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Female Entrepreneurship in China: Opportunity- or Necessity- Based?

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Abstract:

The paper investigates the inequalities within entrepreneurship which are hindering Chinese socio-economic development. We take an institutionalist and gender-based approach. We establish the relationship between entrepreneurship and economic development and create a historical framework from which we examine contemporary female entrepreneurship. We find that females in China often engage in entrepreneurship in the informal sector, where average income is lower. Females are more likely than men to engage in necessity-based entrepreneurship rather than opportunity-based entrepreneurship in China. Therefore, the overall increase in female entrepreneurship in China in recent years does not necessarily imply improvement in living standards for those women. The paper demonstrates that different classes of entrepreneurs face different barriers, and that females need targeted assistance so that the gender gap in entrepreneurship can be reduced. Government should take responsibility for deconstructing social and cultural barriers to women through policy initiatives, as well as promoting women's entrepreneurial training and capital formation. There is also a key role for the nongovernmental sector and international organizations to play in educating government, businesses, and workers, as well as pressuring and/or coordinating them where needed.

1. INTRODUCTION

China's transition from a planned economy to a semi-market economy has greatly expanded the country's private sector and consequently, entrepreneurship. As opportunities increase for entrepreneurs, more people are inspired to innovate and generate further change; in China, this has contributed to economic growth and integration with the global economy. However, the increasing rate of entrepreneurship is also exposing socioeconomic problems that have developed or intensified throughout China's transition.

At the core of these problems is the departure from egalitarian norms. While the economic reforms led to growth, they also perpetuated a more dualistic society. Not all Chinese have been able to take advantage of opportunities emanating from the transition (this is further exacerbated by rampant corruption and lack of transparency). In particular, socio-cultural norms and longstanding traditions leave many women unable to properly capitalize on economic opportunities.

While some women in China have achieved great business success in recent years, for many Chinese women entrepreneurship is often a form of employment of last resort. This is demonstrated by the gender gap between opportunity-based entrepreneurship (initiated as a result of perceived opportunity) and necessity-based entrepreneurship (initiated out of an inability to meet one's basic economic needs) (Allen et al., 2008). It is our position that gender inequality in entrepreneurial opportunity and success hinders Chinese potential for innovation and economic growth; it also hinders China's human

development.¹ As such, policy designed to meet the unique needs of female entrepreneurs is essential to promoting both gender equity and economic development in China.

We begin our paper with an overview of the historical and ongoing economic transition in China, keeping a particular focus on how the scope of entrepreneurship has changed. Following this is an examination of the heterogeneity of entrepreneurs in China and how this relates to gender-differentiated socio-economic outcomes. Due to the dominance of necessity-based female entrepreneurship, we conclude that an increasing rate of female entrepreneurship in China does not necessarily indicate an increasing level of economic opportunity or a better standard of living for these women. Therefore, we propose policy prescriptions aimed at alleviating structural barriers to opportunity-based entrepreneurship for women.

2. HISTORICAL PROGRESSION OF ENTREPRENEURSHIP IN CHINA

2.1. Times of Mao Zedong

Entrepreneurship in China today cannot be well understood without its historical context. When Mao Zedong began to rule the country in 1949, his desire for a Communist ‘command economy’ led him to consolidate social resources and collectivize industry, agriculture, labor, and land (Blanchard & Warnecke, 2010). One consequence of this economic approach was a weakened environment for innovation (Sebora & Li, 2006).

Under Mao Zedong, Communist cadre members maintained control over core economic operations in the state and when state enterprise leaders and managers were chosen, skill was not taken into account (Sebora & Li, 2006; Hu, 2005). Political

¹ Human development does not conceptualize development solely in terms of income. As such, it approaches policymaking from four pillars: equality, sustainability, productivity, and empowerment (Padgett & Warnecke, forthcoming; see also Ul Haq, 2008).

connections were key, and government-created, 'officially recognized' jobs were considered most prestigious; this perpetuated a cultural bias against those involved in commerce (Sebora & Li, 2006). In fact, the Mao regime actively worked against personal enterprise, criminalizing 'capitalist' activity such as the exploitation of perceived economic opportunities (entrepreneurship) (Sebora & Li, 2006).² Despite the concerted efforts, small-scale entrepreneurship occurred during this period, primarily in unproductive rent-seeking activities such as escaping controls and competing for limited government processing orders (Liao & Sohmen, 2001; Douhan & Henrekson, 2008).

Improvements in state-led innovation and education were completely derailed by the onset of the Cultural Revolution in 1966. In 1949 a Soviet-style public research institute system had been adopted by the state, initially helping to regionalize innovation and establish inter-regional competition. But during the Cultural Revolution, a period characterized by social and political upheaval, the Communist Party's fear of capitalism led to widespread suspicion of intellectuals, the closing of schools and the halting of scientific public research (Liu, 2003; Eesley, 2009).

The unwavering emphasis on politics during this period translated to serious neglect of the Chinese economy, which provoked conflict within party lines. The conflict developed into two main streams. One (the open party) was governed by Mao Zedong; the other was led by Deng Xiaoping and others concerned with economic growth, innovation and the suppression of private enterprise--all factors that affect entrepreneurship (Teiwes, 2006).

² The Three-anti Campaign (1951), the Five-Anti Campaign (1952) and the "Anti-Rightist Campaign" (1957) are prime examples of such policies.

2.2. Transition to Deng Xiaoping

The fall of Mao Zedong marked the beginning of China's major economic transition, as Deng Xiaoping became the leader of the Communist Party (CCP) in 1978. Deng shifted the focus of the government from politics (*à la* Mao) to a focus on economic development (Sebora & Li, 2006).³ The economic reforms initiated in 1978 progressively broke down government interference and regulation and opened the doors of China to foreign investment and trade (Blanchard & Warnecke, 2010). This enlarged China's private sector, weakening collectivist norms and strengthening individualism in society (Blanchard & Warnecke, 2010).

The process of transition gathered momentum quickly. In 1979, the State Council of China "officially endorsed the policy of encouraging small business owners as a supplement to the socialist economy" (Dana, 1999, p. 77). Deng Xiaoping restructured the state-run Commune and Brigade Enterprises into town-village enterprises (TVEs), then progressively deregulated and privatized them. This created a favorable environment for entrepreneurship in China, initially characterized by small-scale business and self-employment. In the first decade of economic transition—1978 to 1988—the number of individual businesses⁴ grew from 150,000 to 500,000 (Liu, 2003). In 1988, the Tentative Stipulations on Private Enterprise (TSPE) gave further support to Deng's reform agenda, permitting enterprises to hire more than eight employees and operate under the title of a private enterprise (Yang, 2007).

³ Deng's "Four Modernizations" policy focused on agriculture, industry, science and defense (Blanchard & Warnecke, 2010).

⁴ An individual business was a single unit that could hire no more than five employees (Liu, 2003).

One unique characteristic of Chinese entrepreneurship is that it has flourished in both rural and urban areas. In contrast to many other countries, the Chinese process of industrialization has not led to a dramatic reduction of cultivable land (Dana, 1999, p. 78). In fact, by 1985 more than 70% of small business owners in China were in rural areas; while their business endeavors largely focused on agriculture, they also included “small-scale rural industries including carpentry, construction, embroidery, handicrafts, and transportation” (Dana, 1999, p. 78). The base of rural entrepreneurship expanded further in 1986, when the Spark program (developed by the State Science and Technology Commission) encouraged enterprises focusing on “science and technologies appropriate to rural industry” (Dana 1999, p. 79).

Of course, during this time the domestic market of China was developing at a rapid pace and provided numerous opportunities for potential entrepreneurs. There was also a lack of market regulations, trade barriers against imports and relatively weak foreign competition in China due to the inability to accumulate high profits (Xiang & Teng, 2007). These conditions collectively made for a favorable environment for domestic entrepreneurial growth; individuals were given freedom to exploit economic opportunities and they were largely unchallenged by foreign entities.

This sense of security for domestic entrepreneurs reduced their incentive to overcome deficiencies and create more innovative practices (Xiang & Teng, 2007). Still, Deng’s economic reforms made China a formidable low-cost competitor in global markets, and many entrepreneurs created manufacturing enterprises that successfully exploited this

advantage (Xiang & Teng, 2007).⁵ Gradually, the traditional biases against entrepreneurship began to erode. Governmental reforms⁶ in 1992 and 1998 also helped by blurring the boundary between state and private-owned business and cultivating more political protection and acceptance for entrepreneurs (Zhang & Duysters, 2010). While many Chinese entrepreneurs are struggling to become global competitors, they have made significant strides by creating the first firms in China's history based truly on competition (Xiang & Teng, 2007)⁷.

2.3. Modern Day China

In just two short decades China has jostled into the position of a rising economic power. That being said, there are visible remnants of the command economy period that are proving influential in modern day China. The Chinese government appears to be balancing the stronghold of the Communist Party with the desire for private enterprise development. While the CCP desires complete control over political life, this type of control is not possible in a market-oriented economy focused on rapid economic growth. Even if it were possible in theory, the public sector does not have the capacity to employ a sufficient amount of people, nor does it have the ability to cater to the diverse needs of the Chinese populace while maximizing efficiency (Liu, 2003).

As a result, the slightly less restrictive nature of economic policy in China has resulted in significant progress for entrepreneurs and private enterprise. Most

⁵ It is clear that by emphasizing individual self-interest, Deng Xiaoping cultivated a space for entrepreneurship in China. Even after resigning from political office, Deng went on a "South Touring Talk" preaching for Chinese citizens to get rich quickly through entrepreneurial activities (Zhang & Duysters, 2010).

⁶ The 1992 reforms included the privatization of state owned enterprises, streamlining of government business bureaucracy and alterations of foreign exchange rates, taxation, etc. in favor of entrepreneurship (Zhang & Duysters, 2010). In 1998, the government declared that private enterprises could invest in public substructure projects (Liu, 2003).

⁷ The best known of these companies are Huawei, Lenovo, Hair and TCL (Xiang & Teng, 2007).

entrepreneurs today begin their business in a more transparent business environment compared to the nascent years of the transition (Xiang & Teng, 2007). Entrepreneurs now have the opportunity to become exposed to outside business models, and the educational and experiential background to freely implement these new models in their entrepreneurial ventures (Xiang & Teng, 2007).

One of the most important aspects of modern day entrepreneurship in China is the shift in focus from the manufacturing to the service sector. In developed countries such as the United States, the service sector has proven to be critical in addressing unemployment and serving as a large generator of GDP growth (Xiang & Teng, 2007). In addition, these service-based companies improve China's industrial structure, reduce pressure to import, help balance international trade and create a broad middle class (Xiang & Teng, 2007).

The country's increasing promotion of entrepreneurship is illustrated by policies such as the recent loan guarantee system, which accords equal standing to domestic and foreign enterprises in terms of entrepreneurial investment (Liu, 2003).⁸ The government also implements softer policies on a domestic level—holding 'Entrepreneurship' conferences, sending young officials overseas for a "brainstorming process", and giving talented entrepreneurs positions in the Chinese Communist Party (Sebora & Li, 2006, p. 10). Of course, the state has found ways to profit from the privatization process. "Red hat" firms pay a fee (usually a percentage of total output value) to obtain state licensing for producing and operating under collective ownership, but operate essentially as privately owned companies; this helps them avoid government hassles and bureaucracy in everyday

⁸ A survey by the People's Bank of China indicated that at the end of 2000, the loans granted to the private sector had reached 4.8 trillion RMB (48% of all banking loans) (Liu, 2003).

operations (Liu, 2003). Such trends indicate that the relationship between the government and capitalism is changing and will continue to change (Eesley, 2009; Liu, 2003).

Table 1. Total Entrepreneurial Activity as % of Working Age Population, China

	2002	2003	2005	2006	2007	2009
Entrepreneurial Activity, % of Population	12.1%	12.9%	13.7%	16.0%	16.4%	18.8%

Note: Data refer to early-stage entrepreneurial activity

Source: Global Entrepreneurship Monitor,

http://www.gemconsortium.org/about.aspx?page=gem_datasets (accessed 12 June, 2011)

While Table 1 illustrates the rapid growth of entrepreneurship in China in recent years, entrepreneurs still face many institutional barriers in China. Since the mid-1990s, “China’s growth strategy...has emphasized capital formation at the expense of efficient allocation and utilization of production factors, which has led to a slowdown in TFP growth” (Zheng, Bigsten & Hu, 2009, p. 881). Macroeconomic reforms (e.g. interest rate policies) have lagged behind microeconomic reforms, due to the heavy hand of the state in the financial sector (Srinivasan, 2006).⁹ This “inconsistency between the distorted policy environment and the liberalized allocation and enterprise system” has led to rent seeking, speculative investment and inflation—all factors that reduce the level of economic opportunities available for potential entrepreneurs (Lin, Cai & Li, 1996).

Furthermore, where does the start-up capital come from? Venture capital is still in its nascent stages and despite policy attempts, bank loans are often discriminatory with banks largely unwilling to make many investments (Liao & Sohmen, 2001).¹⁰ Property

⁹ As a result, there is great risk of the state-influenced banks becoming unable to pay their debts, something that pits the taxpayers as victims.

¹⁰ Many Chinese entrepreneurs are funded by personal savings, family and friends (Liao & Sohmen, 2001). The average wealth of Chinese entrepreneurs today lags behind that of entrepreneurs in more developed states (Xiang & Teng, 2007).

rights are insecure and the rule of law is not fully developed (Liao & Sohmen, 2001). When operating their businesses, entrepreneurs are subject to unpublished regulations and must jump through barriers at local, provincial and central government levels, which often have conflicting demands (Liao & Sohmen, 2001). Furthermore, regulatory agencies for tax, intellectual property, and labor laws (among others) do not effectively support entrepreneurship (Lu & Tao, 2010). This breaks down the trust between entrepreneurs and the role of government in private enterprise (Lu & Tao, 2010).

Many Chinese entrepreneurs have also found it difficult to shift from a purely domestic focus to a global one. Few entrepreneurs have worked in internships for foreign enterprise and many of the successful entrepreneurs in China today cannot speak English, the language of international business (Hu, 2005). Furthermore, many Chinese entrepreneurs lack cross-cultural management and systems integration¹¹ skills. Xiang and Teng (2007, p. 9) note that forming equity-exchange programs with multinational corporations could help Chinese firms strengthen their weaknesses in these areas. Such partnerships could also help to alleviate international “concerns over China's economic emergence” (ibid.). Of course, these firm-level efforts should continue to be reinforced by national-level efforts—both to integrate China into the global economy (e.g., China’s recent entry into the WTO) and to deconstruct “the heritage of face-saving, connection, and private interest”, which still influences Chinese politics today (Sebora & Li, 2006).

2.4. China’s Growing Pains

¹¹ Systems integration involves the ability to integrate data, software, and communication technologies together to heighten global competitiveness; this involves “a complete set of business processes, managerial practices, organizational interactions and structural alignments, and knowledge management” (Mische, 2002, p. 5),

With the evolution of both the Communist Party and the economy, interactions between China's government and the private sector have become complicated and at times, strained (Sebora & Li, 2006). Entrepreneurs have been subject to numerous slights and expropriations at the hands of the government and discrimination in conducting business (Lu & Tao, 2010). Despite the policies aimed at providing legal protection for entrepreneurs, there are still numerous ideological and administrative instruments in place to control entrepreneurship and the development of the state (Sebora & Li, 2006).

Entrepreneurs today do not have much faith in the current institutional setup. They perceive a perpetuation of powerful old party handovers and new criminal outfits (Sebora & Li, 2006, p. 7). A survey of 3,073 private enterprises conducted by Lao & Tao (2010) reveals that 39% of private entrepreneurs have paid informal levies for various government projects and 56% of them have called for anti-corruption policies (p. 8).¹² This corrupt environment converts entrepreneurship into a privilege that is shrouded in illegal bribes¹³ and expensive forms of compliance (Sebora & Li, 2006, p. 7; see also Zhang & Ilon, forthcoming).

China still has many officials who use their personal discretion over the law in resolving economic disputes (Sebora & Li, 2006, p. 7). This illustrates the lingering aspects of the command-economy culture, particularly with regard to resisting change and defying national law in order to protect traditional norms and customs (Sebora & Li, 2006, p. 2).¹⁴

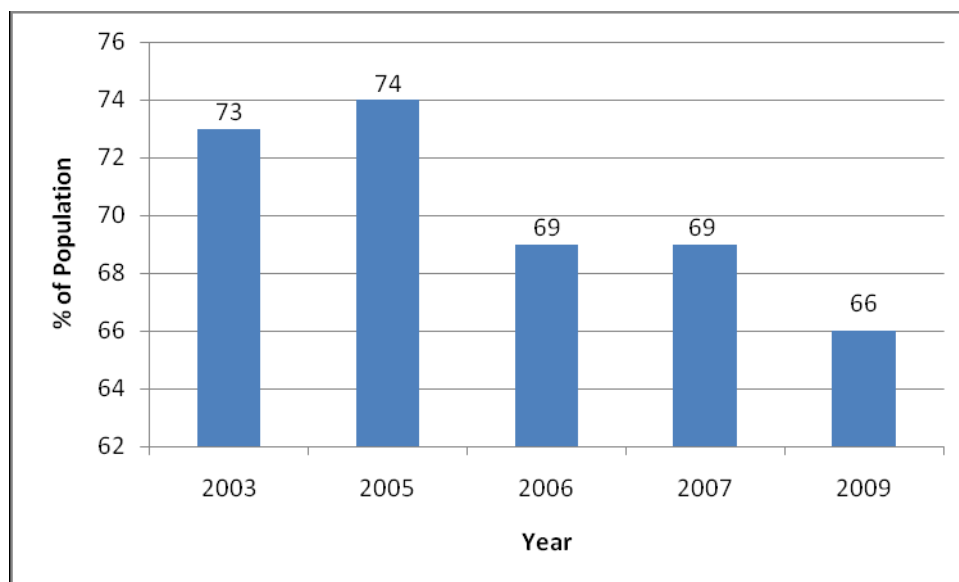
¹² Only 9.4% of the private entrepreneurs surveyed have resorted to the formal legal channels for dispute resolution (Sebora & Li, 2006, p. 8).

¹³ Interestingly, many failed Chinese entrepreneurs have allegedly been involved in economic crimes themselves (Zhang & Alon, 2010).

¹⁴ It is ironic that talented private entrepreneurs being accepted into the CCP will likely serve in significant governmental leadership positions (Zhang & Duysters, 2010). In the future, 'red hat' capitalists may dominate China's economy, even though 20 years ago private entrepreneurs could not even be accepted into the CCP (Zhang & Duysters, 2010, p. 21)

In coping with these restrictions, entrepreneurs in China have been shown to use specific strategies such as political participation and philanthropy (Eesley, 2009, p. 27; see also Bai, Lu & Tao, 2006). Still, entrepreneurship is becoming a less desirable career choice for Chinese citizens (see Chart 1)—a concerning trend.

Chart 1: Percentage of Chinese Agreeing that Entrepreneurship is a Desirable Career Choice



Note: Percentage of population aged 18-64

Source: Global Entrepreneurship Monitor,

http://www.gemconsortium.org/about.aspx?page=gem_datasets (accessed 12 June, 2011)

China faces other growing pains as well. While breaking away from the prohibitive economic policies of Mao Zedong, Deng Xiaoping also abandoned the overarching goal of Mao's reign: egalitarianism. Deng knew that the distribution of income would become less equal in Chinese society (Blanchard & Warnecke, 2010); indeed, this is precisely what happened. Although the transition immensely benefited some groups of Chinese, the slashing of publicly financed subsidies and entitlements, the movement away from collective agriculture, and the restructuring of state-owned enterprises contributed to increasing income inequality both *within* rural and urban areas, and *between* rural and

urban areas (Benjamin, Brandt, Giles & Wang, 2005; Wu & Perloff, 2004; Riskin et al., 2001).¹⁵ As a result, China's GINI coefficient increased from .31 in 1983 to a worrisome .45 in 2004 (Blanchard & Warnecke, 2010; see also Dollar, 2007).¹⁶

Income inequality has important implications for Chinese entrepreneurship. As it stands now, the entrepreneurial environment in China provides numerous opportunities for those with high entrepreneurial self-efficacy, but for those with low entrepreneurial self-efficacy the obstacles and complexities seem full of costs and risks; this discourages many individuals from becoming (and remaining) entrepreneurs (Sebora & Li, 2006 pp. 12).

3. HETEROGENEITY IN ENTREPRENEURSHIP

An examination of entrepreneurship in China thus requires an important realization: entrepreneurs are not a homogenous group. The term 'entrepreneur' has many different meanings in economic and business literature; Tominc and Rebernik (2003) record 12 definitions of the word, each highlighting particular roles an entrepreneur may play, from an allocator of capital, to an innovator, to an industrial leader. In this paper we understand entrepreneurship through a rather general conception of the entrepreneur as an owner of enterprise. China's post-transition wave of economic development has been largely driven by entrepreneurial activity and the growth of micro small enterprises (MSEs).¹⁷ Micro small enterprises are firms with no more than 50 employees and which sell at least half of their output (Nichter & Goldmark, 2009). As Chinese MSEs continue to

¹⁵ Of the current remaining employees in China, 80% received employment by non-market means with most being from the government (Li & Zax, 2001).

¹⁶ The GINI index measures the extent to which the distribution of income (or, in some cases, consumption expenditure) among individuals or households within an economy deviates from a perfectly equal distribution. A GINI coefficient of zero represents perfect equality and 1.00, perfect inequality.

¹⁷ Gibb and Li (2003) state that 40% of Chinese output in the late 1990s was a result of TVEs (most of which are classified as MSEs).

transition away from collective ownership and toward privatization¹⁸, enterprise ownership in China has been increasing and has become more consistent with the westernized conception.

Within our conception of entrepreneurship is a heterogeneous categorization of individual entrepreneurs. Heterogeneity is revealed in the differential success of MSEs. In most developing countries, MSEs serve as a substantial form of economic development and employment. In a survey of 28,000 MSEs throughout Latin America and Africa it was determined that MSE as a whole resulted in employment growth of over 16% (Mead & Liedholm, 1998). MSEs are even found to grow at higher rates and create greater employment opportunities than larger established firms (Nichter & Goldmark, 2009). Though these statistics describe MSEs in aggregate, on an individual firm level the majority of MSEs experience no growth at all (McPherson, 1996; Mead & Liedholm, 1998; Nichter & Goldmark, 2009). Growth is instead created by a small proportion of MSEs experiencing a rapid rate of growth, designated 'gazelles' by Nichter & Goldmark (2009). African and Latin American MSEs are identical to Chinese MSEs in this regard (Gibb & Li, 2003).

Heterogeneous enterprises reflect the heterogeneous backgrounds of individual entrepreneurs. We follow the Global Entrepreneurship Monitor and Tominc and Rebernik (2003) in differentiating between the necessity-based entrepreneur and the opportunity-based entrepreneur. As Tominc and Rebernik explain, "Opportunity entrepreneurs are people who identify available opportunities and exploit them. Necessity entrepreneurs are those who create self-employment in response to job loss or when their options for work

¹⁸ Whereas in 1985 73.7% of enterprise output was from collectively owned firms, this fell to 48.8% by 1997 (Park and Shen, 2003).

or participation in the economy are absent or considered unsatisfactory” (2003, p. 6).¹⁹

Opportunity-based entrepreneurs represent the ideal neo-classical conception of entrepreneurship. Often highly educated with prior managerial experience, these individuals usually leave high waged jobs in pursuit of some perceived economic opportunity. They initiate enterprises within the formal sector and normally are part of a business association, giving access to important forms of networking. Because opportunity-based entrepreneurs generally have privileged opportunities, they establish most ‘gazelle’ MSEs.

Despite the potential benefits of opportunity-based entrepreneurship, necessity-based entrepreneurs are dominant in developing countries (Tominc & Rebernik, 2003). Developing countries have high levels of vulnerable employment, so it should be no surprise that the rate of new entrepreneurial activity is inversely related to the business cycle (Mandelman & Montes-Rojas, 2009; Zhang & Duysters 2010). As an increasing number of people become unemployed during recessions, many are pushed into the informal sector of the economy and into some form of necessity-based entrepreneurship.²⁰ This is because the large number of unemployed coupled with a lack of job creation increases unemployment duration. As unemployment duration increases, the likelihood that an individual will turn to self-employment to secure his or her economic needs also

¹⁹ The Global Entrepreneurship Monitor (GEM) uses two questions in order to classify an entrepreneur as a necessity- or opportunity-driven entrepreneur: “First, we ask, “Are you involved in this start-up to take advantage of a business opportunity or because you have no better choices for work?” Then we ask “Which one of the following, do you feel, is the most important motive for pursuing this opportunity: to have greater independence and freedom in your working life; to increase your personal income; or just to maintain your personal income?” If the respondent says the most important motive is to take advantage of a business opportunity and the most important motive is to have greater independence and freedom or to increase personal income, we classify the person as an opportunity entrepreneur” (GEM, 2010, p. 27).

²⁰ In contrast, as more people gain formal waged employment during periods of economic growth, entrepreneurial incidence rates decrease.

increases (Mandelman & Montes-Rojas, 2009).

The environment in which necessity-based entrepreneurship emerges suggests that these entrepreneurs are often the most discouraged members of the workforce. Brenner (1987) suggests that individuals often become entrepreneurs to cope with adverse circumstances, and Dana (1997) and Ray and Turpin (1990) also note that some individuals have no choice but to be self-employed in order to survive. Unfortunately, the informal sector environment inhibits MSE growth. Informal sector enterprises do not have adequate legal protections or benefits, especially within the already inconsistent legal framework of China (Sebora & Li, 2006). Poorer working conditions and incomes bring further disadvantage.

Firms initiated in this environment are overwhelmingly firms with no additional employees; the entrepreneurs in this case are considered to be own-account workers. Firms run by own-account workers have a much higher likelihood of failing within their first three years than do firms with hired employees (Mandelman & Montes-Rojas, 2009). They also experience less growth than do firms with additional employees (Tamvada, 2010). Such poor results stem from own account workers' lower levels of efficiency, access to capital, and average entrepreneurial competency compared to entrepreneurs who have hired employees (McPherson, 1996; Muravyev et al., 2009; Mandelman & Montes-Rojas, 2009).

Since entrepreneurial competency is correlated with educational attainment (Mandelman & Montes-Rojas, 2009), this can be problematic for necessity-based entrepreneurs. Inferior levels of education help to explain why these individuals are the first to be exiled from formal waged labor during recessionary periods, why they earn

lower incomes relative to their waged counter-parts, and why their MSEs are less likely to be successful and enjoy rapid growth (Mandelman & Montes-Rojas, 2009; Bell et al., 2004; McPherson, 1996). Ironically, when educational disadvantages push individuals out of the formal workforce and into necessity-based entrepreneurship, this ends up diminishing their entrepreneurial skill and the opportunity to gain managerial experience in a formal sector environment (Mandelman & Montes-Rojas, 2009).

Finally, the characteristics and (lack of) resources of necessity-based entrepreneurs lead to an exclusion from many social and business networks (known as *guanxi* in China). *Guanxi* is a crucial ingredient for entrepreneurship in China, since personal relationships, trust and a sense of mutual obligation (all part of *guanxi*) compensate for the absence of adequate legal and social protections/measures to ensure equality (Brown, 2002; Hsu, 2005). This is particularly important since many Chinese do not embrace Western notions of the risk-taking entrepreneur (see Minniti & Arenius, 2005); Chinese cultural norms dictate against risk-taking behavior in order to maintain stability and guard against loss (Ang & Hong, 2001). *Guanxi* thus serves as a cultural mechanism in order to mitigate and spread out entrepreneurial risk. Luo (1997) describes *guanxi* as “the most effective (market growth) and efficient (low cost) marketing tool” (pp.1). Yueh (2009) notes that *guanxi* may be necessary for self-employment success in an environment where access to financing is biased toward state owned enterprises.

Guanxi consists of three differing forms of linkages: inter-enterprise, intra-enterprise, and enterprise-government (Qian et al., 2010). All three forms of networking provide substantial benefits for MSE growth, but inter-enterprise networking is of particular importance. Nichter & Goldmark (2009) explain inter-enterprise networking in

terms of horizontal and vertical linkages; horizontal linkages connect similar MSEs, normally in the same sector, and vertical linkages connect buyers and sellers.

Vertical linkages can provide MSEs with valuable market information, access to new markets, and guaranteed buyers for their output. This mitigates production risk for MSEs and helps to educate them on the markets relevant to their chain of production, expanding their ability to exploit future market opportunities. Horizontal linkages provide for agglomeration externalities, especially in urban areas, which allow MSEs to compensate for their small size through specialization and cooperation with other MSEs.²¹ Horizontal linkages also allow MSEs to cooperate for political gain. Local political power is extremely important for Chinese MSEs given the still-inconsistent government protection of entrepreneurial start-ups, along with historical patterns of corruption and control at the local government level.

Yet for a variety of reasons, necessity-based entrepreneurs often find themselves excluded from these valuable networks. Potential vertical connections are often uninterested in necessity-based entrepreneurs' lack of economic resources and production capacity and it is not worth the time of government officials to work with individual entrepreneurs of such little economic significance. Exclusion from these networks leaves necessity-based entrepreneurs with a variety of disadvantages. Exclusion minimizes inclination for MSEs to expand and take on more risk. Exclusion means firms are unable to adequately judge market conditions, therefore diminishing their ability to exploit market opportunities. Exclusion also means own-account workers are unable to compensate for their small size, which leaves them unable to competitively function. This may explain why

²¹ Agglomeration externalities are theorized to cause the gap in annual growth rates between urban and rural MSEs (McPherson, 1996), and therefore may be contributing to the growing rural-income gap in China.

more than half of MSEs close during their first three years of operation (Mead & Liedholm, 1998).

Figure 1: Necessity vs. Opportunity-based Entrepreneurship

Characteristic	Necessity-Based	Opportunity-Based
Higher educational attainment		✓
Prior managerial experience		✓
Access to external capital		✓
Access to beneficial business networking		✓
Access to formal sector employment		✓
Latent Gazelle ²² Potential		✓
Informal sector operation	✓	
Formal sector operation		✓

Source: Author

Figure 1 presents the stylized characteristics of necessity- and opportunity-based entrepreneurship, demonstrating the heterogeneity that we have discussed. While this heterogeneity has individual level consequences, it also has macroeconomic consequences affecting development in important (but largely neglected) ways. A rising entrepreneurial rate cannot be assumed *a priori* as a positive indicator of economic growth; the *type* of entrepreneurship matters. If the rate of necessity-based entrepreneurship grows, this may indicate an increasingly discouraged and impoverished workforce—with clear ramifications for human development and future economic growth.

4. FEMALE ENTREPRENEURSHIP IN CHINA

Since nearly half of all Chinese entrepreneurial activity is necessity-based today (Kelley et al., 2011), it is worth exploring gender differentials in entrepreneurship. For example, are women more likely than men to be necessity entrepreneurs? This is a

²² Latent gazelles are MSEs with the potential to experience gazelle-like (fast) growth but have yet to do so, Having such potential is associated with being a formal sector enterprise, having high levels of human capital, and being in a high-value supply chain (Nichter and Goldmark, 2009).

particularly interesting issue in the context of China’s economic transition. After all, “the economic dynamism associated with the economy’s increased market orientation brought new opportunities to many women” (Blanchard & Warnecke, 2010, pg. 10). Women have a far higher labor force participation rate in China²³—67.5%—than the world average of 51.9% (World Bank, 2011); they also show better results in political representation²⁴ than women in Brazil, Russia and India (Lawson et al., 2007). How has this affected female entrepreneurial activity during the transition? What has the effect been on gender equity in general?

We can investigate these questions in a variety of ways. First, we can compare entrepreneurial activity among women and men. If gender barriers to economic participation were eroded by the market transition, we would expect to see a narrowing of the gender gap in early-stage entrepreneurial activity. While entrepreneurial activity for both men and women did increase in the 2002-2009 period (see Table 2), the gap between male and female entrepreneurial activity did not narrow. In fact, the male-female entrepreneurial gap increased during this period of rapid economic growth, indicating growing gender inequality in this area.

Table 2. Total Entrepreneurial Activity for Males and Females, % of Working-Age Population, China

	2002	2003	2005	2006	2007	2009
Male (M)	13.6%	14.3%	15.7%	16.9%	19.3%	20.7%
Female (F)	10.6%	11.6%	11.6%	15%	13.4%	16.0%
Gap (M – F)	3.0%	2.7%	4.1%	1.9%	5.9%	4.7%

Note: Data refer to early-stage entrepreneurial activity

²³ The higher participation rate for women in China is a remnant of the command economy period where everyone was expected to work.

²⁴ Political representation is qualified as the percentage of parliamentary seats held by women. While parliamentary representation is a positive sign, this does not necessarily mean that women on average feel empowered to participate in political life.

Source: Global Entrepreneurship Monitor, http://www.gemconsortium.org/about.aspx?page=gem_datasets (accessed 12 June, 2011)

While this is certainly troubling, the gender gap is not the only relevant issue here; even if men are more likely to be entrepreneurs, it is important to examine female entrepreneurial activity in and of itself. As Table 2 reveals, female entrepreneurship increased by 33.7% from 2002-2009. Chinese Embassy Statistics show that Chinese women entrepreneurs currently make up 20% of all the entrepreneurs in China and 41% of them work in the private sector (Alon, Deng & Wang, 2011). One might hypothesize that over time, this increased female entrepreneurship would have several critical positive effects on female income as well as cultural norms and values relating to gender roles. However, this assumes a certain conceptualization of entrepreneurship—one reflecting the neo-classical ideal of opportunity-based entrepreneurship.

Evidence across developing countries suggests that women make up a disproportionate level of the smaller and low income enterprises making up necessity-based entrepreneurship (see Nichter & Goldmark, 2009; Muravyev et al, 2009; McPherson, 1996). According to Tominc and Rebernik (2003), 12% of Chinese women participate in necessity-based entrepreneurship but only 4% of Chinese women participate in opportunity-based entrepreneurship. In contrast, males in China are more likely to be opportunity-based entrepreneurs.

Table 3 illustrates these trends, presenting the opportunity to necessity (O/N) entrepreneurship ratio for males and females in China. The O/N ratio is the percentage of a given group (e.g. males or females) engaged in early stage entrepreneurship to pursue an opportunity divided by the percentage of a given group engaged in early stage entrepreneurship out of necessity. An opportunity to necessity ratio greater than 1.0

indicates that entrepreneurs are more likely to be starting companies due to perceived opportunity, while a ratio lower than 1.0 means that entrepreneurs are more likely to be starting companies due to lack of other options.

Table 3. Opportunity to Necessity Entrepreneurship Ratio, China

Year	Male Opportunity to Necessity Ratio	Female Opportunity to Necessity Ratio
2005	1.42	1.10
2006	1.47	0.71
2007	1.57	1.11
2009	1.3	0.8

Source: Minniti et al., 2006; Allen et al., 2007; Bosma et al., 2008; Global Entrepreneurship Monitor 2010

Until the global economic crisis, the male opportunity to necessity ratio was steadily increasing and was significantly greater than 1.0 (reaching a high of 1.57 in 2007).

However, the female opportunity to necessity ratio has been volatile and has never been greater than 1.11; furthermore, the female O/N ratio has always been significantly less than the male ratio.²⁵ This indicates that many more females than males become entrepreneurs due to lack of other options.

This makes sense given that necessity entrepreneurs are likely to work in the informal sector, and the informal sector is dominantly female in China (Blanchard & Warnecke, 2010; DeRuyter et al., forthcoming). Since the informal sector has been growing at a tremendous pace in China (Blanchard & Warnecke, 2010), this begs the question as to which type of entrepreneurship, necessity or opportunity, is most responsible for the rising entrepreneurial rate, and what implications this has for human development.

This question is particularly relevant considering that while female

²⁵ Out of the 40 country GEM study on women and entrepreneurship, Allen et al. (2007) find that China has the 8th lowest opportunity-to-necessity ratio for nascent female entrepreneurs.

entrepreneurship has been increasing in China, the gender earnings gap in China is also increasing--both at lower and higher wage levels (Zhang et al., 2008; Xiu, 2009). Within the informal sector, females predominantly have lower-paid jobs than males (Chen, 2003), so part of the rising gender gap may reflect the disproportionate representation of women in necessity-based entrepreneurial activity.

The growth of manufacturing in China has also played a pivotal role in pushing women into necessity-based entrepreneurship. Female laborers are valued in manufacturing because their lack of social and political opportunities makes them willing to accept lower wages, inconsistent work and poorer working conditions (Fan, 2004). Such poorer conditions make women the most marginalized workers in the economy and therefore the most susceptible to layoffs and severe periods of unemployment, suggesting incentive for necessity-based entrepreneurial activity.

Despite these seemingly poor conditions, Ma (2002) argues that migration to and employment in Chinese urban centers creates opportunities for savings and acquirement of skills that increase women's propensity for entrepreneurship later on in life.²⁶ The question, however, is whether this is likely given China's socio-cultural traditions. For example, Minniti and Arenius (2005) argue that a sense of self-efficacy and perception of economic opportunity are needed in order to engage in entrepreneurial opportunity. However, women are much more likely to exhibit poor self-confidence when it comes to entrepreneurial ability (Thébaud, 2010). This poor self-confidence is due to a multitude of factors, but is significantly influenced by gendered norms regarding the role and behavior of women in Chinese society.

²⁶ One would expect to find differences between migrant and non-migrant women where entrepreneurship is concerned, so this is another aspect of heterogeneity to consider in future research.

The appeal of Ma's (2002) argument is that it allows women access to start-up capital in the form of their savings, eliminating the need for external finance. However, lack of access to capital has undoubtedly inhibited women's entrepreneurship. Because female firms are likely to be smaller, grow more slowly, and have less collateral than do male firms, banks are more cautious about lending to female entrepreneurs (Muravyev et al. 2009). This corresponds with Bellucci et al. (2010), who find that women generally face greater credit constraints than do men. However, outright gender discrimination also plays a role in the allocation of capital.²⁷ Surveying more than 14,000 firms across 34 countries, Muravyev et al. (2009) find that *ceteris paribus*, female firms were charged a .45% higher interest rate and were 5% less likely to obtain a loan (pp. 4, 11). This has led to a 13% difference between the number of female discouraged borrowers (46.9%) and the number of male discouraged borrowers (33.8%) (Muravyev et al., 2009). Because of such inequality, women are often forced to rely on personal and familial savings for the acquiring of start-up and expansionary capital.

Given traditional cultural norms, however, families do not necessarily prioritize female entrepreneurial activity, preferring instead to focus on ensuring that females are wed²⁸ (Zhang, 2010). Although increasing modernity and urbanization are working to change this inclination (Lin & Tong, 2008), gendered stereotypes of both domestic work and entrepreneurship dissuade Chinese women from attempting to create new entrepreneurial ventures (Baughn et al., 2006; see also Bird & Brush, 2002; Fagenson & Marcus, 1991). Such outcomes adversely affect female agency—the capacity for women to

²⁷ See Zhu and Chu (2010, p. 166-7) for a review of the relevant literature.

²⁸This is particularly true in traditional and rural Chinese families, where the practice of *baobin hunyin*, (parents pre-arranging a child's future marriage) is still ongoing (Zhang, 2010).

formulate strategic choices and take actions to increase their own well-being, actively participating in the shaping of their future (Malhotra, 2003). Female agency is also affected by 'time poverty'; as Padgett and Warnecke (2011, p. 538) note, "the 'time poverty' created for women...in societies where men do little to none of the unpaid household labor...restricts women's ability to take advantage of employment...and/or training opportunities even when they are technically available" (see also de Ruyter et al., forthcoming). Gender-based cultural norms also decrease female propensity for entrepreneurial activity by inhibiting access to education (Alon, Deng & Wang, 2011). Since education increases access to social networks and creates a sense of self-efficacy (in addition to the direct firm level benefit of entrepreneurial competency), any educational disadvantage for females will translate to lower rates of opportunity-based entrepreneurship.

The use and impact of *guanxi* in China also varies by gender group (Hussain et al., 2010). Unfortunately, women have unequal access to these networks in China (Robinson & Stubberud, 2009), which helps to explain why many women choose to study or work abroad. A study by Alon, Misati, Warnecke and Zhang (2011) finds that Chinese female entrepreneurs who are overseas returnees start their businesses or reach executive positions at a younger age than their domestic counterparts. However, not all Chinese women have "the socio-economic background that lends itself to fruitful *guanxi* or studying overseas" (Fong & Liu, 2011). Because of this, women are often forced to rely on their families for a supportive network (Robinson & Stubberud, 2009). While not all Chinese families are willing to support would-be female entrepreneurs, those that do cannot provide a full substitute for *guanxi*. Familial networks are naturally inferior to business

networks due to their lack of entrepreneurial competency, access to large sums of financial capital, and vertical and horizontal linkages. This leaves female MSEs at a severe disadvantage in comparison to similar male MSEs.

Now that we have illustrated the entrepreneurial gender gap in China and discussed the variety of reasons underlying this gap, the next question is what this implies in terms of policy solutions. This is a complex issue since the gender gap is not merely one of numbers (e.g., fewer women than men are entrepreneurs), but also type (e.g., women are more likely than men to be necessity-based entrepreneurs). We consider this in the next section.

5. POLICY DISCUSSION

Our analysis thus far yields two policy goals: to mitigate necessity-based entrepreneurship and to promote opportunity-based entrepreneurship. The former requires a reduction in poverty and unemployment; the latter necessitates an increase in human capital, better access to credit, and more transparent business regulations.

The problem with non-targeted policies promoting entrepreneurship in general is that women still face inequality, thus benefiting to a much lesser extent than they should. For example, an increase in the lending capacity of banks does not necessarily increase women's access to credit if their business ventures are still viewed as more likely to fail in comparison to men. This makes the need apparent for policy that targets female entrepreneurs in particular. It also highlights the need for a cultural shift towards gender equity in China (a more long-term endeavor).

By providing subsidies for professional training, preferential tax conditions for rising female entrepreneurs, and small loan guarantees, the Chinese government has begun to explicitly mitigate the problems faced by female necessity-based entrepreneurs (Alon,

Deng & Wang, 2011). Once women obtain their entrepreneurial training certification, bank loans can now be guaranteed without collateral; there are also loan guarantees and benefits for small enterprises, enterprises created by laid-off women, and labor-intensive enterprises that employ many laid-off women²⁹ (Alon, Deng & Wang, 2011). Of course, these national initiatives take unique forms in each region of China, with the more developed regions demonstrating stronger benefits for female entrepreneurs.

In many cases, the government has partnered with other institutions or countries to support Chinese female entrepreneurs; examples include the United Nations' Technological Information Promotion System (TIPS), which creates opportunities through information and communication technologies (ICTs); the United States, through programs such as Women-LEAD³⁰; and private corporations such as Goldman Sachs³¹. This model of collaboration is also used for broader initiatives to improve gender equality in China. For example, the National Working Committee on Women and Children--a group comprised of leading officials from all 24 governmental ministries and 5 "mass groups" (NGOs, etc.)--oversees, coordinates and monitors the government's Program for the Development of Women; the central government also co-sponsors international conferences focusing on women's rights issues.³²

²⁹ Credit guarantees are provided through joint guarantees and/or loan insurance.

³⁰ This program will contribute to high-level dialogue between Chinese and American women leaders, forging partnerships to provide leadership training and build female entrepreneurial capacity, among other things (US Department of State, 2011).

³¹ Developed by Goldman Sachs, the 10,000 Women program trains women business owners to develop key entrepreneurial and managerial skills to develop a global perspective in their business. The program is scheduled to run for 5 years and train 450 Chinese women entrepreneurs (Paris Chamber of Commerce and Industry, 2009).

³² Examples include the United Nations Fourth World Conference on Women and the NGO Forum on Women (both in Beijing, 1995), and the 2009 American-China Women's Business Conference (held in Beijing, Shanghai and Shenzhen).

During the economic transition, a variety of women's organizations have sprung up in China—most representing urban, college-educated women (Zhang, 2008). However, the most influential group is likely the All-China Women's Federation (ACWF, the only permitted women's organization in China during the command economy period). Over the years, ACWF has become a hybrid between a government organization and NGO, representing and working with professional women's associations and NGOs in advocating for women's welfare (World Bank, 2002).

ACWF has led a number of campaigns and projects aimed at the promotion of opportunity-based female entrepreneurship and micro enterprise as well as mitigating the forces pushing women into necessity-based entrepreneurship (both areas influence female agency). The *Women Making Achievements Campaign* (launched in 1991) collaborates with a number of government ministries in providing social services for urban women who are unemployed and self-employed; the program also provides micro-loans and information in order to aid urban women in starting their own enterprises. As of 2010, more than 40 million women had in some form been aided by the campaign (All-China Women's Federation, 2011). Working with the UK's Department for International Development (DFID), the ACWF helped low-income girls aged 15-18 finish their schooling and provided them with training in business management, marketing, finance, and gender issues. By the end of the four year program, 12,000 girls had been trained (All-China Women's Federation, 2011).

The *Assisting Laid-off Women Workers in Reemployment and Venture Creation Project* pools funding from the United Nations Development Programme (UNDP), the Australian Agency for International Development (AusAID), and the Chinese government for teaching

unemployed women how to run their own enterprises. The main goal of the project is to “chang[e] the subsidy model of poverty alleviation to the model of independent enterprise creation” (Guihuan, 2005, p. 25)—or in other words, transform likely necessity-based entrepreneurs into opportunity-based entrepreneurs. This ACWF-managed program includes microfinance for urban women as well as the Tianjin Women’s Business Incubator.

The Tianjin incubator, initially supported by a grant from the World Bank *infodev*³³ project, helps small female-owned businesses acquire financing while also providing business counseling, entrepreneurial training, and policy support (Social Enterprise Research Center, 2009). Since its inception in 2000, the center has supported more than 70 businesses, assisted 6,000 women with finding employment, and provided consulting for more than 26,000 people (*ibid.*).

Our point here is that there are many different ways to support female entrepreneurs in China—through government initiatives, government partnerships, and non-governmental programs. The programs we have mentioned represent a good start, though there remains much more to be done. One general problem is the lack of awareness about the particular constraints faced by female entrepreneurs (and female workers in general); longstanding cultural norms may be biased against women, but these norms may seem ‘natural’ to many and thus may not be perceived as discriminatory. This leads to two troubling outcomes. The first is a shortage of financial support for equity-enhancing programs (particularly in light of increasing demand for such programs); the second is

³³ *infoDev* is a technology and innovation-led development finance program focusing on (1) innovation, entrepreneurship, and growth; (2) enabling access to information technology for all; and (3) mainstreaming information and communication technology as tools for development and poverty reduction (*infoDev*, 2011).

poor enforcement of laws protecting women's rights.³⁴

Another challenge is the need to assist women in rural areas as well as women with lower levels of education, little to no managerial/professional experience, and lower levels of income (e.g. characteristics associated with necessity-based entrepreneurs). As Zhang (2008, p. 6) notes, China's new wave of "women's organizations remains largely urban-based and intellectual-based...Most of the initiators of these endeavors are highly educated professional women, many of whom work in the state apparatus, and therefore can use their status, connections and relatively abundant material resources to foster and set up organizing initiatives." Several of the programs currently in place to assist female entrepreneurs are focused on women that have already attained some measure of (opportunity-based) entrepreneurial success—not the most disadvantaged women. While some NGOs in China do assist rural female entrepreneurs (e.g., the Cultural Development Center for Rural Women has developed the Practical Skills Training Center for Rural Women³⁵), these are the exception rather than the rule. This problem is exacerbated by financing gaps, particularly for small entrepreneurs or those in rural areas; microfinance "is still in an embryonic stage in China," in contrast to many developing countries and regions (China Microfinance Association, 2008, p. 1).

Given these challenges, a multifaceted approach is needed, combining a push

³⁴ In the transition period, the country has passed many laws and signed on to international treaties promoting the equal status of women and men. Examples include the Law of Succession (1985), the Compulsory Education Law (1986), The Health Protection Law of Mothers and Children (1995), and the revised Marriage Law (2001). International treaties include The Convention to End all Discrimination against Women (1980) and the Law on the Protection of Women's Rights and Interests (1992). However, there is still a wide gap between legal code and social reality. Laws themselves are not able to overturn longstanding gender-biased norms (which influence enforcement of said laws). Because of this, the budding women's NGO movement in China is a major stakeholder in the development of women's rights and a more gender-aware society.

³⁵ See <http://www.nongjianv.org/web/english/aboutus/center.html> for more information.

towards gender equality in general (including more effective enforcement of existing laws protecting women) with steps to expand assistance for women exemplifying characteristics of necessity-based entrepreneurs. Increasing the availability of data on gender and entrepreneurship would also help. While the Global Entrepreneurship Monitor analyzes entrepreneurship every year, not all countries participate in the survey each year and not all reports provide gender-disaggregated data on necessity- and opportunity-based entrepreneurship (as shown by the data limitations of Table 2 above). Reliable national data spanning a longer time-series will facilitate greater understanding of the entrepreneurial barriers to Chinese women and an appropriate reconfiguration of policy options.

6. CONCLUSION

Compared to other countries, China has experienced a uniquely successful economic transformation in the last few decades; as part of this process, entrepreneurship has become a significant driver of economic growth and cultural transformation. While the increasing incidence of entrepreneurship cannot be disputed, we have investigated an important question: does increasing entrepreneurship necessarily indicate an increasing level of economic opportunity or a better standard of living?

This is a complex question, but we must answer in the negative. Although expectations of women in China are gradually changing, men and women are currently not equally able to capitalize on economic opportunities. Similar to the situation in many developing countries, women in China face high levels of gender inequality in education, business and social networks, capital access, and access to decent work. Chinese women also face gender inequality specific to the context in which they live. For example, strong

Confucian values in China lead to “strong assumptions of family, market and voluntary sector responsibility rather than state responsibility, [and] strong expectations of women’s obligations without compensating rights” (Pascall & Sung, 2007, p. 7). The resulting prioritization of male employment continues to shape Chinese labor markets today; as increased urbanization outpaces the creation of formal labor market opportunities, women are being pushed to the informal sector. All of these factors suggest that Chinese women are much more likely than men to become necessity-based entrepreneurs rather than opportunity-based entrepreneurs.

Unfortunately, China’s rapid economic growth has not been narrowing this gender gap; this demonstrates that economic growth alone is not sufficient for achieving gender equality. China’s tremendous growth rate of female entrepreneurship may therefore be a sign of the increasing impoverishment of women rather than an increase in their access to decent work and economic opportunities.

While it is true that necessity-based entrepreneurship may help women escape unemployment and maintain a modicum of household income, this should not be considered justification for maintaining the status quo; a better outcome would be for women to have a wider range of employment options in the formal sector. Addressing the ‘push factors’ forcing individuals into necessity-based entrepreneurship would require broad policies that tackle key human development issues such as education and health. Expanding the reach of ‘pull factors’ drawing individuals into opportunity-based entrepreneurship would require a gender-based policy approach.

Progress is being made: as we have shown, the Chinese government and a variety of NGOs have begun to promote female entrepreneurship and foster the growth of female-run

firms. Now, more needs to be done, particularly in deconstructing social and cultural barriers to women's agency. But how should the division of labor be established for pursuing this policy agenda? Issues of gender equity and female entrepreneurship cross-cut several sectors of the economy, so many types of institutions could be called upon to get involved. Currently, however, the roles and responsibilities of different sectors remain blurry, preventing effective cooperation as well as artificially limiting the range of perspectives and approaches available to tackle these important issues. This is one area to improve in China (and is an important subject for future research). While the ultimate sectoral balance needs to be country-specific, international organizations can assist by educating government, businesses, and workers, as well as pressuring and/or coordinating them where needed.

For all sectors and institutions, keeping female agency in mind is important when undertaking any policy or program intended to increase female entrepreneurship. As we have shown, not all forms of entrepreneurship are equally likely to increase female agency. By expanding the reach and impact of policies and programs increasing the scope for opportunity-based entrepreneurship, and taking a tough stand on violations of laws protecting women's rights, China will be investing in its future—a future not solely defined by economic growth, but also widespread human development and gender equity.

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