Entrepreneurial fear of failure: An international comparison of antecedents and impact on venture creation

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ABSTRACT
Fear of failure is a key barrier in starting a business throughout the world due to the high risks involved to the founders’ finances, relationships, status, and self-esteem. Using Global Entrepreneurship Monitor data, it was observed that countries with high fear of failure have low total early-stage entrepreneurial activity for developed countries only, and that the gap between the ratio of men to women entrepreneurs in countries with high fear of failure is narrower. Countries with higher self-perceived capabilities are lower in fear of failure. However, societal norms, education, access to funding, and perceived government policy had little effect. Countries with greater economic development seem lower in fear of failure than those less developed and the higher the rate of necessity-driven entrepreneurship, the less relevant fear of failure becomes in inhibiting entrepreneurship. This article aims to understand which factors can influence fear of failure to allow governments to put in place policies to reduce this as a barrier to start-ups, which ultimately influences the country’s prospects for economic growth. This article can be used to encourage policies that can be tailored to each country’s unique ecosystem based on the underlying reasons for fear of failure in that country.

KEYWORDS
Enterprise; economic growth; entrepreneurship

Introduction

Although the potential benefits of venture creation are immense, entrepreneurship is inherently high risk: “In becoming an entrepreneur an individual risks financial well-being, career opportunities, family relations, and psychic well-being” (Brockhaus, 1980, p. 510). Despite being “painful at the microeconomic level, business churning is part of a healthy economic system” (Minniti, 2008, p. 788), in part as a necessary trial and error, essential for driving innovation. Atkinson (1957, p. 360) conceptualized fear of failure as “a disposition to avoid failure and/or a capacity for experiencing shame and humiliation as a consequence of failure.” Previous entrepreneurship literature tends to view fear of failure as a fixed trait, in which individuals are either high or low (Kollman et al., 2017), arguing that fear of failure never subsides and that those with
heightened fear are less likely to become an entrepreneur and vice versa (Arenius & Minniti, 2005; Morgan & Sisak, 2016; Wagner, 2007), with some individuals generally more risk-averse, while others demonstrate the opposite with extremely high self-efficacy and minimal fear, making them more prone to taking risk and increasing the likelihood of entrepreneurship (Arenius & Minniti, 2005; McCann & Vroom, 2015). These individuals are more likely to possess attributes such as resilience (Hartmann et al., 2022), competitiveness, and aggression, which Tsai et al. (2016, p. 1132) described as “two critical traits of entrepreneurs.” Confidence also breeds higher aspirations, which has been found to improve the likelihood of success in entrepreneurship through a willingness to work harder and sacrifice more (Morgan & Sisak, 2016). It can also cause hesitation and procrastination in an environment that requires fast decision making and adaptability (Kong et al., 2020). Those who have a higher fear of failure and aversion to risk are less likely to embark on the entrepreneurial journey (Arenius & Minniti, 2005; Beynon et al., 2016; Dutta & Sobel, 2021; Hessels et al., 2011; Koellinger et al., 2007; Morgan & Sisak, 2016; Wagner, 2007). However, for some entrepreneurs, fear of failure is what drives them. They use it as a fuel to motivate themselves and achieve more as the consequences of failure are considered too great (Elliot & Church, 1997; Hayton & Cacciotti, 2018; Hayton et al., 2013). Because it is important to grow the economy, and in a sustainable way (for example, by UN Sustainable Development Goals; Liguori & Bendickson, 2020), it would be of great use to policy makers to understand the drivers of fear of failure within a countries’ economy in order to minimize its effect on entrepreneurial activity.

**Method**

Using the Global Entrepreneurship Monitor (GEM) data (Bosma & Kelley, 2018), we worked using the following hypotheses:

1. Countries higher in fear of failure (>40) will have a lower Total Early-Stage Entrepreneurial Activity (TEA) rate than countries that are lower in fear of failure (<40).
2. In countries that are higher in fear of failure, there will be a higher female/male TEA rate than in countries that are overall lower in fear of failure.
3. Countries with higher self-perceived capabilities will be lower in fear of failure than those that have lower perceived capabilities.
4. Countries that have greater access to entrepreneurial finance will score lower in fear of failure. Likewise, those that find it more difficult to obtain entrepreneurial finance will be higher in fear of failure.
(5) Countries who enjoy favorable cultural and social norms toward entrepreneurship will have a lower rate of fear of failure than those whose populations are hostile toward entrepreneurship.

(6) Countries that have better school-age entrepreneurship education will be lower in fear of failure than those that have a poor school-age entrepreneurship education.

(7) In countries that have high government support, fear of failure will be lower than in countries who do not.

(8) Countries with greater economic development will be lower in fear of failure than those who are less developed economically.

(9) The higher the rate of necessity-driven entrepreneurship, the less relevant fear of failure becomes in inhibiting entrepreneurship rates.

Results

The summary of results in Table 1 provides a profile of each of the countries sampled.

The United States has the highest TEA rate, with 15.6 percent of adults a nascent entrepreneur or owner-manager of a new business. It has a particularly low score for fear of failure, with just 35.2 percent of adults reporting fear of failure. On the other hand, Japan has a low TEA rate of 5.3 percent, and a high fear of failure rate of 46.4 percent. However, beyond this point the trend disappears as the other countries that score “low” on fear of failure have only low to moderate TEA rates.

Table 1. Profiles of individual countries (adapted from Bosma & Kelley, 2018).

| Factor | China | India | Japan | Germany | United States | United Kingdom |
|--------|-------|-------|-------|---------|--------------|----------------|
| Fear of Failure (% of people afraid to start a business, even if they saw an opportunity) | 41.7 (H) | 50.1 (H) | 46.4 (H) | 35.1 (L) | 35.2 (L) | 37.3 (L) |
| TEA (Total Early-Stage Entrepreneurship Activity) | 10.4 | 11.4 | 5.3 | 5.0 | 15.6 | 8.2 |
| Female/Male TEA Ratio | 0.82 | 0.62 | 0.60 | 0.50 | 0.77 | 0.49 |
| Self-Perceived Capabilities (% of people who believe they have the ability to start a business) | 24.2 | 52.2 | 10.01 | 38.3 | 55.6 | 46.6 |
| Availability of Finance (where 1=low, 9=high) | 4.60 | 5.65 | 4.95 | 4.75 | 5.95 | 4.98 |
| Entrepreneurial Culture (where 1=low, 9=high) | 6.02 | 5.58 | 3.62 | 4.45 | 7.27 | 4.82 |
| Adequacy of School Entrepreneurship Education (where 1=low, 9=high) | 3.38 | 4.52 | 2.32 | 3.03 | 4.33 | 2.95 |
| Adequacy of Government Policy (where 1=low, 9=high) | 4.79 | 6.33 | 5.37 | 4.28 | 4.17 | 3.39 |
| GDP per Capita (000’s $) / GDP Growth year on year Opportunity/Necessity Ratio | 16.7/6.9 | 7.2/6.7 | 42.9/1.7 | 50.8/2.5 | 59.8/2.2 | 44.3/1.7 |
| Note. Authors have designated fear of failure to be high (H) or low (L). | | | | | | |
(such as the United Kingdom and Germany). Meanwhile, the remaining countries that score highly in fear of failure—India and China—have high TEA rates. To some degree, these findings go against expectations that countries with a lower fear of failure will have a higher TEA. However, as the United States and Japan clearly demonstrate a correlation, H1 is partially accepted.

**Women**

In line with the previous academic literature, women are less likely than men to start a business across all countries sampled. In countries that are higher in fear of failure, such as India, Japan, and China, the female/male TEA rate is narrower. This suggests in countries that are higher in fear of failure overall, women are increasingly likely to become entrepreneurs (Gupta & Phillips, 2019). As such, H2 is accepted, despite the United States bucking this trend somewhat.

**Self-perceived capabilities**

As the United States has a low fear of failure score, it is unsurprising that it also has the highest score for self-perceived capabilities and Japan has a low score for self-perceived capabilities, corresponding with a high fear of failure. Moreover, the United Kingdom has a high score for self-perceived capabilities and low fear of failure score, adding to the trend. Germany has the lowest fear of failure, and their perceived capabilities score moderately. However, China has a low score for self-perceived capabilities, combined with high fear of failure, providing support for the correlation. Interestingly, India is an outlier with both a high score for fear of failure and self-perceived capabilities, so H3 is accepted.

**Finance**

Generally, none of the countries sampled have a particularly weak score for entrepreneurial finance, yet there are still disparities. The most adequate nation to obtain entrepreneurial finance is the United States, tying in with a low fear of failure score. Despite India having the highest fear of failure of all, it has a remarkably high score for entrepreneurial finance, suggesting that the ability to obtain finance is not an antecedent for fear of failure. The United Kingdom and Germany have low scores for fear of failure and moderate scores for entrepreneurial finance, and so neither support nor disprove the suggested correlation. China has the
lowest score for entrepreneurial finance, yet only the third highest fear of failure, again contributing no insights into the proposed relationship, although alternative finance such as crowdfunding is now becoming available (Hou & Phillips, 2022). Japan has the same score for entrepreneurial finance as the United Kingdom, yet a significantly higher fear of failure rate, disproving the relationship. As such, H4 is rejected.

**Culture**

The United States is rated the highest for cultural norms as society looks on entrepreneurship favorably. This correlates with the United States's low fear of failure rate. This trend is further supported in that Japan has particularly low cultural and social norms, with the second highest fear of failure rate. Despite Germany having the second lowest score for cultural norms, it has the lowest fear of failure rate, going against the trend. Moreover, India also stands out as, despite being the highest in fear of failure, it scores relatively highly for cultural and social norms. The United Kingdom neither proves nor disproves a relationship, meanwhile, China, although being high in fear of failure, also has favorable cultural and societal attitudes toward entrepreneurship (Chen & Phillips, 2016). While there are mixed findings, the high score for the United States and low score for Japan demonstrate a marginal relationship, and so H5 is only partially accepted.

**Education**

It is observed that the United States has a high score, while being of the lowest in fear of failure. Japan once again is low in the score for education and high in fear of failure. Despite Germany and the United Kingdom being low in fear of failure, they have poor results for entrepreneurial education at school, despite improved entrepreneurship education in universities (Phillips, 2010, 2018). China scores a relatively high score for entrepreneurial education, yet also with a higher fear of failure rate, although not significant enough to either prove or disprove a relationship. India is yet again an anomaly in that, despite having the highest score for entrepreneurial education, it has the highest fear of failure. H6 is only partially accepted.

**Government policy**

The results are striking as the countries in the (L) group for fear of failure have lower scores for adequacy of government policy than those in the (H) group. In fact, India has both the highest score for government policy and the highest
fear of failure. Japan and China have the second and third highest score for both, respectively. There is little link between government policy and reducing fear of failure, so H7 is rejected.

**Economic development**

High income countries—the United Kingdom, the United States, Germany, and Japan—are all low in fear of failure with the exception of Japan. The United States and Germany have the highest Gross Domestic Product (GDP) per capita. This coincides with being the two countries lowest in fear of failure, supporting a correlation. The United Kingdom is placed third for GDP per capita, coinciding with the third lowest for fear of failure. China, in the high fear of failure group, has a lower GDP. Likewise India, which has the lowest GDP per capita by far and the highest fear of failure rate. This supports the relationship and H8 is accepted. Countries that are more economically developed have a greater proportion of opportunity-based entrepreneurship rather than necessity-based. On the other hand, the lesser economically developed countries have a much greater proportion of necessity-driven entrepreneurship. Despite Japan having a high GDP per capita, it is not as high as the United States or Germany, and so a moderate opportunity/necessity ratio does not deviate from the trend. When individuals are forced to engage in entrepreneurship out of necessity, fear of failure may be irrelevant in hindering venture creation. This explains why, despite India and China’s higher fear of failure, their TEA rates remain relatively high. Therefore, we suggest that the lower the opportunity/necessity ratio, the less relevant fear of failure is in impeding venture creation. Thus, H9 is accepted.

**Discussion**

The female/male TEA rate is found not to be an antecedent of fear of failure; rather, it is found to be moderated by the overall fear of failure rate since countries that are high in fear of failure have a higher rate of women in entrepreneurship than those who score lower. This can be explained as these countries often have a higher necessity rate, and so women’s propensity to start a business is greater as they have few alternatives to generate additional family income. Despite this, across all countries women remain less likely than men to start a business, even in China, where the gender gap was the narrowest. Thus, being female does indeed mean that one is likely to have a greater fear of failure and subsequently less likely to become an entrepreneur. To overcome this, it has been suggested that resources dedicated to women (incubators, for example) can be effective (Gabarret & D’Andria, 2021).
To some extent, the results find an inverse relationship between self-perceived capabilities and entrepreneurial fear of failure as the United States reports high self-perceived capabilities and low fear of failure, while Japan demonstrates the opposite. However, there are also instances where this fails, such as India, with high self-efficacy and high fear of failure—where business start-up seems easy with 65 million microbusinesses, but when one considers that 90 percent of businesses in India fail within the first 5 years, this justifies India’s high fear of failure score.

The results also find that entrepreneurial finance is not an antecedent of fear of failure. While the United States reported the greatest adequacy of obtaining finance, coupled with a low score for fear of failure, the ability to generate funding was reasonably adequate across the board, yet with very different rates of fear of failure. Entrepreneurial finance may not be linked to fear of failure for several reasons: first, different countries will have different types of entrepreneurship—for example, India has a disproportionate number of micro businesses that are likely to require significantly less start-up capital.

The results do find that cultural and social norms are an antecedent to fear of failure. The United States has a supportive culture toward entrepreneurship that celebrates successful entrepreneurs. It is therefore unsurprising that the United States reports a low score for fear of failure. Meanwhile, Japan is collectivist in nature and has a stigma attached to entrepreneurship that has resulted in an increased fear of failure, as people are anxious about the repercussions in the event of failure. Despite this, China and India, which have favorable cultural and social norms, maintain high fear of failure rates, suggesting that favorable societal attitudes are not enough when the probability of failure remains high.

Likewise, the results also find entrepreneurial education at school age to be an antecedent of fear of failure, again demonstrated by the United States and Japan’s contrasting scores. However, the results also find that despite China and India having a greater adequacy of education than the United Kingdom and Germany, they maintained higher fear of failure rates. As China and India have developed in the last few decades economically, so have other aspects, such as their education system. Since the GEM adult population survey asked respondents aged between 18 and 64, it is possible that older respondents have not benefitted from the advancements in the education system as much as their younger counterparts, diluting the impact of education in reducing entrepreneurial fear of failure. There is also the argument that in China and India, entrepreneurial education may have increased fear of failure. Therefore, while the two countries have a high adequacy for entrepreneurial education at school age, this may be deterring their young populations from venture creation. As these countries have rapidly growing economies, young populations may see more opportunities for lucrative job opportunities instead.
Additionally, the results only consider entrepreneurial education at school age and arguably education at university may be more effective in reducing the fear of failure. The results also find that government policy is not an antecedent to fear of failure. Surprisingly, all countries placed in the (H) group for fear of failure also had a greater score for government policy than those placed in the (L) group. This may indicate that in countries that have a high fear of failure that governments are actively trying to increase entrepreneurship through incentives, while in countries that report lower fear of failure governments take a more hands-off approach. Government policy may have an indirect impact, as governments can play a vital role in preventing actual business failure from occurring. Thus, while government policy may not have an impact on fear of failure directly, it may have an indirect influence by moderating actual failure rates.

The results also show how economic development is correlated with fear of failure, as those with a higher GDP per capita report less fear of failure than those with a lower GDP. In lesser economically developed countries, businesses may struggle to survive, as the purchasing power of those populations is relatively weak compared to countries with higher GDP. In addition, countries that are more economically developed have better start-up infrastructure, which increases the likelihood of survival, decreasing fear of failure. Incubators have been suggested as a way of boosting entrepreneurial ecosystems in emerging economies where current institutions are not well geared for entrepreneurship (Khokhawala & Iyer, 2021). While entrepreneurs in economically developed countries are forced to compete with large incumbent companies, they may be able to differentiate themselves on certain performance attributes in order to steal market share. However, entrepreneurs in lesser economically developed countries may have to compete with many other micro businesses, making it incredibly difficult to stand out and gain traction, thereby increasing their fear of failure. It may be expected that countries that have greater economic growth rates would be lower in fear of failure, due to potential opportunities this may present. Yet this was not the case and no correlation was observed. This might suggest that despite high growth, there remains uncertainty as to whether it can be sustained and that growth does not necessarily lead to significant opportunities for entrepreneurship, and instead stable economic development leads to much more plentiful job opportunities.

Whether an individual is an entrepreneur through opportunity or necessity is found to have a moderating effect on fear of failure. In countries with a low opportunity/necessity ratio (that is, most entrepreneurs are necessity-based), the TEA rate was not negatively impacted by high fear of failure, meaning that it becomes less relevant in the decision to become an entrepreneur when an individual is forced to out of necessity. While this does not
necessarily mean those entrepreneurs are less fearful, it does not inhibit them from starting a business, as they have few opportunities elsewhere. Meanwhile, in countries such as the United Kingdom, United States, Germany, and to some extent Japan, which have higher opportunity/necessity ratios, those who engage in entrepreneurship have many alternative options, meaning fear of failure is more potent in influencing their decision to become an entrepreneur, and those who do choose entrepreneurship do so with greater conviction and less fear. In these countries where fear of failure plays a more significant role, it is arguably more important for policy makers to attempt to reduce it to increase the TEA rate. As reducing fear of failure in lesser economically developed countries with more necessity-based entrepreneurship would likely have a minimal effect, doing so may increase the level of opportunity-based entrepreneurship in these lesser economically developed countries, which consequently may accelerate their development.

Disclosure statement

No potential conflict of interest was reported by the authors.

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