Dfjp	-	-	-	-	0.983	0.00	-	-	-	-	0.593	0.01
Dfn3	-	-	0.527	0.31	0.528	0.31	-	-	-0.030	0.94	-0.030	0.94
Dfot	-	-	0.333	0.58	0.333	0.58	-	-	-0.613	0.30	-0.619	0.30
Dold	-0.179	0.33	-0.154	0.41	-0.157	0.40	0.032	0.87	0.110	0.58	0.101	0.61
Dlarge	1.732	0.00	1.683	0.01	1.671	0.01	1.635	0.00	1.600	0.00	1.589	0.00
F-test	14.95	0.00	10.87	0.00	8.39	0.00	7.74	0.00	6.44	0.00	4.99	0.00
White	7.70	0.94	9.62	0.99	9.75	1.00	18.27	0.25	25.35	0.28	25.44	0.33
Adj. R-sq.	0.316	-	0.314	-	0.306	-	0.291	-	0.317	-	0.304	-
Obs.	152	-	152	-	152	-	83	-	83	-	83	-

Appendix Table 5 (continued, 7/7)

Independent Variables, Indicator	All plants						Large plants with Output >=25 million baht					
	Equation 1		Equation 2		Equation 3		Equation 1		Equation 2		Equation 3	
	Coefficients, etc.	Significance	Coefficients, etc.	Significance	Coefficients, etc.	Significance	Coefficients, etc.	Significance	Coefficients, etc.	Significance	Coefficients, etc.	Significance
FURNITURE												
Constant	2.417	0.00	2.407	0.00	2.425	0.00	3.518	0.00	3.466	0.00	3.469	0.00
ln(EN/E)	0.185	0.04	0.187	0.04	0.195	0.03	0.053	0.54	0.055	0.52	0.060	0.50
ln(K/E)	0.579	0.00	0.580	0.00	0.584	0.00	0.305	0.00	0.319	0.00	0.323	0.00
Df	0.167	0.61	-	-	-	-	-0.708	0.00	-	-	-	-
Dftr	-	-	0.217	0.62	-	-	-	-	-0.787	0.01	-	-
Dfeu	-	-	-	-	-1.032	0.44	-	-	-	-	-1.104	0.20
Dfus	-	-	-	-	0.186	0.89	-	-	-	-	-0.807	0.35
Dfjp	-	-	-	-	0.375	0.44	-	-	-	-	-0.731	0.04
Dfn3	-	-	0.285	0.61	0.281	0.62	-	-	-0.397	0.31	-0.396	0.32
Dfot	-	-	-0.420	0.66	-0.419	0.66	-	-	-1.523	0.07	-1.522	0.08
Dold	-0.435	0.05	-0.406	0.07	-0.415	0.07	-0.288	0.13	-0.234	0.23	-0.242	0.23
Dlarge	0.497	0.15	0.484	0.17	0.465	0.18	0.275	0.35	0.239	0.42	0.238	0.43
F-test	22.19	0.00	15.76	0.00	12.29	0.00	4.69	0.00	3.57	0.00	2.73	0.01
White	19.08	0.32	19.65	0.66	19.93	0.75	10.34	0.89	10.06	0.98	12.65	0.96
Adj. R-sq.	0.388	-	0.382	-	0.378	-	0.178	-	0.175	-	0.155	-
Obs.	168	-	168	-	168	-	86	-	86	-	86	-
JEWELRY												
Constant	3.635	0.00	3.638	0.00	3.664	0.00	Not estimated because there were					
ln(EN/E)	0.039	0.79	0.039	0.79	0.028	0.85	less than 30 observations					
ln(K/E)	-0.001	0.99	-0.003	0.98	-0.039	0.82	-	-	-	-	-	-
Df	0.936	0.02	-	-	-	-	-	-	-	-	-	-
Dftr	-	-	0.950	0.03	-	-	-	-	-	-	-	-
Dfeu	-	-	-	-	0.927	0.11	-	-	-	-	-	-
Dfus	-	-	-	-	0.907	0.09	-	-	-	-	-	-
Dfjp	-	-	-	-	1.492	0.12	-	-	-	-	-	-
Dfn3	-	-	-	-	-	-	-	-	-	-	-	-
Dfot	-	-	0.914	0.08	0.938	0.08	-	-	-	-	-	-
Dold	0.540	0.20	0.543	0.21	0.594	0.19	-	-	-	-	-	-
Dlarge	1.307	0.09	1.317	0.09	1.362	0.09	-	-	-	-	-	-
F-test	4.20	0.00	3.41	0.01	2.51	0.03	-	-	-	-	-	-
White	8.66	0.89	9.52	0.96	-	0.69	-	-	-	-	-	-
Adj. R-sq.	0.267	-	0.248	-	0.215	-	-	-	-	-	-	-
Obs.	45	-	45	-	45	-	27	-	27	-	27	-

Notes: Heteroscedasticity-consistent standard errors used if White is significant at 0.05 or less.

If White cannot be calculated, the significance of the LM heteroscedasticity test is reported and used.

- = not relevant or no plants in this category; n<30 = sample size smaller than 30.

Appendix Table 6: Estimates of Compensation per Hour (dependent variable = ln(W/E)), 1998

Independent Variables, Indicator	All plants						Large plants with Output >=25 million baht					
	Equation 1		Equation 2		Equation 3		Equation 1		Equation 2		Equation 3	
	Coeffi-cients, etc.	Sig-nifi-cance	Coeffi-cients, etc.	Sig-nifi-cance	Coeffi-cients, etc.	Sig-nifi-cance	Coeffi-cients, etc.	Sig-nifi-cance	Coeffi-cients, etc.	Sig-nifi-cance	Coeffi-cients, etc.	Sig-nifi-cance
FOOD												
Constant	2.756	0.00	2.758	0.00	2.764	0.00	2.942	0.00	2.947	0.00	2.957	0.00
ln(EN/E)	0.076	0.00	0.076	0.00	0.075	0.00	0.067	0.01	0.067	0.01	0.064	0.01
ln(K/E)	0.072	0.00	0.072	0.00	0.070	0.00	0.053	0.01	0.053	0.01	0.049	0.02
Df	0.391	0.00	-	-	-	-	0.292	0.00	-	-	-	-
Dftr	-	-	0.412	0.00	-	-	-	-	0.312	0.00	-	-
Dfeu	-	-	-	-	0.542	0.01	-	-	-	-	0.416	0.05
Dfus	-	-	-	-	0.977	0.00	-	-	-	-	0.867	0.00
Dfjp	-	-	-	-	0.270	0.00	-	-	-	-	0.156	0.13
Dfn3	-	-	0.326	0.01	0.324	0.01	-	-	0.233	0.06	0.228	0.07
Dfot	-	-	0.420	0.00	0.420	0.00	-	-	0.313	0.05	0.307	0.06
Dold	0.099	0.02	0.096	0.02	0.094	0.03	0.114	0.04	0.110	0.05	0.104	0.06
Dlarge	0.120	0.19	0.119	0.20	0.127	0.17	-0.042	0.72	-0.042	0.72	-0.013	0.91
F-test	22.85	0.00	16.36	0.00	14.03	0.00	7.31	0.00	5.25	0.00	5.30	0.00
White	18.44	0.36	19.99	0.83	26.92	0.89	19.95	0.28	22.90	0.69	26.64	0.84
Adj. R-sq.	0.102	-	0.101	-	0.109	-	0.054	-	0.052	-	0.066	-
Obs.	960	-	960	-	960	-	549	-	549	-	549	-
TEXTILES												
Constant	2.966	0.00	2.980	0.00	2.969	0.00	3.175	0.00	3.204	0.00	3.189	0.00
ln(EN/E)	0.230	0.00	0.239	0.00	0.239	0.00	0.162	0.01	0.178	0.01	0.180	0.01
ln(K/E)	0.170	0.00	0.177	0.00	0.183	0.00	0.055	0.22	0.063	0.15	0.070	0.11
Df	0.190	0.14	-	-	-	-	0.244	0.08	-	-	-	-
Dftr	-	-	0.010	0.95	-	-	-	-	0.141	0.40	-	-
Dfeu	-	-	-	-	0.514	0.10	-	-	-	-	0.425	0.03
Dfus	-	-	-	-	-0.327	0.38	-	-	-	-	-0.053	0.88
Dfjp	-	-	-	-	-0.007	0.97	-	-	-	-	0.128	0.50
Dfn3	-	-	0.154	0.60	0.149	0.61	-	-	0.119	0.74	0.117	0.74
Dfot	-	-	0.511	0.08	0.517	0.07	-	-	0.550	0.12	0.557	0.11
Dold	0.051	0.56	0.026	0.78	0.022	0.81	-0.100	0.43	-0.134	0.26	-0.136	0.25
Dlarge	-0.113	0.62	-0.149	0.46	-0.178	0.38	0.154	0.49	0.119	0.66	0.094	0.73
F-test	21.83	0.00	16.21	0.00	12.80	0.00	3.37	0.01	2.79	0.01	2.22	0.02
White	38.03	0.00	60.91	0.00	61.41	0.00	18.57	0.35	49.21	0.01	49.60	0.03
Adj. R-sq.	0.243	-	0.247	-	0.246	-	0.063	-	0.066	-	0.058	-
Obs.	326	-	326	-	326	-	178	-	178	-	178	-

Appendix Table 6 (continued, 2/7)

Independent Variables, Indicator	All plants						Large plants with Output >=25 million baht					
	Equation 1		Equation 2		Equation 3		Equation 1		Equation 2		Equation 3	
	Coeffi-cients, etc.	Sig-nifi-cance	Coeffi-cients, etc.	Sig-nifi-cance	Coeffi-cients, etc.	Sig-nifi-cance	Coeffi-cients, etc.	Sig-nifi-cance	Coeffi-cients, etc.	Sig-nifi-cance	Coeffi-cients, etc.	Sig-nifi-cance
APPAREL												
Constant	3.183	0.00	3.199	0.00	3.212	0.00	3.080	0.00	3.194	0.00	3.199	0.00
ln(EN/E)	0.161	0.00	0.161	0.00	0.163	0.00	0.033	0.64	0.068	0.36	0.069	0.37
ln(K/E)	0.045	0.26	0.039	0.32	0.035	0.38	0.027	0.56	0.026	0.56	0.025	0.59
Df	0.378	0.01	-	-	-	-	0.383	0.00	-	-	-	-
Dftr	-	-	0.360	0.06	-	-	-	-	0.263	0.09	-	-
Dfeu	-	-	-	-	0.031	0.95	-	-	-	-	0.221	0.57
Dfus	-	-	-	-	-	-	-	-	-	-	-	-
Dfjp	-	-	-	-	0.411	0.04	-	-	-	-	0.269	0.10
Dfn3	-	-	-0.024	0.93	-0.032	0.91	-	-	0.250	0.33	0.252	0.34
Dfot	-	-	0.606	0.00	0.595	0.00	-	-	0.657	0.00	0.653	0.00
Dold	0.307	0.02	0.271	0.04	0.273	0.04	0.251	0.05	0.212	0.10	0.212	0.10
Dlarge	0.436	0.10	0.418	0.12	0.477	0.09	0.021	0.94	-0.136	0.63	-0.121	0.70
F-test	10.47	0.00	8.12	0.00	7.15	0.00	3.91	0.00	3.40	0.00	2.93	0.01
White	8.19	0.96	20.35	0.73	20.32	0.82	19.99	0.17	29.02	0.18	29.23	0.25
Adj. R-sq.	0.239	-	0.248	-	0.246	-	0.168	-	0.189	-	0.177	-
Obs.	152	-	152	-	152	-	73	-	73	-	73	-
LEATHER & FOOTWEAR												
Constant	3.181	0.00	3.171	0.00	3.160	0.00	3.289	0.00	3.252	0.00	3.234	0.00
ln(EN/E)	0.085	0.02	0.082	0.02	0.080	0.04	0.082	0.11	0.074	0.14	0.072	0.15
ln(K/E)	0.074	0.01	0.075	0.00	0.077	0.01	0.045	0.25	0.050	0.20	0.056	0.15
Df	0.188	0.08	-	-	-	-	0.257	0.03	-	-	-	-
Dftr	-	-	0.284	0.27	-	-	-	-	0.302	0.16	-	-
Dfeu	-	-	-	-	0.264	0.58	-	-	-	-	-	-
Dfus	-	-	-	-	-0.124	0.72	-	-	-	-	-0.074	0.83
Dfjp	-	-	-	-	0.489	0.04	-	-	-	-	0.551	0.05
Dfn3	-	-	0.213	0.31	0.217	0.15	-	-	0.393	0.02	0.396	0.02
Dfot	-	-	0.000	1.00	-0.005	0.98	-	-	-0.027	0.90	-0.033	0.88
Dold	0.228	0.01	0.231	0.01	0.214	0.01	0.301	0.00	0.306	0.00	0.281	0.00
Dlarge	-0.121	0.37	-0.115	0.43	-0.079	0.57	-0.279	0.07	-0.258	0.09	-0.217	0.16
F-test	5.98	0.00	4.40	0.00	3.67	0.00	3.99	0.00	3.24	0.00	3.12	0.00
White	25.65	0.08	44.82	0.01	35.20	0.16	24.39	0.11	29.87	0.27	21.80	0.70
Adj. R-sq.	0.136	-	0.131	-	0.132	-	0.120	-	0.125	-	0.133	-
Obs.	159	-	159	-	159	-	111	-	111	-	111	-

Appendix Table 6 (continued, 3/7)

Independent Variables, Indicator	All plants						Large plants with Output >=25 million baht					
	Equation 1		Equation 2		Equation 3		Equation 1		Equation 2		Equation 3	
	Coeffi-cients, etc.	Sig-nifi-cance	Coeffi-cients, etc.	Sig-nifi-cance	Coeffi-cients, etc.	Sig-nifi-cance	Coeffi-cients, etc.	Sig-nifi-cance	Coeffi-cients, etc.	Sig-nifi-cance	Coeffi-cients, etc.	Sig-nifi-cance
CHEMICALS & PRODUCTS												
Constant	3.585	0.00	3.598	0.00	3.592	0.00	3.578	0.00	3.606	0.00	3.592	0.00
ln(EN/E)	0.118	0.01	0.114	0.01	0.108	0.01	0.090	0.12	0.086	0.12	0.074	0.18
ln(K/E)	0.011	0.71	0.007	0.83	0.007	0.82	0.012	0.73	0.004	0.90	0.005	0.90
Df	0.315	0.00	-	-	-	-	0.335	0.00	-	-	-	-
Dftr	-	-	0.397	0.00	-	-	-	-	0.414	0.00	-	-
Dfeu	-	-	-	-	0.639	0.07	-	-	-	-	0.651	0.06
Dfus	-	-	-	-	0.601	0.02	-	-	-	-	0.695	0.01
Dfjp	-	-	-	-	0.259	0.06	-	-	-	-	0.255	0.10
Dfn3	-	-	0.148	0.30	0.146	0.31	-	-	0.139	0.41	0.136	0.42
Dfot	-	-	0.332	0.12	0.329	0.13	-	-	0.379	0.11	0.375	0.12
Dold	0.149	0.09	0.141	0.11	0.129	0.14	0.138	0.20	0.125	0.24	0.108	0.31
Dlarge	0.559	0.11	0.555	0.11	0.566	0.10	0.329	0.31	0.344	0.28	0.347	0.28
F-test	8.01	0.00	6.02	0.00	5.06	0.00	3.93	0.00	3.10	0.00	2.84	0.00
White	54.91	0.00	61.29	0.00	84.30	0.00	32.64	0.01	44.52	0.01	69.42	0.00
Adj. R-sq.	0.107	-	0.107	-	0.111	-	0.064	-	0.064	-	0.072	-
Obs.	294	-	294	-	294	-	216	-	216	-	216	-
RUBBER PRODUCTS												
Constant	3.571	0.00	3.604	0.00	3.587	0.00	2.875	0.00	2.928	0.00	2.901	0.00
ln(EN/E)	0.109	0.16	0.128	0.06	0.129	0.06	0.116	0.07	0.133	0.04	0.133	0.04
ln(K/E)	0.269	0.00	0.275	0.00	0.282	0.00	0.132	0.01	0.128	0.02	0.136	0.01
Df	0.112	0.52	-	-	-	-	-0.044	0.72	-	-	-	-
Dftr	-	-	-0.246	0.32	-	-	-	-	-0.231	0.21	-	-
Dfeu	-	-	-	-	0.225	0.66	-	-	-	-	-0.072	0.84
Dfus	-	-	-	-	0.115	0.80	-	-	-	-	0.153	0.65
Dfjp	-	-	-	-	-0.550	0.08	-	-	-	-	-0.447	0.05
Dfn3	-	-	0.666	0.02	0.654	0.02	-	-	0.268	0.21	0.263	0.22
Dfot	-	-	0.048	0.85	0.040	0.87	-	-	-0.087	0.63	-0.089	0.62
Dold	-0.116	0.37	-0.138	0.31	-0.144	0.29	0.076	0.51	0.059	0.60	0.060	0.60
Dlarge	0.272	0.27	0.360	0.14	0.404	0.11	0.074	0.72	0.185	0.38	0.183	0.40
F-test	9.32	0.00	7.84	0.00	6.43	0.00	3.26	0.01	2.88	0.01	2.57	0.01
White	27.77	0.05	36.00	0.12	37.01	0.33	14.04	0.66	20.14	0.78	43.63	0.10
Adj. R-sq.	0.181	-	0.203	-	0.206	-	0.073	-	0.084	-	0.089	-
Obs.	189	-	189	-	189	-	145	-	145	-	145	-

Appendix Table 6 (continued, 4/7)

Independent Variables, Indicator	All plants						Large plants with Output >=25 million baht					
	Equation 1		Equation 2		Equation 3		Equation 1		Equation 2		Equation 3	
	Coeffi-cients, etc.	Sig-nifi-cance	Coeffi-cients, etc.	Sig-nifi-cance	Coeffi-cients, etc.	Sig-nifi-cance	Coeffi-cients, etc.	Sig-nifi-cance	Coeffi-cients, etc.	Sig-nifi-cance	Coeffi-cients, etc.	Sig-nifi-cance
PLASTICS & PRODUCTS												
Constant	2.784	0.00	2.798	0.00	2.805	0.00	2.763	0.00	2.793	0.00	2.782	0.00
ln(EN/E)	0.067	0.13	0.069	0.13	0.069	0.13	0.033	0.63	0.035	0.61	0.030	0.67
ln(K/E)	0.082	0.07	0.079	0.09	0.077	0.11	0.063	0.37	0.057	0.43	0.058	0.44
Df	0.285	0.01	-	-	-	-	0.261	0.06	-	-	-	-
Dftr	-	-	0.319	0.03	-	-	-	-	0.269	0.15	-	-
Dfeu	-	-	-	-	0.171	0.74	-	-	-	-	-0.216	0.15
Dfus	-	-	-	-	0.594	0.41	-	-	-	-	0.534	0.02
Dfjp	-	-	-	-	0.318	0.04	-	-	-	-	0.276	0.18
Dfn3	-	-	0.209	0.23	0.208	0.23	-	-	0.195	0.28	0.194	0.28
Dfot	-	-	0.322	0.12	0.324	0.12	-	-	0.340	0.30	0.344	0.29
Dold	0.236	0.05	0.236	0.05	0.227	0.07	0.268	0.15	0.250	0.20	0.237	0.24
Dlarge	-0.108	0.54	-0.106	0.55	-0.103	0.56	-0.049	0.87	-0.045	0.89	-0.043	0.89
F-test	3.31	0.01	2.39	0.02	1.87	0.06	1.33	0.26	0.96	0.46	0.80	0.62
White	15.54	0.56	27.29	0.45	29.67	0.48	28.82	0.04	45.53	0.01	50.23	0.01
Adj. R-sq.	0.056	-	0.048	-	0.039	-	0.014	-	-0.002	-	-0.015	-
Obs.	194	-	194	-	194	-	119	-	119	-	119	-
NON-METALLIC MINERAL PRODUCTS												
Constant	3.020	0.00	3.007	0.00	3.009	0.00	2.952	0.00	2.924	0.00	2.930	0.00
ln(EN/E)	0.113	0.00	0.114	0.00	0.114	0.00	0.071	0.06	0.083	0.03	0.083	0.03
ln(K/E)	0.105	0.00	0.109	0.00	0.109	0.00	0.115	0.00	0.128	0.00	0.128	0.00
Df	0.481	0.00	-	-	-	-	0.485	0.00	-	-	-	-
Dftr	-	-	0.566	0.00	-	-	-	-	0.528	0.00	-	-
Dfeu	-	-	-	-	0.590	0.02	-	-	-	-	0.584	0.01
Dfus	-	-	-	-	0.900	0.01	-	-	-	-	0.869	0.00
Dfjp	-	-	-	-	0.400	0.08	-	-	-	-	0.351	0.06
Dfn3	-	-	0.610	0.00	0.611	0.00	-	-	0.708	0.00	0.707	0.00
Dfot	-	-	-0.176	0.56	-0.175	0.56	-	-	-0.399	0.19	-0.391	0.20
Dold	0.066	0.34	0.067	0.33	0.061	0.38	0.120	0.18	0.109	0.21	0.096	0.27
Dlarge	0.001	1.00	-0.007	0.97	-0.018	0.93	-0.178	0.44	-0.111	0.63	-0.155	0.51
F-test	17.06	0.00	13.08	0.00	10.35	0.00	9.11	0.00	8.25	0.00	6.75	0.00
White	4.03	1.00	4.26	1.00	4.50	1.00	16.27	0.51	26.48	0.38	31.43	0.59
Adj. R-sq.	0.143	-	0.149	-	0.149	-	0.169	-	0.202	-	0.206	-
Obs.	483	-	483	-	483	-	201	-	201	-	201	-

Appendix Table 6 (continued, 5/7)

Independent Variables, Indicator	All plants						Large plants with Output >=25 million baht					
	Equation 1		Equation 2		Equation 3		Equation 1		Equation 2		Equation 3	
	Coeffi-cients, etc.	Sig-nifi-cance	Coeffi-cients, etc.	Sig-nifi-cance	Coeffi-cients, etc.	Sig-nifi-cance	Coeffi-cients, etc.	Sig-nifi-cance	Coeffi-cients, etc.	Sig-nifi-cance	Coeffi-cients, etc.	Sig-nifi-cance
METAL PRODUCTS												
Constant	3.241	0.00	3.290	0.00	3.297	0.00	3.310	0.00	3.346	0.00	3.347	0.00
ln(EN/E)	0.054	0.06	0.060	0.03	0.060	0.03	0.047	0.29	0.053	0.24	0.052	0.25
ln(K/E)	0.086	0.00	0.076	0.00	0.072	0.00	0.091	0.01	0.085	0.01	0.084	0.01
Df	0.159	0.05	-	-	-	-	0.163	0.11	-	-	-	-
Dftr	-	-	0.285	0.00	-	-	-	-	0.225	0.06	-	-
Dfeu	-	-	-	-	0.396	0.21	-	-	-	-	0.295	0.60
Dfus	-	-	-	-	-0.191	0.72	-	-	-	-	-	-
Dfjp	-	-	-	-	0.295	0.00	-	-	-	-	0.223	0.06
Dfn3	-	-	-0.054	0.67	-0.051	0.69	-	-	0.033	0.85	0.033	0.85
Dfot	-	-	0.055	0.79	0.058	0.78	-	-	0.125	0.66	0.125	0.66
Dold	0.131	0.06	0.121	0.08	0.128	0.06	0.056	0.57	0.054	0.58	0.054	0.59
Dlarge	-0.106	0.48	-0.073	0.62	-0.073	0.63	-0.201	0.31	-0.200	0.32	-0.198	0.32
F-test	7.01	0.00	5.84	0.00	4.63	0.00	3.31	0.01	2.50	0.02	2.18	0.03
White	22.05	0.18	26.28	0.50	29.72	0.53	13.69	0.69	18.92	0.84	20.11	0.83
Adj. R-sq.	0.087	-	0.097	-	0.093	-	0.066	-	0.060	-	0.054	-
Obs.	318	-	318	-	318	-	165	-	165	-	165	-
GENERAL MACHINERY												
Constant	3.091	0.00	3.101	0.00	3.123	0.00	3.134	0.00	3.126	0.00	3.189	0.00
ln(EN/E)	0.066	0.05	0.067	0.05	0.068	0.05	0.071	0.10	0.071	0.10	0.074	0.09
ln(K/E)	0.156	0.00	0.154	0.00	0.149	0.00	0.167	0.00	0.168	0.00	0.155	0.00
Df	0.247	0.00	-	-	-	-	0.195	0.04	-	-	-	-
Dftr	-	-	0.261	0.01	-	-	-	-	0.185	0.08	-	-
Dfeu	-	-	-	-	0.180	0.41	-	-	-	-	0.087	0.69
Dfus	-	-	-	-	-0.204	0.58	-	-	-	-	-0.279	0.44
Dfjp	-	-	-	-	0.307	0.00	-	-	-	-	0.236	0.04
Dfn3	-	-	0.271	0.12	0.274	0.11	-	-	0.229	0.26	0.229	0.26
Dfot	-	-	0.171	0.30	0.174	0.29	-	-	0.212	0.27	0.212	0.27
Dold	0.083	0.28	0.082	0.28	0.076	0.32	0.151	0.12	0.153	0.12	0.137	0.17
Dlarge	0.162	0.30	0.157	0.32	0.127	0.43	0.033	0.87	0.040	0.85	0.011	0.96
F-test	15.87	0.00	11.28	0.00	9.00	0.00	7.76	0.00	5.47	0.00	4.50	0.00
White	10.75	0.82	14.21	0.97	15.98	0.99	8.78	0.92	13.62	0.95	14.14	0.99
Adj. R-sq.	0.249	-	0.243	-	0.243	-	0.203	-	0.190	-	0.191	-
Obs.	225	-	225	-	225	-	134	-	134	-	134	-

Appendix Table 6 (continued, 6/7)

Independent Variables, Indicator	All plants						Large plants with Output >=25 million baht					
	Equation 1		Equation 2		Equation 3		Equation 1		Equation 2		Equation 3	
	Coeffi-cients, etc.	Sig-nifi-cance	Coeffi-cients, etc.	Sig-nifi-cance	Coeffi-cients, etc.	Sig-nifi-cance	Coeffi-cients, etc.	Sig-nifi-cance	Coeffi-cients, etc.	Sig-nifi-cance	Coeffi-cients, etc.	Sig-nifi-cance
ELECTRIC MACHINERY, ETC. (INCL. OFFICE & COMPUTING MACHINERY, PRECISION MACHINERY)												
Constant	3.088	0.00	3.101	0.00	3.166	0.00	3.379	0.00	3.434	0.00	3.589	0.00
ln(EN/E)	0.086	0.05	0.088	0.04	0.117	0.00	0.100	0.03	0.106	0.02	0.151	0.00
ln(K/E)	0.148	0.00	0.146	0.01	0.141	0.01	0.081	0.06	0.068	0.12	0.044	0.28
Df	-0.011	0.92	-	-	-	-	0.037	0.74	-	-	-	-
Dftr	-	-	0.017	0.91	-	-	-	-	0.112	0.36	-	-
Dfeu	-	-	-	-	0.750	0.10	-	-	-	-	1.002	0.15
Dfus	-	-	-	-	-0.413	0.15	-	-	-	-	-0.431	0.12
Dfjp	-	-	-	-	0.027	0.87	-	-	-	-	0.184	0.09
Dfn3	-	-	-0.052	0.65	-0.046	0.69	-	-	-0.078	0.57	-0.057	0.63
Dfot	-	-	-0.038	0.85	-0.041	0.84	-	-	0.021	0.92	0.039	0.85
Dold	0.060	0.64	0.059	0.65	0.087	0.51	0.219	0.06	0.218	0.06	0.263	0.01
Dlarge	0.151	0.37	0.142	0.40	0.226	0.18	0.226	0.26	0.221	0.27	0.313	0.05
F-test	5.77	0.00	4.14	0.00	4.38	0.00	3.45	0.01	2.80	0.01	3.95	0.00
White	57.39	0.00	71.12	0.00	83.31	0.00	16.27	0.43	30.23	0.26	56.12	0.01
Adj. R-sq.	0.081	-	0.075	-	0.101	-	0.055	-	0.057	-	0.112	-
Obs.	272	-	272	-	272	-	211	-	211	-	211	-
MOTOR VEHICLES												
Constant	3.328	0.00	3.374	0.00	3.367	0.00	3.276	0.00	3.289	0.00	3.238	0.00
ln(EN/E)	0.135	0.00	0.130	0.00	0.131	0.00	0.257	0.00	0.244	0.00	0.249	0.00
ln(K/E)	0.111	0.00	0.092	0.01	0.094	0.01	0.221	0.00	0.209	0.00	0.224	0.00
Df	0.284	0.01	-	-	-	-	0.018	0.88	-	-	-	-
Dftr	-	-	0.387	0.00	-	-	-	-	0.063	0.63	-	-
Dfeu	-	-	-	-	0.093	0.86	-	-	-	-	-0.244	0.61
Dfus	-	-	-	-	0.648	0.23	-	-	-	-	0.671	0.16
Dfjp	-	-	-	-	0.383	0.00	-	-	-	-	0.033	0.81
Dfn3	-	-	-0.148	0.58	-0.148	0.58	-	-	-0.237	0.35	-0.234	0.35
Dfot	-	-	-0.047	0.88	-0.047	0.88	-	-	0.047	0.90	0.065	0.86
Dold	0.253	0.01	0.277	0.00	0.278	0.01	0.314	0.01	0.331	0.01	0.335	0.01
Dlarge	0.367	0.25	0.321	0.31	0.318	0.32	0.106	0.71	0.101	0.72	0.093	0.74
F-test	14.21	0.00	11.05	0.00	8.57	0.00	13.74	0.00	9.92	0.00	7.97	0.00
White	11.52	0.71	9.42	0.99	10.51	0.99	7.33	0.95	10.42	0.98	11.87	0.97
Adj. R-sq.	0.304	-	0.318	-	0.311	-	0.437	-	0.432	-	0.433	-
Obs.	152	-	152	-	152	-	83	-	83	-	83	-

Appendix Table 6 (continued, 7/7)

Independent Variables, Indicator	All plants						Large plants with Output >=25 million baht					
	Equation 1		Equation 2		Equation 3		Equation 1		Equation 2		Equation 3	
	Coeffi-cients, etc.	Sig-nifi-cance	Coeffi-cients, etc.	Sig-nifi-cance	Coeffi-cients, etc.	Sig-nifi-cance	Coeffi-cients, etc.	Sig-nifi-cance	Coeffi-cients, etc.	Sig-nifi-cance	Coeffi-cients, etc.	Sig-nifi-cance
FURNITURE												
Constant	2.591	0.00	2.606	0.00	2.622	0.00	3.470	0.00	3.490	0.00	3.490	0.00
ln(EN/E)	0.302	0.00	0.301	0.00	0.309	0.00	0.211	0.00	0.211	0.00	0.216	0.00
ln(K/E)	0.422	0.00	0.420	0.00	0.423	0.00	0.134	0.03	0.130	0.03	0.134	0.03
Df	0.502	0.02	-	-	-	-	-0.042	0.78	-	-	-	-
Dftr	-	-	0.530	0.10	-	-	-	-	-0.076	0.69	-	-
Dfeu	-	-	-	-	-0.638	0.00	-	-	-	-	-0.366	0.49
Dfus	-	-	-	-	0.578	0.00	-	-	-	-	-0.069	0.90
Dfjp	-	-	-	-	0.669	0.07	-	-	-	-	-0.029	0.89
Dfn3	-	-	0.251	0.33	0.248	0.34	-	-	-0.076	0.75	-0.076	0.75
Dfot	-	-	1.093	0.00	1.093	0.00	-	-	0.363	0.48	0.363	0.49
Dold	-0.500	0.01	-0.535	0.01	-0.543	0.00	-0.093	0.43	-0.112	0.35	-0.118	0.34
Dlarge	0.282	0.07	0.299	0.06	0.282	0.09	0.150	0.40	0.153	0.40	0.152	0.41
F-test	29.72	0.00	21.24	0.00	16.63	0.00	5.35	0.00	3.86	0.00	2.98	0.00
White	39.94	0.00	40.82	0.01	41.03	0.02	11.01	0.86	11.55	0.95	11.63	0.98
Adj. R-sq.	0.462	-	0.459	-	0.457	-	0.204	-	0.191	-	0.173	-
Obs.	168	-	168	-	168	-	86	-	86	-	86	-
JEWELRY												
Constant	2.757	0.00	2.759	0.00	2.778	0.00	Not estimated because there were					
ln(EN/E)	0.048	0.52	0.048	0.53	0.040	0.61	less than 30 observations					
ln(K/E)	0.232	0.01	0.231	0.01	0.204	0.03	-	-	-	-	-	-
Df	0.363	0.06	-	-	-	-	-	-	-	-	-	-
Dftr	-	-	0.370	0.10	-	-	-	-	-	-	-	-
Dfeu	-	-	-	-	0.354	0.23	-	-	-	-	-	-
Dfus	-	-	-	-	0.338	0.21	-	-	-	-	-	-
Dfjp	-	-	-	-	0.770	0.12	-	-	-	-	-	-
Dfn3	-	-	-	-	-	-	-	-	-	-	-	-
Dfot	-	-	0.352	0.18	0.370	0.17	-	-	-	-	-	-
Dold	0.243	0.26	0.244	0.27	0.282	0.22	-	-	-	-	-	-
Dlarge	0.347	0.37	0.352	0.38	0.385	0.34	-	-	-	-	-	-
F-test	7.92	0.00	6.43	0.00	4.79	0.00	-	-	-	-	-	-
White	8.43	0.91	12.14	0.88	-	0.22	-	-	-	-	-	-
Adj. R-sq.	0.440	-	0.426	-	0.408	-	-	-	-	-	-	-
Obs.	45	-	45	-	45	-	27	-	27	-	27	-

Notes: Heteroscedasticity-consistent standard errors used if White is significant at 0.05 or less.

If White cannot be calculated, the significance of the LM heteroscedasticity test is reported and used.

- = not relevant or no plants in this category; n<30 = sample size smaller than 30.

Appendix Table 7: Estimates of Value Added per Hour (dependent variable = ln(V/E)), 2000

Independent Variables, Indicator	All plants						Large plants with Output >=25 million baht					
	Equation 1		Equation 2		Equation 3		Equation 1		Equation 2		Equation 3	
	Coefficients, etc.	Significance	Coefficients, etc.	Significance	Coefficients, etc.	Significance	Coefficients, etc.	Significance	Coefficients, etc.	Significance	Coefficients, etc.	Significance
FOOD												
Constant	-4.138	0.00	-4.127	0.00	-4.128	0.00	-3.619	0.00	-3.597	0.00	-3.599	0.00
ln(EN/E)	0.107	0.00	0.112	0.00	0.112	0.00	0.074	0.14	0.082	0.11	0.083	0.11
ln(K/E)	0.335	0.00	0.336	0.00	0.335	0.00	0.268	0.00	0.268	0.00	0.267	0.00
Df	0.187	0.19	-	-	-	-	0.017	0.91	-	-	-	-
Dftr	-	-	0.145	0.42	-	-	-	-	-0.013	0.94	-	-
Dfeu	-	-	-	-	-0.634	0.33	-	-	-	-	-0.709	0.05
Dfus	-	-	-	-	0.875	0.08	-	-	-	-	0.670	0.22
Dfjp	-	-	-	-	0.253	0.12	-	-	-	-	0.093	0.65
Dfn3	-	-	0.579	0.00	0.570	0.00	-	-	0.381	0.25	0.379	0.25
Dfot	-	-	-0.238	0.40	-0.236	0.40	-	-	-0.388	0.36	-0.386	0.36
Dboi	-0.058	0.60	-0.049	0.66	-0.067	0.55	-0.256	0.08	-0.249	0.09	-0.263	0.07
Dold	0.120	0.19	0.117	0.21	0.120	0.19	0.152	0.20	0.146	0.22	0.152	0.20
Dlarge	0.254	0.14	0.243	0.16	0.323	0.04	-0.011	0.95	-0.017	0.93	0.036	0.85
F-test	23.20	0.00	17.74	0.00	14.93	0.00	7.20	0.00	5.69	0.00	5.17	0.00
White	50.27	0.00	55.31	0.02	71.85	0.01	20.43	0.62	23.43	0.93	33.76	0.89
Adj. R-sq.	0.184	-	0.185	-	0.191	-	0.095	-	0.096	-	0.106	-
Obs.	591	-	591	-	591	-	354	-	354	-	354	-
TEXTILES												
Constant	-3.825	0.00	-3.817	0.00	-3.814	0.00	-3.380	0.00	-3.336	0.00	-3.358	0.00
ln(EN/E)	0.254	0.00	0.257	0.00	0.260	0.00	0.065	0.59	0.072	0.56	0.070	0.57
ln(K/E)	0.277	0.00	0.275	0.00	0.277	0.00	0.033	0.69	0.024	0.77	0.034	0.70
Df	0.359	0.12	-	-	-	-	0.481	0.06	-	-	-	-
Dftr	-	-	0.422	0.21	-	-	-	-	0.603	0.09	-	-
Dfeu	-	-	-	-	0.879	0.24	-	-	-	-	1.391	0.18
Dfus	-	-	-	-	0.435	0.68	-	-	-	-	0.413	0.70
Dfjp	-	-	-	-	0.302	0.44	-	-	-	-	0.515	0.19
Dfn3	-	-	0.179	0.63	0.167	0.66	-	-	0.125	0.75	0.115	0.77
Dfot	-	-	0.464	0.23	0.454	0.24	-	-	0.727	0.09	0.713	0.10
Dboi	0.329	0.19	0.337	0.18	0.362	0.16	0.366	0.17	0.372	0.16	0.383	0.16
Dold	0.007	0.96	0.015	0.93	0.015	0.93	0.005	0.98	0.006	0.98	-0.012	0.96
Dlarge	-0.493	0.19	-0.517	0.18	-0.524	0.17	-0.410	0.31	-0.429	0.30	-0.433	0.29
F-test	14.69	0.00	10.96	0.00	8.74	0.00	1.57	0.17	1.36	0.23	1.14	0.35
White	18.78	0.71	30.58	0.68	30.74	0.79	18.35	0.74	24.41	0.91	24.86	0.94
Adj. R-sq.	0.317	-	0.310	-	0.304	-	0.035	-	0.030	-	0.014	-
Obs.	178	-	178	-	178	-	95	-	95	-	95	-

Appendix Table 7 (continued, 2/7)

Independent Variables, Indicator	All plants						Large plants with Output >=25 million baht					
	Equation 1		Equation 2		Equation 3		Equation 1		Equation 2		Equation 3	
	Coeffi-cients, etc.	Sig-nifi-cance	Coeffi-cients, etc.	Sig-nifi-cance	Coeffi-cients, etc.	Sig-nifi-cance	Coeffi-cients, etc.	Sig-nifi-cance	Coeffi-cients, etc.	Sig-nifi-cance	Coeffi-cients, etc.	Sig-nifi-cance
APPAREL												
Constant	-3.259	0.00	-3.262	0.00	-3.264	0.00	-3.048	0.00	-3.002	0.00	-3.002	0.00
ln(EN/E)	0.287	0.00	0.287	0.00	0.287	0.00	0.135	0.39	0.148	0.38	0.148	0.39
ln(K/E)	0.288	0.00	0.291	0.00	0.290	0.00	0.262	0.10	0.262	0.11	0.262	0.13
Df	-0.190	0.60	-	-	-	-	-0.125	0.70	-	-	-	-
Dftr	-	-	-0.311	0.50	-	-	-	-	-0.230	0.59	-	-
Dfeu	-	-	-	-	-	-	-	-	-	-	-	-
Dfus	-	-	-	-	-0.463	0.62	-	-	-	-	-0.234	0.79
Dfjp	-	-	-	-	-0.282	0.56	-	-	-	-	-0.229	0.63
Dfn3	-	-	0.446	0.61	0.444	0.61	-	-	0.295	0.73	0.294	0.73
Dfot	-	-	-0.301	0.60	-0.306	0.60	-	-	-0.095	0.87	-0.095	0.87
Dboi	-0.035	0.88	-0.057	0.81	-0.052	0.83	-0.409	0.20	-0.430	0.20	-0.430	0.21
Dold	0.189	0.42	0.198	0.44	0.195	0.45	-0.377	0.21	-0.385	0.24	-0.385	0.25
Dlarge	0.242	0.49	0.310	0.39	0.323	0.38	0.461	0.26	0.457	0.29	0.457	0.30
F-test	5.62	0.00	4.22	0.00	3.70	0.00	0.99	0.45	0.74	0.65	0.64	0.76
White	9.71	0.99	9.99	1.00	10.39	1.00	11.89	0.96	-	0.73	-	0.73
Adj. R-sq.	0.270	-	0.255	-	0.244	-	-0.002	-	-0.059	-	-0.097	-
Obs.	76	-	76	-	76	-	38	-	38	-	38	-
LEATHER & FOOTWEAR												
Constant	-3.580	0.00	-3.650	0.00	-3.650	0.00	-2.013	0.01	-2.046	0.01	-2.046	0.01
ln(EN/E)	0.126	0.32	0.105	0.42	0.105	0.42	0.527	0.00	0.517	0.01	0.517	0.01
ln(K/E)	0.048	0.63	0.043	0.67	0.043	0.67	0.014	0.91	0.012	0.93	0.012	0.93
Df	0.976	0.01	-	-	-	-	0.654	0.07	-	-	-	-
Dftr	-	-	0.859	0.17	-	-	-	-	0.681	0.23	-	-
Dfeu	-	-	-	-	-	-	-	-	-	-	-	-
Dfus	-	-	-	-	-	-	-	-	-	-	-	-
Dfjp	-	-	-	-	0.859	0.17	-	-	-	-	0.681	0.23
Dfn3	-	-	1.166	0.01	1.166	0.01	-	-	0.685	0.12	0.685	0.12
Dfot	-	-	0.048	0.97	0.048	0.97	-	-	0.409	0.70	0.409	0.70
Dboi	0.208	0.52	0.208	0.53	0.208	0.53	-0.102	0.77	-0.106	0.77	-0.106	0.77
Dold	0.153	0.60	0.191	0.52	0.191	0.52	-0.333	0.32	-0.311	0.38	-0.311	0.38
Dlarge	-0.097	0.85	-0.099	0.85	-0.099	0.85	0.484	0.32	0.489	0.33	0.489	0.33
F-test	2.00	0.08	1.58	0.15	1.58	0.15	3.20	0.01	2.28	0.04	2.28	0.04
White	19.86	0.59	20.19	0.82	20.19	0.82	26.37	0.19	-	0.09	-	0.09
Adj. R-sq.	0.074	-	0.058	-	0.058	-	0.231	-	0.189	-	0.189	-
Obs.	76	-	76	-	76	-	45	-	45	-	45	-

Appendix Table 7 (continued, 3/7)

Independent Variables, Indicator	All plants						Large plants with Output >=25 million baht					
	Equation 1		Equation 2		Equation 3		Equation 1		Equation 2		Equation 3	
	Coeffi-cients, etc.	Sig-nifi-cance	Coeffi-cients, etc.	Sig-nifi-cance	Coeffi-cients, etc.	Sig-nifi-cance	Coeffi-cients, etc.	Sig-nifi-cance	Coeffi-cients, etc.	Sig-nifi-cance	Coeffi-cients, etc.	Sig-nifi-cance
CHEMICALS & PRODUCTS												
Constant	-5.179	0.00	-5.118	0.00	-5.097	0.00	-3.521	0.00	-3.349	0.00	-3.340	0.00
ln(EN/E)	-0.019	0.89	-0.025	0.81	-0.012	0.91	0.022	0.86	0.020	0.87	0.043	0.74
ln(K/E)	0.536	0.01	0.525	0.00	0.528	0.00	0.195	0.11	0.161	0.20	0.168	0.19
Df	0.242	0.37	-	-	-	-	0.437	0.16	-	-	-	-
Dftr	-	-	0.425	0.25	-	-	-	-	0.558	0.12	-	-
Dfeu	-	-	-	-	0.321	0.51	-	-	-	-	0.377	0.44
Dfus	-	-	-	-	0.061	0.94	-	-	-	-	0.292	0.71
Dfjp	-	-	-	-	0.622	0.21	-	-	-	-	0.790	0.10
Dfn3	-	-	-0.377	0.52	-0.376	0.52	-	-	-0.228	0.71	-0.220	0.72
Dfot	-	-	0.416	0.53	0.414	0.54	-	-	0.810	0.20	0.810	0.21
Dboi	-0.170	0.68	-0.233	0.55	-0.260	0.51	-0.101	0.79	-0.130	0.73	-0.159	0.68
Dold	0.468	0.12	0.421	0.12	0.408	0.14	0.187	0.53	0.123	0.68	0.127	0.68
Dlarge	-0.186	0.64	-0.283	0.65	-0.204	0.75	0.628	0.39	0.636	0.38	0.779	0.31
F-test	9.41	0.00	7.22	0.00	5.73	0.00	1.69	0.14	1.50	0.18	1.23	0.29
White	37.01	0.02	41.69	0.10	46.08	0.17	7.68	1.00	9.30	1.00	12.41	1.00
Adj. R-sq.	0.338	-	0.334	-	0.323	-	0.053	-	0.051	-	0.030	-
Obs.	100	-	100	-	100	-	75	-	75	-	75	-
RUBBER PRODUCTS												
Constant	-3.435	0.00	-3.514	0.00	-3.376	0.00	-3.477	0.00	-3.703	0.00	-3.360	0.00
ln(EN/E)	0.094	0.40	0.083	0.48	0.130	0.26	-0.049	0.76	-0.095	0.58	0.014	0.94
ln(K/E)	0.195	0.10	0.204	0.09	0.184	0.11	0.220	0.14	0.247	0.12	0.197	0.20
Df	0.371	0.29	-	-	-	-	0.190	0.61	-	-	-	-
Dftr	-	-	0.174	0.71	-	-	-	-	-0.071	0.88	-	-
Dfeu	-	-	-	-	1.310	0.04	-	-	-	-	1.015	0.14
Dfus	-	-	-	-	-0.707	0.56	-	-	-	-	-0.792	0.51
Dfjp	-	-	-	-	-0.509	0.36	-	-	-	-	-0.627	0.27
Dfn3	-	-	0.445	0.42	0.346	0.52	-	-	0.376	0.51	0.248	0.65
Dfot	-	-	0.736	0.23	0.632	0.29	-	-	0.581	0.37	0.477	0.45
Dboi	-0.199	0.52	-0.263	0.42	-0.104	0.75	-0.406	0.24	-0.510	0.16	-0.293	0.42
Dold	-0.165	0.53	-0.115	0.67	-0.074	0.78	-0.317	0.30	-0.232	0.47	-0.199	0.52
Dlarge	0.342	0.48	0.517	0.33	0.323	0.56	0.261	0.59	0.501	0.36	0.285	0.61
F-test	1.67	0.14	1.31	0.25	1.76	0.09	1.06	0.40	0.90	0.53	1.28	0.27
White	20.39	0.62	27.74	0.63	21.28	0.94	16.55	0.83	25.52	0.74	-	0.37
Adj. R-sq.	0.049	-	0.031	-	0.089	-	0.006	-	-0.015	-	0.047	-
Obs.	79	-	79	-	79	-	58	-	58	-	58	-

Appendix Table 7 (continued, 4/7)

Independent Variables, Indicator	All plants						Large plants with Output >=25 million baht					
	Equation 1		Equation 2		Equation 3		Equation 1		Equation 2		Equation 3	
	Coeffi-cients, etc.	Sig-nifi-cance	Coeffi-cients, etc.	Sig-nifi-cance	Coeffi-cients, etc.	Sig-nifi-cance	Coeffi-cients, etc.	Sig-nifi-cance	Coeffi-cients, etc.	Sig-nifi-cance	Coeffi-cients, etc.	Sig-nifi-cance
PLASTICS & PRODUCTS												
Constant	-3.847	0.00	-3.857	0.00	-3.883	0.00	-3.213	0.00	-3.122	0.00	-3.185	0.00
ln(EN/E)	0.063	0.51	0.059	0.54	0.076	0.43	0.141	0.31	0.131	0.36	0.164	0.25
ln(K/E)	0.149	0.21	0.155	0.20	0.180	0.13	0.091	0.56	0.090	0.57	0.128	0.42
Df	0.188	0.60	-	-	-	-	-0.184	0.63	-	-	-	-
Dftr	-	-	0.018	0.97	-	-	-	-	-0.355	0.40	-	-
Dfeu	-	-	-	-	-1.429	0.12	-	-	-	-	-1.453	0.09
Dfus	-	-	-	-	-	-	-	-	-	-	-	-
Dfjp	-	-	-	-	0.445	0.35	-	-	-	-	0.012	0.98
Dfn3	-	-	-0.005	0.99	0.099	0.90	-	-	0.653	0.60	0.774	0.53
Dfot	-	-	0.665	0.27	0.655	0.27	-	-	0.318	0.66	0.320	0.66
Dboi	-0.045	0.91	-0.020	0.96	-0.262	0.53	0.303	0.50	0.187	0.69	-0.036	0.94
Dold	-0.474	0.10	-0.529	0.08	-0.496	0.10	-0.468	0.21	-0.626	0.12	-0.571	0.15
Dlarge	1.001	0.03	0.989	0.03	1.221	0.01	0.473	0.31	0.511	0.29	0.716	0.15
F-test	2.19	0.05	1.75	0.10	1.97	0.05	1.40	0.24	1.18	0.33	1.32	0.26
White	12.72	0.96	13.76	1.00	13.48	1.00	23.57	0.43	29.28	0.30	-	0.58
Adj. R-sq.	0.076	-	0.065	-	0.091	-	0.047	-	0.029	-	0.056	-
Obs.	88	-	88	-	88	-	50	-	50	-	50	-
NON-METALLIC MINERAL PRODUCTS												
Constant	-3.469	0.00	-3.494	0.00	-3.474	0.00	-3.141	0.00	-3.170	0.00	-3.073	0.00
ln(EN/E)	0.090	0.11	0.091	0.11	0.096	0.09	0.048	0.58	0.053	0.55	0.065	0.47
ln(K/E)	0.103	0.05	0.111	0.04	0.108	0.05	0.086	0.27	0.095	0.27	0.076	0.38
Df	0.446	0.05	-	-	-	-	0.178	0.50	-	-	-	-
Dftr	-	-	0.292	0.33	-	-	-	-	0.077	0.83	-	-
Dfeu	-	-	-	-	0.344	0.36	-	-	-	-	0.176	0.68
Dfus	-	-	-	-	-1.305	0.19	-	-	-	-	-1.761	0.11
Dfjp	-	-	-	-	0.553	0.26	-	-	-	-	0.461	0.46
Dfn3	-	-	0.695	0.05	0.719	0.05	-	-	0.351	0.37	0.382	0.33
Dfot	-	-	0.421	0.47	0.444	0.44	-	-	-0.005	1.00	0.000	1.00
Dboi	-0.339	0.14	-0.360	0.12	-0.403	0.08	-0.450	0.10	-0.456	0.10	-0.524	0.06
Dold	0.061	0.66	0.061	0.66	0.066	0.63	0.051	0.80	0.064	0.75	0.053	0.79
Dlarge	0.544	0.10	0.576	0.09	0.716	0.04	0.571	0.22	0.576	0.22	0.927	0.07
F-test	3.72	0.00	2.87	0.00	2.61	0.01	1.53	0.18	1.18	0.32	1.29	0.25
White	16.38	0.84	18.15	0.97	19.57	0.98	8.46	1.00	9.70	1.00	9.96	1.00
Adj. R-sq.	0.077	-	0.071	-	0.076	-	0.029	-	0.013	-	0.027	-
Obs.	197	-	197	-	197	-	106	-	106	-	106	-

Appendix Table 7 (continued, 5/7)

Independent Variables, Indicator	All plants						Large plants with Output >=25 million baht					
	Equation 1		Equation 2		Equation 3		Equation 1		Equation 2		Equation 3	
	Coefficients, etc.	Significance	Coefficients, etc.	Significance	Coefficients, etc.	Significance	Coefficients, etc.	Significance	Coefficients, etc.	Significance	Coefficients, etc.	Significance
METAL PRODUCTS												
Constant	-3.131	0.00	-3.142	0.00	-3.162	0.00	-2.814	0.00	-2.833	0.00	-2.858	0.00
ln(EN/E)	0.102	0.11	0.111	0.09	0.108	0.10	0.088	0.42	0.099	0.36	0.096	0.37
ln(K/E)	0.126	0.05	0.135	0.04	0.138	0.03	0.107	0.30	0.116	0.28	0.121	0.27
Df	0.285	0.23	-	-	-	-	0.122	0.62	-	-	-	-
Dftr	-	-	-0.107	0.74	-	-	-	-	-0.175	0.56	-	-
Dfeu	-	-	-	-	0.148	0.79	-	-	-	-	-0.005	0.99
Dfus	-	-	-	-	-	-	-	-	-	-	-	-
Dfjp	-	-	-	-	-0.168	0.62	-	-	-	-	-0.218	0.50
Dfn3	-	-	0.571	0.06	0.572	0.06	-	-	0.359	0.20	0.359	0.19
Dfot	-	-	0.343	0.49	0.343	0.49	-	-	0.137	0.87	0.138	0.87
Dboi	0.235	0.34	0.346	0.18	0.340	0.18	0.171	0.51	0.271	0.29	0.264	0.30
Dold	0.052	0.74	0.037	0.81	0.043	0.78	0.000	1.00	-0.016	0.94	-0.008	0.97
Dlarge	0.078	0.81	0.145	0.66	0.144	0.66	0.008	0.99	0.056	0.90	0.048	0.92
F-test	3.59	0.00	3.17	0.00	2.84	0.00	1.17	0.33	1.15	0.34	1.03	0.42
White	15.04	0.89	17.19	0.99	12.16	1.00	35.33	0.05	46.73	0.04	51.87	0.04
Adj. R-sq.	0.084	-	0.093	-	0.089	-	0.011	-	0.013	-	0.003	-
Obs.	170	-	170	-	170	-	92	-	92	-	92	-
GENERAL MACHINERY												
Constant	-3.263	0.00	-3.211	0.00	-3.144	0.00	-4.006	0.00	-3.949	0.00	-3.805	0.00
ln(EN/E)	0.052	0.56	0.051	0.57	0.065	0.47	-0.170	0.23	-0.167	0.24	-0.144	0.32
ln(K/E)	0.057	0.58	0.043	0.67	0.036	0.73	0.215	0.19	0.202	0.23	0.177	0.30
Df	0.516	0.08	-	-	-	-	0.391	0.33	-	-	-	-
Dftr	-	-	0.675	0.05	-	-	-	-	0.467	0.30	-	-
Dfeu	-	-	-	-	-0.063	0.92	-	-	-	-	-0.114	0.87
Dfus	-	-	-	-	-	-	-	-	-	-	-	-
Dfjp	-	-	-	-	0.855	0.02	-	-	-	-	0.636	0.19
Dfn3	-	-	0.102	0.85	0.098	0.85	-	-	0.161	0.84	0.154	0.84
Dfot	-	-	0.461	0.50	0.458	0.51	-	-	0.277	0.73	0.276	0.73
Dboi	0.307	0.40	0.235	0.53	0.214	0.57	-0.133	0.78	-0.160	0.74	-0.166	0.74
Dold	0.164	0.48	0.153	0.51	0.133	0.57	0.266	0.42	0.253	0.45	0.234	0.49
Dlarge	-0.091	0.87	-0.158	0.78	-0.313	0.58	-0.006	0.99	-0.038	0.95	-0.171	0.79
F-test	1.96	0.08	1.58	0.14	1.65	0.11	0.94	0.48	0.70	0.69	0.75	0.67
White	24.40	0.27	27.09	0.57	26.32	0.79	28.82	0.12	33.88	0.17	31.42	0.50
Adj. R-sq.	0.052	-	0.042	-	0.053	-	-0.006	-	-0.038	-	-0.037	-
Obs.	106	-	106	-	106	-	66	-	66	-	66	-

Appendix Table 7 (continued, 6/7)

Independent Variables, Indicator	All plants						Large plants with Output >=25 million baht					
	Equation 1		Equation 2		Equation 3		Equation 1		Equation 2		Equation 3	
	Coefficients, etc.	Significance	Coefficients, etc.	Significance	Coefficients, etc.	Significance	Coefficients, etc.	Significance	Coefficients, etc.	Significance	Coefficients, etc.	Significance
ELECTRIC MACHINERY, ETC. (INCL. OFFICE & COMPUTING MACHINERY, PRECISION MACHINERY)												
Constant	-3.371	0.00	-3.448	0.00	-3.456	0.00	-3.215	0.00	-3.337	0.00	-3.350	0.00
ln(EN/E)	0.107	0.20	0.087	0.29	0.088	0.29	0.102	0.29	0.083	0.39	0.084	0.39
ln(K/E)	0.172	0.01	0.180	0.01	0.183	0.01	0.140	0.10	0.159	0.06	0.163	0.06
Df	-0.387	0.09	-	-	-	-	-0.398	0.10	-	-	-	-
Dftr	-	-	-0.491	0.04	-	-	-	-	-0.525	0.04	-	-
Dfeu	-	-	-	-	-0.553	0.21	-	-	-	-	-0.601	0.17
Dfus	-	-	-	-	-0.313	0.54	-	-	-	-	-0.362	0.47
Dfjp	-	-	-	-	-0.495	0.05	-	-	-	-	-0.527	0.05
Dfn3	-	-	-0.179	0.56	-0.173	0.58	-	-	-0.188	0.54	-0.182	0.56
Dfot	-	-	0.379	0.49	0.384	0.49	-	-	0.447	0.46	0.454	0.46
Dboi	0.461	0.05	0.448	0.05	0.440	0.06	0.450	0.06	0.455	0.06	0.448	0.07
Dold	0.077	0.65	0.103	0.56	0.111	0.54	0.066	0.72	0.115	0.53	0.126	0.51
Dlarge	0.624	0.09	0.659	0.07	0.647	0.08	0.518	0.17	0.569	0.13	0.558	0.14
F-test	3.55	0.00	3.15	0.00	2.51	0.01	1.87	0.09	1.91	0.06	1.52	0.14
White	11.72	0.95	13.13	1.00	20.96	1.00	10.76	0.97	11.69	1.00	18.12	1.00
Adj. R-sq.	0.095	-	0.105	-	0.094	-	0.040	-	0.055	-	0.040	-
Obs.	147	-	147	-	147	-	125	-	125	-	125	-
MOTOR VEHICLES												
Constant	-3.413	0.00	-3.397	0.00	-3.342	0.00	-2.971	0.00	-2.834	0.00	-2.681	0.00
ln(EN/E)	0.074	0.38	0.074	0.38	0.086	0.33	-0.005	0.97	-0.007	0.96	0.033	0.81
ln(K/E)	0.090	0.35	0.084	0.39	0.075	0.45	0.014	0.94	-0.036	0.84	-0.059	0.67
Df	0.299	0.39	-	-	-	-	0.340	0.39	-	-	-	-
Dftr	-	-	0.356	0.33	-	-	-	-	0.498	0.24	-	-
Dfeu	-	-	-	-	0.164	0.84	-	-	-	-	0.915	0.69
Dfus	-	-	-	-	0.998	0.35	-	-	-	-	0.912	0.15
Dfjp	-	-	-	-	0.347	0.36	-	-	-	-	0.417	0.30
Dfn3	-	-	0.094	0.86	0.104	0.85	-	-	-0.111	0.84	-0.125	0.85
Dfot	-	-	0.148	0.89	0.163	0.87	-	-	0.055	0.96	0.030	0.95
Dboi	0.165	0.63	0.171	0.62	0.164	0.64	-0.007	0.99	0.044	0.91	0.090	0.86
Dold	-0.256	0.24	-0.254	0.25	-0.246	0.27	-0.119	0.71	-0.111	0.73	-0.112	0.75
Dlarge	1.859	0.00	1.816	0.01	1.897	0.01	1.217	0.12	1.192	0.13	1.282	0.37
F-test	4.83	0.00	3.58	0.00	2.85	0.00	0.96	0.46	0.89	0.53	0.75	0.68
White	13.80	0.84	22.12	0.63	24.20	0.62	15.36	0.70	-	0.26	-	0.02
Adj. R-sq.	0.209	-	0.192	-	0.176	-	-0.005	-	-0.021	-	-0.065	-
Obs.	88	-	88	-	88	-	43	-	43	-	43	-

Appendix Table 7 (continued, 7/7)

Independent Variables, Indicator	All plants						Large plants with Output >=25 million baht					
	Equation 1		Equation 2		Equation 3		Equation 1		Equation 2		Equation 3	
	Coefficients, etc.	Significance	Coefficients, etc.	Significance	Coefficients, etc.	Significance	Coefficients, etc.	Significance	Coefficients, etc.	Significance	Coefficients, etc.	Significance
FURNITURE												
Constant	-3.106	0.00	-3.089	0.00	-3.091	0.00	-3.209	0.00	-3.221	0.00	-3.239	0.00
ln(EN/E)	0.516	0.00	0.521	0.00	0.521	0.00	0.207	0.10	0.207	0.11	0.207	0.11
ln(K/E)	0.455	0.00	0.455	0.00	0.455	0.00	0.154	0.16	0.158	0.16	0.152	0.17
Df	0.956	0.02	-	-	-	-	0.383	0.18	-	-	-	-
Dftr	-	-	1.116	0.05	-	-	-	-	0.388	0.30	-	-
Dfeu	-	-	-	-	-	-	-	-	-	-	-	-
Dfus	-	-	-	-	1.240	0.17	-	-	-	-	0.752	0.20
Dfjp	-	-	-	-	1.040	0.15	-	-	-	-	0.164	0.72
Dfn3	-	-	0.936	0.19	0.936	0.19	-	-	0.612	0.27	0.623	0.26
Dfot	-	-	0.623	0.46	0.623	0.47	-	-	0.182	0.73	0.188	0.72
Dboi	0.294	0.55	0.258	0.60	0.245	0.63	0.543	0.10	0.524	0.13	0.479	0.17
Dold	-0.677	0.01	-0.675	0.01	-0.669	0.01	0.222	0.35	0.235	0.34	0.287	0.26
Dlarge	0.271	0.57	0.273	0.57	0.289	0.56	0.249	0.49	0.222	0.55	0.306	0.43
F-test	21.81	0.00	16.07	0.00	14.13	0.00	3.38	0.01	2.46	0.03	2.25	0.04
White	12.84	0.96	13.15	0.99	13.21	0.99	23.65	0.42	-	0.77	-	0.89
Adj. R-sq.	0.568	-	0.559	-	0.554	-	0.249	-	0.214	-	0.207	-
Obs.	96	-	96	-	96	-	44	-	44	-	44	-
JEWELRY												
Constant	-3.487	0.00	-3.866	0.00	-3.927	0.00	Not estimated because there were					
ln(EN/E)	0.211	0.21	0.173	0.29	0.166	0.32	less than 30 observations					
ln(K/E)	0.210	0.18	0.299	0.06	0.311	0.06	-	-	-	-	-	-
Df	0.123	0.78	-	-	-	-	-	-	-	-	-	-
Dftr	-	-	-0.399	0.50	-	-	-	-	-	-	-	-
Dfeu	-	-	-	-	-0.575	0.37	-	-	-	-	-	-
Dfus	-	-	-	-	-	-	-	-	-	-	-	-
Dfjp	-	-	-	-	-0.054	0.94	-	-	-	-	-	-
Dfn3	-	-	-	-	0.807	0.19	-	-	-	-	-	-
Dfot	-	-	-0.983	0.20	-0.997	0.20	-	-	-	-	-	-
Dboi	0.320	0.48	0.916	0.11	0.899	0.12	-	-	-	-	-	-
Dold	0.150	0.69	0.061	0.87	0.176	0.66	-	-	-	-	-	-
Dlarge	0.539	0.51	0.243	0.76	0.232	0.77	-	-	-	-	-	-
F-test	2.29	0.06	2.29	0.05	2.07	0.07	-	-	-	-	-	-
White	15.15	0.71	-	0.79	-	0.82	-	-	-	-	-	-
Adj. R-sq.	0.165	-	0.210	-	0.198	-	-	-	-	-	-	-
Obs.	40	-	40	-	40	-	22	-	22	-	22	-

Notes: Heteroscedasticity-consistent standard errors used if White is significant at 0.05 or less.

If White cannot be calculated, the significance of the LM heteroscedasticity test is reported and used.

- = not relevant or no plants in this category; n<30 = sample size smaller than 30.

Appendix Table 8: Estimates of Compensation per Hour (dependent variable = ln(W/E)), 2000

Independent Variables, Indicator	All plants						Large plants with Output >=25 million baht					
	Equation 1		Equation 2		Equation 3		Equation 1		Equation 2		Equation 3	
	Coefficients, etc.	Significance	Coefficients, etc.	Significance	Coefficients, etc.	Significance	Coefficients, etc.	Significance	Coefficients, etc.	Significance	Coefficients, etc.	Significance
FOOD												
Constant	2.489	0.00	2.501	0.00	2.500	0.00	2.934	0.00	2.957	0.00	2.956	0.00
ln(EN/E)	0.099	0.00	0.103	0.00	0.103	0.00	0.087	0.00	0.095	0.00	0.095	0.00
ln(K/E)	0.168	0.00	0.168	0.00	0.168	0.00	0.076	0.00	0.075	0.00	0.076	0.00
Df	0.175	0.03	-	-	-	-	0.127	0.14	-	-	-	-
Dftr	-	-	0.166	0.08	-	-	-	-	0.128	0.19	-	-
Dfeu	-	-	-	-	0.150	0.45	-	-	-	-	0.176	0.38
Dfus	-	-	-	-	0.050	0.89	-	-	-	-	0.013	0.97
Dfjp	-	-	-	-	0.183	0.08	-	-	-	-	0.129	0.25
Dfn3	-	-	0.446	0.00	0.446	0.00	-	-	0.378	0.04	0.378	0.04
Dfot	-	-	-0.258	0.17	-0.259	0.17	-	-	-0.304	0.19	-0.304	0.19
Dboi	-0.141	0.06	-0.134	0.07	-0.134	0.07	-0.223	0.01	-0.218	0.01	-0.217	0.01
Dold	0.104	0.06	0.103	0.06	0.104	0.06	0.130	0.05	0.126	0.05	0.127	0.05
Dlarge	0.285	0.00	0.274	0.00	0.273	0.00	0.174	0.10	0.169	0.11	0.164	0.13
F-test	23.45	0.00	18.30	0.00	14.61	0.00	6.28	0.00	5.47	0.00	4.38	0.00
White	197.44	0.00	200.72	0.00	201.72	0.00	21.30	0.56	24.27	0.91	27.01	0.98
Adj. R-sq.	0.186	-	0.190	-	0.187	-	0.082	-	0.092	-	0.087	-
Obs.	591	-	591	-	591	-	354	-	354	-	354	-
TEXTILES												
Constant	2.654	0.00	2.663	0.00	2.663	0.00	2.884	0.00	2.899	0.00	2.915	0.00
ln(EN/E)	0.192	0.00	0.195	0.00	0.196	0.00	0.034	0.72	0.035	0.64	0.037	0.63
ln(K/E)	0.186	0.00	0.184	0.00	0.185	0.00	0.000	0.99	-0.004	0.93	-0.011	0.83
Df	0.308	0.02	-	-	-	-	0.412	0.01	-	-	-	-
Dftr	-	-	0.328	0.08	-	-	-	-	0.504	0.02	-	-
Dfeu	-	-	-	-	0.478	0.21	-	-	-	-	-0.095	0.88
Dfus	-	-	-	-	0.575	0.00	-	-	-	-	0.654	0.31
Dfjp	-	-	-	-	0.259	0.28	-	-	-	-	0.570	0.02
Dfn3	-	-	0.160	0.50	0.153	0.53	-	-	0.214	0.37	0.222	0.36
Dfot	-	-	0.438	0.04	0.433	0.04	-	-	0.508	0.06	0.519	0.05
Dboi	-0.068	0.72	-0.059	0.75	-0.043	0.82	-0.128	0.46	-0.123	0.45	-0.131	0.43
Dold	0.065	0.61	0.071	0.58	0.074	0.57	0.074	0.60	0.078	0.60	0.092	0.54
Dlarge	-0.328	0.24	-0.359	0.19	-0.364	0.19	-0.271	0.31	-0.276	0.27	-0.273	0.28
F-test	11.59	0.00	8.69	0.00	6.90	0.00	1.49	0.19	1.25	0.28	1.09	0.38
White	55.76	0.00	56.19	0.01	56.26	0.03	34.78	0.05	42.15	0.19	44.08	0.20
Adj. R-sq.	0.264	-	0.258	-	0.250	-	0.030	-	0.021	-	0.010	-
Obs.	178	-	178	-	178	-	95	-	95	-	95	-

Appendix Table 8 (continued, 2/7)

Independent Variables, Indicator	All plants						Large plants with Output >=25 million baht					
	Equation 1		Equation 2		Equation 3		Equation 1		Equation 2		Equation 3	
	Coeffi-cients, etc.	Sig-nifi-cance	Coeffi-cients, etc.	Sig-nifi-cance	Coeffi-cients, etc.	Sig-nifi-cance	Coeffi-cients, etc.	Sig-nifi-cance	Coeffi-cients, etc.	Sig-nifi-cance	Coeffi-cients, etc.	Sig-nifi-cance
APPAREL												
Constant	2.889	0.00	2.906	0.00	2.906	0.00	3.256	0.00	3.327	0.00	3.325	0.00
ln(EN/E)	0.130	0.01	0.135	0.01	0.134	0.01	0.086	0.17	0.102	0.13	0.102	0.14
ln(K/E)	0.113	0.01	0.113	0.01	0.113	0.01	-0.004	0.95	-0.013	0.84	-0.011	0.87
Df	-0.015	0.93	-	-	-	-	0.092	0.48	-	-	-	-
Dftr	-	-	-0.105	0.65	-	-	-	-	0.009	0.96	-	-
Dfeu	-	-	-	-	-	-	-	-	-	-	-	-
Dfus	-	-	-	-	-0.129	0.79	-	-	-	-	0.060	0.86
Dfjp	-	-	-	-	-0.101	0.68	-	-	-	-	-0.004	0.98
Dfn3	-	-	0.228	0.61	0.227	0.61	-	-	0.165	0.63	0.166	0.63
Dfot	-	-	0.019	0.95	0.018	0.95	-	-	0.220	0.34	0.217	0.36
Dboi	0.265	0.03	0.255	0.04	0.256	0.04	0.162	0.20	0.164	0.21	0.159	0.24
Dold	0.483	0.00	0.471	0.00	0.471	0.00	0.325	0.01	0.293	0.03	0.293	0.03
Dlarge	0.252	0.16	0.278	0.13	0.280	0.14	0.141	0.38	0.114	0.50	0.116	0.51
F-test	11.76	0.00	8.70	0.00	7.62	0.00	2.52	0.04	1.90	0.10	1.63	0.15
White	30.32	0.11	30.29	0.26	31.26	0.18	14.72	0.87	-	0.21	-	0.20
Adj. R-sq.	0.463	-	0.451	-	0.443	-	0.198	-	0.162	-	0.133	-
Obs.	76	-	76	-	76	-	38	-	38	-	38	-
LEATHER & FOOTWEAR												
Constant	3.321	0.00	3.338	0.00	3.338	0.00	3.387	0.00	3.403	0.00	3.403	0.00
ln(EN/E)	0.069	0.21	0.074	0.19	0.074	0.19	-0.043	0.60	-0.037	0.66	-0.037	0.66
ln(K/E)	-0.021	0.63	-0.020	0.65	-0.020	0.65	-0.019	0.76	-0.019	0.76	-0.019	0.76
Df	0.454	0.01	-	-	-	-	0.239	0.15	-	-	-	-
Dftr	-	-	0.588	0.03	-	-	-	-	0.335	0.20	-	-
Dfeu	-	-	-	-	-	-	-	-	-	-	-	-
Dfus	-	-	-	-	-	-	-	-	-	-	-	-
Dfjp	-	-	-	-	0.588	0.03	-	-	-	-	0.335	0.20
Dfn3	-	-	0.382	0.05	0.382	0.05	-	-	0.199	0.33	0.199	0.33
Dfot	-	-	0.508	0.33	0.508	0.33	-	-	0.197	0.69	0.197	0.69
Dboi	-0.158	0.26	-0.165	0.24	-0.165	0.24	-0.292	0.08	-0.299	0.08	-0.299	0.08
Dold	0.097	0.44	0.094	0.46	0.094	0.46	-0.047	0.76	-0.046	0.78	-0.046	0.78
Dlarge	0.207	0.35	0.212	0.34	0.212	0.34	0.032	0.89	0.038	0.87	0.038	0.87
F-test	2.39	0.04	1.81	0.09	1.81	0.09	1.37	0.25	1.01	0.44	1.01	0.44
White	14.76	0.87	20.47	0.81	20.47	0.81	11.67	0.95	-	0.68	-	0.68
Adj. R-sq.	0.100	-	0.079	-	0.079	-	0.048	-	0.002	-	0.002	-
Obs.	76	-	76	-	76	-	45	-	45	-	45	-

Appendix Table 8 (continued, 3/7)

Independent Variables, Indicator	All plants						Large plants with Output >=25 million baht					
	Equation 1		Equation 2		Equation 3		Equation 1		Equation 2		Equation 3	
	Coeffi-cients, etc.	Sig-nifi-cance	Coeffi-cients, etc.	Sig-nifi-cance	Coeffi-cients, etc.	Sig-nifi-cance	Coeffi-cients, etc.	Sig-nifi-cance	Coeffi-cients, etc.	Sig-nifi-cance	Coeffi-cients, etc.	Sig-nifi-cance
CHEMICALS & PRODUCTS												
Constant	2.268	0.00	2.268	0.00	2.301	0.01	3.372	0.00	3.464	0.00	3.504	0.00
ln(EN/E)	0.057	0.53	0.056	0.54	0.063	0.51	0.172	0.00	0.172	0.00	0.191	0.00
ln(K/E)	0.239	0.13	0.239	0.14	0.234	0.16	0.031	0.59	0.013	0.83	0.007	0.90
Df	0.102	0.52	-	-	-	-	0.130	0.38	-	-	-	-
Dftr	-	-	0.116	0.54	-	-	-	-	0.188	0.27	-	-
Dfeu	-	-	-	-	-0.162	0.50	-	-	-	-	-0.158	0.47
Dfus	-	-	-	-	0.451	0.05	-	-	-	-	0.536	0.13
Dfjp	-	-	-	-	0.331	0.15	-	-	-	-	0.418	0.05
Dfn3	-	-	0.079	0.75	0.086	0.73	-	-	-0.213	0.46	-0.205	0.46
Dfot	-	-	0.080	0.82	0.096	0.80	-	-	0.347	0.24	0.357	0.22
Dboi	0.141	0.60	0.136	0.62	0.084	0.76	0.294	0.10	0.282	0.12	0.243	0.17
Dold	0.473	0.01	0.472	0.01	0.477	0.01	0.333	0.02	0.300	0.04	0.324	0.02
Dlarge	-0.515	0.10	-0.524	0.12	-0.481	0.16	0.004	0.99	0.012	0.97	0.046	0.89
F-test	9.39	0.00	6.90	0.00	5.89	0.00	3.13	0.01	2.64	0.01	2.86	0.01
White	83.96	0.00	84.35	0.00	90.00	0.00	30.99	0.07	33.55	0.26	45.62	0.11
Adj. R-sq.	0.337	-	0.323	-	0.331	-	0.147	-	0.151	-	0.200	-
Obs.	100	-	100	-	100	-	75	-	75	-	75	-
RUBBER PRODUCTS												
Constant	3.333	0.00	3.296	0.00	3.315	0.00	3.681	0.00	3.628	0.00	3.680	0.00
ln(EN/E)	0.022	0.70	0.018	0.76	0.023	0.71	0.046	0.62	0.036	0.72	0.050	0.64
ln(K/E)	-0.048	0.43	-0.044	0.48	-0.048	0.44	-0.149	0.09	-0.150	0.10	-0.158	0.09
Df	0.112	0.54	-	-	-	-	0.264	0.23	-	-	-	-
Dftr	-	-	-0.007	0.98	-	-	-	-	0.162	0.56	-	-
Dfeu	-	-	-	-	0.080	0.82	-	-	-	-	0.264	0.52
Dfus	-	-	-	-	-0.733	0.26	-	-	-	-	-0.576	0.42
Dfjp	-	-	-	-	0.019	0.95	-	-	-	-	0.196	0.56
Dfn3	-	-	0.075	0.80	0.073	0.80	-	-	0.174	0.59	0.168	0.61
Dfot	-	-	0.459	0.15	0.457	0.16	-	-	0.730	0.05	0.727	0.06
Dboi	-0.359	0.03	-0.415	0.02	-0.408	0.02	-0.467	0.02	-0.557	0.01	-0.540	0.02
Dold	-0.190	0.17	-0.147	0.30	-0.153	0.28	-0.112	0.53	-0.032	0.86	-0.041	0.83
Dlarge	0.356	0.16	0.480	0.09	0.555	0.06	0.460	0.11	0.616	0.06	0.686	0.05
F-test	1.46	0.20	1.32	0.25	1.20	0.31	1.80	0.12	1.66	0.13	1.44	0.19
White	25.23	0.34	34.86	0.29	41.33	0.15	25.10	0.34	36.83	0.22	-	0.18
Adj. R-sq.	0.034	-	0.032	-	0.025	-	0.078	-	0.085	-	0.072	-
Obs.	79	-	79	-	79	-	58	-	58	-	58	-

Appendix Table 8 (continued, 4/7)

Independent Variables, Indicator	All plants						Large plants with Output >=25 million baht					
	Equation 1		Equation 2		Equation 3		Equation 1		Equation 2		Equation 3	
	Coeffi-cients, etc.	Sig-nifi-cance	Coeffi-cients, etc.	Sig-nifi-cance	Coeffi-cients, etc.	Sig-nifi-cance	Coeffi-cients, etc.	Sig-nifi-cance	Coeffi-cients, etc.	Sig-nifi-cance	Coeffi-cients, etc.	Sig-nifi-cance
PLASTICS & PRODUCTS												
Constant	2.794	0.00	2.794	0.00	2.786	0.00	3.107	0.00	3.195	0.00	3.172	0.00
ln(EN/E)	0.034	0.50	0.033	0.53	0.039	0.44	0.110	0.18	0.121	0.15	0.133	0.12
ln(K/E)	0.037	0.57	0.041	0.55	0.049	0.43	0.026	0.78	0.014	0.88	0.028	0.77
Df	0.482	0.02	-	-	-	-	0.379	0.09	-	-	-	-
Dftr	-	-	0.378	0.05	-	-	-	-	0.303	0.22	-	-
Dfeu	-	-	-	-	-0.067	0.89	-	-	-	-	-0.090	0.86
Dfus	-	-	-	-	-	-	-	-	-	-	-	-
Dfjp	-	-	-	-	0.509	0.05	-	-	-	-	0.434	0.13
Dfn3	-	-	0.542	0.62	0.574	0.16	-	-	0.045	0.95	0.089	0.90
Dfot	-	-	0.695	0.08	0.692	0.03	-	-	0.772	0.08	0.772	0.08
Dboi	-0.267	0.25	-0.270	0.21	-0.345	0.12	-0.205	0.43	-0.192	0.48	-0.272	0.35
Dold	-0.228	0.17	-0.261	0.11	-0.251	0.11	-0.366	0.09	-0.402	0.09	-0.383	0.11
Dlarge	0.684	0.03	0.673	0.04	0.745	0.00	0.704	0.01	0.669	0.02	0.742	0.01
F-test	2.88	0.01	2.24	0.03	2.12	0.04	2.12	0.07	1.75	0.12	1.63	0.14
White	45.25	0.00	44.65	0.05	21.43	0.92	24.01	0.40	26.23	0.45	-	0.96
Adj. R-sq.	0.115	-	0.102	-	0.104	-	0.121	-	0.109	-	0.104	-
Obs.	88	-	88	-	88	-	50	-	50	-	50	-
NON-METALLIC MINERAL PRODUCTS												
Constant	2.872	0.00	2.846	0.00	2.838	0.00	2.935	0.00	2.883	0.00	2.859	0.00
ln(EN/E)	0.107	0.00	0.105	0.00	0.102	0.00	0.082	0.09	0.077	0.12	0.075	0.14
ln(K/E)	0.097	0.00	0.103	0.00	0.104	0.00	0.110	0.01	0.122	0.01	0.127	0.01
Df	0.536	0.00	-	-	-	-	0.335	0.03	-	-	-	-
Dftr	-	-	0.472	0.02	-	-	-	-	0.275	0.17	-	-
Dfeu	-	-	-	-	0.512	0.08	-	-	-	-	0.220	0.37
Dfus	-	-	-	-	0.930	0.00	-	-	-	-	0.836	0.17
Dfjp	-	-	-	-	0.297	0.18	-	-	-	-	0.209	0.55
Dfn3	-	-	0.535	0.00	0.526	0.00	-	-	0.320	0.15	0.313	0.16
Dfot	-	-	0.823	0.00	0.813	0.00	-	-	0.718	0.08	0.718	0.09
Dboi	-0.294	0.12	-0.312	0.11	-0.294	0.14	-0.181	0.24	-0.188	0.22	-0.171	0.28
Dold	0.066	0.37	0.064	0.39	0.062	0.40	0.044	0.69	0.038	0.74	0.040	0.72
Dlarge	0.130	0.56	0.142	0.54	0.108	0.65	0.145	0.58	0.143	0.58	0.040	0.89
F-test	10.14	0.00	7.69	0.00	6.24	0.00	3.76	0.00	2.92	0.01	2.41	0.01
White	48.81	0.00	51.05	0.01	54.03	0.02	29.97	0.15	34.70	0.25	37.48	0.27
Adj. R-sq.	0.219	-	0.214	-	0.211	-	0.136	-	0.128	-	0.118	-
Obs.	197	-	197	-	197	-	106	-	106	-	106	-

Appendix Table 8 (continued, 5/7)

Independent Variables, Indicator	All plants						Large plants with Output >=25 million baht					
	Equation 1		Equation 2		Equation 3		Equation 1		Equation 2		Equation 3	
	Coeffi-cients, etc.	Sig-nifi-cance	Coeffi-cients, etc.	Sig-nifi-cance	Coeffi-cients, etc.	Sig-nifi-cance	Coeffi-cients, etc.	Sig-nifi-cance	Coeffi-cients, etc.	Sig-nifi-cance	Coeffi-cients, etc.	Sig-nifi-cance
METAL PRODUCTS												
Constant	3.055	0.00	3.061	0.00	3.072	0.00	3.131	0.00	3.144	0.00	3.168	0.00
ln(EN/E)	0.116	0.00	0.116	0.00	0.117	0.00	0.113	0.03	0.111	0.03	0.114	0.03
ln(K/E)	0.115	0.00	0.113	0.00	0.111	0.00	0.129	0.01	0.125	0.01	0.121	0.01
Df	-0.027	0.81	-	-	-	-	-0.123	0.37	-	-	-	-
Dftr	-	-	0.048	0.76	-	-	-	-	-0.028	0.88	-	-
Dfeu	-	-	-	-	-0.090	0.73	-	-	-	-	-0.192	0.53
Dfus	-	-	-	-	-	-	-	-	-	-	-	-
Dfjp	-	-	-	-	0.081	0.62	-	-	-	-	0.013	0.94
Dfn3	-	-	-0.025	0.86	-0.025	0.86	-	-	-0.138	0.42	-0.137	0.42
Dfot	-	-	-0.181	0.45	-0.182	0.45	-	-	-0.346	0.27	-0.346	0.27
Dboi	0.062	0.59	0.033	0.79	0.036	0.77	0.094	0.51	0.057	0.70	0.063	0.67
Dold	0.045	0.55	0.050	0.51	0.047	0.53	0.015	0.90	0.020	0.86	0.012	0.92
Dlarge	0.378	0.02	0.366	0.02	0.367	0.02	0.119	0.56	0.100	0.63	0.107	0.60
F-test	9.11	0.00	6.87	0.00	6.13	0.00	3.25	0.01	2.53	0.02	2.29	0.02
White	22.05	0.52	41.24	0.15	20.59	0.99	19.28	0.69	31.28	0.50	35.45	0.49
Adj. R-sq.	0.224	-	0.218	-	0.215	-	0.129	-	0.119	-	0.113	-
Obs.	170	-	170	-	170	-	92	-	92	-	92	-
GENERAL MACHINERY												
Constant	3.771	0.00	3.789	0.00	3.809	0.00	3.544	0.00	3.573	0.00	3.613	0.00
ln(EN/E)	0.177	0.00	0.176	0.00	0.179	0.00	0.145	0.01	0.139	0.01	0.146	0.01
ln(K/E)	-0.002	0.98	-0.006	0.94	-0.008	0.91	0.084	0.19	0.077	0.24	0.070	0.29
Df	0.410	0.00	-	-	-	-	0.211	0.18	-	-	-	-
Dftr	-	-	0.464	0.00	-	-	-	-	0.252	0.15	-	-
Dfeu	-	-	-	-	0.248	0.28	-	-	-	-	0.092	0.74
Dfus	-	-	-	-	-	-	-	-	-	-	-	-
Dfjp	-	-	-	-	0.517	0.00	-	-	-	-	0.299	0.11
Dfn3	-	-	0.460	0.08	0.459	0.08	-	-	0.361	0.24	0.359	0.25
Dfot	-	-	0.031	0.89	0.030	0.89	-	-	-0.132	0.67	-0.132	0.67
Dboi	0.033	0.85	0.013	0.94	0.007	0.97	0.030	0.87	0.007	0.97	0.006	0.98
Dold	-0.117	0.31	-0.137	0.25	-0.143	0.23	-0.178	0.17	-0.206	0.12	-0.211	0.11
Dlarge	-0.300	0.16	-0.327	0.13	-0.372	0.10	-0.330	0.18	-0.338	0.17	-0.375	0.14
F-test	6.15	0.00	4.80	0.00	4.34	0.00	3.65	0.00	2.95	0.01	2.66	0.01
White	67.23	0.00	70.48	0.00	71.61	0.00	25.31	0.23	29.25	0.35	28.85	0.63
Adj. R-sq.	0.227	-	0.224	-	0.223	-	0.197	-	0.194	-	0.187	-
Obs.	106	-	106	-	106	-	66	-	66	-	66	-

Appendix Table 8 (continued, 6/7)

Independent Variables, Indicator	All plants						Large plants with Output >=25 million baht					
	Equation 1		Equation 2		Equation 3		Equation 1		Equation 2		Equation 3	
	Coefficients, etc.	Significance	Coefficients, etc.	Significance	Coefficients, etc.	Significance	Coefficients, etc.	Significance	Coefficients, etc.	Significance	Coefficients, etc.	Significance
ELECTRIC MACHINERY, ETC. (INCL. OFFICE & COMPUTING MACHINERY, PRECISION MACHINERY)												
Constant	3.101	0.00	3.063	0.00	3.058	0.00	3.148	0.00	3.082	0.00	3.061	0.00
ln(EN/E)	0.100	0.03	0.089	0.05	0.091	0.05	0.138	0.01	0.128	0.02	0.130	0.02
ln(K/E)	0.087	0.02	0.092	0.01	0.097	0.01	0.099	0.04	0.111	0.02	0.120	0.01
Df	-0.012	0.92	-	-	-	-	-0.096	0.48	-	-	-	-
Dftr	-	-	-0.059	0.64	-	-	-	-	-0.162	0.25	-	-
Dfeu	-	-	-	-	-0.044	0.85	-	-	-	-	-0.147	0.54
Dfus	-	-	-	-	0.275	0.31	-	-	-	-	0.201	0.47
Dfjp	-	-	-	-	-0.088	0.51	-	-	-	-	-0.198	0.18
Dfn3	-	-	0.046	0.78	0.050	0.76	-	-	-0.013	0.94	-0.012	0.94
Dfot	-	-	0.616	0.04	0.621	0.04	-	-	0.604	0.08	0.608	0.08
Dboi	0.091	0.46	0.071	0.57	0.060	0.63	0.153	0.26	0.146	0.28	0.139	0.30
Dold	0.277	0.00	0.280	0.00	0.278	0.01	0.295	0.00	0.317	0.00	0.316	0.00
Dlarge	0.219	0.27	0.256	0.20	0.233	0.24	0.236	0.27	0.272	0.19	0.244	0.24
F-test	5.00	0.00	4.60	0.00	3.88	0.00	4.45	0.00	4.21	0.00	3.61	0.00
White	18.17	0.64	25.25	0.76	30.97	0.87	23.35	0.33	29.60	0.49	35.78	0.66
Adj. R-sq.	0.141	-	0.165	-	0.165	-	0.143	-	0.171	-	0.174	-
Obs.	147	-	147	-	147	-	125	-	125	-	125	-
MOTOR VEHICLES												
Constant	3.404	0.00	3.394	0.00	3.471	0.00	3.850	0.00	3.840	0.00	4.172	0.00
ln(EN/E)	0.110	0.02	0.110	0.03	0.130	0.01	0.171	0.02	0.172	0.03	0.258	0.00
ln(K/E)	0.049	0.38	0.054	0.35	0.043	0.45	0.045	0.60	0.050	0.58	-0.002	0.98
Df	-0.106	0.60	-	-	-	-	-0.266	0.18	-	-	-	-
Dftr	-	-	-0.150	0.48	-	-	-	-	-0.283	0.19	-	-
Dfeu	-	-	-	-	-0.082	0.86	-	-	-	-	0.138	0.70
Dfus	-	-	-	-	0.725	0.24	-	-	-	-	0.839	0.13
Dfjp	-	-	-	-	-0.190	0.38	-	-	-	-	-0.384	0.07
Dfn3	-	-	0.073	0.82	0.081	0.80	-	-	-0.192	0.51	-0.197	0.47
Dfot	-	-	-0.169	0.78	-0.157	0.79	-	-	-0.440	0.40	-0.453	0.35
Dboi	0.181	0.37	0.182	0.37	0.174	0.39	0.139	0.46	0.141	0.47	0.204	0.27
Dold	-0.010	0.93	-0.014	0.91	-0.006	0.96	-0.043	0.79	-0.048	0.77	-0.019	0.90
Dlarge	0.849	0.02	0.882	0.02	0.891	0.03	0.579	0.14	0.580	0.15	0.710	0.06
F-test	3.27	0.01	2.47	0.02	2.23	0.02	1.97	0.10	1.43	0.22	2.03	0.06
White	17.89	0.59	20.37	0.73	20.77	0.80	18.15	0.51	-	0.24	-	0.57
Adj. R-sq.	0.135	-	0.119	-	0.124	-	0.121	-	0.076	-	0.197	-
Obs.	88	-	88	-	88	-	43	-	43	-	43	-

Appendix Table 8 (continued, 7/7)

Independent Variables, Indicator	All plants						Large plants with Output >=25 million baht					
	Equation 1		Equation 2		Equation 3		Equation 1		Equation 2		Equation 3	
	Coefficients, etc.	Significance	Coefficients, etc.	Significance	Coefficients, etc.	Significance	Coefficients, etc.	Significance	Coefficients, etc.	Significance	Coefficients, etc.	Significance
FURNITURE												
Constant	3.109	0.00	3.118	0.00	3.121	0.00	3.125	0.00	3.097	0.00	3.106	0.00
ln(EN/E)	0.543	0.00	0.545	0.00	0.544	0.00	0.149	0.07	0.138	0.07	0.138	0.07
ln(K/E)	0.454	0.00	0.452	0.00	0.452	0.00	0.049	0.41	0.044	0.48	0.047	0.46
Df	1.027	0.03	-	-	-	-	0.378	0.01	-	-	-	-
Dftr	-	-	1.086	0.10	-	-	-	-	0.255	0.24	-	-
Dfeu	-	-	-	-	-	-	-	-	-	-	-	-
Dfus	-	-	-	-	0.860	0.40	-	-	-	-	0.060	0.86
Dfjp	-	-	-	-	1.227	0.13	-	-	-	-	0.375	0.16
Dfn3	-	-	0.921	0.26	0.921	0.26	-	-	0.376	0.24	0.370	0.25
Dfot	-	-	1.038	0.29	1.038	0.29	-	-	0.633	0.04	0.630	0.05
Dboi	-0.112	0.84	-0.117	0.84	-0.094	0.87	0.196	0.48	0.228	0.25	0.252	0.21
Dold	-0.400	0.15	-0.401	0.16	-0.413	0.15	0.246	0.06	0.253	0.08	0.225	0.13
Dlarge	0.082	0.88	0.090	0.87	0.061	0.91	-0.005	0.99	0.003	0.99	-0.042	0.85
F-test	14.90	0.00	10.93	0.00	9.62	0.00	2.92	0.02	2.27	0.04	2.07	0.06
White	30.52	0.14	30.65	0.29	30.66	0.29	35.93	0.04	-	0.13	-	0.17
Adj. R-sq.	0.467	-	0.455	-	0.450	-	0.211	-	0.192	-	0.182	-
Obs.	96	-	96	-	96	-	44	-	44	-	44	-
JEWELRY												
Constant	3.667	0.00	3.717	0.00	3.658	0.00	Not estimated because there were less than 30 observations					
ln(EN/E)	0.356	0.00	0.361	0.00	0.355	0.00						
ln(K/E)	0.040	0.67	0.027	0.79	0.039	0.70	-	-	-	-	-	-
Df	0.235	0.40	-	-	-	-	-	-	-	-	-	-
Dftr	-	-	0.284	0.46	-	-	-	-	-	-	-	-
Dfeu	-	-	-	-	0.115	0.78	-	-	-	-	-	-
Dfus	-	-	-	-	-	-	-	-	-	-	-	-
Dfjp	-	-	-	-	0.614	0.21	-	-	-	-	-	-
Dfn3	-	-	-	-	0.092	0.81	-	-	-	-	-	-
Dfot	-	-	0.423	0.39	0.410	0.40	-	-	-	-	-	-
Dboi	0.232	0.41	0.159	0.66	0.143	0.69	-	-	-	-	-	-
Dold	0.101	0.66	0.115	0.63	0.225	0.38	-	-	-	-	-	-
Dlarge	-0.462	0.35	-0.418	0.42	-0.429	0.41	-	-	-	-	-	-
F-test	5.46	0.00	3.90	0.00	3.64	0.00	-	-	-	-	-	-
White	19.26	0.44	-	0.10	-	0.09	-	-	-	-	-	-
Adj. R-sq.	0.407	-	0.373	-	0.378	-	-	-	-	-	-	-
Obs.	40	-	40	-	40	-	22	-	22	-	22	-

Notes: Heteroscedasticity-consistent standard errors used if White is significant at 0.05 or less.

If White cannot be calculated, the significance of the LM heteroscedasticity test is reported and used.

- = not relevant or no plants in this category; n<30 = sample size smaller than 30.

Appendix Table 9a: Mean Value Added per Hour Worked in All Sample Plants by Foreign Ownership Share or Foreign Nationality and Industry, 1996 (baht)

	All	Local	Foreign	Foreign, by nationality										Foreign, by ownership		
Industry	plants	plants	total	EU	US	JP	N3	N3si	N3tw	N3kr	OT	OTch	OTot	MN	MJ	WH
Manufacturing	116	106	165	344	173	185	125	208	107	143	107	71	119	166	197	120
Food	136	137	128	116	286	105	111	96	119	77	129	35	162	124	141	138
Textiles	58	51	86	73	156	106	82	29	83	87	52	31	66	80	113	82
Apparel	58	57	66	104	23	75	75	80	79	48	48	70	42	71	43	71
Leather & footwear	73	74	68	51	41	109	55	-	62	42	67	68	67	54	97	46
Chemicals & products	183	119	341	344	309	558	177	409	120	162	123	72	135	228	711	301
Rubber products	173	132	285	2,765	146	73	405	989	81	221	105	207	89	241	616	31
Plastics & products	64	63	66	41	32	82	61	42	52	180	48	54	46	72	70	47
Non-metallic mineral products	135	137	109	164	48	98	101	65	109	95	73	64	78	123	82	23
Metal products	98	83	188	198	216	229	150	71	137	406	179	71	248	197	148	194
General machinery	104	95	136	278	77	121	137	187	116	205	150	31	197	147	132	105
Electric machinery, etc.	121	99	142	356	79	139	130	80	136	149	129	117	131	205	87	116
Office & computing machinery	184	169	186	-	56	69	335	46	355	378	217	-	217	779	100	136
Miscellaneous electric machinery	125	100	167	937	68	173	92	94	89	185	88	-	88	228	72	152
Radio, TV, communication	109	100	114	172	131	115	80	79	59	116	147	117	162	154	102	88
Precision machinery	103	93	115	50	17	142	53	-	53	-	126	-	126	128	69	126
Motor vehicles	151	101	387	85	386	449	70	-	85	8	187	24	210	394	403	148
Furniture	87	88	78	46	49	48	119	126	101	223	74	52	89	78	97	53
Jewelry	160	191	116	87	113	150	80	77	47	194	144	53	147	105	119	137
Other manufacturing industries	135	127	194	1,202	157	145	118	119	109	165	122	102	133	224	164	85
Beverages	291	311	166	-	142	-	426	426	-	-	149	-	149	179	13	-
Tobacco	85	86	78	109	-	-	-	-	-	-	16	16	-	109	-	16
Wood products	107	106	119	404	-	221	38	35	38	-	100	178	56	130	72	-
Paper products	177	124	474	15,560	29	153	73	-	76	47	111	89	132	605	73	34
Printing & publishing	159	158	178	350	332	77	37	37	-	-	99	-	99	168	333	16
Oil, coal, nuclear, etc.	428	563	213	65	313	240	96	-	-	96	140	-	140	188	313	-
Basic metals	157	137	239	172	267	188	448	-	749	70	118	63	200	132	963	191
Misc. transportation machinery	87	81	122	99	-	166	79	131	27	-	92	177	50	136	31	23
Other misc. manufacturing	66	58	89	121	42	62	90	-	58	263	184	49	229	123	46	86

Notes: EU=Europe; US=United States; JP=Japan; N3=N3si+N3tw+N3kr; N3si=Singapore, N3tw=Taiwan, KR=Korea; OT=OTch+OTot; OTch=China; OTot=Others.
WH=wholly foreign, MJ.=50-99% foreign-owned; MN=1-49% foreign owned; .
Sources: Author's calculations from plant-level data underlying National Statistical Office (1999).

Appendix Table 9b: Mean Value Added per Hour Worked in All Sample Plants by Foreign Nationality and Industry, 1998 (baht)

Industry	All plants	Local plants	Foreign total	Foreign, by nationality									
				EU	US	JP	N3	N3si	N3tw	N3kr	OT	OTch	OTot
Manufacturing	124	103	204	246	264	203	155	238	143	114	239	112	296
Food	106	96	178	239	489	152	116	124	114	110	155	84	177
Textiles	103	56	303	146	125	121	237	-	236	245	691	12	847
Apparel	66	45	141	213	-	90	170	14	248	-	165	264	79
Leather & footwear	103	105	90	16	46	172	89	-	85	90	60	36	96
Chemicals & products	186	135	284	495	273	246	221	369	151	-	317	66	387
Rubber products	110	91	175	123	173	119	314	164	348	162	120	53	138
Plastics & products	80	77	87	42	47	114	62	26	64	84	78	102	63
Non-metallic mineral products	181	172	274	458	327	362	136	64	149	-	88	88	87
Metal products	117	100	181	285	2	193	165	109	185	-	145	204	100
General machinery	140	92	235	168	47	280	172	166	106	379	174	185	172
Electric machinery, etc.	161	96	206	208	89	208	163	172	163	127	417	84	469
Office & computing machinery	155	116	159	-	91	239	143	81	150	-	133	-	133
Miscellaneous electric machinery	167	103	237	302	91	256	165	272	147	-	286	84	331
Radio, TV, communication	172	90	202	-	97	169	172	144	187	127	993	-	993
Precision machinery	105	70	142	21	39	179	157	-	157	-	-	-	-
Motor vehicles	148	81	265	100	141	296	112	181	89	-	81	68	88
Furniture	59	60	55	40	21	66	61	-	61	-	15	-	15
Jewelry	117	77	172	108	149	141	-	-	-	-	258	110	407
Other manufacturing industries	123	109	188	131	525	187	135	544	71	51	182	107	257
Beverages	381	261	1,239	-	1,151	113	3,443	3,443	-	-	831	-	831
Tobacco	59	60	30	-	30	-	-	-	-	-	-	-	-
Wood products	78	79	66	68	39	101	40	38	41	-	62	103	41
Paper products	144	129	202	-	1,418	295	70	5	79	62	114	95	133
Printing & publishing	104	107	81	86	17	51	118	76	202	-	-	-	-
Oil, coal, nuclear, etc.	339	339	340	-	-	340	-	-	-	-	-	-	-
Basic metals	169	151	242	100	198	294	99	133	81	-	151	88	214
Misc. transportation machinery	84	60	165	243	-	151	17	-	17	-	-	-	-
Other misc. manufacturing	60	48	76	109	47	76	65	-	72	50	105	120	66

Notes: EU=Europe; US=United States; JP=Japan; N3=N3si+N3tw+N3kr; N3si=Singapore, N3tw=Taiwan, KR=Korea; OT=OTch+OTot; OTch=China; OTot=Others.
Sources: Author's calculations from plant-level data underlying National Statistical Office (2001a).

Appendix Table 9c: Mean Value Added per Hour Worked in All Sample Plants by Foreign Nationality and Industry, 2000 (baht)

Industry	All plants	Local plants	Foreign total	Foreign, by nationality									
				EU	US	JP	N3	N3si	N3tw	N3kr	OT	OTch	OTot
Manufacturing	81	74	110	163	130	107	86	108	78	96	96	80	104
Food	99	97	114	198	273	84	115	85	95	393	61	182	41
Textiles	47	41	77	73	49	93	56	-	56	-	85	66	109
Apparel	42	41	51	-	36	58	62	-	62	-	44	52	40
Leather & footwear	59	53	86	-	-	62	104	-	69	132	24	-	24
Chemicals & products	118	92	179	146	234	234	84	66	88	-	207	-	207
Rubber products	88	64	157	255	35	41	98	32	114	-	278	51	619
Plastics & products	53	54	51	43	-	44	41	-	41	-	72	66	75
Non-metallic mineral products	61	58	83	129	30	79	65	69	63	-	43	-	43
Metal products	96	85	134	153	-	120	150	199	123	-	117	46	188
General machinery	120	88	181	98	-	225	58	59	58	-	140	320	49
Electric machinery, etc.	82	71	91	66	109	86	98	217	80	34	132	-	132
Office & computing machinery	120	30	136	172	75	175	67	-	67	-	173	-	173
Miscellaneous electric machinery	92	79	107	52	132	92	142	373	116	39	-	-	-
Radio, TV, communication	74	59	79	-	-	78	80	139	51	-	91	-	91
Precision machinery	61	68	53	47	-	61	32	-	35	29	-	-	-
Motor vehicles	76	46	146	463	115	135	68	34	101	-	57	-	57
Furniture	47	44	75	-	71	57	113	-	113	-	46	53	38
Jewelry	66	55	80	94	-	95	69	-	74	54	44	72	31
Other manufacturing industries	81	79	91	238	100	68	57	22	64	53	59	72	55
Beverages	91	65	257	391	219	45	-	-	-	-	46	-	46
Tobacco	177	173	194	745	11	-	-	-	-	-	9	-	9
Wood products	55	56	49	-	-	82	37	-	25	61	20	20	-
Paper products	90	87	97	63	-	129	100	-	100	-	62	-	62
Printing & publishing	63	64	59	-	24	83	48	22	125	-	111	-	111
Oil, coal, nuclear, etc.	138	132	148	194	-	-	-	-	-	-	11	-	11
Basic metals	78	82	67	115	121	58	-	-	-	-	42	37	47
Misc. transportation machinery	62	59	82	69	-	74	-	-	-	-	119	-	119
Other misc. manufacturing	88	110	47	42	39	41	43	-	37	51	76	115	38

Notes: EU=Europe; US=United States; JP=Japan; N3=N3si+N3tw+N3kr; N3si=Singapore, N3tw=Taiwan, KR=Korea; OT=OTch+OTot; OTch=China; OTot=Others.
Sources: Author's calculations from plant-level data underlying National Statistical Office (forthcoming).

Appendix Table 9d: Mean Value Added per Hour Worked in Large Plants by Foreign Ownership Share or Foreign Nationality and Industry, 1996 (baht)

	All	Local	Foreign	Foreign, by nationality										Foreign, by ownership		
Industry	plants	plants	total	EU	US	JP	N3	N3si	N3tw	N3kr	OT	OTch	OTot	MN	MJ	WH
Manufacturing	177	173	189	398	189	204	147	238	125	167	123	83	134	194	222	130
Food	206	221	144	122	303	118	121	105	132	77	153	40	184	135	176	156
Textiles	74	64	96	83	156	107	95	25	95	103	63	34	77	92	122	87
Apparel	72	71	75	162	30	83	91	142	90	51	46	47	45	82	41	77
Leather & footwear	100	107	77	51	41	123	62	-	58	76	71	-	71	60	119	46
Chemicals & products	227	150	368	344	343	611	188	409	122	151	125	71	135	250	751	301
Rubber products	209	165	303	2,765	146	80	448	989	92	221	106	207	90	259	659	31
Plastics & products	79	80	77	47	20	93	75	47	65	180	50	69	44	83	76	58
Non-metallic mineral products	256	275	120	178	48	105	113	65	125	-	75	103	61	134	87	29
Metal products	150	124	219	221	311	240	197	99	181	406	193	73	248	243	161	205
General machinery	143	138	153	315	77	130	155	187	132	205	203	43	222	183	130	100
Electric machinery, etc.	148	139	153	378	81	149	143	77	153	161	134	117	137	241	90	120
Office & computing machinery	199	234	196	-	58	69	372	46	404	378	217	-	217	779	100	144
Miscellaneous electric machinery	161	140	179	937	68	185	98	94	96	185	93	-	93	260	74	154
Radio, TV, communication	126	142	121	172	131	123	86	74	62	126	147	117	162	176	106	91
Precision machinery	125	119	129	45	17	168	53	-	53	-	135	-	135	178	70	126
Motor vehicles	270	182	420	85	386	469	78	-	101	8	283	24	348	443	403	148
Furniture	146	160	87	46	49	52	128	-	110	223	96	68	113	88	111	53
Jewelry	251	412	134	96	122	158	89	99	47	194	175	53	181	116	135	182
Other manufacturing industries	227	225	234	1,483	167	164	148	126	139	196	141	114	156	265	200	107
Beverages	517	640	166	-	142	-	426	426	-	-	149	-	149	179	13	-
Tobacco	674	972	78	109	-	-	-	-	-	-	16	16	-	109	-	16
Wood products	175	176	164	404	-	249	56	35	121	-	115	234	43	181	71	-
Paper products	237	160	574	15,560	29	153	80	-	87	47	116	97	132	710	69	-
Printing & publishing	292	301	210	350	408	97	37	37	-	-	99	-	99	191	333	-
Oil, coal, nuclear, etc.	463	641	213	65	313	240	96	-	-	96	140	-	140	188	313	-
Basic metals	233	217	276	207	267	213	632	-	916	64	118	63	200	142	1,194	347
Misc. transportation machinery	128	126	135	101	-	166	80	186	27	-	128	177	78	155	31	23
Other misc. manufacturing	94	87	103	167	45	64	99	-	57	306	329	11	435	147	52	104

Notes: EU=Europe; US=United States; JP=Japan; N3=N3si+N3tw+N3kr; N3si=Singapore, N3tw=Taiwan, KR=Korea; OT=OTch+OTot; OTch=China; OTot=Others.
WH=wholly foreign, MJ.=50-99% foreign-owned; MN=1-49% foreign owned; .
Sources: Author's calculations from plant-level data underlying National Statistical Office (1999).

Appendix Table 9e: Mean Value Added per Hour Worked in Large Plants by Foreign Nationality and Industry, 1998 (baht)

Industry	All plants	Local plants	Foreign total	Foreign, by nationality									
				EU	US	JP	N3	N3si	N3tw	N3kr	OT	OTch	OTot
Manufacturing	168	139	228	282	281	215	184	286	170	129	280	135	336
Food	155	146	190	239	489	161	121	124	121	110	177	133	183
Textiles	160	81	332	146	125	123	276	-	279	245	788	13	917
Apparel	105	70	160	213	-	90	248	-	248	-	199	479	79
Leather & footwear	128	136	92	-	46	152	101	-	113	95	60	36	96
Chemicals & products	229	172	308	495	294	261	256	369	187	-	342	60	409
Rubber products	127	105	181	123	173	128	340	164	384	162	120	53	138
Plastics & products	103	107	96	47	47	117	67	26	72	84	99	119	78
Non-metallic mineral products	167	133	318	511	327	362	177	64	210	-	114	103	125
Metal products	169	146	228	608	-	216	224	163	244	-	229	294	164
General machinery	197	143	248	168	47	280	219	166	147	379	203	311	188
Electric machinery, etc.	193	125	222	302	89	222	174	186	175	127	471	159	497
Office & computing machinery	155	116	159	-	91	239	143	81	150	-	133	-	133
Miscellaneous electric machinery	205	135	254	302	91	278	177	272	159	-	314	159	331
Radio, TV, communication	193	103	214	-	97	177	185	163	199	127	1,428	-	1,428
Precision machinery	161	118	188	-	39	204	202	-	202	-	-	-	-
Motor vehicles	222	135	275	100	141	305	112	181	89	-	88	68	109
Furniture	88	95	56	40	21	64	65	-	65	-	16	-	16
Jewelry	164	124	197	122	160	141	-	-	-	-	301	142	407
Other manufacturing industries	193	180	228	158	645	209	191	918	87	66	196	107	308
Beverages	700	528	1,239	-	1,151	113	3,443	3,443	-	-	831	-	831
Tobacco	135	149	30	-	30	-	-	-	-	-	-	-	-
Wood products	113	115	91	102	-	162	47	29	52	-	66	103	30
Paper products	181	161	249	-	1,418	295	106	-	114	62	114	95	133
Printing & publishing	131	142	75	63	17	51	135	67	202	-	-	-	-
Oil, coal, nuclear, etc.	339	339	340	-	-	340	-	-	-	-	-	-	-
Basic metals	245	235	268	100	198	326	127	133	121	-	151	88	214
Misc. transportation machinery	138	89	182	360	-	151	17	-	17	-	-	-	-
Other misc. manufacturing	84	82	85	109	42	80	74	-	77	67	114	120	81

Notes: EU=Europe; US=United States; JP=Japan; N3=N3si+N3tw+N3kr; N3si=Singapore, N3tw=Taiwan, KR=Korea; OT=OTch+OTot; OTch=China; OTot=Others.
Sources: Author's calculations from plant-level data underlying National Statistical Office (2001a).

Appendix Table 9f: Mean Value Added per Hour Worked in Large Plants by Foreign Nationality and Industry, 2000 (baht)

Industry	All plants	Local plants	Foreign total	Foreign, by nationality									
				EU	US	JP	N3	N3si	N3tw	N3kr	OT	OTch	OTot
Manufacturing	109	106	116	173	130	110	95	115	88	101	104	87	112
Food	141	146	116	198	273	85	123	97	95	393	61	182	41
Textiles	64	57	85	128	49	93	58	-	58	-	104	98	109
Apparel	58	60	51	-	36	58	62	-	62	-	44	52	40
Leather & footwear	75	70	86	-	-	62	104	-	69	132	24	-	24
Chemicals & products	146	119	191	161	234	234	104	66	116	-	207	-	207
Rubber products	105	78	157	255	35	41	98	32	114	-	278	51	619
Plastics & products	68	73	54	43	-	44	66	-	66	-	83	44	103
Non-metallic mineral products	84	83	88	147	30	80	65	69	63	-	42	-	42
Metal products	128	121	140	153	-	127	152	199	123	-	132	20	188
General machinery	162	132	192	98	-	232	68	59	73	-	140	320	49
Electric machinery, etc.	86	74	92	66	109	89	98	217	80	34	142	-	142
Office & computing machinery	120	30	136	172	75	175	67	-	67	-	173	-	173
Miscellaneous electric machinery	97	86	107	52	132	92	142	373	116	39	-	-	-
Radio, TV, communication	76	65	81	-	-	81	80	139	51	-	81	-	81
Precision machinery	57	62	55	47	-	65	32	-	35	29	-	-	-
Motor vehicles	117	64	151	463	115	142	68	34	101	-	57	-	57
Furniture	71	69	78	-	71	57	149	-	149	-	46	53	38
Jewelry	85	81	88	110	-	99	79	-	91	54	44	72	31
Other manufacturing industries	101	102	99	238	100	64	71	22	85	57	64	72	60
Beverages	163	114	283	391	219	45	-	-	-	-	-	-	-
Tobacco	491	887	194	745	11	-	-	-	-	-	9	-	9
Wood products	65	66	54	-	-	91	53	-	46	61	20	20	-
Paper products	105	101	116	63	-	129	156	-	156	-	62	-	62
Printing & publishing	76	79	65	-	24	83	56	22	125	-	111	-	111
Oil, coal, nuclear, etc.	142	136	148	194	-	-	-	-	-	-	11	-	11
Basic metals	101	138	61	115	121	47	-	-	-	-	42	37	47
Misc. transportation machinery	77	75	82	69	-	74	-	-	-	-	119	-	119
Other misc. manufacturing	66	79	50	42	39	41	49	-	44	56	115	115	-

Notes: EU=Europe; US=United States; JP=Japan; N3=N3si+N3tw+N3kr; N3si=Singapore, N3tw=Taiwan, KR=Korea; OT=OTch+OTot; OTch=China; OTot=Others.
Sources: Author's calculations from plant-level data underlying National Statistical Office (forthcoming).

Appendix Table 10a: Mean Compensation per Hour in All Sample Plants by Foreign Ownership Share or Foreign Nationality and Industry, 1996 (baht)

	All	Local	Foreign	Foreign, by nationality										Foreign, by ownership		
Industry	plants	plants	total	EU	US	JP	N3	N3si	N3tw	N3kr	OT	OTch	OTot	MN	MJ	WH
Manufacturing	29	27	37	60	44	38	29	32	28	34	34	26	37	37	39	34
Food	23	22	28	30	40	28	22	20	21	29	30	22	33	28	31	26
Textiles	21	21	23	42	23	22	21	23	21	22	21	19	21	21	29	22
Apparel	27	27	30	31	20	32	30	20	32	23	28	31	27	29	31	38
Leather & footwear	30	30	31	25	25	41	26	-	27	26	33	31	34	28	31	38
Chemicals & products	44	38	59	106	65	59	41	37	41	47	46	27	50	50	81	62
Rubber products	21	22	20	14	37	18	21	19	20	56	18	15	18	23	14	13
Plastics & products	23	22	27	37	20	29	26	26	25	37	23	32	19	26	33	23
Non-metallic mineral products	24	23	40	48	23	49	35	25	38	34	29	22	33	38	52	18
Metal products	32	30	38	45	61	41	33	31	32	55	31	33	30	40	35	34
General machinery	37	35	46	51	45	47	39	50	36	46	55	30	65	47	40	52
Electric machinery, etc.	36	34	39	93	41	32	27	28	26	32	74	36	81	50	29	33
Office & computing machinery	35	32	36	-	48	20	35	12	37	33	57	-	57	18	28	42
Miscellaneous electric machinery	40	33	51	213	22	39	26	41	25	21	180	-	180	62	34	48
Radio, TV, communication	30	34	28	50	48	25	25	25	21	34	24	36	19	38	24	21
Precision machinery	38	37	39	38	19	38	25	-	25	-	55	-	55	45	34	36
Motor vehicles	35	32	50	49	65	54	24	-	19	43	34	43	33	47	63	34
Furniture	27	26	30	38	39	25	33	26	31	47	30	33	28	31	35	23
Jewelry	39	33	47	46	44	67	47	53	36	58	44	34	44	48	44	48
Other manufacturing industries	30	29	38	106	44	40	29	54	25	35	29	21	34	41	37	28
Beverages	37	36	40	-	33	-	124	124	-	-	34	-	34	40	50	-
Tobacco	11	11	13	18	-	-	-	-	-	-	4	4	-	18	-	4
Wood products	24	24	29	42	-	39	23	34	20	-	26	16	31	27	37	-
Paper products	35	32	54	1,022	41	34	28	-	25	45	27	28	26	63	30	9
Printing & publishing	37	37	32	25	33	33	36	36	-	-	35	-	35	33	33	27
Oil, coal, nuclear, etc.	62	50	81	32	111	97	45	-	-	45	24	-	24	73	111	-
Basic metals	29	28	34	39	16	36	30	-	22	40	32	28	38	36	17	41
Misc. transportation machinery	34	34	38	72	-	32	35	59	11	-	34	19	42	42	15	7
Other misc. manufacturing	27	25	33	46	49	38	27	-	27	27	34	15	41	32	38	30

Notes: EU=Europe; US=United States; JP=Japan; N3=N3si+N3tw+N3kr; N3si=Singapore, N3tw=Taiwan, KR=Korea; OT=OTch+OTot; OTch=China; OTot=Others.
WH=wholly foreign, MJ.=50-99% foreign-owned; MN=1-49% foreign owned; .
Sources: Author's calculations from plant-level data underlying National Statistical Office (1999).

Appendix Table 10b: Mean Compensation per Hour in All Sample Plants by Foreign Ownership Share or Foreign Nationality and Industry, 1998 (baht)

Industry	All plants	Local plants	Foreign total	Foreign, by nationality									
				EU	US	JP	N3	N3si	N3tw	N3kr	OT	OTch	OTot
Manufacturing	45	44	49	58	57	50	41	44	41	38	53	34	62
Food	25	23	34	36	82	28	27	21	27	45	37	34	38
Textiles	34	22	85	29	27	31	112	-	116	35	152	13	184
Apparel	24	20	36	29	-	33	25	9	33	-	45	54	38
Leather & footwear	30	29	37	26	34	50	38	-	25	45	27	25	30
Chemicals & products	51	41	70	115	90	59	47	70	37	-	81	30	95
Rubber products	27	26	30	30	49	23	35	31	37	21	25	27	24
Plastics & products	28	25	33	17	36	38	27	18	29	23	34	33	35
Non-metallic mineral products	152	162	53	63	83	53	46	34	48	-	28	25	30
Metal products	38	35	47	57	24	54	37	47	33	-	36	31	40
General machinery	46	38	62	52	27	71	49	62	40	63	48	44	48
Electric machinery, etc.	41	34	45	85	34	46	39	42	39	32	45	16	49
Office & computing machinery	38	44	37	-	15	39	38	14	40	-	67	-	67
Miscellaneous electric machinery	43	37	49	105	39	54	39	56	36	-	28	16	30
Radio, TV, communication	40	31	43	-	41	39	42	42	44	32	101	-	101
Precision machinery	35	27	43	46	22	51	33	-	33	-	-	-	-
Motor vehicles	48	38	65	41	54	70	35	28	38	-	35	43	32
Furniture	25	25	28	32	20	28	27	-	27	-	36	-	36
Jewelry	39	29	52	44	41	85	-	-	-	-	58	51	65
Other manufacturing industries	31	28	43	50	57	56	31	48	28	31	27	33	22
Beverages	34	32	55	-	78	16	74	74	-	-	30	-	30
Tobacco	13	12	35	-	35	-	-	-	-	-	-	-	-
Wood products	24	24	26	23	17	33	22	35	17	-	25	39	18
Paper products	32	30	43	-	173	62	30	14	30	42	19	16	22
Printing & publishing	38	37	41	54	9	54	34	32	38	-	-	-	-
Oil, coal, nuclear, etc.	53	38	127	-	-	127	-	-	-	-	-	-	-
Basic metals	41	36	64	15	52	76	55	114	26	-	28	32	23
Misc. transportation machinery	41	34	65	93	-	56	33	-	33	-	-	-	-
Other misc. manufacturing	27	23	32	38	23	35	30	-	31	29	32	38	16

Notes: EU=Europe; US=United States; JP=Japan; N3=N3si+N3tw+N3kr; N3si=Singapore, N3tw=Taiwan, KR=Korea; OT=OTch+OTot; OTch=China; OTot=Others.
Sources: Author's calculations from plant-level data underlying National Statistical Office (2001a).

Appendix Table 10c: Mean Compensation per Hour in All Sample Plants by Foreign Ownership Share or Foreign Nationality and Industry, 2000 (baht)

Industry	All plants	Local plants	Foreign total	Foreign, by nationality									
				EU	US	JP	N3	N3si	N3tw	N3kr	OT	OTch	OTot
Manufacturing	26	24	35	37	38	37	30	34	27	42	34	37	33
Food	23	22	28	33	29	27	33	34	28	53	19	41	15
Textiles	19	18	27	22	31	31	23	-	23	-	28	27	30
Apparel	22	21	31	-	27	28	29	-	29	-	37	36	38
Leather & footwear	28	25	42	-	-	40	42	-	21	59	39	-	39
Chemicals & products	37	32	48	38	67	63	28	42	25	-	50	-	50
Rubber products	23	23	24	38	12	18	21	8	25	-	24	27	19
Plastics & products	22	19	31	20	-	23	55	-	55	-	34	48	25
Non-metallic mineral products	24	23	36	47	81	26	27	33	25	-	35	-	35
Metal products	28	27	34	30	-	43	30	28	30	-	23	16	30
General machinery	39	35	48	46	-	49	56	123	39	-	33	31	34
Electric machinery, etc.	33	29	36	41	41	34	32	31	29	50	57	-	57
Office & computing machinery	43	42	43	47	39	38	38	-	38	-	59	-	59
Miscellaneous electric machinery	36	31	42	70	42	41	34	46	29	45	-	-	-
Radio, TV, communication	29	26	30	-	-	29	26	24	27	-	55	-	55
Precision machinery	29	26	33	25	-	36	38	-	21	55	-	-	-
Motor vehicles	33	30	41	54	55	40	36	37	35	-	30	-	30
Furniture	18	17	28	-	18	31	28	-	28	-	37	42	31
Jewelry	30	24	37	32	-	46	29	-	26	38	50	65	43
Other manufacturing industries	28	27	33	34	34	40	23	24	22	26	37	53	31
Beverages	23	21	36	27	56	31	-	-	-	-	18	-	18
Tobacco	18	18	19	15	22	-	-	-	-	-	16	-	16
Wood products	23	23	21	-	-	23	16	-	22	3	30	30	-
Paper products	29	29	29	34	-	47	21	-	21	-	21	-	21
Printing & publishing	30	29	36	-	18	25	26	24	31	-	104	-	104
Oil, coal, nuclear, etc.	44	44	45	56	-	-	-	-	-	-	9	-	9
Basic metals	36	32	46	37	14	50	-	-	-	-	52	40	64
Misc. transportation machinery	34	33	38	27	-	43	-	-	-	-	36	-	36
Other misc. manufacturing	28	27	28	25	33	27	25	-	22	30	42	70	13

Notes: EU=Europe; US=United States; JP=Japan; N3=N3si+N3tw+N3kr; N3si=Singapore, N3tw=Taiwan, KR=Korea; OT=OTch+OTot; OTch=China; OTot=Others.
Sources: Author's calculations from plant-level data underlying National Statistical Office (forthcoming).

Appendix Table 10d: Mean Compensation per Hour in Large Plants by Foreign Ownership Share or Foreign Nationality and Industry, 1996 (baht)

	All	Local	Foreign	Foreign, by nationality										Foreign, by ownership		
Industry	plants	plants	total	EU	US	JP	N3	N3si	N3tw	N3kr	OT	OTch	OTot	MN	MJ	WH
Manufacturing	34	32	39	65	47	39	30	33	28	37	36	25	39	39	41	36
Food	27	27	29	30	42	28	22	21	20	29	33	20	36	28	36	26
Textiles	22	22	22	48	23	21	19	14	18	23	21	14	24	20	30	24
Apparel	31	31	31	32	22	33	32	18	34	23	30	35	29	30	30	40
Leather & footwear	33	32	34	25	25	45	31	-	29	40	37	-	37	30	36	38
Chemicals & products	49	43	61	106	69	61	41	37	40	50	47	29	50	53	84	62
Rubber products	20	21	19	14	37	17	22	19	20	56	17	15	18	22	15	13
Plastics & products	23	22	28	43	23	29	30	24	30	37	21	31	18	26	34	26
Non-metallic mineral products	33	31	44	51	23	52	38	25	41	-	36	23	42	41	59	22
Metal products	37	36	40	45	81	41	38	36	36	55	30	29	30	43	35	36
General machinery	43	41	48	60	45	49	38	50	32	46	61	27	65	50	39	52
Electric machinery, etc.	39	38	39	95	42	32	27	29	25	32	78	36	86	54	29	33
Office & computing machinery	35	36	35	-	51	20	33	12	35	33	57	-	57	18	28	42
Miscellaneous electric machinery	47	40	54	213	22	41	26	41	24	21	203	-	203	69	34	48
Radio, TV, communication	30	36	28	50	48	25	25	26	18	34	24	36	19	39	24	22
Precision machinery	38	37	39	28	19	38	25	-	25	-	59	-	59	48	33	36
Motor vehicles	44	39	53	49	65	55	26	-	20	43	40	43	40	50	63	34
Furniture	34	35	32	38	39	25	35	-	33	47	34	38	31	33	38	23
Jewelry	50	49	51	51	45	67	51	70	36	58	49	34	50	50	48	59
Other manufacturing industries	37	36	41	121	45	41	30	55	26	33	30	23	33	43	41	28
Beverages	51	55	40	-	33	-	124	124	-	-	34	-	34	40	50	-
Tobacco	57	78	13	18	-	-	-	-	-	-	4	4	-	18	-	4
Wood products	28	27	32	42	-	41	31	34	24	-	24	21	26	31	36	-
Paper products	39	33	61	1,022	41	34	29	-	26	45	28	30	26	69	34	-
Printing & publishing	45	46	35	25	36	36	36	36	-	-	35	-	35	35	33	-
Oil, coal, nuclear, etc.	65	54	81	32	111	97	45	-	-	45	24	-	24	73	111	-
Basic metals	32	32	32	24	16	37	19	-	17	23	32	28	38	33	16	52
Misc. transportation machinery	40	40	39	110	-	32	31	70	11	-	41	19	63	44	15	7
Other misc. manufacturing	33	31	35	55	53	39	29	-	28	30	37	10	47	33	43	29

Notes: EU=Europe; US=United States; JP=Japan; N3=N3si+N3tw+N3kr; N3si=Singapore, N3tw=Taiwan, KR=Korea; OT=OTch+OTot; OTch=China; OTot=Others.
WH=wholly foreign, MJ.=50-99% foreign-owned; MN=1-49% foreign owned; .
Sources: Author's calculations from plant-level data underlying National Statistical Office (1999).

Appendix Table 10e: Mean Compensation per Hour in Large Plants by Foreign Ownership Share or Foreign Nationality and Industry, 1998 (baht)

Industry	All plants	Local plants	Foreign total	Foreign, by nationality									
				EU	US	JP	N3	N3si	N3tw	N3kr	OT	OTch	OTot
Manufacturing	39	33	52	61	60	52	44	48	44	40	59	35	68
Food	30	29	35	36	82	28	28	21	28	45	39	36	39
Textiles	45	23	91	29	27	30	128	-	135	35	172	11	199
Apparel	31	25	39	29	-	33	33	-	33	-	51	84	38
Leather & footwear	33	31	40	-	34	56	43	-	30	50	27	25	30
Chemicals & products	56	43	73	115	97	59	50	70	38	-	86	26	100
Rubber products	28	27	30	30	49	23	36	31	39	21	25	27	24
Plastics & products	29	26	33	14	36	37	26	18	28	23	38	30	46
Non-metallic mineral products	38	34	57	68	83	53	52	34	57	-	26	24	28
Metal products	43	40	52	67	-	56	45	65	38	-	41	36	46
General machinery	54	43	64	52	27	71	54	62	43	63	54	47	56
Electric machinery, etc.	44	39	47	105	34	49	40	40	41	32	47	23	49
Office & computing machinery	38	44	37	-	15	39	38	14	40	-	67	-	67
Miscellaneous electric machinery	48	44	52	105	39	59	41	56	38	-	29	23	30
Radio, TV, communication	41	30	44	-	41	41	41	37	44	32	125	-	125
Precision machinery	42	32	48	-	22	54	41	-	41	-	-	-	-
Motor vehicles	60	49	67	41	54	72	35	28	38	-	43	43	43
Furniture	32	33	27	32	20	26	26	-	26	-	42	-	42
Jewelry	49	41	55	41	42	85	-	-	-	-	64	63	65
Other manufacturing industries	38	34	48	53	65	59	34	59	30	33	28	33	23
Beverages	47	45	55	-	78	16	74	74	-	-	30	-	30
Tobacco	18	16	35	-	35	-	-	-	-	-	-	-	-
Wood products	28	27	28	31	-	44	18	17	18	-	25	39	11
Paper products	36	32	51	-	173	62	41	-	41	42	19	16	22
Printing & publishing	41	42	36	32	9	54	35	31	38	-	-	-	-
Oil, coal, nuclear, etc.	53	38	127	-	-	127	-	-	-	-	-	-	-
Basic metals	49	41	67	15	52	79	75	114	35	-	28	32	23
Misc. transportation machinery	55	40	69	127	-	56	33	-	33	-	-	-	-
Other misc. manufacturing	32	31	33	38	18	37	27	-	26	30	35	38	22

Notes: EU=Europe; US=United States; JP=Japan; N3=N3si+N3tw+N3kr; N3si=Singapore, N3tw=Taiwan, KR=Korea; OT=OTch+OTot; OTch=China; OTot=Others.
Sources: Author's calculations from plant-level data underlying National Statistical Office (2001a).

Appendix Table 10f: Mean Compensation per Hour in Large Sample Plants by Foreign Ownership Share or Foreign Nationality and Industry, 2000 (baht)

Industry	All plants	Local plants	Foreign total	Foreign, by nationality									
				EU	US	JP	N3	N3si	N3tw	N3kr	OT	OTch	OTot
Manufacturing	31	29	35	37	38	37	31	36	27	43	35	38	34
Food	27	27	28	33	29	27	35	37	28	53	19	41	15
Textiles	22	20	27	17	31	31	23	-	23	-	29	26	30
Apparel	28	27	31	-	27	28	29	-	29	-	37	36	38
Leather & footwear	32	28	42	-	-	40	42	-	21	59	39	-	39
Chemicals & products	42	37	50	42	67	63	27	42	22	-	50	-	50
Rubber products	24	24	24	38	12	18	21	8	25	-	24	27	19
Plastics & products	23	22	25	20	-	24	13	-	13	-	37	50	31
Non-metallic mineral products	31	29	37	48	81	30	27	33	25	-	38	-	38
Metal products	33	32	36	30	-	44	31	28	32	-	23	10	30
General machinery	42	36	48	46	-	49	63	123	33	-	33	31	34
Electric machinery, etc.	34	31	36	41	41	34	32	31	29	50	56	-	56
Office & computing machinery	43	42	43	47	39	38	38	-	38	-	59	-	59
Miscellaneous electric machinery	38	34	42	70	42	41	34	46	29	45	-	-	-
Radio, TV, communication	28	27	29	-	-	29	26	24	27	-	49	-	49
Precision machinery	31	27	33	25	-	36	38	-	21	55	-	-	-
Motor vehicles	41	40	42	54	55	42	36	37	35	-	30	-	30
Furniture	24	23	28	-	18	31	27	-	27	-	37	42	31
Jewelry	36	32	38	34	-	46	29	-	25	38	50	65	43
Other manufacturing industries	34	33	35	34	34	40	26	24	27	25	42	53	37
Beverages	32	30	38	27	56	31	-	-	-	-	-	-	-
Tobacco	37	61	19	15	22	-	-	-	-	-	16	-	16
Wood products	27	27	22	-	-	22	17	-	31	3	30	30	-
Paper products	32	32	33	34	-	47	26	-	26	-	21	-	21
Printing & publishing	40	41	38	-	18	25	27	24	31	-	104	-	104
Oil, coal, nuclear, etc.	42	41	45	56	-	-	-	-	-	-	9	-	9
Basic metals	47	48	46	37	14	50	-	-	-	-	52	40	64
Misc. transportation machinery	36	35	38	27	-	43	-	-	-	-	36	-	36
Other misc. manufacturing	31	30	31	25	33	27	27	-	25	29	70	70	-

Notes: EU=Europe; US=United States; JP=Japan; N3=N3si+N3tw+N3kr; N3si=Singapore, N3tw=Taiwan, KR=Korea; OT=OTch+OTot; OTch=China; OTot=Others.
Sources: Author's calculations from plant-level data underlying National Statistical Office (forthcoming).

Appendix Table 11a: Number of Plants in Thai Manufacturing by Foreign Ownership Share or Foreign Nationality and Industry, 1996 (number)

Industry	Publi-cation	Sample plants: All plants	Foreign total	Foreign, by nationality: EU	US	JP	N3	N3si	N3tw	N3kr	OT	OTch	OTot	Foreign, by ownership: MN	MJ	WH
Manufacturing	23,677	10,494	1,822	140	124	696	527	68	388	71	335	86	249	1,142	379	301
Food	3,294	1,483	190	19	17	72	47	7	35	5	35	9	26	139	32	19
Textiles	1,520	716	136	7	5	46	49	2	37	10	29	12	17	105	21	10
Apparel	1,877	743	101	9	3	31	22	2	17	3	36	8	28	77	17	7
Leather & footwear	832	289	39	2	2	9	21	0	14	7	5	1	4	18	14	7
Chemicals & products	936	512	146	17	17	53	34	6	23	5	25	5	20	94	31	21
Rubber products	540	284	75	3	3	19	20	7	12	1	30	4	26	49	15	11
Plastics & products	1,272	604	114	4	3	49	36	7	26	3	22	7	15	67	24	23
Non-metallic mineral products	2,509	964	59	12	2	15	24	4	18	2	6	2	4	43	13	3
Metal products	2,261	831	125	7	6	44	50	6	40	4	18	7	11	80	21	24
General machinery	982	480	107	6	2	59	26	4	19	3	14	4	10	68	19	20
Electric machinery, etc.	890	540	276	14	21	136	79	11	58	10	26	4	22	104	75	97
Office & computing machinery	58	35	32	0	9	8	14	1	12	1	1	0	1	3	9	20
Miscellaneous electric machinery	442	264	102	4	3	53	35	3	31	1	7	0	7	51	30	21
Radio, TV, communication	258	165	109	6	7	56	28	7	13	8	12	4	8	37	29	43
Precision machinery	132	76	33	4	2	19	2	0	2	0	6	0	6	13	7	13
Motor vehicles	1,095	455	79	2	3	61	5	0	4	1	8	1	7	56	20	3
Furniture	988	461	45	2	2	14	15	1	12	2	12	5	7	31	8	6
Jewelry	380	177	73	21	12	8	8	4	3	1	24	1	23	38	18	17
Other manufacturing industries	4,301	1,955	257	15	26	80	91	7	70	14	45	16	29	173	51	33
Beverages	254	96	13	0	8	0	1	1	0	0	4	0	4	12	1	0
Tobacco	238	88	3	2	0	0	0	0	0	0	1	1	0	2	0	1
Wood products	945	491	31	1	0	8	11	3	8	0	11	4	7	25	6	0
Paper products	559	270	41	1	3	9	18	0	16	2	10	5	5	31	9	1
Printing & publishing	915	347	18	2	5	8	1	1	0	0	2	0	2	15	2	1
Oil, coal, nuclear, etc.	42	26	10	1	2	5	1	0	0	1	1	0	1	8	2	0
Basic metals	475	204	40	3	1	22	9	0	5	4	5	3	2	33	5	2
Misc. transportation machinery	216	107	16	2	0	7	4	2	2	0	3	1	2	14	1	1
Other misc. manufacturing	657	326	85	3	7	21	46	0	39	7	8	2	6	33	25	27

Notes: EU=Europe; US=United States; JP=Japan; N3=N3si+N3tw+N3kr; N3si=Singapore, N3tw=Taiwan, KR=Korea; OT=OTch+OTot; OTch=China; OTot=Others.
WH=wholly foreign, MJ.=50-99% foreign-owned; MN=1-49% foreign owned; .
Sources: National Statistical Office (1999) and author's calculations from plant-level data underlying this publication.

Appendix Table 11b: Number of Plants in Thai Manufacturing by Foreign Nationality and Industry, 1998 (number)

Industry	Publi-cation	Sample plants											
		All plants	Foreign total	Foreign, by nationality									
				EU	US	JP	N3	N3si	N3tw	N3kr	OT	OTch	OTot
Manufacturing	20,807	4,773	1,026	73	68	440	270	42	203	25	175	54	121
Food	2,801	960	119	9	10	48	31	5	24	2	21	5	16
Textiles	1,316	326	62	3	4	21	18	0	17	1	16	3	13
Apparel	1,928	152	33	2	0	12	6	2	4	0	13	6	7
Leather & footwear	859	159	23	1	2	4	11	0	4	7	5	3	2
Chemicals & products	748	294	100	10	10	32	25	8	17	0	23	5	18
Rubber products	482	189	43	3	4	11	11	1	9	1	14	3	11
Plastics & products	1,279	194	62	2	1	27	19	2	15	2	13	5	8
Non-metallic mineral products	2,195	483	44	9	5	11	13	2	11	0	6	3	3
Metal products	2,139	318	66	3	1	36	19	5	14	0	7	3	4
General machinery	764	225	75	6	2	46	10	2	6	2	11	2	9
Electric machinery, etc.	655	272	161	6	11	81	48	7	39	2	15	2	13
Office & computing machinery	30	19	17	0	2	4	10	1	9	0	1	0	1
Miscellaneous electric machinery	355	133	64	4	3	32	14	2	12	0	11	2	9
Radio, TV, communication	190	89	65	0	5	37	20	4	14	2	3	0	3
Precision machinery	80	31	15	2	1	8	4	0	4	0	0	0	0
Motor vehicles	879	152	55	1	1	46	4	1	3	0	3	1	2
Furniture	915	168	18	1	1	8	6	0	6	0	2	0	2
Jewelry	339	45	19	5	6	2	0	0	0	0	6	3	3
Other manufacturing industries	3,508	836	146	12	10	55	49	7	34	8	20	10	10
Beverages	200	57	7	0	3	1	1	1	0	0	2	0	2
Tobacco	225	42	1	0	1	0	0	0	0	0	0	0	0
Wood products	796	262	21	2	1	7	8	2	6	0	3	1	2
Paper products	441	97	20	0	1	5	10	1	8	1	4	2	2
Printing & publishing	797	61	8	2	1	2	3	2	1	0	0	0	0
Oil, coal, nuclear, etc.	16	6	1	0	0	1	0	0	0	0	0	0	0
Basic metals	420	147	28	1	1	19	3	1	2	0	4	2	2
Misc. transportation machinery	154	43	10	3	0	6	1	0	1	0	0	0	0
Other misc. manufacturing	459	121	50	4	2	14	23	0	16	7	7	5	2

Notes: EU=Europe; US=United States; JP=Japan; N3=N3si+N3tw+N3kr; N3si=Singapore, N3tw=Taiwan, KR=Korea; OT=OTch+OTot; OTch=China; OTot=Others.
Sources: National Statistical Office (2001a) and author's calculations from plant-level data underlying this publication.

Appendix Table 11c: Number of Sample Plants in Thai Manufacturing by Foreign Nationality and Industry, 2000 (number)

Industry	Publi-cation	Sample plants: All plants	Foreign total	Foreign, by nationality: EU	US	JP	N3	N3si	N3tw	N3kr	OT	OTch	OTot
Manufacturing	20,608	2,520	520	72	28	223	128	24	88	16	69	21	48
Food	-	591	67	9	4	35	12	6	5	1	7	1	6
Textiles	1,358	178	30	2	1	9	9	0	9	0	9	5	4
Apparel	1,581	76	9	0	1	4	1	0	1	0	3	1	2
Leather & footwear	756	76	14	0	0	4	9	0	4	5	1	0	1
Chemicals & products	903	100	30	9	3	9	5	1	4	0	4	0	4
Rubber products	-	79	20	4	1	5	5	1	4	0	5	3	2
Plastics & products	-	88	19	2	0	9	3	0	3	0	5	2	3
Non-metallic mineral products	1,802	197	23	7	1	4	8	2	6	0	3	0	3
Metal products	2,090	170	38	4	0	16	14	5	9	0	4	2	2
General machinery	880	106	36	4	0	24	5	1	4	0	3	1	2
Electric machinery, etc.	845	147	84	7	5	51	17	3	12	2	4	0	4
Office & computing machinery	35	13	11	1	2	4	2	0	2	0	2	0	2
Miscellaneous electric machinery	450	56	26	2	3	14	7	1	5	1	0	0	0
Radio, TV, communication	241	44	32	0	0	24	6	2	4	0	2	0	2
Precision machinery	119	34	15	4	0	9	2	0	1	1	0	0	0
Motor vehicles	938	88	27	2	1	19	4	2	2	0	1	0	1
Furniture	-	96	10	0	2	3	3	0	3	0	2	1	1
Jewelry	-	40	18	8	0	3	4	0	3	1	3	1	2
Other manufacturing industries	-	488	95	14	9	28	29	3	19	7	15	4	11
Beverages	-	66	9	4	3	1	0	0	0	0	1	0	1
Tobacco	198	21	4	1	2	0	0	0	0	0	1	0	1
Wood products	797	94	6	0	0	2	3	0	2	1	1	1	0
Paper products	487	64	15	1	0	4	7	0	7	0	3	0	3
Printing & publishing	796	59	7	0	1	1	4	3	1	0	1	0	1
Oil, coal, nuclear, etc.	48	10	4	3	0	0	0	0	0	0	1	0	1
Basic metals	476	54	15	2	1	10	0	0	0	0	2	1	1
Misc. transportation machinery	179	33	5	1	0	3	0	0	0	0	1	0	1
Other misc. manufacturing	1,671	87	30	2	2	7	15	0	9	6	4	2	2

Notes: EU=Europe; US=United States; JP=Japan; N3=N3si+N3tw+N3kr; N3si=Singapore, N3tw=Taiwan, KR=Korea; OT=OTch+OTot; OTch=China; OTot=Others.
Sources: National Statistical Office (forthcoming) and author's calculations from plant-level data underlying this publication.

Appendix Table 11d: Number of Large Sample Plants in Thai Manufacturing by Foreign Ownership Share or Foreign Nationality and Industry, 1996 (number)

Industry	All plants	Foreign total	Foreign, by nationality										Foreign, by ownership		
			EU	US	JP	N3	N3si	N3tw	N3kr	OT	OTch	OTot	MN	MJ	WH
Manufacturing	5,481	1,509	118	111	613	401	57	288	56	266	58	208	924	323	262
Food	844	163	18	16	60	41	6	30	5	28	6	22	122	25	16
Textiles	364	111	5	5	44	36	1	27	8	21	7	14	84	18	9
Apparel	368	72	4	2	26	16	1	14	1	24	4	20	55	11	6
Leather & footwear	132	29	2	2	8	15	0	12	3	2	0	2	12	10	7
Chemicals & products	374	132	17	15	48	28	6	18	4	24	4	20	82	29	21
Rubber products	218	70	3	3	17	18	7	10	1	29	4	25	45	14	11
Plastics & products	329	87	3	1	41	24	6	15	3	18	4	14	51	20	16
Non-metallic mineral products	400	49	11	2	14	19	4	15	0	3	1	2	37	10	2
Metal products	375	101	6	4	40	35	4	27	4	16	5	11	61	19	21
General machinery	260	84	5	2	49	19	4	12	3	9	1	8	48	17	19
Electric machinery, etc.	380	245	13	20	122	66	10	47	9	24	4	20	84	70	91
Office & computing machinery	31	29	0	8	8	12	1	10	1	1	0	1	3	9	17
Miscellaneous electric machinery	175	91	4	3	48	30	3	26	1	6	0	6	43	28	20
Radio, TV, communication	130	98	6	7	51	22	6	9	7	12	4	8	30	27	41
Precision machinery	44	27	3	2	15	2	0	2	0	5	0	5	8	6	13
Motor vehicles	194	72	2	3	58	4	0	3	1	5	1	4	49	20	3
Furniture	193	36	2	2	12	12	0	10	2	8	3	5	23	7	6
Jewelry	99	57	15	10	7	6	2	3	1	19	1	18	32	14	11
Other manufacturing industries	951	201	12	24	67	62	6	45	11	36	13	23	139	39	23
Beverages	50	13	0	8	0	1	1	0	0	4	0	4	12	1	0
Tobacco	9	3	2	0	0	0	0	0	0	1	1	0	2	0	1
Wood products	224	20	1	0	7	4	3	1	0	8	3	5	17	3	0
Paper products	177	33	1	3	9	11	0	9	2	9	4	5	26	7	0
Printing & publishing	147	15	2	4	6	1	1	0	0	2	0	2	13	2	0
Oil, coal, nuclear, etc.	24	10	1	2	5	1	0	0	1	1	0	1	8	2	0
Basic metals	120	33	2	1	19	6	0	4	2	5	3	2	28	4	1
Misc. transportation machinery	55	13	1	0	7	3	1	2	0	2	1	1	11	1	1
Other misc. manufacturing	145	61	2	6	14	35	0	29	6	4	1	3	22	19	20

Notes: EU=Europe; US=United States; JP=Japan; N3=N3si+N3tw+N3kr; N3si=Singapore, N3tw=Taiwan, KR=Korea; OT=OTch+OTot; OTch=China; OTot=Others.
WH=wholly foreign, MJ.=50-99% foreign-owned; MN=1-49% foreign owned; .

Sources: Author's calculations from plant-level data underlying National Statistical Office (1999).

Appendix Table 11e: Number of Large Sample Plants in Thai Manufacturing by Foreign Nationality and Industry, 1998 (number)

Industry	All plants	Foreign total	Foreign, by nationality									
			EU	US	JP	N3	N3si	N3tw	N3kr	OT	OTch	OTot
Manufacturing	2,729	885	61	63	403	214	34	159	21	144	40	104
Food	549	107	9	10	42	29	5	22	2	17	2	15
Textiles	178	56	3	4	20	15	0	14	1	14	2	12
Apparel	73	28	2	0	12	4	0	4	0	10	3	7
Leather & footwear	111	19	0	2	3	9	0	3	6	5	3	2
Chemicals & products	216	91	10	9	30	21	8	13	0	21	4	17
Rubber products	145	41	3	4	10	10	1	8	1	14	3	11
Plastics & products	119	48	1	1	24	14	2	10	2	8	4	4
Non-metallic mineral products	201	37	8	5	11	9	2	7	0	4	2	2
Metal products	165	47	1	0	30	12	3	9	0	4	2	2
General machinery	134	69	6	2	46	7	2	3	2	8	1	7
Electric machinery, etc.	211	147	4	11	75	44	6	36	2	13	1	12
Office & computing machinery	19	17	0	2	4	10	1	9	0	1	0	1
Miscellaneous electric machinery	100	59	4	3	29	13	2	11	0	10	1	9
Radio, TV, communication	74	60	0	5	35	18	3	13	2	2	0	2
Precision machinery	18	11	0	1	7	3	0	3	0	0	0	0
Motor vehicles	83	52	1	1	44	4	1	3	0	2	1	1
Furniture	86	14	1	1	6	5	0	5	0	1	0	1
Jewelry	27	15	3	5	2	0	0	0	0	5	2	3
Other manufacturing industries	431	114	9	8	48	31	4	22	5	18	10	8
Beverages	29	7	0	3	1	1	1	0	0	2	0	2
Tobacco	9	1	0	1	0	0	0	0	0	0	0	0
Wood products	119	10	1	0	3	4	1	3	0	2	1	1
Paper products	71	16	0	1	5	6	0	5	1	4	2	2
Printing & publishing	35	6	1	1	2	2	1	1	0	0	0	0
Oil, coal, nuclear, etc.	6	1	0	0	1	0	0	0	0	0	0	0
Basic metals	88	25	1	1	17	2	1	1	0	4	2	2
Misc. transportation machinery	17	9	2	0	6	1	0	1	0	0	0	0
Other misc. manufacturing	57	39	4	1	13	15	0	11	4	6	5	1

Notes: EU=Europe; US=United States; JP=Japan; N3=N3si+N3tw+N3kr; N3si=Singapore, N3tw=Taiwan, KR=Korea; OT=OTch+OTot; OTch=China; OTot=Others.
Sources: Author's calculations from plant-level data underlying National Statistical Office (2001a).

Appendix Table 11f: Number of Large Sample Plants in Thai Manufacturing by Foreign Nationality and Industry, 2000 (number)

Industry	All plants	Foreign total	Foreign, by nationality									
			EU	US	JP	N3	N3si	N3tw	N3kr	OT	OTch	OTot
Manufacturing	1,487	476	67	28	212	110	22	73	15	59	17	42
Food	354	65	9	4	34	11	5	5	1	7	1	6
Textiles	95	26	1	1	9	8	0	8	0	7	3	4
Apparel	38	9	0	1	4	1	0	1	0	3	1	2
Leather & footwear	45	14	0	0	4	9	0	4	5	1	0	1
Chemicals & products	75	28	8	3	9	4	1	3	0	4	0	4
Rubber products	58	20	4	1	5	5	1	4	0	5	3	2
Plastics & products	50	14	2	0	8	1	0	1	0	3	1	2
Non-metallic mineral products	106	20	6	1	3	8	2	6	0	2	0	2
Metal products	92	35	4	0	15	13	5	8	0	3	1	2
General machinery	66	33	4	0	23	3	1	2	0	3	1	2
Electric machinery, etc.	125	81	7	5	49	17	3	12	2	3	0	3
Office & computing machinery	13	11	1	2	4	2	0	2	0	2	0	2
Miscellaneous electric machinery	49	26	2	3	14	7	1	5	1	0	0	0
Radio, TV, communication	41	30	0	0	23	6	2	4	0	1	0	1
Precision machinery	22	14	4	0	8	2	0	1	1	0	0	0
Motor vehicles	43	26	2	1	18	4	2	2	0	1	0	1
Furniture	44	9	0	2	3	2	0	2	0	2	1	1
Jewelry	22	14	6	0	2	3	0	2	1	3	1	2
Other manufacturing industries	274	82	14	9	26	21	2	13	6	12	4	8
Beverages	28	8	4	3	1	0	0	0	0	0	0	0
Tobacco	7	4	1	2	0	0	0	0	0	1	0	1
Wood products	51	4	0	0	1	2	0	1	1	1	1	0
Paper products	47	12	1	0	4	4	0	4	0	3	0	3
Printing & publishing	27	6	0	1	1	3	2	1	0	1	0	1
Oil, coal, nuclear, etc.	9	4	3	0	0	0	0	0	0	1	0	1
Basic metals	29	14	2	1	9	0	0	0	0	2	1	1
Misc. transportation machinery	21	5	1	0	3	0	0	0	0	1	0	1
Other misc. manufacturing	55	25	2	2	7	12	0	7	5	2	2	0

Notes: EU=Europe; US=United States; JP=Japan; N3=N3si+N3tw+N3kr; N3si=Singapore, N3tw=Taiwan, KR=Korea; OT=OTch+OTot; OTch=China; OTot=Others.
Sources: Author's calculations from plant-level data underlying National Statistical Office (forthcoming).