

Ownership and Energy Efficiency in Indonesia's Manufacturing Plants

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Abstract

This paper examines energy efficiency differentials between foreign multinational corporations (MNCs) or state-owned enterprises (SOEs) and local, private plants in Indonesian manufacturing using data on medium-large plants from the industrial censuses for 1996 and 2006. The results suggest that correlations between ownership and five different energy intensities (total energy, electricity, diesel fuel, natural gas fuel, and coal fuel) were all relatively weak. When significant, MNC-private and SOE-private differentials varied markedly among energy types, industries, years, and capital definitions. In other words, the evidence suggests that ownership-related differentials in energy intensity were not pronounced or consistent in Indonesia in these two years. Thus, if policy makers are concerned with energy efficiency in Indonesian manufacturing, it does not appear meaningful to focus on plant ownership.

Keywords: ownership, multinational corporations, energy efficiency, Indonesia, manufacturing

JEL Categories: F23, K32, L32, L33, L60, O53, Q40

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1. Introduction

This paper asks whether plants controlled by foreign multinational corporations (MNCs) and state-owned enterprises (SOEs) used purchased energy (defined as electricity and fuel) more efficiently than medium-large local, private plants covered by the Indonesian manufacturing censuses for 1996 and 2006. Answering this question is important because purchased energy consumption generates a large portion of pollution (mainly air pollution) emitted by manufacturing plants. Improving energy efficiency or energy conservation is thus an important way to limit pollution by manufacturers. For example, if foreign MNCs are more efficient than local plants or firms in host economies as often asserted, they may contribute directly to lower pollution intensity in the host and may also help create spillovers that encourage local, private plants and firms to adopt more energy-saving technologies. The Indonesian census data also contain rather detailed breakdowns of energy consumption, which also allow us to ask if differentials in energy intensities vary among relatively clean and dirty energy sources (e.g., natural gas-based fuel and coal fuel).

Eskeland and Harrison (2003) is one of the few studies using micro-data to investigate this question in developing economies. One of their main findings (p. 21) was “foreign plants are significantly more energy efficient and use cleaner types of energy” than their local peers in Coˆte d’Ivoire, Mexico, and Venezuela. In a related study of provincial data, He (2006) provides evidence that FDI [foreign direct investment] enterprises produce “with higher [SO₂] pollution efficiency”, but that stronger environmental regulation has simultaneously, though moderately, deterred FDI among Chinese provinces. Earnhart and Lizal (2006) focus on the effects of financial performance and privatization on environmental performance, but their results also indicate foreign ownership was usually an insignificant determinant of pollution in Czech firms.

The paper first reviews literature related to the energy efficiency of MNCs (Section 2). Second, it describes the database used and compares energy expenditures and energy

intensities between MNCs or SOEs, on the one hand, and local, private plants, on the other (Section 3). Third, it analyzes whether MNC-private and SOE-private differentials in energy intensities persist after accounting for scale and input mix, as well as factors affecting technology and thus energy intensity (Section 4). The final section concludes.

2. MNCs, SOEs, and Energy Efficiency in Developing Economies

There are at least two distinct stands of literature examining the environmental impacts of MNCs in developing economies. The largest strand examines location choices of MNCs and investigates the so-called pollution-haven hypothesis, asking whether relatively lax environmental standards in developing economies encourage MNCs to locate “dirty” production in those economies. Although this literature’s methodology is not directly related to this paper’s analysis, it is helpful to review a few key concepts it raises. The section then examines the literature analyzing whether foreign MNCs are more efficient than local plants in developing economies, which is more directly related to this analysis.

2a. Pollution Havens and Location Choice by MNCs

The pollution haven hypothesis literature is worthy of brief consideration because it helps put this analysis in the context of other literature on MNCs and the environment. The pollution haven hypothesis states that MNCs transfer polluting activities from home economies, where environmental regulations are relatively strict, to developing economies, where corresponding regulations tend to be less stringent. Evidence supporting this pollution-haven hypothesis is generally weak (Dean et al. 2009; Eskeland and Harrison 2003; Kirkpatrick and Shimamoto 2008; Smarzynska and Wei 2001), but there is some evidence consistent with the hypothesis (He 2006; Wagner and Timmons 2008).

These analyses face numerous problems which have yet to be sorted out. First, internationally comparable and meaningful data on location choice by MNCs and the severity of environmental regulations are not easy to obtain. For example, the level of FDI is often used to proxy MNC location choice, but FDI represents only a portion of equity and loans (corporate finance) in recipient affiliates and is often poorly correlated (both over time and across economies) with employment, sales, the number of affiliates, and other real activities in recipient affiliates (Ramstetter 2012). Second, modeling MNC location choice is a rather imprecise art and most of the literature lacks sufficient data to analyze the effects of all potentially important determinants (Ramstetter 2011). For example, Kirkpatrick and Shimamoto (2008) find a positive correlation between Japanese firm presence and host country participation in international environmental agreements, but fail to account for other factors related to good governance (e.g., strong and impartial legal and political institutions, effective economic policy implementation), which are likely to be positively correlated with participation in international environmental agreements.

Even if the pollution-haven hypothesis is true, and foreign direct investment (FDI) or other MNC activities (e.g., employment, sales) tend to be concentrated in pollution-intensive industries and countries with relatively lax environmental regulation, it is also possible that MNC affiliates in developing economies may be less pollution- or energy-intensive compared to local firms or plants. In other words, even if MNCs exploit pollution havens, they may contribute to more efficient use of energy or pollution reduction in host developing countries, especially if energy-efficient practices spillover from MNCs to local firms.

2b. MNCs, SOEs, Productivity, and Energy Efficiency in Developing Economies

In recent years, theoretical analyses have highlighted the role of what have been called knowledge-based, intangible assets (terminology from Markusen 1991) in MNCs. The key goals of many theoretical analyses are to explain why the MNC chooses to invest abroad

when it (at least) initially has several cost disadvantages compared to local firms, and why the MNC chooses to spread out production across countries rather than concentrate it in one location. Most observers agree that MNCs tend to possess relatively large amounts of technological knowledge and networks, marketing expertise and networks, especially international ones, and generally have relatively sophisticated and capable management.¹ The first two characteristics are evidenced by relatively high research and development (R&D) intensities (ratios to total sales), relatively large proportions of patent applications and approvals, relatively high advertising-sales ratios, and relatively high dependence on international trade (generally on both exports and imports). Correspondingly, when asking what makes a firm decide to assume the extra costs of investing in a foreign country (compared to the costs of local firms in the host), Dunning (1988) asserted that a firm must first have “ownership advantages” such as those afforded by possession of relatively large amounts intangible assets, as well as “location advantages” and “internalization advantages” before investing.²

The important implication is that, if one accepts the idea that MNCs have relatively large amounts of knowledge-based, intangible assets, MNCs will tend to be relatively efficient producers compared to non-MNCs, at least in some respect. And this relatively high efficiency could involve the MNC becoming more energy efficient and/or polluting less as part of efforts to facilitate increased demand among consumers and minimize production costs related to energy and pollution abatement needs. Moreover, because MNCs tend to be relatively R&D- and patent-intensive, and because technologies for clean energy and pollution control usually require relatively sophisticated technological inputs, it is logical to expect that MNCs are relatively efficient producers and consumers of goods and services that

¹ Caves (2007) and Dunning and Lundan (2008) provide thorough literature reviews. The work of Markusen (2002) has also been influential.

² Dunning’s OLI (ownership-location-internalization) paradigm has been influential, but others (Buckley and Casson 1992, Casson 1987, Rugman 1980, 1985) emphasize that the concept of internalization alone can explain the existence of the MNC and its characteristics.

promote energy efficiency and pollution reduction. For example, evidence from Cole et al. (2006) suggests that Japanese firms with FDI tend to have better environmental performance (pollute less and manage emissions better) than firms without FDI, and is consistent with the notion that MNCs are both better able to and more highly motivated to pollute less than other firms.³ Although limited, the existing literature on energy intensities (see introduction) indicates that MNCs tend to be relatively energy efficient, and thus pollute less, than local counterparts.

On the other hand, the fact that MNCs can move productive resources internationally clearly gives them the opportunity to locate polluting activities where related regulations tend to be relatively lax. It is also conceivable that investment incentives for MNCs might encourage them to be less energy efficient or pollute more than local firms. As indicated above, with some exceptions, the existing literature suggests that there is not much evidence supporting the pollution haven hypothesis that MNCs tend to locate in pollution-friendly areas. Moreover, even if MNCs pollute less per unit of output, they may contribute to higher overall pollution if they stimulate higher production levels to the extent that volume-related increases in pollution are larger than efficiency gains related to MNC activity.

Although the theoretical rationale for expecting MNCs to have relatively high productivity is rather convincing, the empirical evidence on productivity differentials between foreign MNCs and local firms in developing economies (which are predominantly non-MNCs) is often ambiguous. For example, studies of productivity differentials between MNCs and non-MNCs in the manufacturing sectors of Malaysia (Oguchi et al 2002, Haji Ahmad 2010) and Thailand (Ramstetter 2004, 2006) suggest that productivity differentials tended to be relatively small and were often statistically insignificant. Other evidence from Malaysia (Menon 1998, Oguchi et al. 2002) indicates that the growth of total factor productivity (TFP) was often less rapid in MNCs than in non-MNCs. Evidence

³ Cole et al. (2006) also provide evidence that firms with trade are also more likely to have better environmental performance than firms without trade. Correspondingly, they emphasize that internationalized firms are more likely to have better environmental performance than others.

for Indonesia (Takii 2004, 2006) and Vietnam (Ramstetter and Phan 2008, 2011) suggests that significant productivity differentials between MNCs and local plants were somewhat more common in the manufacturing industries of these economies. However, here again, differentials often become statistically insignificant when a translog function is used (allowing for flexible assumptions about scale and factor substitution) and plants are disaggregated by industry (allowing for differences in production function slopes among industries, as well as the constant). The only known evidence for China also suggests significant differences in both capital- and labor-productivity when all manufacturing firms are combined into one sample (Jefferson and Su 2006). Because an MNC parent's willingness to share technology is often thought to be greater in controlled affiliates (Moran 2001), much of this literature also examines the question of whether majority-foreign MNCs or MNCs with large foreign ownership shares have different productivity levels than other MNCs. However, the empirical evidence for Thailand, Indonesia, and Vietnam cited above does not suggest a strong tendency for productivity levels to be higher in controlled affiliates.

In contrast to MNCs, many economists expect SOEs to generally have relatively low productivity compared to private plants, largely because SOEs are thought to face relatively weak incentives for pursuing profits and efficiency. However, here again, the empirical evidence is mixed with several studies finding SOEs to have relatively low productivity and others finding the opposite.⁴ At the firm level, some SOEs have clear records of high profitability and productivity (e.g., Korea's Pohang Steel before privatization, Taiwan's China Steel). However, accounting is often ambiguous in SOEs and it is difficult to evaluate just how common efficient or inefficient SOEs are in general. In Indonesia, SOEs have played important roles in several industries but have generally been perceived as relatively inefficient. This is one reason for privatization of many SOEs during the period studied (see Section 3 below).

Hartono et al. (2011) is the only known study of energy intensity determinants in Indonesia. They

⁴ See Aharoni (2000), Djankov and Murrell (2002), and (Stretton and Orchard 1994) for surveys. Jefferson and Su (2006) provide Chinese evidence and Brown (2004, 2005) analyze the productivity effects of privatization in Eastern Europe.

find find that local, private firms tended to have significantly higher energy intensities than SOEs (the control group in their study) and that MNC-SOE differentials were not significant when all manufacturing plants were pooled for 2002-2006. However, they do not examine the substantial variation energy intensity differentials and their determinants among industries, and the theoretical foundations of their specification is not clear.

3. The Data, Energy Consumption, and Energy Intensities

This paper uses data from the two industrial censuses conducted by BPS-Statistics (various years) for 1996 and 2006 primarily because the censuses contain greater detail on energy expenditures and labor quality than annual surveys conducted for other years. Focus on census years is also advantageous because sample coverage tended to be higher in these years and because data for some plants were estimated in the survey years between the censuses. In other words, the data for the census years are more comprehensive and probably more accurate than data for survey years.

Because a number of plants are jointly owned by MNCs, SOEs, and/or private firms, the distinctions between these three ownership forms are potentially ambiguous. In order to avoid ambiguity, joint ventures with foreign shares of 33 percent or more are classified as MNCs and non-MNC joint ventures with state shares of 33 percent or more are classified as SOEs. This cutoff for the definition of MNCs is somewhat higher than the standard one (foreign shares of 10 percent or more), but we know of no standard for defining SOEs similarly.

Table 1 shows total energy (fuel and electricity) expenditures for 19 manufacturing industries and the shares of each industry's expenditure by SOEs, all MNCs, minority-foreign MNCs (foreign shares of 33-49 percent), majority-foreign (50-89 percent shares), and heavily foreign MNCs (shares of 90 percent or more). These data refer to energy expenditures only, and do not account for energy generated or sold by the plant, but purchased energy accounts for the vast majority of energy used by most plants. Industry definitions for 1996 are based on version 2 of the Indonesia's Standard Industrial Classification (ISIC) and differ in some respects from 2006 definitions, which are based on

version 3 of the ISIC. Thus, caution is necessary when interpreting trends over time, particularly at the industry level.⁵

The aggregate data indicate large increases in nominal energy expenditures during this decade, 7.8-fold in all manufacturing industries and in the 12 large energy using industries that accounted for 93 percent of total energy expenditures in both 1996 and 2006 (Table 1). Because it is reasonable to assume that the 12 large energy using industries were the source of most energy-related pollution in Indonesian manufacturing, the analysis below focuses primarily on these industries.⁶ Most of the increase in nominal expenditures was the result of inflation, which was relatively high in Indonesian manufacturing during 1997-2001, and again in 2005-2006.⁷ Among these industries, textiles, non-metallic mineral products, food and beverages, paper, and chemicals used the most purchased energy in both years; these five industries accounted for almost two-thirds (66%) of the total in 1996 and just over three-fifths (62%) in 2006.

Among large energy using industries, the share of SOEs in energy expenditures fell from 12 to 9.2 percent, while the share MNCs rose from 21 to 29 percent. Shares of minority- and majority-foreign MNCs were relatively stable (5.7-6.3 percent and 11-12 percent, respectively), but shares of heavily-foreign MNCs increased 2.7 fold (3.9 to 11 percent). Financial duress among private firms and local partners in joint ventures with MNCs in the wake of the 1997-1998 financial crisis led many MNCs to increase ownership shares in old joint ventures. Large decreases in Indonesian asset

⁵ It is impossible to construct a precise correspondence between the two classifications, because several detailed categories (i.e., at the 5- or 4-digit level) in one classification are split among detailed categories in the other classification; see Appendix Table 8 for detailed definitions used in this paper.

⁶ These analyses focus on industries that accounted for 3 percent or more of expenditures in 1996 or 2006 (or both) on each type of fuel examined (total energy, electricity, diesel fuel, natural gas fuel, and coal fuel). The same 12 industries were both large energy users and large electricity users by this criterion, though their share of electricity expenditures, 91-92 percent, was slightly lower. This criterion was met by 10 industries for diesel (92-93 percent of the total), 8 industries for natural gas (94-98 percent of the total), and 4 industries for coal (99-100 percent of the total). All but one was among the 12 large energy using industries, fabricated metals for natural gas being the exception.

⁷ According to national accounts' estimates, manufacturing GDP increased 6.7-fold in 1996-2006 if measured in current prices, but the manufacturing GDP deflator increased 4.9-fold while real manufacturing GDP increased only 1.4-fold. The growth of the manufacturing GDP deflator peaked in 1998 (60 percent), but this measure of manufacturing inflation was also high in 2000-2001 (20-27 percent), and in 1997, 1999, and 2005-2006 (13-17 percent; Asian Development Bank 2004, 2011).

prices and the value of the rupiah also made buyouts of joint venture partners, as well as investments in new ventures or takeovers of local plants much cheaper in foreign currency than before the crisis. In addition, the post-crisis policy environment was also more favorable for MNCs seeking relatively large ownership shares, though the implementation 1994 investment law was probably the most important reduction of foreign ownership restrictions.

SOEs accounted for more than one-fifth of the energy expenditures in four of the 12 large energy using industries in 1996, chemicals, basic metals, electronics-related machinery, and other transportation machinery, but in only one industry in 2006, non-metallic mineral products (Table 1).⁸ On the other hand, MNC shares exceed one fifth in most of the large using industries, apparel, paper, chemicals, non-metallic mineral products, electronics-related machinery, and motor vehicles in both years, basic metals in 1996 but not 2006, and food and beverages, textiles, and rubber and plastics in 2006 but not 1996.

MNC shares of output tended to be somewhat smaller than shares of energy expenditures. Thus, mean energy intensities, measured as the ratio of energy expenditures to output, were generally lower in MNCs than in other plants. Correspondingly, the MNC-private differentials in Table 2 were predominantly negative. If plants from all 12 large energy using industries are combined, the mean energy intensity of private plants was 6.0 percent in 1996 and 6.5 percent in 2006, but the mean energy intensity was 2.4 percentage points lower in all MNCs combined in 1996 and 1.3 percentage points lower in 2006. If all 12 industries are combined, heavily foreign MNCs had the lowest energy intensities, 2.6 and 1.4 percentage points, respectively, lower than private plants. In contrast, these differentials were smallest (in absolute value) between minority-foreign MNCs and private plants, 2.2 and 0.2 percent lower than private plants, respectively.

⁸ Although not shown in Table 1, it is also interesting to note that energy expenditures of local SOEs increased much more rapidly than those of central SOEs (45-fold vs. 4.5 fold), but that expenditures of central SOEs remained 3.4-fold larger in 2006 (authors' calculations). This occurred largely because many central SOEs were privatized or transferred to local authorities after the 1997 crisis and the promulgation of the decentralization law in 1999. However, the number of local and central SOEs is not large enough to make this distinction statistically meaningful in most industries.

There was also large variation of energy intensities and MNC-private differentials among industries and ownership groups (Table 2). For example, both private plant energy intensities and negative MNC-private differentials tended to be relatively large in non-metallic mineral products. On the other hand, SOEs and minority- and majority-foreign MNCs all had higher energy intensities than private plants in textiles in both years. Most MNC-private differentials (10-11 industries in 1996, 8-9 in 2006) were negative in both years. In other words, MNCs tended to have lower energy intensities than private plants even at the industry level, but the size of both intensities and differentials depended on the industry involved. In contrast, mean SOE-private differentials were negative in about half (6) of the 12 (1996) or 11 (2006) relevant, large energy using industries.⁹

The aggregate energy intensities at the top of Table 2 do not reflect the important possibility that MNCs and private plants may consume different energy mixes and thus impart different environmental impacts even if aggregate energy intensities are similar. For example, Eskeland and Harrison (2003) suggest that electricity consumption is cleaner than fuel consumption and find that MNCs tend to consume relatively more electricity than non-MNCs. In Indonesia, electricity generation has relied relatively heavily on clean fuels such as natural gas and hydropower, but coal (a relatively dirty fuel) was the single largest fuel source. Coal's shares of electricity generation were also much larger than corresponding shares of the primary energy supply and increased substantially between 2000 and 2005.¹⁰ The heavy and increasing use of coal for electricity generation suggests that electricity may not be a relatively clean source of energy in Indonesia, while the relatively large shares of natural gas and hydropower indicate the opposite. Thus, it is unclear whether electricity was a relatively clean source of energy in Indonesian manufacturing during this period.

⁹ Note that there were no SOE plants in motor vehicles in 2006.

¹⁰ According to Asia Pacific Energy Research Centre (2009), natural gas and hydropower combined to account for 36 percent of electricity generation in 2000 and 23 percent in 2005, while corresponding shares of the primary energy supply were 22 and 18 percent, respectively. Coal's share in electricity generation rose was 37 percent in 2000 and 41 percent in 2005, but its share in the primary energy supply was 7 and 13 percent, respectively. Oil accounted for another large portion of both the primary energy supply (30 and 19 percent, respectively) and electricity generation (40 and 39 percent, respectively).

Electricity accounted for 42 percent of all purchased energy in 1996 and 47 percent in 2006 (Appendix Tables 1a, 1b). Mean electricity propensities for private plants in the 12 large electricity using industries were 2.2 percent in 1996 and 2.7 percent in 2006 (Table 2). In 1996, all MNC groups had lower electricity intensities than private plants in most (9-11) of the 12 industries. Relatively large negative differentials of over 1 percentage point were observed in about half of the industries for minority-foreign plants (6) and heavily-foreign plants (5), but only three industries for majority-foreign plants. In 2006, mean MNC-private differentials for all industries combined were positive for majority- and heavily-foreign MNCs, but negative for minority-foreign MNCs. Both minority- and majority-foreign MNCs had lower electricity intensities than private plants in most industries (8 and 9, respectively), but negative differentials were observed in only five industries for heavily-foreign MNCs. Moreover, there were few negative differentials greater than 1 percentage point, six for minority-foreign MNCs, two for majority-foreign MNCs, and only one for heavily foreign MNCs. SOEs had lower electricity intensities in slightly more than two-fifths of the relevant large electricity using industries in 1996 (5 of 12) and slightly fewer in 2006 (4 of 11); mean SOE-private differentials for all 12 industries combined were positive and large.

Diesel and diesel oil constitute the largest homogeneous fuel type, accounting for 29 percent of total energy expenditures in 1996 and 24 percent in 2006 (Appendix Tables 1a, 1c), but there were only 10 industries that accounted for 3 percent of all diesel in at least one year. In these industries, minority- and heavily foreign MNCs had mean diesel intensities that were 0.4 points lower than private plants, and majority-foreign plants had mean diesel intensities that were 0.6 points lower (Table 2). However, in 2006, only minority-foreign MNCs had lower diesel intensities than private plants while majority- and heavily-foreign had relatively high diesel intensities. Similarly, in 1996, most of the MNC-private differentials were negative for the three MNCs ownership groups (6 or 7), and this was also true for majority- and heavily-foreign MNCs in 2006, but not minority-foreign MNCs (5 industries). SOEs had lower diesel intensities than private plants in four of ten industries in 1996, but six of nine in 2006; mean intensities in all 10 industries combined were about 0.9

percentage points higher in 1996, but only 0.03 percentage points higher in 2006. Thus, as for total energy intensities and electricity intensities, most MNC-local differentials are negative, but there are relatively few negative differentials or relatively large negative differentials for fuel compared to electricity and total energy, and for 2006 compared to 1996.

Although it is difficult to classify electricity or diesel as unambiguously clean or dirty energy sources in Indonesia, natural gas use is relatively clean, while coal and coke usage is relatively dirty. Thus, despite the small shares of natural gas and coal in total energy expenditures, it is interesting to examine the use of these two fuels.¹¹ Use of both of these fuels is more specialized than use of diesel or electricity, for example. Only eight industries had shares of total natural gas expenditures greater than 3 percent in at least one of the years and this was true for only four industries in the case of coal expenditures. Moreover, a very large number of plants did not use these specialized fuels at all.

Correspondingly, means of both natural gas and coal intensities (ratios expenditures on each energy type to gross output) were only 0.10 and 0.08 for natural gas in 1996 and 2006, respectively, and 0.04 and 0.23, respectively, for coal (Table 2). Mean MNC-private differentials for gas tended to be positive for both types of fuel. For gas, majority-foreign plants had relatively high intensities in most industries in both years (6 and 5 of 8, respectively), while SOE-private differentials were predominantly negative, by exactly the same counts. On the other hand, MNC-private differentials were predominantly negative for minority-foreign MNCs in both years (again 5 or 6 of 8) in heavily-foreign MNCs in 1996 in most (7) industries. For coal, negative and positive differentials were equally frequent in 1996 but by 2006 most differentials between minority-foreign and majority-foreign MNCs and private plants (3 and 4 of 4, respectively) were negative. On the other hand, SOE-private and wholly-foreign-private differentials were predominantly positive in 2006.

In short, the descriptive statistics in Table 2 suggest that there was a weak tendency for MNCs to use less total energy and electricity per unit of output than do private plants. The was also a weaker

¹¹ Natural gas accounted for 7 percent of total manufacturing energy expenditures in 1996 and 3 percent in 2006, while coal accounted for 5 and 6 percent, respectively (Appendix Tables 1a, 1d, 1e).

tendency for MNCs to have relatively low diesel intensities, but MNC-private differentials in coal or natural gas intensities were more often positive, though somewhat inconsistent across time and ownership groups. However, these simple comparisons mask important plant-level differences in factor usage, scale, and technology that may affect the relationship between ownership and energy intensities.

4. Energy Intensities and Ownership after Accounting for Scale and Factor Usage

This section attempts to examine the relationship between ownership and energy intensities after accounting for the effects of scale and other factor usage by estimating a factor demand model similar to that used by Eskeland and Harrison (2003, 16-18). The model is based on a translog production function and derives the relevant energy demand, measured as the share of the energy factors income (expenditure) in gross output, as a function of the logs of other factor inputs (other intermediate consumption, fixed assets, and labor), the quantity of the energy input being considered, and factors related to a plant's technological sophistication. In the Indonesian census data, there are four potentially important indicators of technological sophistication that might affect energy intensities, the ratio of research and development (R&D) expenditures to gross output, shares of moderately educated workers and highly educated workers in the total workforce, and information on a plant's startup which can be used to calculate a vintage variable.¹² The effect of plant ownership is then captured by adding dummy variables that identify various groups of MNCs and SOEs (i.e., private firms are used as the reference group).

The simplest version of the model assumes that MNC-private differentials are the same for all MNC ownership groups as follows:

$$EP_i = a_0 + a_1(LL_i) + a_2(LK_i) + a_3(LM_i) + a_4(LE_i) + a_5(SM_i) + a_6(SH_i) + a_7(RD_i) + a_8(YR_i) + a_9(DS_i) + a_{10}(DF_i) \quad (1)$$

¹² Eskeland and Harrison (2003) include the R&D ratio and the vintage variable in their model. They also include machinery imports, but that variable is not available in the Indonesian census data.

where

DF_i =a dummy equal to 1 if plant i is an MNC, 0 otherwise

DS_i =a dummy equal to 1 if plant i is an SOE, 0 otherwise

EP_i =energy intensity or ratio of energy expenditures gross output in plant i (percent)

LE_i =natural log of the quantity of energy used in plant $i + 1$ (kilowatt hours of electricity for total energy and electricity, liters for diesel, kilograms for coal, cubic meters for natural gas)

LL_i =natural log of the number of workers in plant i (number)

LK_i = natural log of the fixed assets less depreciation at yearend in plant i (thousand rupiah)

LM_i =natural log intermediate consumption excluding energy in plant i (thousand rupiah)

RD_i =ratio of R&D expenditures to gross output in plant i (percent)

SM_i =percentage of workers with secondary education in plant i

SH_i =percentage of workers with tertiary education in plant i

YR_i =number of years in operation in plant i .

The coefficient $a10$ is the percentage point differential (comparable to calculations in Table 2) of energy intensities between MNCs and local, private plants after accounting for the influences of scale and factor usage, and the four indicators of technological sophistication. As in the tables above, a modification of equation (1) is also used to distinguish differentials between MNC ownership groups and private plants as follows:

$$EP_i = b0 + b1(LL_i) + b2(LK_i) + b3(LM_i) + b4(LE_i) + b5(SM_i) + b6(SH_i) + b7(RD_i) + b8(YR_i) + b9(DS_i) + b10(DFMIN_i) + b11(DFMAJ_i) + b12(DFHVVY_i) \quad (2)$$

where

$DFMIN_i$ =a dummy equal to 1 if plant i is a minority-foreign MNC, 0 otherwise

$DFMAJ_i$ =a dummy equal to 1 if plant i is a majority-foreign MNC, 0 otherwise

$DFHVVY_i$ =a dummy equal to 1 if plant i is a heavily-foreign MNC, 0 otherwise

In this case, the coefficients $b10$, $b11$, and $b12$ are the percentage point differentials between minority-foreign, majority-foreign and heavily-foreign MNCs, on the one hand, and private plants on the other, after accounting for the influences of scale and other factor usage, and four indicators of technological sophistication.

Because energy requirements differ greatly among manufacturing industries, determinants of energy intensities, including SOE-private and MNC-private differentials, are likely to differ across industries. Correspondingly, analyses of industry-level regressions are emphasized and contrasted to results from large samples of plants in all large energy using industries combined. In both industry-level and aggregate regressions, more detailed, industry-related differences in intercepts are accounted for by adding industry dummies at the 4-digit level as possible.¹³ Regional dummies are also included to account for the effects of plant location on intercepts.¹⁴ Because the data cover two years spanning a period of severe economic crisis and large structural change, and because there are large differences in industrial classifications between the two years, the models are estimated in cross section only.

Unfortunately, even after excluding plants that reported extreme values of production or the average product of labor, 28-33 percent of the plants in large energy consuming industries did not report data on fixed assets in 1996 and 43-48 percent did not report this variable in 2006, with more plants reporting yearend capital than initial capital. The following analysis focuses on analyses of relatively small samples for which capital measures are available because omitted variable biases are likely to be severe if the variable is not included. Although estimates using initial capital are probably preferable because they reduce the possibility of simultaneity-related problems, estimates using ending capital are also reported as robustness checks, primarily because samples are up to 15 percent larger using this measure. Similarly, Appendix Tables 3-7, which report lengthy regression details excluded from the text, also include estimates in large samples that omit the capital variable

¹³ One industry, motor vehicles, was a 4-digit category in 1996. In other industries, it is sometimes necessary to combine 4-digit categories with few observations or ambiguous definitions (Appendix Table 8). To reiterate, both aggregate and detailed industry definitions differ between 1996 and 2006.

¹⁴ Jakarta is used as the reference region and regional dummies are used to identify plants in Sumatra, West Java, Central Java (including Yogyakarta), East Java, and East Indonesia (including Nusa Tenggara, Kalimantan, Sulawesi, Maluku, and Irian Jaya). Plants in East Indonesia had to be omitted from some industry estimates in order to avoid perfect correlations with ownership dummies (paper in 1996, basic metals in 2006, and in both years for electronics-related machinery and motor vehicles (see Appendix tables 3-7 for details).

altogether. The choice of the capital variable, or its omission, does not appear to affect estimates of MNC-private or SOE-private differentials in a predictable manner.

As in Table 2, MNC-private and SOE-private differentials are examined for five types of energy intensities, total energy, electricity, diesel fuel, gas fuel, and coal fuel. For total energy, the quantity of energy is not directly measurable and proxied with the quantity of electricity (as in Eskeland and Harrison 2003); for other energy types, quantities are measured directly in homogeneous units (see precise definitions above). Model performance varies substantially depending on the measure, period, and industry involved (Appendix Tables 3-7). For example, in the aggregate samples that combine all sample plants, the model explains variation in total energy and coal fuel intensities in 1996 quite well given the cross sectional context (R^2 of 0.59 or higher). However, it does a poorer job of explaining variation of diesel and gas intensities (R^2 of 0.36 or lower) and an intermediate job of explaining variation of electricity intensities in 1996. The model's explanatory power is also substantially lower for total energy, electricity, and coal in 2006 than in 1996, though differences between years are smaller for diesel and natural gas. Not surprisingly, there is also substantial variation in explanatory power across industries. However, even the lowest R^2 (0.18 for total energy in other transportation machinery in 2006) was not unusually low for cross sections such as these.

Moreover, in almost all of the total energy and electricity equations, most of the coefficients on labor and the energy quantity were positive and at least weakly significant at the 10 percent level, while coefficients on intermediate consumption (excluding the energy input in question) were negative and significant at this level (Appendix Tables 3-4). The coefficient on the energy quantity was also positive and significant in the most diesel, natural gas, and coal estimates, and intermediate consumption also had a significantly negative coefficient in the diesel equations (Appendix Tables 5-7). In other words, labor was a complement for total energy and electricity while intermediate consumption was a substitute for total energy, electricity, and diesel. However, all of the control coefficients were less often significant in estimates for the smaller energy sources of natural gas and coal. Labor also did not appear to affect diesel consumption in many industry-year combinations.

Higher shares of workers with secondary education also were positively and significantly correlated with total energy, electricity, and diesel intensities in slightly under half of the cases examined. Other indicators of technological sophistication were not generally significant determinants of energy intensities and correlations were again weakest for natural gas and coal.

After accounting for these influences, is plant ownership significantly related to energy intensities? Estimates of total energy intensities for all 12 industries combined (the top block in Table 3) suggest all SOE- and MNC-private differentials were statistically insignificant in 1996. The positive differential between majority-foreign MNCs and private plants was the only weakly significant one in 2006. Tests of the hypothesis that MNC-private differentials differed among MNC ownership groups were also rejected either at the 10 percent level (initial capital) or the standard 5 percent level (ending capital), suggesting that equation (2) is should probably be preferred to equation (1). However, none of the differentials themselves were significant at the standard 5 percent level or better. In other words, the correlation between ownership and total energy intensities was rather weak in these large samples of 9,333-11,173 plants.

As the data in Table 2 suggest, ownership-related differentials sometimes differed greatly among industries, as did other slope coefficients when equations (1) and (2) were estimated at the industry level (Appendix Tables 3-7). Thus, industry-level results probably provide more accurate estimates of ownership-related differentials in energy intensities. Industry-level results were consistent with aggregate estimates for the 12 large energy consuming energy industries combined in suggesting that correlations between ownership and total energy intensities were generally rather weak (Table 3). For example, all ownership coefficients were insignificant at standard levels (5 percent or better) for both years in five of the 12 industries (wood, rubber and plastics, non-metallic mineral products, basic metals, and motor vehicles) and for one of the two years in three more industries (paper in 1996 and chemicals, electronics-related machinery, and other transportation machinery in 2006). Negative and significant (at the 5 percent level) differentials were observed for minority-foreign plants in food and beverages in 1996, heavily-foreign plants in textiles in 2006 if yearend capital is used, SOEs in

apparel if initial capital is used, minority-foreign plants in paper products in 2006 if yearend capital is used, and SOEs in other transportation machinery in 1996 (Table 3). Positive and significant differentials were slightly less frequent, being observed for SOEs in textiles in 1996 if initial capital is used, heavily foreign MNCs in apparel in 1996, SOEs in chemicals in 1996 if initial capital is used, and all MNCs in electronics-related machinery in 1996. However, only about one-fourth of the estimated differentials in Table 3 were weakly significant at the 10 percent level and the positive SOE-private differential in textiles was the only one that was consistently significant in both specifications for both years. In short, estimated differentials were often inconsistent among years and capital definitions, and accompanied by large variation that made them generally insignificant.

Significant, ownership-related differentials were slightly more common for electricity intensities (Table 4) than for total energy intensities. However, 70 percent of the estimated differentials were still insignificant at the 10 percent level or better, as were all ownership-related differentials in chemicals, rubber and plastics, and motor vehicles. When all 12 industries were combined in 2006, electricity intensities were significantly lower in minority-foreign and heavily-foreign MNCs, but significantly higher in majority-foreign MNCs and SOEs. In 1996, SOEs also had weakly significant and higher electricity intensities than private plants if initial capital is used, but there were no significant differences between MNCs and private plants.

Industry-level results contrasted with the aggregate ones (Table 4). For example, significantly higher electricity intensities were observed for SOEs in only two industries, food and beverages (2006) and textiles (both years, weakly significant in 2006), but significantly lower ones were observed in four industries, apparel (both years, inconsistent among capital measures), paper (weakly significant in 2006, yearend capital), non-metallic mineral products (1996), and other transportation machinery (1996, yearend capital, Table 4). At least one group of MNCs had relatively low electricity intensities in food and beverages (minority-foreign in both years), wood (minority-foreign in 2006, heavily foreign in both years), paper (all in 2006, yearend capital), non-metallic mineral products (minority-foreign in 2006), basic metals (minority-foreign in 1996), and other transportation

machinery (majority-foreign in 2006, yearend capital). Conversely, at least one group of MNCs had relatively high electricity intensities in food and beverages (majority foreign in 2006), apparel (heavily foreign in 1996), paper (all in 1996, yearend capital), electronics-related machinery (heavily-foreign in 1996), and other transportation machinery (heavily-foreign in 1996). In short, there was large variation of ownership-related differentials among industries and little consistency in the signs of those differentials among industries or across time in individual industries. In addition, because electricity was not an unambiguously clean or dirty energy source in Indonesia, it is difficult to interpret these results as in Eskeland and Harrison (2003).

Interpreting estimates of diesel fuel intensities in Table 5 is similarly difficult for similar reasons. Moreover, only 21 percent of the estimated differentials in the Table were weakly significant. In the aggregate estimates for all sample industries, tests of the hypothesis that ownership-related differentials were the same for all MNC groups could not be rejected. Results of estimating equation (1) indicate that both SOE-private and the MNC-private differentials were never weakly significant. At the industry-level, SOEs used less diesel per unit of output than private plants and differentials were significant at the 10 percent level or better in wood (2006), paper (both years), and rubber and plastics (1996); SOE-private differentials in diesel intensities were never negative and weakly significant. MNC-private differentials were at least weakly significant and negative in chemicals (minority-foreign in 1996), rubber and plastics (majority-foreign in 1996), and non-metallic mineral products (all MNCs in 1996), but positive in paper (heavily foreign in 1996, ending capital) and motor vehicles (minority-foreign in both years, heavily-foreign in 1996). There is thus some evidence that, when ownership-related differentials were significant, both SOEs and MNCs used less diesel per unit of output than private plants. However, all ownership-related differentials were insignificant for four of the ten large diesel using industries, food and beverages, textiles, basic metals and other transportation machinery and differentials in most industries were not consistent in the two years. Thus, the relationship between plant ownership and diesel intensity was also weak.

Because natural gas fuel is clearly a relatively clean source of energy in Indonesia, one would expect positive ownership-related differentials if MNCs or SOEs tend to use relatively large amounts of clean fuel. However, in the aggregate estimates for the eight large gas using industries combined, SOEs had significantly lower gas intensities than private plants in 1996 and other SOE-private and MNC-private differentials were insignificant (Table 6).¹⁵ All ownership-related differentials were also insignificant in half of the eight industries, textiles, paper, basic metals and metal products, and four-fifths of all estimated differentials in the Table were insignificant. MNC-private differentials were positive and significant in food and beverages in 1996 for minority-foreign plants if initial capital is used, but negative for all MNCs in 2006 using both capital measures. SOE-private differentials were also negative in 1996 if yearend capital is used. MNC-private differentials were negative and at least weakly significant in chemicals in 2006, but all other differentials were insignificant statistically. In rubber and plastics, both SOE- and MNC-private differentials were significantly positive in 1996 if initial capital is used but insignificant otherwise. In non-metallic mineral products, the second largest gas using industry after basic metals, differentials involving minority-foreign plants in 1996 and SOEs in 2006 were significantly negative, but all other differentials were insignificant. Thus, when differentials were significant, they tended to be negative, but here again, the relationship of ownership to natural gas intensities was weak.

Correlations of ownership to coal fuel intensities were also weak with over three-fourths (78 percent) of the estimated differentials in Table 7 being insignificant. There were only four large coal using industries. In 1996, the negative MNC-private differentials in chemicals and in all four industries combined when yearend capital was used were the only weakly significant differentials.¹⁶ Significant or weakly significant differentials were more common in 2006 and all of these differentials were positive. The aggregate results indicated that SOEs used more coal per unit of

¹⁵ Estimates of equation (2) indicate relatively low gas intensities for minority-foreign MNCs in 2006, but tests of the hypothesis that all MNC-private differentials were the same could not be rejected and estimates of equation (1) reveal the MNC-private differential to be insignificant.

¹⁶ Results of equation (2) suggest that the negative MNC-private differentials were concentrated in majority-foreign and heavily foreign MNCs, but the hypothesis that all MNC-private differentials were the same could not be rejected.

output than private plants as did industry-level results in textiles and non-metallic mineral products. Results for chemicals suggested that heavily foreign MNCs used relatively large amounts of coal if equation (2) is used and that SOEs used relatively large amounts of coal if equation (1) and yearend capital is used, but other differentials were insignificant.¹⁷ All differentials were insignificant for paper in this year. Thus, when significant, these results also suggest a tendency for SOEs and MNCs to use less coal per unit of output than local plants in 1996, but to have higher coal intensities in 2006. However, in 1996, all SOE-private differentials were insignificant and in 2006, none of the MNC-private differentials were significant at standard levels. In short, as with the other energy sources examined, the correlation between plant ownership and coal intensities was rather weak.

5. Conclusions

This paper has examined whether foreign MNCs used five types of energy (total energy, electricity, diesel fuel gas fuel, and coal fuel) more efficiently than their local counterparts in samples of Indonesia's medium-large manufacturing plants in 1996 and 2006. A literature review highlighted the fact that foreign MNCs are generally assumed to have superior technology to local plants in developing economies like Indonesia. This creates the possibility that they might use inputs like energy relatively efficiently. The empirical evidence also suggests that productivity differentials between MNCs and local plants were more pronounced in Indonesia and Vietnam than in other Southeast Asian economies such as Malaysia and Thailand, for example. However, if estimated at the industry-level for different periods, there is substantial variation in the size and significance of productivity differentials among industries and across years.

Both descriptive statistics and results of econometric estimation are consistent with this mixed picture and suggest that the relationship between ownership and energy intensities was relatively weak in Indonesian manufacturing. When ownership-related differentials in energy intensities were

¹⁷ The hypothesis that all MNC-private differentials were equal can be rejected at the 10 percent level but not the standard 5 percent level in this industry.

statistically significant, they varied greatly among industries, years, and capital definitions. In other words, the evidence compiled suggests that ownership-related differentials in energy intensity were not pronounced or consistent. This suggests that plants of all types tended to use energy with more or less the same efficiency in these two years. Thus, if policy makers are concerned with energy efficiency in Indonesian manufacturing, it does not appear meaningful to focus on plant ownership.

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Table 1: Total energy (fuel and electricity) expenditures in sample plants (totals in billion rupiah, SOE & MNC shares in % of industry subtotals)

Industry	1996						2006					
	All plants	SOE shares	MNC shares				All plants	SOE shares	MNC shares			
			All	Minority	Majority	Heavily			All	Minority	Majority	Heavily
Manufacturing	7,309	11.7	21.6	5.7	11.8	4.1	56,841	8.8	28.5	5.9	11.2	11.4
Large energy users (12 industries)	6,786	12.2	21.1	5.7	11.5	3.9	52,635	9.2	28.6	6.3	11.4	10.8
Food & beverages	804	12.4	19.6	2.7	12.5	4.4	7,652	7.6	21.8	2.9	8.3	10.5
Textiles	1,521	3.6	17.5	2.5	11.8	3.1	7,810	1.2	23.6	0.7	12.1	10.8
Apparel	75	0.2	24.9	4.3	8.8	11.9	1,938	3.3	25.4	0.5	1.5	23.3
Wood products	474	0.6	8.6	3.3	4.0	1.3	1,523	0.4	16.6	1.8	4.4	10.4
Paper products	631	8.5	30.8	6.6	14.0	10.2	5,197	10.2	29.9	6.2	20.6	3.1
Chemicals	631	25.5	27.0	1.8	21	4.0	7,316	3.3	25.7	1.8	7.8	16.2
Rubber & plastic products	399	3.2	16.1	1.1	10.0	5.0	3,125	7.1	22.8	0.8	10.3	11.7
Non-metallic mineral products	1,274	15.5	20.3	17.0	3.3	0.0	7,379	34.9	30.3	7.3	19.9	3.2
Basic metals	542	29.1	20.5	0.6	18.7	1.2	4,316	4.7	11.3	1.3	5.6	4.4
Electronics-related machinery	256	23.3	39.9	1.6	20.0	18.3	1,610	0.1	66.3	0.7	14.0	51.7
Motor vehicles	80	0.8	41.3	25.5	13.8	2.0	2,827	-	87.2	68.2	9.2	9.8
Other transportation machinery	99	30.0	15.8	6.7	6.2	2.9	1,943	16.3	18.8	0.1	9.6	9.0
Small energy users (7 industries)	524	4.3	27.6	5.1	15.5	7.0	4,206	3.5	28.3	0.7	8.0	19.6
Tobacco	38	1.1	6.3	-	3.6	2.7	575	0.1	3.3	0.9	0.2	2.2
Leather & footwear	92	1.6	37.1	6.8	20.0	10.3	441	0.2	40.7	0.1	14.7	25.9
Printing & publishing	55	23.8	8.6	0.7	7.9	-	297	7.7	0.9	0.4	0.4	0.2
Oil & coal products	11	12.6	28.6	9.8	0.6	18.1	355	5.5	5.7	0.1	0.0	5.5
Fabricated metals	197	0.6	33.4	8.4	19.5	5.4	1,020	5.1	41.8	1.7	11.6	28.4
General machinery	51	8.8	38.4	2.0	20.8	15.6	910	0.5	48.1	0.1	14.7	33.3
Miscellaneous mfg. & recycling	80	0.1	18.6	1.9	9.8	6.9	609	7.6	17.4	0.4	3.1	13.9

Notes and Sources: - = no plants in the category; industry definitions differ in important respects between 1996 and 2006; see the text for detailed definitions of industries and ownership groups; data are authors' compilations from BPS-Statistics (various years).

Table 2: Mean energy intensities in private plants (percent) and SOE-private and MNC-private differentials (percentage point [1st] differences)

Industry	1996						2006					
	Private plants	SOE-private	MNC-private				Private plants	SOE-private	MNC-private			
			All	Minority	Majority	Heavily			All	Minority	Majority	Heavily
Total energy (12 large using industries)	5.96	1.110	-2.429	-2.195	-2.375	-2.584	6.54	0.224	-1.253	-0.208	-1.040	-1.434
Food & beverages	5.83	1.785	-2.463	-2.207	-2.362	-2.748	6.49	0.717	-1.259	5.238	-0.589	-2.460
Textiles	4.94	4.417	0.310	0.097	0.805	-0.210	6.82	4.315	0.405	2.211	1.910	-0.477
Apparel	2.24	-1.218	-0.309	-0.930	-0.512	-0.097	3.70	4.630	1.834	-2.087	5.509	1.595
Wood products	4.65	-0.700	-1.460	-2.284	-1.276	-1.340	6.05	-1.275	-1.985	-3.392	-2.713	-1.631
Paper products	5.38	7.782	1.417	-2.337	1.682	2.764	5.90	2.543	-0.272	-3.088	2.941	-0.556
Chemicals	5.07	3.234	-2.544	-1.942	-2.652	-2.658	6.25	-1.922	-2.170	-2.017	-2.769	-1.850
Rubber & plastic products	5.68	-2.600	-2.359	-2.837	-2.648	-1.953	6.57	-2.746	-1.097	-2.246	-1.834	-0.705
Non-metallic mineral products	15.61	-3.096	-5.821	-2.059	-7.570	-5.698	14.52	-2.775	-4.293	-5.326	-5.884	-2.526
Basic metals	5.61	-0.083	-1.187	-3.367	-0.690	-1.089	5.36	1.466	0.054	-1.087	-0.549	0.590
Electronics-related machinery	3.19	1.334	-0.248	-1.175	-0.212	-0.138	3.76	-2.747	0.175	-2.620	-0.935	0.442
Motor vehicles	3.97	1.540	-1.537	-1.603	-1.278	-2.487	5.11	-	-0.426	4.704	-1.398	-0.930
Other transportation machinery	4.39	-2.140	-1.637	-1.795	-1.494	-1.721	6.17	-1.659	-0.295	-5.228	-1.811	0.463
Electricity (12 large using industries)	2.15	0.862	-0.510	-0.407	-0.618	-0.410	2.71	0.625	0.222	-0.395	0.226	0.280
Food & beverages	2.11	1.210	-1.045	-1.286	-0.876	-1.172	2.22	0.597	-0.223	-0.778	0.870	-0.695
Textiles	2.83	2.772	-0.653	-1.372	-0.506	-0.648	4.14	4.547	0.280	2.577	0.555	0.006
Apparel	1.43	-1.040	-0.149	-0.912	-0.517	0.176	2.12	5.030	0.931	-1.619	4.678	0.601
Wood products	1.74	-0.132	-0.352	-1.026	-0.340	-0.051	2.33	0.580	-0.363	-1.612	-0.571	-0.198
Paper products	2.75	4.268	-0.091	-2.300	0.703	-0.574	3.13	0.912	-1.147	-2.456	-0.559	-1.045
Chemicals	2.34	1.990	-0.973	0.072	-1.212	-1.037	2.72	-1.159	-0.367	-0.412	-0.684	-0.180
Rubber & plastic products	3.73	-2.936	-1.900	-2.153	-2.056	-1.681	4.39	-2.379	-0.586	-2.663	-2.021	0.167
Non-metallic mineral products	1.25	0.991	1.599	5.284	0.778	-1.085	1.87	1.976	1.474	0.048	1.367	1.966
Basic metals	2.95	1.553	-0.857	-2.447	-0.367	-0.935	2.52	0.596	-0.003	-0.359	-0.881	0.541
Electronics-related machinery	1.80	2.591	-0.007	-0.865	-0.416	0.465	2.56	-1.985	0.523	-1.739	-0.209	0.714
Motor vehicles	2.39	-0.903	-1.162	-0.757	-1.306	-1.463	3.40	-	0.278	4.199	-0.232	-0.196
Other transportation machinery	2.02	-0.627	-0.082	0.187	-0.097	-0.454	3.03	-1.419	0.056	-2.623	-1.027	0.549

Table 2 (continued)

Industry	1996						2006					
	Private plants	SOE-private	MNC-private				Private plants	SOE-private	MNC-private			
			All	Minority	Majority	Heavily			All	Minority	Majority	Heavily
Diesel fuel (10 large using industries)	1.65	0.939	-0.352	-0.465	-0.353	-0.295	2.08	0.028	-0.463	1.337	-0.510	-0.656
Food & beverages	1.72	1.343	-0.177	0.343	-0.326	-0.225	2.11	0.798	0.458	7.600	0.000	-0.265
Textiles	1.29	1.764	0.836	1.328	1.389	0.078	1.08	0.272	0.513	0.083	1.199	0.183
Wood products	1.93	-0.227	-0.563	-0.621	-0.508	-0.616	2.75	-1.848	-1.210	-1.271	-1.420	-1.133
Paper products	1.48	-0.560	0.819	-0.010	0.215	2.444	1.45	0.146	0.126	-1.374	2.228	-0.126
Chemicals	1.61	0.683	-0.954	-1.215	-0.950	-0.795	2.23	-0.703	-1.154	-1.204	-1.336	-1.043
Rubber & plastic products	1.23	0.195	-0.144	-0.410	-0.443	0.224	1.46	-0.016	-0.538	0.741	-0.194	-0.769
Non-metallic mineral products	2.30	1.661	-0.398	-1.495	0.191	-0.681	4.06	-1.662	-1.587	-1.468	-3.142	-0.173
Basic metals	1.25	-0.985	-0.259	0.025	-0.604	0.050	1.22	-1.109	0.563	0.585	1.316	0.148
Motor vehicles	0.75	0.437	-0.227	-0.209	-0.188	-0.436	0.86	-	-0.335	0.634	-0.720	-0.354
Other transportation machinery	1.07	-0.859	-0.736	-1.061	-0.762	-0.192	1.92	-0.556	-0.007	-1.920	-0.346	0.209
Natural gas fuel (8 large using industries)	0.10	-0.027	0.103	0.112	0.218	-0.087	0.08	0.006	0.152	0.058	0.225	0.128
Food & beverages	0.04	-0.014	0.018	-0.039	0.067	-0.026	0.05	-0.036	-0.003	0.076	0.007	-0.018
Textiles	0.02	-0.024	0.096	0.112	0.159	0.020	0.03	-0.026	0.117	-0.026	0.367	-0.004
Paper products	0.09	1.572	-0.084	-0.086	-0.086	-0.078	0.04	1.461	0.146	-0.040	0.929	-0.019
Chemicals	0.09	-0.069	0.092	-0.094	0.212	-0.093	0.08	-0.077	-0.045	-0.076	-0.035	-0.047
Rubber & plastic products	0.02	-0.019	-0.004	-0.019	0.013	-0.019	0.05	-0.054	0.096	-0.054	0.234	0.047
Non-metallic mineral products	0.44	0.017	1.460	1.342	2.118	-0.440	0.37	-0.191	1.857	0.597	1.442	2.591
Basic metals	0.23	0.082	-0.116	-0.231	-0.007	-0.207	0.15	2.154	0.080	-0.099	-0.148	0.238
Fabricated metals	0.07	-0.028	0.026	0.045	0.062	-0.048	0.08	-0.047	0.058	-0.037	-0.010	0.089
Coal fuel (4 large using industries)	0.04	0.216	0.039	0.277	0.005	-0.018	0.23	0.252	0.112	0.702	0.134	0.020
Textiles	0.00	-0.001	0.002	-0.001	0.006	-0.001	0.36	-0.364	0.084	0.311	0.296	-0.038
Paper products	0.05	-0.046	0.051	0.052	-0.046	0.244	0.37	-0.367	-0.023	1.467	-0.367	-0.223
Chemicals	0.02	0.031	-0.016	-0.017	-0.015	-0.017	0.07	-0.066	0.155	0.132	0.053	0.216
Non-metallic mineral products	0.08	0.718	0.469	1.391	0.225	-0.083	0.08	1.892	0.394	1.801	0.485	-0.078

Notes and Sources: please see the text for detailed definitions of ownership groups and note that industry definitions differ in important respects between 1996 (ISIC rev. 2) and 2006 (ISIC rev. 3); data are authors' compilations from BPS-Statistics (various years).

Table 3: Estimates of SOE-Private and MNC-Private Total Energy Intensity Differentials from Equations (1) and (2)

Industry, equation, differential	1996, initial capital	1996, ending capital	2006, initial capital	2006, ending capital
12 LARGE ENERGY USING INDUSTRIES COMBINED				
Eq. (1), SOE-private	0.3017	0.2310	0.8454	0.9661
MNC-private	-0.2025	-0.1559	-0.0402	-0.2190
Eq (2), SOE-private	0.2933	0.2248	0.8515	0.9739
Minority-foreign MNC-private	-0.7328	-0.7374	-1.1381	-1.4010
Majority-foreign MNC-private	-0.3950	-0.2375	0.8494 c	0.7814 c
Heavily-foreign MNC-private	0.2410	0.1384	-0.2539	-0.4524
Wald test of MNC group equality	2.00	1.42	2.47 c	3.46 b
FOOD & BEVERAGES				
Eq. (1), SOE-private	0.2359	0.2538	0.9146	1.5051 c
MNC-private	0.0513	0.0050	1.2665	1.3189 c
Eq (2), SOE-private	0.2393	0.2520	0.9220	1.5114 c
Minority-foreign MNC-private	-1.9068 a	-2.1417 a	1.3248	0.9381
Majority-foreign MNC-private	0.3133	0.2574	2.3492 a	2.5458 a
Heavily-foreign MNC-private	0.5225	0.4949	0.6327	0.6780
Wald test of MNC group equality	6.38 a	7.22 a	0.97	1.23
TEXTILES				
Eq. (1), SOE-private	2.7380 b	2.2935 c	9.9839 c	10.0477 c
MNC-private	0.3220	0.3325	-0.4717	-0.8486
Eq (2), SOE-private	2.7336 b	2.2921 c	9.9905 c	10.0573 c
Minority-foreign MNC-private	0.5273	0.5265	0.8189	0.5328
Majority-foreign MNC-private	-0.1142	0.1157	0.3407	0.0848
Heavily-foreign MNC-private	0.6843	0.5051	-1.0928	-1.5074 b
Wald test of MNC group equality	0.18	0.05	1.68	5.01 a
APPAREL				
Eq. (1), SOE-private	-0.7441 c	-0.8285 c	-2.1992 a	-2.2944
MNC-private	0.5943 c	0.7893 b	-0.0768	-0.0239
Eq (2), SOE-private	-0.7462 c	-0.8334 c	-2.1987 a	-2.2911
Minority-foreign MNC-private	-0.0553	0.0339	-1.1901 c	-1.2595
Majority-foreign MNC-private	-0.4448	0.2950	0.2149	0.2807
Heavily-foreign MNC-private	1.3593 a	1.2726 a	-0.0287	0.0029
Wald test of MNC group equality	4.60 b	2.11	1.31	1.35
WOOD PRODUCTS				
Eq. (1), SOE-private	0.7242	0.6830	4.4512	4.5320
MNC-private	-0.5021	-0.0605	-0.2232	-0.4600
PAPER PRODUCTS; East Indonesian and minority-foreign plants omitted for 1996				
Eq. (1), SOE-private	6.1690	6.4640 c	-2.3363	-2.7228
MNC-private	0.4859	1.4496	1.4167	0.4231
Eq (2), SOE-private	6.2196	6.4340 c	-2.1258	-2.4872
Minority-foreign MNC-private	-	-	-2.9980 c	-5.3068 b
Majority-foreign MNC-private	-0.3370	1.6077	3.2408	2.9849
Heavily-foreign MNC-private	4.3113	1.0823	1.4229	0.6207
Wald test of MNC group equality	1.38	0.03	2.44 c	3.19 b

Table 3 (continued)

Industry, equation, differential	1996, initial capital	1996, ending capital	2006, initial capital	2006, ending capital
CHEMICALS				
Eq. (1), SOE-private	4.1615 b	3.5609 c	0.7666	1.1918
MNC-private	-0.0622	0.1954	-0.2882	-0.4983
RUBBER & PLASTIC PRODUCTS				
Eq. (1), SOE-private	-0.9482	-1.1290 c	-0.4337	-1.0144
MNC-private	-0.3007	-0.6996	0.2159	0.1563
NON-METALLIC MINERAL PRODUCTS,				
Eq. (1), SOE-private	-0.8752	-0.9236	6.4073	6.8196
MNC-private	-3.0950 c	-2.9576 c	-2.2913	-1.6446
BASIC METALS; SOE & East Indonesian plants omitted for 2006				
Eq. (1), SOE-private	-4.1974 c	-2.5143	-	-
MNC-private	-0.2194	-0.4278	-1.5212	-2.2187 c
ELECTRONICS-RELATED MACHINERY; SOE & East Indonesian plants omitted				
Eq. (1), MNC-private	0.9084 b	0.8955 b	0.1732	0.1105
MOTOR VEHICLES; SOE & East Indonesian plants omitted				
Eq. (1), MNC-private	0.8239	0.4092	-0.2242	-0.4547
OTHER TRANSPORTATION MACHINERY				
Eq. (1), SOE-private	-2.1724 c	-2.7168 b	-1.0354	-0.7599
MNC-private	0.2072	-1.0595	-0.3054	0.5313

Notes: a=significant at the 1% level, b=significant at the 5% level, c=significant at the 10% level (all p-values based on robust standard errors); the test MNC equality rows report Wald tests of the hypothesis that MNC-private differentials are equal for all MNC groups and associated p-values; equation (2) results are omitted for industries if all Wald tests of MNC group equality for the industry are not significant at 0.10; for other slope coefficients and equation statistics, see Appendix Table 3.

Table 4: Estimates of SOE-Private and MNC-Private Electricity Intensity Differentials from Equations (1) and (2)

Industry, equation, differential	1996, initial capital	1996, ending capital	2006, initial capital	2006, ending capital
12 LARGE ELECTRICITY USING INDUSTRIES COMBINED				
Eq. (1), SOE-private	0.6268 c	0.5490	1.0727 b	1.1904 b
MNC-private	-0.0228	-0.0300	-0.1277	-0.1860
Eq (2), SOE-private	0.6233 c	0.5473	1.0812 b	1.1987 b
Minority-foreign MNC-private	-0.0656	-0.0732	-0.8677 b	-0.9784 b
Majority-foreign MNC-private	-0.1662	-0.0933	0.7727 b	0.6803 b
Heavily-foreign MNC-private	0.1794	0.0644	-0.3844 b	-0.4111 b
Test MNC equality	1.01	0.24	6.60 a	6.75 a
FOOD & BEVERAGES				
Eq. (1), SOE-private	0.3160	0.3232	1.1138 b	1.6166 a
MNC-private	0.0592	0.0200	0.4484	0.6274
Eq (2), SOE-private	0.3170	0.3213	1.1209 b	1.6225 a
Minority-foreign MNC-private	-0.9167 a	-0.9938 a	-1.7607 c	-1.7101 b
Majority-foreign MNC-private	0.1440	0.0780	2.0729 a	2.3687 a
Heavily-foreign MNC-private	0.3802	0.3602	-0.2135	-0.0445
Test MNC equality	3.93 b	4.04 b	5.88 a	7.07 a
TEXTILES				
Eq. (1), SOE-private	2.7050 a	2.2783 b	11.0569 c	11.0423 c
MNC-private	-0.0035	-0.0459	-0.3145	-0.5102
APPAREL				
Eq. (1), SOE-private	-0.6162 c	-0.6483 b	-0.9446 a	-1.0169
MNC-private	0.7898 b	0.8807 a	-0.2328	-0.2782
Eq (2), SOE-private	-0.6192 c	-0.6544 b	-0.9457 a	-1.0167
Minority-foreign MNC-private	-0.3082	-0.2649	-0.4602	-0.6364
Majority-foreign MNC-private	-0.0964	0.3334	0.4453	-0.3125
Heavily-foreign MNC-private	1.5496 a	1.4713 a	-0.3015	-0.2537
Test MNC equality	6.22 a	7.33 a	0.59	0.37
WOOD PRODUCTS				
Eq. (1), SOE-private	0.8619	0.8650	5.2096	5.1175
MNC-private	-0.5964 b	-0.1231	-0.4185	-0.4395
Eq (2), SOE-private	0.8678	0.8789	5.1730	5.0860
Minority-foreign MNC-private	-0.3209	-0.3955	-2.1087 a	-2.1834 a
Majority-foreign MNC-private	-0.3202	0.5135	1.3698	1.2307
Heavily-foreign MNC-private	-0.9937 a	-0.7611 b	-0.9454 b	-0.7943 b
Test MNC equality	0.95	2.46 c	3.52 b	5.22 a
PAPER PRODUCTS; East Indonesian plants omitted for 1996				
Eq. (1), SOE-private	4.1684	4.6346	-2.1831	-2.4189 c
MNC-private	0.9286	1.3452 c	-0.1757	-0.5813 b
CHEMICALS				
Eq. (1), SOE-private	2.4050	1.9553	0.1561	0.1060
MNC-private	-0.2061	-0.0684	-0.4705	-0.4931
RUBBER & PLASTIC PRODUCTS				
Eq. (1), SOE-private	0.4918	0.3627	0.0583	-0.3466
MNC-private	0.1052	-0.2390	0.2058	0.1949

Table 4 (continued)

Industry, equation, differential	1996, initial capital	1996, ending capital	2006, initial capital	2006, ending capital
NON-METALLIC MINERAL PRODUCTS				
Eq. (1), SOE-private	-1.2577 b	-1.4644 b	1.1867	1.3509
MNC-private	-0.4375	-0.5632	-1.0599	-0.3498
Eq (2), SOE-private	-1.2099 c	-1.4089 b	1.1742	1.3111
Minority-foreign MNC-private	1.7126	1.7971	-3.9047 a	-3.6958 a
Majority-foreign MNC-private	-1.3190	-1.4998 c	0.6814	0.6679
Heavily-foreign MNC-private	-0.9941	-1.2817	-0.8209	0.2265
Test MNC equality	1.05	1.14	4.40 b	4.95 a
BASIC METALS; SOE & East Indonesian plants omitted for 2006				
Eq. (1), SOE-private	-2.2071	-1.3903	-	-
MNC-private	-0.4087	-0.3146	-0.0741	-0.9321
Eq (2), SOE-private	-1.8997	-1.2513	-	-
Minority-foreign MNC-private	-3.8117 b	-3.9843 b	-0.7783	-0.4172
Majority-foreign MNC-private	0.6667	0.4633	1.6562	0.9733
Heavily-foreign MNC-private	-1.0242	-0.1815	-0.7048	-1.9038
Test MNC equality	3.29 b	3.15 b	0.89	1.41
ELECTRONICS-RELATED MACHINERY; SOE & East Indonesian plants omitted				
Eq. (1), MNC-private	0.6982 a	0.6558 a	0.1072	0.1032
Eq. (2), Minority-foreign-private	-0.3173	-0.3042	-1.4598	-1.4833
Majority-foreign MNC-private	0.3760	0.3084	-0.4241	-0.5640
Heavily-foreign MNC-private	1.4220 a	1.3754 a	0.3338	0.3483
Test MNC equality	8.71 a	8.89 a	0.95	1.06
MOTOR VEHICLES; SOE & East Indonesian plants omitted				
Eq. (1), MNC-private	-0.1124	-0.2590	-0.0470	-0.4883
OTHER TRANSPORTATION MACHINERY; minority-foreign MNCs omitted from (2)				
Eq. (1), SOE-private	-0.8876	-1.2453 b	-0.2077	-0.1066
MNC-private	0.3097	-0.2563	-0.5001	-0.0574
Eq (2), SOE-private	-0.8985	-1.2539 b	-0.1968	-0.0701
Majority-foreign MNC-private	-0.2723	-1.0233	-1.8716 c	-1.8904 b
Heavily-foreign MNC-private	2.3473 a	2.3667 a	-0.2436	0.3200
Test MNC equality	7.06 a	9.09 a	2.38	6.96 a

Notes: a=significant at the 1% level, b=significant at the 5% level, c=significant at the 10% level (all p-values based on robust standard errors); the test MNC equality rows report Wald tests of the hypothesis that MNC-private differentials are equal for all MNC groups and associated p-values; equation (2) results are omitted for industries if all Wald tests of MNC group equality for the industry are not significant at 0.10; for other slope coefficients and equation statistics, see Appendix Table 4.

Table 5: Estimates of SOE-Private and MNC-Private Diesel Fuel Intensity Differentials from Equations (1) and (2)

Industry, equation, differential	1996, initial capital	1996, ending capital	2006, initial capital	2006, ending capital
10 LARGE DIESEL FUEL USING INDUSTRIES COMBINED				
Eq. (1), SOE-private	0.1662	0.1788	0.1451	0.2050
MNC-private	0.1487	0.1321	0.3102	0.2450
Eq (2), SOE-private	0.1625	0.1756	0.1462	0.2060
Minority-foreign MNC-private	-0.2012	-0.2678	0.9441	0.6924
Majority-foreign MNC-private	0.0967	0.1300	0.1436	0.1497
Heavily-foreign MNC-private	0.3847 c	0.2945	0.3049	0.2321
Test MNC equality	2.11	2.38 c	0.30	0.14
FOOD & BEVERAGES				
Eq. (1), SOE-private	0.0910	0.1473	0.5671	0.6466
MNC-private	0.2141	0.2125	0.6773	0.6170
TEXTILES				
Eq. (1), SOE-private	-0.0161	-0.0273	0.0297	0.0367
MNC-private	0.1988	0.2855	-0.1648	-0.2562
WOOD PRODUCTS				
Eq. (1), SOE-private	0.3106	0.2786	-2.6113 a	-2.4617 a
MNC-private	0.4004	0.2562	0.2934	0.3292
PAPER PRODUCTS; East Indonesian and minority-foreign plants omitted for 1996				
Eq. (1), SOE-private	-1.2558 a	-1.3995 a	-2.4388 c	-2.5753 b
MNC-private	0.5846	1.0136	0.6735	0.4475
Eq (2), SOE-private	-1.2212 a	-1.2904 a	-2.3954 c	-2.5126 c
Minority-foreign MNC-private	-	-	-0.0568	-1.1039
Majority-foreign MNC-private	0.1890	0.3430	1.0548	1.1181
Heavily-foreign MNC-private	2.4790	2.5658 c	0.6525	0.5107
Test MNC equality	1.63	2.77 c	0.37	1.22
CHEMICALS				
Eq. (1), SOE-private	1.0070	0.9122	0.8634	1.0135
MNC-private	0.3064	0.2888	0.1233	-0.0893
Eq (2), SOE-private	0.9933	0.9016	0.7830	0.9600
Minority-foreign MNC-private	-0.6358 c	-0.6121 b	-0.7437	-0.7266
Majority-foreign MNC-private	0.5409	0.5153	-0.7309	-0.9994
Heavily-foreign MNC-private	0.4151	0.3851	0.7284	0.4839
Test MNC equality	4.77 a	5.48 a	0.97	1.18
RUBBER & PLASTIC PRODUCTS				
Eq. (1), SOE-private	-0.3923 c	-0.4841 b	0.0645	-0.1045
MNC-private	-0.0201	-0.1024	0.2705	0.3230
Eq (2), SOE-private	-0.4177 c	-0.5024 b	0.0776	-0.0913
Minority-foreign MNC-private	-0.2142	-0.2476	2.7630	2.7773
Majority-foreign MNC-private	-0.5502 a	-0.5006 a	0.4985	0.6368
Heavily-foreign MNC-private	0.5867 c	0.3431	0.0200	0.0672
Test MNC equality	5.03 a	3.59 b	0.94	1.01

Table 5 (continued)

Industry, equation, differential	1996, initial capital	1996, ending capital	2006, initial capital	2006, ending capital
NON-METALLIC MINERAL PRODUCTS				
Eq. (1), SOE-private	0.9386	0.8224	-0.1585	-0.1968
MNC-private	-1.1835 b	-1.2284 b	-0.1072	-0.0826
BASIC METALS; SOE & East Indonesian plants omitted for 2006				
Eq. (1), SOE-private	-2.1196	-1.9136	-	-
MNC-private	0.0085	-0.4291	0.1374	0.2112
MOTOR VEHICLES; SOE & East Indonesian plants omitted				
Eq. (1), MNC-private	0.7964 b	0.7109 b	-0.0602	-0.1476
Eq. (2), Minority-foreign-private	1.0177 a	1.0067 a	1.4639 a	1.4183 a
Majority-foreign MNC-private	0.4904	0.3613	-0.1694	-0.1860
Heavily-foreign MNC-private	1.0978 b	1.0870 b	-0.2778	-0.3783
Test MNC equality	0.40	0.71	13.80 a	12.89 a
OTHER TRANSPORTATION MACHINERY				
Eq. (1), SOE-private	-0.3640	-0.6050	-0.3186	-0.2360
MNC-private	0.2005	-0.0600	0.3198	0.2761

Notes: a=significant at the 1% level, b=significant at the 5% level, c=significant at the 10% level (all p-values based on robust standard errors); the test MNC equality rows report Wald tests of the hypothesis that MNC-private differentials are equal for all MNC groups and associated p-values; equation (2) results are omitted for industries if all Wald tests of MNC group equality for the industry are not significant at 0.10; for other slope coefficients and equation statistics, see Appendix Table 5.

Table 6: Estimates of SOE-Private and MNC-Private Natural Gas Fuel Intensity Differentials from Equations (1) and (2)

Industry, equation, differential	1996, initial capital	1996, ending capital	2006, initial capital	2006, ending capital
8 LARGE NATURAL GAS FUEL USING INDUSTRIES COMBINED				
Eq. (1), SOE-private	-0.1585 a	-0.1482 a	0.0448	0.0500
MNC-private	-0.0684	-0.0782	-0.0593	-0.0590
Eq (2), SOE-private	-0.1602 a	-0.1495 a	0.0427	0.0475
Minority-foreign MNC-private	-0.2896	-0.2777	-0.4642 b	-0.4954 b
Majority-foreign MNC-private	-0.0544	-0.0530	-0.0269	-0.0366
Heavily-foreign MNC-private	-0.0025	-0.0442	-0.0234	-0.0157
Test MNC equality	0.85	0.59	1.82	2.19
FOOD & BEVERAGES				
Eq. (1), SOE-private	-0.0552	-0.0614 c	0.0083	0.0065
MNC-private	-0.0518	-0.0693	-0.1299 a	-0.1457 a
Eq (2), SOE-private	-0.0553	-0.0609 c	0.0089	0.0068
Minority-foreign MNC-private	0.1006 a	0.0737	-0.2315	-0.2360
Majority-foreign MNC-private	-0.0693	-0.0789	-0.0390	-0.0707
Heavily-foreign MNC-private	-0.0940	-0.1147	-0.1702 b	-0.1763 b
Test MNC equality	3.38 b	2.94 c	1.64	1.09
TEXTILES				
Eq. (1), SOE-private	0.0162	0.0194	0.0097	0.0004
MNC-private	0.0048	0.0125	0.0418	0.0390
PAPER PRODUCTS; East Indonesian and minority-foreign plants omitted for 1996				
Eq. (1), SOE-private	0.9655	1.3146	4.8174	4.8381
MNC-private	0.0718	-0.1955	0.0163	-0.0316
CHEMICALS				
Eq. (1), SOE-private	-0.0155	-0.0026	-0.0311	-0.0006
MNC-private	0.0427	0.0555	-0.2206 b	-0.1482 c
RUBBER & PLASTIC PRODUCTS				
Eq. (1), SOE-private	0.0214 b	0.0136	0.0109	0.0146
MNC-private	0.0242 b	-0.0002	0.0021	-0.0089
NON-METALLIC MINERAL PRODUCTS				
Eq. (1), SOE-private	-0.7077	-0.6475	-3.0625 b	-3.0637 b
MNC-private	-1.9192 b	-1.8845 b	0.0004	-0.0672
Eq (2), SOE-private	-0.7662	-0.7061	-3.1435 b	-3.1705 b
Minority-foreign MNC-private	-3.7310 b	-3.6754 b	-2.7115	-2.6911
Majority-foreign MNC-private	-1.8370	-1.7843	-2.1399	-2.2287
Heavily-foreign MNC-private	0.0320	0.0374	1.6578	1.3500
Test MNC equality	3.13 b	3.17 b	1.06	1.11
BASIC METALS; SOE & East Indonesian plants omitted for 2006				
Eq. (1), SOE-private	-0.0102	0.0546	-	-
MNC-private	0.1078	0.0992	-0.0662	0.0845
METAL PRODUCTS				
Eq. (1), SOE-private	-0.1507	-0.1682	-0.1523	-0.6258
MNC-private	-0.0542	-0.0617	-0.0484	-0.0299

Notes: a=significant at the 1% level, b=significant at the 5% level, c=significant at the 10% level (all p-values based on robust standard errors); the test MNC equality rows report Wald tests of the hypothesis that MNC-private differentials are equal for all MNC groups and associated p-values; equation (2) results are omitted for industries if all Wald tests of MNC group equality for the industry are not significant at 0.10; for other slope coefficients and equation statistics, see Appendix Table 6.

Table 7: Estimates of SOE-Private and MNC-Private Coal Fuel Intensity Differentials from Equations (1) and (2)

Industry, equation, differential	1996, initial capital	1996, ending capital	2006, initial capital	2006, ending capital
4 LARGE COAL FUEL USING INDUSTRIES COMBINED				
Eq. (1), SOE-private	-0.1215	-0.1094	1.2397 a	1.1477 a
MNC-private	-0.0565	-0.0757 c	0.0549	0.0527
Eq (2), SOE-private	-0.1232	-0.1093	1.2406 a	1.1489 a
Minority-foreign MNC-private	-0.1030	-0.0960	-0.0499	-0.0607
Majority-foreign MNC-private	-0.0797	-0.0576	0.1471	0.1377
Heavily-foreign MNC-private	0.0001	-0.0948	0.0255	0.0305
Test MNC equality	1.40	0.15	0.28	0.33
TEXTILES				
Eq. (1), SOE-private	0.0005	0.0004	0.6334 b	0.5592 b
MNC-private	0.0006	0.0006	0.1966	0.1783
PAPER PRODUCTS, East Indonesian plants omitted for 1996				
Eq. (1), SOE-private	0.0063	0.0123	-0.0084	0.1254
MNC-private	0.0006	-0.0179	-0.1093	-0.0961
CHEMICALS				
Eq. (1), SOE-private	-0.0632	-0.0625	0.1506	0.1457 c
MNC-private	-0.0902 c	-0.0825 c	0.1649	0.1486
Eq (2), SOE-private	-0.0636	-0.0631	0.1264	0.1315
Minority-foreign MNC-private	-0.0178	-0.0187	-0.2017	-0.1939
Majority-foreign MNC-private	-0.1411 c	-0.1300 c	-0.0794	-0.0641
Heavily-foreign MNC-private	-0.0330 c	-0.0288	0.3647 c	0.3257 c
Test MNC equality	1.43	1.40	2.35 c	2.34 c
NON-METALLIC MINERAL PRODUCTS				
Eq. (1), SOE-private	-0.5098	-0.4796	1.2743 c	1.2635 c
MNC-private	-0.2881	-0.2836	0.0289	0.0239

Notes: a=significant at the 1% level, b=significant at the 5% level, c=significant at the 10% level (all p-values based on robust standard errors); the test MNC equality rows report Wald tests of the hypothesis that MNC-private differentials are equal for all MNC groups and associated p-values; equation (2) results are omitted for industries if all Wald tests of MNC group equality for the industry are not significant at 0.10; for all results including other slope coefficients and equation statistics, see Appendix Table 7.

Appendix Table 1a: Total energy (fuel and electricity) expenditures in sample plants (billion rupiah)

Industry	1996						2006					
	Private plants	SOEs	MNCs				Private plants	SOEs	MNCs			
			33-100	33-49	50-89	90+			33-100	33-49	50-89	90+
Manufacturing	4,879.2	852.6	1,577.4	414.9	861.1	301.4	35,635	4,982.2	16,224	3,357.3	6,364.5	6,502.4
Large energy users (12 industries)	4,522.3	830.3	1,433.0	388.0	780.2	264.9	32,767	4,835.2	15,033	3,329.5	6,026.1	5,677.9
Food & beverages	546.6	99.4	157.9	22.0	100.9	35.1	5,400.9	582.8	1,667.9	223.1	637.9	806.9
Textiles	1,200.2	55.0	265.4	38.4	179.7	47.3	5,873.0	90.0	1,846.9	55.9	947.5	843.5
Apparel	56.0	0.1	18.6	3.2	6.6	8.9	1,381.7	64.8	491.4	9.6	29.7	452.1
Wood products	430.3	3.0	40.7	15.8	18.9	6.0	1,264.8	5.6	252.5	26.7	67.1	158.7
Paper products	382.9	53.7	194.2	41.6	88.4	64.2	3,109.4	532.2	1,555.4	322.3	1,073.0	160.1
Chemicals	300.0	160.9	170.6	11.5	133.6	25.5	5,192.5	244.4	1,879.6	130.1	567.1	1,182.4
Rubber & plastic products	322.1	12.7	64.4	4.3	40.1	20.0	2,190.6	220.7	713.7	26.5	322.5	364.7
Non-metallic mineral products	817.0	198.0	258.7	216.7	41.9	0.2	2,566.4	2,573.7	2,239.2	538.0	1,468.4	232.8
Basic metals	273.2	157.6	111.3	3.4	101.6	6.3	3,624.7	203.6	487.4	56.3	240.5	190.6
Electronics-related machinery	94.2	59.6	102.3	4.1	51.3	46.9	540.5	1.4	1,068.0	10.6	224.6	832.7
Motor vehicles	46.5	0.6	33.1	20.4	11.1	1.6	361.0	-	2,466.0	1,928.0	260.2	277.8
Other transportation machinery	53.3	29.6	15.6	6.6	6.1	2.9	1,261.1	316.0	365.4	2.4	187.3	175.8
Small energy users (7 industries)	357.0	22.3	144.4	26.9	80.9	36.5	2,868.3	147.0	1,190.7	27.8	338.4	824.5
Tobacco	35.3	0.4	2.4	-	1.4	1.0	556.1	0.5	18.8	5.0	1.0	12.9
Leather & footwear	56.3	1.5	34.0	6.3	18.3	9.4	260.2	0.8	179.5	0.6	64.7	114.2
Printing & publishing	37.4	13.2	4.8	0.4	4.4	-	270.9	22.9	2.7	1.1	1.1	0.5
Oil & coal products	6.5	1.4	3.2	1.1	0.1	2.0	314.8	19.5	20.3	0.5	0.2	19.6
Metal products	129.9	1.3	65.7	16.6	38.4	10.7	541.6	52.4	425.9	17.8	118.4	289.7
General machinery	26.7	4.5	19.5	1.0	10.6	7.9	468.1	4.6	437.7	0.6	134.0	303.1
Miscellaneous mfg. & recycling	64.9	0.1	14.8	1.5	7.8	5.5	456.6	46.4	105.9	2.2	19.1	84.6

Notes and Sources: - = no plants in the category; see the text and Appendix Table 8 for detailed definitions of ownership groups and industries noting that industry definitions differ in important respects between 1996 and 2006; data are authors' compilations from BPS-Statistics (various years).

Appendix Table 1b: Electricity expenditures in sample plants (billion rupiah)

Industry	1996						2006					
	Private plants	SOEs	MNCs				Private plants	SOEs	MNCs			
			33-100	33-49	50-89	90+			33-100	33-49	50-89	90+
Manufacturing	2,080.8	299.9	724.4	164.6	403.7	156.1	15,902	2,231.4	8,574.3	1,786.5	2,943.1	3,844.8
Large energy users (12 industries)	1,900.9	284.2	651.1	155.9	360.6	134.5	14,432	2,159.9	7,876.6	1,765.9	2,728.0	3,382.6
Food & beverages	177.6	16.6	62.0	6.3	44.5	11.3	1,461.7	144.1	633.6	22.5	201.4	409.7
Textiles	648.6	47.3	105.0	5.6	73.4	26.0	3,329.1	67.1	961.6	42.9	596.4	322.3
Apparel	33.6	0.1	10.9	0.9	4.3	5.7	977.2	54.3	278.4	5.0	20.0	253.4
Wood products	133.7	1.2	11.7	4.1	3.4	4.3	382.0	4.2	77.1	13.8	9.1	54.2
Paper products	125.5	5.9	52.6	1.2	41.2	10.1	818.5	171.8	508.9	1.1	417.6	90.2
Chemicals	129.8	23.4	90.8	7.4	62.9	20.4	2,640.4	121.0	1,194.3	56.6	246.6	891.1
Rubber & plastic products	194.9	1.9	31.9	2.6	17.3	12.1	1,209.1	61.0	421.6	16.3	166.9	238.5
Non-metallic mineral products	162.8	78.3	114.8	105.8	8.9	0.0	538.1	1,153.4	730.3	103.2	533.9	93.2
Basic metals	176.9	31.5	74.3	0.5	72.1	1.7	1,859.7	93.4	135.3	22.8	19.0	93.5
Electronics-related machinery	59.7	59.5	67.8	3.0	25.0	39.9	318.3	0.6	893.2	9.7	201.9	681.5
Motor vehicles	30.0	0.2	19.1	12.5	5.6	1.1	242.8	-	1,872.3	1,470.2	200.9	201.1
Other transportation machinery	27.6	18.4	10.0	6.0	2.1	1.9	655.6	288.9	169.9	1.9	114.1	53.9
Small energy users (7 industries)	179.9	15.7	73.4	8.7	43.0	21.6	1,470.0	71.5	697.8	20.6	215.1	462.2
Tobacco	15.2	0.3	1.9	-	1.1	0.8	131.7	0.1	15.4	4.6	0.0	10.8
Leather & footwear	34.5	0.6	18.8	2.6	10.7	5.5	181.1	0.5	124.7	0.4	39.1	85.2
Printing & publishing	24.0	10.2	3.3	0.2	3.2	-	190.8	18.8	2.1	0.9	0.9	0.3
Oil & coal products	0.5	0.0	1.7	0.0	0.0	1.7	67.2	4.8	2.1	0.0	0.0	2.1
Metal products	55.8	0.8	31.9	4.0	21.5	6.4	288.0	13.7	249.3	12.4	70.2	166.6
General machinery	14.6	3.8	8.3	0.7	2.9	4.8	344.6	2.3	231.5	0.4	92.8	138.4
Miscellaneous mfg. & recycling	35.2	0.0	7.5	1.2	3.7	2.5	266.6	31.4	72.8	1.8	12.1	58.8

Notes and Sources: - = no plants in the category; see the text and Appendix Table 8 for detailed definitions of ownership groups and industries noting that industry definitions differ in important respects between 1996 and 2006; data are authors' compilations from BPS-Statistics (various years).

Appendix Table 1c: Diesel fuel and oil expenditures in sample plants (billion rupiah)

Industry	1996						2006					
	Private plants	SOEs	MNCs				Private plants	SOEs	MNCs			
			33-100	33-49	50-89	90+			33-100	33-49	50-89	90+
Manufacturing	1,582.3	164.8	405.6	109.7	221.7	74.1	9,843.2	738.8	3,315.9	684.4	1,340.6	1,290.8
Large energy users (12 industries)	1,485.2	162.0	363.1	97.6	198.6	66.9	8,946.3	710.1	3,083.6	680.7	1,269.0	1,133.9
Food & beverages	244.8	50.3	45.3	12.2	24.0	9.1	2,120.7	248.8	685.6	176.1	256.5	253.1
Textiles	437.6	6.3	123.6	27.2	79.0	17.4	855.3	10.6	237.5	4.5	137.1	95.9
Apparel	10.9	0.0	3.2	0.5	1.4	1.2	257.8	3.3	143.0	3.5	4.6	134.9
Wood products	202.4	1.5	23.7	9.2	13.2	1.3	712.5	0.7	141.2	9.7	48.7	82.7
Paper products	124.3	2.9	52.4	19.4	14.2	18.8	463.4	30.1	267.2	0.3	240.9	25.9
Chemicals	112.9	51.6	25.4	2.6	19.3	3.5	1,553.3	54.4	241.0	20.7	102.3	118.0
Rubber & plastic products	80.8	7.8	23.9	0.9	16.0	6.9	746.7	144.4	181.6	8.3	72.6	100.7
Non-metallic mineral products	203.1	39.2	26.4	18.5	7.8	0.0	811.8	206.4	264.1	109.0	118.9	36.3
Basic metals	34.3	0.2	13.8	2.4	7.4	4.0	736.0	3.4	276.7	24.2	191.1	61.4
Electronics-related machinery	17.1	0.0	17.0	0.5	13.1	3.4	141.0	0.4	93.3	0.4	5.8	87.1
Motor vehicles	7.9	0.0	5.6	4.0	1.3	0.3	60.3	-	396.0	323.9	30.6	41.4
Other transportation machinery	9.2	2.2	2.8	0.1	1.9	0.8	487.6	7.5	156.3	0.0	59.9	96.4
Small energy users (7 industries)	97.1	2.8	42.5	12.2	23.2	7.2	896.9	28.7	232.3	3.7	71.6	156.9
Tobacco	14.2	0.1	0.5	-	0.3	0.2	284.0	0.1	1.2	0.0	0.1	1.1
Leather & footwear	15.2	0.8	11.8	3.4	5.6	2.8	48.3	0.2	40.9	0.1	20.4	20.5
Printing & publishing	4.9	0.8	0.8	0.1	0.7	-	28.0	0.4	0.2	0.2	0.0	0.0
Oil & coal products	3.7	0.9	1.0	0.7	0.0	0.3	216.6	11.6	6.0	0.4	0.1	5.5
Metal products	36.4	0.0	20.2	7.8	10.7	1.7	131.1	5.8	50.0	3.0	33.0	14.0
General machinery	5.1	0.1	3.6	0.0	2.8	0.8	65.9	1.5	113.3	0.0	14.8	98.5
Miscellaneous mfg. & recycling	17.6	0.0	4.6	0.0	3.1	1.5	123.0	9.1	20.7	0.1	3.2	17.4

Notes and Sources: - = no plants in the category; see the text and Appendix Table 8 for detailed definitions of ownership groups and industries noting that industry definitions differ in important respects between 1996 and 2006; data are authors' compilations from BPS-Statistics (various years).

Appendix Table 1d: Natural gas fuel expenditures in sample plants (billion rupiah)

Industry	1996						2006					
	Private plants	SOEs	MNCs				Private plants	SOEs	MNCs			
			33-100	33-49	50-89	90+			33-100	33-49	50-89	90+
Manufacturing	284.8	153.0	65.9	12.7	51.1	2.1	1,112.7	165.5	705.1	36.0	423.9	245.2
Large energy users (12 industries)	280.1	152.8	60.3	10.6	48.5	1.3	1,084.7	165.4	606.7	35.8	414.9	156.0
Food & beverages	31.3	2.7	7.8	0.0	7.6	0.1	110.1	6.7	67.2	2.6	54.8	9.8
Textiles	14.5	0.0	8.7	0.7	7.3	0.7	59.7	0.0	20.4	0.0	15.7	4.7
Apparel	0.6	0.0	0.0	0.0	0.0	0.0	23.7	0.0	0.9	0.0	0.0	0.9
Wood products	1.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
Paper products	20.2	12.4	0.3	0.0	0.0	0.3	20.6	90.7	147.7	0.0	146.2	1.5
Chemicals	9.5	9.7	8.6	0.0	8.6	0.0	26.0	0.0	36.0	0.0	13.5	22.6
Rubber & plastic products	15.3	0.0	2.7	0.0	2.7	0.0	34.5	0.0	39.9	0.0	24.6	15.3
Non-metallic mineral products	140.0	5.4	17.9	9.6	8.3	0.0	269.3	7.9	227.0	26.2	153.4	47.5
Basic metals	38.2	118.1	7.4	0.0	7.4	0.0	528.6	60.0	21.3	6.8	0.0	14.5
Electronics-related machinery	3.1	0.0	6.6	0.1	6.4	0.1	3.4	0.0	26.2	0.0	0.1	26.2
Motor vehicles	0.9	0.4	0.0	0.0	0.0	0.0	0.4	-	3.8	0.2	2.4	1.2
Other transportation machinery	5.3	4.0	0.3	0.2	0.0	0.1	8.2	0.1	16.2	0.0	4.3	11.8
Small energy users (7 industries)	4.7	0.2	5.6	2.1	2.6	0.8	28.1	0.1	98.4	0.3	9.0	89.2
Tobacco	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	1.3	0.0	0.7	0.5
Leather & footwear	0.1	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0
Printing & publishing	0.7	0.0	0.2	0.0	0.2	-	0.5	0.0	0.0	0.0	0.0	0.0
Oil & coal products	0.0	0.0	0.0	0.0	0.0	0.0	2.5	0.0	0.0	0.0	0.0	0.0
Metal products	2.6	0.0	4.9	2.1	1.9	0.8	22.1	0.1	91.6	0.3	7.8	83.6
General machinery	1.1	0.1	0.4	0.0	0.4	0.0	1.7	0.0	5.0	0.0	0.5	4.5
Miscellaneous mfg. & recycling	0.2	0.0	0.0	0.0	0.0	0.0	1.2	0.0	0.6	0.0	0.0	0.6

Notes and Sources: - = no plants in the category; see the text and Appendix Table 8 for detailed definitions of ownership groups and industries noting that industry definitions differ in important respects between 1996 and 2006; data are authors' compilations from BPS-Statistics (various years).

Appendix Table 1e: Coal fuel expenditures in sample plants (billion rupiah)

Industry	1996						2006					
	Private plants	SOEs	MNCs				Private plants	SOEs	MNCs			
			33-100	33-49	50-89	90+			33-100	33-49	50-89	90+
Manufacturing	245.0	58.1	82.5	54.1	17.6	10.8	1,012.8	967.4	1,218.5	441.3	525.9	251.3
Large energy users (12 industries)	241.2	58.1	82.3	54.1	17.3	10.8	1,002.3	965.6	1,215.6	441.3	524.3	250.0
Food & beverages	0.2	0.9	0.1	0.0	0.0	0.1	45.9	4.0	14.1	0.0	5.3	8.8
Textiles	1.4	0.0	0.5	0.0	0.5	0.0	336.7	0.0	166.4	6.6	56.0	103.7
Apparel	0.0	0.0	0.0	0.0	0.0	0.0	16.2	0.0	0.7	0.1	0.0	0.6
Wood products	0.8	0.0	0.0	0.0	0.0	0.0	40.7	0.0	10.2	1.4	2.5	6.2
Paper products	72.3	0.0	12.5	2.0	0.0	10.5	314.6	0.0	328.0	320.0	0.0	8.0
Chemicals	0.6	0.0	0.0	0.0	0.0	0.0	37.0	0.0	203.8	7.5	78.2	118.1
Rubber & plastic products	0.7	0.0	0.0	0.0	0.0	0.0	9.4	0.0	8.5	0.0	5.2	3.3
Non-metallic mineral products	164.2	57.2	65.5	52.1	13.4	0.0	146.2	960.6	474.1	105.6	368.5	0.0
Basic metals	0.8	0.0	3.4	0.0	3.3	0.2	55.3	1.1	9.8	0.0	8.6	1.2
Electronics-related machinery	0.1	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Motor vehicles	0.0	0.0	0.1	0.0	0.1	0.0	0.3	-	0.0	0.0	0.0	0.0
Other transportation machinery	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Small energy users (7 industries)	3.8	0.0	0.3	0.0	0.3	0.0	10.6	1.7	2.9	0.0	1.6	1.3
Tobacco	0.0	0.0	0.0	-	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
Leather & footwear	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Printing & publishing	0.8	0.0	0.0	0.0	0.0	-	0.9	0.0	0.0	0.0	0.0	0.0
Oil & coal products	0.0	0.0	0.0	0.0	0.0	0.0	3.1	1.6	0.0	0.0	0.0	0.0
Metal products	1.5	0.0	0.0	0.0	0.0	0.0	2.2	0.0	0.7	0.0	0.0	0.7
General machinery	1.4	0.0	0.2	0.0	0.2	0.0	2.5	0.0	2.2	0.0	1.6	0.6
Miscellaneous mfg. & recycling	0.0	0.0	0.0	0.0	0.0	0.0	1.9	0.0	0.0	0.0	0.0	0.0

Notes and Sources: - = no plants in the category; see the text and Appendix Table 8 for detailed definitions of ownership groups and industries noting that industry definitions differ in important respects between 1996 and 2006; data are authors' compilations from BPS-Statistics (various years).

Appendix Table 1f: Gross output in sample plants (billion rupiah)

Industry	1996						2006					
	Private plants	SOEs	MNCs				Private plants	SOEs	MNCs			
			33-100	33-49	50-89	90+			33-100	33-49	50-89	90+
Manufacturing	155,557	21,602	66,019	12,801	37,008	16,210	741,205	83,245	459,566	43,173	156,309	260,083
Large energy users (12 industries)	125,385	19,942	54,355	11,285	29,368	13,702	609,683	76,860	398,492	28,270	140,566	229,655
Food & beverages	24,273	3,391	5,957	1,010	3,664	1,284	167,720	18,796	74,954	3,584	20,047	51,323
Textiles	21,829	695	5,636	684	4,007	945	68,280	1,401	32,869	550	13,715	18,604
Apparel	5,907	67	2,329	556	714	1,058	27,332	1,299	16,035	1,384	1,335	13,317
Wood products	14,180	126	1,867	724	913	230	31,079	118	6,751	1,034	2,393	3,324
Paper products	6,005	437	2,949	876	836	1,237	40,456	9,650	21,808	3,361	12,799	5,648
Chemicals	10,954	3,187	8,679	793	6,635	1,251	76,140	21,977	49,293	1,832	17,357	30,104
Rubber & plastic products	11,514	490	3,158	248	2,191	719	67,142	4,247	27,585	1,261	14,217	12,107
Non-metallic mineral products	5,400	1,150	2,224	1,675	544	4	17,318	10,488	11,564	3,777	5,589	2,198
Basic metals	5,291	7,845	3,904	235	3,513	156	66,472	2,675	12,614	3,525	5,448	3,641
Electronics-related machinery	7,752	655	10,658	352	3,652	6,653	22,993	275	59,683	2,739	4,896	52,048
Motor vehicles	3,852	8	5,258	3,220	1,972	65	13,043	-	56,742	4,427	18,336	33,979
Other transportation machinery	8,427	1,891	1,736	911	727	98	11,709	5,934	28,592	796	24,435	3,362
Small energy users (7 industries)	30,173	1,660	11,664	1,516	7,639	2,509	131,522	6,384	61,074	14,903	15,743	30,428
Tobacco	13,563	7	723	-	563	160	55,227	202	14,339	13,735	302	302
Leather & footwear	3,954	65	3,400	414	1,943	1,043	11,215	74	11,843	52	7,345	4,446
Printing & publishing	2,210	1,065	272	29	242	-	10,786	1,872	229	168	52	9
Oil & coal products	97	144	40	12	6	22	6,803	57	1,031	6	11	1,013
Metal products	5,548	189	4,277	869	2,897	511	16,963	2,420	12,765	695	4,056	8,014
General machinery	1,754	181	1,857	94	1,574	189	10,678	582	13,185	94	3,416	9,675
Miscellaneous mfg. & recycling	3,046	8	1,095	97	413	585	19,851	1,178	7,683	153	561	6,969

Notes and Sources: - = no plants in the category; see the text and Appendix Table 8 for detailed definitions of ownership groups and industries noting that industry definitions differ in important respects between 1996 and 2006; data are authors' compilations from BPS-Statistics (various years).

Appendix Table 1g: Value added in sample plants (billion rupiah)

Industry	1996						2006					
	Private plants	SOEs	MNCs				Private plants	SOEs	MNCs			
			33-100	33-49	50-89	90+			33-100	33-49	50-89	90+
Manufacturing	54,557	12,682	25,877	6,427	13,621	5,829	278,753	37,019	196,660	20,405	69,774	106,481
Large energy users (12 industries)	39,700	11,735	21,074	5,596	10,640	4,838	204,857	33,902	167,608	10,632	63,205	93,772
Food & beverages	5,583	1,260	1,876	362	957	557	45,000	6,237	30,335	1,275	11,937	17,123
Textiles	7,233	198	2,156	304	1,501	351	25,903	592	10,877	115	5,579	5,184
Apparel	2,191	15	1,042	285	285	471	11,569	585	6,835	465	920	5,449
Wood products	5,139	38	687	206	421	60	12,526	56	1,975	233	785	957
Paper products	1,967	87	1,079	256	145	678	18,940	3,281	8,485	440	5,700	2,345
Chemicals	3,345	1,477	3,607	341	2,714	552	27,677	13,300	17,239	524	5,040	11,676
Rubber & plastic products	2,521	199	847	72	624	151	20,779	1,813	7,119	249	3,648	3,223
Non-metallic mineral products	2,002	443	1,284	1,033	249	2	7,942	4,630	6,225	2,153	3,001	1,071
Basic metals	1,353	6,090	2,408	85	2,282	41	14,222	801	5,081	2,577	1,545	959
Electronics-related machinery	3,608	479	2,965	97	963	1,905	9,358	112	21,940	998	2,601	18,341
Motor vehicles	1,462	1	2,542	2,160	368	15	6,137	-	40,225	1,308	12,776	26,140
Other transportation machinery	3,294	1,448	581	395	131	55	4,806	2,494	11,273	295	9,673	1,305
Small energy users (7 industries)	14,857	946	4,804	831	2,981	992	73,896	3,117	29,052	9,773	6,569	12,709
Tobacco	8,298	4	479	-	415	64	39,225	105	9,764	9,405	201	159
Leather & footwear	1,796	6	1,221	142	698	381	5,212	53	5,055	16	2,832	2,206
Printing & publishing	811	651	217	15	202	-	5,249	1,166	72	41	28	4
Oil & coal products	42	120	16	1	1	13	5,041	20	212	2	5	206
Metal products	2,015	84	1,836	605	1,059	172	6,768	983	4,753	221	1,670	2,862
General machinery	736	77	537	31	437	70	3,299	316	5,391	37	1,643	3,711
Miscellaneous mfg. & recycling	1,160	4	498	37	169	292	9,102	475	3,805	52	191	3,562

Notes and Sources: - = no plants in the category; see the text and Appendix Table 8 for detailed definitions of ownership groups and industries noting that industry definitions differ in important respects between 1996 and 2006; data are authors' compilations from BPS-Statistics (various years).

Appendix Table 1h: Workers in sample plants (thousands)

Industry	1996						2006					
	Private plants	SOEs	MNCs				Private plants	SOEs	MNCs			
			33-100	33-49	50-89	90+			33-100	33-49	50-89	90+
Manufacturing	2,981.7	275.2	720.2	133.5	346.0	240.7	2,972.6	236.0	1,067.9	102.0	299.8	666.1
Large energy users (12 industries)	2,242.1	251.4	492.6	100.3	221.8	170.5	2,235.1	204.8	806.0	70.9	236.9	498.1
Food & beverages	361.3	118.7	52.3	16.7	24.7	10.8	481.1	74.2	116.4	13.8	41.1	61.5
Textiles	499.8	18.7	79.0	8.1	46.7	24.2	427.7	11.1	91.5	3.5	46.9	41.2
Apparel	284.8	3.6	86.6	17.8	25.3	43.4	335.0	15.5	153.3	14.1	14.0	125.3
Wood products	356.7	4.6	36.6	12.4	14.8	9.3	241.4	2.1	36.2	3.2	10.6	22.3
Paper products	68.2	5.8	17.0	6.3	6.3	4.3	80.5	21.3	22.8	6.4	8.4	8.1
Chemicals	125.7	22.6	34.7	5.9	21.7	7.1	139.0	18.0	43.0	4.4	15.6	23.1
Rubber & plastic products	218.4	27.8	33.1	2.8	18.6	11.7	223.0	26.3	71.6	2.9	35.6	33.1
Non-metallic mineral products	139.0	11.6	20.3	11.5	8.5	0.3	113.1	12.8	35.4	12.5	14.2	8.7
Basic metals	32.6	7.2	10.4	0.9	7.2	2.2	48.6	3.1	13.3	1.9	5.1	6.3
Electronics-related machinery	83.6	3.3	91.5	3.2	35.2	53.1	76.8	3.3	152.5	3.4	12.9	136.3
Motor vehicles	42.7	0.3	17.6	9.6	7.1	0.8	38.3	-	46.3	4.3	17.6	24.5
Other transportation machinery	29.5	27.1	13.7	4.9	5.6	3.2	30.6	17.2	23.5	0.6	15.0	7.9
Small energy users (7 industries)	739.6	23.8	227.6	33.2	124.2	70.2	737.4	31.3	261.9	31.1	62.9	167.9
Tobacco	168.3	1.2	2.8	-	0.7	2.1	205.7	5.9	30.0	26.0	0.1	3.9
Leather & footwear	184.9	2.4	138.3	20.5	76.3	41.5	124.4	1.3	97.4	0.6	37.0	59.8
Printing & publishing	58.2	8.3	3.1	0.6	2.5	-	56.9	4.6	1.1	0.5	0.4	0.2
Oil & coal products	1.6	0.4	0.6	0.1	0.0	0.5	5.0	0.3	0.5	0.0	0.0	0.4
Metal products	117.6	2.6	39.4	9.8	22.9	6.7	75.5	4.1	29.5	2.8	7.5	19.2
General machinery	26.7	8.3	8.9	0.8	6.2	1.9	49.1	4.7	51.6	0.4	12.0	39.2
Miscellaneous mfg. & recycling	182.3	0.6	34.5	1.4	15.7	17.4	220.9	10.3	51.8	0.8	5.8	45.3

Notes and Sources: - = no plants in the category; see the text and Appendix Table 8 for detailed definitions of ownership groups and industries noting that industry definitions differ in important respects between 1996 and 2006; data are authors' compilations from BPS-Statistics (various years).

Appendix Table 1i: Number of sample plants

Industry	1996						2006					
	Private plants	SOEs	MNCs				Private plants	SOEs	MNCs			
			33-100	33-49	50-89	90+			33-100	33-49	50-89	90+
Manufacturing	18,270	533	1,233	165	604	464	21,662	623	1,992	122	483	1,387
Large energy users (12 industries)	14,068	458	941	130	455	356	15,885	510	1,476	97	377	1,002
Food & beverages	3,934	226	139	24	69	46	5,096	202	245	20	75	150
Textiles	1,698	33	108	11	52	45	1,932	41	137	5	45	87
Apparel	1,879	6	108	10	35	63	2,465	33	138	7	15	116
Wood products	1,569	22	56	9	28	19	1,397	17	75	4	18	53
Paper products	316	5	21	3	12	6	430	15	45	6	8	31
Chemicals	796	42	156	24	95	37	864	40	195	16	65	114
Rubber & plastic products	1,279	65	88	9	40	39	1,454	98	160	7	46	107
Non-metallic mineral products	1,524	33	39	10	22	7	1,181	31	64	8	27	29
Basic metals	143	5	32	4	15	13	212	4	57	6	18	33
Electronics-related machinery	406	4	145	11	61	73	325	5	230	7	29	194
Motor vehicles	238	2	30	9	17	4	242	-	82	9	20	53
Other transportation machinery	286	15	19	6	9	4	287	24	48	2	11	35
Small energy users (7 industries)	4,202	75	292	35	149	108	5,777	113	516	25	106	385
Tobacco	258	5	7	-	2	5	488	5	9	1	1	7
Leather & footwear	556	8	56	6	31	19	671	8	60	2	16	42
Printing & publishing	603	32	8	3	5	-	803	31	8	2	3	3
Oil & coal products	30	1	5	2	1	2	55	6	9	1	1	7
Metal products	908	13	85	11	48	26	813	22	133	10	29	94
General machinery	288	9	43	9	25	9	321	10	132	5	36	91
Miscellaneous mfg. & recycling	1,559	7	88	4	37	47	2,626	31	165	4	20	141

Notes and Sources: - = no plants in the category; see the text and Appendix Table 8 for detailed definitions of ownership groups and industries noting that industry definitions differ in important respects between 1996 and 2006; data are authors' compilations from BPS-Statistics (various years).

Appendix Table 2a: Total energy intensities (means of plant-level ratios of all fuel and electricity expenditures to output, percent)

Industry	1996						2006					
	Private plants	SOEs	MNCs				Private plants	SOEs	MNCs			
			33-100	33-49	50-89	90+			33-100	33-49	50-89	90+
Manufacturing	5.37	6.50	3.24	3.53	3.20	3.20	5.83	6.32	5.05	5.49	5.41	4.88
Large energy users (12 industries)	5.96	7.07	3.54	3.77	3.59	3.38	6.54	6.76	5.28	6.33	5.50	5.10
Food & beverages	5.83	7.61	3.36	3.62	3.46	3.08	6.49	7.21	5.23	11.73	5.90	4.03
Textiles	4.94	9.36	5.25	5.04	5.75	4.73	6.82	11.13	7.22	9.03	8.73	6.34
Apparel	2.24	1.02	1.93	1.31	1.73	2.14	3.70	8.33	5.53	1.61	9.21	5.30
Wood products	4.65	3.95	3.19	2.37	3.38	3.31	6.05	4.78	4.07	2.66	3.34	4.42
Paper products	5.38	13.16	6.80	3.04	7.06	8.14	5.90	8.44	5.63	2.81	8.84	5.34
Chemicals	5.07	8.30	2.53	3.13	2.42	2.41	6.25	4.33	4.08	4.23	3.48	4.40
Rubber & plastic products	5.68	3.08	3.32	2.84	3.03	3.72	6.57	3.82	5.47	4.32	4.73	5.86
Non-metallic mineral products	15.61	12.52	9.79	13.55	8.04	9.91	14.52	11.74	10.22	9.19	8.63	11.99
Basic metals	5.61	5.53	4.43	2.25	4.92	4.52	5.36	6.83	5.41	4.27	4.81	5.95
Electronics-related machinery	3.19	4.53	2.95	2.02	2.98	3.06	3.76	1.01	3.93	1.14	2.82	4.20
Motor vehicles	3.97	5.51	2.44	2.37	2.70	1.49	5.11	-	4.68	9.81	3.71	4.18
Other transportation machinery	4.39	2.25	2.76	2.60	2.90	2.67	6.17	4.52	5.88	0.95	4.36	6.64

Notes and Sources: - = no plants in the category; see the text and Appendix Table 8 for detailed definitions of ownership groups and industries noting that industry definitions differ in important respects between 1996 and 2006; data are authors' compilations from BPS-Statistics (various years).

Appendix Table 2b: Electricity intensities (means of plant-level ratios of electricity expenditures to output, percent)

Industry	1996						2006					
	Private plants	SOEs	MNCs				Private plants	SOEs	MNCs			
			33-100	33-49	50-89	90+			33-100	33-49	50-89	90+
Manufacturing	2.03	2.81	1.54	1.63	1.43	1.66	2.53	3.12	2.91	2.11	3.06	2.93
Large electricity users (12 industries)	2.15	3.01	1.64	1.74	1.53	1.74	2.71	3.34	2.94	2.32	2.94	2.99
Food & beverages	2.11	3.32	1.06	0.82	1.23	0.94	2.22	2.81	1.99	1.44	3.09	1.52
Textiles	2.83	5.60	2.17	1.45	2.32	2.18	4.14	8.69	4.42	6.72	4.70	4.15
Apparel	1.43	0.39	1.29	0.52	0.92	1.61	2.12	7.15	3.05	0.50	6.80	2.72
Wood products	1.74	1.61	1.39	0.71	1.40	1.69	2.33	2.91	1.97	0.72	1.76	2.13
Paper products	2.75	7.02	2.66	0.45	3.45	2.18	3.13	4.04	1.98	0.67	2.57	2.09
Chemicals	2.34	4.33	1.37	2.41	1.13	1.30	2.72	1.56	2.35	2.31	2.03	2.54
Rubber & plastic products	3.73	0.80	1.83	1.58	1.68	2.05	4.39	2.01	3.80	1.73	2.37	4.56
Non-metallic mineral products	1.25	2.24	2.85	6.53	2.03	0.16	1.87	3.85	3.35	1.92	3.24	3.84
Basic metals	2.95	4.50	2.09	0.50	2.58	2.02	2.52	3.11	2.52	2.16	1.64	3.06
Electronics-related machinery	1.80	4.39	1.79	0.94	1.39	2.27	2.56	0.57	3.08	0.82	2.35	3.27
Motor vehicles	2.39	1.49	1.23	1.63	1.09	0.93	3.40	-	3.67	7.60	3.16	3.20
Other transportation machinery	2.02	1.39	1.93	2.20	1.92	1.56	3.03	1.61	3.08	0.40	2.00	3.57

Notes and Sources: - = no plants in the category; see the text and Appendix Table 8 for detailed definitions of ownership groups and industries noting that industry definitions differ in important respects between 1996 and 2006; data are authors' compilations from BPS-Statistics (various years).

Appendix Table 2c: Diesel fuel intensities (means of plant-level ratios of diesel and diesel oil expenditures to output, percent)

Industry	1996						2006					
	Private plants	SOEs	MNCs				Private plants	SOEs	MNCs			
			33-100	33-49	50-89	90+			33-100	33-49	50-89	90+
Manufacturing	1.24	2.27	0.95	1.01	1.00	0.85	1.55	1.76	1.25	2.47	1.36	1.10
Large diesel users (10 industries)	1.65	2.59	1.30	1.19	1.30	1.36	2.08	2.10	1.61	3.41	1.57	1.42
Food & beverages	1.72	3.06	1.54	2.06	1.39	1.49	2.11	2.91	2.57	9.71	2.11	1.85
Textiles	1.29	3.06	2.13	2.62	2.68	1.37	1.08	1.35	1.59	1.16	2.28	1.26
Wood products	1.93	1.71	1.37	1.31	1.42	1.32	2.75	0.90	1.54	1.48	1.33	1.62
Paper products	1.48	0.92	2.30	1.47	1.69	3.92	1.45	1.59	1.57	0.07	3.68	1.32
Chemicals	1.61	2.30	0.66	0.40	0.66	0.82	2.23	1.53	1.07	1.02	0.89	1.19
Rubber & plastic products	1.23	1.42	1.08	0.82	0.78	1.45	1.46	1.45	0.93	2.21	1.27	0.70
Non-metallic mineral products	2.30	3.96	1.90	0.81	2.49	1.62	4.06	2.40	2.47	2.59	0.92	3.89
Basic metals	1.25	0.27	1.00	1.28	0.65	1.30	1.22	0.12	1.79	1.81	2.54	1.37
Motor vehicles	0.75	1.18	0.52	0.54	0.56	0.31	0.86	-	0.52	1.49	0.14	0.51
Other transportation machinery	1.07	0.21	0.33	0.01	0.31	0.88	1.92	1.36	1.91	0.00	1.57	2.13

Notes and Sources: - = no plants in the category; see the text and Appendix Table 8 for detailed definitions of ownership groups and industries noting that industry definitions differ in important respects between 1996 and 2006; data are authors' compilations from BPS-Statistics (various years).

Appendix Table 2d: Natural gas fuel intensities (means of plant-level ratios of gas expenditures to output, percent)

Industry	1996						2006					
	Private plants	SOEs	MNCs				Private plants	SOEs	MNCs			
			33-100	33-49	50-89	90+			33-100	33-49	50-89	90+
Manufacturing	0.069	0.074	0.120	0.135	0.201	0.010	0.052	0.069	0.144	0.091	0.203	0.128
Large gas users (8 industries)	0.103	0.076	0.206	0.215	0.321	0.016	0.082	0.088	0.234	0.140	0.307	0.210
Food & beverages	0.039	0.025	0.057	0.000	0.106	0.013	0.045	0.009	0.042	0.121	0.052	0.027
Textiles	0.024	0.000	0.120	0.136	0.183	0.044	0.026	0.000	0.143	0.000	0.393	0.022
Paper products	0.086	1.658	0.002	0.000	0.000	0.008	0.041	1.502	0.187	0.001	0.970	0.022
Chemicals	0.094	0.025	0.186	0.000	0.306	0.001	0.077	0.000	0.032	0.001	0.042	0.030
Rubber & plastic products	0.019	0.000	0.015	0.000	0.032	0.000	0.054	0.000	0.150	0.000	0.288	0.101
Non-metallic mineral products	0.440	0.457	1.900	1.782	2.558	0.000	0.373	0.182	2.230	0.970	1.815	2.964
Basic metals	0.231	0.313	0.115	0.000	0.224	0.024	0.148	2.302	0.228	0.049	0.000	0.386
Fabricated metals	0.071	0.043	0.097	0.116	0.133	0.023	0.077	0.030	0.135	0.040	0.067	0.166

Notes and Sources: see the text and Appendix Table 8 for detailed definitions of ownership groups and industries noting that industry definitions differ in important respects between 1996 and 2006; data are authors' compilations from BPS-Statistics (various years).

Appendix Table 2e: Coal fuel intensities (means of plant-level ratios of coal and coke expenditures to output, percent)

Industry	1996						2006					
	Private plants	SOEs	MNCs				Private plants	SOEs	MNCs			
			33-100	33-49	50-89	90+			33-100	33-49	50-89	90+
Manufacturing	0.045	0.068	0.029	0.092	0.020	0.018	0.085	0.173	0.110	0.286	0.137	0.086
Large coal users (4 industries)	0.036	0.252	0.075	0.313	0.041	0.018	0.229	0.481	0.341	0.931	0.363	0.249
Textiles	0.001	0.000	0.003	0.000	0.007	0.000	0.364	0.000	0.448	0.675	0.660	0.326
Paper products	0.046	0.000	0.097	0.098	0.000	0.290	0.367	0.000	0.344	1.834	0.000	0.144
Chemicals	0.017	0.048	0.001	0.000	0.002	0.000	0.066	0.000	0.221	0.198	0.119	0.282
Non-metallic mineral products	0.083	0.801	0.552	1.474	0.308	0.000	0.078	1.970	0.472	1.879	0.563	0.000

Notes and Sources: see the text and Appendix Table 8 for detailed definitions of ownership groups and industries noting that industry definitions differ in important respects between 1996 and 2006; data are authors' compilations from BPS-Statistics (various years).

Appendix Table 3: OLS Estimates of SOE-Private and MNC-Private Total Energy Intensity Differentials and Other Slope Coefficients from Equations (1) and (2); all p-values based on robust standard errors

Independent variable, statistic	1996						2006					
	Initial capital		Ending capital		No capital		Initial capital		Ending capital		No capital	
	Value	P-val.	Value	P-val.	Value	P-val.	Value	P-val.	Value	P-val.	Value	P-val.
12 LARGE ENERGY USING INDUSTRIES COMBINED, eq. (1)												
LK_i	0.0980	0.00	0.1041	0.00	-	-	0.1569	0.00	0.1505	0.00	-	-
LL_i	1.3237	0.00	1.3001	0.00	1.3280	0.00	1.5664	0.00	1.5418	0.00	1.3257	0.00
LM_i	-1.4514	0.00	-1.4525	0.00	-1.3614	0.00	-1.9679	0.00	-1.9816	0.00	-1.8686	0.00
LE_i	0.2568	0.00	0.2667	0.00	0.2590	0.00	0.5290	0.00	0.5399	0.00	0.5730	0.00
RD_i	-0.0789	0.72	-0.0273	0.90	0.0843	0.66	0.0514	0.56	0.0017	0.98	-0.0367	0.67
SM_i	0.0209	0.00	0.0204	0.00	0.0203	0.00	0.0269	0.00	0.0267	0.00	0.0372	0.00
SH_i	0.0057	0.61	0.0050	0.63	0.0003	0.97	0.0222	0.02	0.0288	0.00	0.0264	0.00
YR_i	0.0235	0.00	0.0212	0.00	0.0187	0.00	0.0359	0.00	0.0342	0.00	0.0493	0.00
DS_i	0.3017	0.53	0.2310	0.62	0.3064	0.41	0.8454	0.20	0.9661	0.14	0.6020	0.13
DF_i	-0.2025	0.35	-0.1559	0.45	-0.2250	0.16	-0.0402	0.90	-0.2190	0.47	-0.2990	0.21
Obs./R ²	10,342	0.60	11,173	0.59	15,463	0.55	9,333	0.30	10,187	0.29	17,834	0.26
12 LARGE ENERGY USING INDUSTRIES COMBINED, eq. (2)												
LK_i	0.0976	0.00	0.1036	0.00	-	-	0.1577	0.00	0.1512	0.00	-	-
LL_i	1.3227	0.00	1.3007	0.00	1.3295	0.00	1.5728	0.00	1.5488	0.00	1.3241	0.00
LM_i	-1.4491	0.00	-1.4511	0.00	-1.3612	0.00	-1.9725	0.00	-1.9872	0.00	-1.8690	0.00
LE_i	0.2566	0.00	0.2666	0.00	0.2589	0.00	0.5287	0.00	0.5395	0.00	0.5736	0.00
RD_i	-0.0867	0.69	-0.0326	0.88	0.0829	0.67	0.0558	0.53	0.0069	0.94	-0.0390	0.65
SM_i	0.0209	0.00	0.0204	0.00	0.0202	0.00	0.0269	0.00	0.0267	0.00	0.0372	0.00
SH_i	0.0061	0.58	0.0051	0.62	0.0004	0.97	0.0226	0.02	0.0293	0.00	0.0262	0.00
YR_i	0.0239	0.00	0.0214	0.00	0.0188	0.00	0.0358	0.00	0.0340	0.00	0.0491	0.00
DS_i	0.2933	0.54	0.2248	0.63	0.3033	0.42	0.8515	0.20	0.9739	0.13	0.6054	0.13
$DFMIN_i$	-0.7328	0.12	-0.7374	0.12	-0.7289	0.07	-1.1381	0.37	-1.4010	0.25	0.7472	0.50
$DFMAJ_i$	-0.3950	0.17	-0.2375	0.40	-0.1785	0.42	0.8494	0.08	0.7814	0.09	-0.3071	0.43
$DFHVY_i$	0.2410	0.45	0.1384	0.63	-0.0997	0.65	-0.2539	0.50	-0.4524	0.19	-0.3982	0.15
TestDFs	2.00	0.14	1.42	0.24	1.03	0.36	2.47	0.08	3.46	0.03	0.52	0.60
Obs./R ²	10,342	0.60	11,173	0.59	15,463	0.55	9,333	0.30	10,187	0.29	17,834	0.26
FOOD AND BEVERAGES, eq. (1)												
LK_i	-0.0038	0.94	0.0189	0.72	-	-	0.1724	0.00	0.1690	0.00	-	-
LL_i	1.2415	0.00	1.2867	0.00	1.1798	0.00	1.9111	0.00	1.8355	0.00	1.7268	0.00
LM_i	-1.4689	0.00	-1.5402	0.00	-1.3756	0.00	-2.9018	0.00	-2.9242	0.00	-2.5762	0.00
LE_i	0.2441	0.00	0.2541	0.00	0.2285	0.00	0.6995	0.00	0.7180	0.00	0.6241	0.00
RD_i	0.6304	0.39	0.5861	0.42	0.4776	0.48	-0.1385	0.31	-0.1528	0.28	-0.1884	0.33
SM_i	0.0358	0.00	0.0343	0.00	0.0369	0.00	0.0547	0.00	0.0564	0.00	0.0618	0.00
SH_i	-0.0251	0.47	-0.0079	0.79	-0.0285	0.26	0.0530	0.02	0.0573	0.01	0.0458	0.01
YR_i	0.0152	0.16	0.0102	0.32	0.0111	0.20	0.0515	0.00	0.0454	0.00	0.0576	0.00
DS_i	0.2359	0.74	0.2538	0.71	0.1688	0.75	0.9146	0.25	1.5051	0.06	1.6698	0.01
DF_i	0.0513	0.93	0.0050	0.99	-0.0387	0.92	1.2665	0.12	1.3189	0.09	1.3340	0.02
Obs./R ²	3,073	0.67	3,267	0.65	4,297	0.63	3,267	0.29	3,527	0.29	5,541	0.26

Appendix Table 3 (continued)

Independent variable, statistic	1996						2006					
	Initial capital		Ending capital		No capital		Initial capital		Ending capital		No capital	
	Value	P-val.	Value	P-val.	Value	P-val.	Value	P-val.	Value	P-val.	Value	P-val.
FOOD AND BEVERAGES, eq. (2)												
LK_i	-0.0082	0.87	0.0153	0.77	-	-	0.1744	0.00	0.1708	0.00	-	-
LL_i	1.2491	0.00	1.2998	0.00	1.1807	0.00	1.9039	0.00	1.8323	0.00	1.7024	0.00
LM_i	-1.4658	0.00	-1.5394	0.00	-1.3756	0.00	-2.8992	0.00	-2.9234	0.00	-2.5711	0.00
LE_i	0.2453	0.00	0.2555	0.00	0.2285	0.00	0.7004	0.00	0.7187	0.00	0.6271	0.00
RD_i	0.6233	0.40	0.5800	0.43	0.4790	0.48	-0.1272	0.34	-0.1396	0.31	-0.1665	0.36
SM_i	0.0358	0.00	0.0343	0.00	0.0369	0.00	0.0546	0.00	0.0564	0.00	0.0616	0.00
SH_i	-0.0238	0.49	-0.0074	0.80	-0.0285	0.26	0.0536	0.02	0.0582	0.01	0.0432	0.01
YR_i	0.0149	0.17	0.0099	0.33	0.0110	0.20	0.0517	0.00	0.0455	0.00	0.0579	0.00
DS_i	0.2393	0.73	0.2520	0.71	0.1690	0.75	0.9220	0.24	1.5114	0.06	1.6777	0.01
$DFMIN_i$	-1.9068	0.00	-2.1417	0.00	-0.2221	0.84	1.3248	0.78	0.9381	0.83	7.0111	0.06
$DFMAJ_i$	0.3133	0.70	0.2574	0.74	0.0191	0.97	2.3492	0.01	2.5458	0.00	1.6817	0.02
$DFHVY_i$	0.5225	0.52	0.4949	0.50	-0.0302	0.95	0.6327	0.53	0.6780	0.48	0.4298	0.49
TestDFs	6.38	0.00	7.22	0.00	0.02	0.98	0.97	0.38	1.23	0.29	2.29	0.10
Obs./R ²	3,073	0.67	3,267	0.65	4,297	0.63	3,267	0.29	3,527	0.29	5,541	0.26
TEXTILES, eq. (1)												
LK_i	0.1078	0.23	0.0969	0.24	-	-	0.0757	0.19	0.0454	0.43	-	-
LL_i	1.5678	0.00	1.4761	0.00	1.5931	0.00	1.6225	0.00	1.5780	0.00	1.4281	0.00
LM_i	-1.5158	0.00	-1.4588	0.00	-1.4684	0.00	-1.8608	0.00	-1.8458	0.00	-2.1081	0.00
LE_i	0.3928	0.00	0.4113	0.00	0.3935	0.00	0.8983	0.00	0.9758	0.00	0.9477	0.00
RD_i	1.7517	0.24	2.1208	0.18	1.6930	0.00	3.9827	0.09	3.6470	0.11	5.6071	0.18
SM_i	0.0295	0.00	0.0301	0.00	0.0303	0.00	0.0262	0.00	0.0232	0.00	0.0556	0.00
SH_i	0.0937	0.13	0.0859	0.14	0.0803	0.03	0.0952	0.00	0.0906	0.01	0.0713	0.02
YR_i	0.0357	0.01	0.0338	0.01	0.0269	0.02	0.0202	0.31	0.0200	0.29	0.0217	0.19
DS_i	2.7380	0.03	2.2935	0.06	3.3252	0.05	9.9839	0.08	10.0477	0.08	2.4980	0.19
DF_i	0.3220	0.68	0.3325	0.65	0.1457	0.79	-0.4717	0.50	-0.8486	0.21	-1.2657	0.07
Obs./R ²	1,306	0.33	1,430	0.33	1,839	0.31	1,184	0.38	1,283	0.37	2,097	0.30
TEXTILES, eq. (2)												
LK_i	0.1064	0.23	0.0960	0.25	-	-	0.0746	0.20	0.0447	0.44	-	-
LL_i	1.5667	0.00	1.4766	0.00	1.5917	0.00	1.6225	0.00	1.5804	0.00	1.4265	0.00
LM_i	0.3920	0.00	0.4108	0.00	0.3939	0.00	-1.8619	0.00	-1.8490	0.00	-2.1089	0.00
LE_i	-1.5125	0.00	-1.4577	0.00	-1.4682	0.00	0.8942	0.00	0.9709	0.00	0.9460	0.00
RD_i	1.8391	0.22	2.1547	0.17	1.6975	0.00	4.0740	0.08	3.7449	0.10	5.5592	0.17
SM_i	0.0298	0.00	0.0302	0.00	0.0303	0.00	0.0263	0.00	0.0234	0.00	0.0557	0.00
SH_i	0.0931	0.14	0.0857	0.14	0.0805	0.03	0.0950	0.00	0.0898	0.01	0.0710	0.02
YR_i	0.0361	0.01	0.0339	0.01	0.0269	0.03	0.0197	0.33	0.0192	0.32	0.0212	0.20
DS_i	2.7336	0.03	2.2921	0.06	3.3251	0.05	9.9905	0.08	10.0573	0.08	2.5029	0.19
$DFMIN_i$	0.5273	0.76	0.5265	0.76	0.5223	0.69	0.8189	0.44	0.5328	0.61	-1.3731	0.33
$DFMAJ_i$	-0.1142	0.90	0.1157	0.90	0.0732	0.91	0.3407	0.79	0.0848	0.95	-0.7381	0.52
$DFHVY_i$	0.6843	0.57	0.5051	0.65	0.1372	0.87	-1.0928	0.11	-1.5074	0.02	-1.5262	0.08
TestDFs	0.18	0.84	0.05	0.95	0.05	0.95	1.68	0.19	5.01	0.01	1.82	0.16
Obs./R ²	1,306	0.33	1,430	0.33	1,839	0.31	1,184	0.38	1,283	0.37	2,097	0.20

Appendix Table 3 (continued)

Independent variable, statistic	1996						2006					
	Initial capital		Ending capital		No capital		Initial capital		Ending capital		No capital	
	Value	P-val.	Value	P-val.	Value	P-val.	Value	P-val.	Value	P-val.	Value	P-val.
APPAREL, eq. (1)												
LK_i	0.0905	0.06	0.0142	0.64	-	-	0.0718	0.00	0.0825	0.00	-	-
LL_i	0.0370	0.70	0.0901	0.28	0.0677	0.39	0.3782	0.00	0.3872	0.00	0.4612	0.04
LM_i	-0.6434	0.00	-0.6536	0.00	-0.7294	0.00	-0.8309	0.00	-0.8767	0.00	-1.1538	0.00
LE_i	0.3159	0.00	0.3442	0.00	0.4235	0.00	0.3595	0.00	0.4117	0.00	0.7610	0.00
RD_i	-0.0732	0.70	-0.0729	0.71	0.4462	0.55	-0.1170	0.00	-0.1103	0.00	0.0108	0.79
SM_i	0.0083	0.02	0.0071	0.03	0.0111	0.00	0.0075	0.06	0.0072	0.05	0.0219	0.00
SH_i	0.0390	0.10	0.0405	0.08	0.0378	0.04	0.0059	0.70	0.0013	0.92	0.0234	0.41
YR_i	0.0247	0.01	0.0245	0.01	0.0271	0.00	0.0394	0.01	0.0459	0.00	0.0682	0.00
DS_i	-0.7441	0.09	-0.8285	0.06	-0.3836	0.54	-2.1992	0.00	-2.2944	0.00	2.8996	0.09
DF_i	0.5943	0.08	0.7893	0.03	0.5244	0.05	-0.0768	0.84	-0.0239	0.95	0.2143	0.81
Obs./R ²	1,131	0.30	1,252	0.29	1,993	0.25	1,303	0.26	1,420	0.27	2,626	0.17
APPAREL, eq. (2)												
LK_i	0.0934	0.05	0.0150	0.62	-	-	0.0720	0.00	0.0828	0.00	-	-
LL_i	0.0369	0.70	0.0921	0.27	0.0691	0.38	0.3759	0.00	0.3836	0.00	0.4590	0.04
LM_i	0.3148	0.00	0.3441	0.00	0.4240	0.00	-0.8296	0.00	-0.8750	0.00	-1.1481	0.00
LE_i	-0.6377	0.00	-0.6517	0.00	-0.7291	0.00	0.3593	0.00	0.4116	0.00	0.7561	0.00
RD_i	-0.1717	0.45	-0.1327	0.54	0.4255	0.57	-0.1170	0.00	-0.1102	0.00	0.0096	0.81
SM_i	0.0085	0.01	0.0072	0.02	0.0111	0.00	0.0075	0.06	0.0073	0.05	0.0221	0.00
SH_i	0.0389	0.08	0.0398	0.07	0.0370	0.04	0.0065	0.68	0.0019	0.89	0.0253	0.38
YR_i	0.0245	0.01	0.0245	0.01	0.0272	0.00	0.0396	0.01	0.0462	0.00	0.0689	0.00
DS_i	-0.7462	0.08	-0.8334	0.06	-0.3872	0.54	-2.1987	0.00	-2.2911	0.00	2.8993	0.09
$DFMIN_i$	-0.0553	0.90	0.0339	0.94	-0.1176	0.71	-1.1901	0.09	-1.2595	0.09	-2.4658	0.03
$DFMAJ_i$	-0.4448	0.14	0.2950	0.57	0.3716	0.38	0.2149	0.86	0.2807	0.78	4.3310	0.30
$DFHVI_i$	1.3593	0.01	1.2726	0.01	0.7092	0.05	-0.0287	0.94	0.0029	1.00	-0.1281	0.87
TestDFs	4.60	0.01	2.11	0.12	1.82	0.16	1.31	0.27	1.35	0.26	2.68	0.07
Obs./R ²	1,131	0.31	1,252	0.30	1,993	0.25	1,303	0.26	1,420	0.27	2,626	0.18
WOOD PRODUCTS, eq. (1)												
LK_i	0.2340	0.00	0.2029	0.00	-	-	0.1162	0.06	0.1081	0.08	-	-
LL_i	1.9846	0.00	2.0013	0.00	1.9725	0.00	2.3420	0.00	2.2016	0.00	1.5305	0.00
LM_i	-2.1357	0.00	-2.1373	0.00	-1.9480	0.00	-2.1551	0.00	-2.0912	0.00	-2.1706	0.00
LE_i	0.1472	0.00	0.1423	0.00	0.1611	0.00	0.1376	0.03	0.1584	0.01	0.3396	0.00
RD_i	-0.0272	0.96	-0.7150	0.51	0.0134	0.96	1.6250	0.47	1.4648	0.47	3.0907	0.20
SM_i	0.0195	0.02	0.0207	0.01	0.0198	0.00	0.0073	0.33	0.0038	0.60	0.0210	0.01
SH_i	0.0757	0.05	0.0691	0.07	0.0374	0.26	0.0189	0.49	0.0543	0.26	0.0486	0.21
YR_i	-0.0137	0.42	-0.0125	0.45	-0.0002	0.99	-0.0147	0.53	-0.0133	0.57	0.0840	0.00
DS_i	0.7242	0.37	0.6830	0.41	-0.1702	0.77	4.4512	0.45	4.5320	0.43	-2.9665	0.17
DF_i	-0.5021	0.25	-0.0605	0.89	-0.1105	0.78	-0.2232	0.82	-0.4600	0.58	-0.0032	1.00
Obs./R ²	1,107	0.31	1,181	0.31	1,647	0.28	775	0.25	851	0.24	1,486	0.21

Appendix Table 3 (continued)

Independent variable, statistic	1996						2006					
	Initial capital		Ending capital		No capital		Initial capital		Ending capital		No capital	
	Value	P-val.	Value	P-val.	Value	P-val.	Value	P-val.	Value	P-val.	Value	P-val.
WOOD PRODUCTS, eq. (2)												
LK_i	0.2353	0.00	0.2033	0.00	-	-	0.1169	0.05	0.1090	0.07	-	-
LL_i	1.9859	0.00	2.0052	0.00	1.9734	0.00	2.3421	0.00	2.2015	0.00	1.5338	0.00
LM_i	0.1476	0.00	0.1440	0.00	0.1620	0.00	-2.1531	0.00	-2.0893	0.00	-2.1733	0.00
LE_i	-2.1399	0.00	-2.1414	0.00	-1.9490	0.00	0.1386	0.03	0.1595	0.01	0.3398	0.00
RD_i	-0.0232	0.97	-0.7188	0.50	0.0181	0.95	1.6139	0.47	1.4554	0.48	3.1175	0.20
SM_i	0.0196	0.02	0.0206	0.01	0.0199	0.00	0.0073	0.33	0.0038	0.60	0.0210	0.01
SH_i	0.0756	0.06	0.0687	0.07	0.0372	0.26	0.0191	0.48	0.0544	0.26	0.0469	0.23
YR_i	-0.0145	0.39	-0.0132	0.43	-0.0004	0.98	-0.0146	0.54	-0.0134	0.57	0.0838	0.00
DS_i	0.7344	0.37	0.6980	0.40	-0.1679	0.77	4.4443	0.45	4.5223	0.43	-2.9682	0.17
$DFMIN_i$	0.4021	0.54	-0.0985	0.90	-0.3269	0.61	-1.6877	0.01	-1.8477	0.01	1.6493	0.19
$DFMAJ_i$	-0.3492	0.60	0.5391	0.45	0.2722	0.65	-0.2211	0.89	-0.2288	0.89	0.0133	0.99
$DFHVV_i$	-1.0417	0.10	-0.7557	0.19	-0.5748	0.29	-0.1017	0.93	-0.4387	0.65	-0.1272	0.89
TestDFs	1.36	0.26	1.08	0.34	0.64	0.53	1.23	0.29	1.31	0.27	0.79	0.46
Obs./R ²	1,107	0.31	1,181	0.31	1,647	0.28	775	0.25	851	0.24	1,486	0.21
PAPER PRODUCTS, eq. (1); East Indonesian plants omitted for 1996												
LK_i	0.2855	0.33	0.2473	0.40	-	-	0.3222	0.11	0.2498	0.20	-	-
LL_i	2.5433	0.00	2.1865	0.00	2.0602	0.00	2.9950	0.01	3.0868	0.00	1.4871	0.01
LM_i	-2.0858	0.00	-1.9974	0.00	-1.6169	0.00	-2.4569	0.00	-2.3647	0.00	-1.3449	0.00
LE_i	0.4896	0.00	0.5358	0.00	0.5120	0.00	0.7412	0.00	0.6673	0.00	0.6928	0.00
RD_i	0.6376	0.49	0.7192	0.50	1.0534	0.37	-1.4205	0.42	-1.6017	0.35	-1.7905	0.14
SM_i	0.0505	0.01	0.0449	0.01	0.0328	0.02	0.0141	0.43	0.0140	0.42	0.0203	0.18
SH_i	-0.0469	0.63	-0.1124	0.18	-0.0922	0.07	-0.1331	0.01	-0.1327	0.01	-0.1228	0.01
YR_i	0.0049	0.89	0.0042	0.91	0.0028	0.92	0.0180	0.69	0.0205	0.64	0.0183	0.57
DS_i	6.1690	0.14	6.4640	0.10	5.8057	0.05	-2.3363	0.60	-2.7228	0.53	0.8333	0.75
DF_i	0.4859	0.67	1.4496	0.40	0.9288	0.42	1.4167	0.41	0.4231	0.79	-0.5152	0.66
Obs./R ²	186	0.38	214	0.37	339	0.36	229	0.26	263	0.26	490	0.19
PAPER PRODUCTS, eq. (2), minority-foreign & East Indonesian plants omitted for 1996												
LK_i	0.2821	0.33	0.2510	0.38	-	-	0.3143	0.12	0.2431	0.21	-	-
LL_i	2.4597	0.00	2.1978	0.00	2.0465	0.00	3.0192	0.01	3.1579	0.00	1.4939	0.01
LM_i	0.4816	0.00	0.5349	0.00	0.5172	0.00	-2.5117	0.00	-2.4701	0.00	-1.3676	0.00
LE_i	-1.9970	0.00	-2.0065	0.00	-1.6088	0.00	0.7437	0.00	0.6676	0.00	0.6860	0.00
RD_i	0.6294	0.50	0.7186	0.50	1.0452	0.38	-1.2518	0.49	-1.4190	0.41	-1.6319	0.19
SM_i	0.0507	0.01	0.0447	0.01	0.0328	0.02	0.0152	0.40	0.0160	0.36	0.0215	0.16
SH_i	-0.0752	0.43	-0.1080	0.19	-0.0947	0.06	-0.1297	0.01	-0.1240	0.01	-0.1234	0.01
YR_i	0.0048	0.90	0.0041	0.91	0.0031	0.92	0.0180	0.70	0.0191	0.67	0.0172	0.60
DS_i	6.2196	0.14	6.4340	0.10	5.8426	0.05	-2.1258	0.64	-2.4872	0.57	0.8931	0.73
$DFMIN_i$	-	-	-	-	-	-	-2.9980	0.05	-5.3068	0.02	-2.1387	0.48
$DFMAJ_i$	-0.3370	0.75	1.6077	0.47	1.1714	0.48	3.2408	0.36	2.9849	0.38	1.8674	0.55
$DFHVV_i$	4.3113	0.26	1.0823	0.66	1.0809	0.61	1.4229	0.49	0.6207	0.73	-0.7799	0.55
TestDFs	1.38	0.24	0.03	0.87	0.00	0.97	2.44	0.09	3.19	0.04	0.44	0.64
Obs./R ²	186	0.38	214	0.37	336	0.36	229	0.26	263	0.26	490	0.10

Appendix Table 3 (continued)

Independent variable, statistic	1996						2006					
	Initial capital		Ending capital		No capital		Initial capital		Ending capital		No capital	
	Value	P-val.	Value	P-val.	Value	P-val.	Value	P-val.	Value	P-val.	Value	P-val.
CHEMICALS, eq. (1)												
LK_i	0.1357	0.22	0.1370	0.20	-	-	-0.0517	0.69	-0.0533	0.65	-	-
LL_i	0.7594	0.03	0.9521	0.00	1.4088	0.00	2.1574	0.00	2.2869	0.00	0.7110	0.04
LM_i	-1.5152	0.00	-1.5428	0.00	-1.5375	0.00	-1.9543	0.00	-2.1455	0.00	-1.2537	0.00
LE_i	0.4932	0.00	0.4694	0.00	0.4082	0.00	0.3829	0.00	0.3708	0.00	0.5485	0.00
RD_i	-0.2381	0.14	-0.2177	0.14	-0.2345	0.10	1.5157	0.01	-0.3002	0.64	-0.4769	0.33
SM_i	0.0214	0.09	0.0202	0.09	0.0198	0.04	0.0063	0.63	0.0158	0.27	0.0071	0.52
SH_i	-0.0134	0.53	-0.0103	0.61	-0.0160	0.33	0.0024	0.91	0.0245	0.37	-0.0017	0.94
YR_i	-0.0201	0.25	-0.0092	0.59	-0.0059	0.72	0.0082	0.71	0.0137	0.56	0.0202	0.25
DS_i	4.1615	0.03	3.5609	0.06	2.2945	0.14	0.7666	0.65	1.1918	0.45	-0.7669	0.39
DF_i	-0.0622	0.92	0.1954	0.74	-0.3079	0.52	-0.2882	0.79	-0.4983	0.62	-1.7562	0.01
Obs./R ²	630	0.34	665	0.34	993	0.30	493	0.30	544	0.31	1,096	0.16
CHEMICALS, eq. (2)												
LK_i	0.1346	0.22	0.1369	0.20	-	-	-0.0523	0.68	-0.0540	0.65	-	-
LL_i	0.7689	0.03	0.9602	0.00	1.4328	0.00	2.1725	0.00	2.2943	0.00	0.7154	0.04
LM_i	0.4938	0.00	0.4697	0.00	0.4110	0.00	-1.9524	0.00	-2.1445	0.00	-1.2484	0.00
LE_i	-1.5248	0.00	-1.5496	0.00	-1.5588	0.00	0.3814	0.00	0.3698	0.00	0.5499	0.00
RD_i	-0.2266	0.17	-0.2106	0.16	-0.2161	0.15	1.6037	0.01	-0.2839	0.67	-0.4753	0.34
SM_i	0.0214	0.09	0.0201	0.09	0.0196	0.04	0.0064	0.63	0.0159	0.27	0.0070	0.53
SH_i	-0.0134	0.54	-0.0100	0.62	-0.0166	0.30	0.0000	1.00	0.0234	0.40	-0.0024	0.92
YR_i	-0.0202	0.25	-0.0094	0.59	-0.0060	0.72	0.0101	0.65	0.0145	0.54	0.0204	0.24
DS_i	4.1727	0.03	3.5679	0.06	2.2989	0.14	0.6791	0.68	1.1616	0.46	-0.7854	0.38
$DFMIN_i$	-0.0092	0.99	0.2039	0.83	-0.7744	0.39	-1.8007	0.15	-1.4031	0.22	-1.8836	0.07
$DFMAJ_i$	0.2711	0.73	0.4235	0.55	0.3226	0.56	-0.7091	0.53	-0.6383	0.54	-2.4560	0.00
$DFHVV_i$	-0.7863	0.31	-0.2637	0.69	-1.4256	0.03	0.2618	0.86	-0.2257	0.87	-1.3416	0.16
TestDFs	0.80	0.45	0.46	0.63	3.15	0.04	0.75	0.47	0.30	0.74	0.46	0.46
Obs./R ²	630	0.34	665	0.34	993	0.30	493	0.30	544	0.31	1,096	0.23
RUBBER & PLASTIC PRODUCTS, eq. (1)												
LK_i	0.2869	0.01	0.3643	0.00	-	-	0.0017	0.98	-0.0017	0.98	-	-
LL_i	0.7390	0.00	0.7331	0.00	0.8915	0.00	0.7266	0.01	0.6460	0.01	0.5560	0.07
LM_i	-1.6508	0.00	-1.6943	0.00	-1.4874	0.00	-1.5462	0.00	-1.4841	0.00	-1.4730	0.00
LE_i	0.4162	0.00	0.4385	0.00	0.4002	0.00	0.5409	0.00	0.5109	0.00	0.5136	0.00
RD_i	0.0500	0.81	0.0129	0.95	0.1994	0.25	1.2275	0.54	1.2504	0.49	1.1962	0.48
SM_i	0.0081	0.25	0.0053	0.44	0.0066	0.24	0.0187	0.02	0.0118	0.15	0.0128	0.07
SH_i	-0.0193	0.40	-0.0373	0.07	-0.0145	0.41	-0.0213	0.36	-0.0132	0.56	0.0053	0.83
YR_i	0.0189	0.25	0.0138	0.38	0.0078	0.50	-0.0077	0.68	-0.0062	0.73	0.0057	0.70
DS_i	-0.9482	0.17	-1.1290	0.08	0.0462	0.94	-0.4337	0.70	-1.0144	0.33	-1.1318	0.06
DF_i	-0.3007	0.58	-0.6996	0.15	-0.3458	0.39	0.2159	0.79	0.1563	0.83	0.0523	0.94
Obs./R ²	868	0.24	972	0.25	1,432	0.22	744	0.23	848	0.21	1,711	0.18

Appendix Table 3 (continued)

Independent variable, statistic	1996						2006					
	Initial capital		Ending capital		No capital		Initial capital		Ending capital		No capital	
	Value	P-val.	Value	P-val.	Value	P-val.	Value	P-val.	Value	P-val.	Value	P-val.
RUBBER & PLASTIC PRODUCTS, eq. (2)												
LK_i	0.2885	0.01	0.3649	0.00	-	-	0.0073	0.92	0.0020	0.98	-	-
LL_i	0.7419	0.00	0.7328	0.00	0.8916	0.00	0.7404	0.01	0.6578	0.01	0.5561	0.07
LM_i	0.4152	0.00	0.4384	0.00	0.4002	0.00	-1.5649	0.00	-1.4989	0.00	-1.4732	0.00
LE_i	-1.6527	0.00	-1.6942	0.00	-1.4858	0.00	0.5438	0.00	0.5134	0.00	0.5136	0.00
RD_i	0.0375	0.85	0.0096	0.96	0.1947	0.25	1.0575	0.56	1.1205	0.49	1.1994	0.47
SM_i	0.0079	0.26	0.0053	0.44	0.0065	0.25	0.0189	0.02	0.0118	0.15	0.0128	0.07
SH_i	-0.0191	0.40	-0.0372	0.07	-0.0143	0.41	-0.0214	0.36	-0.0132	0.56	0.0053	0.83
YR_i	0.0194	0.25	0.0140	0.38	0.0080	0.49	-0.0086	0.65	-0.0070	0.70	0.0057	0.70
DS_i	-0.9727	0.17	-1.1350	0.08	0.0407	0.94	-0.4045	0.72	-0.9896	0.35	-1.1311	0.06
$DFMIN_i$	-0.5443	0.74	-0.7029	0.66	-1.2267	0.26	1.6866	0.57	1.6698	0.56	0.3246	0.86
$DFMAJ_i$	-0.7249	0.35	-0.8311	0.21	-0.4804	0.33	1.9083	0.15	1.7224	0.20	0.0380	0.96
$DFHVV_i$	0.2017	0.79	-0.5631	0.42	-0.0013	1.00	-0.3902	0.68	-0.3968	0.65	0.0409	0.96
TestDFs	0.42	0.66	0.04	0.96	0.51	0.60	1.19	0.30	1.10	0.33	0.01	0.99
Obs./R ²	868	0.24	972	0.25	1,432	0.22	744	0.23	848	0.21	1,711	0.18
NON-METALLIC MINERAL PRODUCTS, eq. (1)												
LK_i	0.1145	0.66	0.0259	0.91	-	-	0.3162	0.03	0.3326	0.02	-	-
LL_i	2.2895	0.00	2.2830	0.00	2.7008	0.00	3.8294	0.00	3.9638	0.00	3.5439	0.00
LM_i	-1.6181	0.00	-1.6322	0.00	-1.6376	0.00	-2.3147	0.00	-2.4568	0.00	-2.2813	0.00
LE_i	-0.0266	0.76	0.0187	0.83	0.0361	0.61	0.0765	0.64	0.0572	0.71	0.1849	0.06
RD_i	-0.5072	0.58	0.4204	0.73	-0.3219	0.78	-6.2639	0.07	-6.1871	0.08	-4.6991	0.13
SM_i	0.0116	0.54	0.0098	0.58	0.0058	0.69	-0.0156	0.43	-0.0123	0.52	-0.0180	0.29
SH_i	0.0169	0.81	0.0136	0.84	-0.0053	0.92	0.0665	0.42	0.0448	0.56	0.0987	0.13
YR_i	0.0793	0.04	0.0668	0.07	0.0767	0.02	-0.0104	0.83	-0.0136	0.77	0.0528	0.12
DS_i	-0.8752	0.75	-0.9236	0.73	-0.8822	0.65	6.4073	0.15	6.8196	0.12	-1.4511	0.45
DF_i	-3.0950	0.07	-2.9576	0.08	-2.1041	0.14	-2.2913	0.45	-1.6446	0.56	-4.6052	0.01
Obs./R ²	1,217	0.53	1,288	0.53	1,595	0.50	672	0.24	710	0.25	1,275	0.27
NON-METALLIC MINERAL PRODUCTS, eq. (2)												
LK_i	0.1102	0.67	0.0168	0.95	-	-	0.3034	0.03	0.3206	0.02	-	-
LL_i	2.2438	0.00	2.2348	0.00	2.6919	0.00	4.1300	0.00	4.2326	0.00	3.6404	0.00
LM_i	-0.0274	0.75	0.0179	0.83	0.0369	0.60	-2.3487	0.00	-2.4816	0.00	-2.2909	0.00
LE_i	-1.5902	0.00	-1.6039	0.00	-1.6306	0.00	0.0423	0.79	0.0248	0.87	0.1751	0.08
RD_i	-0.6438	0.47	0.3266	0.79	-0.4240	0.72	-5.7579	0.08	-5.6684	0.08	-4.6695	0.12
SM_i	0.0127	0.50	0.0108	0.55	0.0061	0.68	-0.0142	0.47	-0.0111	0.56	-0.0168	0.32
SH_i	0.0180	0.80	0.0146	0.83	-0.0042	0.94	0.0581	0.49	0.0402	0.61	0.0925	0.17
YR_i	0.0798	0.04	0.0672	0.07	0.0767	0.03	-0.0038	0.94	-0.0076	0.87	0.0540	0.11
DS_i	-0.8654	0.76	-0.8941	0.74	-0.8802	0.66	6.2261	0.15	6.6048	0.12	-1.5117	0.43
$DFMIN_i$	-1.1694	0.76	-0.4555	0.91	-1.4996	0.69	-8.6518	0.00	-7.5979	0.00	-6.8755	0.03
$DFMAJ_i$	-4.9749	0.02	-4.9252	0.02	-2.8240	0.08	-7.2340	0.03	-6.6375	0.03	-7.3382	0.00
$DFHVV_i$	-1.0907	0.54	-1.4620	0.42	-0.7750	0.65	1.5077	0.74	1.5874	0.69	-1.6037	0.57
TestDFs	1.23	0.29	1.17	0.31	0.40	0.67	2.09	0.12	2.19	0.11	1.74	0.18
Obs./R ²	1,217	0.53	1,288	0.53	1,595	0.50	672	0.25	710	0.26	1,275	0.27

Appendix Table 3 (continued)

Independent variable, statistic	1996						2006					
	Initial capital		Ending capital		No capital		Initial capital		Ending capital		No capital	
	Value	P-val.	Value	P-val.	Value	P-val.	Value	P-val.	Value	P-val.	Value	P-val.
BASIC METALS, eq. (1); SOE and/or East Indonesian plants omitted for 2006												
LK_i	-0.0355	0.80	0.0754	0.69	-	-	-0.0384	0.76	0.0689	0.60	-	-
LL_i	2.3973	0.01	2.0968	0.02	2.1222	0.00	0.8766	0.28	0.4089	0.60	1.1018	0.09
LM_i	-1.3692	0.00	-1.2621	0.00	-1.3690	0.00	-0.9457	0.00	-0.9537	0.00	-1.0545	0.00
LE_i	0.1783	0.14	0.2080	0.08	0.3264	0.01	0.1619	0.17	0.2447	0.09	0.2409	0.01
RD_i	-3.9755	0.64	-5.1342	0.61	-2.1320	0.10	4.4874	0.67	8.2849	0.54	-0.0724	0.94
SM_i	-0.0193	0.41	-0.0146	0.56	0.0192	0.35	0.0033	0.83	0.0248	0.20	-0.0019	0.92
SH_i	0.0521	0.39	-0.0650	0.40	-0.0523	0.49	-0.0539	0.06	-0.0637	0.03	-0.0253	0.52
YR_i	0.1683	0.01	0.0976	0.21	0.0047	0.94	0.0193	0.70	-0.0369	0.61	0.0247	0.66
DS_i	-4.1974	0.07	-2.5143	0.29	-0.6619	0.71	-	-	-	-	-	-
DF_i	-0.2194	0.86	-0.4278	0.72	-1.0827	0.26	-1.5212	0.17	-2.2187	0.08	0.2871	0.78
Obs./R ²	105	0.31	119	0.26	180	0.21	116	0.25	130	0.22	265	0.16
BASIC METALS, eq. (2); SOE and/or East Indonesian plants omitted for 2006												
LK_i	-0.0584	0.69	0.0411	0.83	-	-	-0.0373	0.78	0.0591	0.65	-	-
LL_i	2.5101	0.01	2.2307	0.01	2.1580	0.00	0.9081	0.25	0.4066	0.60	1.1154	0.09
LM_i	0.1660	0.16	0.2070	0.09	0.3242	0.01	-0.9624	0.00	-0.9627	0.00	-1.0668	0.00
LE_i	-1.4236	0.00	-1.3346	0.00	-1.4092	0.00	0.1626	0.16	0.2558	0.08	0.2437	0.01
RD_i	-5.3357	0.55	-6.4142	0.53	-2.3202	0.08	4.8529	0.64	9.6190	0.48	-0.0852	0.93
SM_i	-0.0166	0.47	-0.0133	0.60	0.0179	0.39	0.0037	0.82	0.0266	0.20	-0.0017	0.93
SH_i	0.0435	0.47	-0.0660	0.39	-0.0502	0.51	-0.0540	0.06	-0.0668	0.03	-0.0248	0.53
YR_i	0.1552	0.04	0.0876	0.31	0.0119	0.86	0.0175	0.73	-0.0446	0.56	0.0230	0.68
DS_i	-3.4970	0.14	-2.0287	0.40	-0.6120	0.73	-	-	-	-	-	-
$DFMIN_i$	-3.1761	0.28	-3.2770	0.17	-3.9532	0.01	-1.4433	0.57	-0.7471	0.79	-0.2414	0.91
$DFMAJ_i$	1.3727	0.39	1.0616	0.51	0.0345	0.98	-1.2221	0.54	-1.7886	0.28	0.9068	0.67
$DFHVV_i$	-2.1704	0.31	-1.4567	0.48	-1.3355	0.38	-1.6902	0.22	-2.7689	0.11	0.0246	0.99
TestDFs	1.82	0.17	1.71	0.19	2.90	0.06	0.02	0.98	0.22	0.80	0.08	0.92
Obs./R ²	105	0.34	119	0.28	180	0.22	116	0.25	130	0.23	265	0.16
ELECTRONICS-RELATED MACHINERY, eq. (1); SOE & East Indonesian plants omitted												
LK_i	-0.0334	0.57	0.0467	0.48	-	-	0.0773	0.23	0.1013	0.12	-	-
LL_i	0.7921	0.00	0.6404	0.01	0.6944	0.00	0.2035	0.55	0.3547	0.31	0.2337	0.32
LM_i	-1.0386	0.00	-1.0988	0.00	-1.1406	0.00	-1.2570	0.00	-1.3971	0.00	-1.2350	0.00
LE_i	0.3149	0.00	0.3383	0.00	0.3592	0.00	0.6487	0.00	0.6072	0.00	0.6057	0.00
RD_i	0.3279	0.07	0.3640	0.05	0.0537	0.86	2.0777	0.13	2.2223	0.11	1.6992	0.22
SM_i	-0.0127	0.05	-0.0094	0.14	-0.0029	0.59	-0.0137	0.16	-0.0131	0.17	0.0007	0.94
SH_i	0.0488	0.05	0.0462	0.06	0.0265	0.16	0.0273	0.23	0.0399	0.08	0.0282	0.29
YR_i	-0.0091	0.65	0.0016	0.94	0.0059	0.74	0.0507	0.05	0.0309	0.24	0.0337	0.04
DF_i	0.9084	0.03	0.8955	0.03	1.4097	0.00	0.1732	0.79	0.1105	0.87	0.2989	0.56
Obs./R ²	334	0.30	361	0.29	550	0.27	246	0.41	265	0.41	548	0.28

Appendix Table 3 (continued)

Independent variable, statistic	1996						2006					
	Initial capital		Ending capital		No capital		Initial capital		Ending capital		No capital	
	Value	P-val.	Value	P-val.	Value	P-val.	Value	P-val.	Value	P-val.	Value	P-val.
ELECTRONICS-RELATED MACHINERY, eq. (2); SOE & East Indonesian plants omitted												
LK_i	-0.0333	0.57	0.0475	0.47	-	-	0.0926	0.15	0.1158	0.07	-	-
LL_i	0.8098	0.00	0.6578	0.01	0.6874	0.00	0.1327	0.70	0.2793	0.42	0.1976	0.40
LM_i	0.3088	0.00	0.3305	0.00	0.3557	0.00	-1.2853	0.00	-1.4210	0.00	-1.2372	0.00
LE_i	-1.0477	0.00	-1.1070	0.00	-1.1433	0.00	0.6412	0.00	0.6029	0.00	0.6068	0.00
RD_i	0.3030	0.11	0.3355	0.08	0.0394	0.90	1.7286	0.21	1.8093	0.21	1.4052	0.30
SM_i	-0.0125	0.05	-0.0092	0.15	-0.0032	0.57	-0.0139	0.15	-0.0133	0.16	0.0004	0.97
SH_i	0.0490	0.05	0.0465	0.05	0.0268	0.15	0.0280	0.22	0.0396	0.08	0.0307	0.25
YR_i	-0.0066	0.75	0.0044	0.84	0.0093	0.60	0.0647	0.03	0.0457	0.12	0.0439	0.01
$DFMIN_i$	0.1314	0.68	0.1766	0.60	0.3854	0.30	-1.8094	0.21	-1.8516	0.27	-1.4761	0.17
$DFMAJ_i$	0.8313	0.07	0.7317	0.12	1.4497	0.01	-1.6610	0.08	-1.8266	0.04	-1.3683	0.05
$DFHVV_i$	1.2260	0.06	1.3036	0.04	1.6683	0.00	0.7197	0.40	0.6542	0.43	0.7440	0.18
TestDFs	1.80	0.17	1.58	0.21	2.71	0.07	1.99	0.14	2.17	0.12	5.08	0.01
Obs./R ²	334	0.30	361	0.30	550	0.27	246	0.42	265	0.43	548	0.29
MOTOR VEHICLES, eq. (1); SOE & East Indonesian plants omitted												
LK_i	0.1524	0.26	0.0647	0.66	-	-	-0.0612	0.71	-0.0777	0.56	-	-
LL_i	2.0697	0.00	2.1575	0.00	1.7695	0.00	2.1934	0.01	1.8175	0.03	0.6706	0.14
LM_i	-2.3532	0.00	-2.3252	0.00	-1.8999	0.00	-2.6102	0.00	-2.3459	0.00	-1.6509	0.00
LE_i	0.5181	0.01	0.5488	0.01	0.5083	0.00	0.8227	0.00	0.9323	0.00	0.8497	0.00
RD_i	-0.7919	0.24	-0.7520	0.12	-1.0821	0.01	0.8605	0.79	-0.1973	0.93	-1.7729	0.28
SM_i	0.0054	0.62	0.0050	0.62	0.0086	0.31	0.0106	0.67	0.0007	0.98	0.0014	0.95
SH_i	0.0586	0.20	0.0606	0.17	0.0496	0.11	-0.0671	0.23	-0.0487	0.33	-0.0514	0.22
YR_i	-0.0961	0.04	-0.0951	0.04	-0.0526	0.12	0.0023	0.97	0.0317	0.54	0.1136	0.01
DF_i	0.8239	0.41	0.4092	0.68	-0.1996	0.78	-0.2242	0.85	-0.4547	0.70	0.6541	0.35
Obs./R ²	168	0.39	185	0.38	261	0.38	131	0.46	150	0.41	320	0.29
MOTOR VEHICLES, eq. (2); SOE and East Indonesian plants omitted												
LK_i	0.1233	0.37	0.0424	0.77	-	-	-0.0609	0.72	-0.0807	0.54	-	-
LL_i	2.1543	0.00	2.2262	0.00	1.8724	0.00	2.1936	0.01	1.8193	0.03	0.7164	0.13
LM_i	0.5257	0.01	0.5531	0.00	0.5135	0.00	-2.6098	0.00	-2.3565	0.00	-1.6735	0.00
LE_i	-2.3690	0.00	-2.3396	0.00	-1.9462	0.00	0.8224	0.00	0.9360	0.00	0.8339	0.00
RD_i	-1.0767	0.24	-0.9191	0.14	-1.1922	0.01	0.8621	0.79	-0.2005	0.93	-1.3587	0.40
SM_i	0.0036	0.74	0.0034	0.74	0.0073	0.39	0.0106	0.67	0.0009	0.97	0.0032	0.88
SH_i	0.0697	0.13	0.0700	0.12	0.0623	0.05	-0.0672	0.24	-0.0476	0.34	-0.0511	0.22
YR_i	-0.1002	0.03	-0.0977	0.03	-0.0561	0.10	0.0024	0.97	0.0301	0.57	0.1051	0.03
$DFMIN_i$	-0.4658	0.68	-0.7116	0.53	-1.9092	0.11	-0.1911	0.90	-0.9142	0.54	4.8395	0.31
$DFMAJ_i$	2.0377	0.30	1.2121	0.52	0.6098	0.54	-0.2458	0.88	-0.0612	0.97	0.5244	0.74
$DFHVV_i$	0.7931	0.41	0.7361	0.42	-0.1751	0.83	-0.2222	0.87	-0.5131	0.71	-0.1605	0.84
TestDFs	0.70	0.50	0.64	0.53	1.43	0.24	0.00	1.00	0.10	0.90	0.52	0.59
Obs./R ²	168	0.40	185	0.39	261	0.38	131	0.46	150	0.41	320	0.31

Appendix Table 3 (continued)

Independent variable, statistic	1996						2006					
	Initial capital		Ending capital		No capital		Initial capital		Ending capital		No capital	
	Value	P-val.	Value	P-val.	Value	P-val.	Value	P-val.	Value	P-val.	Value	P-val.
OTHER TRANSPORTATION MACHINERY, eq. (1)												
LK_i	0.0450	0.74	0.2134	0.19	-	-	0.3409	0.18	0.3466	0.11	-	-
LL_i	1.2495	0.01	0.7558	0.13	0.4354	0.19	-0.8188	0.33	-0.8789	0.26	1.0465	0.19
LM_i	-1.6373	0.00	-1.3919	0.00	-1.0617	0.00	-1.0299	0.13	-0.9680	0.11	-1.4881	0.01
LE_i	0.4192	0.00	0.3240	0.00	0.3302	0.00	0.5297	0.00	0.5238	0.00	0.5607	0.06
RD_i	-0.2404	0.67	-0.4582	0.40	0.1639	0.76	1.1882	0.14	1.2525	0.11	1.4273	0.25
SM_i	0.0225	0.07	0.0337	0.02	0.0249	0.02	0.0474	0.02	0.0432	0.03	0.0340	0.03
SH_i	0.0120	0.79	0.0429	0.51	0.1032	0.05	-0.0072	0.89	0.0018	0.97	0.0105	0.82
YR_i	0.0442	0.28	0.0417	0.32	0.0500	0.16	-0.0192	0.57	-0.0331	0.28	0.0038	0.90
DS_i	-2.1724	0.05	-2.7168	0.01	-3.4650	0.00	-1.0354	0.53	-0.7599	0.63	-1.5572	0.26
DF_i	0.2072	0.77	-1.0595	0.21	-0.8539	0.26	-0.3054	0.85	0.5313	0.70	0.0881	0.95
Obs./R ²	207	0.34	227	0.25	320	0.24	166	0.18	187	0.18	357	0.17
OTHER TRANSPORTATION MACHINERY, eq. (2); minority-foreign plants omitted												
LK_i	0.0444	0.74	0.2134	0.19	-	-	0.3502	0.17	0.3615	0.10	-	-
LL_i	1.2160	0.02	0.7466	0.15	0.4463	0.19	-0.8653	0.30	-0.9044	0.24	1.0622	0.18
LM_i	0.4212	0.00	0.3245	0.00	0.3282	0.00	-1.0050	0.14	-0.9489	0.12	-1.4755	0.01
LE_i	-1.6268	0.00	-1.3888	0.00	-1.0486	0.00	0.5306	0.00	0.5271	0.00	0.5624	0.06
RD_i	-0.2356	0.68	-0.4593	0.41	0.1928	0.71	1.2481	0.13	1.3124	0.11	1.4847	0.24
SM_i	0.0222	0.08	0.0336	0.03	0.0241	0.02	0.0477	0.02	0.0434	0.03	0.0340	0.03
SH_i	0.0132	0.77	0.0431	0.52	0.1094	0.04	-0.0083	0.88	-0.0008	0.99	0.0075	0.88
YR_i	0.0456	0.28	0.0421	0.33	0.0560	0.12	-0.0163	0.63	-0.0308	0.31	0.0069	0.83
DS_i	-2.1725	0.05	-2.7153	0.02	-3.5940	0.00	-1.0014	0.54	-0.7045	0.66	-1.5354	0.27
$DFMAJ_i$	0.0756	0.93	-1.0814	0.30	-1.1621	0.21	-2.0938	0.38	-1.0176	0.57	-1.0290	0.43
$DFHVY_i$	0.8307	0.60	-0.8661	0.61	0.1676	0.91	0.1250	0.94	0.9587	0.52	0.6209	0.71
TestDFs	0.17	0.68	0.01	0.91	0.71	0.40	0.87	0.35	1.28	0.26	0.97	0.33
Obs./R ²	206	0.34	226	0.25	314	0.24	165	0.19	186	0.18	355	0.17

Notes: - = estimate could not be obtained; in the Obs./R² rows, the coefficient column contains the number of observations and the P-value column contains the R-squared; the TestDFs rows show Wald tests of the hypothesis that coefficients on all foreign ownership dummies are equal and associated p-values; industry and region dummies also included as relevant (see explanation in the text); full results including the constant and all dummies are available from the authors.

Appendix Table 4: OLS Estimates of SOE-Private and MNC-Private Electricity Intensity Differentials and Other Slope Coefficients from Equations (1) and (2); all p-values based on robust standard errors

Independent variable, statistic	1996						2006					
	Initial capital		Ending capital		No capital		Initial capital		Ending capital		No capital	
	Value	P-val.	Value	P-val.	Value	P-val.	Value	P-val.	Value	P-val.	Value	P-val.
12 LARGE ELECTRICITY USING INDUSTRIES COMBINED, eq. (1)												
LK_i	0.0500	0.02	0.0568	0.01	-	-	0.0474	0.00	0.0480	0.00	-	-
LL_i	0.5276	0.00	0.5116	0.00	0.5231	0.00	0.6664	0.00	0.6842	0.00	0.4607	0.00
LM_i	-0.8279	0.00	-0.8312	0.00	-0.7884	0.00	-1.0993	0.00	-1.1585	0.00	-1.0463	0.00
LE_i	0.4118	0.00	0.4186	0.00	0.4086	0.00	0.5738	0.00	0.5974	0.00	0.6319	0.00
RD_i	-0.0381	0.84	-0.0084	0.96	-0.0339	0.80	0.0109	0.87	0.0106	0.87	-0.0465	0.37
SM_i	0.0095	0.00	0.0098	0.00	0.0103	0.00	0.0183	0.00	0.0186	0.00	0.0243	0.00
SH_i	0.0041	0.61	0.0002	0.98	-0.0009	0.88	0.0218	0.00	0.0264	0.00	0.0236	0.00
YR_i	0.0065	0.13	0.0071	0.09	0.0073	0.04	0.0149	0.01	0.0120	0.02	0.0218	0.00
DS_i	0.6268	0.09	0.5490	0.11	0.7569	0.01	1.0727	0.04	1.1904	0.02	0.9896	0.00
DF_i	-0.0228	0.87	-0.0300	0.82	-0.0381	0.71	-0.1277	0.47	-0.1860	0.27	-0.0468	0.78
Obs./R ²	10,342	0.48	11,173	0.47	15,465	0.45	9,336	0.24	10,191	0.24	17,862	0.22
12 LARGE ELECTRICITY USING INDUSTRIES COMBINED, eq. (1)												
LK_i	0.0500	0.02	0.0567	0.01	-	-	0.0480	0.00	0.0485	0.00	-	-
LL_i	0.5263	0.00	0.5112	0.00	0.5231	0.00	0.6729	0.00	0.6906	0.00	0.4611	0.00
LM_i	-0.8267	0.00	-0.8306	0.00	-0.7880	0.00	-1.1044	0.00	-1.1640	0.00	-1.0469	0.00
LE_i	0.4116	0.00	0.4185	0.00	0.4086	0.00	0.5737	0.00	0.5972	0.00	0.6319	0.00
RD_i	-0.0411	0.83	-0.0096	0.96	-0.0345	0.80	0.0143	0.83	0.0145	0.82	-0.0462	0.37
SM_i	0.0095	0.00	0.0098	0.00	0.0103	0.00	0.0183	0.00	0.0186	0.00	0.0243	0.00
SH_i	0.0043	0.59	0.0002	0.98	-0.0009	0.89	0.0221	0.00	0.0268	0.00	0.0236	0.00
YR_i	0.0067	0.12	0.0072	0.08	0.0074	0.04	0.0147	0.01	0.0118	0.02	0.0218	0.00
DS_i	0.6233	0.09	0.5473	0.12	0.7556	0.01	1.0812	0.04	1.1987	0.02	0.9909	0.00
$DFMIN_i$	-0.0656	0.85	-0.0732	0.83	-0.1794	0.50	-0.8677	0.03	-0.9784	0.01	-0.0153	0.98
$DFMAJ_i$	-0.1662	0.36	-0.0933	0.59	-0.0652	0.64	0.7727	0.03	0.6803	0.04	0.0956	0.73
$DFHVV_i$	0.1794	0.35	0.0644	0.72	0.0489	0.72	-0.3844	0.04	-0.4111	0.02	-0.1056	0.58
TestDFs	1.01	0.36	0.24	0.78	0.39	0.67	6.60	0.00	6.75	0.00	0.21	0.81
Obs./R ²	10,342	0.48	11,173	0.47	15,465	0.45	9,336	0.24	10,191	0.24	17,862	0.22
FOOD AND BEVERAGES, eq. (1)												
LK_i	0.0250	0.61	0.0421	0.37	-	-	0.0261	0.45	0.0397	0.22	-	-
LL_i	0.5362	0.00	0.5313	0.00	0.4094	0.00	0.7952	0.00	0.7643	0.00	0.7390	0.00
LM_i	-0.8078	0.00	-0.8346	0.00	-0.6920	0.00	-1.6668	0.00	-1.7543	0.00	-1.5177	0.00
LE_i	0.4129	0.00	0.4121	0.00	0.3912	0.00	0.7417	0.00	0.7648	0.00	0.6499	0.00
RD_i	0.5847	0.43	0.5602	0.45	0.4859	0.47	-0.1077	0.34	-0.1218	0.26	-0.2043	0.06
SM_i	0.0126	0.05	0.0132	0.03	0.0163	0.00	0.0387	0.00	0.0401	0.00	0.0440	0.00
SH_i	0.0137	0.66	0.0099	0.70	-0.0059	0.78	0.0498	0.00	0.0523	0.00	0.0462	0.00
YR_i	0.0012	0.90	0.0014	0.88	0.0035	0.66	0.0187	0.05	0.0147	0.10	0.0265	0.00
DS_i	0.3160	0.62	0.3232	0.59	0.8616	0.09	1.1138	0.05	1.6166	0.01	1.5036	0.00
DF_i	0.0592	0.85	0.0200	0.95	-0.0671	0.75	0.4484	0.28	0.6274	0.13	0.7628	0.02
Obs./R ²	3,073	0.60	3,267	0.59	4,298	0.59	3,267	0.23	3,527	0.23	5,542	0.22

Appendix Table 4 (continued)

Independent variable, statistic	1996						2006					
	Initial capital		Ending capital		No capital		Initial capital		Ending capital		No capital	
	Value	P-val.	Value	P-val.	Value	P-val.	Value	P-val.	Value	P-val.	Value	P-val.
FOOD AND BEVERAGES, eq. (2)												
LK_i	0.0227	0.64	0.0402	0.39	-	-	0.0306	0.37	0.0436	0.18	-	-
LL_i	0.5403	0.00	0.5382	0.00	0.4164	0.00	0.7944	0.00	0.7683	0.00	0.7362	0.00
LM_i	-0.8064	0.00	-0.8344	0.00	-0.6927	0.00	-1.6663	0.00	-1.7564	0.00	-1.5156	0.00
LE_i	0.4135	0.00	0.4128	0.00	0.3920	0.00	0.7426	0.00	0.7657	0.00	0.6495	0.00
RD_i	0.5809	0.44	0.5572	0.46	0.4923	0.47	-0.0951	0.44	-0.1075	0.36	-0.1957	0.07
SM_i	0.0126	0.05	0.0132	0.03	0.0163	0.00	0.0385	0.00	0.0400	0.00	0.0439	0.00
SH_i	0.0143	0.65	0.0099	0.70	-0.0062	0.76	0.0520	0.00	0.0545	0.00	0.0465	0.00
YR_i	0.0011	0.91	0.0013	0.89	0.0035	0.66	0.0190	0.04	0.0148	0.10	0.0267	0.00
DS_i	0.3170	0.62	0.3213	0.59	0.8589	0.09	1.1209	0.05	1.6225	0.01	1.4993	0.00
$DFMIN_i$	-0.9167	0.01	-0.9938	0.00	-0.9400	0.00	-1.7607	0.05	-1.7101	0.05	0.3468	0.72
$DFMAJ_i$	0.1440	0.74	0.0780	0.85	-0.0824	0.79	2.0729	0.01	2.3687	0.00	1.6271	0.01
$DFHVY_i$	0.3802	0.48	0.3602	0.47	0.3934	0.20	-0.2135	0.60	-0.0445	0.91	0.3888	0.27
TestDFs	3.93	0.02	4.04	0.02	6.30	0.00	5.88	0.00	7.07	0.00	1.57	0.21
Obs./R ²	3,073	0.60	3,267	0.59	4,298	0.59	3,267	0.23	3,527	0.23	5,542	0.22
TEXTILES, eq. (1)												
LK_i	-0.0545	0.31	-0.0401	0.42	-	-	0.0504	0.18	0.0275	0.48	-	-
LL_i	0.9597	0.00	0.8872	0.00	0.9751	0.00	0.9155	0.00	1.0090	0.00	0.7247	0.01
LM_i	-1.1058	0.00	-1.0800	0.00	-1.1390	0.00	-1.2210	0.00	-1.3516	0.00	-1.6535	0.00
LE_i	0.4640	0.00	0.4881	0.00	0.4749	0.00	0.7914	0.00	0.8695	0.00	0.9573	0.00
RD_i	-0.7012	0.14	-0.7597	0.11	-0.4728	0.01	-1.0927	0.34	-1.5047	0.18	-1.4972	0.40
SM_i	0.0103	0.06	0.0120	0.03	0.0085	0.04	0.0075	0.15	0.0074	0.17	0.0352	0.00
SH_i	0.0216	0.44	0.0191	0.48	0.0135	0.41	0.0400	0.04	0.0365	0.05	-0.0038	0.86
YR_i	0.0183	0.12	0.0196	0.07	0.0108	0.22	0.0057	0.70	-0.0031	0.83	0.0054	0.69
DS_i	2.7050	0.01	2.2783	0.02	2.1513	0.01	11.0569	0.07	11.0423	0.07	2.8022	0.11
DF_i	-0.0035	0.99	-0.0459	0.92	0.0088	0.98	-0.3145	0.53	-0.5102	0.29	-0.5944	0.30
Obs./R ²	1,306	0.34	1,430	0.34	1,839	0.33	1,185	0.40	1,285	0.39	2,107	0.31
TEXTILES, eq. (2)												
LK_i	-0.0543	0.31	-0.0397	0.42	-	-	0.0495	0.19	0.0268	0.49	-	-
LL_i	0.9594	0.00	0.8860	0.00	0.9753	0.00	0.9162	0.00	1.0111	0.00	0.7252	0.01
LM_i	-1.1062	0.00	-1.0805	0.00	-1.1400	0.00	-1.2218	0.00	-1.3535	0.00	-1.6526	0.00
LE_i	0.4642	0.00	0.4886	0.00	0.4754	0.00	0.7892	0.00	0.8670	0.00	0.9584	0.00
RD_i	-0.7252	0.16	-0.7998	0.12	-0.4868	0.01	-1.0476	0.36	-1.4580	0.20	-1.4753	0.41
SM_i	0.0103	0.06	0.0120	0.03	0.0084	0.04	0.0076	0.14	0.0075	0.17	0.0351	0.00
SH_i	0.0217	0.44	0.0192	0.48	0.0136	0.40	0.0399	0.04	0.0363	0.05	-0.0037	0.87
YR_i	0.0182	0.12	0.0195	0.07	0.0107	0.23	0.0055	0.71	-0.0034	0.81	0.0057	0.67
DS_i	2.7058	0.01	2.2796	0.02	2.1517	0.01	11.0608	0.07	11.0469	0.07	2.7990	0.11
$DFMIN_i$	0.1665	0.88	0.2224	0.84	0.1611	0.85	0.8818	0.50	0.7549	0.56	-0.8519	0.48
$DFMAJ_i$	0.0433	0.96	0.0474	0.95	0.1001	0.86	0.0091	0.99	-0.1447	0.86	-0.8692	0.26
$DFHVY_i$	-0.0756	0.88	-0.1779	0.69	-0.1229	0.76	-0.6019	0.26	-0.8053	0.12	-0.4413	0.56
TestDFs	0.02	0.98	0.08	0.93	0.08	0.92	0.72	0.49	0.85	0.43	0.10	0.90
Obs./R ²	1,306	0.34	1,430	0.34	1,839	0.33	1,185	0.40	1,285	0.39	2,107	0.31

Appendix Table 4 (continued)

Independent variable, statistic	1996						2006					
	Initial capital		Ending capital		No capital		Initial capital		Ending capital		No capital	
	Value	P-val.	Value	P-val.	Value	P-val.	Value	P-val.	Value	P-val.	Value	P-val.
APPAREL, eq. (1)												
LK_i	0.0265	0.35	0.0010	0.97	-	-	0.0231	0.14	0.0341	0.03	-	-
LL_i	-0.0459	0.47	-0.0432	0.47	-0.0466	0.46	0.4055	0.02	0.3942	0.01	0.0329	0.83
LM_i	-0.4270	0.00	-0.4207	0.00	-0.5260	0.00	-0.6929	0.00	-0.7016	0.00	-0.6790	0.00
LE_i	0.3184	0.00	0.3289	0.00	0.3949	0.00	0.3095	0.00	0.3544	0.00	0.7575	0.00
RD_i	-0.1934	0.03	-0.1937	0.02	0.4208	0.54	-0.0433	0.00	-0.0371	0.03	0.0971	0.00
SM_i	0.0033	0.25	0.0030	0.25	0.0061	0.03	-0.0009	0.78	-0.0005	0.87	0.0097	0.00
SH_i	0.0314	0.16	0.0291	0.16	0.0265	0.11	-0.0106	0.18	-0.0157	0.03	0.0001	0.99
YR_i	0.0165	0.00	0.0186	0.00	0.0213	0.00	0.0211	0.00	0.0256	0.00	0.0458	0.00
DS_i	-0.6162	0.07	-0.6483	0.04	-0.2038	0.72	-0.9446	0.01	-1.0169	0.01	3.3154	0.03
DF_i	0.7898	0.02	0.8807	0.00	0.5747	0.01	-0.2328	0.37	-0.2782	0.36	0.1749	0.80
Obs./R ²	1,131	0.33	1,252	0.34	1,993	0.25	1,305	0.27	1,422	0.27	2,634	0.20
APPAREL, eq. (2)												
LK_i	0.0291	0.30	0.0018	0.94	-	-	0.0235	0.13	0.0341	0.03	-	-
LL_i	-0.0456	0.46	-0.0405	0.49	-0.0446	0.48	0.4067	0.02	0.3933	0.01	0.0317	0.83
LM_i	-0.4219	0.00	-0.4186	0.00	-0.5256	0.00	-0.6928	0.00	-0.7011	0.00	-0.6748	0.00
LE_i	0.3176	0.00	0.3289	0.00	0.3954	0.00	0.3092	0.00	0.3543	0.00	0.7537	0.00
RD_i	-0.2948	0.01	-0.2689	0.01	0.3909	0.58	-0.0437	0.00	-0.0370	0.03	0.0960	0.00
SM_i	0.0034	0.22	0.0031	0.23	0.0061	0.03	-0.0009	0.77	-0.0005	0.88	0.0098	0.00
SH_i	0.0307	0.14	0.0281	0.15	0.0254	0.12	-0.0101	0.20	-0.0156	0.04	0.0016	0.94
YR_i	0.0163	0.00	0.0186	0.00	0.0214	0.00	0.0211	0.00	0.0257	0.00	0.0463	0.00
DS_i	-0.6192	0.07	-0.6544	0.04	-0.2102	0.71	-0.9457	0.01	-1.0167	0.01	3.3161	0.03
$DFMIN_i$	-0.3082	0.17	-0.2649	0.19	-0.2620	0.05	-0.4602	0.17	-0.6364	0.09	-1.7549	0.04
$DFMAJ_i$	-0.0964	0.69	0.3334	0.26	0.2861	0.29	0.4453	0.60	-0.3125	0.61	3.6374	0.31
$DFHVI_i$	1.5496	0.00	1.4713	0.00	0.8669	0.01	-0.3015	0.23	-0.2537	0.45	-0.1280	0.83
TestDFs	6.22	0.00	7.33	0.00	7.41	0.00	0.59	0.55	0.37	0.69	2.39	0.09
Obs./R ²	1,131	0.35	1,252	0.35	1,993	0.25	1,305	0.28	1,422	0.27	2,634	0.21
WOOD PRODUCTS, eq. (1)												
LK_i	0.1100	0.00	0.1018	0.00	-	-	0.0647	0.04	0.0439	0.20	-	-
LL_i	0.8010	0.00	0.8517	0.00	0.9069	0.00	0.7835	0.00	0.8406	0.00	0.5873	0.00
LM_i	-1.0056	0.00	-1.0345	0.00	-0.9915	0.00	-0.8057	0.00	-0.8913	0.00	-0.9208	0.00
LE_i	0.2982	0.00	0.2975	0.00	0.3085	0.00	0.3617	0.00	0.3710	0.00	0.5174	0.00
RD_i	0.2437	0.46	0.3753	0.53	-0.1586	0.08	-0.2339	0.70	-0.4851	0.43	0.4266	0.66
SM_i	0.0121	0.07	0.0122	0.06	0.0125	0.01	0.0078	0.06	0.0075	0.08	0.0080	0.06
SH_i	0.0574	0.08	0.0423	0.16	0.0276	0.29	0.0121	0.55	0.0464	0.22	0.0469	0.13
YR_i	-0.0192	0.09	-0.0207	0.05	-0.0006	0.95	-0.0154	0.22	-0.0212	0.10	0.0281	0.08
DS_i	0.8619	0.12	0.8650	0.12	0.1416	0.75	5.2096	0.27	5.1175	0.26	-0.5610	0.67
DF_i	-0.5964	0.04	-0.1231	0.69	-0.0790	0.77	-0.4185	0.52	-0.4395	0.43	-0.1779	0.69
Obs./R ²	1,107	0.31	1,181	0.31	1,647	0.32	775	0.32	851	0.31	1,489	0.21

Appendix Table 4 (continued)

Independent variable, statistic	1996						2006					
	Initial capital		Ending capital		No capital		Initial capital		Ending capital		No capital	
	Value	P-val.	Value	P-val.	Value	P-val.	Value	P-val.	Value	P-val.	Value	P-val.
WOOD PRODUCTS, eq. (2)												
LK_i	0.1104	0.00	0.1019	0.00	-	-	0.0678	0.03	0.0461	0.18	-	-
LL_i	0.8033	0.00	0.8563	0.00	0.9069	0.00	0.7781	0.00	0.8370	0.00	0.5833	0.00
LM_i	-1.0080	0.00	-1.0382	0.00	-0.9930	0.00	-0.7980	0.00	-0.8857	0.00	-0.9196	0.00
LE_i	0.2987	0.00	0.2994	0.00	0.3098	0.00	0.3651	0.00	0.3739	0.00	0.5189	0.00
RD_i	0.2452	0.46	0.3686	0.54	-0.1512	0.10	-0.2421	0.69	-0.4816	0.44	0.4386	0.65
SM_i	0.0121	0.07	0.0122	0.06	0.0125	0.01	0.0081	0.04	0.0077	0.06	0.0081	0.06
SH_i	0.0567	0.08	0.0417	0.17	0.0277	0.29	0.0112	0.58	0.0459	0.23	0.0460	0.14
YR_i	-0.0196	0.08	-0.0213	0.05	-0.0010	0.92	-0.0165	0.19	-0.0224	0.09	0.0276	0.08
DS_i	0.8678	0.12	0.8789	0.12	0.1459	0.74	5.1730	0.28	5.0860	0.27	-0.5597	0.68
$DFMIN_i$	-0.3209	0.65	-0.3955	0.52	-0.0833	0.91	-2.1087	0.00	-2.1834	0.00	0.2093	0.87
$DFMAJ_i$	-0.3202	0.46	0.5135	0.29	0.4192	0.25	1.3698	0.48	1.2307	0.53	0.6271	0.56
$DFHVY_i$	-0.9937	0.01	-0.7611	0.03	-0.8124	0.02	-0.9454	0.03	-0.7943	0.03	-0.4773	0.30
TestDFs	0.95	0.39	2.46	0.09	3.41	0.03	3.52	0.03	5.22	0.01	0.54	0.58
Obs./R ²	1,107	0.31	1,181	0.31	1,647	0.32	775	0.33	851	0.32	1,489	0.21
PAPER PRODUCTS, eq. (1); East Indonesian plants omitted for 1996												
LK_i	0.0412	0.83	0.0197	0.91	-	-	0.0918	0.57	0.0816	0.59	-	-
LL_i	0.8624	0.07	0.8378	0.06	0.9601	0.00	0.7047	0.11	0.7630	0.06	0.1950	0.53
LM_i	-1.1888	0.00	-1.1884	0.00	-1.0326	0.00	-1.2098	0.00	-1.1703	0.00	-0.6596	0.00
LE_i	0.6236	0.00	0.6364	0.00	0.5457	0.00	0.6733	0.00	0.6402	0.00	0.5431	0.00
RD_i	-0.1643	0.61	-0.0836	0.81	0.0393	0.91	-0.7844	0.58	-1.1273	0.35	-1.9512	0.02
SM_i	0.0424	0.01	0.0322	0.02	0.0231	0.04	0.0106	0.34	0.0151	0.16	0.0215	0.02
SH_i	-0.0891	0.12	-0.1026	0.03	-0.0704	0.02	-0.0632	0.05	-0.0657	0.03	-0.0609	0.06
YR_i	-0.0249	0.22	-0.0196	0.32	-0.0068	0.66	-0.0028	0.92	-0.0084	0.75	0.0161	0.46
DS_i	4.1684	0.33	4.6346	0.28	3.8456	0.28	-2.1831	0.17	-2.4189	0.12	-0.0965	0.96
DF_i	0.9286	0.23	1.3452	0.09	0.3935	0.49	-0.1757	0.82	-0.5813	0.45	-1.0188	0.06
Obs./R ²	186	0.40	214	0.39	339	0.38	229	0.25	263	0.25	490	0.21
PAPER PRODUCTS, eq. (2), minority-foreign & East Indonesian plants omitted for 1996												
LK_i	0.0393	0.84	0.0239	0.89	-	-	0.0898	0.58	0.0790	0.60	-	-
LL_i	0.8157	0.09	0.8509	0.06	0.9364	0.00	0.7128	0.11	0.7904	0.06	0.1965	0.53
LM_i	-1.1392	0.00	-1.1989	0.00	-1.0374	0.00	-1.2205	0.00	-1.1986	0.00	-0.6610	0.00
LE_i	0.6193	0.00	0.6354	0.00	0.5591	0.00	0.6740	0.00	0.6406	0.00	0.5427	0.00
RD_i	-0.1691	0.61	-0.0841	0.80	0.0298	0.93	-0.7539	0.60	-1.0881	0.37	-1.9501	0.02
SM_i	0.0426	0.01	0.0321	0.02	0.0230	0.04	0.0108	0.34	0.0155	0.16	0.0216	0.02
SH_i	-0.1050	0.06	-0.0977	0.04	-0.0682	0.03	-0.0624	0.05	-0.0630	0.04	-0.0609	0.06
YR_i	-0.0249	0.23	-0.0198	0.32	-0.0081	0.61	-0.0028	0.92	-0.0087	0.75	0.0161	0.46
DS_i	4.1970	0.33	4.6014	0.28	3.8892	0.28	-2.1526	0.19	-2.3849	0.13	-0.0940	0.96
$DFMIN_i$	-	-	-	-	-	-	-1.1097	0.17	-2.2385	0.05	-1.1650	0.38
$DFMAJ_i$	0.4680	0.54	1.5201	0.10	0.7132	0.29	0.0352	0.98	-0.2440	0.86	-0.9127	0.37
$DFHVY_i$	3.0721	0.14	0.9377	0.48	-0.3371	0.78	-0.1174	0.90	-0.4209	0.65	-1.0163	0.10
TestDFs	1.46	0.23	0.15	0.70	0.62	0.43	0.46	0.63	1.12	0.33	0.01	0.99
Obs./R ²	186	0.40	214	0.39	336	0.38	229	0.25	263	0.25	490	0.21

Appendix Table 4 (continued)

Independent variable, statistic	1996						2006					
	Initial capital		Ending capital		No capital		Initial capital		Ending capital		No capital	
	Value	P-val.	Value	P-val.	Value	P-val.	Value	P-val.	Value	P-val.	Value	P-val.
CHEMICALS, eq. (1)												
LK_i	0.1014	0.16	0.0795	0.25	-	-	0.0742	0.31	0.0627	0.36	-	-
LL_i	0.4518	0.06	0.4785	0.04	0.5482	0.00	0.8323	0.00	0.9100	0.00	0.1227	0.63
LM_i	-1.0526	0.00	-1.0182	0.00	-0.9049	0.00	-0.8277	0.00	-0.9469	0.00	-0.5281	0.00
LE_i	0.5954	0.00	0.5734	0.00	0.5110	0.00	0.3766	0.00	0.3975	0.00	0.5115	0.00
RD_i	-0.1519	0.17	-0.1457	0.17	-0.1434	0.11	0.1474	0.58	-0.1604	0.24	-0.2667	0.04
SM_i	0.0208	0.06	0.0213	0.03	0.0198	0.01	-0.0014	0.84	-0.0016	0.81	-0.0025	0.71
SH_i	-0.0029	0.86	-0.0065	0.66	-0.0035	0.77	-0.0024	0.79	0.0104	0.53	-0.0007	0.96
YR_i	-0.0188	0.15	-0.0124	0.33	-0.0016	0.89	0.0079	0.50	0.0105	0.43	0.0097	0.37
DS_i	2.4050	0.14	1.9553	0.21	1.5991	0.18	0.1561	0.86	0.1060	0.90	-0.3842	0.47
DF_i	-0.2061	0.68	-0.0684	0.88	-0.0226	0.95	-0.4705	0.28	-0.4931	0.27	-0.8315	0.09
Obs./R ²	630	0.30	665	0.30	993	0.26	493	0.24	544	0.25	1,099	0.18
CHEMICALS, eq. (2)												
LK_i	0.0959	0.18	0.0761	0.27	-	-	0.0741	0.31	0.0636	0.35	-	-
LL_i	0.4638	0.05	0.4832	0.04	0.5526	0.00	0.8291	0.00	0.9072	0.00	0.1209	0.64
LM_i	-1.0650	0.00	-1.0251	0.00	-0.9150	0.00	-0.8271	0.00	-0.9489	0.00	-0.5239	0.00
LE_i	0.5990	0.00	0.5757	0.00	0.5132	0.00	0.3771	0.00	0.3971	0.00	0.5132	0.00
RD_i	-0.1437	0.21	-0.1398	0.19	-0.1330	0.15	0.1313	0.62	-0.1662	0.22	-0.2776	0.03
SM_i	0.0209	0.06	0.0213	0.03	0.0198	0.01	-0.0014	0.84	-0.0016	0.80	-0.0026	0.69
SH_i	-0.0007	0.96	-0.0047	0.76	-0.0031	0.80	-0.0021	0.82	0.0110	0.51	-0.0008	0.96
YR_i	-0.0189	0.14	-0.0124	0.33	-0.0019	0.86	0.0076	0.51	0.0100	0.45	0.0097	0.37
DS_i	2.4316	0.14	1.9736	0.21	1.6139	0.18	0.1699	0.85	0.1209	0.89	-0.3913	0.46
$DFMIN_i$	1.0114	0.30	0.9511	0.27	0.6538	0.44	-0.1901	0.81	-0.1812	0.80	-0.2565	0.74
$DFMAJ_i$	-0.2520	0.66	-0.1248	0.81	0.1748	0.69	-0.4414	0.60	-0.2707	0.75	-1.3361	0.02
$DFHVI_i$	-0.8847	0.09	-0.5790	0.21	-0.8950	0.03	-0.5504	0.22	-0.6686	0.14	-0.6318	0.34
TestDFs	1.94	0.15	1.60	0.20	3.09	0.05	0.10	0.91	0.27	0.76	1.03	0.36
Obs./R ²	630	0.30	665	0.30	993	0.27	493	0.24	544	0.25	1,099	0.18
RUBBER & PLASTIC PRODUCTS, eq. (1)												
LK_i	0.2252	0.00	0.2465	0.00	-	-	-0.0455	0.39	-0.0378	0.46	-	-
LL_i	0.3120	0.07	0.3539	0.04	0.4291	0.00	0.4024	0.05	0.4054	0.04	0.2494	0.12
LM_i	-1.1175	0.00	-1.1821	0.00	-1.0277	0.00	-1.1329	0.00	-1.1303	0.00	-0.9616	0.00
LE_i	0.5568	0.00	0.5901	0.00	0.5577	0.00	0.5757	0.00	0.5944	0.00	0.6187	0.00
RD_i	-0.2800	0.01	-0.2803	0.01	-0.0722	0.57	-0.5169	0.64	-0.1797	0.85	-0.3715	0.67
SM_i	-0.0026	0.60	-0.0028	0.58	-0.0019	0.66	0.0167	0.02	0.0123	0.09	0.0072	0.19
SH_i	-0.0156	0.39	-0.0392	0.02	-0.0334	0.01	-0.0145	0.42	-0.0096	0.57	0.0046	0.79
YR_i	0.0031	0.75	0.0012	0.90	0.0026	0.75	-0.0129	0.36	-0.0114	0.40	-0.0012	0.90
DS_i	0.4918	0.38	0.3627	0.50	1.0593	0.03	0.0583	0.94	-0.3466	0.63	-0.2048	0.64
DF_i	0.1052	0.83	-0.2390	0.60	-0.0259	0.94	0.2058	0.76	0.1949	0.75	0.2891	0.63
Obs./R ²	868	0.32	972	0.32	1,432	0.30	744	0.31	848	0.30	1,711	0.24

Appendix Table 4 (continued)

Independent variable, statistic	1996						2006					
	Initial capital		Ending capital		No capital		Initial capital		Ending capital		No capital	
	Value	P-val.	Value	P-val.	Value	P-val.	Value	P-val.	Value	P-val.	Value	P-val.
RUBBER & PLASTIC PRODUCTS, eq. (2)												
LK_i	0.2260	0.00	0.2465	0.00	-	-	-0.0450	0.40	-0.0376	0.46	-	-
LL_i	0.3130	0.07	0.3538	0.04	0.4293	0.00	0.4068	0.05	0.4088	0.04	0.2519	0.12
LM_i	-1.1186	0.00	-1.1819	0.00	-1.0276	0.00	-1.1367	0.00	-1.1326	0.00	-0.9538	0.00
LE_i	0.5566	0.00	0.5900	0.00	0.5577	0.00	0.5750	0.00	0.5938	0.00	0.6177	0.00
RD_i	-0.2846	0.00	-0.2809	0.01	-0.0741	0.56	-0.5658	0.60	-0.2117	0.82	-0.3365	0.71
SM_i	-0.0027	0.60	-0.0028	0.58	-0.0019	0.66	0.0168	0.02	0.0123	0.09	0.0070	0.20
SH_i	-0.0155	0.40	-0.0392	0.02	-0.0333	0.01	-0.0142	0.43	-0.0093	0.58	0.0041	0.81
YR_i	0.0031	0.75	0.0013	0.90	0.0027	0.74	-0.0127	0.37	-0.0113	0.41	-0.0008	0.94
DS_i	0.4841	0.39	0.3613	0.51	1.0569	0.03	0.0573	0.94	-0.3481	0.63	-0.2142	0.62
$DFMIN_i$	-0.1798	0.91	-0.1259	0.94	-0.3830	0.70	-0.8191	0.54	-0.7447	0.56	-0.9246	0.18
$DFMAJ_i$	0.0069	0.99	-0.2891	0.66	-0.0362	0.94	0.5977	0.49	0.5000	0.55	-0.3187	0.53
$DFHVY_i$	0.2816	0.69	-0.2115	0.75	0.0682	0.89	0.1650	0.84	0.1687	0.82	0.6256	0.44
TestDFs	0.06	0.94	0.01	0.99	0.08	0.92	0.41	0.66	0.35	0.70	1.23	0.29
Obs./R ²	868	0.32	972	0.32	1,432	0.30	744	0.31	848	0.30	1,711	0.24
NON-METALLIC MINERAL PRODUCTS, eq. (1)												
LK_i	0.0531	0.39	0.0516	0.39	-	-	-0.0457	0.32	-0.0315	0.45	-	-
LL_i	0.3645	0.09	0.3253	0.09	0.3220	0.10	1.1033	0.00	1.2093	0.00	0.5109	0.02
LM_i	-0.2752	0.01	-0.3077	0.00	-0.2809	0.01	-0.5302	0.00	-0.5730	0.00	-0.3234	0.02
LE_i	0.3191	0.00	0.3385	0.00	0.3377	0.00	0.4142	0.00	0.4384	0.00	0.4503	0.00
RD_i	-0.4412	0.40	0.3345	0.70	0.3746	0.63	1.4792	0.47	1.3415	0.52	0.7026	0.57
SM_i	0.0097	0.19	0.0135	0.09	0.0111	0.06	0.0145	0.06	0.0107	0.17	0.0104	0.08
SH_i	-0.0301	0.17	-0.0171	0.42	-0.0175	0.32	0.0199	0.37	0.0116	0.58	0.0163	0.36
YR_i	0.0109	0.09	0.0060	0.35	0.0080	0.21	-0.0067	0.71	-0.0127	0.49	-0.0023	0.85
DS_i	-1.2577	0.05	-1.4644	0.02	-1.3118	0.01	1.1867	0.52	1.3509	0.46	0.2545	0.76
DF_i	-0.4375	0.59	-0.5632	0.51	-0.5133	0.46	-1.0599	0.20	-0.3498	0.72	-0.7919	0.16
Obs./R ²	1,217	0.30	1,288	0.27	1,596	0.27	672	0.34	710	0.33	1,276	0.30
NON-METALLIC MINERAL PRODUCTS, eq. (2)												
LK_i	0.0391	0.51	0.0363	0.53	-	-	-0.0467	0.31	-0.0336	0.42	-	-
LL_i	0.3330	0.12	0.2932	0.12	0.2949	0.12	1.1580	0.00	1.2898	0.00	0.5377	0.02
LM_i	-0.2584	0.02	-0.2905	0.01	-0.2737	0.01	-0.5467	0.00	-0.5901	0.00	-0.3251	0.02
LE_i	0.3189	0.00	0.3382	0.00	0.3372	0.00	0.4091	0.00	0.4302	0.00	0.4466	0.00
RD_i	-0.3651	0.42	0.4185	0.62	0.4285	0.57	1.9862	0.30	1.8840	0.33	0.9412	0.44
SM_i	0.0098	0.19	0.0136	0.09	0.0108	0.07	0.0141	0.07	0.0104	0.18	0.0103	0.09
SH_i	-0.0303	0.17	-0.0173	0.41	-0.0168	0.34	0.0218	0.33	0.0131	0.53	0.0165	0.36
YR_i	0.0109	0.09	0.0060	0.36	0.0077	0.23	-0.0048	0.78	-0.0103	0.57	-0.0015	0.91
DS_i	-1.2099	0.06	-1.4089	0.03	-1.2628	0.01	1.1742	0.52	1.3111	0.47	0.2446	0.76
$DFMIN_i$	1.7126	0.44	1.7971	0.43	1.4086	0.52	-3.9047	0.00	-3.6958	0.00	-2.9676	0.00
$DFMAJ_i$	-1.3190	0.10	-1.4998	0.06	-1.1021	0.04	0.6814	0.67	0.6679	0.68	-0.5630	0.44
$DFHVY_i$	-0.9941	0.18	-1.2817	0.16	-1.1725	0.14	-0.8209	0.44	0.2265	0.86	-0.4738	0.58
TestDFs	1.05	0.35	1.14	0.32	0.68	0.51	4.40	0.01	4.95	0.01	2.79	0.06
Obs./R ²	1,217	0.30	1,288	0.28	1,596	0.27	672	0.35	710	0.33	1,276	0.30

Appendix Table 4 (continued)

Independent variable, statistic	1996						2006					
	Initial capital		Ending capital		No capital		Initial capital		Ending capital		No capital	
	Value	P-val.	Value	P-val.	Value	P-val.	Value	P-val.	Value	P-val.	Value	P-val.
BASIC METALS, eq. (1); SOE and/or East Indonesian plants omitted for 2006												
LK_i	0.0110	0.90	0.0539	0.63	-	-	-0.0734	0.33	0.0522	0.60	-	-
LL_i	1.7186	0.01	1.6363	0.01	1.0797	0.06	0.9008	0.14	0.4374	0.46	0.3906	0.24
LM_i	-0.8434	0.01	-0.8460	0.00	-0.8208	0.00	-0.6746	0.00	-0.6530	0.00	-0.5646	0.00
LE_i	0.3231	0.00	0.3786	0.00	0.4626	0.00	0.3066	0.00	0.3767	0.00	0.3641	0.00
RD_i	-7.5507	0.34	-9.7777	0.25	-1.0416	0.34	6.0495	0.30	8.7602	0.09	-0.2499	0.31
SM_i	-0.0107	0.48	-0.0005	0.98	0.0170	0.30	0.0213	0.03	0.0372	0.02	0.0295	0.01
SH_i	-0.0005	0.99	-0.0534	0.20	-0.0267	0.70	-0.0220	0.33	-0.0282	0.21	0.0058	0.82
YR_i	0.0741	0.14	0.0328	0.52	0.0067	0.89	0.0099	0.69	-0.0498	0.42	-0.0281	0.37
DS_i	-2.2071	0.14	-1.3903	0.36	0.2543	0.90	-	-	-	-	-	-
DF_i	-0.4087	0.64	-0.3146	0.72	-0.7111	0.33	-0.0741	0.93	-0.9321	0.40	0.1650	0.79
Obs./R ²	105	0.37	119	0.35	180	0.25	116	0.40	130	0.26	265	0.25
BASIC METALS, eq. (2); SOE and/or East Indonesian plants omitted for 2006												
LK_i	-0.0055	0.95	0.0378	0.74	-	-	-0.0529	0.48	0.0641	0.49	-	-
LL_i	1.7642	0.01	1.6395	0.02	1.0700	0.06	1.0782	0.04	0.5556	0.33	0.3860	0.24
LM_i	-0.8876	0.01	-0.8753	0.00	-0.8335	0.00	-0.7596	0.00	-0.7211	0.00	-0.5683	0.00
LE_i	0.3216	0.00	0.3803	0.00	0.4605	0.00	0.3005	0.00	0.3801	0.00	0.3675	0.00
RD_i	-8.1538	0.32	#####	0.24	-1.2204	0.28	7.7213	0.24	11.6891	0.06	-0.2478	0.31
SM_i	-0.0096	0.52	-0.0006	0.97	0.0161	0.33	0.0218	0.03	0.0401	0.02	0.0299	0.01
SH_i	-0.0020	0.95	-0.0518	0.23	-0.0248	0.72	-0.0206	0.33	-0.0298	0.17	0.0049	0.85
YR_i	0.0768	0.14	0.0428	0.44	0.0197	0.70	0.0059	0.82	-0.0570	0.40	-0.0305	0.35
DS_i	-1.8997	0.21	-1.2513	0.42	0.2537	0.90	-	-	-	-	-	-
$DFMIN_i$	-3.8117	0.05	-3.9843	0.02	-3.5316	0.00	-0.7783	0.44	-0.4172	0.78	1.0120	0.44
$DFMAJ_i$	0.6667	0.54	0.4633	0.69	-0.1907	0.85	1.6562	0.35	0.9733	0.54	0.3417	0.68
$DFHVY_i$	-1.0242	0.26	-0.1815	0.87	-0.2588	0.78	-0.7048	0.40	-1.9038	0.21	-0.0952	0.92
TestDFs	3.29	0.04	3.15	0.05	3.50	0.03	0.89	0.41	1.41	0.25	0.24	0.79
Obs./R ²	105	0.40	119	0.37	180	0.26	116	0.42	130	0.28	265	0.25
ELECTRONICS-RELATED MACHINERY, eq. (1); SOE & East Indonesian plants omitted												
LK_i	-0.0231	0.56	0.0024	0.95	-	-	0.0742	0.19	0.0855	0.13	-	-
LL_i	0.3579	0.01	0.2784	0.06	0.3417	0.00	0.1061	0.72	0.2382	0.42	0.1770	0.35
LM_i	-0.6924	0.00	-0.6793	0.00	-0.7673	0.00	-1.0382	0.00	-1.1560	0.00	-0.9987	0.00
LE_i	0.3854	0.00	0.3915	0.00	0.3943	0.00	0.6217	0.00	0.5860	0.00	0.5553	0.00
RD_i	0.4825	0.00	0.4888	0.00	0.0729	0.77	2.3643	0.09	2.6169	0.05	1.8727	0.18
SM_i	-0.0069	0.07	-0.0062	0.09	0.0016	0.66	-0.0059	0.50	-0.0057	0.50	0.0041	0.61
SH_i	0.0350	0.09	0.0345	0.08	0.0195	0.22	0.0280	0.18	0.0378	0.07	0.0318	0.21
YR_i	0.0043	0.68	0.0093	0.40	0.0016	0.85	0.0274	0.21	0.0162	0.43	0.0216	0.08
DF_i	0.6982	0.00	0.6558	0.01	0.9443	0.00	0.1072	0.84	0.1032	0.84	0.3331	0.46
Obs./R ²	334	0.43	361	0.43	550	0.36	246	0.46	265	0.46	549	0.28

Appendix Table 4 (continued)

Independent variable, statistic	1996						2006					
	Initial capital		Ending capital		No capital		Initial capital		Ending capital		No capital	
	Value	P-val.	Value	P-val.	Value	P-val.	Value	P-val.	Value	P-val.	Value	P-val.
ELECTRONICS-RELATED MACHINERY, eq. (2); SOE & East Indonesian plants omitted												
LK_i	-0.0208	0.58	0.0044	0.91	-	-	0.0797	0.16	0.0916	0.10	-	-
LL_i	0.3938	0.01	0.3076	0.03	0.3453	0.00	0.0784	0.79	0.2061	0.49	0.1580	0.40
LM_i	-0.7078	0.00	-0.6914	0.00	-0.7772	0.00	-1.0498	0.00	-1.1671	0.00	-1.0005	0.00
LE_i	0.3708	0.00	0.3773	0.00	0.3872	0.00	0.6179	0.00	0.5834	0.00	0.5553	0.00
RD_i	0.4322	0.00	0.4408	0.01	0.0520	0.84	2.2044	0.11	2.4111	0.08	1.7091	0.22
SM_i	-0.0064	0.09	-0.0059	0.11	0.0014	0.70	-0.0060	0.50	-0.0057	0.50	0.0039	0.63
SH_i	0.0352	0.08	0.0349	0.08	0.0196	0.22	0.0288	0.17	0.0382	0.06	0.0332	0.19
YR_i	0.0090	0.40	0.0139	0.22	0.0073	0.41	0.0348	0.14	0.0242	0.28	0.0275	0.03
$DFMIN_i$	-0.3173	0.12	-0.3042	0.11	0.2326	0.56	-1.4598	0.35	-1.4833	0.39	-0.8454	0.42
$DFMAJ_i$	0.3760	0.12	0.3084	0.21	0.7063	0.02	-0.4241	0.51	-0.5640	0.38	-0.5571	0.40
$DFHVV_i$	1.4220	0.00	1.3754	0.00	1.5158	0.00	0.3338	0.58	0.3483	0.55	0.5802	0.22
TestDFs	8.71	0.00	8.89	0.00	3.50	0.03	0.95	0.39	1.06	0.35	2.23	0.11
Obs./R ²	334	0.45	361	0.44	550	0.37	246	0.46	265	0.47	549	0.28
MOTOR VEHICLES, eq. (1); SOE & East Indonesian plants omitted												
LK_i	0.1183	0.29	0.0228	0.87	-	-	-0.0524	0.74	-0.0502	0.68	-	-
LL_i	0.7645	0.09	0.9384	0.04	0.7975	0.02	1.3805	0.06	1.2911	0.05	0.5066	0.15
LM_i	-1.2538	0.00	-1.2936	0.00	-1.1322	0.00	-1.8475	0.00	-1.7536	0.00	-1.2658	0.00
LE_i	0.5309	0.00	0.5694	0.00	0.5425	0.00	0.7891	0.00	0.8699	0.00	0.7919	0.00
RD_i	-0.4225	0.20	-0.4610	0.05	-0.7163	0.00	1.4831	0.60	0.5123	0.80	-0.9330	0.56
SM_i	0.0031	0.62	0.0019	0.75	0.0026	0.60	0.0018	0.94	0.0015	0.95	-0.0021	0.92
SH_i	0.0372	0.29	0.0409	0.24	0.0253	0.28	-0.0821	0.17	-0.0634	0.23	-0.0448	0.23
YR_i	-0.0458	0.12	-0.0384	0.18	-0.0229	0.30	-0.0046	0.93	0.0119	0.80	0.0563	0.03
DF_i	-0.1124	0.84	-0.2590	0.65	-0.4821	0.27	-0.0470	0.96	-0.4883	0.59	0.7662	0.18
Obs./R ²	168	0.39	185	0.39	261	0.39	131	0.41	150	0.37	320	0.29
MOTOR VEHICLES, eq. (2); SOE and East Indonesian plants omitted												
LK_i	0.1112	0.34	0.0143	0.00	-	-	-0.0575	0.71	-0.0560	0.64	-	-
LL_i	0.7904	0.09	0.9713	0.00	0.8522	0.01	1.3654	0.07	1.2783	0.05	0.5428	0.13
LM_i	-1.2635	0.00	-1.3073	0.00	-1.1586	0.00	-1.8386	0.00	-1.7561	0.00	-1.2935	0.00
LE_i	0.5310	0.00	0.5686	0.00	0.5437	0.00	0.7911	0.00	0.8751	0.00	0.7854	0.00
RD_i	-0.4614	0.23	-0.4880	0.00	-0.7599	0.00	1.4156	0.62	0.4520	0.83	-0.5727	0.72
SM_i	0.0027	0.67	0.0014	0.00	0.0019	0.70	0.0018	0.94	0.0018	0.94	-0.0007	0.97
SH_i	0.0399	0.28	0.0445	0.00	0.0314	0.20	-0.0809	0.19	-0.0615	0.25	-0.0449	0.23
YR_i	-0.0455	0.13	-0.0378	0.00	-0.0233	0.31	-0.0035	0.95	0.0116	0.81	0.0481	0.08
$DFMIN_i$	-0.3706	0.66	-0.5954	0.00	-1.2590	0.14	-0.7674	0.53	-1.6115	0.17	3.8616	0.30
$DFMAJ_i$	-0.0281	0.97	-0.2320	0.00	-0.2373	0.66	-0.0345	0.98	-0.1017	0.94	1.0873	0.43
$DFHVV_i$	0.3042	0.67	0.4769	0.00	0.0852	0.88	0.0731	0.94	-0.4416	0.68	-0.0019	1.00
TestDFs	0.24	0.78	0.66	0.52	1.04	0.36	0.20	0.82	0.62	0.54	0.68	0.51
Obs./R ²	168	0.39	185	0.39	261	0.40	131	0.41	150	0.37	320	0.31

Appendix Table 4 (continued)

Independent variable, statistic	1996						2006					
	Initial capital		Ending capital		No capital		Initial capital		Ending capital		No capital	
	Value	P-val.	Value	P-val.	Value	P-val.	Value	P-val.	Value	P-val.	Value	P-val.
OTHER TRANSPORTATION MACHINERY, eq. (1)												
LK_i	-0.0402	0.32	-0.0416	0.46	-	-	0.0718	0.45	0.1117	0.17	-	-
LL_i	0.3774	0.13	0.2690	0.32	0.4699	0.11	-0.4838	0.10	-0.5601	0.05	-0.1312	0.76
LM_i	-0.5010	0.00	-0.4913	0.00	-0.7617	0.00	-0.3349	0.05	-0.2751	0.08	-0.5875	0.00
LE_i	0.3188	0.00	0.3130	0.00	0.3551	0.00	0.3447	0.00	0.3593	0.00	0.7147	0.00
RD_i	0.0583	0.89	0.0223	0.96	0.0031	0.99	-0.2292	0.13	-0.1961	0.18	-0.2269	0.49
SM_i	0.0006	0.93	0.0037	0.59	0.0012	0.84	0.0065	0.41	0.0025	0.71	0.0015	0.85
SH_i	-0.0302	0.15	0.0035	0.90	0.0396	0.18	0.0095	0.61	0.0088	0.62	0.0322	0.26
YR_i	0.0621	0.00	0.0680	0.00	0.0615	0.01	0.0061	0.69	-0.0044	0.76	0.0241	0.30
DS_i	-0.8876	0.12	-1.2453	0.03	-1.7666	0.02	-0.2077	0.71	-0.1066	0.84	-0.4786	0.60
DF_i	0.3097	0.58	-0.2563	0.70	0.0900	0.89	-0.5001	0.54	-0.0574	0.94	-0.3272	0.79
Obs./R ²	206	0.45	226	0.42	320	0.00	166	0.32	187	0.28	358	0.00
OTHER TRANSPORTATION MACHINERY, eq. (2); minority-foreign plants omitted												
LK_i	-0.0429	0.29	-0.0421	0.45	-	-	0.0799	0.40	0.1319	0.10	-	-
LL_i	0.2582	0.32	0.1210	0.66	0.4742	0.11	-0.5119	0.07	-0.5806	0.04	-0.1057	0.80
LM_i	0.3252	0.00	0.3186	0.00	0.3525	0.00	-0.3197	0.06	-0.2572	0.10	-0.5690	0.00
LE_i	-0.4611	0.00	-0.4384	0.01	-0.7404	0.00	0.3464	0.00	0.3642	0.00	0.7178	0.00
RD_i	0.0971	0.81	0.0782	0.84	0.0317	0.93	-0.2056	0.12	-0.1679	0.17	-0.1969	0.54
SM_i	-0.0004	0.95	0.0025	0.72	0.0000	1.00	0.0065	0.41	0.0024	0.72	0.0014	0.86
SH_i	-0.0255	0.23	0.0085	0.75	0.0470	0.12	0.0088	0.64	0.0058	0.75	0.0269	0.37
YR_i	0.0671	0.00	0.0743	0.00	0.0692	0.00	0.0085	0.57	-0.0014	0.93	0.0291	0.21
DS_i	-0.8985	0.10	-1.2539	0.03	-1.9163	0.01	-0.1968	0.72	-0.0701	0.90	-0.4544	0.62
$DFMAJ_i$	-0.2723	0.65	-1.0233	0.15	-0.2439	0.75	-1.8716	0.09	-1.8904	0.02	-2.1550	0.04
$DFHVY_i$	2.3473	0.00	2.3667	0.00	1.4210	0.28	-0.2436	0.77	0.3200	0.70	0.3592	0.80
TestDFs	7.06	0.01	9.09	0.00	1.22	0.27	2.38	0.12	6.96	0.01	3.54	0.06
Obs./R ²	206	0.46	226	0.43	314	0.40	166	0.32	186	0.29	356	0.22

Notes: - = estimate could not be obtained; in the Obs./R² rows, the coefficient column contains the number of observations and the P-value column contains the R-squared; the TestDFs rows show Wald tests of the hypothesis that coefficients on all foreign ownership dummies are equal and associated p-values; industry and region dummies also included as relevant (see explanation in the text); full results including the constant and all dummies are available from the authors.

Appendix Table 5: OLS Estimates of SOE-Private and MNC-Private Diesel Intensity Differentials and Other Slope Coefficients from Equations (1) and (2); all p-values based on robust standard errors

Independent variable, statistic	1996						2006					
	Initial capital		Ending capital		No capital		Initial capital		Ending capital		No capital	
	Value	P-val.	Value	P-val.	Value	P-val.	Value	P-val.	Value	P-val.	Value	P-val.
10 LARGE DIESEL FUEL USING INDUSTRIES COMBINED, eq. (1)												
LK_i	-0.0007	0.97	0.0086	0.65	-	-	0.0078	0.60	0.0051	0.72	-	-
LL_i	0.3344	0.00	0.3038	0.00	0.2753	0.00	0.2043	0.00	0.1582	0.02	0.0952	0.05
LM_i	-0.7793	0.00	-0.7534	0.00	-0.7105	0.00	-0.8842	0.00	-0.8486	0.00	-0.7797	0.00
LE_i	0.3658	0.00	0.3643	0.00	0.3823	0.00	0.5233	0.00	0.5178	0.00	0.5139	0.00
RD_i	0.0175	0.83	0.0281	0.72	0.1547	0.23	0.0818	0.42	0.0594	0.50	0.0463	0.62
SM_i	0.0098	0.00	0.0093	0.00	0.0084	0.00	0.0080	0.00	0.0077	0.00	0.0099	0.00
SH_i	0.0085	0.17	0.0070	0.23	0.0047	0.31	0.0093	0.17	0.0099	0.13	0.0049	0.36
YR_i	0.0037	0.28	0.0027	0.39	0.0020	0.50	0.0140	0.02	0.0129	0.02	0.0227	0.00
DS_i	0.1662	0.53	0.1788	0.48	-0.0444	0.85	0.1451	0.63	0.2050	0.47	-0.2287	0.18
DF_i	0.1487	0.21	0.1321	0.23	-0.0700	0.47	0.3102	0.21	0.2450	0.28	0.2117	0.17
Obs./R ²	8,875	0.35	9,557	0.34	12,919	0.33	7,782	0.29	8,501	0.29	14,672	0.26
10 LARGE DIESEL FUEL USING INDUSTRIES COMBINED, eq. (2)												
LK_i	-0.0011	0.96	0.0083	0.66	-	-	0.0073	0.62	0.0048	0.73	-	-
LL_i	0.3344	0.00	0.3049	0.00	0.2756	0.00	0.2017	0.01	0.1563	0.02	0.0913	0.06
LM_i	-0.7782	0.00	-0.7527	0.00	-0.7104	0.00	-0.8826	0.00	-0.8475	0.00	-0.7790	0.00
LE_i	0.3659	0.00	0.3642	0.00	0.3823	0.00	0.5234	0.00	0.5178	0.00	0.5138	0.00
RD_i	0.0146	0.85	0.0260	0.74	0.1545	0.23	0.0772	0.45	0.0569	0.52	0.0398	0.67
SM_i	0.0098	0.00	0.0093	0.00	0.0083	0.00	0.0080	0.00	0.0077	0.00	0.0099	0.00
SH_i	0.0087	0.17	0.0070	0.23	0.0048	0.31	0.0091	0.18	0.0098	0.13	0.0047	0.38
YR_i	0.0038	0.26	0.0028	0.38	0.0020	0.50	0.0140	0.02	0.0129	0.02	0.0226	0.00
DS_i	0.1625	0.54	0.1756	0.49	-0.0449	0.84	0.1462	0.63	0.2060	0.47	-0.2260	0.19
$DFMIN_i$	-0.2012	0.34	-0.2678	0.19	-0.1409	0.57	0.9441	0.42	0.6924	0.53	1.6705	0.07
$DFMAJ_i$	0.0967	0.51	0.1300	0.36	-0.0702	0.56	0.1436	0.57	0.1497	0.54	0.0950	0.63
$DFHVY_i$	0.3847	0.07	0.2945	0.12	-0.0364	0.81	0.3049	0.31	0.2321	0.39	0.0991	0.56
TestDFs	2.11	0.12	2.38	0.09	0.07	0.93	0.30	0.74	0.14	0.87	1.43	0.24
Obs./R ²	8,875	0.35	9,557	0.34	12,919	0.33	7,782	0.29	8,501	0.29	14,672	0.26
FOOD AND BEVERAGES, eq. (1)												
LK_i	-0.0487	0.17	-0.0337	0.34	-	-	0.0446	0.07	0.0407	0.08	-	-
LL_i	0.6307	0.00	0.6342	0.00	0.5364	0.00	0.2758	0.03	0.2320	0.06	0.2650	0.00
LM_i	-1.0304	0.00	-1.0298	0.00	-0.9275	0.00	-1.0780	0.00	-1.0528	0.00	-0.9615	0.00
LE_i	0.3774	0.00	0.3740	0.00	0.3830	0.00	0.5704	0.00	0.5677	0.00	0.5395	0.00
RD_i	0.1646	0.53	0.1533	0.57	0.1943	0.43	-0.0224	0.85	-0.0287	0.81	-0.0840	0.62
SM_i	0.0191	0.01	0.0186	0.00	0.0161	0.00	0.0116	0.00	0.0119	0.00	0.0129	0.00
SH_i	-0.0163	0.47	-0.0123	0.51	-0.0152	0.24	0.0107	0.39	0.0141	0.23	0.0086	0.36
YR_i	0.0040	0.54	0.0025	0.68	0.0016	0.77	0.0275	0.01	0.0233	0.01	0.0277	0.00
DS_i	0.0910	0.84	0.1473	0.73	-0.3635	0.27	0.5671	0.18	0.6466	0.11	0.4532	0.16
DF_i	0.2141	0.41	0.2125	0.41	-0.0501	0.83	0.6773	0.28	0.6170	0.31	0.7679	0.08
Obs./R ²	3,074	0.38	3,268	0.38	4,299	0.37	3,268	0.29	3,528	0.29	5,543	0.29

Appendix Table 5 (continued)

Independent variable, statistic	1996						2006					
	Initial capital		Ending capital		No capital		Initial capital		Ending capital		No capital	
	Value	P-val.	Value	P-val.	Value	P-val.	Value	P-val.	Value	P-val.	Value	P-val.
FOOD AND BEVERAGES, eq. (2)												
LK_i	-0.0498	0.17	-0.0347	0.32	-	-	0.0422	0.09	0.0386	0.10	-	-
LL_i	0.6338	0.00	0.6384	0.00	0.5329	0.00	0.2670	0.04	0.2234	0.07	0.2461	0.01
LM_i	-1.0306	0.00	-1.0299	0.00	-0.9275	0.00	-1.0736	0.00	-1.0483	0.00	-0.9547	0.00
LE_i	0.3775	0.00	0.3739	0.00	0.3832	0.00	0.5696	0.00	0.5672	0.00	0.5371	0.00
RD_i	0.1623	0.54	0.1519	0.57	0.1900	0.44	-0.0219	0.85	-0.0284	0.82	-0.0701	0.66
SM_i	0.0191	0.01	0.0187	0.00	0.0160	0.00	0.0116	0.00	0.0120	0.00	0.0128	0.00
SH_i	-0.0167	0.46	-0.0127	0.49	-0.0150	0.25	0.0091	0.49	0.0129	0.30	0.0058	0.55
YR_i	0.0041	0.53	0.0025	0.67	0.0017	0.76	0.0275	0.01	0.0233	0.01	0.0279	0.00
DS_i	0.0857	0.85	0.1425	0.74	-0.3630	0.27	0.5681	0.18	0.6475	0.11	0.4604	0.16
$DFMIN_i$	0.0660	0.88	-0.0778	0.86	0.5329	0.53	3.1712	0.47	2.6981	0.51	6.4158	0.06
$DFMAJ_i$	-0.0554	0.86	0.0409	0.90	-0.2064	0.41	0.2506	0.47	0.1793	0.59	0.3266	0.32
$DFHVY_i$	0.7942	0.10	0.6442	0.15	-0.1165	0.69	0.6089	0.45	0.5871	0.45	0.2531	0.58
TestDFs	1.22	0.30	0.88	0.41	0.38	0.69	0.33	0.72	0.33	0.72	1.66	0.19
Obs./R ²	3,074	0.38	3,268	0.38	4,299	0.37	3,268	0.29	3,528	0.29	5,543	0.29
TEXTILES, eq. (1)												
LK_i	0.0331	0.44	0.0289	0.48	-	-	0.0174	0.38	0.0146	0.44	-	-
LL_i	-0.0044	0.96	0.0065	0.94	0.0153	0.86	-0.1075	0.27	-0.1683	0.08	-0.2187	0.01
LM_i	-0.4526	0.00	-0.4624	0.00	-0.4979	0.00	-0.2780	0.00	-0.2461	0.00	-0.2766	0.00
LE_i	0.3371	0.00	0.3381	0.00	0.3622	0.00	0.3059	0.00	0.3115	0.00	0.3661	0.00
RD_i	0.8575	0.13	1.2953	0.10	1.6209	0.00	1.5615	0.25	1.5128	0.27	3.8715	0.16
SM_i	0.0065	0.05	0.0063	0.05	0.0096	0.01	0.0081	0.00	0.0082	0.00	0.0086	0.00
SH_i	0.0388	0.19	0.0356	0.20	0.0416	0.03	0.0054	0.65	0.0068	0.56	0.0108	0.39
YR_i	0.0026	0.66	0.0035	0.50	0.0066	0.36	0.0054	0.39	0.0067	0.26	0.0143	0.01
DS_i	-0.0161	0.97	-0.0273	0.95	1.0566	0.43	0.0297	0.97	0.0367	0.96	-0.5818	0.12
DF_i	0.1988	0.54	0.2855	0.37	-0.0040	0.99	-0.1648	0.62	-0.2562	0.40	-0.3257	0.22
Obs./R ²	1,306	0.31	1,430	0.32	1,839	0.31	1,185	0.32	1,285	0.31	2,109	0.29
TEXTILES, eq. (2)												
LK_i	0.0337	0.43	0.0302	0.47	-	-	0.0171	0.39	0.0144	0.44	-	-
LL_i	-0.0039	0.97	0.0059	0.95	0.0172	0.84	-0.1099	0.26	-0.1694	0.08	-0.2216	0.01
LM_i	-0.4544	0.00	-0.4645	0.00	-0.5001	0.00	-0.2802	0.00	-0.2499	0.00	-0.2796	0.00
LE_i	0.3376	0.00	0.3387	0.00	0.3625	0.00	0.3072	0.00	0.3129	0.00	0.3667	0.00
RD_i	0.8282	0.15	1.2506	0.12	1.5917	0.00	1.6011	0.24	1.5518	0.25	3.7972	0.15
SM_i	0.0064	0.05	0.0061	0.05	0.0096	0.01	0.0081	0.00	0.0083	0.00	0.0087	0.00
SH_i	0.0391	0.19	0.0359	0.19	0.0417	0.03	0.0050	0.68	0.0062	0.60	0.0102	0.41
YR_i	0.0024	0.68	0.0033	0.53	0.0064	0.37	0.0049	0.43	0.0061	0.31	0.0136	0.02
DS_i	-0.0139	0.97	-0.0243	0.95	1.0581	0.43	0.0306	0.97	0.0394	0.96	-0.5754	0.12
$DFMIN_i$	-0.0195	0.98	-0.0744	0.94	-0.0443	0.95	-0.0668	0.93	-0.1089	0.88	-0.5728	0.35
$DFMAJ_i$	0.3882	0.38	0.5981	0.18	0.2192	0.52	0.3286	0.61	0.2530	0.68	0.3986	0.50
$DFHVY_i$	0.0637	0.90	0.0482	0.92	-0.2341	0.50	-0.5010	0.11	-0.5824	0.04	-0.6769	0.00
TestDFs	0.17	0.85	0.47	0.62	0.47	0.62	0.82	0.44	0.94	0.39	1.54	0.22
Obs./R ²	1,306	0.31	1,430	0.32	1,839	0.31	1,185	0.32	1,285	0.32	2,109	0.29

Appendix Table 5 (continued)

Independent variable, statistic	1996						2006					
	Initial capital		Ending capital		No capital		Initial capital		Ending capital		No capital	
	Value	P-val.	Value	P-val.	Value	P-val.	Value	P-val.	Value	P-val.	Value	P-val.
WOOD PRODUCTS, eq. (1)												
LK_i	0.0180	0.59	0.0163	0.61	-	-	0.0220	0.64	0.0213	0.63	-	-
LL_i	0.6322	0.00	0.5807	0.00	0.4314	0.00	0.6693	0.00	0.6365	0.00	0.2199	0.15
LM_i	-1.1383	0.00	-1.1014	0.00	-0.9559	0.00	-1.4688	0.00	-1.3766	0.00	-1.4905	0.00
LE_i	0.4300	0.00	0.4292	0.00	0.4243	0.00	0.6369	0.00	0.6182	0.00	0.8176	0.00
RD_i	-0.1380	0.70	-0.7149	0.33	0.2259	0.28	0.4083	0.77	0.7131	0.56	0.7512	0.55
SM_i	0.0060	0.06	0.0058	0.06	0.0061	0.02	-0.0079	0.08	-0.0087	0.04	0.0054	0.28
SH_i	0.0070	0.71	0.0171	0.34	-0.0017	0.92	0.0204	0.17	0.0172	0.21	0.0100	0.55
YR_i	0.0141	0.18	0.0162	0.12	0.0071	0.36	-0.0043	0.77	-0.0023	0.88	0.0481	0.02
DS_i	0.3106	0.63	0.2786	0.67	0.0096	0.98	-2.6113	0.00	-2.4617	0.00	-2.7071	0.00
DF_i	0.4004	0.24	0.2562	0.39	0.0590	0.81	0.2934	0.63	0.3292	0.54	0.2633	0.56
Obs./R ²	1,107	0.42	1,181	0.41	1,647	0.39	775	0.32	851	0.31	1,489	0.28
WOOD PRODUCTS, eq. (2)												
LK_i	0.0180	0.60	0.0160	0.62	-	-	0.0208	0.66	0.0207	0.64	-	-
LL_i	0.6329	0.00	0.5807	0.00	0.4319	0.00	0.6688	0.00	0.6355	0.00	0.2195	0.15
LM_i	-1.1385	0.00	-1.1005	0.00	-0.9554	0.00	-1.4694	0.00	-1.3768	0.00	-1.4904	0.00
LE_i	0.4299	0.00	0.4294	0.00	0.4243	0.00	0.6378	0.00	0.6197	0.00	0.8186	0.00
RD_i	-0.1379	0.71	-0.7172	0.33	0.2246	0.29	0.3994	0.77	0.6927	0.57	0.7322	0.56
SM_i	0.0060	0.06	0.0058	0.06	0.0061	0.02	-0.0082	0.07	-0.0090	0.04	0.0053	0.29
SH_i	0.0068	0.72	0.0169	0.35	-0.0020	0.90	0.0211	0.15	0.0178	0.20	0.0112	0.51
YR_i	0.0140	0.19	0.0164	0.12	0.0072	0.35	-0.0036	0.81	-0.0015	0.92	0.0484	0.02
DS_i	0.3106	0.63	0.2762	0.67	0.0085	0.99	-2.5976	0.00	-2.4500	0.00	-2.7065	0.00
$DFMIN_i$	0.3670	0.21	0.0069	0.99	-0.1788	0.54	-0.3158	0.59	-0.3993	0.44	-0.6113	0.17
$DFMAJ_i$	0.4683	0.29	0.2378	0.49	0.0532	0.86	-0.7696	0.40	-0.7710	0.39	-0.2080	0.81
$DFHVV_i$	0.3455	0.58	0.3850	0.50	0.1778	0.72	0.7403	0.34	0.6779	0.28	0.4853	0.37
TestDFs	0.02	0.98	0.19	0.83	0.29	0.75	1.03	0.36	1.38	0.26	1.45	0.24
Obs./R ²	1,107	0.42	1,181	0.41	1,647	0.39	775	0.32	851	0.31	1,489	0.28
PAPER PRODUCTS, eq. (1); East Indonesian plants omitted for 1996												
LK_i	0.1497	0.49	0.1793	0.41	-	-	0.0286	0.72	-0.0532	0.54	-	-
LL_i	-0.0864	0.82	-0.1956	0.59	-0.0020	0.99	0.3123	0.50	0.3515	0.43	0.2346	0.36
LM_i	-0.7093	0.00	-0.6593	0.00	-0.5820	0.00	-0.6940	0.01	-0.7063	0.01	-0.5423	0.00
LE_i	0.4133	0.00	0.4116	0.00	0.3712	0.00	0.4219	0.00	0.4528	0.00	0.3869	0.00
RD_i	1.0301	0.22	1.0743	0.19	1.2247	0.14	0.2026	0.91	0.6349	0.70	-0.3406	0.72
SM_i	0.0108	0.14	0.0137	0.04	0.0103	0.04	0.0091	0.25	0.0042	0.62	0.0026	0.70
SH_i	-0.0023	0.96	-0.0322	0.45	-0.0127	0.54	-0.0323	0.17	-0.0423	0.06	-0.0387	0.02
YR_i	0.0130	0.44	0.0156	0.33	0.0029	0.82	0.0207	0.32	0.0269	0.19	0.0210	0.09
DS_i	-1.2558	0.01	-1.3995	0.00	-1.0341	0.03	-2.4388	0.07	-2.5753	0.05	-0.6630	0.45
DF_i	0.5846	0.30	1.0136	0.14	0.7027	0.14	0.6735	0.38	0.4475	0.52	0.1578	0.74
Obs./R ²	186	0.35	214	0.36	339	0.33	229	0.21	263	0.23	490	0.19

Appendix Table 5 (continued)

Independent variable, statistic	1996						2006					
	Initial capital		Ending capital		No capital		Initial capital		Ending capital		No capital	
	Value	P-val.	Value	P-val.	Value	P-val.	Value	P-val.	Value	P-val.	Value	P-val.
PAPER PRODUCTS, eq. (2), minority-foreign & East Indonesian plants omitted for 1996												
LK_i	0.1463	0.49	0.1640	0.46	-	-	0.0285	0.73	-0.0534	0.54	-	-
LL_i	-0.1373	0.73	-0.2459	0.50	-0.0212	0.90	0.3223	0.49	0.3827	0.39	0.2408	0.35
LM_i	-0.6692	0.00	-0.6174	0.00	-0.5595	0.00	-0.7050	0.01	-0.7378	0.01	-0.5527	0.00
LE_i	0.4179	0.00	0.4127	0.00	0.3720	0.00	0.4185	0.00	0.4478	0.00	0.3814	0.00
RD_i	1.0232	0.23	1.0786	0.20	1.2288	0.14	0.2294	0.90	0.6766	0.67	-0.2707	0.76
SM_i	0.0110	0.14	0.0144	0.03	0.0107	0.03	0.0094	0.24	0.0048	0.57	0.0033	0.63
SH_i	-0.0160	0.72	-0.0503	0.23	-0.0256	0.24	-0.0317	0.18	-0.0399	0.08	-0.0391	0.02
YR_i	0.0129	0.44	0.0164	0.31	0.0046	0.71	0.0207	0.32	0.0266	0.20	0.0204	0.11
DS_i	-1.2212	0.01	-1.2904	0.00	-0.9691	0.03	-2.3954	0.08	-2.5126	0.06	-0.6280	0.47
$DFMIN_i$	-	-	-	-	-	-	-0.0568	0.93	-1.1039	0.26	-0.6287	0.48
$DFMAJ_i$	0.1890	0.74	0.3430	0.56	0.1840	0.67	1.0548	0.62	1.1181	0.59	1.3249	0.42
$DFHVY_i$	2.4790	0.14	2.5658	0.05	2.4796	0.03	0.6525	0.39	0.5107	0.45	0.0292	0.95
TestDFs	1.63	0.20	2.77	0.10	3.51	0.06	0.37	0.69	1.22	0.30	0.58	0.56
Obs./R ²	186	0.34	214	0.36	339	0.34	229	0.21	263	0.23	490	0.19
CHEMICALS, eq. (1)												
LK_i	0.0664	0.34	0.0617	0.35	-	-	-0.1285	0.14	-0.1417	0.07	-	-
LL_i	-0.1129	0.42	-0.1654	0.22	0.1763	0.29	0.6182	0.03	0.6077	0.02	0.2061	0.30
LM_i	-0.5504	0.00	-0.4987	0.00	-0.6018	0.00	-1.0871	0.00	-1.1180	0.00	-0.7855	0.00
LE_i	0.2990	0.00	0.2954	0.00	0.3420	0.00	0.4802	0.00	0.5023	0.00	0.4394	0.00
RD_i	-0.0916	0.04	-0.0823	0.03	-0.1001	0.01	0.4099	0.31	-0.1275	0.64	-0.1292	0.59
SM_i	0.0039	0.41	0.0028	0.55	0.0024	0.59	0.0070	0.52	0.0122	0.29	0.0081	0.32
SH_i	0.0040	0.63	-0.0007	0.93	-0.0027	0.72	0.0243	0.26	0.0265	0.17	0.0091	0.54
YR_i	0.0184	0.04	0.0173	0.05	0.0118	0.13	-0.0030	0.83	-0.0026	0.85	0.0060	0.52
DS_i	1.0070	0.46	0.9122	0.46	0.2980	0.76	0.8634	0.39	1.0135	0.28	-0.5227	0.25
DF_i	0.3064	0.37	0.2888	0.36	-0.2394	0.34	0.1233	0.88	-0.0893	0.90	-0.3986	0.29
Obs./R ²	630	0.29	665	0.29	994	0.24	493	0.30	544	0.31	1,099	0.26
CHEMICALS, eq. (2)												
LK_i	0.0704	0.31	0.0648	0.33	-	-	-0.1314	0.13	-0.1455	0.07	-	-
LL_i	-0.1197	0.40	-0.1658	0.22	0.1878	0.27	0.6274	0.03	0.6098	0.02	0.2133	0.28
LM_i	-0.5473	0.00	-0.4989	0.00	-0.6073	0.00	-1.0810	0.00	-1.1073	0.00	-0.7859	0.00
LE_i	0.2998	0.00	0.2965	0.00	0.3423	0.00	0.4828	0.00	0.5054	0.00	0.4395	0.00
RD_i	-0.0915	0.04	-0.0822	0.03	-0.0980	0.01	0.4607	0.27	-0.1166	0.68	-0.1147	0.64
SM_i	0.0038	0.42	0.0027	0.55	0.0023	0.60	0.0073	0.51	0.0123	0.28	0.0081	0.32
SH_i	0.0023	0.78	-0.0022	0.79	-0.0033	0.65	0.0222	0.32	0.0247	0.21	0.0084	0.57
YR_i	0.0185	0.04	0.0171	0.05	0.0120	0.12	-0.0012	0.93	-0.0013	0.92	0.0062	0.50
DS_i	0.9933	0.46	0.9016	0.47	0.2896	0.77	0.7830	0.44	0.9600	0.31	-0.5324	0.24
$DFMIN_i$	-0.6358	0.06	-0.6121	0.04	-1.0605	0.00	-0.7437	0.45	-0.7266	0.42	-1.1914	0.05
$DFMAJ_i$	0.5409	0.24	0.5153	0.23	-0.0350	0.91	-0.7309	0.26	-0.9994	0.10	-0.5382	0.12
$DFHVY_i$	0.4151	0.35	0.3851	0.34	-0.1724	0.61	0.7284	0.52	0.4839	0.64	-0.2015	0.69
TestDFs	4.77	0.01	5.48	0.00	4.03	0.02	0.97	0.38	1.18	0.31	0.99	0.37
Obs./R ²	630	0.30	665	0.29	994	0.24	493	0.30	544	0.31	1,099	0.26

Appendix Table 5 (continued)

Independent variable, statistic	1996						2006					
	Initial capital		Ending capital		No capital		Initial capital		Ending capital		No capital	
	Value	P-val.	Value	P-val.	Value	P-val.	Value	P-val.	Value	P-val.	Value	P-val.
RUBBER & PLASTIC PRODUCTS, eq. (1)												
LK_i	0.0382	0.49	0.0761	0.09	-	-	0.0014	0.96	-0.0004	0.99	-	-
LL_i	0.0886	0.42	0.0380	0.69	0.0676	0.36	0.0919	0.38	-0.0345	0.77	-0.1337	0.13
LM_i	-0.6022	0.00	-0.5773	0.00	-0.5853	0.00	-0.6077	0.00	-0.5657	0.00	-0.4754	0.00
LE_i	0.2985	0.00	0.2916	0.00	0.3252	0.00	0.3457	0.00	0.3551	0.00	0.3619	0.00
RD_i	0.1710	0.16	0.1732	0.15	0.0893	0.36	1.2470	0.31	1.1197	0.31	1.2103	0.26
SM_i	0.0074	0.02	0.0045	0.14	0.0050	0.06	0.0025	0.43	0.0002	0.95	0.0025	0.41
SH_i	-0.0081	0.31	-0.0039	0.63	0.0050	0.53	0.0172	0.24	0.0175	0.22	-0.0005	0.97
YR_i	-0.0035	0.61	-0.0028	0.64	-0.0033	0.49	-0.0050	0.54	-0.0040	0.65	0.0052	0.55
DS_i	-0.3923	0.09	-0.4841	0.03	-0.2700	0.18	0.0645	0.91	-0.1045	0.85	-0.3620	0.16
DF_i	-0.0201	0.92	-0.1024	0.56	0.0007	1.00	0.2705	0.41	0.3230	0.29	0.0525	0.81
Obs./R ²	868	0.24	972	0.25	1,432	0.24	744	0.25	848	0.23	1,712	0.20
RUBBER & PLASTIC PRODUCTS, eq. (2)												
LK_i	0.0397	0.48	0.0776	0.09	-	-	0.0036	0.91	0.0014	0.96	-	-
LL_i	0.0899	0.41	0.0354	0.71	0.0651	0.38	0.0935	0.38	-0.0320	0.79	-0.1333	0.13
LM_i	-0.6074	0.00	-0.5783	0.00	-0.5806	0.00	-0.6092	0.00	-0.5677	0.00	-0.4768	0.00
LE_i	0.3013	0.00	0.2934	0.00	0.3260	0.00	0.3439	0.00	0.3532	0.00	0.3620	0.00
RD_i	0.1554	0.16	0.1621	0.14	0.0874	0.35	1.2370	0.29	1.1025	0.29	1.2304	0.25
SM_i	0.0071	0.02	0.0043	0.16	0.0048	0.08	0.0024	0.43	0.0002	0.95	0.0024	0.42
SH_i	-0.0079	0.32	-0.0036	0.65	0.0050	0.53	0.0165	0.26	0.0170	0.23	-0.0007	0.95
YR_i	-0.0027	0.69	-0.0023	0.71	-0.0030	0.53	-0.0055	0.50	-0.0045	0.60	0.0050	0.57
DS_i	-0.4177	0.07	-0.5024	0.02	-0.2704	0.18	0.0776	0.89	-0.0913	0.87	-0.3579	0.16
$DFMIN_i$	-0.2142	0.53	-0.2476	0.42	-0.2626	0.22	2.7630	0.21	2.7773	0.21	1.7606	0.23
$DFMAJ_i$	-0.5502	0.01	-0.5006	0.01	-0.4486	0.01	0.4985	0.50	0.6368	0.39	-0.0386	0.93
$DFHVV_i$	0.5867	0.06	0.3431	0.22	0.5252	0.18	0.0200	0.95	0.0672	0.81	-0.0186	0.93
TestDFs	5.03	0.01	3.59	0.03	2.74	0.06	0.94	0.39	1.01	0.37	0.76	0.47
Obs./R ²	868	0.24	972	0.25	1,432	0.24	744	0.25	848	0.23	1,712	0.20
NON-METALLIC MINERAL PRODUCTS, eq. (1)												
LK_i	0.0677	0.36	0.0437	0.47	-	-	-0.0204	0.75	0.0126	0.83	-	-
LL_i	0.2481	0.32	0.1900	0.43	0.1052	0.62	0.0011	1.00	-0.0008	1.00	0.0542	0.85
LM_i	-0.6270	0.00	-0.5022	0.00	-0.4752	0.00	-1.2036	0.00	-1.2104	0.00	-1.0898	0.00
LE_i	0.4143	0.00	0.4148	0.00	0.4983	0.00	0.9267	0.00	0.9178	0.00	0.8778	0.00
RD_i	-0.3180	0.49	-0.3034	0.51	-0.1452	0.78	-2.0922	0.13	-2.0908	0.13	-2.3275	0.02
SM_i	0.0061	0.48	0.0029	0.73	0.0015	0.82	0.0160	0.06	0.0159	0.05	0.0117	0.11
SH_i	0.0033	0.90	0.0038	0.88	-0.0019	0.93	-0.0120	0.79	-0.0105	0.80	0.0156	0.63
YR_i	0.0085	0.32	0.0057	0.48	0.0032	0.72	0.0009	0.96	0.0059	0.73	0.0369	0.01
DS_i	0.9386	0.31	0.8224	0.35	0.2186	0.78	-0.1585	0.91	-0.1968	0.89	-1.5017	0.02
DF_i	-1.1835	0.02	-1.2284	0.01	-0.8209	0.13	-0.1072	0.94	-0.0826	0.95	-0.9925	0.18
Obs./R ²	1,217	0.33	1,288	0.33	1,596	0.33	672	0.36	710	0.36	1,276	0.34

Appendix Table 5 (continued)

Independent variable, statistic	1996						2006					
	Initial capital		Ending capital		No capital		Initial capital		Ending capital		No capital	
	Value	P-val.	Value	P-val.	Value	P-val.	Value	P-val.	Value	P-val.	Value	P-val.
NON-METALLIC MINERAL PRODUCTS, eq. (2)												
LK_i	0.0766	0.30	0.0525	0.39	-	-	-0.0227	0.72	0.0100	0.86	-	-
LL_i	0.2539	0.31	0.1953	0.41	0.1213	0.57	0.0441	0.92	0.0441	0.91	0.0870	0.76
LM_i	-0.6279	0.00	-0.5031	0.00	-0.4764	0.00	-1.2101	0.00	-1.2168	0.00	-1.0950	0.00
LE_i	0.4138	0.00	0.4143	0.00	0.4981	0.00	0.9261	0.00	0.9169	0.00	0.8770	0.00
RD_i	-0.4264	0.34	-0.4117	0.35	-0.2220	0.66	-2.1732	0.13	-2.1346	0.12	-2.3694	0.02
SM_i	0.0064	0.47	0.0032	0.70	0.0019	0.79	0.0163	0.05	0.0162	0.05	0.0121	0.10
SH_i	0.0038	0.88	0.0043	0.86	-0.0020	0.92	-0.0143	0.76	-0.0121	0.77	0.0131	0.69
YR_i	0.0087	0.31	0.0059	0.46	0.0035	0.71	0.0014	0.94	0.0066	0.71	0.0372	0.01
DS_i	0.9059	0.32	0.7888	0.37	0.1835	0.82	-0.1917	0.89	-0.2429	0.86	-1.5255	0.02
$DFMIN_i$	-2.0768	0.00	-2.1100	0.00	-2.0077	0.00	-0.4260	0.75	-0.6045	0.65	-1.4887	0.20
$DFMAJ_i$	-1.2283	0.06	-1.2901	0.05	-0.6566	0.41	-1.6901	0.06	-1.6775	0.06	-2.1487	0.00
$DFHVY_i$	-0.0115	0.99	-0.0089	0.99	0.1558	0.87	0.5869	0.77	0.5846	0.75	0.1664	0.90
TestDFs	1.79	0.17	1.98	0.14	2.30	0.10	0.71	0.49	0.74	0.48	1.44	0.24
Obs./R ²	1,217	0.33	1,288	0.33	1,596	0.33	672	0.36	710	0.36	1,276	0.34
BASIC METALS, eq. (1); SOE and East Indonesian plants omitted for 2006												
LK_i	0.0642	0.45	0.0944	0.32	-	-	-0.0135	0.79	-0.0232	0.56	-	-
LL_i	0.5723	0.04	0.3588	0.17	0.3592	0.07	-0.1958	0.61	-0.0979	0.76	0.5029	0.05
LM_i	-0.5944	0.01	-0.5642	0.01	-0.4974	0.00	-0.2169	0.23	-0.1850	0.20	-0.2854	0.02
LE_i	0.2731	0.00	0.3031	0.00	0.2918	0.00	0.2582	0.00	0.2396	0.00	0.2658	0.00
RD_i	8.4627	0.16	11.2901	0.04	-0.5474	0.07	-2.8121	0.46	-1.7903	0.65	0.4648	0.60
SM_i	-0.0061	0.65	-0.0070	0.57	0.0087	0.33	0.0049	0.46	0.0007	0.91	-0.0175	0.10
SH_i	0.0589	0.14	0.0433	0.22	0.0375	0.17	-0.0062	0.66	-0.0086	0.54	-0.0047	0.79
YR_i	-0.0073	0.76	-0.0309	0.26	-0.0294	0.15	-0.0309	0.05	-0.0313	0.04	-0.0029	0.90
DS_i	-2.1196	0.16	-1.9136	0.14	-0.4534	0.59	-	-	-	-	-	-
DF_i	0.0085	0.99	-0.4291	0.39	-0.6177	0.10	0.1374	0.80	0.2112	0.67	1.0146	0.14
Obs./R ²	105	0.39	119	0.38	180	0.33	116	0.35	130	0.35	265	0.28
BASIC METALS, eq. (2); SOE and East Indonesian plants omitted for 2006												
LK_i	0.0688	0.41	0.0977	0.31	-	-	-0.0184	0.70	-0.0267	0.47	-	-
LL_i	0.5280	0.05	0.3497	0.18	0.3582	0.07	-0.1657	0.70	-0.0927	0.79	0.5292	0.05
LM_i	-0.5760	0.01	-0.5552	0.01	-0.4929	0.00	-0.2333	0.23	-0.1874	0.21	-0.3134	0.02
LE_i	0.2694	0.00	0.3023	0.00	0.2913	0.00	0.2577	0.00	0.2374	0.00	0.2725	0.00
RD_i	8.7980	0.14	11.3713	0.04	-0.5155	0.09	-2.4810	0.54	-1.5050	0.72	0.4309	0.62
SM_i	-0.0073	0.58	-0.0071	0.55	0.0089	0.33	0.0057	0.40	0.0012	0.84	-0.0170	0.09
SH_i	0.0624	0.12	0.0430	0.23	0.0370	0.17	-0.0067	0.64	-0.0091	0.52	-0.0036	0.84
YR_i	0.0022	0.93	-0.0314	0.30	-0.0313	0.16	-0.0337	0.04	-0.0330	0.03	-0.0054	0.79
DS_i	-2.3420	0.12	-1.9552	0.12	-0.4559	0.59	-	-	-	-	-	-
$DFMIN_i$	-0.0324	0.94	0.1048	0.80	-0.1335	0.76	0.6072	0.71	0.6359	0.69	-0.0744	0.95
$DFMAJ_i$	-0.3595	0.58	-0.5883	0.32	-0.7325	0.09	0.3631	0.51	0.3223	0.46	2.1876	0.19
$DFHVY_i$	0.7994	0.51	-0.3855	0.69	-0.6634	0.37	-0.1133	0.88	0.0486	0.94	0.5499	0.32
TestDFs	0.47	0.62	0.52	0.58	0.58	0.56	0.15	0.86	0.10	0.91	0.59	0.55
Obs./R ²	105	0.40	119	0.38	180	0.33	116	0.35	130	0.35	265	0.29

Appendix Table 5 (continued)

Independent variable, statistic	1996						2006					
	Initial capital		Ending capital		No capital		Initial capital		Ending capital		No capital	
	Value	P-val.	Value	P-val.	Value	P-val.	Value	P-val.	Value	P-val.	Value	P-val.
MOTOR VEHICLES, eq. (1); SOE & East Indonesian plants omitted												
LK_i	-0.0076	0.85	-0.0106	0.78	-	-	-0.0169	0.72	0.0118	0.73	-	-
LL_i	0.0477	0.74	0.0509	0.71	0.0302	0.74	0.3344	0.11	0.1993	0.25	-0.1086	0.48
LM_i	-0.4192	0.00	-0.4043	0.00	-0.3167	0.00	-0.5194	0.00	-0.4451	0.00	-0.2400	0.01
LE_i	0.1852	0.00	0.1937	0.00	0.1713	0.00	0.2199	0.00	0.2146	0.00	0.1792	0.00
RD_i	-0.1717	0.66	-0.3642	0.17	-0.3315	0.06	-0.9116	0.01	-1.0593	0.00	-1.1179	0.01
SM_i	-0.0043	0.26	-0.0032	0.38	-0.0030	0.31	0.0039	0.69	0.0028	0.75	0.0037	0.57
SH_i	0.0011	0.92	-0.0016	0.89	0.0060	0.54	0.0135	0.37	0.0147	0.30	-0.0029	0.82
YR_i	-0.0434	0.02	-0.0451	0.01	-0.0261	0.04	-0.0183	0.27	-0.0124	0.39	0.0295	0.07
DF_i	0.7964	0.01	0.7109	0.02	0.3919	0.08	-0.0602	0.89	-0.1476	0.71	0.2343	0.26
Obs./R ²	168	0.35	185	0.34	261	0.30	131	0.35	150	0.34	320	0.27
MOTOR VEHICLES, eq. (2); SOE and East Indonesian plants omitted												
LK_i	-0.0050	0.91	-0.0076	0.84	-	-	-0.0063	0.89	0.0191	0.58	-	-
LL_i	0.0316	0.83	0.0340	0.81	0.0019	0.98	0.3513	0.09	0.2208	0.21	-0.0999	0.52
LM_i	-0.4206	0.00	-0.4074	0.00	-0.3070	0.00	-0.5359	0.00	-0.4645	0.00	-0.2438	0.01
LE_i	0.1892	0.00	0.1983	0.00	0.1745	0.00	0.2272	0.00	0.2225	0.00	0.1823	0.00
RD_i	-0.1166	0.75	-0.3103	0.23	-0.3078	0.08	-0.7808	0.04	-0.9424	0.01	-1.0778	0.01
SM_i	-0.0040	0.30	-0.0028	0.46	-0.0027	0.35	0.0038	0.70	0.0027	0.76	0.0041	0.52
SH_i	-0.0008	0.95	-0.0039	0.76	0.0032	0.76	0.0106	0.47	0.0123	0.38	-0.0021	0.87
YR_i	-0.0420	0.02	-0.0435	0.01	-0.0253	0.04	-0.0207	0.24	-0.0157	0.31	0.0296	0.07
$DFMIN_i$	1.0177	0.00	1.0067	0.00	0.7655	0.05	1.4639	0.00	1.4183	0.00	1.3418	0.08
$DFMAJ_i$	0.4904	0.38	0.3613	0.47	0.2059	0.45	-0.1694	0.73	-0.1860	0.68	-0.3465	0.06
$DFHVV_i$	1.0978	0.04	1.0870	0.05	0.4543	0.37	-0.2778	0.57	-0.3783	0.42	0.2445	0.36
TestDFs	0.40	0.67	0.71	0.49	0.77	0.47	13.80	0.00	12.89	0.00	4.29	0.01
Obs./R ²	168	0.35	185	0.34	261	0.30	131	0.37	150	0.36	320	0.29
OTHER TRANSPORTATION MACHINERY, eq. (1)												
LK_i	0.0704	0.50	0.1295	0.19	-	-	0.0208	0.85	-0.0194	0.85	-	-
LL_i	0.1495	0.46	-0.0692	0.78	-0.1391	0.38	-0.8723	0.01	-0.7294	0.01	-0.0950	0.71
LM_i	-0.6677	0.00	-0.5813	0.01	-0.3533	0.00	-0.2483	0.12	-0.2384	0.08	-0.4235	0.01
LE_i	0.2684	0.00	0.2999	0.00	0.2545	0.00	0.5147	0.00	0.4843	0.00	0.4805	0.00
RD_i	-0.3400	0.16	-0.4031	0.10	-0.1178	0.51	0.3904	0.70	0.4159	0.68	0.7357	0.55
SM_i	0.0089	0.09	0.0118	0.04	0.0066	0.10	0.0241	0.08	0.0235	0.07	0.0105	0.30
SH_i	-0.0051	0.84	0.0010	0.98	0.0429	0.14	-0.0526	0.11	-0.0544	0.09	-0.0238	0.37
YR_i	-0.0125	0.50	-0.0229	0.21	-0.0005	0.98	-0.0009	0.96	-0.0023	0.88	-0.0012	0.93
DS_i	-0.3640	0.32	-0.6050	0.16	-0.8251	0.03	-0.3186	0.70	-0.2360	0.78	-0.8969	0.18
DF_i	0.2005	0.58	-0.0600	0.89	-0.0018	1.00	0.3198	0.69	0.2761	0.71	0.3068	0.61
Obs./R ²	207	0.34	227	0.35	320	0.29	166	0.35	187	0.35	358	0.26

Appendix Table 5 (continued)

Independent variable, statistic	1996						2006					
	Initial capital		Ending capital		No capital		Initial capital		Ending capital		No capital	
	Value	P-val.	Value	P-val.	Value	P-val.	Value	P-val.	Value	P-val.	Value	P-val.
OTHER TRANSPORTATION MACHINERY, eq. (2); minority-foreign plants omitted												
LK_i	0.0694	0.51	0.1280	0.20	-	-	0.0262	0.81	-0.0152	0.88	-	-
LL_i	0.1587	0.47	-0.0423	0.87	-0.1441	0.38	-0.8769	0.01	-0.7292	0.01	-0.1065	0.68
LM_i	-0.6778	0.00	-0.5993	0.00	-0.3622	0.00	-0.2499	0.13	-0.2409	0.08	-0.4450	0.01
LE_i	0.2769	0.00	0.3100	0.00	0.2698	0.00	0.5197	0.00	0.4893	0.00	0.4922	0.00
RD_i	-0.3138	0.20	-0.3775	0.12	-0.0652	0.70	0.3613	0.72	0.3889	0.70	0.7058	0.56
SM_i	0.0089	0.09	0.0120	0.04	0.0063	0.12	0.0239	0.08	0.0233	0.08	0.0107	0.30
SH_i	-0.0051	0.84	-0.0002	1.00	0.0426	0.15	-0.0529	0.11	-0.0550	0.08	-0.0234	0.38
YR_i	-0.0134	0.48	-0.0247	0.19	-0.0021	0.90	0.0003	0.99	-0.0016	0.92	-0.0034	0.81
DS_i	-0.3817	0.30	-0.6188	0.15	-0.8266	0.03	-0.3322	0.69	-0.2457	0.77	-0.8841	0.19
$DFMAJ_i$	0.0812	0.84	-0.1216	0.77	-0.4803	0.08	-0.3070	0.72	-0.0039	1.00	0.8859	0.31
$DFHVV_i$	-0.3226	0.46	-0.9866	0.18	-0.4406	0.25	0.3129	0.72	0.2439	0.77	0.0122	0.99
TestDFs	0.36	0.55	1.00	0.32	0.01	0.92	0.34	0.56	0.07	0.80	0.99	0.32
Obs./R ²	206	0.35	226	0.35	314	0.30	165	0.35	186	0.35	356	0.26

Notes: - = estimate could not be obtained; in the Obs./R² rows, the coefficient column contains the number of observations and the P-value column contains the R-squared; the TestDFs rows show Wald tests of the hypothesis that coefficients on all foreign ownership dummies are equal and associated p-values; industry and region dummies also included as relevant (see explanation in the text); full results including the constant and all dummies are available from the authors.

Appendix Table 6: OLS Estimates of SOE- and MNC-Private Natural Gas Fuel Intensity Differentials and Other Slope Coefficients from Equations (1) and (2); all p-values based on robust standard errors

Independent variable, statistic	1996						2006					
	Initial capital		Ending capital		No capital		Initial capital		Ending capital		No capital	
	Value	P-val.	Value	P-val.	Value	P-val.	Value	P-val.	Value	P-val.	Value	P-val.
8 LARGE NATURAL GAS FUEL USING INDUSTRIES COMBINED, eq. (1)												
LK_i	0.0051	0.17	0.0028	0.44	-	-	0.0114	0.04	0.0077	0.16	-	-
LL_i	0.0199	0.23	0.0280	0.07	0.0113	0.34	0.0440	0.02	0.0372	0.04	0.0647	0.00
LM_i	-0.0457	0.00	-0.0463	0.00	-0.0359	0.00	-0.0236	0.00	-0.0224	0.00	-0.0275	0.00
LE_i	0.3090	0.00	0.2998	0.00	0.2760	0.00	0.3346	0.00	0.3341	0.00	0.2376	0.00
RD_i	-0.0205	0.32	-0.0166	0.40	-0.0140	0.37	-0.0450	0.24	-0.0325	0.26	-0.0003	0.99
SM_i	0.0005	0.31	0.0005	0.24	0.0005	0.24	0.0007	0.05	0.0008	0.02	0.0006	0.02
SH_i	-0.0019	0.32	-0.0016	0.43	-0.0016	0.46	-0.0046	0.02	-0.0041	0.02	-0.0009	0.40
YR_i	0.0012	0.36	0.0014	0.27	0.0007	0.46	-0.0009	0.37	-0.0006	0.55	0.0026	0.00
DS_i	-0.1585	0.00	-0.1482	0.00	-0.0997	0.01	0.0448	0.70	0.0500	0.65	0.0097	0.83
DF_i	-0.0684	0.28	-0.0782	0.18	-0.0765	0.09	-0.0593	0.56	-0.0590	0.53	0.0437	0.43
Obs./R ²	8,044	0.36	8,682	0.36	11,688	0.34	7,159	0.32	7,809	0.32	13,470	0.26
8 LARGE NATURAL GAS FUEL USING INDUSTRIES COMBINED, eq. (2)												
LK_i	0.0050	0.18	0.0028	0.45	-	-	0.0117	0.03	0.0080	0.14	-	-
LL_i	0.0204	0.22	0.0287	0.06	0.0129	0.28	0.0454	0.02	0.0388	0.03	0.0654	0.00
LM_i	-0.0455	0.00	-0.0463	0.00	-0.0364	0.00	-0.0243	0.00	-0.0232	0.00	-0.0276	0.00
LE_i	0.3092	0.00	0.2999	0.00	0.2761	0.00	0.3349	0.00	0.3345	0.00	0.2377	0.00
RD_i	-0.0214	0.31	-0.0171	0.39	-0.0141	0.37	-0.0425	0.26	-0.0303	0.29	0.0007	0.98
SM_i	0.0005	0.31	0.0005	0.24	0.0004	0.24	0.0007	0.05	0.0007	0.03	0.0006	0.02
SH_i	-0.0019	0.32	-0.0016	0.42	-0.0017	0.43	-0.0045	0.02	-0.0040	0.02	-0.0008	0.42
YR_i	0.0012	0.36	0.0014	0.27	0.0007	0.45	-0.0008	0.40	-0.0005	0.59	0.0026	0.00
DS_i	-0.1602	0.00	-0.1495	0.00	-0.1013	0.01	0.0427	0.71	0.0475	0.67	0.0092	0.84
$DFMIN_i$	-0.2896	0.20	-0.2777	0.19	-0.3166	0.03	-0.4642	0.03	-0.4954	0.02	-0.1804	0.08
$DFMAJ_i$	-0.0544	0.55	-0.0530	0.52	-0.0187	0.77	-0.0269	0.85	-0.0366	0.78	0.0549	0.46
$DFHVV_i$	-0.0025	0.97	-0.0442	0.46	-0.0642	0.17	-0.0234	0.87	-0.0157	0.91	0.0644	0.42
TestDFs	0.85	0.43	0.59	0.56	1.93	0.15	1.82	0.16	2.19	0.11	2.25	0.11
Obs./R ²	8,044	0.36	8,682	0.36	11,688	0.34	7,159	0.32	7,809	0.33	13,470	0.26
FOOD & BEVERAGES, eq. (1)												
LK_i	0.0010	0.62	-0.0009	0.72	-	-	-0.0041	0.02	-0.0061	0.02	-	-
LL_i	-0.0093	0.46	-0.0018	0.88	0.0029	0.81	-0.0057	0.57	-0.0034	0.72	0.0264	0.03
LM_i	-0.0297	0.06	-0.0325	0.02	-0.0285	0.01	-0.0096	0.19	-0.0106	0.15	-0.0256	0.00
LE_i	0.1718	0.00	0.1814	0.00	0.1662	0.00	0.2016	0.00	0.2136	0.00	0.1462	0.00
RD_i	-0.0003	0.98	-0.0043	0.70	-0.0106	0.37	0.0025	0.58	0.0074	0.29	0.0509	0.43
SM_i	0.0007	0.17	0.0002	0.73	0.0001	0.81	0.0006	0.11	0.0007	0.05	0.0004	0.24
SH_i	0.0024	0.44	0.0078	0.18	0.0058	0.14	0.0001	0.94	0.0003	0.87	0.0012	0.44
YR_i	-0.0004	0.36	-0.0003	0.42	-0.0004	0.27	0.0003	0.43	0.0003	0.37	0.0018	0.00
DS_i	-0.0552	0.13	-0.0614	0.09	-0.0653	0.02	0.0083	0.67	0.0065	0.74	-0.0224	0.08
DF_i	-0.0518	0.31	-0.0693	0.20	-0.0375	0.32	-0.1299	0.01	-0.1457	0.01	-0.0464	0.04
Obs./R ²	3,074	0.39	3,268	0.42	4,299	0.38	3,268	0.36	3,528	0.36	5,543	0.23

Appendix Table 6 (continued)

Independent variable, statistic	1996						2006					
	Initial capital		Ending capital		No capital		Initial capital		Ending capital		No capital	
	Value	P-val.	Value	P-val.	Value	P-val.	Value	P-val.	Value	P-val.	Value	P-val.
FOOD & BEVERAGES, eq. (2)												
LK_i	0.0013	0.51	-0.0006	0.80	-	-	-0.0039	0.03	-0.0060	0.02	-	-
LL_i	-0.0099	0.43	-0.0028	0.82	0.0022	0.86	-0.0058	0.55	-0.0033	0.72	0.0263	0.00
LM_i	-0.0301	0.06	-0.0326	0.02	-0.0285	0.01	-0.0097	0.20	-0.0107	0.15	-0.0255	0.00
LE_i	0.1722	0.00	0.1816	0.00	0.1664	0.00	0.2023	0.00	0.2139	0.00	0.1463	0.00
RD_i	0.0003	0.98	-0.0038	0.73	-0.0113	0.35	0.0033	0.51	0.0081	0.28	0.0511	0.00
SM_i	0.0007	0.17	0.0002	0.73	0.0001	0.82	0.0006	0.12	0.0007	0.05	0.0004	0.00
SH_i	0.0023	0.46	0.0078	0.18	0.0058	0.14	0.0003	0.91	0.0004	0.84	0.0012	0.00
YR_i	-0.0004	0.37	-0.0003	0.43	-0.0004	0.27	0.0003	0.41	0.0003	0.36	0.0018	0.00
DS_i	-0.0553	0.13	-0.0609	0.09	-0.0649	0.02	0.0089	0.65	0.0068	0.72	-0.0225	0.00
$DFMIN_i$	0.1006	0.01	0.0737	0.11	0.0623	0.02	-0.2315	0.27	-0.2360	0.25	-0.0705	0.61
$DFMAJ_i$	-0.0693	0.32	-0.0789	0.26	-0.0422	0.44	-0.0390	0.30	-0.0707	0.15	-0.0213	0.92
$DFHVY_i$	-0.0940	0.34	-0.1147	0.25	-0.0808	0.20	-0.1702	0.01	-0.1763	0.01	-0.0557	0.59
TestDFs	3.38	0.03	2.94	0.05	3.33	0.04	1.64	0.19	1.09	0.34	0.75	0.47
Obs./R ²	3,074	0.39	3,268	0.42	4,299	0.38	3,268	0.36	3,528	0.36	5,543	0.23
TEXTILES, eq. (1)												
LK_i	-0.0036	0.50	-0.0035	0.53	-	-	0.0028	0.32	0.0012	0.66	-	-
LL_i	-0.0088	0.45	-0.0058	0.59	-0.0053	0.45	0.0088	0.36	0.0023	0.82	0.0166	0.02
LM_i	-0.0075	0.19	-0.0096	0.09	-0.0088	0.06	-0.0153	0.02	-0.0114	0.06	-0.0185	0.00
LE_i	0.1413	0.00	0.1365	0.00	0.1219	0.00	0.2057	0.00	0.2072	0.00	0.1676	0.00
RD_i	-0.0007	0.98	0.0003	0.99	0.0077	0.26	-0.4912	0.22	-0.4952	0.22	-0.4524	0.11
SM_i	0.0014	0.06	0.0012	0.06	0.0011	0.05	0.0000	0.91	0.0000	0.85	-0.0002	0.39
SH_i	-0.0034	0.20	-0.0037	0.17	-0.0031	0.11	0.0028	0.21	0.0037	0.12	0.0037	0.07
YR_i	0.0012	0.23	0.0010	0.20	0.0007	0.27	0.0004	0.47	0.0014	0.16	0.0017	0.02
DS_i	0.0162	0.31	0.0194	0.19	0.0143	0.20	0.0097	0.76	0.0004	0.99	-0.0013	0.91
DF_i	0.0048	0.93	0.0125	0.79	-0.0350	0.45	0.0418	0.63	0.0390	0.65	0.0558	0.37
Obs./R ²	1,306	0.38	1,430	0.38	1,839	0.35	1,185	0.49	1,285	0.48	2,109	0.38
TEXTILES, eq. (2)												
LK_i	-0.0034	0.52	-0.0033	0.56	-	-	0.0027	0.33	0.0012	0.65	-	-
LL_i	-0.0084	0.47	-0.0056	0.60	-0.0047	0.50	0.0085	0.38	0.0027	0.79	0.0161	0.03
LM_i	-0.0079	0.17	-0.0099	0.08	-0.0091	0.04	-0.0162	0.02	-0.0129	0.06	-0.0192	0.00
LE_i	0.1414	0.00	0.1366	0.00	0.1230	0.00	0.2038	0.00	0.2058	0.00	0.1666	0.00
RD_i	-0.0028	0.93	-0.0015	0.96	0.0053	0.60	-0.4669	0.21	-0.4741	0.21	-0.4675	0.10
SM_i	0.0014	0.07	0.0012	0.07	0.0010	0.06	0.0000	0.98	0.0000	0.95	-0.0001	0.46
SH_i	-0.0034	0.21	-0.0036	0.17	-0.0032	0.11	0.0026	0.21	0.0035	0.12	0.0036	0.07
YR_i	0.0011	0.24	0.0010	0.21	0.0007	0.24	0.0002	0.72	0.0011	0.25	0.0015	0.04
DS_i	0.0166	0.29	0.0197	0.18	0.0143	0.20	0.0110	0.73	0.0026	0.94	0.0002	0.99
$DFMIN_i$	-0.1054	0.48	-0.0963	0.48	-0.2986	0.12	0.0111	0.64	0.0268	0.34	0.0281	0.20
$DFMAJ_i$	0.0489	0.56	0.0559	0.44	0.0100	0.88	0.2853	0.21	0.2667	0.23	0.2344	0.21
$DFHVY_i$	-0.0165	0.75	-0.0107	0.81	-0.0237	0.47	-0.1160	0.10	-0.1007	0.11	-0.0321	0.31
TestDFs	0.65	0.52	0.77	0.47	1.43	0.24	1.81	0.16	2.04	0.13	1.54	0.21
Obs./R ²	1,306	0.38	1,430	0.38	1,839	0.35	1,185	0.50	1,285	0.49	2,109	0.39

Appendix Table 6 (continued)

Independent variable, statistic	1996						2006					
	Initial capital		Ending capital		No capital		Initial capital		Ending capital		No capital	
	Value	P-val.	Value	P-val.	Value	P-val.	Value	P-val.	Value	P-val.	Value	P-val.
PAPER PRODUCTS, eq. (1); East Indonesian plants omitted for 1996												
LK_i	-0.0662	0.09	-0.0443	0.38	-	-	0.0614	0.13	0.0531	0.16	-	-
LL_i	0.0190	0.72	0.0328	0.56	-0.0081	0.78	0.0082	0.93	-0.0084	0.92	0.0833	0.28
LM_i	0.0329	0.12	0.0169	0.57	0.0008	0.94	-0.0791	0.26	-0.0495	0.40	-0.0491	0.24
LE_i	0.2419	0.00	0.1905	0.00	0.1888	0.00	0.2211	0.01	0.2067	0.01	0.1388	0.01
RD_i	0.0179	0.43	0.0201	0.48	0.0325	0.29	0.2777	0.31	0.2525	0.33	0.3462	0.28
SM_i	-0.0003	0.81	0.0017	0.20	0.0011	0.22	0.0006	0.59	0.0002	0.82	-0.0002	0.79
SH_i	0.0008	0.89	-0.0161	0.16	-0.0117	0.11	-0.0077	0.31	-0.0091	0.23	0.0005	0.87
YR_i	-0.0037	0.15	0.0010	0.76	0.0008	0.73	0.0096	0.51	0.0101	0.46	0.0177	0.21
DS_i	0.9655	0.19	1.3146	0.19	1.0597	0.23	4.8174	0.25	4.8381	0.25	1.2219	0.29
DF_i	0.0718	0.28	-0.1955	0.18	-0.1770	0.14	0.0163	0.91	-0.0316	0.81	0.0185	0.84
Obs./R ²	186	0.72	214	0.59	339	0.58	229	0.40	263	0.39	490	0.23
PAPER PRODUCTS, eq. (2), minority-foreign & East Indonesian plants omitted for 1996												
LK_i	-0.0662	0.09	-0.0394	0.42	-	-	0.0616	0.13	0.0526	0.16	-	-
LL_i	0.0187	0.73	0.0457	0.43	-0.0031	0.92	0.0072	0.94	-0.0007	0.99	0.0850	0.29
LM_i	0.0332	0.14	0.0026	0.93	-0.0084	0.50	-0.0786	0.25	-0.0581	0.30	-0.0514	0.20
LE_i	0.2419	0.00	0.1937	0.00	0.1939	0.00	0.2207	0.01	0.2066	0.01	0.1375	0.02
RD_i	0.0179	0.44	0.0211	0.42	0.0338	0.23	0.2758	0.31	0.2647	0.29	0.3515	0.23
SM_i	-0.0003	0.81	0.0016	0.22	0.0010	0.22	0.0006	0.60	0.0004	0.71	-0.0001	0.89
SH_i	0.0007	0.92	-0.0107	0.30	-0.0073	0.19	-0.0078	0.32	-0.0083	0.27	0.0005	0.88
YR_i	-0.0037	0.16	0.0007	0.83	0.0001	0.96	0.0096	0.51	0.0100	0.47	0.0176	0.22
DS_i	0.9658	0.20	1.2738	0.19	1.0268	0.23	4.8179	0.25	4.8494	0.24	1.2264	0.29
$DFMIN_i$	-	-	-	-	-	-	0.1002	0.58	-0.4716	0.38	-0.1889	0.37
$DFMAJ_i$	0.0690	0.22	0.0143	0.82	0.0050	0.87	0.0431	0.94	0.1063	0.84	0.2316	0.61
$DFHVV_i$	0.0846	0.63	-0.6697	0.12	-0.7918	0.10	-0.0027	0.99	-0.0012	0.99	0.0080	0.92
TestDFs	0.01	0.92	2.69	0.10	2.85	0.09	0.14	0.87	0.43	0.65	0.81	0.44
Obs./R ²	186	0.72	214	0.59	336	0.59	229	0.34	263	0.39	490	0.23
CHEMICALS, eq. (1)												
LK_i	-0.0127	0.11	-0.0120	0.11	-	-	0.0105	0.31	-0.0060	0.74	-	-
LL_i	0.0214	0.46	0.0221	0.43	0.0117	0.80	0.0742	0.21	0.0561	0.35	0.0545	0.04
LM_i	-0.0179	0.27	-0.0180	0.27	-0.0196	0.27	-0.0411	0.10	-0.0417	0.06	-0.0319	0.01
LE_i	0.2489	0.00	0.2388	0.00	0.2827	0.00	0.2556	0.00	0.2342	0.00	0.1754	0.00
RD_i	-0.0257	0.40	-0.0243	0.41	-0.0247	0.44	-0.0941	0.31	-0.0281	0.45	-0.0242	0.37
SM_i	-0.0005	0.54	-0.0004	0.55	-0.0017	0.19	0.0008	0.39	0.0010	0.29	0.0005	0.31
SH_i	-0.0004	0.80	-0.0006	0.73	-0.0026	0.23	-0.0013	0.64	0.0000	0.99	-0.0009	0.60
YR_i	-0.0032	0.11	-0.0028	0.12	-0.0028	0.35	0.0015	0.42	0.0023	0.25	0.0037	0.03
DS_i	-0.0155	0.86	-0.0026	0.98	-0.0527	0.54	-0.0311	0.62	-0.0006	0.99	-0.0132	0.56
DF_i	0.0427	0.43	0.0555	0.28	0.0758	0.31	-0.2206	0.03	-0.1482	0.08	-0.0611	0.08
Obs./R ²	630	0.42	665	0.40	994	0.38	493	0.41	544	0.38	1,099	0.30

Appendix Table 6 (continued)

Independent variable, statistic	1996						2006					
	Initial capital		Ending capital		No capital		Initial capital		Ending capital		No capital	
	Value	P-val.	Value	P-val.	Value	P-val.	Value	P-val.	Value	P-val.	Value	P-val.
CHEMICALS, eq. (2)												
LK_i	-0.0128	0.11	-0.0120	0.12	-	-	0.0091	0.38	-0.0069	0.71	-	-
LL_i	0.0228	0.43	0.0236	0.40	0.0150	0.75	0.0736	0.21	0.0546	0.36	0.0549	0.03
LM_i	-0.0192	0.24	-0.0192	0.24	-0.0223	0.24	-0.0380	0.12	-0.0387	0.08	-0.0315	0.01
LE_i	0.2489	0.00	0.2386	0.00	0.2822	0.00	0.2587	0.00	0.2364	0.00	0.1757	0.00
RD_i	-0.0245	0.39	-0.0232	0.41	-0.0225	0.45	-0.0976	0.30	-0.0296	0.43	-0.0242	0.38
SM_i	-0.0005	0.55	-0.0004	0.54	-0.0017	0.19	0.0009	0.34	0.0011	0.29	0.0005	0.31
SH_i	-0.0004	0.80	-0.0006	0.74	-0.0026	0.23	-0.0016	0.58	-0.0002	0.93	-0.0010	0.58
YR_i	-0.0032	0.11	-0.0029	0.12	-0.0028	0.35	0.0018	0.37	0.0025	0.23	0.0037	0.03
DS_i	-0.0139	0.88	-0.0015	0.99	-0.0515	0.55	-0.0382	0.55	-0.0051	0.92	-0.0145	0.53
$DFMIN_i$	0.0579	0.23	0.0543	0.21	0.0535	0.19	-0.1363	0.45	-0.0859	0.54	-0.0676	0.36
$DFMAJ_i$	0.0782	0.32	0.0901	0.22	0.1440	0.17	-0.4942	0.05	-0.3718	0.07	-0.1186	0.08
$DFHVV_i$	-0.0397	0.64	-0.0121	0.87	-0.0613	0.55	-0.1117	0.25	-0.0573	0.51	-0.0273	0.45
TestDFs	0.64	0.53	0.57	0.56	1.20	0.30	1.05	0.35	1.07	0.35	0.82	0.44
Obs./R ²	630	0.42	665	0.40	994	0.38	493	0.41	544	0.38	1,099	0.30
RUBBER & PLASTIC PRODUCTS, eq. (1)												
LK_i	-0.0016	0.25	0.0005	0.82	-	-	0.0089	0.15	0.0070	0.20	-	-
LL_i	-0.0131	0.04	-0.0051	0.48	-0.0092	0.15	-0.0562	0.18	-0.0466	0.22	0.0310	0.06
LM_i	0.0045	0.06	0.0028	0.38	0.0025	0.36	0.0083	0.46	0.0069	0.49	-0.0130	0.02
LE_i	0.0581	0.00	0.0858	0.00	0.0975	0.00	0.3680	0.00	0.3830	0.00	0.1858	0.00
RD_i	0.0012	0.75	0.0022	0.43	0.0005	0.86	-0.2130	0.26	-0.1923	0.25	-0.1857	0.06
SM_i	-0.0001	0.65	-0.0002	0.24	-0.0002	0.29	0.0008	0.26	0.0006	0.29	-0.0004	0.12
SH_i	-0.0011	0.20	-0.0015	0.12	-0.0020	0.05	-0.0024	0.18	-0.0025	0.13	0.0013	0.34
YR_i	0.0005	0.13	0.0003	0.49	0.0000	0.99	0.0000	1.00	-0.0004	0.78	0.0016	0.13
DS_i	0.0214	0.05	0.0136	0.10	0.0138	0.05	0.0109	0.73	0.0146	0.57	-0.0005	0.98
DF_i	0.0242	0.02	-0.0002	0.99	0.0061	0.58	0.0021	0.99	-0.0089	0.93	0.0552	0.39
Obs./R ²	868	0.41	972	0.52	1,432	0.54	744	0.46	848	0.49	1,712	0.30
RUBBER & PLASTIC PRODUCTS, eq. (2)												
LK_i	-0.0016	0.24	0.0005	0.84	-	-	0.0092	0.14	0.0071	0.19	-	-
LL_i	-0.0131	0.04	-0.0051	0.48	-0.0092	0.14	-0.0537	0.20	-0.0445	0.24	0.0305	0.06
LM_i	0.0046	0.06	0.0029	0.37	0.0025	0.36	0.0056	0.62	0.0049	0.62	-0.0135	0.01
LE_i	0.0580	0.00	0.0858	0.00	0.0975	0.00	0.3691	0.00	0.3841	0.00	0.1858	0.00
RD_i	0.0014	0.68	0.0026	0.36	0.0006	0.84	-0.2402	0.21	-0.2126	0.21	-0.1939	0.05
SM_i	-0.0001	0.68	-0.0002	0.25	-0.0002	0.29	0.0008	0.24	0.0007	0.28	-0.0004	0.14
SH_i	-0.0011	0.20	-0.0015	0.12	-0.0020	0.05	-0.0023	0.19	-0.0024	0.14	0.0014	0.30
YR_i	0.0005	0.12	0.0003	0.48	0.0000	1.00	0.0000	0.97	-0.0003	0.81	0.0015	0.13
DS_i	0.0218	0.04	0.0141	0.09	0.0139	0.05	0.0111	0.72	0.0142	0.58	-0.0003	0.98
$DFMIN_i$	0.0258	0.03	0.0283	0.02	0.0199	0.04	-0.5270	0.30	-0.5541	0.29	-0.1283	0.43
$DFMAJ_i$	0.0335	0.09	0.0063	0.70	0.0066	0.58	0.2220	0.23	0.1883	0.25	0.1484	0.23
$DFHVV_i$	0.0142	0.08	-0.0130	0.62	0.0023	0.90	-0.0241	0.85	-0.0297	0.81	0.0274	0.73
TestDFs	1.43	0.24	1.32	0.27	0.70	0.50	1.32	0.27	1.31	0.27	0.96	0.38
Obs./R ²	868	0.41	972	0.52	1,432	0.54	744	0.46	848	0.50	1,712	0.30

Appendix Table 6 (continued)

Independent variable, statistic	1996						2006					
	Initial capital		Ending capital		No capital		Initial capital		Ending capital		No capital	
	Value	P-val.	Value	P-val.	Value	P-val.	Value	P-val.	Value	P-val.	Value	P-val.
NON-METALLIC MINERAL PRODUCTS, eq. (1)												
LK_i	0.0681	0.11	0.0600	0.15	-	-	0.0168	0.65	0.0103	0.76	-	-
LL_i	0.2316	0.11	0.1891	0.14	0.0394	0.69	0.1970	0.24	0.1893	0.23	0.2407	0.03
LM_i	-0.3310	0.00	-0.2895	0.00	-0.1702	0.01	-0.0196	0.80	-0.0230	0.75	0.0199	0.63
LE_i	0.7878	0.00	0.7690	0.00	0.7379	0.00	0.8477	0.00	0.8580	0.00	0.6707	0.00
RD_i	0.2350	0.42	0.2290	0.40	-0.0230	0.92	0.2780	0.66	0.2765	0.66	0.1617	0.69
SM_i	0.0038	0.35	0.0033	0.36	0.0025	0.44	-0.0016	0.64	-0.0014	0.66	-0.0001	0.96
SH_i	-0.0055	0.76	-0.0053	0.76	-0.0231	0.31	-0.0123	0.45	-0.0118	0.43	-0.0127	0.24
YR_i	0.0144	0.08	0.0136	0.07	0.0110	0.12	-0.0074	0.41	-0.0077	0.37	-0.0020	0.69
DS_i	-0.7077	0.28	-0.6475	0.29	-0.5623	0.27	-3.0625	0.02	-3.0637	0.02	-0.9211	0.03
DF_i	-1.9192	0.02	-1.8845	0.02	-1.5271	0.02	0.0004	1.00	-0.0672	0.96	0.0969	0.88
Obs./R ²	1,217	0.59	1,288	0.59	1,596	0.56	672	0.53	710	0.54	1,276	0.50
NON-METALLIC MINERAL PRODUCTS, eq. (2)												
LK_i	0.0844	0.05	0.0755	0.07	-	-	0.0111	0.75	0.0045	0.89	-	-
LL_i	0.2419	0.10	0.1986	0.13	0.0643	0.52	0.3267	0.05	0.3008	0.05	0.2813	0.01
LM_i	-0.3357	0.00	-0.2943	0.00	-0.1734	0.01	-0.0502	0.52	-0.0483	0.51	0.0124	0.77
LE_i	0.7914	0.00	0.7727	0.00	0.7426	0.00	0.8480	0.00	0.8615	0.00	0.6702	0.00
RD_i	0.0514	0.83	0.0553	0.80	-0.1480	0.43	0.4627	0.57	0.4834	0.55	0.2940	0.49
SM_i	0.0042	0.28	0.0036	0.30	0.0030	0.34	-0.0013	0.69	-0.0012	0.70	0.0001	0.97
SH_i	-0.0045	0.80	-0.0044	0.80	-0.0236	0.30	-0.0159	0.37	-0.0137	0.38	-0.0144	0.19
YR_i	0.0147	0.08	0.0139	0.06	0.0114	0.10	-0.0051	0.53	-0.0056	0.48	-0.0013	0.79
DS_i	-0.7662	0.25	-0.7061	0.25	-0.6264	0.22	-3.1435	0.02	-3.1705	0.02	-0.9444	0.02
$DFMIN_i$	-3.7310	0.05	-3.6754	0.05	-3.7978	0.02	-2.7115	0.15	-2.6911	0.15	-1.7687	0.12
$DFMAJ_i$	-1.8370	0.10	-1.7843	0.11	-1.1336	0.14	-2.1399	0.36	-2.2287	0.34	-0.5515	0.34
$DFHVY_i$	0.0320	0.88	0.0374	0.85	0.0629	0.70	1.6578	0.47	1.3500	0.50	1.1324	0.39
TestDFs	3.13	0.04	3.17	0.04	3.68	0.03	1.06	0.35	1.11	0.33	1.31	0.27
Obs./R ²	1,217	0.59	1,288	0.59	1,596	0.57	672	0.55	710	0.55	1,276	0.51
BASIC METALS, eq. (1); SOE and East Indonesian plants omitted for 2006												
LK_i	-0.0098	0.36	-0.0029	0.82	-	-	-0.0025	0.83	0.0091	0.49	-	-
LE_i	0.0250	0.56	-0.0116	0.79	0.0861	0.18	0.0488	0.71	-0.0754	0.64	0.0058	0.93
LM_i	-0.0205	0.13	-0.0182	0.16	-0.0309	0.11	-0.0327	0.36	-0.0190	0.59	-0.0179	0.49
LL_i	0.0556	0.00	0.0600	0.00	0.0914	0.00	0.1122	0.00	0.1281	0.00	0.0980	0.00
RD_i	1.1244	0.12	0.9602	0.18	0.0045	0.96	-0.2667	0.86	-0.1476	0.91	-0.0011	0.97
SM_i	0.0006	0.55	0.0006	0.45	0.0009	0.48	-0.0011	0.70	-0.0001	0.96	-0.0007	0.64
SH_i	0.0041	0.22	0.0014	0.55	-0.0005	0.90	-0.0015	0.65	-0.0023	0.49	-0.0004	0.87
YR_i	0.0024	0.67	0.0026	0.61	-0.0102	0.32	-0.0028	0.57	-0.0048	0.33	0.0112	0.09
DS_i	-0.0102	0.92	0.0546	0.55	-0.0424	0.72	-	-	-	-	-	-
DF_i	0.1078	0.22	0.0992	0.19	-0.0314	0.70	-0.0662	0.51	0.0845	0.57	0.2272	0.19
Obs./R ²	105	0.68	119	0.68	180	0.49	116	0.52	130	0.51	265	0.34

Appendix Table 6 (continued)

Independent variable, statistic	1996						2006					
	Initial capital		Ending capital		No capital		Initial capital		Ending capital		No capital	
	Value	P-val.	Value	P-val.	Value	P-val.	Value	P-val.	Value	P-val.	Value	P-val.
BASIC METALS, eq. (2); SOE and East Indonesian plants omitted for 2006												
LK_i	-0.0104	0.34	-0.0040	0.75	-	-	0.0046	0.55	0.0151	0.16	-	-
LL_i	0.0272	0.53	-0.0068	0.88	0.0876	0.18	0.0503	0.71	-0.0736	0.65	0.0053	0.93
LM_i	-0.0219	0.14	-0.0206	0.16	-0.0310	0.11	-0.0369	0.34	-0.0208	0.57	-0.0134	0.58
LE_i	0.0554	0.00	0.0598	0.00	0.0915	0.00	0.1157	0.00	0.1303	0.00	0.0980	0.00
RD_i	1.1087	0.13	0.9269	0.21	0.0120	0.90	-0.2521	0.86	-0.3609	0.76	0.0031	0.91
SM_i	0.0006	0.54	0.0007	0.44	0.0009	0.47	-0.0014	0.61	-0.0006	0.80	-0.0010	0.52
SH_i	0.0040	0.23	0.0014	0.57	-0.0006	0.89	-0.0010	0.77	-0.0015	0.66	0.0001	0.97
YR_i	0.0023	0.66	0.0023	0.65	-0.0109	0.31	-0.0019	0.71	-0.0030	0.54	0.0128	0.08
DS_i	-0.0006	1.00	0.0690	0.48	-0.0409	0.73	-	-	-	-	-	-
$DFMIN_i$	0.0125	0.67	0.0180	0.54	0.0871	0.36	-0.4797	0.23	-0.4625	0.26	-0.2803	0.26
$DFMAJ_i$	0.1409	0.29	0.1443	0.26	-0.0383	0.76	0.0520	0.45	0.0547	0.49	0.0468	0.39
$DFHVV_i$	0.0834	0.18	0.0655	0.22	-0.0684	0.52	0.0044	0.97	0.2344	0.24	0.4310	0.13
TestDFs	0.55	0.58	0.48	0.62	0.48	0.62	0.95	0.39	1.23	0.30	1.34	0.26
Obs./R ²	105	0.68	119	0.68	180	0.49	116	0.54	130	0.53	265	0.36
METAL PRODUCTS												
LK_i	0.0033	0.44	0.0029	0.53	-	-	0.0093	0.22	0.0065	0.40	-	-
LL_i	-0.0176	0.49	-0.0053	0.85	-0.0493	0.29	0.0085	0.81	-0.0678	0.39	-0.0097	0.73
LM_i	-0.0132	0.13	-0.0169	0.09	-0.0048	0.79	-0.0181	0.27	-0.0233	0.19	-0.0163	0.18
LE_i	0.0969	0.00	0.1025	0.00	0.1173	0.00	0.1452	0.00	0.1723	0.00	0.1220	0.00
RD_i	-0.0223	0.06	-0.0134	0.26	-0.0027	0.82	-0.0923	0.31	-0.0608	0.53	-0.0915	0.15
SM_i	0.0002	0.82	0.0000	0.97	0.0010	0.25	0.0000	0.95	0.0012	0.36	0.0006	0.27
SH_i	0.0009	0.23	0.0012	0.19	-0.0013	0.61	-0.0033	0.27	-0.0051	0.16	0.0000	0.99
YR_i	-0.0016	0.15	-0.0004	0.79	-0.0009	0.55	-0.0039	0.11	0.0011	0.84	0.0039	0.24
DS_i	-0.1507	0.13	-0.1682	0.11	-0.1470	0.20	-0.1523	0.29	-0.6258	0.13	-0.1088	0.19
DF_i	-0.0542	0.21	-0.0617	0.16	-0.0872	0.31	-0.0484	0.54	-0.0299	0.71	0.0137	0.72
Obs./R ²	657	0.39	724	0.37	1,006	0.20	450	0.46	497	0.37	968	0.29
METAL PRODUCTS												
LK_i	0.0024	0.51	0.0021	0.61	-	-	0.0108	0.16	0.0080	0.29	-	-
LL_i	-0.0132	0.60	-0.0020	0.94	-0.0450	0.32	0.0009	0.98	-0.0750	0.34	-0.0104	0.71
LM_i	-0.0140	0.11	-0.0170	0.09	-0.0057	0.75	-0.0156	0.36	-0.0211	0.26	-0.0156	0.21
LE_i	0.0983	0.00	0.1035	0.00	0.1197	0.00	0.1461	0.00	0.1733	0.00	0.1220	0.00
RD_i	-0.0225	0.05	-0.0134	0.27	-0.0043	0.71	-0.0930	0.30	-0.0632	0.50	-0.0899	0.15
SM_i	0.0001	0.87	0.0000	1.00	0.0009	0.29	-0.0002	0.75	0.0010	0.43	0.0006	0.31
SH_i	0.0009	0.27	0.0010	0.26	-0.0016	0.54	-0.0026	0.39	-0.0044	0.23	0.0001	0.95
YR_i	-0.0015	0.17	-0.0002	0.91	-0.0007	0.66	-0.0034	0.14	0.0015	0.78	0.0040	0.22
DS_i	-0.1580	0.12	-0.1736	0.11	-0.1583	0.19	-0.1495	0.30	-0.6236	0.13	-0.1097	0.18
$DFMIN_i$	-0.2892	0.16	-0.2650	0.18	-0.4620	0.08	-0.5044	0.08	-0.5075	0.16	-0.1183	0.32
$DFMAJ_i$	-0.0411	0.42	-0.0653	0.26	-0.0381	0.71	-0.0305	0.75	0.0033	0.98	0.0034	0.93
$DFHVV_i$	0.0064	0.78	0.0167	0.42	-0.0278	0.63	-0.0137	0.88	-0.0012	0.99	0.0315	0.51
TestDFs	1.40	0.25	1.80	0.17	1.57	0.21	1.45	0.24	0.98	0.37	0.76	0.47
Obs./R ²	657	0.40	724	0.38	1,006	0.20	450	0.46	497	0.38	968	0.29

Appendix Table 6 (continued)

Notes: - = estimate could not be obtained; in the Obs./R² rows, the coefficient column contains the number of observations and the P-value column contains the R-squared; the TestDFs rows show Wald tests of the hypothesis that coefficients on all foreign ownership dummies are equal and associated p-values; industry and region dummies also included as relevant (see explanation in the text); full results including the constant and all dummies are available from the authors.

Appendix Table 7: OLS Estimates of SOE- and MNC-Private Coal Fuel Intensity Differentials and Other Slope Coefficients from Equations (1) and (2); all p-values based on robust standard errors

Independent variable, statistic	1996						2006					
	Initial capital		Ending capital		No capital		Initial capital		Ending capital		No capital	
	Value	P-val.	Value	P-val.	Value	P-val.	Value	P-val.	Value	P-val.	Value	P-val.
4 LARGE COAL FUEL USING INDUSTRIES COMBINED, eq. (1)												
LK_i	-0.0066	0.39	-0.0069	0.33	-	-	-0.0151	0.17	-0.0162	0.11	-	-
LL_i	0.0130	0.33	0.0108	0.37	-0.0075	0.64	0.0101	0.89	0.0148	0.83	0.0747	0.10
LM_i	-0.0054	0.24	-0.0041	0.32	-0.0081	0.02	-0.1674	0.03	-0.1504	0.03	-0.1195	0.01
LE_i	0.3001	0.00	0.2592	0.00	0.2867	0.00	0.3466	0.00	0.3381	0.00	0.2956	0.00
RD_i	0.0034	0.43	0.0051	0.31	0.0026	0.59	0.0873	0.45	0.0331	0.49	0.0047	0.91
SM_i	0.0002	0.38	0.0004	0.12	0.0006	0.22	0.0025	0.02	0.0024	0.01	0.0008	0.21
SH_i	0.0003	0.78	-0.0013	0.32	-0.0008	0.47	0.0087	0.03	0.0083	0.02	0.0071	0.01
YR_i	0.0006	0.21	0.0006	0.18	0.0004	0.33	-0.0047	0.20	-0.0034	0.30	0.0008	0.66
DS_i	-0.1215	0.16	-0.1094	0.18	-0.0987	0.16	1.2397	0.00	1.1477	0.00	0.3858	0.00
DF_i	-0.0565	0.16	-0.0757	0.06	-0.0644	0.06	0.0549	0.59	0.0527	0.55	0.0783	0.20
Obs./R ²	3,340	0.66	3,599	0.65	4,771	0.45	2,579	0.36	2,802	0.36	4,974	0.35
4 LARGE COAL FUEL USING INDUSTRIES COMBINED, eq. (2)												
LK_i	-0.0065	0.38	-0.0069	0.33	-	-	-0.0150	0.17	-0.0161	0.11	-	-
LL_i	0.0122	0.36	0.0111	0.35	-0.0071	0.66	0.0103	0.89	0.0152	0.83	0.0726	0.11
LM_i	-0.0048	0.30	-0.0043	0.30	-0.0083	0.02	-0.1683	0.03	-0.1514	0.03	-0.1190	0.01
LE_i	0.3003	0.00	0.2593	0.00	0.2867	0.00	0.3466	0.00	0.3381	0.00	0.2954	0.00
RD_i	0.0027	0.50	0.0053	0.31	0.0025	0.60	0.0940	0.42	0.0359	0.46	-0.0021	0.96
SM_i	0.0002	0.36	0.0004	0.13	0.0006	0.22	0.0025	0.02	0.0024	0.01	0.0008	0.21
SH_i	0.0003	0.78	-0.0013	0.31	-0.0009	0.46	0.0088	0.03	0.0084	0.02	0.0073	0.01
YR_i	0.0007	0.18	0.0006	0.18	0.0004	0.31	-0.0047	0.20	-0.0035	0.29	0.0007	0.71
DS_i	-0.1232	0.16	-0.1093	0.18	-0.0993	0.16	1.2406	0.00	1.1489	0.00	0.3873	0.00
$DFMIN_i$	-0.1030	0.43	-0.0960	0.44	-0.1205	0.30	-0.0499	0.82	-0.0607	0.75	0.4048	0.22
$DFMAJ_i$	-0.0797	0.14	-0.0576	0.21	-0.0499	0.22	0.1471	0.45	0.1377	0.44	0.1071	0.34
$DFHVY_i$	0.0001	0.99	-0.0948	0.14	-0.0633	0.24	0.0255	0.82	0.0305	0.75	0.0197	0.74
TestDFs	1.40	0.25	0.15	0.86	0.19	0.82	0.28	0.76	0.33	0.72	0.90	0.41
Obs./R ²	3,340	0.67	3,599	0.65	4,771	0.45	2,579	0.36	2,802	0.36	4,974	0.35
TEXTILES, eq. (1)												
LK_i	0.0000	1.00	0.0000	0.90	-	-	0.0024	0.91	-0.0036	0.85	-	-
LL_i	0.0009	0.22	0.0007	0.23	0.0009	0.18	-0.0222	0.89	-0.0119	0.93	0.1243	0.22
LM_i	-0.0004	0.30	0.0003	0.28	-0.0004	0.04	-0.3161	0.05	-0.2792	0.05	-0.2602	0.01
LE_i	0.0345	0.03	0.0345	0.03	0.0257	0.01	0.3796	0.00	0.3644	0.00	0.3133	0.00
RD_i	-0.0023	0.37	0.0023	0.35	-0.0015	0.45	0.0661	0.96	0.1730	0.91	0.0385	0.98
SM_i	0.0000	0.47	0.0000	0.48	0.0000	0.69	0.0023	0.25	0.0017	0.34	0.0002	0.87
SH_i	-0.0001	0.40	0.0001	0.40	0.0000	0.34	0.0213	0.07	0.0225	0.05	0.0210	0.03
YR_i	-0.0001	0.22	0.0001	0.22	-0.0001	0.15	-0.0078	0.32	-0.0057	0.41	-0.0005	0.89
DS_i	0.0005	0.43	0.0004	0.46	0.0000	1.00	0.6334	0.01	0.5592	0.01	0.1727	0.06
DF_i	0.0006	0.56	0.0006	0.53	-0.0015	0.60	0.1966	0.36	0.1783	0.35	0.0788	0.49
Obs./R ²	1,306	0.55	1,440	0.55	1,839	0.50	1,185	0.33	1,285	0.32	2,109	0.31

Appendix Table 7 (continued)

Independent variable, statistic	1996						2006					
	Initial capital		Ending capital		No capital		Initial capital		Ending capital		No capital	
	Value	P-val.	Value	P-val.	Value	P-val.	Value	P-val.	Value	P-val.	Value	P-val.
TEXTILES, eq. (2)												
LK_i	0.0000	0.99	0.0000	0.90	-	-	0.0021	0.92	-0.0037	0.85	-	-
LL_i	0.0009	0.22	0.0007	0.23	0.0009	0.18	-0.0234	0.88	-0.0120	0.93	0.1236	0.22
LM_i	-0.0004	0.30	-0.0003	0.27	-0.0004	0.04	-0.3173	0.05	-0.2812	0.05	-0.2609	0.01
LE_i	0.0345	0.03	0.0345	0.03	0.0257	0.01	0.3800	0.00	0.3647	0.00	0.3133	0.00
RD_i	-0.0025	0.35	-0.0024	0.34	-0.0013	0.54	0.0911	0.95	0.1968	0.89	0.0235	0.99
SM_i	0.0000	0.46	0.0000	0.48	0.0000	0.70	0.0023	0.25	0.0018	0.33	0.0002	0.86
SH_i	-0.0001	0.40	-0.0001	0.40	0.0000	0.34	0.0211	0.07	0.0221	0.05	0.0209	0.03
YR_i	-0.0001	0.22	-0.0001	0.22	-0.0001	0.14	-0.0081	0.30	-0.0061	0.39	-0.0007	0.85
DS_i	0.0005	0.42	0.0004	0.46	0.0000	0.99	0.6373	0.01	0.5641	0.01	0.1750	0.06
$DFMIN_i$	0.0007	0.61	0.0007	0.60	0.0006	0.40	0.2927	0.67	0.2619	0.68	0.2636	0.38
$DFMAJ_i$	0.0012	0.38	0.0010	0.38	-0.0033	0.56	0.4933	0.19	0.4772	0.17	0.2509	0.30
$DFHVV_i$	0.0001	0.95	0.0001	0.84	0.0000	0.96	-0.0053	0.98	-0.0110	0.95	-0.0183	0.87
TestDFs	0.86	0.42	0.79	0.45	0.79	0.46	0.83	0.44	0.91	0.40	0.85	0.43
Obs./R ²	1,306	0.55	1,440	0.55	1,839	0.50	1,185	0.33	1,285	0.32	2,109	0.31
PAPER PRODUCTS, eq. (1); East Indonesian plants omitted for 1996												
LK_i	-0.0025	0.28	-0.0009	0.44	-	-	-0.0044	0.60	-0.0172	0.22	-	-
LL_i	0.0024	0.42	0.0011	0.69	0.0181	0.42	0.0281	0.17	0.0587	0.11	0.0739	0.20
LM_i	-0.0010	0.56	0.0008	0.76	-0.0089	0.36	-0.0232	0.18	-0.0444	0.06	-0.0509	0.03
LE_i	0.0811	0.00	0.0633	0.00	0.1163	0.00	0.1462	0.00	0.1750	0.00	0.2421	0.00
RD_i	0.0038	0.31	0.0039	0.37	-0.0041	0.71	0.0054	0.95	-0.1240	0.58	-0.0421	0.79
SM_i	-0.0001	0.40	0.0001	0.55	0.0006	0.27	0.0009	0.12	0.0027	0.07	0.0040	0.00
SH_i	0.0006	0.25	-0.0015	0.50	-0.0035	0.22	-0.0040	0.30	-0.0023	0.59	-0.0062	0.31
YR_i	0.0004	0.28	0.0002	0.49	-0.0006	0.66	0.0006	0.76	-0.0021	0.59	-0.0003	0.90
DS_i	0.0063	0.60	0.0123	0.38	0.0275	0.37	-0.0084	0.90	0.1254	0.47	0.1409	0.04
DF_i	0.0006	0.82	-0.0179	0.39	-0.1658	0.09	-0.1093	0.15	-0.0961	0.19	0.0900	0.58
Obs./R ²	186	0.81	214	0.83	339	0.61	229	0.72	263	0.60	490	0.67
PAPER PRODUCTS, eq. (2), minority-foreign & East Indonesian plants omitted for 1996												
LK_i	-0.0025	0.28	-0.0007	0.60	-	-	-0.0039	0.64	-0.0170	0.23	-	-
LL_i	0.0025	0.42	0.0022	0.42	0.0242	0.28	0.0252	0.23	0.0563	0.13	0.0603	0.23
LM_i	-0.0011	0.53	-0.0004	0.81	-0.0160	0.16	-0.0244	0.17	-0.0469	0.06	-0.0486	0.04
LE_i	0.0811	0.00	0.0644	0.00	0.1294	0.00	0.1473	0.00	0.1763	0.00	0.2414	0.00
RD_i	0.0039	0.31	0.0039	0.36	-0.0029	0.77	0.0095	0.91	-0.1137	0.61	0.0542	0.77
SM_i	-0.0001	0.40	0.0001	0.55	0.0007	0.21	0.0010	0.12	0.0028	0.07	0.0039	0.00
SH_i	0.0007	0.25	-0.0010	0.55	-0.0010	0.71	-0.0042	0.27	-0.0025	0.56	-0.0062	0.28
YR_i	0.0004	0.28	0.0002	0.52	-0.0007	0.62	0.0005	0.80	-0.0022	0.58	-0.0005	0.86
DS_i	0.0062	0.61	0.0103	0.40	0.0169	0.46	0.0068	0.93	0.1462	0.42	0.1483	0.03
$DFMIN_i$	-	-	-	-	-	-	0.0209	0.68	-0.0474	0.38	0.9545	0.30
$DFMAJ_i$	0.0021	0.49	0.0018	0.54	-0.0132	0.34	0.0450	0.50	0.0957	0.22	0.2920	0.01
$DFHVV_i$	-0.0066	0.49	-0.0669	0.39	-0.4608	0.14	-0.1729	0.12	-0.1481	0.16	-0.1279	0.26
TestDFs	0.65	0.42	0.77	0.38	2.16	0.14	1.31	0.27	1.40	0.25	3.66	0.03
Obs./R ²	186	0.81	214	0.83	336	0.66	229	0.73	263	0.61	490	0.68

Appendix Table 7 (continued)

Independent variable, statistic	1996						2006					
	Initial capital		Ending capital		No capital		Initial capital		Ending capital		No capital	
	Value	P-val.	Value	P-val.	Value	P-val.	Value	P-val.	Value	P-val.	Value	P-val.
CHEMICALS, eq. (1)												
LK_i	0.0009	0.72	0.0009	0.75	-	-	-0.0266	0.08	-0.0206	0.10	-	-
LL_i	-0.0018	0.86	-0.0030	0.76	0.0019	0.82	0.0983	0.05	0.0872	0.05	0.0560	0.02
LM_i	-0.0016	0.67	-0.0010	0.77	-0.0035	0.43	-0.0649	0.01	-0.0612	0.01	-0.0306	0.01
LE_i	0.2449	0.01	0.2435	0.01	0.2068	0.02	0.2357	0.00	0.2359	0.00	0.1642	0.00
RD_i	-0.0001	0.98	-0.0005	0.86	-0.0004	0.79	-0.0314	0.54	-0.0087	0.60	-0.0199	0.23
SM_i	0.0005	0.14	0.0005	0.12	0.0003	0.16	0.0007	0.69	0.0004	0.77	0.0001	0.94
SH_i	0.0011	0.09	0.0011	0.09	0.0007	0.06	-0.0015	0.38	-0.0017	0.28	-0.0018	0.13
YR_i	0.0019	0.11	0.0018	0.11	0.0013	0.11	-0.0043	0.08	-0.0042	0.06	-0.0001	0.93
DS_i	-0.0632	0.35	-0.0625	0.33	-0.0327	0.41	0.1506	0.15	0.1457	0.10	0.0471	0.14
DF_i	-0.0902	0.07	-0.0825	0.08	-0.0364	0.15	0.1649	0.22	0.1486	0.21	0.1049	0.13
Obs./R ²	630	0.56	665	0.56	994	0.49	493	0.50	544	0.50	1,099	0.39
CHEMICALS, eq. (2)												
LK_i	0.0007	0.79	0.0006	0.81	-	-	-0.0273	0.07	-0.0215	0.08	-	-
LL_i	-0.0026	0.80	-0.0046	0.66	0.0009	0.92	0.1017	0.04	0.0890	0.04	0.0578	0.02
LM_i	-0.0008	0.83	0.0001	0.98	-0.0028	0.53	-0.0635	0.01	-0.0591	0.01	-0.0303	0.01
LE_i	0.2462	0.01	0.2446	0.01	0.2072	0.02	0.2372	0.00	0.2374	0.00	0.1643	0.00
RD_i	-0.0011	0.71	-0.0014	0.63	-0.0009	0.60	-0.0087	0.87	-0.0023	0.88	-0.0169	0.26
SM_i	0.0005	0.14	0.0005	0.12	0.0003	0.16	0.0008	0.66	0.0005	0.75	0.0001	0.93
SH_i	0.0012	0.09	0.0012	0.10	0.0008	0.06	-0.0022	0.23	-0.0023	0.19	-0.0020	0.11
YR_i	0.0019	0.10	0.0018	0.11	0.0013	0.11	-0.0037	0.12	-0.0037	0.08	0.0000	0.98
DS_i	-0.0636	0.35	-0.0631	0.33	-0.0328	0.41	0.1264	0.20	0.1315	0.12	0.0440	0.16
$DFMIN_i$	-0.0178	0.50	-0.0187	0.40	-0.0063	0.55	-0.2017	0.41	-0.1939	0.37	-0.0649	0.57
$DFMAJ_i$	-0.1411	0.08	-0.1300	0.08	-0.0562	0.15	-0.0794	0.67	-0.0641	0.70	0.0276	0.60
$DFHVV_i$	-0.0330	0.10	-0.0288	0.10	-0.0119	0.27	0.3647	0.05	0.3257	0.05	0.1741	0.09
TestDFs	1.43	0.24	1.40	0.25	1.08	0.34	2.35	0.10	2.34	0.10	1.40	0.25
Obs./R ²	630	0.56	665	0.56	994	0.49	493	0.51	544	0.51	1,099	0.39
NON-METALLIC MINERAL PRODUCTS, eq. (1)												
LK_i	-0.0340	0.24	-0.0308	0.25	-	-	-0.0131	0.07	-0.0106	0.09	-	-
LL_i	0.0887	0.10	0.0783	0.10	-0.0040	0.94	0.0731	0.19	0.0628	0.21	0.0387	0.50
LM_i	-0.0058	0.63	-0.0033	0.78	-0.0028	0.84	-0.0336	0.14	-0.0281	0.16	-0.0167	0.49
LE_i	0.6739	0.00	0.6743	0.00	0.8660	0.00	0.5308	0.00	0.5313	0.00	0.4902	0.00
RD_i	0.0797	0.19	0.0695	0.20	0.0062	0.92	0.1578	0.40	0.1659	0.37	0.0282	0.85
SM_i	0.0015	0.19	0.0013	0.21	0.0018	0.17	0.0015	0.08	0.0013	0.09	0.0000	0.96
SH_i	-0.0088	0.07	-0.0080	0.07	-0.0105	0.04	-0.0043	0.32	-0.0039	0.33	0.0005	0.89
YR_i	-0.0016	0.29	-0.0015	0.28	-0.0031	0.16	-0.0030	0.32	-0.0027	0.35	-0.0007	0.75
DS_i	-0.5098	0.12	-0.4796	0.12	-0.2155	0.43	1.2743	0.09	1.2635	0.09	0.3962	0.28
DF_i	-0.2881	0.14	-0.2836	0.15	-0.2822	0.13	0.0289	0.70	0.0239	0.72	0.1289	0.44
Obs./R ²	1,217	0.81	1,288	0.80	1,596	0.69	672	0.81	710	0.81	1,276	0.67

Appendix Table 7 (continued)

Independent variable, statistic	1996						2006					
	Initial capital		Ending capital		No capital		Initial capital		Ending capital		No capital	
	Value	P-val.	Value	P-val.	Value	P-val.	Value	P-val.	Value	P-val.	Value	P-val.
NON-METALLIC MINERAL PRODUCTS, eq. (2)												
LK_i	-0.0313	0.25	-0.0282	0.26	-	-	-0.0131	0.08	-0.0106	0.09	-	-
LL_i	0.0922	0.09	0.0816	0.09	0.0021	0.97	0.0754	0.19	0.0646	0.21	0.0317	0.58
LM_i	-0.0073	0.53	-0.0047	0.68	-0.0036	0.79	-0.0344	0.13	-0.0287	0.16	-0.0152	0.53
LE_i	0.6751	0.00	0.6755	0.00	0.8676	0.00	0.5305	0.00	0.5310	0.00	0.4894	0.00
RD_i	0.0548	0.32	0.0461	0.35	-0.0170	0.78	0.1768	0.35	0.1835	0.32	-0.0496	0.80
SM_i	0.0016	0.18	0.0013	0.21	0.0019	0.16	0.0015	0.08	0.0013	0.10	0.0001	0.89
SH_i	-0.0088	0.07	-0.0079	0.07	-0.0106	0.04	-0.0042	0.32	-0.0038	0.34	0.0004	0.92
YR_i	-0.0016	0.31	-0.0015	0.30	-0.0030	0.17	-0.0030	0.33	-0.0026	0.36	-0.0009	0.68
DS_i	-0.5197	0.11	-0.4896	0.12	-0.2280	0.41	1.2752	0.09	1.2643	0.09	0.4007	0.27
$DFMIN_i$	-0.6313	0.18	-0.6223	0.19	-0.7484	0.15	-0.0827	0.53	-0.0754	0.55	0.8329	0.28
$DFMAJ_i$	-0.2163	0.29	-0.2108	0.30	-0.1869	0.30	0.0910	0.24	0.0831	0.25	0.0154	0.96
$DFHVY_i$	-0.0427	0.40	-0.0393	0.39	0.0120	0.71	0.0404	0.61	0.0312	0.64	0.0598	0.21
TestDFs	0.96	0.38	0.97	0.38	1.25	0.29	1.22	0.29	1.10	0.33	0.51	0.60
Obs./R ²	1,217	0.81	1,288	0.81	1,596	0.69	672	0.81	710	0.81	1,276	0.67

Notes: - = estimate could not be obtained; in the Obs./R² rows, the coefficient column contains the number of observations and the P-value column contains the R-squared; the TestDFs rows show Wald tests of the hypothesis that coefficients on all foreign ownership dummies are equal and associated p-values; industry and region dummies also included as relevant (see explanation in the text); full results including the constant and all dummies are available from the authors.

Appendix Table 8: Industry definitions

Industry definition in this paper	1996, ISIC revision 2 definitions	2006, ISIC revision 3 definitions
Manufacturing (19 industries)	114 4-digit categories	132 4-digit categories
Large energy users (12 industries)	80 4-digit categories; 78 in regressions	91 4-digit categories; 80 in regressions
Food & beverages	311+312+313	15
Textiles	321	17
Apparel	322	18
Wood products	331	20
Paper products	341	21
Chemicals	351+352	24
Rubber & plastic products	355+356	25
Non-metallic mineral products	36	26
Basic metals	37	27
Electronics-related machinery	3825+383+385	30+31+32+33
Motor vehicles	3843	34
Other transportation machinery	3841+3842+3844+3845+3849	35
Small energy users (7 industries)		
Tobacco	314	16
Leather & footwear	323+324	19
Printing & publishing	342	22
Oil & coal products	353+354	23
Metal products	381	28
General machinery	3821+3822+3823+3824+3829	29
Miscellaneous manufacturing & recycling	39+332	36+37

Note: There are numerous discrepancies at the 3-, 4-, or 5-digit levels in revisions 2 and 3 that are impossible to resolve precisely; in 1996, 3825 (4 observations) is combined with 3839 and 3845 (1 observation) is combined with 3849; in 2006, 1553 (6 obs.) is combined with 1552, 1510 (4 obs.) with 1511, 1720 (1 obs.) with 1721, 2420 (1 obs.) with 2421, 2610 (1 obs.) with 2611, 3310 (1 obs.) with 3311, 3520 (3 obs.), 3530 (2 obs.), 3540 (1 obs.) with 3590; most combinations in 2006 result from lack of 4-digit definitions (observations where the 4-digit categories listed end in 0) and are arbitrary.