Founders' Characteristics and Startups' Funding Opportunities Around the Globe

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In this paper, I investigate the eleven largest startup markets in the world to uncover whether female founders have a disadvantage in the amount of funding received by their respective startups. I am also interested in whether country-level factors such as the level of development and quality of formal and informal institutions can impact the results. Moreover, I research founders with formal technical education to show if they have any advantage while funding their startups.

I investigate more than 3,500 international startups during the period of 2017-2022 while utilizing CrunchBase database. I uncover that female founders are at a disadvantage in funding for their startups in all 11 countries of interest. Such results are more pronounced in developed countries, those with better functioning formal institutions and more individualistic populations. The disparity between male and female-led startups' funding is especially pronounced in debt financing as well as seed round of equity financing. The technical education of male and female founders does not provide any advantage in terms of the funding opportunities.

Keywords: startup, entrepreneur, gender, education, funding, international, founder, technical, individualistic, institutions

INTRODUCTION

The Global Impact Investing Network (GIIN) shows that in the US less than 2% of raised venture capital is going to female-led startups, while women own around 38% of businesses in the country and represent 70% of total consumer purchases. At the same time, the United States have long been a leading country in terms of the overall number of startups and their output per capita as per Enginsoy (2023), which shows that the process of creating and financing new ventures in this country is highly efficient despite the previously shown statistics. That is why the US market has been thoroughly researched before, while international markets for entrepreneurs in terms of raising capital and its connection to founders' characteristics have not been investigated in such details.

In this paper, I investigate more than 3,500 startups from the following 11 countries: Brazil, Canada, China, France, Germany, India, Israel, Singapore, Sweden, The Netherlands and The United Kingdom that have at least \$1 bn. of yearly investments in the new ventures. I am interested in those countries from 2017 to 2022, and the international dataset in question is obtained with the help of CrunchBase subscription. I show whether female entrepreneurs have the same disadvantages as men-led startups in terms of funding opportunities as shown in the American market by Malinin (2023). I am also interested in whether technical

education can help founders to raise more funds considering recent trends and the incredible success of many technological-oriented ventures. Moreover, I uncover if country-level characteristics such as the level of development, quality of formal institutions in the country, and cultural differences can play an important moderating role in the fundraising process.

The structure of this paper includes literature review that outlays the fundament for the investigated hypotheses. Then, I provide information about the dataset used in this research, discuss main results, conduct split sample analysis based on country-level characteristics, and conclude with robustness tests to underline the importance of received results.

LITERATURE REVIEW AND HYPOTHESES

Prior literature mostly investigates international startups and funding available for female founders based on each specific country separately – for example, Tripathi (2023) covers only India and Wiig et al. (2023) is focused on the Chinese market. In this paper with the help of the CrunchBase dataset, I investigate information about 11 biggest markets for new ventures in the world during the period of 2017-2022. Such a comprehensive dataset makes it possible to investigate country-level differences like their level of development, quality of formal and informal institutions and how those attributes might influence funding available for female entrepreneurs and founders with technical degrees. Moreover, it gives me an opportunity to show the difference between normal economic times and COVID-19 pandemic in terms of funding opportunities for newly created companies.

According to Zhou (2024), only 0.05% of all startups globally receive venture financing. The difficulty of this task is the main reason why investigating founders' characteristics that might help to raise more capital is an important task. Founders need to understand what qualities and characteristics might attract more funding for their respective startups which is the focus of this paper.

Female entrepreneurs are known to bring a new perspective on current business problems as per Carranza et al. (2018) and have the potential to attract venture capitalists looking for diverse founders, leading to the main hypothesis outlined below. Moreover, according to Abouzahr et al. (2018) women-led startups over the 5-year period generate 10.2% more revenue than new companies with male founders which could be an important consideration for potential investors while providing funding.

Hypothesis 1: Female founders raise more capital for their startups compared to their male counterparts in international setting.

With 7 out of every 10 startups, according to my international sample of more than 3,500 new ventures, created in high-tech industries or at least using new technologies to provide other less technical services, I hypothesize that technical education is an important factor for startups' funding opportunities around the world and that its impact is pronounced in both female and male-led ventures. Gershon (2023) also mention that technical degrees are usually associated with practical experience and deep understanding of the company's underlying processes, which is a great quality to have in an entrepreneur and could be a desirable attribute for potential investors.

Hypothesis 2: Founders with technical education raise more capital for their startups in international setting.

Apart from the two main hypotheses outlined above, I investigate more detailed ones involving split sample analysis based on different countries' characteristics such as the quality of formal institutions and legal systems, their overall level of development and cultural differences of its populations.

According to Jin and Myers (2006), high quality of financial institutions in the country is associated with better legal protection of its population in general as well as investors' protection in particular. Developing countries with poor formal institutions sometimes struggle to attract investors and entrepreneurs precisely because of the lack of legal protection for such individuals' businesses. Moreover,

according to Long (1997), a country's intellectual property rights are crucial to any business success. That's why I hypothesize that's it's easier for female entrepreneurs to raise money in a sound legal environment compared to other countries' where its population doesn't enjoy such a protection.

Hypothesis 3: Female founders raise more capital for their startups in countries with high quality of formal institutions.

Bae et al. (2018) mention that in more developed countries, it's easier to access information about businesses. Access to accurate information about startups might help female entrepreneurs showcase their achievements more effectively and attract additional investors. Moreover, there are more people with funds to invest into promising startups if the overall financial environment of the country is sound and population is encouraged to invest rather than just save which is usually a mark of a developed country rather than an emerging market.

Hypothesis 4: Female founders raise more capital for their startups in developed countries.

The more individualistic culture of the country attracts entrepreneurs who would like to start their businesses according to Hofstede et al. (2010). According to Wu (2020), people from individualistic countries also have a higher level of overall trust in each other which could be an important factor in raising funds for new companies. Moreover, Frijns et al. (2022) mention that individualism is a trait that is usually associated with risk-taking behavior which is an important characteristic for potential investors and founders as well as a crucial component for startup's funding success. That's why I hypothesize that the individualistic culture of the country, which helps start new ventures, will positively impact funding available for female entrepreneurs.

Hypothesis 5: Female founders raise more capital for their startups in countries with individualistic cultures.

DATA

The sample for this paper contains more than 3,500 funded international private startups from 11 countries around the world that have yearly investments in startup industry of more than 1 billion dollars and which have been founded between the years of 2017 and 2022 but didn't have IPO at the time. Those countries of interest include the following: Brazil, Canada, China, France, Germany, India, Israel, Singapore, Sweden, The Netherlands and The United Kingdom. Information about startups from these countries and their founders' characteristics have been retrieved from the highly reputable CrunchBase database specializing in providing information for potential investors, sales representatives, and startup founders.

Figure 1 shows 11 countries that have at least 1 bn.\$ investments in startups through the period of one year according to the article by Glasner (2012) with top-3 being UK, India and Germany. Figure 2 outlines the most popular industries for international startups: Artificial Intelligence (AI), e-commerce and health care, with around 7 out of top-10 startup industries in these countries connected with high-tech.

Main dependent variable for the purposes of this paper is logarithmic transformation of the total funds received by the startups in the 11 countries of interest. I also investigate debt and equity financing received by startups separately while using binary variables of *gender* and technical education (*tech*) of founders as the main independent ones.

The following controls are also utilized to make sure that received results are not explained by the influence of some other startups' characteristics:

Number of founders as it's easier to raise funds through larger networking opportunities (*NumberofFounders*);

- Startup's age in terms of how long it has been on a market as this attribute can help to get more funds as well (age);
- Number of investors as syndicated financing available for startups is usually much more pronounced (*NumberofInvestors*);
- Number of funding rounds as the financial capital available to a startup increases as it progresses through the stages (*NumberofFundingRounds*);
- S&P 500 index is a global economy well-being indicator (sp500). According to Brzenk (2018) S&P 500 is a truly global index and that's why it's used in my international sample analysis as a proxy for overall economic conditions in 11 countries of interest.

Three country-level variables being individualism index, GDP per capita and the rule of law index are all used to split the sample into two parts by using median values of those three respective variables to show the potential differences between female-led startups' funding internationally:

- The rule of law index (*ruleoflaw*) is the part of Worldwide Governance Indicators (WGI) published by World Bank and represents the quality of formal institutions in the countries of interest while showing how protected potential entrepreneurs could feel in each country's legal environment.
- GDP per capita (*gdpcap*) according to Jin and Myers (2006) is a proxy for overall country's development level showing the external environment and financial climate in which startups are created.
- The individualism index (*indiv*) according to Hofstede et al. (2010) shows the level of individualism of population in each of the countries. It is a proxy for quality of informal institutions, overall entrepreneurial climate and desire to create new ventures in each of the countries of interest.

Based on the information provided above, the regression model that I investigate in this paper looks the following way:

$$Total Funding = \beta 0 + \beta 1 * Gender + \beta 2 * Tech + \beta 3 * Controls + \varepsilon$$
 (1)

I utilize the above-mentioned regression (1) with 3 fixed effects that include industry and year as well as country of startup's origin because it's more precise than controlling for many country-level variables separately.

RESULTS

Table 1 shows summary statistics of my sample with the average age of international startups from 11 countries of interest being around 4 years and number of funding rounds between 1 and 8 while almost 6 investors on average invest in startups. Total number of founders is between 1 and 5 while only about 12.78% of all investigated startups have female representation.

Results shown in the following tables are different from what has been expected initially in hypotheses section – more developed countries and those with more individualistic populations and better formal institutions provide less funding for female-led startups than their emerging and less individualistic counterparts.

Main Results

Table 2 shows the impact of *gender* and *tech* education variables on three main dependent variables: logfund, logequity and logdebt representing total, equity and debt financing received by startups, respectively. Startups led by female founders enjoy 44.39% less overall funding than male entrepreneurs. Similar results are found when I consider only equity financing with 44.05% less available for female entrepreneurs. The largest impact of the startup's founder gender is found on the debt capital's availability. The female founders can expect a very significant drop of more than 60% in total debt funding available for their respective startups compared to male-led ones. *Tech* variable indicating whether the founder has

technical education so important in today's day and time dominated by tech-related industries and startups is not significant in all three regressions with different dependent variables.

The number of funding rounds as well as investors and founders are all highly significant at 0.1% level and positively impact the amount of total funds raised by the startups as well as equity and debt financing separately. The most pronounced impact is detected in the number of funding rounds with their number increasing by just 1 leading to 33.48% more funding available for such startups.

In Table 3 I investigate the impact of founders' gender and education on different types of equity funding – meaning pre-seed, seed and series A stages. Female-led startups doesn't have a disadvantage at a pre-seed stage but it's growing as the startup is moving to seed and series A funding stages. More than 34% decline in funding is shown if the startup is led by a female founder compared to men-led entities while reaching Series A round. Interestingly, startup's *age* is much more important for pre-seed and seed stages because such initial funding becomes less available for those startups that have been on a market longer. Each additional year before applying for pre-seed funding decreases the funding amount of that stage by 16.83%. Number of investors is also important for equity funding despite the stage of financing, but number of founders is not so important for those rounds of funding because coefficients of *NumberpofFounders* variables are not significant in all 3 regressions.

As technical education does not seem to play an important role in funding opportunities for international startups, I investigate whether it can help female entrepreneurs decrease potential negative effects from underfunding associated with gender bias. In Table 4 I investigate the interaction term *gendertech* between *femaleratio* variable that is a ratio of female founders to the total number of founders in a startup and a binary variable of *tech* education. This newly created interaction term is not significant in any of three regressions utilizing *logfund*, *logequity* or *logdebt* which leads to the conclusion that technical education pursued by female entrepreneurs does not decrease the funding gap for their respective startups.

Split Sample Analysis

Tables 5-7 present evidence of how the gender and technical education of the founders might impact the overall funding for startups in 11 countries of interest while considering country-level differences and conducting split sample analysis.

Table 5 shows that countries with high rule of the law index and overall protection of their population and entrepreneurs from legal standpoint have a more significant underfunding problem for female-led businesses than those less regulated countries. The difference is significant and while startups with female representation enjoy 41.44% less funding compared to male entrepreneurs in countries with lower quality of formal institutions, that gap increases to 45% when countries with better regulations are investigated on the other hand. It could be explained by the fact that countries with sound regulations attract more entrepreneurs who value protection of their businesses, leading to increased competition in such countries' markets and worse outcomes for female-led companies in terms of their funding opportunities.

Interestingly, the *age* of startups becomes insignificant for countries with lower level of formal institutions compared to more regulated countries where it still plays an important and positive role in the overall amount of funding. The same applies to the age variable value in Table 6 – I find that it's significant only for countries with higher economic development as proxied by GDP per capita. Female founders are also at a bigger disadvantage in funding in such countries – it's 48.35% less funding for them in more developed countries and 44.17% less compared to male-led startups in emerging ones. It could be explained by the fact that it's harder to stand out for such startups in saturated markets of developed countries while there is still room for growth in emerging ones.

Table 7 utilizes another split sample analysis among countries of interest, this time based on the level of individualism of its population, which is a proxy for the quality of informal institutions in those countries. I discovered that in more individualistic countries the negative impact of founders' *gender* is more pronounced in terms of its impact on the startups' funding – 43.97% less funds in more individualistic countries versus 43.45% less in countries with less individualism. It could be explained by the fact that in individualistic and self-centered countries it's a higher probability for people to start their businesses and as such competition in their respective markets is increasing compared to countries with less individualistic

cultures. Table 7 shows that not only formal development indicators such as the rule of law and GDP per capita play an important role in explaining the difference between countries and their attitudes towards female-founded startups. Cultural aspects highlight the importance of informal institutions' quality in the country as well.

In Table 8, I investigate the difference between COVID-19 years 2020-2022 and the pre-COVID period of the same length, 2017-2019, to understand whether there is a significant difference in terms of funding raised by female-led businesses during normal and force-major times. Interestingly, unlike the paper where I investigate the US market and female-led startups, international startups see the biggest outflow of funding capital from women-led businesses before and not during the COVID pandemic. It could be explained by the difference in severity levels of the pandemic's impact in the US versus all other countries. In this case, startups from 11 countries of interest show a more negative effect of founder's gender on funding before COVID than throughout such an event – 47.72% less compared to male-led businesses versus 40.04% for COVID times. Much lower number of startups have been founded by women in COVID period (202 vs 413) so investors have less new entities to choose from – thus, the less pronounced negative effect of the gender variable on the amount of funding received by such startups.

Robustness Tests

Tables 9-11 provide results from various robustness tests. For the first robustness test in Table 9, I exclude top-3 countries by their weight in the sample being UK, India and Germany, representing 48.69% of total observations, to uncover if the same result shown above still holds. *Gender* variable is still negative and highly significant at 0.1% level, meaning that even after exclusion of those 3 countries, female entrepreneurs still receive 37.85% less funding than male founders. Interestingly, the sign of *SP 500* variable changes in this type of regression as well, which could happen because the most developed, from an entrepreneurial point of view, countries have been excluded from the sample. Investors in the countries that are left in the sample might prefer stability of the US economy and as such invest less in local startups and rather put their funds into the US economy that is growing as long as S&P 500 index increases. Results for the number of founders, investors and funding rounds still hold and all those variables positively influence funding amount as such increasing total financing available for startups in 11 countries of interest.

Startups are also not equally distributed among industries with artificial intelligence, e-commerce, health care, application developing, blockchain, financial services, analytics, biotechnology, and information technology being highly represented in the investigated sample. By excluding those top-9 industries representing almost 38% of the sample, with 7 of them being in high-tech sectors, in Table 10 I show that overall results still hold. They even become more pronounced for *gender* variable showing that female-led startups do not receive about 50.96% of funds compared to those with male founders. It's about 6% less funding compared to results in Table 2 when I analyze the whole sample. It means that not only tech and other popular sectors of the economy do not lead the exclusion of female founders from funding, but it is, on the contrary, the other less popular industries where it's harder for women to raise money for their newly formed businesses.

Finally, Table 11 shows robustness test where I substitute *gender* variable for the ratio of female founders to the total number of founders in a startup (*femaleratio*) to show that results discussed before in terms of underfunding still hold. They show that as the number of female founders in the company grow, it leads to less available funding that startup can receive. Results become even more pronounced when compared to the ones from Table 2 - while using ratio instead of a binary gender variable, startups enjoy less total funding by 57.57% compared to 44.39% found before. All other results while running this regression correspond to previously found ones underlining the importance of the number of funding rounds, investors, and the overall age of startups for their success with funding.

CONCLUSION

In this paper I find that female entrepreneurs indeed raise less funds for their respective startups while investigating a comprehensive sample of more than 3,500 new ventures from 11 countries during the period

of 6 years from 2017 till 2022. I find that female founders have especially big disadvantages while trying to secure debt financing, with it being around 60% less on average compared to startups led by male founders. Moreover, female entrepreneurs also raise less equity, this effect is especially pronounced on seed and series A stages of financing but seemingly not present at a pre-seed round. At the same time, I don't find any impact on the funding from the side of technical education of the founders, which is different from the US market I investigated before.

During split sample analysis uncovering moderating effects of countries' characteristics, I find that countries that have more rigorous formal institutions in place as well as those that are more developed according to GDP metrics and those that have more individualistic populations create such environments where startups led by female entrepreneurs enjoy less funding for their business ideas. It might be explained by increased competition that such newly founded entities face in these more competitive markets.

Surprisingly, I also find that the COVID-19 pandemic didn't bring down the overall financing for female-led startups as much and there was even an improvement compared to pre-COVID years, which could be explained by the fact that international markets have been impacted by the pandemic differently compared to the US.

Finally, after running a battery of robustness tests, while excluding from consideration countries and industries with a disproportionately large presence in the sample as well as substituting binary gender variable for the ratio of female founders in a startup, I receive the same results that show lower funding available for new ventures led by female entrepreneurs across all 11 countries of interest.

Such concerning results have an important implication for government-sponsored and private programs supporting female entrepreneurs, as my results suggest that female founders on average, do not receive almost 45% of the funding available for their male colleagues.

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APPENDIX

FIGURE 1 STARTUPS' ALLOCATION BY COUNTRY

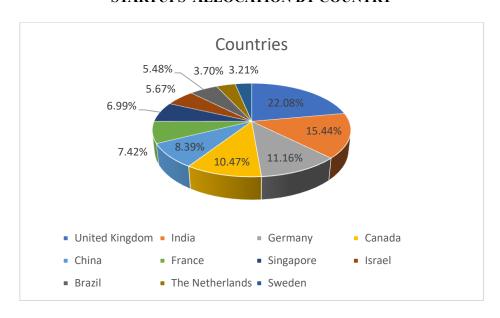


FIGURE 2 STARTUPS' ALLOCATION BY INDUSTRY

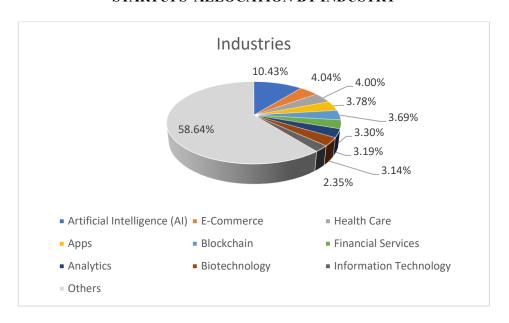


TABLE 1 **SUMMARY STATISTICS**

| Variable | Obs | Mean | Std. dev. | Min | Max |
|--------------------------|-------|----------|-----------|----------|----------|
| logfund | 3,739 | 14.89423 | 2.082971 | 9.615806 | 19.51763 |
| logequity | 3,677 | 14.88032 | 2.037643 | 9.615806 | 19.35635 |
| logdebt | 515 | 13.79028 | 2.399067 | 8.878219 | 19.67344 |
| age | 3,739 | 4.183739 | 1.428965 | 1 | 6 |
| Number of Funding Rounds | 3,739 | 2.764108 | 1.723841 | 1 | 8 |
| Number of Investors | 3,739 | 5.876438 | 5.224518 | 1 | 23 |
| Number of Founders | 3,739 | 2.297941 | 1.029799 | 1 | 5 |
| sp500 | 3,739 | 14.93136 | 13.81667 | -19.44 | 28.88 |
| indiv | 3,698 | 65.07491 | 21.26841 | 20 | 89 |
| gdpcap | 3,698 | 40872.34 | 22366.59 | 2410.888 | 82807.63 |
| ruleoflaw | 3,607 | 7.842039 | 2.103316 | 4.166667 | 10 |

TABLE 2 GENDER AND TECH EDUCATION VARIABLES' IMPACT ON TOTAL FUNDS AS WELL AS **EQUITY AND DEBT FINANCING**

| | (1) | (2) | (3) |
|-------------------------|------------|------------|------------|
| | logfund | logequity | logdebt |
| age | 0.0538^* | 0.0682** | -0.1207 |
| | (0.023) | (0.023) | (0.105) |
| gender | -0.5869*** | -0.5808*** | -0.9321** |
| | (0.084) | (0.084) | (0.285) |
| tech | 0.0248 | 0.0347 | -0.0482 |
| | (0.077) | (0.076) | (0.287) |
| NumberofFundingRounds | 0.2888*** | 0.2422*** | 0.1900** |
| Tvamooron anamgreeanas | (0.021) | (0.020) | (0.071) |
| NumberofInvestors | 0.1571*** | 0.1606*** | 0.1096*** |
| T valido Formi v estors | (0.007) | (0.007) | (0.022) |
| NumberofFounders | 0.1217*** | 0.1319*** | 0.0688 |
| Trainocion ounders | (0.028) | (0.028) | (0.102) |
| sp500 | 0.0015 | 0.0014 | 0.0293 |
| 5000 | (0.004) | (0.004) | (0.022) |
| oons | 12.8256*** | 12.8260*** | 12.1920*** |
| _cons | (0.145) | (0.144) | (0.708) |
| N | 3676 | 3615 | 507 |
| R^2 | 0.399 | 0.389 | 0.236 |
| Year FE | Yes | Yes | Yes |
| Industry FE | Yes | Yes | Yes |
| | Yes | Yes | Yes |
| Country FE | 1 68 | 1 68 | 1 68 |

Standard errors in parentheses p < 0.05, *** p < 0.01, *** p < 0.001

TABLE 3 GENDER AND TECH EDUCATION VARIABLES' IMPACT ON DIFFERENT STAGES OF **EQUITY FUNDING**

| | (1) | (2) | (3) |
|----------------------------|------------|------------|------------|
| | Logfund | Logfund | Logfund |
| | (Pre-seed) | (Seed) | (Series A) |
| age | -0.1843*** | -0.1244*** | -0.0683 |
| | (0.053) | (0.027) | (0.043) |
| 1 | 0.0722 | 0.4127*** | 0.4255** |
| gender | -0.0723 | -0.4127*** | -0.4255** |
| | (0.168) | (0.093) | (0.158) |
| tech | -0.2025 | 0.0202 | -0.1889 |
| | (0.157) | (0.093) | (0.123) |
| | (31237) | (******) | (**==*) |
| NumberofFundingRounds | 0.2292*** | 0.1367*** | 0.0478 |
| C | (0.056) | (0.025) | (0.034) |
| | *** | *** | *** |
| NumberofInvestors | 0.1463*** | 0.1099*** | 0.0683*** |
| | (0.020) | (0.008) | (0.010) |
| NumberofFounders | -0.0316 | 0.0506 | 0.0446 |
| r valide of our defined is | (0.064) | (0.033) | (0.044) |
| | (0.001) | (0.055) | (0.011) |
| sp500 | -0.0033 | -0.0018 | 0.0021 |
| • | (0.006) | (0.005) | (0.010) |
| | | | |
| _cons | 12.8739*** | 14.0050*** | 16.1046*** |
| | (0.246) | (0.176) | (0.338) |
| $N_{\hat{a}}$ | 540 | 1609 | 600 |
| R^2 | 0.322 | 0.305 | 0.248 |
| Year FE | Yes | Yes | Yes |
| Industry FE | Yes | Yes | Yes |
| Country FE | Yes | Yes | Yes |

Standard errors in parentheses p < 0.05, p < 0.01, p < 0.001

TABLE 4 TECH EDUCATION ON FEMALE-LED STARTUPS' FUNDING INFLUENCE

| | (1) | (2) | (3) |
|-----------------------|--------------|------------|------------|
| | logfund | logequity | logdebt |
| age | 0.0560^{*} | 0.0707** | -0.1249 |
| | (0.023) | (0.023) | (0.105) |
| femaleratio | -0.8808*** | -0.8907*** | -1.4331** |
| Temareravio | (0.137) | (0.138) | (0.471) |
| tech | 0.0190 | 0.0265 | -0.0515 |
| teen | (0.079) | (0.079) | (0.308) |
| gendertech | 0.2074 | 0.2373 | -0.3218 |
| genderteen | (0.398) | (0.396) | (1.595) |
| NumberofFundingRounds | 0.2884*** | 0.2420*** | 0.1931** |
| rumocron unungrounds | (0.021) | (0.021) | (0.071) |
| NumberofInvestors | 0.1575*** | 0.1610*** | 0.1110*** |
| Tumoeroniiv estors | (0.007) | (0.007) | (0.022) |
| NumberofFounders | 0.0994*** | 0.1094*** | 0.0237 |
| Tumoeron ouncers | (0.028) | (0.028) | (0.105) |
| sp500 | 0.0017 | 0.0015 | 0.0317 |
| 5000 | (0.004) | (0.004) | (0.022) |
| cons | 12.8524*** | 12.8542*** | 12.2345*** |
| _00110 | (0.146) | (0.145) | (0.711) |
| N | 3676 | 3615 | 507 |
| R^2 | 0.398 | 0.388 | 0.237 |
| Year FE | Yes | Yes | Yes |
| Industry FE | Yes | Yes | Yes |
| Country FE | Yes | Yes | Yes |

Standard errors in parentheses p < 0.05, p < 0.01, p < 0.001

TABLE 5 SPLIT SAMPLE ANALYSIS USING RULE OF LAW AS PROXY FOR FORMAL INSTITUTIONS' QUALITY IN THE COUNTRIES OF INTEREST

| | (1) | (2) |
|-----------------------|-------------------|--------------------|
| | Logfund | Logfund |
| | (Low rule of law) | (High rule of law) |
| age | 0.0252 | 0.0716** |
| | (0.050) | (0.027) |
| gender | -0.5351** | -0.5979*** |
| | (0.203) | (0.094) |
| tech | 0.0979 | -0.0599 |
| | (0.138) | (0.097) |
| NumberofFundingRounds | 0.4261*** | 0.2364*** |
| C | (0.046) | (0.024) |
| NumberofInvestors | 0.1230*** | 0.1712*** |
| | (0.013) | (0.008) |
| NumberofFounders | 0.1600** | 0.0989** |
| | (0.059) | (0.032) |
| sp500 | -0.0080 | 0.0073 |
| 1 | (0.008) | (0.005) |
| cons | 11.9150*** | 12.8234*** |
| _ | (0.288) | (0.172) |
| N | 1032 | 2644 |
| R^2 | 0.448 | 0.382 |
| Year FE | Yes | Yes |
| Industry FE | Yes | Yes |
| Country FE | Yes | Yes |

Standard errors in parentheses p < 0.05, p < 0.01, p < 0.001

TABLE 6 SPLIT SAMPLE ANALYSIS USING GDP PER CAPITA AS A PROXY FOR DEVELOPMENT OF THE COUNTRIES OF INTEREST

| | (1) | (2) | |
|-----------------------|------------|------------|--|
| | Logfund | Logfund | |
| | (Low GDP) | (High GDP) | |
| age | 0.0291 | 0.0997** | |
| | (0.033) | (0.035) | |
| gender | -0.5830*** | -0.6607*** | |
| | (0.116) | (0.130) | |
| tech | 0.1031 | -0.0772 | |
| | (0.106) | (0.117) | |
| NumberofFundingRounds | 0.3531*** | 0.2291*** | |
| C | (0.028) | (0.032) | |
| NumberofInvestors | 0.1448*** | 0.1736*** | |
| | (0.009) | (0.010) | |
| NumberofFounders | 0.1311*** | 0.1204** | |
| | (0.039) | (0.042) | |
| sp500 | 0.0000 | 0.0025 | |
| 1 | (0.006) | (0.006) | |
| cons | 12.8798*** | 11.8258*** | |
| _ | (0.192) | (0.228) | |
| N | 2089 | 1587 | |
| R^2 | 0.409 | 0.405 | |
| Year FE | Yes | Yes | |
| Industry FE | Yes | Yes | |
| Country FE | Yes | Yes | |

Standard errors in parentheses p < 0.05, p < 0.01, p < 0.001

TABLE 7 SPLIT SAMPLE ANALYSIS USING INDIVIDUALISM INDEX AS A PROXY FOR INFORMAL INSTITUTIONS' QUALITY IN THE COUNTRIES OF INTEREST

| | (1) | (2) |
|-----------------------|---------------------|----------------------|
| | Logfund | Logfund |
| | (Low individualism) | (High individualism) |
| age | 0.0555 | 0.0445 |
| | (0.034) | (0.034) |
| gender | -0.5701*** | -0.5793*** |
| | (0.138) | (0.110) |
| tech | 0.0066 | -0.0019 |
| | (0.097) | (0.132) |
| NumberofFundingRounds | 0.3749*** | 0.2191*** |
| C | (0.032) | (0.028) |
| NumberofInvestors | 0.1350*** | 0.1808*** |
| | (0.009) | (0.010) |
| NumberofFounders | 0.1196** | 0.1318*** |
| | (0.041) | (0.040) |
| sp500 | -0.0102 | 0.0131* |
| 1 | (0.006) | (0.006) |
| cons | 12.6686*** | 12.7939*** |
| _ | (0.217) | (0.213) |
| N | 1780 | 1896 |
| R^2 | 0.446 | 0.366 |
| Year FE | Yes | Yes |
| Industry FE | Yes | Yes |
| Country FE | Yes | Yes |

Standard errors in parentheses p < 0.05, p < 0.01, p < 0.001

TABLE 8 **COVID-19 VS PRE-COVID PERIOD ANALYSIS**

| | (1) | (2) |
|-----------------------|------------|-------------|
| | Logfund | Logfund |
| | (COVID) | (pre-COVID) |
| age | 0.0477 | 0.0661 |
| | (0.080) | (0.044) |
| gender | -0.5113*** | -0.6487*** |
| | (0.145) | (0.106) |
| tech | -0.1474 | 0.0866 |
| | (0.126) | (0.099) |
| NumberofFundingRounds | 0.3936*** | 0.2682*** |
| S | (0.042) | (0.025) |
| NumberofInvestors | 0.1350*** | 0.1653*** |
| | (0.011) | (0.009) |
| NumberofFounders | 0.0856 | 0.1306*** |
| | (0.049) | (0.035) |
| sp500 | 0.0000 | 0.0004 |
| 1 | (0.004) | (0.002) |
| cons | 12.8930*** | 12.7428*** |
| _ | (0.233) | (0.251) |
| N | 1254 | 2422 |
| R^2 | 0.394 | 0.410 |
| Year FE | Yes | Yes |
| Industry FE | Yes | Yes |
| Country FE | Yes | Yes |

Standard errors in parentheses p < 0.05, p < 0.01, p < 0.001

TABLE 9 ROBUSTNESS. REGRESSION WITHOUT TOP-3 COUNTRIES BEING UK, INDIA AND GERMANY

| | (1) |
|-----------------------|----------------|
| | $\binom{1}{2}$ |
| | logfund |
| age | 0.0015*** |
| | (0.000) |
| | |
| gender | -0.4757*** |
| | (0.123) |
| | |
| tech | -0.0789 |
| | (0.119) |
| | |
| NumberofFundingRounds | 0.2487*** |
| | (0.032) |
| | |
| NumberofInvestors | 0.1765*** |
| | (0.010) |
| | |
| NumberofFounders | 0.1447*** |
| | (0.042) |
| | |
| sp500 | -0.0576** |
| | (0.020) |
| | |
| _cons | 41.3323*** |
| | (8.226) |
| N | 1764 |
| R^2 | 0.424 |
| Year FE | Yes |
| Industry FE | Yes |
| Country FE | Yes |
| | <u> </u> |

Standard errors in parentheses p < 0.05, p < 0.01, p < 0.001

TABLE 10 ROBUSTNESS. REGRESSION WITHOUT TOP-9 INDUSTRIES FOR INTERNATIONAL STARTUPS

| | (1) | |
|-----------------------|------------|--|
| | logfund | |
| age | 0.0320 | |
| | (0.040) | |
| gender | -0.7125*** | |
| 8 | (0.148) | |
| tech | 0.0192 | |
| tecn | | |
| | (0.131) | |
| NumberofFundingRounds | 0.2512*** | |
| <u> </u> | (0.037) | |
| NumberofInvestors | 0.1642*** | |
| 2.02220.02.02.02.0 | (0.012) | |
| NumberofFounders | 0.1017^* | |
| rumocron ounders | (0.049) | |
| | , | |
| sp500 | 0.0056 | |
| | (0.007) | |
| cons | 12.7867*** | |
| _cons | (0.239) | |
| N | 1398 | |
| R^2 | 0.382 | |
| Year FE | Yes | |
| Industry FE | Yes | |
| Country FE | Yes | |

Standard errors in parentheses p < 0.05, ** p < 0.01, *** p < 0.001

TABLE 11 ROBUSTNESS. FEMALE FOUNDERS' RATIO IS USED INSTEAD OF A BINARY **GENDER VARIABLE**

| | (1) | |
|-----------------------|------------|--|
| | logfund | |
| age | 0.0558* | |
| | (0.023) | |
| femaleratio | -0.8573*** | |
| | (0.130) | |
| tech | 0.0296 | |
| | (0.077) | |
| NumberofFundingRounds | 0.2884*** | |
| ٥ | (0.021) | |
| NumberofInvestors | 0.1574*** | |
| | (0.007) | |
| NumberofFounders | 0.0995*** | |
| | (0.028) | |
| sp500 | 0.0017 | |
| • | (0.004) | |
| cons | 12.8508*** | |
| _ | (0.146) | |
| N | 3676 | |
| R^2 | 0.398 | |
| Year FE | Yes | |
| Industry FE | Yes | |
| Country FE | Yes | |

Standard errors in parentheses p < 0.05, p < 0.01, p < 0.001