Religions and Entrepreneurship under Weak Formal Institutions: Evidence from Reform-era Rural China[1]

Wubiao Zhou
Birmingham Business School
University of Birmingham
United Kingdom
Email: wubiaozhou@gmail.com

Extended Abstract

1. The research gap

Existing entrepreneurship literature has emphasized interactions between formal institutions – particularly, formal regulatory institutions[2] – and entrepreneurship in recent decades (see, e.g., reviews by Bradley & Klein, 2016; Bruton et al., 2010; Jennings et al., 2013). Following North (1990) and Baumol (1990), this body of research has suggested that formal regulatory institutions – particularly, effective legal rules (e.g., Acemoglu & Johnson, 2005; De Soto, 2000; Johnson et al., 2002), as well as a developed market system (Gwartney & Lawson, 2002) and economic freedom (e.g., Minniti, 2008; Miniti & Levesque, 2008; Sobel, 2008) – are essential for genuine entrepreneurial activities around the world.

Such formal institutions, however, are generally weak among emerging and developing economies. Weak formal institutions are defined here as inefficient institutional rules and regulations that increase transaction costs of organizations' economic activities and, thus, are unable to achieve their intended goals (North 1990; Ostrom et al. 1993). They come in several forms and play a defining role in shaping product markets and factor markets in emerging and developing economies (Khanna and Palepu 1997, 2010; North 1990). One form of weak formal institutions is the lack or underdevelopment of market intermediaries that can help facilitate transactions in product and factor markets (Gao et al. 2017; Khanna and Palepu 2010). Another form of weak formal institutions is the inefficiency of the legal system, under which property and contractual rights cannot be properly enforced (North, 1990; see also, Acemoglu and Johnson, 2005; Dixit 2004).

The dominant view in the new institutional literature suggests that informal institutions can substitute for formal institutions, particularly, under weak formal institutions by facilitating access to otherwise scarce resources, opportunities, and legal and political protection (North, 1990; see, also, Khanna & Palepu, 1997; Peng, 2003). Informal institutions here mean a society's norms, values, and belief systems that define the codes for socially acceptable behaviors (North, 1990; Scott, 2014). Indeed, a large body of research has found that a number of informal institutions can facilitate firm entry and reduce firm failure when formal institutions are ineffective (for reviews, see, e.g., Bruton et al., 2010; Jennings et al., 2013; Li et al., 2021).

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[2] Regulatory institutions stem primarily from government legislation, as well as industrial agreements and standards (Scott, 2014; Bruton et al., 2010). These institutions determine the structure of property rights and the presence and perfection of markets (Acemoglu et al., 2005; Acemoglu & Robinson, 2012, 2016).

Surprisingly, while there is a large literature on the role of different religions – an important informal/cultural institution ubiquitous around the world and, especially, in the emerging and developing economies - on economic growth including entrepreneurship growth (for reviews, see, e.g., Iannaccone, 1998; Iyer, 2016; McCleary & Barro, 2006), there is little research on whether or which religions are able to substitute for formal institutions, and why. This is possible because the literature on the effect of religions on growth and entrepreneurship focuses primarily on *how religious beliefs encourage or discourage certain kinds of behavior* but pays much less attention to *how the ways religions are organized affect opportunities of their followers to accessing networks and resources*.

2. Theory and hypotheses

Adopting the social capital view on religions (Coleman, 2003; Deller, et al., 2018; see, also, Iyer, 2016), this study fills in this gap by suggesting that different religions, given their different ways of organizing, bring different amount of social capital to their followers and thus have different capacity for substituting for formal institutions under weak formal institutions. Specifically, I argue that (1) less organized religions such as Buddhism and Taoism bring low level of social capital - both bonding and bridging social capital[3] - because of lacking formal/informal socializing among followers; (2) Protestantism, while well-organized and offering formal and informal socializing within congregations, also brings low level of social capital (particularly, bridging social capital), because its small congregations limit their followers' ability to network with other Protestants in the larger society; (3) Catholicism may also bring low level of social capital – particularly, bonding social capital – because its generally large congregations, though well-organized and offering more opportunities to network with other Catholists in the larger society, may have the downside of being relatively impersonal; (4) Being the most organized religion, Islam can bring high level of social capital - both bonding and bridging social capital – both because of its extensive formal/informal socializing among followers through various congregational activities (thus bringing bonding social capital) and because of its generally large congregations (thus bringing bridging social capital).

A higher level of social capital brought to the followers of a religion has the potential to tackle the issue of weak formal institutions, thus facilitating entry into entrepreneurship for the followers. First, social capital – both bonding and bridging ones – can facilitate access to suppliers, customers, technologies, financial resources, skilled labors, etc., thus resolving the issue of the lack or underdevelopment of market intermediaries under weak formal institutions. Second, it can also help protect property and contractual rights. When legal systems cannot provide adequate formal protection for contractual and property rights, economic actors will seek informal mechanisms for protection (Dixit 2004). A large network of religious followers with strong bonding social capital is surely a powerful informal mechanism to deter infringements of rights from both government agencies and other organizations/individuals.

Based on the reasoning above, this study proposes the following main hypothesis:

Hypothesis 1: Islam being the most organized religion has a positive effect on entry into entrepreneurship, while less organized religions, as well as organized religions such as Christianity, have no significant effect on entrepreneurship under weak formal institutions.

In addition, this study also proposes that the effect of Islam on entrepreneurship is heterogeneous, depending on the formal and other informal institutions in the local

[3] Bonding social capital refers to networks, norms and trust within groups/organizations and bridging social capital networks, norms and trust cross groups/organizations.

community. Specifically, I argue that its effect declines as local democratic governance improves. This is because democratic governance improves protection of property and contractual rights, provides quality public goods and services, and even facilitate access to important economic resources for potential entrepreneurs (Zhou & Xu, 2024), thus reducing the value of strong social capital of Islam. On the other hand, I also argue that the effect of Islam increases with the increase in the strength of other types of social capital, e.g., kinship networks. This is because each type of social capital has both strength and weaknesses and, thus, complementing each other. Therefore, we have:

Hypothesis 2: The effect of Islam on entry into entrepreneurship declines as local democratic governance improves under weak formal institutions.

Hypothesis 3: The effect of Islam on entry into entrepreneurship increases as the strength of other types of social capital, e.g., kinship networks, increases under weak formal institutions.

3. Data and methods

I set the study in the context of reform-era rural China. This context is appropriate for several reasons. First, China is an emerging economy with relatively weak formal institutions, especially in the rural areas. Second, there are a large proportion of religious followers with most of the major world religions having their followers in rural China. Third, there is large variation in local formal and informal institutions across both different localities and different time in reform-era rural China.

This study utilizes data from the China Labour Force Dynamic Survey (CLDS), a nationally representative survey that captures the demographics, employment of working-age people, as well as their household and community characteristics across urban communities (street or *jiedao*) and rural communities (villages) in 25 provinces and four municipalities in China. The CLDS is particularly noted for its longitudinal design, which tracks individuals, households, and communities over time, allowing for the analysis of entrepreneurial activities and other dynamic changes within the labour force. This feature is important for the study on individuals' entrepreneurial entry by examining their transition from non-entrepreneurial roles to entrepreneurship between survey waves.

The CLDS operates on a biennial base and employs a multi-stage cluster, stratified, and probability proportional to size (PPS) sampling method. Since its inception in 2012, the survey has completed five waves with the latest wave completed in 2020. Each wave revisits a proportion of the previously surveyed individuals, communities, and households, while also incorporating new samples to form unbalanced panel data. This methodology supports our analysis by enabling us to track the entrepreneurial transitions of individuals across the survey waves. For this study, I utilize three waves of the data (2014, 2016, and 2018) due to the missing variables of the 2012 wave of survey and lack of access to the latest wave of data.

Consistent with the previous entrepreneurship literature, I define an individual as an entrepreneur if he/she was self-employed or an employer. For preliminary results, I focus on individuals in villages who were not entrepreneurs in the previous wave. Therefore, my current final sample consists of only individuals followed in the later wave(s). After excluding observations with missing values for certain variables, my final sample consists of 7,386 individuals with 9,122 individual-year observations in 227 villages; among which 3,131 individuals in the 2014 wave were followed in the 2016 wave, 2,519 in 2016 followed in 2018, and 1,736 in 2014 followed in both 2016 and 2018.

For the key variables, each religion (the survey includes Buddhism, Catholicism, Islam, Taoism, Protestantism, and others) is defined with two variables, one at the individual level

(i.e., whether an individual believes any one of the above-mentioned religions) and another at the village level (i.e., the proportion of people believing in each religion in each village). Local democratic governance and kinship networks are measured at the village level following Zhou & Xu (2024). A number of village-level and individual level variables are also used as controls following the existing entrepreneurship literature.

For preliminary results, I treat the data as cross-sectional and use logit model. All explanatory variables are lagged by one period and I also control for province and year fixed effects. I have also adopted several robustness tests to see whether other alternative explanations can explain the findings. The hypotheses are supported strongly by the preliminary results. For the next step, I will try multiple ways, e.g., the binary response models for panel data and the dynamic binary panel data model, to tackle the endogeneity issues.

4. Contributions to the literature

This study contributes, first, to the institutions and entrepreneurship literature. As mentioned above, a large body of research has found that a number of informal institutions can facilitate firm entry and reduce firm failure when formal institutions are ineffective (for reviews, see, e.g., Bruton et al., 2010; Jennings et al., 2013; Li et al., 2021). However, there is little research on whether and which religion(s) – one of the most important informal institutions ubiquitous around the world – can help tackle the weak-formal-institutions problem, thus facilitating new business formation in emerging and developing economies. Focusing on the organizational feature and thus the social capital of each religion and utilizing data from reform-era rural China, this study fills in this gap by showing that more organized religions, especially, Islam, enjoy advantages in tackling the issue of weak formal institutions. However, it is noted that each religion has different sects/branches and the way each sect/branch is organized may be different even for the same religion. In addition, the results reported in this study may be driven partly by China's contextual environment (e.g., the unfriendly political environment for Christianity). Future research may study the effects of different sects of each world religion and use data from other contexts for further verification.

Second, this study also contributes to the religions and economic growth (including entrepreneurship growth) literature. The existing literature on the effect of religions on economic growth (for reviews, see, e.g., Iannaccone, 1998; Iyer, 2016; McCleary & Barro, 2006), as well as that on the effect of religions on entrepreneurship, focuses primarily on how religious beliefs encourage or discourage certain kinds of behavior but pays much less attention to how the ways religions are organized affect opportunities of their followers to accessing networks and resources. Building on the small literature that views religions from the angle of social capital theory advanced by Coleman (2003) (see, also, Deller, et al., 2018; Iyer, 2016), this study suggests that different religions, given their different ways of organizing, bring different amount of social capital to their followers, thus having heterogeneous effects on economic growth, especially under weak formal institutions.

In particular, this study suggests that Islam as a most organized religion provides more social capital to its followers, and, thus, enjoys more capacity than other religions to substitute for formal institutions under weak formal institutions. Yet, Islam as a religious institution also has its weaknesses, e.g., emphasizing financing through personal or family savings and not providing benefits to all followers with equal opportunity, thus needing to be complemented by other types of social capital (as shown by Hypothesis 3). The weaknesses of Islam can also partly explain why its effect declines as local democratic governance improves (Hypothesis 2). Such findings complement existing studies on the relationship between Islam and entrepreneurship (e.g., Audretsch et al., 2013; Deller et al., 2018) and,

more generally, on the relationship between Islam and economic performance (see, e.g., Kuran, 2018 for review).

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