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# Economic and Political Networks and Firm Openness

## Evidence from Indonesia

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# Economic and Political Networks and Firm Openness: Evidence from Indonesia*

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Abstract

Using a firm-level dataset from the manufacturing sector in Indonesia, we examine how firms' ties with the government in receiving rents and with other firms and their managers' trust toward foreigners and views of globalization are correlated with each other. We find that firms' strong political ties are associated positively with the level of managers' trust toward domestic citizens and the number of domestic buyers and suppliers and negatively with their level of trust toward foreign citizens. In turn, managers' trust toward foreign citizens and firms' transactions with foreign firms are positively correlated with each other, and trust and business networks within the country also show a positive correlation. Then, when managers trust domestic citizens more or when firms transact with more domestic firms, managers are more likely to have a negative view of globalization, incorporating such factors as the foreign ownership of firms and free trade. The results suggest a vicious cycle between the political ties of local firms and protectionist views and policies against globalization, which lead to economic stagnation due to a lack of diffusion of knowledge from abroad. This mechanism may explain why middle-income countries experience economic stagnation and cannot escape the "middle-income trap."

Keywords: business networks, political networks, trust, views of globalization, Indonesia

JEL classification: D22, F14, F23

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## 1. Introduction

Social networks can promote economic development by facilitating knowledge diffusion in an economy. Social capital, or social networks in which actors are strongly and densely connected through trust, may further promote development because trust is required in economic transactions due to information asymmetry (Durlauf and Fafchamps, 2005). Empirical studies have found that social capital is positively correlated with income and productivity at the country level (Knack and Keefer, 1997), the sub-national region level (Gennaioli et al., 2013), the firm level (Phelps, 2010), and the individual level (Rost, 2011).

However, strong ties with trust may not always be effective in knowledge diffusion or productivity enhancement. Granovetter (1973) and Burt (1992, 2004) show that weak ties with outsiders are more effective because the knowledge of actors who are densely connected largely overlaps. Todo et al. (2015) reveal that the performance of a firm is lower when its network partners are densely connected.

Moreover, some studies emphasize the dark side of social capital. Olson (1984) argues that social capital in lobbying groups is often intensified in order to receive rents from the government, leading to protectionist policies and, thus, to economic stagnation. Some empirical studies indeed show negative effects of strong ties on economic and social development (Beugelsdijk and Smulders, 2004; Satyanath et al., 2013).

However, empirical studies have not fully investigated the detailed mechanism of the argument by Olson (1984) from the political economy perspective. To fill the gap, this paper examines how social capital generated from economic rents is intensified and leads to the protectionism of economic actors, taking firm managers' views of globalization in Indonesia as an example. We hypothesize that firms' political networks created to receive rents strengthen trust toward domestic citizens and business networks with domestic firms, in turn weakening trust toward foreign citizens and networks with foreign firms. Trust and networks within the country reinforce each other through dense communication but deteriorate trust and networks across countries because trust toward insiders and trust toward outsiders often substitute, rather than complement, each other (Ermisch and Gambetta, 2010). Then, trust and networks within the country, combined with the lack of trust and networks across countries, enhance protectionism. Figure 1 summarizes this mechanism.

We test these hypotheses using firm-level data collected by the authors in the manufacturing sector in Indonesia. Indonesia is a suitable target for this research because the political ties of firms play an important role in business. According to the OECD (2012), 26

percent of firms in Indonesia expect to give gifts to obtain an operating license from the government. This figure is substantially higher than those for the Philippines (6.6 percent) and Vietnam (6.7 percent), indicating the particular significance of political ties in economic activities in Indonesia. Our data are unique in that they include information on each firm's business and political networks, firm managers' views of globalization, such as the foreign ownership of private firms and free trade agreements (FTAs), and the level of these managers' trust toward domestic and foreign citizens.

Our empirical results support most of our hypotheses. Managers of firms that possess networks with the government to earn rents are more likely to oppose the foreign ownership of firms and FTAs through enhancing trust and networks within the country and deteriorating those across countries. Assuming that protectionism of the public leads to the actual implementation of protectionist policies (although this paper did not examine this assumption), our results suggest a vicious cycle between political networks associated with rents and the protectionism of economic actors. Once the vicious cycle is initiated, it may be difficult to escape because political ties and protectionism intensify each other. Because many studies empirically show the benefits of globalization (see Section 2.1 for details), this vicious cycle results in economic stagnation. This mechanism may be able to explain middle-income traps in which the income of middle-income countries stagnates for a long time and cannot reach the level of current developed countries.

Some studies, including Tomiura et al. (2013) and Naoi and Kume (2011), have used individual-level data to examine how protectionist views of globalization are determined. For example, Naoi and Kume (2011) find that Japanese are more likely to support agricultural protectionism if they feel that their jobs are insecure or they have family members or relatives who engage in farming. Tomiura et al. (2013) show evidence that wealthy citizens or those in managerial positions are more supportive of trade liberalization, whereas citizens engaging in agriculture support liberalization less. However, they did not incorporate into their analysis the effects of business or political networks or the level of trust toward domestic and foreign citizens. Incorporating these issues is the contribution of this paper.

## 2. Hypotheses and Estimation Methods

### 2.1. Benefits of globalization

Economic integration and globalization provide many benefits to the local economy. For example, many studies have found evidence of learning by exporting, i.e., productivity growth from

exporting. Blalock and Gertler (2004) find that when Indonesian firms began to export, their productivity jumped by 2-5 percent, and Van Biesebroeck (2005) finds similar evidence for Sub-Saharan Africa. A meta-analysis by Martins and Yang (2009) confirms the positive learning-by-exporting effect, revealing a larger effect for less developed countries. In addition to its effect on productivity in production activities, exporting is shown to raise productivity in innovative activities in Spain (Salomon and Shaver, 2005). The import of intermediate and final goods is also beneficial to local firms, as Amiti and Konings (2007) find using firm-level data from Indonesia.

Inflows of foreign direct investment (FDI) are also found to promote productivity growth in the host country. Using establishment-level data from Indonesia, Arnold and Javorcik (2005) find that domestic firms improve their productivity when they are acquired by foreign firms. FDI can even benefit other domestically owned firms in the host country through knowledge spillovers. For Indonesia, Takii (2005) finds positive spillovers from FDI. Spillovers are more significant when FDI is associated with local research and development (R&D) activities in the host country (Todo and Miyamoto, 2006) and when foreign-owned firms are vertically integrated with, i.e., procure supplies from, local firms (Javorcik, 2004). Using cross-country panel data, Borensztein et al. (1998) find that FDI has a positive effect on growth in GDP per capita when the education level is sufficiently high.

### 2.2. Linkages between protectionism, business and political networks, and trust

Although these benefits of globalization for the local economy have been found in academic research, some people, including firm managers, have a negative view of globalization. Such protectionism may be generated by a lack of overseas business networks and by distrust towards foreign citizens; these two factors are interlinked with each other and affected by political ties, as explained in detail below and summarized in Figure 1.

We hypothesize that an important source of protectionist views of globalization is firms' ties with politicians and the government to receive economic rents. Firms with strong political networks are more likely to perceive foreign-owned firms as threats and oppose the penetration of FDI, which may deteriorate their rents (arrow A in Figure 1). In addition, politically connected firms are more willing to expand transactions in the domestic market regulated by the government—because their rents are earned domestically—and are less willing to create business networks with foreign firms (arrow B). For the same reason, managers of firms with close political ties tend to distrust foreigners because foreigners are often eager to destroy their rents (arrow C).

Trust and business networks within a country reinforce each other, and those across countries intensify each other. Managers with fewer business ties with foreign firms are less likely to trust foreign citizens simply due to a lack of direct communication (arrow D). In turn, distrust toward foreigners discourages firms' overseas activities (arrow E).

Finally, when firm managers have little interaction with foreign firms, they cannot realize the benefits of globalization and thus may not support globalization (arrow F of Figure 1). Furthermore, managers who distrust foreign citizens are more likely to perceive foreign-owned firms and foreign citizens as threats rather than as collaborative partners that bring new knowledge (arrow G), as Fafchamps (2006) suggests. Accordingly, political networks affect protectionist views of globalization directly and indirectly through trust and business networks.

### 2.3. Estimation Method

To test these hypotheses, we estimate the following equations for firm *i* and its owner or highly ranked manager:

$$VIEW_i = \beta_0^G + \beta_1^G NETWORK_i + \beta_2^G TRUST_i + \beta_3^G POL_i + \beta_4^G X_i + \beta_5^G D_i + \varepsilon_i^G , \quad (1)$$

$$NETWORK_i = \beta_0^N + \beta_1^N TRUST_i + \beta_2^N POL_i + \beta_3^N X_i + \beta_4^N D_i + \varepsilon_i^N , \quad (2)$$

$$TRUST_i = \beta_0^T + \beta_1^T NETWORK_i + \beta_2^T POL_i + \beta_3^T X_i + \beta_4^T D_i + \varepsilon_i^T . \quad (3)$$

*VIEW* is a measure of the manager's positive views of globalization. *NETWORK* is a vector of measures of the firm's ties with domestic firms and those with foreign firms. Similarly, *TRUST* is a vector of measures of the manager's trust toward domestic and foreign citizens. *POL* is a measure of the firm's ties with politicians and the government. *X* is a vector of control variables at the firm and manager levels, *D* is a vector of industry dummies, and $\varepsilon$ is the error term. The next section will explain in detail how we construct these variables.

Based on the argument in the previous subsection, we hypothesize that networks with foreign firms and trust toward foreign citizens have a positive effect on the pro-globalization views of managers, whereas networks with domestic firms, trust toward domestic citizens, and networks with politicians have a negative effect. Business networks with foreign firms and trust toward foreign citizens have a positive effect on each other, whereas they are negatively affected by political ties. Conversely, networks with domestic firms and trust toward domestic citizens have a positive effect on each other, whereas they are positively affected by political ties.

Equations (1)-(3) should be estimated jointly, for example, using 2-stage least squares estimations, to identify interlinked causal relations between views of globalization, business and political networks, and trust. However, because we do not have a good instrument for such joint estimation, we estimate each equation separately using an ordered logit estimation when the dependent variable is a categorical variable and a Tobit estimation when it is continuous with a lower limit of zero. Because this study examines the correlation between the variables of interest, rather than their causal relations, the results should be viewed with caution.

## 3. Data

### 3.1. Survey

The analysis in this study is based on data from an establishment-level survey conducted by the authors in cooperation with the Institute for Economic and Social Research (LPEM), Faculty of Economics, University of Indonesia. The survey was conducted in 17 cities in six provinces[1] in Indonesia from September 21, 2014 to December 7, 2014 and covered five manufacturing industries, i.e., the textile, chemical, metal and machinery, electrical and electric machinery, and transportation equipment industries. The five industries were selected because these are the major manufacturing industries in Indonesia. The 17 cities were chosen because the number of establishments in the five industries in each city exceeded a threshold level, according to the Manufacturing Industry Directory of the Central Bureau of Statistics (BPS) for 2012 (hereafter, the 2012 Directory) .

Among the establishments, 40 percent are in the textile industry, 32 percent are in the chemical industry, 18 percent are in the metal and machinery industry, 5 percent are in the electricity and electric machinery industry, and 5 percent are in the transport equipment industry. The size of the surveyed firms varies: 11 percent are small firms with fewer than 30 workers, 30 percent are medium-sized firms with fewer than 100 workers, and 58 percent are large firms with 100 or more workers.

In the survey, we randomly selected establishments from the 2012 Directory and conducted a face-to-face interview with each establishment. The 2012 Directory covers all establishments with 30 workers or more and randomly selected establishments with fewer workers. When any

[1] These are Cilegon and Tangerang in Banten Province, Jakarta Barat, Jakarta Pusat, Jakarta Selatan, Jakarta Timur, and Jakarta Utara in DKI Jakarta, Semarang and Pekalongan in Central Java Province, Surabaya in East Java Province, Medan in North Sumatera Province, and Bandung, Bekasi, Bogor, Cimahi, Depok, and Taskmalaya in West Java Province.

selected firm refused to respond or no longer existed, we replaced it with a randomly selected firm. In three cities, Pekalongan, Medan, and Semarang, after some refusals, no more establishments were available in the 2012 Directory because there were few establishments in these cities. Therefore, we randomly selected establishments for replacement from the Directory for 2011. Although our initial target was 400 establishments, we collected data from only 332 firms due to time constraints.

The questions in the survey consist primarily of two parts. The first part contains questions about standard characteristics of establishments, such as sales, the value of capital stocks, the number of full-time workers, ownership, and board members. This part also includes questions about the firm's business networks, including the number of buyers and suppliers of each establishment by location and ownership.

The second contains questions directed toward establishments' highly ranked managers. Our target was the top manager, such as the president or CEO, but when he/she was not available, we asked a procurement or accounting manager or any highly ranked manager. Table 1 shows the composition of respondents by position. Company executives accounted for 14.2 percent, owners 15.7 percent, highly ranked managers 31.1 percent, and other positions 34.6 percent. Questions to managers were related to their ethnicity, religion, education background, participation in associations, and personal ties with politicians. We also asked the managers to what degree they trusted particular types of people, such as politicians, Indonesians, and foreigners. In addition, we surveyed managers' views of globalization, asking them whether they thought that the foreign ownership of private firms should be limited in Indonesia and that free trade agreements are beneficial to small and medium-sized enterprises in Indonesia.

Some firms did not answer all questions. Therefore, our estimation utilizes a sub-sample of 276 firms for which all necessary variables are available.

### 3.2. Variables

From the data collected through the survey, we construct key variables in this paper related to business and political ties and managers' views of globalization. First, to measure the business networks of establishments, we create two variables: the number of domestically located buyers and suppliers and the number of overseas buyers and suppliers. The number of domestic transaction partners represents the strength of domestic business ties, whereas the number of overseas partners represents the strength of ties across countries. To incorporate a nonlinear

relationship between these business network variables and others, we take a log of the two after adding one. Therefore, the lower limit of the two variables is zero.

Second, we construct a dummy variable to indicate whether firms have a connection with any politician or the government that provides economic rents to firms based on the following question to managers: “Do you feel that you are able to obtain government approvals more easily than other companies?” We define the dummy variable for political ties as one if the response of managers is yes. Alternatively, for political ties in a broader context, we construct a dummy variable that takes a value of one if firms can receive valuable information from the government, receive any subsidy from the government, or have politicians on their boards of directors or if their managers have any personal relationships with politicians.

Third, to measure the respondent manager’s views of globalization, we construct two measures from the survey questions. In the survey, we asked respondent managers whether they agreed with the statement, “In general, the government should limit the foreign ownership of domestic companies.” We define a categorical variable for supporting the foreign ownership of private firms as four if the respondent’s reply to the question was “completely disagree,” three if it was “somewhat disagree,” two if it was “somewhat agree,” and one if it was “completely agree.”

Another measure of managers’ view of globalization is based on their responses to the statement ,“Free trade agreements (FTAs) are beneficial to small and medium-sized enterprises (SMEs) in Indonesia.” We define a categorical variable for positive views of globalization from one to four, for which four indicates strong agreement with the statement.

Fourth, we measure the degree of trust toward domestic and foreign citizens based on survey questions to managers. We define a categorical variable for trusting foreign citizens as one if managers responded, “I do not trust foreigners at all,” two, “I do not trust foreigners very much,” three, “I trust foreigners to some extent,” and four, “I trust foreigners completely.” Similarly, we define a categorical variable for trusting domestic citizens. In this study, we assume that the degree of managers’ trust toward domestic citizens indicates the strength of domestic personal ties, whereas the degree of managers’ trust toward foreign citizens indicates the strength of foreign personal ties.

We utilize a set of control variables at the firm and managerial levels. Firm-level variables include the log of the number of permanent workers, firm age and firm age squared, and the foreign ownership ratio. As Melitz (2003) argues, business networks, particularly overseas business networks, are determined by the productivity of firms. However, if we included productivity measures, such as sales per worker, we would lose many firms from the sample

because many firms did not report sales. Therefore, we did not include any direct productivity measure, assuming that firm size is correlated with the productivity level. In empirical studies on the determinants of exports and firm size is found to be a better predictor than productivity (Todo, 2011).

Manager-level variables are age and age squared, the log of years of education, a male dummy, the degree of trust toward politicians, a dummy variable that indicates whether the manager belongs to any association, such as alumni, business, or recreational associations, and religion and ethnicity dummies. These individual characteristics are found to determine the level of trust toward people in general in existing studies, such as those by Alesina and La Ferrara (2002), Algan and Cahuc (2014), and Nunn and Wantchekon (2011).

### 3.3. Summary Statistics

Table 2 shows the distribution of the 2 measures of managers' view of globalization. 27 percent strongly oppose foreign ownership liberalization, 61 percent oppose it to some extent, 11 percent support it to some extent, and only 1 percent support it strongly. To the statement that FTAs are beneficial to SMEs, 29 percent disagree to some extent, and 54 percent agree to some extent.

As shown in Table 3, the level of managers' trust toward Indonesians is high: only 7.5 percent do not trust Indonesians to any extent, whereas 80 and 13 percent trust them to some extent and completely, respectively. However, the level of trust toward foreigners is lower: 24 percent of managers do not trust foreigners to some extent or completely.

The number of transaction partners, i.e., buyers and suppliers, reported by firms is not large for many firms (Table 4). The median number of transaction partners in Indonesia is 5, whereas the number of overseas partners is zero for 19 percent of firms.

Summary statistics for other firm- and manager-level variables are provided in Table 5. Of the firms, 5.6 percent recognize that they can receive business approvals from the government more easily than other firms (POL = 1). The dummy variable for political ties in a broader context (POL_BROAD) is one for 13.5 percent of firms. The average and median numbers of permanent workers are 257 and 100, respectively. On average, the managers are 45.2 years old, with 14.7 years of education. 76 percent of managers are male, and 47 percent of managers belong to an association.

## 4. Estimation Results

### 4.1. Benchmark Results

The results from the estimation of equation (1), using an ordered logit model, are shown in columns (1) and (2) of Table 6. The results in column (1) indicate that a firm manager is more likely to support the limitations of foreign ownership of private firms in Indonesia when the firm transacts with more local buyers and suppliers. In column (2), we find that higher trust toward foreign citizens is correlated with a higher propensity for managers to recognize the benefits of FTAs to Indonesia. These findings imply that strong ties with domestic firms are associated with negative views of globalization, whereas trust toward foreign citizens is associated with positive views. Contrary to this theoretical prediction, political ties are not directly correlated with protectionist views.

Next, columns (3) and (4) of Table 6 present the results from an ordered logit estimation of equation (2). We find that strong ties between politicians and the government are correlated negatively with the level of managers' trust toward foreigners and positively with the level of their trust toward Indonesians. Trust toward Indonesians is also negatively correlated with the number of overseas business partners.

Finally, we present results from the Tobit estimation of equation (3) in columns (5) and (6) of Table 6, finding that Indonesian firms are more likely to transact with overseas firms when managers of firms trust foreigners more and Indonesians less. Moreover, firms with strong political ties transact with more local firms.

The results from columns (3)-(6) suggest that managers of firms with strong political ties that generate economic rents to their firms trust Indonesians more and foreigners less to avoid competition with foreigners and to maintain their rents, expanding transactions with local firms. In addition, it is suggested that trust toward foreigners promotes transactions with foreign firms and that in turn, transactions with foreign firms promote trust toward foreigners through face-to-face communication with foreigners in these transactions. Conversely, a high level of trust toward Indonesians seems to discourage transactions with foreign firms, likely because it promotes closed networks within the country.

### 4.2. Alternative Measure of Political Ties

To check the robustness of the results, we repeat the same regressions using an alternative measure of political ties. As explained in detail in Section 3, this alternative measure of political ties

includes broader aspects of political ties, e.g., having politicians on the board of directors and managers' personal relations with politicians, than the measure based on receiving government approvals more easily that was used in the benchmark results.

The results shown in Table 7 are not very different from the benchmark results in Table 6. However, the coefficients of the measure of political ties are often smaller and less significant here than in the benchmark results. This implies that the narrower definition of political ties explains the empirical model better, likely because firms' ability to obtain business approvals from the government, which is directly related to rents, is the most important aspect of political ties.

### 4.3. Discussion

The results above mostly support the hypotheses explained in Section 2 and summarized in Figure 1, although some of the predicted links are found in the estimations to be insignificant. In summary, firms' strong ties with politicians that enable firms to receive rents from the government lead to more transactions with domestic firms and higher trust toward domestic people but fewer transactions with foreign firms and lower trust toward foreigners. Trust toward domestic (foreign) citizens and transactions with domestic (foreign) firms reinforce each other and promote negative (positive) views of globalization.

These results suggest that when firms' political ties are strengthened, firms are less likely to be interested in foreign economies and engage in cross-border economic activities, such as international trade and cross-border inward mergers and acquisitions (M&As). As a result, domestic actors, including firm managers, perceive foreign firms and foreigners as threats.

Then, a democratic government, such as that of Indonesia, is likely to implement protectionist policies against globalization, such as limiting the foreign ownership of firms in the country and protecting domestic industries by restricting international trade. Because these regulations consequently provide more rents to domestic firms, political ties between firms and the government are strengthened to receive benefits from rents. This paper did not examine the link between domestic citizens' protectionist views of globalization and the implementation of protectionist policies of the government or between protective policies and political ties. However, if these links exist in practice, there will be a vicious cycle between political ties, protectionist views and policies against globalization.

As shown by many studies, including some for Indonesia, international trade and FDI inflows are sources of growth of domestic productivity through knowledge spillovers (Section

2.1). Therefore, this vicious cycle deteriorates openness to the world economy and leads to the stagnation of the domestic economy. In emerging economies such as that of Indonesia, this mechanism may cause middle-income traps. In fact, in many Latin American countries, the income level stagnated for several decades after protectionist policies were implemented in the 1950s. These prolonged middle-income traps may be explained by the vicious cycle between political ties, protectionist views and policies against globalization.

## 5. Conclusion

Using a firm-level dataset from the manufacturing sector in Indonesia collected by the authors, we examine the relations between firm managers' protectionist views of globalization and trust toward domestic and foreign citizens and firms' domestic and overseas business networks and ties with the government.

Our data are unique in that they include comprehensive information on various types of political and business economic ties. First, we identify the political ties of each firm based on whether the firm can obtain business approvals from the government more easily than other firms. Second, our data include information about buyers and suppliers of each firm and their location and ownership so that we can identify its business networks with domestic and foreign firms. Finally, our data measure managers' views of globalization, such as the foreign ownership of firms and free trade agreements (FTA).

We find that strong political ties of firms are associated positively with managers' level of trust toward Indonesians and the number of buyers and suppliers in Indonesia and negatively with their level of trust toward foreign citizens. Managers' trust toward foreign citizens and firms' transactions with foreign firms are positively correlated with each other. Trust and business networks within Indonesia are also correlated. Then, when managers trust Indonesians more or firms transact with more domestic firms, managers are more likely to have a protectionist view of globalization.

The results suggest a vicious cycle between the political ties between local firms and the government and views and policies against globalization, which leads to economic stagnation due to a lack of knowledge diffusion from abroad. This mechanism may explain why middle-income countries are often caught in a trap and cannot escape it despite prolonged economic stagnation.

An obvious caveat in this paper is that we did not correct for possible biases due to endogeneity. Many of the relations between protectionism, business and political ties, and trust shown in Figure 1 are contaminated by reverse causality. For example, we claimed that business

networks with domestic firms lead to the protectionism of firm managers and found some evidence to support this claim. However, when their managers are protectionists, firms are more willing to transact with domestic firms and hesitate to go abroad. Therefore, the results of this paper should be viewed as showing correlation rather than causality. Future work should correct for these endogeneity biases using, for example, instrumental variable estimations. Possible instruments include regional and industry variables that affect the level of trust and political ties and are not impossible to obtain.

Figure 1. Linkages between protectionism, business and political networks, and trust

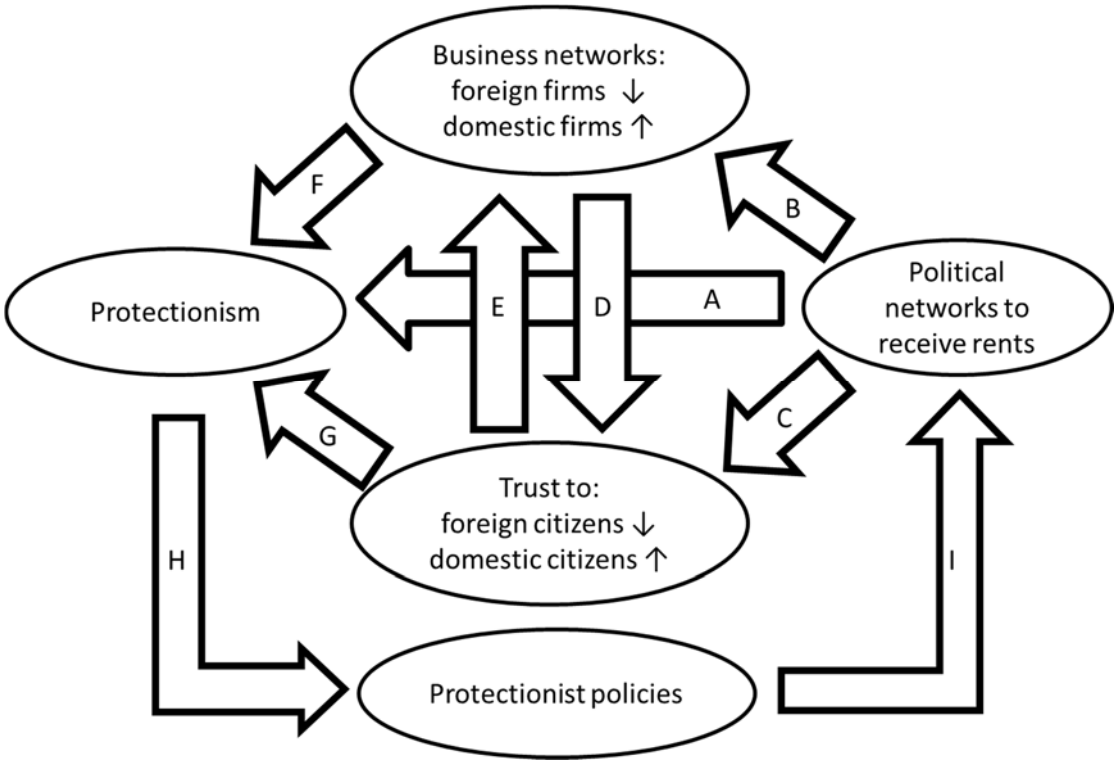

Table 1. Types of Respondents

| Types of respondents | Number of firms | Percentage |
|---|---|---|
| Director | 47 | 14.2 |
| Owner | 52 | 15.7 |
| Managers | 110 | 33.1 |
| Others | 115 | 34.6 |
| Missing | 8 | 2.4 |
| Total | 332 | 100.0 |

Note: Directors include vice presidents, accounting directors, finance directors, managing directors, legal directors, and other positions titled as directors.

Table 2. Managers' Views of Globalization

| | | 1 | 2 | 3 | 4 | |
|---|---|---|---|---|---|---|
| Variables | Description | Strongly disagree | Disagree | Agree | Strongly agree | Mean |
| VIEW_FDI | Foreign ownership should be liberalized. | 27.0% | 60.7% | 11.2% | 1.1% | 1.87 |
| VIEW_FTA | FTAs are beneficial to SMEs. | 4.5% | 29.2% | 53.6% | 12.7% | 2.75 |

Table 3. Levels of Trust toward Indonesians and Foreigners

| Variables | Description | 1 | 2 | 3 | 4 | Mean |
|---|---|---|---|---|---|---|
| | | Do not trust at all | Do not trust | Trust | Trust very much | |
| TRUST_IND | Trust toward Indonesians | 0.4% | 7.1% | 79.8% | 12.7% | 3.05 |
| TRUST_FOR | Trust toward foreigners | 2.6% | 21.4% | 70.0% | 6.0% | 2.79 |

Table 4. Number of Transaction Partners in Indonesia and Foreign Countries

| Variables | Description | Min. | 10% | 50% | 90% | Max. | Mean |
|---|---|---|---|---|---|---|---|
| NET_IND | Number of transaction partners in Indonesia | 0 | 0 | 5 | 17 | 598 | 11.6 |
| NET_FOR | Number of overseas transaction partners | 0 | 0 | 0 | 2 | 54 | 0.87 |

Table 5. Summary Statistics of Key Variables

| Variables | Description | Mean | S.D. | Min | Median | Max |
|---|---|---|---|---|---|---|
| *Firm level* | | | | | | |
| POL | Dummy for political ties | 0.056 | 0.231 | 0 | 0 | 1 |
| POL_BROAD | Dummy for broader political ties | 0.135 | 0.342 | 0 | 0 | 1 |
| L | Number of permanent workers | 256.640 | 532.648 | 0 | 100 | 6570 |
| F_AGE | Firm age | 26.865 | 13.637 | 1 | 25 | 98 |
| FShare | Foreign ownership ratio | 12.833 | 29.194 | 0 | 0 | 100 |
| | | | | | | |
| *Manager level* | | | | | | |
| AGE | Age | 45.176 | 11.302 | 20 | 45 | 84 |
| EDUC | Years of education | 14.659 | 3.229 | 1 | 16 | 26 |
| lnEDUC | Log of EDUC | 2.650 | 0.304 | 0 | 2.773 | 3.258 |
| MALE | Male dummy | 0.757 | 0.430 | 0 | 1 | 1 |
| ASSOC | Dummy for participation in associations | 0.446 | 0.498 | 0 | 0 | 1 |
| TRUST_POL | Level of trust toward politicians | 2.464 | 0.727 | 1 | 3 | 4 |

Table 6. Estimation Results

| | | (1) | (2) | (3) | (4) | (5) | (6) |
|---|---|---|---|---|---|---|---|
| | Dependent variable | VIEW_FDI | VIEW_FTA | TRUST_FOR | TRUST_IND | lnNET_FOR | lnNET_IND |
| | Short description of dependent variable | Supporting foreign ownership | Supporting free trade agreement | Trust toward foreigners | Trust toward Indonesians | # of overseas partners | # of local partners |
| | Estimation method | Ordered logit | Ordered logit | Ordered logit | Ordered logit | Tobit | Tobit |
| Independent variables | Short description | | | | | | |
| TRUST_FOR | Trust toward foreigners | -0.323 | 0.529* | | | 0.920* | 0.0581 |
| | | (0.351) | (0.314) | | | (0.492) | (0.158) |
| TRUST_IND | Trust toward Indonesians | -0.130 | -0.759 | | | -1.218* | -0.258 |
| | | (0.561) | (0.471) | | | (0.637) | (0.228) |
| POL | Political ties | -0.157 | -0.489 | -1.161* | 2.170** | 0.159 | 0.609** |
| | | (0.799) | (0.708) | (0.665) | (1.051) | (0.934) | (0.301) |
| lnNET_FOR | # of overseas partners | 0.154 | -0.206 | 0.345 | -0.552* | | |
| | | (0.149) | (0.169) | (0.227) | (0.313) | | |
| lnNET_IND | # of local partners | -0.278** | 0.0277 | -0.0486 | -0.152 | | |
| | | (0.119) | (0.129) | (0.133) | (0.207) | | |
| AGE | Age | 0.0652 | 0.0465 | -0.0621 | 0.133 | 0.0619 | -0.0480 |
| | | (0.0659) | (0.0808) | (0.0896) | (0.136) | (0.0914) | (0.0363) |
| AGE^2 | Age squared | -0.0715 | -0.0715 | 0.0885 | -0.0936 | -0.0244 | 0.0452 |
| | | (0.0723) | (0.0892) | (0.0969) | (0.140) | (0.0962) | (0.0400) |
| lnEDUC | Years of education | -0.175 | -0.920* | 0.926 | -0.0797 | 0.963 | -0.620* |
| | | (0.433) | (0.508) | (0.630) | (0.753) | (1.024) | (0.320) |
| MALE | Male dummy | -0.172 | 0.101 | -0.373 | 0.529 | 0.745 | -0.0150 |
| | | (0.363) | (0.313) | (0.336) | (0.557) | (0.537) | (0.176) |
| ASSOC | Association dummy | -0.350 | 0.169 | 0.520 | 0.0831 | 0.583 | 0.285* |
| | | (0.306) | (0.284) | (0.338) | (0.587) | (0.413) | (0.169) |
| TRUST_POL | Trust toward politicians | -0.149 | 0.687*** | 1.330*** | 4.132*** | 0.0323 | 0.161 |
| | | (0.218) | (0.206) | (0.208) | (0.576) | (0.295) | (0.103) |
| lnL | Labor | 0.0445 | -0.000503 | 0.0558 | -0.448* | 0.157 | -0.0658 |
| | | (0.112) | (0.120) | (0.129) | (0.231) | (0.151) | (0.0661) |
| F_AGE | Firm age | 0.00471 | -0.0443* | 0.0276 | 0.0146 | 0.00699 | 0.0208 |
| | | (0.0270) | (0.0244) | (0.0280) | (0.0478) | (0.0414) | (0.0172) |
| F_AGE^2 | Firm age squared | 0.000176 | 0.000363 | -0.000590* | -0.000397 | 0.000130 | -0.000113 |
| | | (0.000287) | (0.000234) | (0.000305) | (0.000534) | (0.000510) | (0.000204) |
| FShare | Foreign ownership ratio | 0.00777 | -0.000983 | -0.0104** | 0.000419 | 0.0129** | -0.00396 |
| | | (0.00499) | (0.00485) | (0.00454) | (0.00907) | (0.00649) | (0.00275) |
| | Observations | 267 | 267 | 267 | 267 | 267 | 267 |
| | Pseudo $R^2$ | 0.0664 | 0.113 | 0.233 | 0.633 | 0.114 | 0.0575 |

Notes: Robust standard errors are in parentheses. *, **, and *** signify statistical significance at the 10-, 5-, and 1-percent levels, respectively. Dummies for industries and managers' ethnicity and religion are included as control variables, but for brevity, the results are not shown.

Table 7. Alternative Specifications

| | | (1) | (2) | (3) | (4) | (5) | (6) |
|---|---|---|---|---|---|---|---|
| | Dependent variable | VIEW_FDI | VIEW_FTA | TRUST_FOR | TRUST_IND | lnNET_FOR | lnNET_IND |
| | Short description of dependent variable | Supporting foreign ownership | Supporting free trade agreement | Trust toward foreigners | Trust toward Indonesians | # of overseas partners | # of local partners |
| | Estimation method | Ordered logit | Ordered logit | Ordered logit | Ordered logit | Tobit | Tobit |
| Independent variables | Short description | | | | | | |
| TRUST_FOR | Trust toward foreigners | -0.337 | 0.534* | | | 0.897* | 0.0637 |
| | | (0.349) | (0.316) | | | (0.497) | (0.158) |
| TRUST_IND | Trust toward Indonesians | -0.148 | -0.786* | | | -1.235** | -0.199 |
| | | (0.551) | (0.469) | | | (0.625) | (0.231) |
| POL | Political ties | -0.372 | -0.120 | -1.048* | -0.659 | -0.222 | 0.390* |
| | | (0.455) | (0.436) | (0.568) | (0.789) | (0.578) | (0.207) |
| lnNET_FOR | # of overseas partners | 0.148 | -0.208 | 0.327 | -0.520* | | |
| | | (0.150) | (0.170) | (0.223) | (0.304) | | |
| lnNET_IND | # of local partners | -0.268** | 0.0166 | -0.0361 | -0.146 | | |
| | | (0.119) | (0.125) | (0.134) | (0.221) | | |
| | Observations | 267 | 267 | 267 | 267 | 267 | 267 |
| | Pseudo $R^2$ | 0.0678 | 0.112 | 0.237 | 0.626 | 0.114 | 0.0569 |

Notes: Robust standard errors are in parentheses. *, **, and *** signify statistical significance at the 10-, 5-, and 1-percent levels, respectively. Independent variables are shown in Table 6, and dummies for industries and managers' ethnicity and religion are included as control variables, but for brevity, the results are not shown.

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