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Abstract

This paper examines the role of political affiliation in the extension of trade credit by Chinese firms. Using a dataset of over 70,000 firms over the period 2000-2007, we find that, because they benefit from easier access to short-term external funding, politically affiliated firms can extend more trade credit to their business partners than their non-affiliated counterparts. In other words, politically affiliated firms redistribute bank funding via trade credit. Furthermore, the sensitivity of trade credit extension to short-term debt is largest for non-affiliated private firms producing differentiated goods, which are more constrained in their access to external funding.

JEL Classification: G31, K0, P2.
Keywords: trade credit, political affiliation, Chinese firms.

Outline

Non-technical abstract

Despite being hindered in their access to external formal finance, the Chinese private sector has developed rapidly and contributed to the high growth rates of the Chinese economy. Several explanations to this puzzle have been proposed in the literature. While there is evidence that internal funds, informal finance, foreign direct investment, and industrial clustering have helped private Chinese firms alleviate their financial constraints, trade credit has been shown to play an insignificant role. This is rather surprising as trade credit is an important source of external finance even in developed economies. Therefore, in an emerging economy like China, where private firms receive limited support from the banking system, trade credit should be playing a prominent role.

In a paper close to ours, Cull et al. (2009) investigate the link between Chinese firms' access to formal finance and their trade credit extension using data from the National Bureau of Statistics (NBS) over the period 1998–2003. They show that firms' extension of trade credit is positively correlated with their bank borrowing: state-owned firms with privileged bank relationships and profitable private firms further lend part of their formal credit via trade credit to support their trading partners. Yet, the authors conclude that the redistribution of bank loans via trade credit was just one of many factors contributing to China's explosive growth.

In this paper, we shed more light on the redistribution of bank loans via trade credit, focusing on the implications of firms' political affiliation. Our paper contributes to the literature along several dimensions. First, we link trade credit extension with Chinese firms' ability to obtain external funding via their political connections. Specifically, we investigate, for the first time, whether political affiliation affects the ability of firms to redistribute bank loans through the extension of trade credit to their business customers.

Second, our empirical model encompasses two recent theories in the trade credit literature. In particular, we provide further evidence that the extension of trade credit is linked with the characteristics of the transacted good. Supplier firms have an advantage relative to banks in financing their customers, as a repossessed good is worth more to suppliers than to banks. This advantage is stronger for firms producing differentiated goods, more specific to the needs of their customers. Therefore, firms producing differentiated goods have larger accounts receivable than firms producing standardized goods. Furthermore, we control for the trade-off between trade credit extended and the stock of inventories: firms sell on credit in an attempt to reduce their costly stocks of inventories.

Our results, based on a dataset of over 70,000 firms from the NBS over the period 2000-2007, show that firms' access to external funding varies with capital ownership, industry characteristics, and political connections. Firms with better access to external funding, such as, for example, state-owned firms, extend more trade credit, alleviating thus the severity of financial constraints for their business partners. Yet, once we control for affiliation with the central or provincial government, the differences between trade credit extension by firms owned by

different agents disappear. In particular, private firms with high political connections behave in ways similar to state-owned enterprises, as they too have favorable credit conditions. In addition, the impact of political affiliation on trade credit extension via short-term debt is larger for firms more constrained in their access to external funding, namely private firms producing differentiated goods. We conclude that an analysis of formal finance redistribution via trade credit has to control for firms' political affiliation.

The story that emerges is that in an underdeveloped financial market dominated by the state, private firms engage in political affiliation to facilitate their access to external funding. They then redistribute credit to their business partners via trade credit.

1. **Introduction**

Despite being hindered in their access to external formal finance, the Chinese private sector has developed rapidly and contributed to the high growth rates of the Chinese economy. Several explanations to this puzzle have been proposed in the literature. Among these are the use of alternative sources of financing by Chinese firms, which include internal funds, informal loans (from family, friends, and acquaintances), and trade credit; foreign direct investment (FDI); and industrial clustering. While there is evidence that internal funds (Guariglia et al., 2011), informal finance (Ayaggari et al., 2010), foreign direct investment (Allen et al., 2005; Héricourt and Poncet, 2009; Poncet et al., 2010), and industrial clustering (Long and Zhang, 2011) have helped private Chinese firms alleviate their financial constraints, the evidence regarding the role of trade credit is mixed. Trade credit from state-owned or foreign-invested firms has been shown to play an insignificant role (Cull et al., 2009) or to be non-existent (Hale and Long, 2011a). This is rather surprising as trade credit is an important source of external finance even in developed economies.[1] Therefore, in an emerging economy like China, where private firms receive limited support from the banking system, trade credit should be playing an even more prominent role.

A handful of papers have analyzed the relationship between accounts payable (trade credit received) and bank loans availability in the context of China. Ge and Qiu (2007) use the 2000 Chinese Academy of Social Sciences survey data, which covers around 800 firms, and show that those non-state-owned enterprises which have difficulties in obtaining financing from banks rely heavily on trade credit. Huang et al. (2011) use data on a small sample of listed companies over the period 1986-2006 to investigate whether trade credit received and bank credit act as substitutes over different phases of the economic cycle. Along similar lines, Wu et al. (2011) use a panel of 1626 listed firms over the period 1999-2009 to study the links between trade credit received and extended, and cash holdings, taking financial deepening into account.

Fabbri and Klapper (2008) analyze the interconnection between accounts payable (trade credit received) and accounts receivable (trade credit extended).[2] They use the 2003 World Bank Enterprise Survey data of 2500 Chinese firms to find that firms that receive trade credit from their suppliers are also more likely to extend trade credit to their customers and to

[1] Petersen and Rajan (1997) report that the aggregate volume of trade credit represented a significant part of total assets for all US firms in the early 1990s, while in the United Kingdom, 70% of the total short-term debt (credit extended) and 55% of total credit received by firms was made up of trade credit (Kohler et al., 2000). Furthermore, trade credit represents about a quarter of total corporate assets in France, Italy and Belgium (Caglayan, et al., 2011).

[2] Hereafter, we will refer to accounts receivable, trade credit extended, and trade debit interchangeably.

match the maturities of the contract terms for their accounts payable and receivable. More recently, Hale and Long (2011b) analyze data from the Chinese Industrial Surveys of medium-sized and large firms for 2000-2006 and show that private firms are able to manage their inventories and accounts receivable better than other firms.

In a paper close to ours, Cull et al. (2009) investigate the link between Chinese firms' access to formal finance and their trade credit extension using data from the National Bureau of Statistics over the period 1998–2003. They show that firms' extension of trade credit is positively correlated with their bank borrowing: state-owned firms with privileged bank relationships and profitable private firms further lend part of their formal credit via trade credit to support their trading partners. The authors conclude that the redistribution of bank loans via trade credit was just one of many factors contributing to China's explosive growth.

In this paper, we aim to shed more light on the redistribution of bank loans via trade credit, focusing on the implications of firms' political affiliation. Our paper contributes to the literature along several dimensions. First, we link trade credit extension with Chinese firms' ability to obtain external funding via their political connections. Our paper thus contributes to the growing literature on the implications of political connections. Petersen and Rajan (1997) establish that firms' extension of trade credit is linked with their access to external funding. In the context of China, the literature has shown that access to external funding of Chinese firms depends on their capital ownership (Lin, 2011). At the same time, Bai et al. (2006) and Li et al. (2008) find that political connections help private firms to obtain bank loans. We link these strands of the literature by investigating, for the first time, whether political affiliation affects the ability of firms to redistribute bank loans through the extension of trade credit to their business customers.

Second, our empirical model encompasses two recent theories in the trade credit literature. In particular, in line with Giannetti et al. (2011), we provide further evidence that the extension of trade credit is linked with the characteristics of the transacted good. Supplier firms have an advantage relative to banks in financing their customers as a repossessed good is worth more to suppliers than to banks. This advantage is stronger for firms producing differentiated goods, more specific to the needs of their customers. Therefore, firms producing differentiated goods have larger accounts receivable than firms producing standardized goods. Furthermore, we control for the trade-off between trade credit extended and the stock of inventories as in Bougheas et al. (2009): firms sell on credit in an attempt to reduce their costly stocks of inventories. This complements the small literature on the use of trade credit in China.

Our results, based on a dataset of over 70,000 firms from the National Bureau of Statistics (NBS) over the period 2000-2007, show that firms' access to external funding varies with capital ownership, industry characteristics, and political connections. Firms with better access to external funding, such as, for example, state-owned firms, extend more trade credit, alleviating thus the severity of financial constraints for their business partners.[3] Yet, once we control for affiliation with the central or provincial government, the differences between trade credit extension by firms owned by different agents disappears. In particular, private firms with high political connections behave in ways similar to state-owned enterprises, as they too have favourable credit conditions. In addition, the impact of political affiliation on trade credit extension via short-term debt is larger for firms more constrained in their access to external funding, namely private firms producing differentiated goods. We conclude that an analysis of formal finance redistribution via trade credit has to control for firms' political affiliation. The story that emerges is that in an underdeveloped financial market dominated by the state, private firms engage in political affiliation to facilitate their access to external funding. They then redistribute credit to their business partners via trade credit. To the best of our knowledge, we are the first to make a connection between firms' political affiliation and their use of financial resources.

The remainder of the paper is structured as follows. Section 2 presents the theoretical background of our analysis and our hypotheses. Section 3 outlines our empirical specification and methodology. In Section 4 we describe our data. Section 5 presents our empirical results and Section 6 concludes the paper.

2. Theoretical background and hypotheses

Petersen and Rajan (1997) have shown that the availability of finance is an important consideration in determining whether suppliers extend trade credit. Furthermore, most firms tend to match the maturity of their assets and liabilities (Diamond, 1991; Hart and Moore, 1991). We therefore expect firms to use short-term resources to finance their accounts receivable and to allocate internal funds and long-term liabilities to long-term investments, which are riskier and require a higher external finance premium. Consequently, we expect to find that:

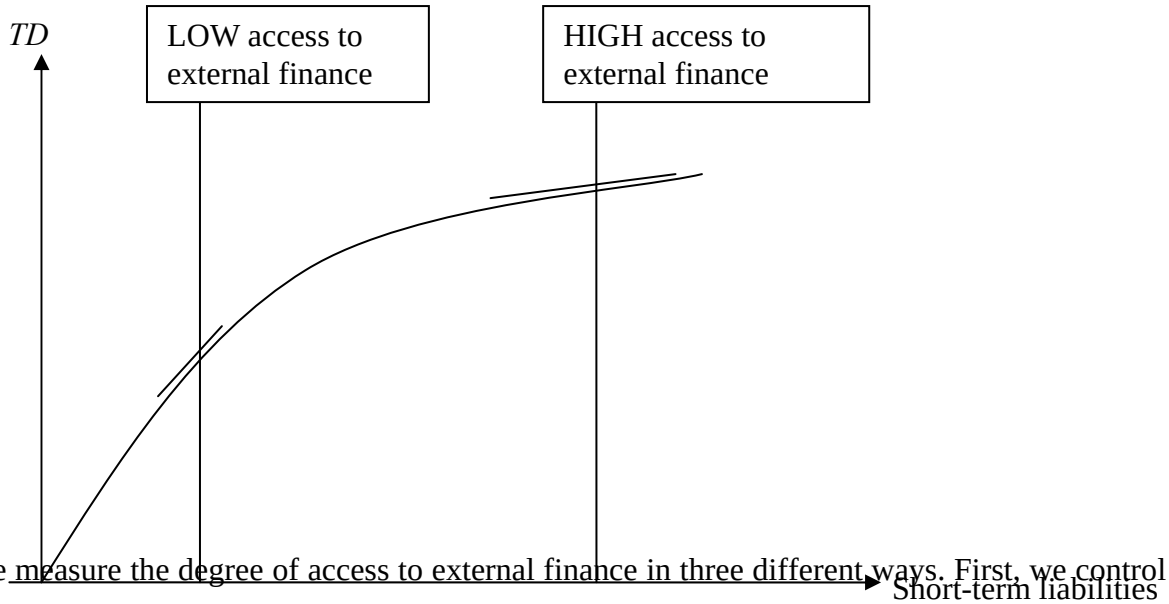
H1: *trade credit extended and firms' short-term liabilities are positively correlated*.

[3] Our data have detailed information about accounts payable (trade credit received from business partners) only at the end of our sample period. We are therefore unable to focus our analysis on the relationship between accounts payable and the availability of external funding.

Let us assume supplier firms differ in their degree of access to external finance. All firms have a pool of potential buyers, characterized by different levels of risk. Assuming a pecking order of buyers, firms sell on credit to their perceived less risky customers first. As their access to external funding increases, firms can extend more trade credit to buyers in subsequent classes of risk. Let us assume that firms are willing to sell more on credit to lower than to higher risk categories of firms. This implies that the total amount of trade credit a firm is willing to extend to a risk class of buyers is decreasing in the riskiness of the class. This suggests that *the sensitivity of trade credit extension to short-term funding is higher for firms with low access to external funding*.

Graphically, the relationship between the amount of trade credit extended by firms and their short-term liabilities can be represented as in Figure 1. The concavity of the increasing relationship between trade debit (*TD*) and short-term liabilities captures the idea that each firm sells on credit to 'low-risk' buyers first and then to higher risk types. In addition, the total amount of trade credit a firm is willing to extend to a risk class of buyers is decreasing in the riskiness of the class.

Figure 1. Trade debit and short-term liabilities



We measure the degree of access to external finance in three different ways. First, we control for firms' capital ownership. Second, we distinguish firms according to the industry in which they operate and the characteristics of the goods they produce. Finally, we separate firms according to their degree of political affiliation.

Trade credit extended and capital ownership

The literature has already established that firms' access to external funding is influenced by the capital ownership of the firms. Consistent with Guariglia et al. (2011), we indentify four groups of firms: state owned (*SK*), private (*PK*), foreign (*FK*) and collective (*CK*). While state-owned firms have preferential access to bank loans, private firms are discriminated against on the credit market (Ge and Qiu, 2007; Lin, 2011). Since trade credit extension is correlated with firms' access to external funding, we would expect to find that the sensitivity of trade credit extension to the availability of external finance varies significantly with the ownership type of firms. This leads to the following hypothesis:

H2: *the sensitivity of trade credit extended to short-term liabilities depends on firms' capital ownership. State-owned firms should display lower sensitivities than firms owned by other agents.*

Trade credit extended and product characteristics

Building on the diversion theory in Burkart and Ellingsen (2004), Giannetti et al. (2011) link the use of trade credit with the characteristics of the transacted good or service. As a product becomes more specialized in nature, it has fewer alternative uses and fewer suppliers. This ensures that the relationship between customer and supplier becomes stronger, with fewer incentives for buyers to renege on trade credit payments.[4] Suppliers have an advantage relative to banks in financing their customers, as a repossessed good is worth more to suppliers than to banks. At the same time, diversion of differentiated goods is more difficult as opposed to diversion of standardized goods. This explains why accounts receivable are more widespread in differentiated industries than in standardised industries.

To explain lower access to external funding, compare two firms, one operating in a differentiated and one in a standardized industry. Assuming equal collateral (land, buildings, fixed assets), these firms differ in how valuable their inventories are as collateral. For the reasons mentioned above, the inventories of the firm in the differentiated industry are worth less as collateral. We would therefore expect firms in differentiated industries to have lower access to external funding. In other words:

H3: *trade credit extended is more sensitive to short-term liabilities in differentiated than in standardized industries.*

Trade credit extended and political affiliation

[4] Similarly, Cunat (2007) shows that when a firm uses a specialized product, the buyer and the seller enter a symbiotic relationship in which neither has the incentive to damage the trust that exists between the two.

Li et al. (2006) document that private firms respond to market and institutional failures by seeking political connections. In China, one type of political engagement is affiliation with some level of government administration. A large number of Chinese firms are politically affiliated with governmental bodies, which offer credit guarantees and political protection in return for 'management fees' (Huang, 2003). Firms can be politically affiliated with five different levels of government: central, provincial, prefecture, county and township (local) governments. Firms associated with higher levels of government (i.e. central and provincial) are likely to enjoy better protection and more privileges, e.g. access to export and import licenses, favourable bank loans and lucrative public contracts. We would therefore expect to find that:

H4: *the sensitivity of trade credit to short-term funding is lower for politically affiliated firms. The sensitivity declines for affiliation with higher levels of government.*

3. Empirical specification and estimation methodology

Our empirical model extends Giannetti et al. (2011) to account for the trade-off between accounts receivable and the stock of inventories suggested by Bougheas et al. (2009). It can be expressed as follows:

$$AR_{it} = \alpha_i + \beta_1 Stocks_{it} + \beta_2 Stliabs_{it} + \beta_3 Collateral_{it} + \beta_4 Profits_{it} + \beta_5 Liquid_{it} + \\ + \beta_6 Size_{it} + + \beta_7 Age_{it} + d_t + v_{jt} + u_{it} \quad (1)$$

where AR_{it} represents accounts receivable (trade credit extended) for firm i at time t, and u_{it} is the idiosyncratic error term. A negative β_1 coefficient implies that firms face a trade-off between holding costly stocks of inventories ($Stocks_{it}$) and accumulating accounts receivable. This is the inventory management motive for credit sales proposed by Bougheas et al. (2009). Due to uncertain demand, producers have an incentive to extend trade credit to their business partners in order to promote sales rather than accumulate costly stocks on inventories. This incentive is only limited by the need to obtain liquidity to meet their obligations.[5]

Our main coefficient of interest is β_2: we expect it to be positive indicating that better access to external short-term funding ($Stliabs_{it}$) increases the amount of trade credit extended by firms.[6] As explained in the previous section, the size of this coefficient is expected to vary

[5] A negative relationship between trade credit and inventories is also consistent with Daripa and Nilsen (2011), according to whom sellers subsidize the shift of inventories to buyers.

[6] The National Bureau of Statistics (NBS) data, which we use in this paper, only provides information about the breakdown of short-term liabilities into bank loans, creditors and other short-term liabilities from 2004 onwards.

inversely with firms' access to external funding. We link access to external funding with firm capital ownership and the characteristics of the goods produced by the firms. Novel to our paper is that we further relate access to credit markets to firms' political affiliation. We therefore investigate the impact of firms' political affiliation on the sensitivity of trade credit extended to external short-term funding, while controlling for firm ownership and characteristics of the traded goods.

The rest of the controls include $Collateral_{it}$, given by the share of tangible assets in total assets, and used as a proxy for firms' borrowing capacity; firm's profitability ($Profits_{it}$); and $Liquid_{it}$, which represents firm's gross liquid assets (cash, bank deposits, and other current assets excluding inventories and accounts receivable). With the exception of $Collateral_{it}$, all these variables are scaled by total sales. Finally, we include the firms' book value of real assets to control for size effects and the age of the firm, both expressed in logarithms.

We control for firm-specific (α_i), time-specific (d_t), and industry-specific time effects (v_{jt}). Industry-time dummies control for unobserved industry shocks or other time-varying industry-level variables correlated with trade credit extended. We expect the use of trade credit to differ across industries for several reasons. First, empirical studies have found wide variations across industries but rather similar credit terms within industries (Ng et al., 1999; Nilsen, 2002). Second, the reliance of firms on internal finance relative to external finance follows an industry pattern. Third, inventory costs differ significantly across industries (Shirley and Winston, 2004).

Our very large dataset enables us to test our hypotheses by estimating our empirical model on separate sub-samples of firms. This way we allow all firm characteristics, and not just the intercept, to have a different impact on the trade credit extension by each category of firms. First, we identify four categories of firms according to the majority ownership share and test whether the sensitivity of trade credit extended to the availability of external funds differs in each category (*H2*). Second, we split firms according to the industry in which they operate and test whether the same sensitivity is correlated with product characteristics (*H3*). Finally, we explore whether political affiliation affects the sensitivity (*H4*).

We estimate all our models using a first-difference Generalized Method of Moments (GMM) approach, and control for the possible endogeneity of the regressors by using two or

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For this reason, we use short-term liabilities instead of bank loans (relative to sales) in our regressions. For those years in which detailed information is available, bank loans constitute on average 70% of total short-term liabilities.

more lags of each of the regressors as instruments.[7] Time dummies and industry-level time dummies are included in all our regressions and in the instrument matrix. In all our specifications, we test for the presence of n^{th}-order serial correlation in the differenced residuals using the *m(n)* test, which is asymptotically distributed as a standard normal under the null of no n^{th}-order serial correlation of the differenced residuals. In the presence of serial correlation of order *n* in the differenced residuals, the instrument set needs to be restricted to lags *n*+1 and deeper. The latter instruments are valid in the absence of serial correlation of order *n*+1 in the differenced residuals (Brown and Petersen, 2009; Roodman, 2006). At the same time, if our model is correctly specified, the variables in the instrument set should be uncorrelated with the error term in the relevant equation. To test whether this is the case, we report the Hansen test for the legitimacy of variables dated *t*-2 and further as instruments in the differenced equation. Under the null of instrument validity, the Hansen test for over-identifying restrictions is asymptotically distributed as a chi-square with degrees of freedom equal to the number of instruments less the number of parameters.

In most cases, we use two lags of the regressors as instruments and find evidence of significant negative first-order serial correlation (*m*1 test) in the differenced residuals, which is to be expected, but no evidence of higher-order serial correlation. Furthermore, for each model, the Hansen test statistic (and the corresponding *p*-value) indicates that the test for over-identifying restrictions is satisfactory. Hence, we deduce that our instruments are valid and that our models are correctly specified, and do not make any further comments on these tests as we discuss our results.

4. Data and summary statistics

4.1 Data

Our sample is drawn from the annual accounting reports filed by industrial firms with the National Bureau of Statistics (NBS) over the period 2000-2007. All firms with annual sales of five million yuan (about $650,000) or more are covered. Our sample firms operate in the manufacturing and mining sectors and are in all 31 Chinese provinces or province-equivalent municipal cities. To avoid the adverse impact of outliers in our investigation, we apply the following sample selection criteria. Observations with negative sales and negative total assets are dropped. We trim one per cent from either end of all variables that we use in our

[7] All our regressions are performed in Stata using the command *xtabond2* developed by Roodman (2006).

empirical models and remove firms with less than 5 consecutive observations from the dataset. Our final panel contains over 420,000 firm-year observations for over 72,000 firms. It is unbalanced, with the number of observations ranging from a minimum of 25,706 in 2000 to a maximum of 65,706 in 2003 and 2004.[8]

The NBS data contain a continuous measure of ownership based on the fraction of paid-in-capital contributed by the following types of investors: the state; foreign investors (excluding those from Hong Kong, Macao, and Taiwan); investors from Hong Kong, Macao, and Taiwan; legal entities; individuals; and collective investors. We classify firms into four ownership categories - state-owned (*SK*), private (*PK*), foreign (*FK*) and collective (*CK*) - based on the majority average ownership share calculated over the sample period.[9] For instance, a firm is classified as private (*PK*) if it has a majority average private ownership share calculated over the sample period.

The database provides detailed industry specific information that allows us to identify the characteristics of the traded products. To link trade credit extended with the characteristics of the goods sold we follow Giannetti et al. (2011) and separate firms into two sectors: differentiated and standardized. The matching of industry codes to the two sectors can be found in the Appendix. Consistent with Bougheas et al. (2009) and Blundell et al. (1992), to account for industry-specific effects, we identify four main industries within the standardized sector, i.e. food, beverages and tobacco; textiles, apparel and leather; products of wood and paper products; coke, petroleum, chemicals and non-metal mining; and five main industries within the differentiated sector, i.e. publishing, printing, furniture and others; rubber and plastic products; fabricated metal products; machinery and instruments; and transport equipment. We add time dummies specific to the main industries to our estimations. In our robustness checks, we substitute the industry-specific time dummies with industry concentration measures calculated at two-digit industry level.

Finally, we distinguish firms according to their degree of political affiliation. Our aim is to investigate whether political affiliation has an impact on trade credit extension by firms

[8] See the Appendix for details about the structure of our panel and for definitions of all variables used.

[9] Alternatively, we could have defined our ownership categories using registration codes. However, registration codes are not entirely reliable as they are updated only with considerable delay (Dollar and Wei, 2007). Moreover, firms might have an incentive to falsely register as foreign simply to take advantage of the tax benefits accorded to the latter. Defining ownership categories based on majority average ownership also has the advantage of minimizing the effects of measurement error in the ownership variables which can affect individual years. It should be noted that, according to our classification scheme, foreign-owned firms include firms owned by Hong-Kong, Macao, and Taiwan agents, as well as agents from other foreign countries. Finally, privately-owned firms include firms owned by legal entities and individuals. A similar classification was used in Guariglia et al. (2011).

via better access to external funding. First we contrast firms without political affiliation (*NPA*) with firms with political affiliation at any level of government (*PA*).[10] Alternatively, we consider a more detailed classification in which we distinguish firms affiliated to higher levels of government (*HPA*), firms affiliated with medium government levels (*MPA*), and firms with no political affiliation (*NPA*).

4.2 Summary statistics

Table 1 reports the mean and standard deviation of the main variables for the whole sample and for different sub-samples of firms. Panel A compares firm characteristics across different ownership types. The private sector contributes over half of the observations in our sample. It appears that private firms are smaller and younger than the average firm in our sample. Even though firms seem to be very similar in terms of the share of their assets they could use as collateral, private firms have a lower ratio of short-term liabilities to total sales. They also hold lower inventory stocks. State-owned enterprises result as just breaking even on average, while firms owned by other agents do not differ in terms of their profitability.

< Table 1 about here >

The average accounts receivable to sales ratio for firms in our sample is 17.2%, which is similar to the ratio for the sample of UK manufacturing firms (17.1%) in Bougheas et al. (2009). Looking at the receivables to sales ratio by ownership types, we observe lower values relative to Cull et al. (2009) for all ownership types. Like us, Cull et al. (2009) use data drawn from the NBS, but for an earlier time period, 1998-2003. We explain the relative lower values in our study with the downward trend observed for the receivables to sales ratio over our sample period depicted in Figure 2. We should also keep in mind that ownership categories in the two studies do not coincide.[11] Despite the downward trend, we reckon that trade credit extension by Chinese firms is important as even the lowest ratio of accounts receivable to sales recorded for private Chinese firms (observed in 2006) is higher than the 10% ratio reported for small US firms in Giannetti et al. (2011). Moreover, Fabbri and Klapper (2008) state that the use of trade credit in China is comparable to that in similar developing countries. This highlights the importance of analyzing the extension of trade credit in China.

[10] Each firm may be affiliated (have a *lishu* relationship) with the central, provincial, prefecture, county, or township governments (Li, 2004; Tan et al., 2007; Xia et al., 2009). A *lishu* relationship is associated with government supports and subsidies. In particular, governments can grant firms affiliated with them benefits such as bank loans at better conditions, waivers of import tariffs, tax reductions and so on.

[11] Cull et al. (2009) group firms into five ownership categories: state-owned, collective, legal-person, domestic private, and foreign. We include legal entities into the private group as in Guariglia et al. (2011). Also see the Appendix and footnote 9.

Focusing on the differences across firms owned by different agents, we observe that trade credit extension is highest for state-owned firms and lowest for private firms.

Panel B reports summary statistics for firms in differentiated and standardized industries. We observe a striking difference between accounts receivable relative to sales in the two sectors. As firms in differentiated industries extended 50% more trade credit relative to sales than firms in standardized industries, this provides initial raw evidence that trade credit extension is correlated with the traded good characteristics. Figure 3 shows a downward trend in the trade credit extended relative to sales ratio over the sample period for both differentiated and standardized industries.

In Panel C, we present statistics for firms characterized by different levels of political affiliation. With the exception of their collateral values, firms without political affiliation (*NPA*) differ systematically from politically affiliated firms (*PA*). The column titled *Diff.* reports the *p*-value of the *t*-test for the equality of means for firms without (*NPA*) and with any level of political affiliation (*PA*). In the last columns, we refine our classification and separate out firms affiliated with the central or provincial government (*HPA*) to notice that these firms are significantly larger, older and have higher ratios of short-term liabilities to sales. Firms with high political affiliation have larger stocks of inventories and extend considerably more trade credit than firms affiliated with local governments. They hold 50% more receivables relative to sales than firms without any political affiliation. Figure 4 follows the evolution of accounts receivable to sales over time for the three categories of firms with high, medium and no political affiliation.

Panel D highlights that once we control for political affiliation, the difference in the accounts receivable to sales ratios across different ownership types fades. Private, foreign and collective firms with high political affiliation hold in fact roughly the same accounts receivable to sales ratios as state-owned enterprises. Comparing summary statistics within ownership types and across affiliation levels, we notice diminishing values for all variables as we move down the columns from high affiliation towards no political engagement. Figure 5 shows very clearly that political affiliation, especially with central and provincial governments, has a dramatic impact on the extension of trade credit. The impact is largest in the case of private firms.

Finally, Panel E presents descriptive statistics across two measures of firm competition calculated at two-digit industry level. We construct a proxy for industry concentration (*Ind. concentration*) as the sales share of the eight largest firms in the firm's two-digit industry. Our second proxy, *Ind. share,* is given by the ratio of the firm's sales

relative to its two-digit industry total sales. We can see that firms producing standardized goods operate in more concentrated industries. However, the shares of sales in total industry sales do not differ significantly across differentiated and standardized firms.

To summarize, the descriptive statistics provide some initial evidence that ownership, political affiliation, and the characteristics of the goods produced by our firms, all have an impact on their trade credit extension. Specifically, we find that state-owned firms and firms operating in differentiated industries extend more trade credit than other firms. Yet, when we control for political affiliation, the differences in trade credit extension among different ownership groups disappears: state-owned and private firms with high political affiliation extend in fact similar amounts of trade credit. In the section that follows, we analyze the extent to which the association between accounts receivable and short-term liabilities differs for different types of firms.

5. Empirical results

5.1 Main results

Table 2 presents estimates of our accounts receivable regression, contrasting differentiated (Panel A) and standardized (Panel B) firms by ownership type. In both panels, the coefficient on the short-term liabilities variable (*Stliabs*) is precisely determined: this is consistent with our Hypothesis *H1.* In line with our hypothesis *H3*, the results also show that, irrespective of firm capital ownership, better access to external funding has a larger impact on trade credit extension in differentiated than in standardized industries. Consistent with Giannetti et al. (2011), the larger coefficient associated with *Stliabs* in the columns titled *differentiated* compared to those titled *standardized* provides evidence that trade credit extension is correlated with the characteristics of the traded goods. Moreover, comparing coefficients within the same sector and across ownership types, we find evidence consistent with the studies showing that Chinese private firms have difficulties in accessing external funding (e.g. Huang et al., 2011; Cull et al., 2009; Ge and Qiu, 2007). The magnitude of the coefficient for *Stliabs* is in fact largest in the case of private firms, implying that a unit increase in their external short-term funding will have a larger impact on their volume of trade credit extended relative to sales than in the case of firms owned by other agents. In line with our Hypothesis *H2*, the coefficient is smallest for *SK*s, who have preferential access to bank loans.

< Table 2 about here >

Focusing on the other regressors, we find evidence of a trade-off between holding inventories and accumulating receivables for all ownership types. This is consistent with the inventory management motive for offering trade credit in Bougheas et al. (2009), and with Daripa and Nilsen (2011), according to whom sellers subsidize the shift of inventories to buyers. The argument is also consistent with the sales motive identified by Wilson and Summers (2002), according to whom firms extend sales by offering goods on account in the first instance. In line with Mateut et al. (2011), the trade-off is stronger in differentiated than in standardized industries. For reasons explained in Giannetti et al. (2011) and Cunat (2007), when goods are differentiated they are more specific and the seller-buyer relationship is closer.

The ratio of tangible assets to total assets (*Collateral*), profits, liquidity, firm size and age, all act as controls for firm characteristics. The coefficient associated with *Profits* is negative for state-owned firms, suggesting, as in Cull et al. (2009), that poorly performing state-owned firms redistribute credit to other firms via trade credit. Yet, the coefficient is only significant for those firms operating in differentiated industries. The only other case in which *Profits* affect the volume of trade credit extended is for foreign firms producing standardized goods. Fabbri and Klapper (2008) also find that profitability is not significantly related to trade credit supply. Less liquid firms in our sample extend more trade credit. Petersen and Rajan (1997) and Bougheas et al. (2009) also find a negative relationship between firms' liquidity and their volume of sales on credit. With the exception of foreign firms, larger firms seem to sell more on credit than smaller ones. Finally, as in Giannetti et al. (2011), firm age does not appear to impact trade credit extended (apart from private firms producing differentiated goods).

Having established that the strength of the relationship between trade credit extension and firms' short-term liabilities depends on the characteristics of the traded goods and on the firms' ownership type, we next investigate whether the political affiliation of firms also plays a role. To this end, we now differentiate firms without any political engagement from those with some degree of political affiliation. These results are reported in Table 3 separately for differentiated firms (Panel A) and for standardized firms (Panel B).

< Table 3 about here >

In line with our Hypothesis *H4*, the results highlight that the availability of short-term external finance has a larger impact on the trade credit extension by firms who have no

political affiliation.[12] A unit increase in short-term liabilities has the largest impact on the accounts receivable of private firms in differentiated industries who have no political affiliation. These are the firms who face the greatest difficulties in accessing external finance. Our results provide indirect evidence that political affiliation with different levels of government offers some privileges including better access to funding.[13]

So far, we have shown that political affiliation has an impact on trade credit extension by firms. Since firms can be politically affiliated with different levels of government, we now refine our analysis and divide politically affiliated firms into two groups: firms affiliated with central and provincial government form the high political affiliation (*HPA*) group, while those affiliated with lower levels of government constitute the medium political affiliation (*MPA*) group of firms. We now contrast firms not politically engaged (*NPA*) with firms with medium (*MPA*) and high (*HPA*) political affiliation to investigate whether firms associated with high levels of government enjoy better protection and more privileges. As before, we control for ownership and industrial sector. The results presented in Panel A (for differentiated firms) and Panel B (for standardized firms) of Table 4 confirm our finding that political affiliation reduces the sensitivity of trade credit extended to short-term external funding. Within each ownership group and sector classification, the sensitivities decline as we move away from no affiliation to affiliation with higher levels of government.

< Table 4 about here >

The coefficients on the other regressors are similar to those previously reported. In particular, the trade-off between inventories and credit sales is still present and it is stronger for firms in differentiated industries who sell goods more tailored to the needs of their buyers and who would find fewer alternative customers. While firm profitability does not seem to play an important role, lower liquidity leads firms, mainly in differentiated industries, to extend more trade credit. As in Giannetti et al. (2011), higher borrowing capacity (measured

[12] The insignificant coefficient for short-term liabilities in the case of state-owned firms without political affiliation in both differentiated and standardized industries may be explained by the small sample characterizing these two categories.

[13] Cull et al. (2009) use the ratio of interest payments to sales as a proxy for bank finance, since just like us, they cannot identify the amount of bank borrowing from total short-term liabilities. They explain trade credit extension with firm ownership, profitability, their bank finance proxy, and possible interactions between these three variables. We prefer to use the short-term liabilities to sales ratio instead, as the interest payments to sales ratio may capture both interest rate and amount of loan variation across categories of firms and over time. However, to facilitate comparison, we experimented with the use of the interest payments to sales ratio instead of short-term liabilities to sales. Consistent with Cull et al. (2009), we found a positive correlation between trade credit extension and their bank loans proxy. Moreover, the magnitude of the coefficient was larger for private firms without political affiliation than for politically engaged private firms, while controlling for the characteristics of the traded goods. These results, which are not reported for brevity, confirm the robustness of our main findings.

by the share of tangible assets in total assets) reduces the volume of trade credit extended. In the private sector, younger and larger firms affiliated with high levels of government extend more credit to their business partners than their older and smaller counterparts. This holds irrespective of the characteristics of the goods produced.

5.2 Alternative specifications

In this section, we investigate in greater detail whether trade credit extension depends on the structure of the market in which firms operate. In all our specifications so far we have included industry-specific time dummies to control for industry characteristics. We now substitute these with time dummies and two measures of industry concentration calculated at a more disaggregated level (two-digit industry level). As in Giannetti et al. (2011), to capture the extent of concentration in the market in which a given firm operates, we use the market share of the eight largest firms (*Ind. concentration*). We next construct a measure of the firm's own share of sales relative to its two-digit industry total sales (*Ind. share*).

Table 5 replicates results in Table 2 when we use the concentration ratio of the eight largest firms in terms of sales and/or the ratio of the firm's sales relative to its two-digit industry total sales. The results presented in Panel A (for differentiated) and in Panel B (for standardized) are very similar to those in Table 2. We repeat the exercise and report, in Table 6, results when we separate private and foreign firms according to their political engagement.[14] Once again, this exercise confirms our previous results reported in Table 3. We can therefore conclude that our findings are robust to controlling for two-digit industry market structure instead of including time dummies specific to the nine main industries. Moreover, we can further relate our final results to those in the literature. While Giannetti et al. (2011) find that industry concentration in the supplier market does not impact the extension of trade credit by small US firms, in line with Fabbri and Klapper (2008), we find some evidence that Chinese suppliers with weaker market power extend more trade credit. This suggests that firms extend trade credit to boost sales and there seems to be no correlation with firms' political engagement.

To summarize, the empirical results reported in Tables 2 through 6 suggest that the characteristics of the goods produced, ownership, and political affiliation, all impact the sensitivity of trade credit extension to short-term debt. Specifically, we find that the impact of political affiliation on trade credit extension via short-term debt is larger for firms more

[14] For brevity, we do not report the results for state-owned and collective firms. These results were similar to those reported in Tables 3 and 4.

constrained in their access to external funding, namely private firms producing differentiated goods. In addition, our results confirm the predictions for differentiated versus standardized goods manufacturers in Giannetti et al. (2011) and Cunat (2007), as well as the predictions in the inventory management model in Bougheas et al. (2009).

6. Conclusions

This paper uses a dataset made up of over 70,000 firms over the period 2000-2007 to provide evidence that political affiliation has a significant impact on trade credit extension by Chinese firms. Specifically, we link trade credit extension with access to external funding, allowing the relationship to depend not only on firm ownership and the characteristics of the goods produced, but also on firms' political affiliation. Our results suggest that politically affiliated firms benefit from easier access to short-term external funding and can therefore, extend more trade credit to their business partners. In other words, consistent with the literature on the implications of political connections (Bai et al., 2005 and Li et al., 2008), our findings imply that politically affiliated firms are able to redistribute bank funding via trade credit. The impact of political affiliation on trade credit extension via short-term debt is larger for firms more constrained in their access to external funding, namely private firms producing differentiated goods. In conclusion, our findings suggest that political affiliation may reduce the inefficiencies in resource allocation due to state-owned banks' discrimination against private firms.

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Appendix

1. Definition of variables

AR = trade credit extended (accounts receivable) scaled by turnover
Stocks = total stocks of inventories scaled by turnover
Stliabs = short-term liabilities scaled by turnover
Collateral = ratio of tangible assets to total assets
Profits = profit/loss for the period scaled by turnover
Liquid = liquid assets (current assets minus stocks of inventories and accounts receivable) scaled by turnover
Size = logarithm of real total assets
Age = logarithm of (1 + firm age)
Ind. concentration = market share of the eight largest firms in the firm's two-digit industry
Ind. share = share of own sales to total two-digit industry sales
Deflators = variables are deflated using provincial ex-factory producer price indices taken from various issues of the China Statistical Yearbook.

2. Panel structure

year	Freq.	Percent	Cum.
2000	25,706	6.09	6.09
2001	38,131	9.03	15.11
2002	49,602	11.74	26.86
2003	65,706	15.56	42.41
2004	65,706	15.56	57.97
2005	62,966	14.91	72.88
2006	59,436	14.07	86.95
2007	55,125	13.05	100.00
Total	422,378	100.00	

3. Definition of firms' categories

3.1.Classification based on capital ownership

We derived ownership categories on the basis of the fraction of capital paid-in by various groups in every year. We then assigned firms to our four ownership groups (state-owned, private, foreign, and collective) according to their majority average ownership share over the sample period. Thus, a firm is considered as private (*PK*) if more than 50% of its average capital is paid-in by private agents.[15]

All foreign-owned firms (from Hong-Kong, Macao, Taiwan, and other parts of the world) are grouped into a single category (which we labelled *FK*). All firms owned by legal entities and individuals are also grouped into a single category (labelled *PK*).[16] Collective firms (*CK*) are either owned by township-village governments or collectively by employees.

[15] Our way of classifying firms into ownership groups excludes from our sample firms with mixed ownership in which no group has a majority share. For instance, a firm characterized by 40% private ownership, 30% state ownership, and 30% foreign ownership would be excluded. Firms of this type of mixed ownership make up less than 4% of our sample.

[16] Within this category, firms owned by individuals represent approximately 60% of the total. As firms owned by legal entities include firms owned by state legal entities, one could question their inclusion in the *private* category. One reason for including them is that while the state's primary interest is mainly political (i.e. aimed at maintaining employment levels or control over certain strategic industries), legal entities are profit-oriented

3.2. Classification based on the characteristics of the goods produced

The classification of the manufacturing firms into differentiated or standardized follows Giannetti et al. (2011) and is based on Rauch (1999).

IND CODE		Differentiated	Industry group
10	Nonmetal Mining	0	S4
13	Timber Logging	0	S3
14	Food production	0	S1
15	Beverage	0	S1
16	Tobacco	0	S1
17	Textiles	0	S2
18	Textile wearing apparel, footwear and caps	0	S2
19	Leather	0	S2
20	Timber	0	S3
21	Furniture	1	D1
22	Paper making	0	S3
23	Printing	1	D1
24	Cultural	1	D1
25	Petroleum processing	0	S4
26	Raw chemical	0	S4
27	Medical	1	D4
28	Chemical fibre	0	S4
29	Rubber	1	D2
30	Plastic	1	D2
31	Nonmetal Products	0	S4
32	Pressing Ferrous	0	S4
33	Pressing Nonferrous	0	S4
34	Metal Products	1	D3
35	Ordinary Machinery	1	D4
36	Special Equipment	1	D4
37	Transport Equipment	1	D5
39	Electrical machinery and equipment	1	D4
40	Communication equipment computers and other electronic equipment	1	D4
41	Measuring instruments and machinery for cultural activity and office work	1	D4
42	Artwork and other manufacturing	1	D1
43	Other manufacturing	1	D1

In line with Bougheas et al. (2009) and Blundell et al. (1992), we distinguish four industry groups within the standardized sector (S1 to S4) and five industry groups within the differentiated sector (D1 to D5). The last column of the table assigns the industry codes to the nine industry groups within the differentiated and standardized sectors.

3.3. Classification based on political affiliation

The NBS provides a variable for political affiliation which can take the following values:

Lishu =10 => affiliated at central level
=20 => affiliated at provincial level
=40 => city or district level
=50 => county level

(Wei et al., 2005). Since our dataset does not allow us to discriminate between state and non-state legal entities, we were unable to exclude the former from our *private* category.

=61 => street level
=62 => town level
=63 => township level
=71 => community level
=72 => village level
=90 => no political affiliation

First, we contrast firms without political affiliation with those affiliated with any level of government and generate the following two time-invariant categories:

NPA (No political affiliation) = 1 if the firm has no political affiliation (lishu=90), 0 otherwise.

PA (Political affiliation) = 1 if the firm has any level of political affiliation (lishu<90), 0 otherwise.

Second, we distinguish among politically affiliated firms (*PA*) according to the level of government to which firms are affiliated. In this case, we generate the following three categories of firms:

HPA (High political affiliation) = 1 if the firm is affiliated at the central or provincial level (lishu<=20), 0 otherwise.

MPA (Medium political affiliation) = 1 if the firm has political affiliation but not at the central or provincial level (40<=lishu<90), 0 otherwise.

NPA (No political affiliation) = 1 if the firm has no political affiliation (lishu=90), 0 otherwise.

Table 1. Summary statistics

Panel A. Ownership

	Whole sample		*SK*		*PK*		*FK*		*CK*	
Variable	mean	sd	mean	sd	mean	sd	mean	sd	mean	sd
AR	0.172	0.194	0.228	0.255	0.159	0.180	0.183	0.198	0.203	0.222
Stocks	0.185	0.217	0.306	0.299	0.165	0.199	0.205	0.218	0.192	0.237
Profits	0.024	0.064	0.000	0.083	0.026	0.054	0.024	0.078	0.025	0.064
Liquid	0.183	0.217	0.295	0.287	0.169	0.208	0.184	0.209	0.193	0.228
Stliabs	0.489	0.471	0.875	0.719	0.468	0.443	0.438	0.412	0.538	0.523
Collateral	0.332	0.192	0.391	0.201	0.335	0.192	0.321	0.188	0.311	0.193
Size	5.319	1.250	5.586	1.535	5.118	1.191	5.787	1.239	5.090	1.072
Age	2.148	0.690	2.927	0.806	2.029	0.686	2.112	0.505	2.622	0.635
Obs	422378		20584		254078		101899		29527	

Panel B. Sector

	Whole sample		Differentiated		Standardized		*Diff.*
Variable	mean	sd	mean	sd	mean	sd	
AR	0.172	0.194	0.207	0.206	0.140	0.176	0.000
Stocks	0.185	0.217	0.203	0.229	0.169	0.203	0.000
Profits	0.024	0.064	0.027	0.067	0.022	0.062	0.000
Liquid	0.183	0.217	0.195	0.224	0.172	0.211	0.000
Stliabs	0.489	0.471	0.520	0.475	0.460	0.465	0.000
Collateral	0.332	0.192	0.305	0.180	0.356	0.200	0.000
Size	5.319	1.250	5.400	1.255	5.245	1.240	0.000
Age	2.148	0.690	2.199	0.681	2.101	0.694	0.000
Obs	422378		202659		219719		

Panel C. Political affiliation

	No Political Affiliation (*NPA*)		Political Affiliation (*PA = HPA+MPA*)		*Diff.* (*NPA* v. *PA*)	High Political Affiliation (*HPA*)		Medium Political Affiliation (*MPA*)	
Variable	mean	sd	mean	sd		mean	sd	mean	sd
AR	0.159	0.180	0.193	0.213	0.000	0.238	0.232	0.186	0.208
Stocks	0.165	0.198	0.217	0.240	0.000	0.289	0.264	0.205	0.234
Profits	0.026	0.059	0.021	0.071	0.000	0.017	0.089	0.022	0.068
Liquid	0.163	0.202	0.214	0.237	0.000	0.283	0.261	0.202	0.231
Stliabs	0.434	0.413	0.576	0.539	0.000	0.697	0.599	0.556	0.526
Collateral	0.331	0.192	0.332	0.192	0.244	0.318	0.191	0.334	0.192
Size	5.192	1.199	5.523	1.301	0.000	6.138	1.416	5.422	1.253
Age	1.976	0.597	2.425	0.736	0.000	2.575	0.811	2.400	0.720
Obs	259979		162399			22968		139431	

Panel D. Ownership & political affiliation

	SK		*SK - HPA*		*PK - HPA*		*FK - HPA*		*CK - HPA*	
Variable	mean	sd	mean	sd	mean	sd	mean	sd	variable	mean
AR	0.228	0.255	0.255	0.256	0.236	0.230	0.220	0.187	0.219	0.219
Stocks	0.306	0.299	0.353	0.305	0.274	0.242	0.220	0.187	0.264	0.291
Profits	0.000	0.083	0.000	0.091	0.020	0.082	0.041	0.102	0.005	0.065
Liquid	0.295	0.287	0.315	0.282	0.285	0.265	0.248	0.217	0.229	0.249
Stliabs	0.875	0.719	0.890	0.690	0.678	0.559	0.440	0.385	0.644	0.600
Collateral	0.391	0.201	0.366	0.191	0.299	0.188	0.305	0.182	0.234	0.174
Size	5.586	1.535	5.907	1.518	6.218	1.378	6.696	1.228	5.317	1.040
Age	2.927	0.806	2.992	0.783	2.335	0.864	2.296	0.403	2.706	0.766
Obs	20584		7411		8405		3701		1107	
			SK - MPA		*PK - MPA*		*FK - MPA*		*CK - MPA*	
AR			0.214	0.256	0.173	0.196	0.198	0.204	0.200	0.222
Stocks			0.279	0.293	0.196	0.224	0.210	0.218	0.189	0.237
Profits			-0.001	0.078	0.024	0.060	0.024	0.082	0.027	0.064
Liquid			0.285	0.291	0.188	0.219	0.204	0.217	0.192	0.229
Stliabs			0.878	0.742	0.538	0.493	0.467	0.429	0.529	0.520
Collateral			0.409	0.205	0.334	0.191	0.315	0.183	0.318	0.194
Size			5.379	1.521	5.377	1.222	5.913	1.246	5.078	1.073
Age			2.930	0.804	2.274	0.753	2.221	0.439	2.634	0.625
Obs			12464		70851		22003		24505	
			SK - NPA		*PK - NPA*		*FK - NPA*		*CK - NPA*	
AR			0.208	0.205	0.149	0.169	0.177	0.197	0.213	0.222
Stocks			0.292	0.263	0.147	0.183	0.203	0.219	0.191	0.218
Profits			0.025	0.076	0.028	0.050	0.024	0.076	0.017	0.065
Liquid			0.259	0.263	0.156	0.198	0.176	0.205	0.188	0.219
Stliabs			0.648	0.528	0.430	0.408	0.429	0.408	0.562	0.514
Collateral			0.329	0.206	0.336	0.193	0.323	0.190	0.290	0.191
Size			5.890	1.299	4.960	1.120	5.706	1.216	5.097	1.070
Age			2.198	0.723	1.915	0.614	2.071	0.521	2.525	0.646
Obs			709		174822		76195		3915	

Panel E. Industry characteristics

	Whole sample		Differentiated		Standardized		*Diff.*
Variable	mean	sd	mean	sd	mean	sd	
Ind. concentration	0.08645	0.11630	0.08102	0.07686	0.09147	0.14318	0.000
Ind. share	0.00059	0.00326	0.00059	0.00308	0.00058	0.00342	0.344

Note:

The table reports means and asymptotic standard errors. *AR* represents accounts receivable (trade credit extended). *Stocks* stands for stocks of total inventories; *Profits* gives the firm's profit (or loss) for the period; *Liquid* represents the firm's liquid assets (cash, bank deposits, and other current assets). *Stliabs* stands for short-term liabilities, and *Collateral* is the ratio of tangible assets to total assets. With the exception of *Collateral*, all variables are scaled by total sales. *Size* is the logarithm of firms' real book value of assets and *Age* is the logarithm of (1+ the number of years since the firm was established).

Panel A reports statistics for the whole sample and then separates firms according to their average ownership share over the sample period into state-owned (*SK*), private (*PK*), foreign (*FK*), and collective (*CK*). For example, a firm is considered private (*PK*) if more than 50% of its average capital belongs to private agents.

Panel B distinguishes among firms according to the characteristics of their transacted goods. See the Appendix for the matching of industries to the differentiated and standardized groups. The column titled *Diff.* reports the *p*-value of the *t*-test for the equality of means for differentiated and standardized firms.

In Panel C, we group firms according to their level of political affiliation. We contrast statistics for firms without political affiliation (*NPA*) and firms with political affiliation (*PA*). The column titled *Diff* reports the *p*-value of the *t*-test for the equality of means for firms without (*NPA*) and with any political affiliation (*PA*). The last columns separate politically affiliated firms according to the level of political affiliation into high and medium (*PA = HPA + MPA*) level of affiliation. Firms do not transit among categories. See Appendix for more details.

Panel D gives the breakdown for each ownership type according to their level of political affiliation. Each column refers to the same ownership type, and each row to the same level of political affiliation. The top part highlights similarities of all ownership types who are affiliated with the central or provincial government (*HPA*); the middle part reports statistics for firms with medium levels of government affiliation (*MPA*), and the bottom of the panel refers to firms without political affiliation (*NPA*).

Panel E reports the industry concentration ratio calculated as the market share of the eight largest firms in the firm's two-digit industry (*Ind. concentration*) and the share of the firm's own sales relative to total two-digit industry sales (*Ind. share*). The column titled *Diff.* reports the *p*-value of the *t*-test for the equality of means for differentiated and standardized firms.

Table 2. Main accounts receivable regressions

Panel A. Differentiated

	(1) *PK*	(2) *FK*	(3) *CK*	(4) *SK*
Stocks	-0.347***	-0.289***	-0.422***	-0.194**
	(0.048)	(0.042)	(0.119)	(0.081)
Profits	0.000	-0.013	-0.255	-0.592***
	(0.147)	(0.056)	(0.331)	(0.222)
Liquid	-0.191***	-0.141***	-0.279***	-0.154**
	(0.052)	(0.045)	(0.108)	(0.062)
Stliabs	0.312***	0.269***	0.338***	0.228***
	(0.028)	(0.022)	(0.082)	(0.036)
Collateral	-0.278***	-0.400***	-0.284**	-0.632***
	(0.037)	(0.037)	(0.123)	(0.149)
Size	0.067***	-0.001	0.097**	0.232***
	(0.017)	(0.026)	(0.045)	(0.074)
Age	-0.033***	-0.027	-0.003	-0.048
	(0.009)	(0.023)	(0.029)	(0.035)
Observations	97568	47039	11980	8285
Nr firms	18352	8234	2120	1487
m1 (p)	0.00	0.00	0.00	0.00
m(n) (p)	0.10	0.06	0.09	0.44
Hansen (p)	0.39	0.16	0.94	0.57

Panel B. Standardized

	(1) *PK*	(2) *FK*	(3) *CK*	(4) *SK*
Stocks	-0.251***	-0.209***	-0.245	-0.154**
	(0.093)	(0.069)	(0.165)	(0.071)
Profits	-0.185	0.308**	0.060	-0.285
	(0.208)	(0.131)	(0.264)	(0.219)
Liquid	-0.139*	-0.273***	-0.115	-0.137**
	(0.074)	(0.077)	(0.119)	(0.067)
Stliabs	0.240***	0.220***	0.246***	0.174***
	(0.049)	(0.042)	(0.079)	(0.029)
Collateral	-0.221***	-0.215***	-0.251**	-0.584***
	(0.056)	(0.058)	(0.099)	(0.110)
Size	0.032*	0.001	0.101***	0.102**
	(0.017)	(0.033)	(0.036)	(0.051)
Age	-0.018	-0.033	-0.025	-0.005
	(0.011)	(0.025)	(0.023)	(0.024)
Observations	115984	39625	13109	9144
Nr firms	22174	7001	2318	1668
m1 (p)	0.00	0.00	0.00	0.00
m(n) (p)	0.06	0.56	0.25	0.14
Hansen (p)	0.08	0.06	0.20	0.11

Note: The table reports coefficients and asymptotic standard errors (in parantheses). Columns refer to private firms (*PK*), foreign firms (*FK*), collective firms (C*K*), and state-owned firms (S*K*) producing differentiated (Panel A) and standardized goods (Panel B). The dependent variable is trade credit extended (*AR*). *Stocks* stands for stocks of total inventories; *Profits* gives the firm's profit (or loss) for the period; *Liquid* represents the firm's liquid assets (cash, bank deposits, and other current assets). *Stliabs* stands for short-term liabilities, and *Collateral* is the ratio of tangible assets to total assets. With the exception of *Collateral*, all variables are scaled by total sales. *Size* is the logarithm of firms' real book value of assets, and *Age* is the logarithm of (1+ the number of years since the firm was established). All models are estimated with the first-difference GMM estimator using different lag lengths of the regressors as instruments. The table also reports the *p*-value for the test for first-order (*m1*), n^{th}-order (m(*n*)) serial correlation of the differenced residuals, and for the Hansen test of overidentifying restrictions. Also see Note to Table 1 and Appendix for more details. *, **, *** denote significance at 10, 5 and 1 percent level.

Table 3. Accounts receivable regressions: taking two categories of political affiliation into consideration

Panel A. Differentiated

	(1) *PK* *NPA*	(2) *PA*	(3) *FK* *NPA*	(4) *PA*	(5) *CK* *NPA*	(6) *PA*	(7) *SK* *NPA*	(8) *PA*
Stocks	-0.336***	-0.338***	-0.248***	-0.392***	-0.244	-0.239**	-0.051	-0.198**
	(0.062)	(0.069)	(0.044)	(0.083)	(0.255)	(0.103)	(0.144)	(0.082)
Profits	0.054	-0.329	0.062	-0.176*	0.416	-0.156	-0.231	-0.514**
	(0.158)	(0.294)	(0.064)	(0.101)	(0.637)	(0.282)	(0.368)	(0.222)
Liquid	-0.254***	-0.168**	-0.229***	-0.022	-0.203	-0.222**	-0.077	-0.160**
	(0.061)	(0.076)	(0.056)	(0.062)	(0.175)	(0.090)	(0.135)	(0.065)
Stliabs	0.345***	0.225***	0.296***	0.227***	0.279***	0.270***	0.098	0.235***
	(0.038)	(0.036)	(0.026)	(0.037)	(0.101)	(0.070)	(0.121)	(0.037)
Collateral	-0.289***	-0.200***	-0.413***	-0.383***	-0.040	-0.339***	-0.059	-0.646***
	(0.043)	(0.065)	(0.041)	(0.075)	(0.216)	(0.118)	(0.199)	(0.154)
Size	0.039	0.132***	0.000	-0.002	0.140	0.093**	0.072	0.253***
	(0.024)	(0.030)	(0.025)	(0.055)	(0.104)	(0.036)	(0.080)	(0.076)
Age	-0.027***	-0.053***	-0.035	-0.009	0.036	-0.021	0.020	-0.062*
	(0.011)	(0.018)	(0.023)	(0.047)	(0.050)	(0.030)	(0.076)	(0.037)
Observations	66072	31496	35691	11348	1805	10175	357	7928
Nr firms	12794	5558	6362	1872	327	1793	66	1421
m1 (p)	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00
m(n) (p)	0.28	034	0.26	0.14	0.79	0.47	0.95	0.39
Hansen (p)	0.94	0.06	0.10	0.87	0.85	0.10	0.77	0.48

Note: The table reports coefficients and asymptotic standard errors (in parantheses) for firms in differentiated industries. Firms without political affiliation (*NPA*) are contrasted with firms with any political affiliation (*PA*). Columns 1-2 refer to private firms (*PK*), columns 3-4 to foreign firms (*FK*), columns 5-6 to collective firms (C*K*), and columns 7-8 to state-owned firms (S*K*). The dependent variable is trade credit extended (*AR*). *Stocks* stands for stocks of total inventories; *Profits* gives the firm's profit (or loss) for the period; *Liquid* represents firm's liquid assets (cash, bank deposits, and other current assets). *Stliabs* stands for short-term liabilities, and *Collateral* is the ratio of tangible assets in total assets. With the exception of *Collateral*, all variables are scaled by total sales. *Size* is the logarithm of firms' real book value of assets and *Age* is the logarithm of (1+ the number of years since the firm was established). All models are estimated with the first-difference GMM estimator using different lag lengths of the regressors as instruments. The table also reports the *p*-value for the test for first-order (*m1*), n^{th}-order (m(*n*)) serial correlation of the differenced residuals, and for the Hansen test of overidentifying restrictions. Also see Note to Table 1 and Appendix for more details. *, **, *** denote significance at 10, 5 and 1 percent level.

Panel B. Standardized

	(1) *PK* *NPA*	(2) *PA*	(3) *FK* *NPA*	(4) *PA*	(5) *CK* *NPA*	(6) *PA*	(7) *SK* *NPA*	(8) *PA*
Stocks	-0.074	-0.113	-0.185*	-0.188**	-0.178	-0.157	-0.052	-0.156**
	(0.134)	(0.069)	(0.097)	(0.091)	(0.232)	(0.119)	(0.324)	(0.072)
Profits	-0.174	-0.025	0.442**	0.067	0.334	0.114	-0.540	-0.327
	(0.302)	(0.176)	(0.184)	(0.101)	(0.344)	(0.216)	(0.615)	(0.225)
Liquid	-0.077	-0.027	-0.184*	-0.152**	-0.248	-0.048	-0.206	-0.132**
	(0.106)	(0.060)	(0.108)	(0.065)	(0.159)	(0.102)	(0.399)	(0.067)
Stliabs	0.190**	0.181***	0.216***	0.190***	0.289**	0.153***	0.243	0.174***
	(0.074)	(0.032)	(0.052)	(0.041)	(0.124)	(0.055)	(0.202)	(0.029)
Collateral	-0.207***	-0.214***	-0.240***	-0.234**	-0.298	-0.218**	-0.956	-0.569***
	(0.069)	(0.053)	(0.071)	(0.092)	(0.184)	(0.092)	(0.655)	(0.110)
Size	0.035	0.048*	-0.010	0.053	0.042	0.079**	0.226	0.097*
	(0.022)	(0.025)	(0.047)	(0.058)	(0.049)	(0.034)	(0.161)	(0.054)
Age	-0.013	-0.021	-0.020	-0.056	0.019	-0.018	-0.040	0.005
	(0.012)	(0.015)	(0.032)	(0.038)	(0.050)	(0.024)	(0.201)	(0.024)
Observations	80165	35819	28916	10709	1509	11600	242	8902
Nr firms	15791	6383	5226	1775	274	2044	44	1624
m1 (p)	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00
m(n) (p)	0.44	0.93	0.74	0.08	0.36	0.58	0.60	0.15
Hansen (p)	0.24	0.11	0.06	0.08	0.52	0.04	0.15	0.14

Note: The table reports coefficients and asymptotic standard errors (in parantheses) for firms in standardized industries. Firms without political affiliation (*NPA*) are contrasted with firms with any political affiliation (*PA*). Columns 1-2 refer to private firms (*PK*), columns 3-4 to foreign firms (*FK*), columns 5-6 to collective firms (C*K*), and columns 7-8 to state-owned firms (S*K*).The dependent variable is trade credit extended (*AR*). *Stocks* stands for stocks of total inventories; *Profits* gives the firm's profit (or loss) for the period; *Liquid* represents firm's liquid assets (cash, bank deposits, and other current assets). *Stliabs* stands for short-term liabilities, and *Collateral* is the ratio of tangible assets in total assets. With the exception of *Collateral*, all variables are scaled by total sales. *Size* is the logarithm of firms' real book value of assets and *Age* is the logarithm of (1+ the number of years since the firm was established). All models are estimated with the first-difference GMM estimator using different lag lengths of the regressors as instruments. The table also reports the *p*-value for the test for first-order (*m1*), n^{th}-order (m(*n*)) serial correlation of the differenced residuals, and for the Hansen test of overidentifying restrictions. Also see Note to Table 1 and Appendix for more details. *, **, *** denote significance at 10, 5 and 1 percent level.

Table 4. Accounts receivable regressions: taking three categories of political affiliation into consideration

Panel A. Differentiated

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
		PK			*FK*			*CK*			*SK*	
	HPA	*MPA*	*NPA*	*HPA*	*MPA*	*NPA*	*HPA*	*MPA*	*NPA*	*HPA*	*MPA*	*NPA*
Stocks	-0.195**	-0.335***	-0.336***	-0.168	-0.392***	-0.248***	-0.046	-0.003	-0.244	-0.177**	-0.142	-0.051
	(0.092)	(0.076)	(0.062)	(0.125)	(0.091)	(0.044)	(0.387)	(0.084)	(0.255)	(0.077)	(0.133)	(0.144)
Profits	-0.285	0.088	0.054	-0.142	-0.148	0.062	-0.350	0.071	0.416	-0.520**	-0.287	-0.231
	(0.183)	(0.312)	(0.158)	(0.153)	(0.111)	(0.064)	(1.189)	(0.177)	(0.637)	(0.226)	(0.271)	(0.368)
Liquid	-0.231***	-0.041	-0.254***	-0.034	-0.050	-0.229***	-0.190	-0.251***	-0.203	-0.129*	-0.244**	-0.077
	(0.086)	(0.090)	(0.061)	(0.063)	(0.075)	(0.056)	(0.226)	(0.077)	(0.175)	(0.068)	(0.101)	(0.135)
Stliabs	0.278***	0.303***	0.345***	0.177**	0.239***	0.296***	0.175	0.234***	0.279***	0.224***	0.246***	0.098
	(0.048)	(0.042)	(0.038)	(0.070)	(0.041)	(0.026)	(0.175)	(0.046)	(0.101)	(0.046)	(0.047)	(0.121)
Collateral	-0.000	-0.257***	-0.289***	-0.161	-0.445***	-0.413***	-0.492	-0.158*	-0.040	-0.647***	-0.511**	-0.059
	(0.127)	(0.070)	(0.043)	(0.158)	(0.086)	(0.041)	(0.450)	(0.087)	(0.216)	(0.166)	(0.212)	(0.199)
Size	0.147***	0.053	0.039	0.063	-0.032	0.000	0.189	0.027	0.140	0.072	0.354***	0.072
	(0.057)	(0.036)	(0.024)	(0.067)	(0.056)	(0.025)	(0.173)	(0.041)	(0.104)	(0.080)	(0.097)	(0.080)
Age	-0.089**	-0.010	-0.027***	-0.115	0.022	-0.035	0.045	-0.004	0.036	0.055	-0.164***	0.020
	(0.036)	(0.021)	(0.011)	(0.088)	(0.046)	(0.023)	(0.069)	(0.032)	(0.050)	(0.039)	(0.060)	(0.076)
Observations	4420	27076	66072	2054	9294	35691	560	9615	1805	3972	3956	357
Nr firms	779	4779	12794	328	1544	6362	99	1694	327	698	723	66
m1 (p)	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.02
m(n) (p)	0.05	0.58	0.28	0.34	0.12	0.26	0.05	0.05	0.79	0.82	0.57	0.95
Hansen (p)	0.12	0.15	0.94	0.47	0.79	0.10	0.75	0.56	0.85	0.77	0.68	0.77

Note: The table reports coefficients and asymptotic standard errors (in parantheses) for firms in differentiated industries. Firms are separated into high political affiliation (*HPA*), medium political affiliation (*MPA*) and no political affiliation (*NPA*). Columns 1 to 3 refer to private firms (*PK*), columns 4 to 6 to foreign firms (*FK*), columns 7 to 9 to collective firms (C*K*), and columns 10 to 12 to state-owned firms (S*K*). The dependent variable is trade credit extended (*AR*). *Stocks* stands for stocks of total inventories; *Profits* gives the firm's profit (or loss) for the period; *Liquid* represents firm's liquid assets (cash, bank deposits, and other current assets). *Stliabs* stands for short-term liabilities, and *Collateral* is the ratio of tangible assets in total assets. With the exception of *Collateral*, all variables are scaled by total sales. *Size* is the logarithm of firms' real book value of assets and *Age* is the logarithm of (1+ the number of years since the firm was established). All models are estimated with the first-difference GMM estimator using different lag lengths of the regressors as instruments. The table also reports the *p*-value for the test for first-order (*m1*), n^{th}-order (m(*n*)) serial correlation of the differenced residuals, and for the Hansen test of overidentifying restrictions. Also see Note to Table 1 and Appendix for more details. *, **, *** denote significance at 10, 5 and 1 percent level.

Panel B. Standardized

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
		PK			*FK*			*CK*			*SK*	
	HPA	*MPA*	*NPA*	*HPA*	*MPA*	*NPA*	*HPA*	*MPA*	*NPA*	*HPA*	*MPA*	*NPA*
Stocks	-0.062	-0.123*	-0.074	0.035	-0.215**	-0.185*	-0.191	-0.164	-0.178	-0.090	-0.305**	-0.052
	(0.084)	(0.075)	(0.134)	(0.121)	(0.095)	(0.097)	(0.190)	(0.122)	(0.232)	(0.072)	(0.135)	(0.324)
Profits	0.044	-0.082	-0.174	-0.120	0.085	0.442**	-0.142	0.153	0.334	-0.109	-0.212	-0.540
	(0.149)	(0.185)	(0.302)	(0.128)	(0.111)	(0.184)	(0.236)	(0.219)	(0.344)	(0.212)	(0.324)	(0.615)
Liquid	-0.119*	-0.040	-0.077	-0.019	-0.173**	-0.184*	-0.116	-0.042	-0.248	-0.173**	-0.259**	-0.206
	(0.061)	(0.067)	(0.106)	(0.101)	(0.068)	(0.108)	(0.147)	(0.104)	(0.159)	(0.076)	(0.116)	(0.399)
Stliabs	0.157***	0.188***	0.190**	0.134***	0.181***	0.216***	0.108	0.156***	0.289**	0.155***	0.196***	0.243
	(0.041)	(0.034)	(0.074)	(0.051)	(0.043)	(0.052)	(0.072)	(0.058)	(0.124)	(0.030)	(0.073)	(0.202)
Collateral	-0.331***	-0.197***	-0.207***	-0.252	-0.245***	-0.240***	-0.203	-0.252***	-0.298	-0.358***	-0.870***	-0.956
	(0.119)	(0.053)	(0.069)	(0.232)	(0.093)	(0.071)	(0.190)	(0.092)	(0.184)	(0.117)	(0.217)	(0.655)
Size	0.123***	0.032	0.035	0.030	0.083	-0.010	-0.023	0.088**	0.042	0.083	0.197**	0.226
	(0.047)	(0.026)	(0.022)	(0.064)	(0.058)	(0.047)	(0.104)	(0.034)	(0.049)	(0.054)	(0.100)	(0.161)
Age	-0.080***	-0.010	-0.013	-0.026	-0.075*	-0.020	0.072	-0.022	0.019	-0.021	-0.027	-0.040
	(0.028)	(0.016)	(0.012)	(0.065)	(0.039)	(0.032)	(0.059)	(0.025)	(0.050)	(0.024)	(0.054)	(0.201)
Observations	2711	33108	80165	1135	9574	28916	380	11220	1509	6825	2561	242
Nr firms	495	5888	15791	184	1591	5226	68	1976	274	1246	466	44
m1 (p)	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.04
m(n) (p)	0.17	0.56	0.24	0.32	0.05	0.74	0.75	0.55	0.36	0.35	0.40	0.60
Hansen (p)	0.82	0.28	0.24	0.13	0.23	0.06	0.67	0.05	0.52	0.05	0.58	0.15

Note: The table reports coefficients and asymptotic standard errors (in parantheses) for firms in standardized industries. Firms are separated into high political affiliation (*HPA*), medium political affiliation (*MPA*) and no political affiliation (*NPA*). Columns 1 to 3 refer to private firms (*PK*), columns 4 to 6 to foreign firms (*FK*), columns 7 to 9 to collective firms (C*K*), and columns 10 to 12 to state-owned firms (S*K*). The dependent variable is trade credit extended (*AR*). *Stocks* stands for stocks of total inventories; *Profits* gives the firm's profit (or loss) for the period; *Liquid* represents firm's liquid assets (cash, bank deposits, and other current assets). *Stliabs* stands for short-term liabilities, and *Collateral* is the ratio of tangible assets in total assets. With the exception of *Collateral*, all variables are scaled by total sales. *Size* is the logarithm of firms' real book value of assets and *Age* is the logarithm of (1+ the number of years since the firm was established). All models are estimated with the first-difference GMM estimator using different lag lengths of the regressors as instruments. The table also reports the *p*-value for the test for first-order (*m1*), n^{th}-order (m(*n*)) serial correlation of the differenced residuals, and for the Hansen test of overidentifying restrictions. Also see Note to Table 1 and Appendix for more details. *, **, *** denote significance at 10, 5 and 1 percent level.

Table 5. Accounts receivable regressions: taking market power into consideration

Panel A. Differentiated

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
		PK			*FK*			*CK*			*SK*	
Stocks	-0.347***	-0.347***	-0.348***	-0.289***	-0.293***	-0.293***	-0.421***	-0.422***	-0.424***	-0.142*	-0.120	-0.122
	(0.048)	(0.048)	(0.048)	(0.042)	(0.043)	(0.043)	(0.118)	(0.119)	(0.118)	(0.079)	(0.079)	(0.079)
Profits	0.009	0.017	0.018	-0.005	-0.006	-0.006	-0.226	-0.231	-0.233	-0.705***	-0.755***	-0.749***
	(0.146)	(0.146)	(0.146)	(0.056)	(0.056)	(0.056)	(0.335)	(0.335)	(0.335)	(0.220)	(0.223)	(0.222)
Liquid	-0.192***	-0.193***	-0.193***	-0.139***	-0.143***	-0.143***	-0.289***	-0.290***	-0.290***	-0.143**	-0.123**	-0.121**
	(0.052)	(0.052)	(0.052)	(0.045)	(0.045)	(0.045)	(0.108)	(0.108)	(0.108)	(0.062)	(0.062)	(0.061)
Stliabs	0.314***	0.314***	0.314***	0.271***	0.269***	0.269***	0.346***	0.344***	0.345***	0.242***	0.250***	0.248***
	(0.028)	(0.028)	(0.028)	(0.022)	(0.023)	(0.023)	(0.082)	(0.082)	(0.082)	(0.037)	(0.038)	(0.037)
Collateral	-0.284***	-0.287***	-0.286***	-0.393***	-0.397***	-0.397***	-0.309**	-0.315**	-0.313**	-0.688***	-0.617***	-0.604***
	(0.037)	(0.037)	(0.037)	(0.036)	(0.036)	(0.036)	(0.127)	(0.127)	(0.128)	(0.152)	(0.149)	(0.147)
Size	0.069***	0.069***	0.069***	-0.001	0.003	0.003	0.101**	0.103**	0.103**	0.133*	0.067	0.071
	(0.018)	(0.018)	(0.018)	(0.028)	(0.028)	(0.028)	(0.046)	(0.047)	(0.047)	(0.070)	(0.069)	(0.068)
Age	-0.034***	-0.033***	-0.033***	-0.027	-0.029	-0.030	-0.001	-0.005	-0.005	-0.013	0.008	0.007
	(0.010)	(0.010)	(0.010)	(0.025)	(0.025)	(0.025)	(0.030)	(0.030)	(0.030)	(0.032)	(0.030)	(0.030)
Ind. concentration	0.009*		0.010**	-0.002		-0.005	0.007		0.006	0.039***		0.034***
	(0.005)		(0.004)	(0.009)		(0.010)	(0.014)		(0.014)	(0.012)		(0.012)
Ind. share		-1.264***	-1.270***		-2.291*	-2.306*		-3.898	-3.889		-3.797	-2.870
		(0.244)	(0.241)		(1.303)	(1.318)		(2.528)	(2.525)		(7.848)	(7.851)
Observations	97568	97568	97568	47039	47039	47039	11980	11980	11980	8285	8285	8285
Nr firms	18352	18352	18352	8234	8234	8234	2120	2120	2120	1487	1487	1487
m1 (p)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
m(n) (p)	0.10	0.09	0.09	0.07	0.07	0.07	0.10	0.11	0.10	0.40	0.38	0.34
Hansen (p)	0.26	0.22	0.26	0.20	0.20	0.20	0.92	0.92	0.91	0.38	0.32	0.35

Note: The table reports coefficients and asymptotic standard errors (in parantheses) for firms in differentiated industries. Columns 1 to 3 refer to private firms (*PK*), 4 to 6 to foreign firms (*FK*), 7 to 9 to collective firms (*CK*), and columns 10 to 12 to state-owned firms (*SK*). The dependent variable is trade credit extended (*AR*). *Stocks* stands for stocks of total inventories; *Profits* gives the firm's profit (or loss) for the period; *Liquid* represents firm's liquid assets (cash, bank deposits, and other current assets). *Stliabs* stands for short-term liabilities, and *Collateral* is the ratio of tangible assets in total assets. With the exception of *Collateral*, all variables are scaled by total sales. *Size* is the logarithm of firms' real book value of assets and *Age* is the logarithm of (1+ the number of years since the firm was established). *Ind. concentration* is the market share of the eight largest firms in the firm's two-digit industry. *Ind. share* is the share of own sales to total two-digit industry sales. All models are estimated with the first-difference GMM estimator using different lag lengths of the regressors as instruments. The table also reports the *p*-value for the test for first-order (*m1*), n^{th}-order (m(*n*)) serial correlation of the differenced residuals, and for the Hansen test of overidentifying restrictions. Also see Note to Table 1 and Appendix for more details. *, **, *** denote significance at 10, 5 and 1 percent level.

Panel B. Standardized

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
		PK			*FK*			*CK*			*SK*	
Stocks	-0.259***	-0.259***	-0.258***	-0.309***	-0.309***	-0.309***	-0.260	-0.274*	-0.273*	-0.150**	-0.165**	-0.168**
	(0.093)	(0.093)	(0.093)	(0.083)	(0.083)	(0.083)	(0.164)	(0.166)	(0.165)	(0.072)	(0.074)	(0.074)
Profits	-0.201	-0.194	-0.194	0.382**	0.382**	0.382**	0.064	0.052	0.044	-0.216	-0.192	-0.198
	(0.209)	(0.211)	(0.211)	(0.149)	(0.149)	(0.149)	(0.264)	(0.265)	(0.264)	(0.217)	(0.218)	(0.217)
Liquid	-0.132*	-0.133*	-0.133*	-0.258***	-0.258***	-0.258***	-0.132	-0.142	-0.143	-0.133**	-0.151**	-0.150**
	(0.075)	(0.075)	(0.075)	(0.084)	(0.084)	(0.084)	(0.119)	(0.120)	(0.120)	(0.067)	(0.068)	(0.068)
Stliabs	0.247***	0.246***	0.246***	0.236***	0.235***	0.235***	0.261***	0.257***	0.256***	0.172***	0.173***	0.171***
	(0.049)	(0.049)	(0.049)	(0.049)	(0.049)	(0.049)	(0.078)	(0.079)	(0.079)	(0.029)	(0.029)	(0.028)
Collateral	-0.226***	-0.225***	-0.225***	-0.246***	-0.247***	-0.247***	-0.233**	-0.254**	-0.258**	-0.614***	-0.635***	-0.637***
	(0.057)	(0.057)	(0.057)	(0.062)	(0.062)	(0.062)	(0.101)	(0.102)	(0.102)	(0.115)	(0.115)	(0.115)
Size	0.034**	0.034**	0.034**	0.021	0.021	0.021	0.101***	0.106***	0.106***	0.118**	0.124**	0.126**
	(0.017)	(0.017)	(0.017)	(0.038)	(0.038)	(0.038)	(0.036)	(0.036)	(0.036)	(0.054)	(0.054)	(0.054)
Age	-0.016	-0.017	-0.017	-0.049*	-0.050*	-0.050*	-0.023	-0.025	-0.025	-0.006	-0.010	-0.010
	(0.011)	(0.011)	(0.011)	(0.030)	(0.030)	(0.030)	(0.023)	(0.023)	(0.023)	(0.024)	(0.024)	(0.024)
Ind. concentration	0.001		0.001	0.001		0.001	-0.005		-0.008	-0.023*		-0.023*
	(0.002)		(0.002)	(0.004)		(0.004)	(0.008)		(0.008)	(0.013)		(0.013)
Ind. share		-0.136	-0.136		-0.313	-0.313		-12.042**	-12.278**		-4.220***	-4.246***
		(0.259)	(0.259)		(0.252)	(0.252)		(4.921)	(4.979)		(1.232)	(1.233)
Observations	115984	115980	115980	39625	39625	39625	13109	13109	13109	9130	9130	9130
Nr firms	22174	22173	22173	7001	7001	7001	2318	2318	2318	1666	1666	1666
m1 (p)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
m(n) (p)	0.06	0.06	0.06	0.74	0.74	0.74	0.21	0.22	0.23	0.16	0.16	0.17
Hansen (p)	0.11	0.11	0.10	0.71	0.72	0.72	0.22	0.21	0.20	0.08	0.10	0.11

Note: The table reports coefficients and asymptotic standard errors (in parantheses) for firms in standardized industries. Columns 1 to 3 refer to private firms (*PK*), 4 to 6 to foreign firms (*FK*), 7 to 9 to collective firms (*CK*), and columns 10 to 12 to state-owned firms (*SK*). The dependent variable is trade credit extended (*AR*). *Stocks* stands for stocks of total inventories; *Profits* gives the firm's profit (or loss) for the period; *Liquid* represents firm's liquid assets (cash, bank deposits, and other current assets). *Stliabs* stands for short-term liabilities, and *Collateral* is the ratio of tangible assets in total assets. With the exception of *Collateral*, all variables are scaled by total sales. *Size* is the logarithm of firms' real book value of assets and *Age* is the logarithm of (1+ the number of years since the firm was established). *Ind. concentration* is the market share of the eight largest firms in the firm's two-digit industry. *Ind. share* is the share of own sales to total two-digit industry sales. All models are estimated with the first-difference GMM estimator using different lag lengths of the regressors as instruments. The table also reports the *p*-value for the test for first-order (*m1*), n^{th}-order (m(*n*)) serial correlation of the differenced residuals, and for the Hansen test of overidentifying restrictions. Also see Note to Table 1 and Appendix for more details. *, **, *** denote significance at 10, 5 and 1 percent level.

Table 6. Accounts receivable regressions: taking industry concentration and political affiliation into consideration

Panel A. Differentiated

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
	PK						*FK*					
	NPA	*PA*	*NPA*	*PA*	*NPA*	*PA*	*NPA*	*PA*	*NPA*	*PA*	*NPA*	*PA*
Stocks	-0.337***	-0.340***	-0.335***	-0.393***	-0.337***	-0.392***	-0.257***	-0.399***	-0.286***	-0.397***	-0.286***	-0.397***
	(0.062)	(0.069)	(0.062)	(0.076)	(0.062)	(0.076)	(0.045)	(0.086)	(0.049)	(0.090)	(0.049)	(0.090)
Profits	0.059	-0.299	0.070	0.119	0.071	0.124	0.031	-0.007	-0.058	-0.022	-0.058	-0.023
	(0.156)	(0.297)	(0.156)	(0.285)	(0.156)	(0.284)	(0.064)	(0.126)	(0.068)	(0.126)	(0.068)	(0.126)
Liquid	-0.251***	-0.175**	-0.249***	-0.177**	-0.252***	-0.178**	-0.217***	-0.110	-0.233***	-0.117	-0.233***	-0.117
	(0.061)	(0.076)	(0.061)	(0.084)	(0.061)	(0.085)	(0.055)	(0.079)	(0.059)	(0.089)	(0.059)	(0.089)
Stliabs	0.347***	0.226***	0.347***	0.272***	0.348***	0.272***	0.302***	0.269***	0.303***	0.269***	0.303***	0.269***
	(0.038)	(0.037)	(0.038)	(0.038)	(0.038)	(0.038)	(0.027)	(0.044)	(0.030)	(0.045)	(0.030)	(0.045)
Collateral	-0.293***	-0.223***	-0.296***	-0.289***	-0.295***	-0.291***	-0.400***	-0.412***	-0.396***	-0.438***	-0.396***	-0.440***
	(0.044)	(0.067)	(0.044)	(0.072)	(0.045)	(0.073)	(0.040)	(0.083)	(0.044)	(0.082)	(0.044)	(0.082)
Size	0.039	0.138***	0.038	0.138***	0.039	0.138***	-0.012	0.004	-0.025	-0.009	-0.025	-0.009
	(0.026)	(0.031)	(0.026)	(0.037)	(0.026)	(0.037)	(0.028)	(0.091)	(0.033)	(0.100)	(0.033)	(0.100)
Age	-0.027**	-0.056***	-0.027**	-0.052***	-0.027**	-0.052***	-0.025	-0.029	-0.015	-0.015	-0.015	-0.015
	(0.011)	(0.019)	(0.011)	(0.020)	(0.011)	(0.020)	(0.025)	(0.067)	(0.029)	(0.071)	(0.029)	(0.071)
Ind. concentration	0.009	0.006			0.012**	-0.009	-0.002	0.000			-0.004	-0.015
	(0.006)	(0.007)			(0.006)	(0.013)	(0.012)	(0.014)			(0.012)	(0.017)
Ind. share			-1.108***	-23.736**	-1.115***	-23.908**			-1.440	-8.153	-1.447	-8.357
			(0.137)	(11.496)	(0.136)	(11.900)			(0.977)	(6.115)	(0.984)	(6.302)
Observations	66072	31496	66072	31496	66072	31496	35691	11348	35691	11348	35691	11348
Nr firms	12794	5558	12794	5558	12794	5558	6362	1872	6362	1872	6362	1872
m1 (p)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
m(n) (p)	0.29	0.36	0.26	0.12	0.26	0.12	0.26	0.05	0.30	0.06	0.30	0.06
Hansen (p)	0.87	0.05	0.82	0.06	0.86	0.05	0.12	0.20	0.28	0.14	0.28	0.14

Note: The table reports coefficients and asymptotic standard errors (in parantheses) for firms in differentiated industries. Columns 1 to 6 refer to private firms (*PK*) and columns 7 to 12 to foreign firms (*FK*). Firms without political affiliation (*NPA*) are contrasted with firms politically affiliated (*PA*). The dependent variable is trade credit extended (*AR*). *Stocks* stands for stocks of total inventories; *Profits* gives the firm's profit (or loss) for the period; *Liquid* represents firm's liquid assets (cash, bank deposits, and other current assets). *Stliabs* stands for short-term liabilities, and *Collateral* is the ratio of tangible assets in total assets. With the exception of *Collateral*, all variables are scaled by total sales. *Size* is the logarithm of firms' real book value of assets and *Age* is the logarithm of (1+ the number of years since the firm was established). *Ind. concentration* is the market share of the eight largest firms in the firm's two-digit industry. *Ind. share* is the share of own sales to total two-digit industry sales. All models are estimated with the first-difference GMM estimator using different lag lengths of the regressors as instruments. The table also reports the *p*-value for the test for first-order (*m1*), n^{th}-order (m(*n*)) serial correlation of the differenced residuals, and for the Hansen test of overidentifying restrictions. Also see Note to Table 1 and Appendix for more details. *, **, *** denote significance at 10, 5 and 1 percent level.

Panel B. Standardized

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
	PK						*FK*					
	NPA	*PA*	*NPA*	*PA*	*NPA*	*PA*	*NPA*	*PA*	*NPA*	*PA*	*NPA*	*PA*
Stocks	-0.082	-0.126*	-0.075	-0.126*	-0.075	-0.126*	-0.187*	-0.185**	-0.186*	-0.202**	-0.187*	-0.200**
	(0.139)	(0.069)	(0.138)	(0.069)	(0.138)	(0.069)	(0.097)	(0.092)	(0.097)	(0.100)	(0.097)	(0.099)
Profits	-0.192	0.022	-0.180	0.017	-0.179	0.020	0.445**	0.058	0.442**	0.065	0.444**	0.064
	(0.308)	(0.180)	(0.306)	(0.179)	(0.306)	(0.179)	(0.180)	(0.103)	(0.180)	(0.104)	(0.180)	(0.104)
Liquid	-0.064	-0.021	-0.063	-0.022	-0.064	-0.022	-0.188*	-0.140**	-0.187*	-0.150**	-0.188*	-0.149**
	(0.107)	(0.060)	(0.107)	(0.060)	(0.107)	(0.060)	(0.108)	(0.068)	(0.107)	(0.073)	(0.107)	(0.073)
Stliabs	0.199***	0.192***	0.192**	0.191***	0.192**	0.191***	0.216***	0.202***	0.215***	0.199***	0.216***	0.200***
	(0.076)	(0.032)	(0.077)	(0.032)	(0.077)	(0.032)	(0.051)	(0.040)	(0.051)	(0.042)	(0.051)	(0.042)
Collateral	-0.215***	-0.207***	-0.210***	-0.209***	-0.210***	-0.208***	-0.235***	-0.214**	-0.235***	-0.235**	-0.235***	-0.233**
	(0.074)	(0.053)	(0.073)	(0.053)	(0.073)	(0.053)	(0.071)	(0.093)	(0.071)	(0.101)	(0.071)	(0.101)
Size	0.036	0.046*	0.037*	0.047*	0.037*	0.046*	-0.008	0.010	-0.008	0.016	-0.007	0.014
	(0.023)	(0.025)	(0.023)	(0.025)	(0.022)	(0.025)	(0.047)	(0.055)	(0.047)	(0.060)	(0.047)	(0.060)
Age	-0.011	-0.018	-0.012	-0.018	-0.012	-0.018	-0.021	-0.030	-0.021	-0.030	-0.022	-0.029
	(0.012)	(0.015)	(0.012)	(0.015)	(0.012)	(0.015)	(0.032)	(0.037)	(0.032)	(0.039)	(0.032)	(0.038)
Ind. concentration	-0.001	0.006			-0.001	0.006	0.001	0.002			0.001	-0.002
	(0.002)	(0.004)			(0.002)	(0.004)	(0.004)	(0.008)			(0.004)	(0.008)
Ind. share			0.068	-0.314***	0.069	-0.314***			-0.140	-10.239	-0.141	-10.085
			(0.337)	(0.116)	(0.337)	(0.114)			(0.170)	(7.006)	(0.170)	(7.023)
Observations	80165	35819	80165	35815	80165	35815	28916	10709	28916	10709	28916	10709
Nr firms	15791	6383	15791	6382	15791	6382	5226	1775	5226	1775	5226	1775
m1 (p)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
m(n) (p)	0.21	0.91	0.23	0.91	0.22	0.91	0.72	0.06	0.72	0.06	0.72	0.06
Hansen (p)	0.28	0.15	0.25	0.15	0.25	0.14	0.07	0.06	0.07	0.07	0.07	0.06

Note: The table reports coefficients and asymptotic standard errors (in parantheses) for firms in differentiated industries. Columns 1 to 6 refer to private firms (*PK*) and columns 7 to 12 to foreign firms (*FK*). Firms without political affiliation (*NPA*) are contrasted with firms politically affiliated (*PA*). The dependent variable is trade credit extended (*AR*). *Stocks* stands for stocks of total inventories; *Profits* gives the firm's profit (or loss) for the period; *Liquid* represents firm's liquid assets (cash, bank deposits, and other current assets). *Stliabs* stands for short-term liabilities, and *Collateral* is the ratio of tangible assets in total assets. With the exception of *Collateral* all other variables are scaled by total sales. *Size* is the logarithm of firms' real book value of assets and *Age* is the logarithm of (1+ the number of years since the firm was established). *Ind. concentration* is the market share of the eight largest firms in the firm's two-digit industry. *Ind. share* is the share of own sales to total two-digit industry sales. All models are estimated with the first-difference GMM estimator using different lag lengths of the regressors as instruments. The table also reports the *p*-value for the test for first-order (*m1*), n^{th}-order (m(*n*)) serial correlation of the differenced residuals, and for the Hansen test of overidentifying restrictions. Also see Note to Table 1 and Appendix for more details. *, **, *** denote significance at 10, 5 and 1 percent level.

Figure 2. Average accounts receivable to sales
by ownership

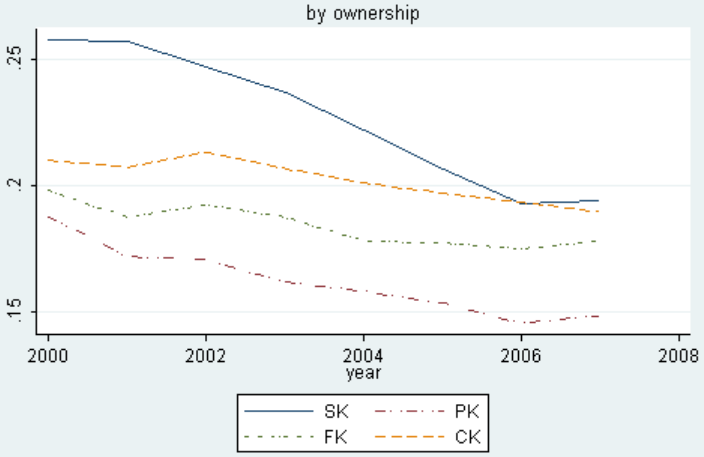
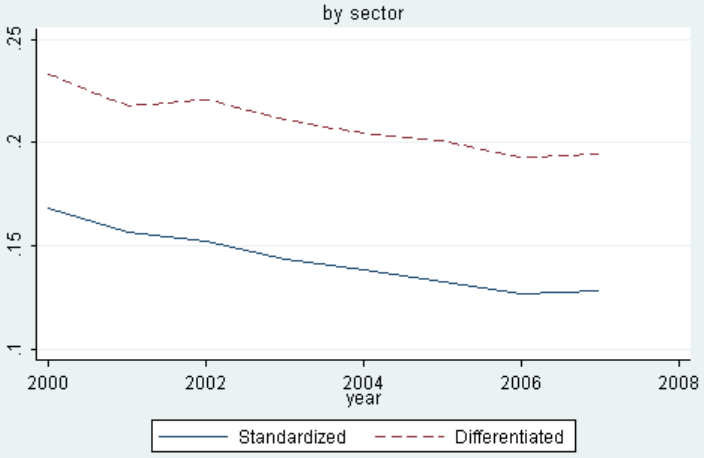


Figure 3. Average accounts receivable to sales
by sector



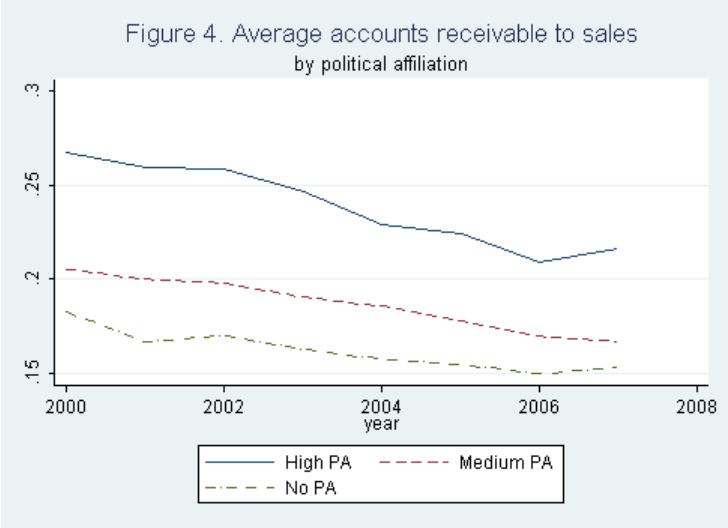


Figure 4. Average accounts receivable to sales
by political affiliation
.3
.25
.2
.15
2000
2002
2004
2006
2008
year
High PA
Medium PA
No PA

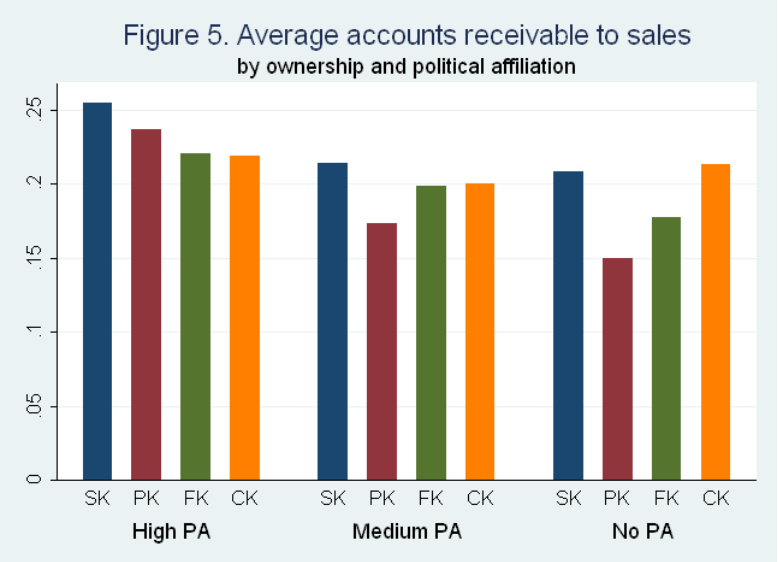


Figure 5. Average accounts receivable to sales
by ownership and political affiliation
0
.05
.1
.15
.2
.25
SK
PK
FK
CK
High PA
Medium PA
No PA