"A known unknown? Networks of firms and access to credit in Italy" D.Coin, L. Infante, G. Nuzzo, M. Piazza

> Discussion Gabriella Chiesa

The paper studies the role of business and social networks in reducing info asymmetry and agency problems in credit markets

It aims to test whether joining a network of firms has:

•a positive impact on the firm's access to bank credit,

•(possibly) due to info revelation and disciplining behavior of the joining firm

Business/social network

defined as a set of firms linked by interlocking directorates:

- •two firms are in the same network if they have at least one member of the board or a top executive in common
- •drawing connections iteratively allows to construct a network topology.

Economic significance of Network (?)

- despite large institutional and economic differences, the structure of networks so defined appears strikingly similar across very (etherogenous) countries.
- In particular, each country (whether USA, or Pakistan) has one large network (giant network) which is orders of magnitude larger than the next largest network.

Business Groups versus Networks

- Firm links within the network so defined depart substantialy from the **economic** links within "business groups":
- internal labor and capital markets -substitute for missing institutions (like for example, contract enforcement)
- Presence and design of "business groups" differ substantially across countries

Business Groups

- pervasive phenomenon in "under-developed" countries:
- Rationalized as organizational design in economies where transactions are insufficiently protected by legal institutions (Kali, 1999, 2002; Khanna, 2000);
- performance of business groups in emerging markets is superior to that of unaffiliated firms(Khanna and Palepu, 1999; Perotti and Gelfer, 2001; Recanatini and Ryterman, 2000)
- firms within a business group are more likely to be refinanced than stand-alone firms (Kim, 2004)

This paper

 departs from the "business group" literature. In the spirit of Khwaja, Mian an Qamar (2011) it constructs the topology of firm networks in Italy over the period 2005-2009, where a network is composed by all the firms with at least one link through a member of the board or a top executive. It focuses on the Giant Network and investigates whether network participation has:

- •1.) a positive impact on the firm's access to bank credit ; and
- •2.) whether this is due to info revelation and disciplining behavior of the joining firm

(1. is measured by the total amount of loan facilities obtained by the banking system)

1. Impact on access to credit

Testing 1. requires :

- to identify the **causal** effect of networks on credit availability
- •i.e. to separate the causal effect of networks from firm attribute that jointly determines network participation and access to credit.
- For example, firms with better anticipated growth prospects may be more likely to join the network. If that were the case, an increase in access to credit may be due to improvements in firm quality and not direct benefits of the network.

causal effect of networks on credit availability

- distinction is drawn between "incidental" and "direct" entry (in the spirit of Khwaja, Mian an Qamar ,2011).
- The findings is that the benefit of "incidental" entry is positive but weaker than that of "direct" entry
- (a confirmation that spurious/selection effects are at work ?)

Reasons/mechanisms un- derlying the influence of network membership on credit conditions

2.) is access to credit due to info revelation and disciplining behavior of the joining firm?

The question is rephrased:

Is the credit-enhancement effect of joining a network greater in geographical areas where law enforcement and trust are weaker?

- Measure of territorial factors that reduce credit availability (TFRCA). Regions are ranked according to their endowment of this measure
- (the fourth quartile indicates the worst performers, regions with the lowest combined measure of firm size, trust and judicial efficiency)

Result:

 the effect of joining a network is higher in areas where territorial factors tend to depress credit availability. Does this mean that network membership improves info and/or disciplining behavior?

- Does Network-membership
- •create value
- --i.e., improvement in credit access results from info revelation and/or disciplining behavior of the joining firm;
- Or, is it part of
- Rent seeking firm's growth and credit access driven by "connections "

Distinguish the joining firms according to Business sector

- Building and construction sector (domestic-highly regulated mkt)
- Business sectors exposed to international competition

Is the enhancement in credit availability greater for the network-joining firms belonging to the "building and construction" sector?