China Economic Review 36 (2015) 236–260

Contents lists available at ScienceDirect

China Economic Review

Trade credit and ethnicity: Case of ethnic minority area in China

Go YANO [a,*], Maho SHIRAISHI [b,1]

[a] Graduate School of Economics, Kyoto University, Yoshida-honmachi, Sakyo-ku, Kyoto 606-8501, Japan
[b] Faculty of Foreign Studies, The University of Kitakyushu, 4-2-1, Kitagata, Kokuraminami-ku, Kitakyushu 802-8577, Japan

ARTICLE INFO

Article history:
Received 11 December 2014
Received in revised form 13 September 2015
Accepted 19 September 2015
Available online 28 September 2015

JEL classification:
G32
O16
O53
P34

Keywords:
China
Ethnic bias
Ethnic minority firms
Interfirm trust
Trade credit

ABSTRACT

Using data for trade credit practices, this work investigates interfirm trust formation by ethnic minority firms in the Xinjiang Uygur Autonomous Region, China. The main findings of this research are as follows. First, there is a general ethnic bias against ethnic minority firms in receiving trade credit. Second, ethnic minority firms are less eager than Han firms to build interfirm trust with their business partners by offering trade credit, which is partly due to their financing constraints. Third, ethnic minority firms have less trust of other ethnic minority firms in offering trade credit. Fourth, these trade credit practices by ethnic minority firms tend to be more pronounced in those surviving after 2005. Fifth, ethnic minority firms do not share their members' information regarding productivity within their circle of ethnic minority firms. Overall, interfirm trust is insufficiently formed, even among ethnic minority firms.

1. Introduction

This study, which is centered on the Xinjiang Uygur Autonomous Region, an ethnic minority area in China, examines the presence of ethnic bias when trade credit is both offered and received. The particular focus is on which firms have a biased attitude against ethnic minority firms.

This research has investigated interfirm trust formation by ethnic minority firms. Trade credit access is treated as a proxy for interfirm trust. The first question is whether ethnic minority firms build broad interfirm trust with ethnic majority (Han) firms. The second question is whether interfirm trust can be formed among ethnic minority firms. The empirical evidence considered here provides pessimistic answers to both questions.

An existing strand of research has investigated the economic situation of ethnic minority groups in China. Almost all the researchers used household data. They explained matters such as a household's economic outcome, labor participation, and investment in education by household attributes, including ethnicity (Gustafsson & Ding, 2009; Gustafsson & Li, 2003; Sato & Ding, 2012). Paying particular attention to ethnic minorities in rural China, Gustafsson and Ding (2009) found that having a higher percentage of the population in manufacturing in villages led to higher average household income or wealth in those villages. Gustafsson and Li (2003), Gustafsson and Ding (2009), and Sato and Ding (2012) obtained similar findings for rural ethnic minority areas in China.

* Corresponding author. Tel.: +81 75 753 3440; fax: +81 75 753 3492.
E-mail addresses: rswtj922@yahoo.co.jp (G. Yano), mshira@kitakyu-u.ac.jp (M. Shiraishi).
[1] Tel.: +81 93 964 4060.

http://dx.doi.org/10.1016/j.chieco.2015.09.006

This implies that the activity of firms plays an important role in the economic situation of households and people in general in rural ethnic minority areas. Financing is of critical importance for firm activity. Therefore, this research pays particular attention to trade credit as an alternative financing channel for small and medium-sized firms in ethnic minority areas that have limited access to formal financing channels such as bank loans. Although previous studies have pointed out the important role of firms, they considered the economy in ethnic minority areas with a focus on the economic situation of households using household data; this study will fill the gap by directly using microdata on firms.

Another strand of research has investigated the determinants of trust between firms ("interfirm trust" hereafter) using data on trade credit practices. Fisman and Raturi (2004) stated that previous research often treated access to trade credit as a proxy for interfirm trust (Fafchamps, 2004; Johnson, McMillan, & Woodruff, 2002), an approach which they adopted in their own work. These studies indicate that the granting of notes and accounts payable requires robust interfirm trust based on an assumption that interfirm trust creates confidence that payment will be made after delivery of the goods or services. Furthermore, in addition to the assumption of trade credit as a proxy for interfirm trust, a recent study provided direct evidence that connects social trust and the provision of trade credit. Thus, using more direct proxies of social trust at the provincial level than trade credit, Wu, Firth, and Rui (2014) determined a significantly positive effect of social trust on trade credit received and offered. In particular, they found that in China, private firms located in higher social trust regions received more trade credit from suppliers and offered more trade credit to customers. This reinforces the validity of interpreting trade credit as a proxy for interfirm trust.[2] Some authors have paid particular attention to ethnicity and trust formation, and conversely to ethnic bias. Using microdata for African firms and traders, Fafchamps (2004) found ethnic bias in trade credit usage and showed that much of this bias can be explained by network effects. Networks between firms are based on ethnicity. As a result, indigenous-ethnicity firms without network affiliation with non-indigenous business groups (Asian and European) have less involvement with trade credit and in particular receive less trade credit. Therefore, this study has investigated interfirm trust formation in ethnic minority areas in China and analyzed trade credit practices for firms there. To the authors' knowledge, this is the first study to pursue this issue in a Chinese context. The goal is to draw policy implications with the intent of mitigating serious friction between ethnic majority and minority groups in China.

The Xinjiang Uygur Autonomous Region (hereafter Xinjiang) has been used as the geographic base for the present study of ethnic minority areas in China. In the Xinjiang data, the names of firms' managers make it possible to distinguish (non-Hui) ethnic minority firms from Han (and Hui) firms.[3] A number of questions were considered to investigate interfirm trust formation in Xinjiang, for which firm-level microdata for industrial firms in Xinjiang during the 2000s were used.

The first question is whether ethnic minority firms build broad interfirm trust, including trust with ethnic majority (Han) firms. In other words, can they obtain network affiliations with a broad circle of firms, including Han firms? If ethnic minority firms could do this, it would be effective for their development in that relational contracting with Han firms would help them to grow, and receiving trade credit through trade with Han firms would alleviate their credit constraints.

If ethnic minority firms fail to do this, the next question is whether they at least succeed in forming interfirm trust within a circle of ethnic minority firms. Even a closed network circle and interfirm trust formation among minority firms would lead to reciprocal help among these firms and, although only modestly, would alleviate their credit constraints.

However, the statistical evidence obtained in this research shows that not only is there ethnic bias in receiving trade credit, but also a more serious situation regarding interfirm trust formation by ethnic minority firms in Xinjiang.[4]

Ethnic minority firms are less eager to build interfirm trust with their business partners than are Han firms and tend to be reluctant to conduct credit transactions with their customers. More specifically, ethnic minority firms are likely to offer less trade credit to their customers than Han firms. Furthermore, ethnic minority firms have less trust in their relations with other ethnic minority firms than Han firms have with ethnic minority firms. Ironically, ethnic minority firms have a more biased attitude against ethnic minority firms in terms of offering trade credit. This phenomenon is related to the first observation. As a result, less interfirm trust is formed in transactions between ethnic minority firms, which are not eager to build interfirm trust with business partners. Therefore, less trade credit is offered and received between ethnic minority firms. Consequently, interfirm trust is insufficiently formed, even among ethnic minority firms.

This work therefore offers the following contributions to the literature on China's ethnic minority economy, trust formation, and ethnicity. First, to the best of the authors' knowledge, this work is the first to use firm-level microdata to investigate the ethnic minority economy in China from the aspect of firms' activity in the realm of financing (trade credit practices). Second, this work provides valuable findings regarding interfirm trust formation (using the proxy of trade credit usage) and ethnicity in China, which few researchers have studied so far.

The remainder of the paper is organized as follows. Section 2 explains the empirical models, the variables used, and the estimation strategy. Section 3 describes the data used and includes several important observations on the stage of descriptive statistical analysis. Section 4 considers the estimation results of the econometric analysis, and Section 5 presents conclusions.

[2] However, we must also acknowledge that trade credit is simply an indirect proxy for interfirm trust, unlike those used by Wu et al. (2014). In further studies, more direct measures of interfirm trust at firm level would improve our understanding of this issue.

[3] Ethnic information for firms was also obtained from the list of members of the People's Congress, as explained in Section 3.

[4] Fafchamps (2004) proposed an analytical framework of network effects versus statistical discrimination to explain differences in trade credit practices between ethnic groups. His analytical framework seems to be useful in the case of Xinjiang. For example, the general ethnic bias against ethnic minority firms in receiving trade credit can be interpreted as coming from statistical discrimination against them. The other observations regarding trade credit practices by ethnic minority firms can be seen to be closely related to network formation.