

## **THE PRIVILEGED RUSH IN?**

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# **THE PRIVILEGED RUSH IN? HOW ENTREPRENEURS' RELATIONAL TIES SHAPE THE BENEFITS OF STARTING UP FORMAL IN AN EMERGING ECONOMY**

## **ABSTRACT**

Why do entrepreneurs in emerging economies choose to start their business in the informal sector? The frequency with which growth-oriented emerging economy entrepreneurs make this decision contradicts conventional wisdom and economic and institutional theories, all of which posit that registering with government conveys much-needed legitimacy and access to external resources. Recent research, however, suggest that entrepreneurs can use the informal economy as safe ground within which to build up internal capabilities before registering with the government. In this paper, we resolve these competing views by proposing that the promise of formality at startup varies with firms' relational resources for filling institutional voids. Using a nationally representative, pooled cross-sectional dataset of firm survey responses in Vietnam, we show evidence that initial informality positively affects firms' performance post-formalization. More importantly, we find that it is firms that are large, politically connected, and male-owned that benefit from immediate registration.

## **INTRODUCTION**

In emerging economies, typical liabilities of newness faced by new ventures (Stinchcombe 1965, Aldrich and Fiol 1994, Shane and Cable 2002) are compounded by underdeveloped market institutions (Khanna and Palepu 1997, Mair, Martí, and Ventresca 2012). Specifically, these institutional challenges exacerbate liability of newness by enhancing the value of incumbents' superior social capital (Greif 1993, Kock and Guillén 2001, Peng and Heath 1996, Gao et al. 2017). Conventional wisdom holds that formally registering business operations with government can boost the legitimacy of new ventures (Meyer and Rowan 1977), thereby

reducing their disadvantages in accessing external resource markets critical to growth (Thai and Turkina 2014, Kistruck et al. 2015). This is further supported by institutional theory on the long-lasting imprinting of startup structure and orientation (Marquis and Tilcsik 2013, Stinchcombe 1965) and empirical evidence indicating that formally registered firms outperform their otherwise similar informal counterparts (Assenova and Sorenson 2017, De Mel, McKenzie, and Woodruff 2013, Rand and Torm 2012, McKenzie and Sakho 2010). Recent research, however, pushes back, showing that emerging economy firms in the formal economy perform better after first using the informal economy as a staging ground within which to build up their internal resources before formal entry (Williams, Martinez–Perez, and Kedir 2017).

In this paper, we begin by re-examing the net effect of these dueling external market access and internal resource development mechanisms on the relative performance of emerging economy firms in the formal economy that registered immediately at startup and those that instead began their operations in the informal economy. Going beyond this initial baseline analysis, we then delve deeper into how the performance effect of formalization is shaped by the relational resources that emerging economy entrepreneurs possess at startup. The core argument of this paper is that emerging economy firms that start with privileged access to key business resources through their founders' social capital benefit from immediate formalization, while the rest, i.e. the majority, are better off piloting their ventures in the informal economy.

In particular, it is well established in emerging economies strategy and entrepreneurship literature (Wright et al. 2005, Hoskisson et al. 2000) that entrepreneurs enjoy a competitive advantage of substituting for underdeveloped institutions when they are affiliated with any of the overlapping categories of business groups (Guillen 2000, Khanna and Palepu 2000, Kock and Guillén 2001), family businesses (Carney and Gedajlovic 2002, Luo and Chung 2005), or

political connections (Faccio, Masulis, and McConnell 2006, Fisman 2001). In this paper, in addition to examining starting resources from family and friends and political connections, we also consider the startup social capital advantages that male entrepreneurs tend to hold in most countries (Kim and Sherraden 2014, Marlow and Patton 2005), but perhaps especially in emerging economies (Osgood and Peters 2017, Poggesi, Mari, and De Vita 2016).

We test our theoretical arguments on a novel standardized pooled cross-sectional dataset, constructed from a decade of responses (2010-2020) to an annual mail-out questionnaire survey of domestic private companies in emerging Vietnam. Our tests indicate limited support for what we term the *Internal Resources Development Mechanism*, which posits that growth-oriented firms benefit from building up their internal capabilities and resources in the informal economy before registering with government. The benefits of such strategic delay are most robust in the years immediately following firm registration and fade over time. More novel and significant is the clear support we find for all three of our moderating hypotheses that the positive performance effect of delaying formalization is greatest for firms that start up smaller, without political connections, or headed by a female entrepreneur. In short, while privileged firms may be rightly drawn to immediate formalization's prospects of external resources access, most firms are better off first experimenting in the informal economy and developing their internal resources.

## **HYPOTHESES DEVELOPMENT**

### **A Baseline Hypotheses Horse Race**

*The External Resources Access Mechanism.* There is widespread scholarly agreement on the significant societal and economic benefits to business formalization (Loayza 2018, Dabla-Norris and Feltenstein 2005). Scholars generally also believe that formalization benefits individual entrepreneurs and their ventures (De Soto 2000). At the entrepreneur level, the core argument is

that registering with government facilitates access to critical external resource markets that facilitate firm growth and performance (Thai and Turkina 2014, Kistruck et al. 2015). This is because resource providers are at a particularly significant information disadvantage vis-à-vis young firms in understanding their quality and future prospects and therefore are appropriately concerned about the dangers of agency challenges and markets for lemons (Akerlof 1978). For entrepreneurs, choosing to register with government is a means of signaling their intention to operate in a transparent manner and play by the formal regulatory rules of the game. In this way, from the perspective of institutional theory, government certification through the formalization process improves legitimacy vis-à-vis key resource providers (Meyer and Rowan 1977, Aldrich and Fiol 1994) and thereby reduces liability of newness (Stinchcombe 1965).

Entrepreneurs are likely well aware of such benefits to formalization, as implied by Campos, Goldstein, and McKenzie (2018), which shows through a field experiment in Malawi that eliminating the costs of registration led most firms to choose the otherwise uncommon path of formalization. But real-life formalization is rarely costless, especially in emerging economies, ranging from straightforward fees for processing registration to increased and sustained attention from government regulators and tax authorities (Bruhn and McKenzie 2014). Given this and the fact that firms tend to be oriented either towards subsistence or growth (Schoar 2010), it is reasonable to expect formalization to generally be chosen by firms with a growth orientation that entails expected future benefits outweighing those expected costs (McCaig and Nanowski 2019).

Institutional theory provides reason to expect that not only will entrepreneurial orientation influence a firm's decision to formalize either at startup but the reverse is true as well. In other words, formalization at startup is likely to itself importantly shape entrepreneurial orientation going forward. In addition to launching the concept of liability of newness,

Stinchcombe (1965) is also seen as the origin of a literature on the critical imprinting of structure, experiences, and orientation during a firm's earliest days on its subsequent character and performance over the rest of its life. In line with this perspective, a firm that chooses to start in the informal economy, with its relative lack of external resource availability and the greater need for secrecy vis-à-vis outsiders, will be much less likely to position itself well to tap into external resource markets after formalization. In contrast, an immediately formalized startup is likely to be importantly shaped by the immediate burden of formalization costs and coinciding pressure to capitalize on enhanced access to external markets. Fundamentally, the argument is that the attributes that firms take on as they adapt to their environments in critical development stages, such as initial start up, will remain with them and shape their long-term performance and survivability (Marquis and Tilcsik 2013).

Consistent with these arguments, researchers have found a positive relationship between formalization and subsequent performance in both economics (Rand and Torm 2012, Demenet, Razafindrakoto, and Roubaud 2016, McKenzie and Sakho 2010, De Mel, McKenzie, and Woodruff 2013) and management (Assenova and Sorenson 2017). These studies have used a variety of methods, including random assignment within field experiments and instrumental variables in secondary data analysis, to deal with key issues of endogeneity, such as differences in the quality of firms that choose to formalize and those that do not. While none have specifically focused on the performance impact of registering immediately at startup versus registering later after first operating in the informal economy, the logic is consistent with a general claim that formalizing earlier means earlier access to the benefits of formalization. As a result, the first of our competing baseline hypotheses is as follows:

**Hypothesis 1a:** *Ceteris paribus*, a firm that immediately registers with government as a company at startup will perform *better* than a similar firm that registers after first beginning operations in the informal economy.

*The Internal Resources Development Mechanism.* Contrary to the implications of the External Resources Access Mechanism, the informal economy remains ubiquitous and a popular option for entrepreneurs around the world, especially in emerging economies (La Porta and Shleifer 2014, Loayza 2018, Schneider and Enste 2000). Directly undermining the specific logic of the External Resources Development Mechanism is the fact that formal markets for allocating critical business resources to the highest quality firms generally function very poorly in emerging economies. These poorly functioning markets, commonly referred to as institutional voids, feature dramatically curtailed efficiency in the flow of information on firm quality, markets, and human resources (Khanna and Palepu 1997, Mair, Martí, and Ventresca 2012). As such, emerging economies' institutional voids further exacerbate the challenges that startups with limited track records face in signaling their quality, even in the most well governed entrepreneurial ecosystems (Zimmerman and Zeitz 2002, Kotha and George 2012).

As we delve into in more detail with our entrepreneur-characteristics-based moderating hypotheses, certain types of firms tend to have systemically privileged access to resources through relational ties (Greif 1993, Kock and Guillén 2001, Peng and Heath 1996, Gao et al. 2017). But what we wish to emphasize here is that these relational ties are advantages that are not readily available to most firms, especially not at original startup. Instead, in emerging economies, they are largely the domain of an elite set of entrepreneurs affiliated with prominent business groups (Guillen 2000, Khanna and Palepu 2000, Kock and Guillén 2001), families (Carney and Gedajlovic 2002, Luo and Chung 2005), and government agencies or politicians

(Faccio, Masulis, and McConnell 2006, Fisman 2001). As a direct result, for the vast majority of startup firms in emerging economies, the real-world prospects for following up immediate formalization with successful access to key resources, e.g. bank credit or government contracts, are limited, at best. In emerging economies like Vietnam, the country of empirical focus in this paper, many entrepreneurs are themselves understandably very pessimistic about their chances for accessing external resources in the formal economy (Cling, Razafindrakoto, and Roubaud 2012).

Meanwhile, there appear to be very real benefits to “ordinary” firms—i.e. the majority, without relational advantages at startup—starting operations in the informal economy (Webb et al. 2013, Godfrey 2011). These benefits include avoidance of the various costs to formalization that many international development initiatives to promote formalization seek to reduce. These costs start with formal government fees for registration and licenses and informal fees (i.e. bribery) for getting through oftentimes complicated and time-consuming formalization requirements. They continue further with subsequent exposure to not only the formal taxation system, but also greater attention from all types of government regulators and other officials. Existing research on Vietnam has shown that firms without business registration license are less likely to have to pay bribes (Vu and Le 2016). Researchers have even found that criminal elements see formal businesses as more reliable sources of prey than their informal counterparts (Kistruck et al. 2015). Indeed, many scholars and emerging economy entrepreneurs alike would argue that there is little that differentiates such underground shakedowns from off-the-books negotiated settlements with poorly-paid, rent-seeking government regulators.

Furthermore, some scholars have argued that registration with government may not carry the same weight, in terms of conveying legitimacy, when the government’s legitimacy itself is



being widely questioned (Webb et al. 2009). In this context, given their poor prospects of tapping external resource markets in the formal economy, entrepreneurs without privileged relational ties may well view the informal economy as an attractive lower cost option. The legitimacy of the informal economy means it can be used for piloting and concept testing at smaller scale and lower cost that allows new entrepreneurs to learn about themselves and their businesses. Such experimentation can potentially enable entrepreneurs to gain valuable operational experience and a better handle on how they wish to present themselves, in the future, to government, society and other formal stakeholder counterparts, including resource providers and customers.

Consistent with this perspective, in their analysis of World Bank survey data on registered firms across a broad set of emerging economies, Williams, Martinez–Perez, and Kadir (2017) find that firms that started informally performed better, once formalized, than those that registered immediately with government. Digging deeper and pushing back explicitly on the External Resources Access Mechanism, McCaig and Nanowski (2019) use three waves of household survey data from Vietnam to show that better performing formalized firms were those that had previously also performed well in the informal economy. These appear to be firms that took advantage of the lower cost conditions in the informal economy to build up performance-enhancing internal resources and capabilities. In line with this perspective, we present the second of our dueling baseline hypotheses as follows:

**Hypothesis 1b:** *Ceteris paribus*, a firm that immediately registers with government as a company at startup will perform worse than a similar firm that registers after first beginning operations in the informal economy.

*Temporal Matters.* The imprinting component of the logic underlying the External Resource Access Mechanism holds that experiences in the impressionable earliest days of

operations will stick with a firm throughout its existence. This logic does not preclude that firms that immediately formalize at startup may face significant difficulties, at first, in accessing external resource markets. Such struggles may be a natural component of the process of learning and orienting the firm's orientation towards making the best use of these markets. Meanwhile, the parallel expectation is that firms that started operations in the informal economy will be less likely to engage with external resource markets throughout their lifespans—even if and when they shift into the formal economy. As a result, the External Resources Access Mechanism would seem to point towards the performance advantage of immediate formalizers, relative to delayed formalizers, growing over time.

The logic of the Internal Resources Development Mechanism is that experimentation in the informal economy will better prepare a firm to hit the ground running at formalization. The more developed internal resources of a firm that followed this path should not only help directly with business operations, but also help indirectly through improving prospects for distinguishing the firm from other newly registered firms vis-à-vis key resource providers. Given these key attributes, the Internal Resources Development Mechanism appears to predict that the performance advantage of delayed formalizers over immediate formalizers would fade over time.

As such, both of our dueling mechanisms point in the same direction, with respect to the temporal dynamic of the formalization-performance effect and so we predict that:

**Hypothesis 2:** *Ceteris paribus*, the performance effect of immediately registering with government at startup is positively moderated by years of operations in the formal economy.

### **The Moderating Effects of Entrepreneurial Social Capital at Startup**

*Entry Size Matters.* There are, at least, three reasons to expect larger firms to benefit more from immediate formalization than their smaller counterparts. Each increases the relative relevance of

the External Resources Access Mechanism for larger firms and the Internal Resources Development Mechanism for smaller firms. First, firm size at startup is likely to be associated with startup access to a variety of resources, both tangible and intangible, that reduce liabilities of newness and associated dangers to performance and survival (Bruderl and Schussler 1990). As a direct result, resource providers are likely to see larger firms as more attractive potential new clients than their smaller counterparts (Berger and Udell 1998). This is especially true vis-à-vis the smallest, micro-enterprise entrants, which resource providers will know are more likely to be subsistence-oriented (Beck 2013). Second, larger firms are more likely to be able to more easily and more effectively handle the additional challenges of engaging with regulators and other government officials, including hiring dedicated staff for such purposes (Hart 2008, Schuler, Rehbein, and Cramer 2002). This should mean that, in relative terms, operating in the formal economy is less costly for larger firms. Finally, it is likely to be far more difficult—and thereby more costly—for larger firms to successfully operate in the informal economy, since it is less likely that they would go fully unnoticed by even heavily overburdened government regulators. This is likely to serve as a drag on performance for large firms that choose to start up in the informal economy in order to focus on development of internal resources. With the logic of these three reasons all pointing in the same direction, we begin with the following baseline moderating hypothesis:

**Hypothesis 3:** *Ceteris paribus*, the performance effect of immediately registering with government at startup is positively moderated by firm size at startup.

*Political Connections Matter.* Existing research has shown that political connections benefit firms in various ways (Fisman 2001, Faccio 2006, Calomiris et al. 2010). There are again, at least, three reasons to expect entrepreneurs with this starting advantage to better

capitalize on immediate formalization than similar but unconnected entrepreneurs. First, political connections open the doors to state-controlled resource markets, such as state contracts and state land. In many countries, especially emerging economies, the state also owns banks and other financial services and investment vehicles. These state-owned financial institutions may even have specific industrial policy mandates that explicitly require guidance from government. In all of these cases, personal connections to government officials can facilitate gaining favored resource access. In some cases, personal connections create safety needed for corrupt kickbacks to motivate such favoritism.

Second, political connections can help firms minimize the costs of government regulation in the formal economy. Regulators may, for example, feel less inclined to legally sanction politically connected firms (Wu 2008). Government inspectors are also less likely to exploit regulations to extract costly illegal bribes from connected businesses and citizens. Corrupt state agents, whose goal is partially to maximize bribe income, are incentivized to focus their efforts on wealthy but politically powerless victims who cannot fight back (Robinson and Seim 2018).

Third, private providers of external resources are themselves also likely to favor politically connected firms. This is not only because they, too, are vulnerable to political pressure, but is also fundamentally based on a market-based, profit-oriented rationale. Related to reasons one and two above, these resource providers can expect that the advantages of political connectedness will lead to favoritism in access to state-controlled resources and reducing regulatory costs and risks that result in these firms being more successful—or, at least, less likely to fail. As a result, it is reasonable for private providers of resources to see politically connected firms as being generally safer, more sustainable, long-term sources of business.

Given these reasons, we expect that:

**Hypothesis 4:** *Ceteris paribus*, the performance effect of immediately registering with government at startup is positively moderated by an entrepreneur's political connections.

*Entrepreneur Gender Matters.* It is well established that, around the world and across cultures, women entrepreneurs face substantial structural obstacles not only to starting businesses but also to succeeding once started. A particularly substantial share of research comparing the experiences of female entrepreneurs to their male counterparts has focused on the issue of access to finance needed to grow businesses. While results are not entirely uniform, rigorous studies indicate that discriminatory lending practices, including denials and higher interest rates, exist under certain circumstances in even the most market-oriented economies (Asiedu, Freeman, and Nti-Addae 2012, Blanchard, Zhao, and Yinger 2008). Further reinforcing this argument, studies have found that discrimination is particularly clear when women-owned firms are themselves clearly gendered as female, rather than downplaying female characteristics (Marlow and Patton 2005, Wu and Chua 2012). This is particularly important with respect to examining the question of business formalization, which is most relevant not to large corporations, but to younger, smaller firms for which entrepreneurial characteristics are less easily masked by layers of management and bureaucracy or by corporate branding.

Overlapping with the obstacles women entrepreneurs face in financing growth of their businesses are systematic disadvantages that they appear to have in the realm of networking. Researchers have found that, relative to their male counterparts, female entrepreneurs are particularly disadvantaged with respect to “weak ties” and brokerage ties (Renzulli, Aldrich, and Moody 2000, Robinson and Stubberud 2011). Weak ties are the looser, more widely spread network connections that help entrepreneurs to overcome common inefficiencies in information markets (Granovetter 2005), while brokerage ties are those that connect otherwise disconnected

networks (Burt 2004). Instead of either of these overlapping types of relations, female entrepreneurs have been found to rely disproportionately on stronger, more frequently repeated and reinforced ties to family and friends (Cromie and Birley 1992, Neumeyer et al. 2019).

Importantly, research focused on relatively progressive advanced economies also shows an important role for “self discrimination” by female entrepreneurs in reducing access to capital for women-owned businesses (Kon and Storey 2003, Orser, Riding, and Manley 2006, Roper and Scott 2009). In their recent literature review of female entrepreneurship research, Poggesi, Mari, and De Vita (2016) summarize this work as reflecting how environmental factors throughout life lead women to hold lower senses of self-efficacy and greater pessimism about their prospects for successfully accessing key resources. There would seem to be every reason to expect a similar, if not larger, challenge, in this regard, for women in generally more traditional emerging economies. As a result, given this array of challenges faced by female entrepreneurs and their impact of making it relatively more difficult for women-owned firms to capitalize on the external resource markets opportunities of the formal economy, we posit that:

**Hypothesis 5:** *Ceteris paribus*, the performance effect of immediately registering with government at startup is positively moderated for male-owned businesses.

## **EMPIRICS**

### **Data Source**

The data used in this paper comes from the Vietnam Provincial Competitiveness (PCI) program and the annual firm survey it has been running since 2005. Funded by the United States Agency for International Development, the PCI survey asks a core set of questions on firm and business environmental characteristics that have been kept largely consistent over the years in order to facilitate measuring and ranking of the quality of provincial business environments across space

and time. Each year, the PCI survey is completed by approximately 7,000 Vietnamese private companies. An explicit effort is made to get a substantial number of responses for each of Vietnam's 63 provinces and for those responses to also adequately cover major firm types, such as female ownership and sector type. Over the years, the response rate has generally ranged between 29 and 35 percent (Malesky, Phan, and Pham 2018). While our most basic models include nearly 80,000 firm observations across 11 years of surveys (2010-2020), our fuller models feature a smaller sample of 41,052 firm observations over 10 years (2011-2020), due to incomplete data on some variables, especially for earlier survey years. This includes missing data due to changes in some variables in 2011 and onwards and missing registration-year-provincial-level data for individual firms that registered before 2006, when, for example, the provincial level governance index was created.

### **Variables**

*Dependent Variable.* Our primary dependent variable, *Firm Performance*, is based on firm responses to a question asking them to place their survey year's performance on a Likert scale including: "Large Losses" (1), "Small Losses" (2), "Break Even" (3), "Small Profits" (4), and "Large Profits" (5). This design was meant to maximize the likelihood of truthful firm responses in an environment where firms have reasons to conceal their performance (e.g. fear of taxation).

*Independent Variables.* The paper's analyses all center on two main independent variables representing formalization at startup. The first is a dichotomous variable, *Registered at Startup*, which equals one if the respondent said that they registered when they first started operations and zero if registered later. The second independent variable, *Years Informal Before Registration*, is simply the difference between the firm's stated year of establishment and year of registration.

Additional independent variables include one for experience since registration to test H2 and three more for testing our three entrepreneurial-characteristics-based hypotheses, H3-H5. *Formal Economy Experience* is calculated by, first, subtracting registration year from survey year and, second, taking the natural log. For firm size, we created two separate variables, based on Likert scale measures of the number of employees at startup and the amount of the equity value at startup, respectively. We base our tests of H4 on a measure, *Political Connection*, that is a dummy variable representing whether an entrepreneur was previously an SOE Manager, Government Official, or in the Military. In models not testing H4, we disaggregate each of these specific entrepreneur characteristics into separate control variables representing each of these components. Finally, we test the role of owner gender with a dummy variable, *Female Owner*.

*Control Variables.* We introduce controls at the level of the entrepreneur, firm, and province levels. At the entrepreneur level, we include additional dummies for whether they had experience as an SOE employee or an undergraduate degree, At the firm level, we have dummies for whether it operated on the owner's own household land, whether it had a Land Use Rights Certificate for the land it operated on, whether it had received a bank loan, and whether it was an exporter. Finally, at the province level, we include measures for population, average income, inequality (based on dividing the income of the top quintile by the income of the bottom quintile), the share of households with electricity, and a score of provincial government quality. The provincial government quality score is based on a range of questions on government transparency, responsiveness, and public services. For greater detail on how this is calculated, please see Malesky, Pham, and Phan (2018, p. 59). Data on other province-level control variables was sourced from Vietnam's General Statistics Office (<https://www.gso.gov.vn/en/homepage/>).



## EMPRICAL RESULTS

### Descriptive Statistics

Table 1 presents basic descriptive statistics for all variables in our empirical analyses and Table 2 presents correlations between variables. Focusing first on our dependent variable, 60 percent of firms reported being profitable, including 52.6 percent reporting “Small profits” (4) and 6.4 percent reporting “Profits as expected” (5). Another 26.2 percent reported losses, including 22.4 percent reporting “Small losses” (2) and 3.8 percent reporting “Large losses.” The remaining 14.9 percent reported “Break even.” Performance was positively correlated with variables for time since registration (0.18) and startup employment (0.13). Interestingly, its correlations with starting equity—which was naturally highly correlated with starting employment (0.39)—was only barely positive (0.03). Similarly, performance was only modestly correlated with political connections (0.03) and female ownership (-0.01).

Entry into the informal economy at startup was very common in the sample (61%). Immediate registration at startup was not surprisingly correlated positively with starting employment (0.15) and equity (0.14) and registration as a joint-stock company (0.17). It was negatively correlated with the owner having been an SOE employee (-0.09) and the firm operating on household land (-0.17) or in the services industry (-0.1). With respect to time spent in the informal economy, only 1.2 percent spent at least a year, including 0.5 percent that spent one year and 0.2 percent that spent two years.

With respect to formal economy experience, 28.8 percent of firms were surveyed within two years of their registration year and 65.6 percent within five years. In terms of employees, 45.6 percent started with less than five, another 30.6 percent started with five to nine, and 20.4 percent started with ten to 49. Equity at startup had a more bell shaped distribution, with 16.9

percent starting with less than half a billion Vietnam dong (VND), 21.4 percent starting with half to one billion VND, and the largest share of 45.1 percent starting with one to five billion VND. For context, based on the end-of-year 2015 exchange rate of USD1=VND,22,550, one billion VND equals approximately USD 44,346. Fortunately for our purposes, the USD-VND exchange rate has been relatively stable over time. Interestingly, employees at startup was more correlated with loan access, land use rights, and formal experience than was starting equity.

Across our sample, 11 percent of firms were politically connected in some identifiable way. The largest group were the 8 percent for which the owner had been an SOE manager. These connected firms were more likely to start bigger, to have land use rights certificates, and to get bank loans. Perhaps different than some other emerging economy settings, being politically connected also meant being much less likely to have a university degree.

Finally, women accounted for 21 percent of firm owners. They generally started smaller, were more likely to operate their firm on household land, and were less likely to have political connections.

## **Regression Results**

*The Baseline Horse Race.* Our basic specification involves OLS regression with two-way clustering of errors by survey year and province and fixed effects for survey year. We also re-ran all of our models using poisson and negative binomial regression models and got similar results.

Reflecting the mixed record in past work that led us to our horse race framing, the results we present in Table 2 are not conclusive. We find some limited support for the performance benefits of starting informal (H1b) and none for those of immediate registration (H1a). The coefficient on *Registration at Startup* is never statistically significant in any of the models, but is always negative. The limited evidence we do find for H1b is the positive and highly significant

coefficients on *Informal Years Before Registration* in all models, indicating that—controlling for immediate formal entry—staying informal for longer had a positive effect on firm performance.

Table 3 presents results consistent with our prediction that the performance effect of starting formal gets better with more formal economy experience (H2). Models 1 and 2 include negative and significant coefficients on *Registration at Startup* when the sample is constrained to less than two and four years after registration, respectively. The performance effect of formalization decreases in size across these two models and disappears in Model 3, which constrains the sample to observations of four or more years post registration. Moving to a full sample and an interaction of post-registration experience and *Registration at Startup* confirms that the differences across time are significant. Differences in *Informal Years Before Registration* across time, however, are not statistically significant.

*Moderating Privileged Resource Access Hypotheses.* Tables 4-6 present evidence that largely supports all three of our hypotheses arguing that firms with more privileged access to external resources in the formal economy will see a better performance effect for immediately registering with government at startup.

Table 4, which tests our hypothesis that the benefits of starting formal increase with firm size at startup (H3), produces the most mixed evidence of the three. Specifically, the evidence based on size as measured by *Employees at Startup* strongly supports H3, but the evidence based on size as measured by *Equity at Startup* goes the opposite direction. Model 1 begins by constraining the sample to just firms that had less than five employees at startup and produces a coefficient on *Registration at Startup* that is negative and weakly significant ( $p=0.07$ ). This significance then disappears in Model 2, where the sample is constrained to firms with five employees or more at startup. In Model 3, the negative and highly significant coefficient on the

interaction between *Employees at Startup* and *Registration at Startup* confirms that the statistical significance of the positive moderating influence of startup size, in terms of employees, on the relationship between immediate formalization and firm performance. Adding to this story is that the coefficient on *Informal Years Before Registration* also goes from positive and significant ( $p=.001$ ) in Model 1 to insignificant in Model 2. We bring in an interaction with *Employees at Startup* in Model 4, which produces a negative and weakly significant coefficient ( $p=0.09$ ), indicating that the benefits to spending longer in the informal economy fall as a firm's starting number of employees increases. Both coefficients remain similarly significant in the full Model 9.

Contrary to H3, and perhaps our most surprising results, however, are our findings indicating that the relationship between *Registration at Startup*'s performance effect and a firm's starting equity value goes in the opposite direction. Our initial splitting of the sample between firms with less than VND 1 billion in equity at startup and those above this level does not show any significance for immediate registration at either level. But when we introduce the interaction of *Registration at Startup* and *Equity at Startup* in Model 7, its coefficient is negative and weakly significant ( $p>0.06$ ). As such, it appears that the driver of this effect occurs at larger firm size levels. The size and significance of this coefficient both increase substantially when paired with the opposing interaction with starting employee size in the full Model 9. We consider potential interpretations of this result in the Discussion Section. The interaction of starting equity and *Informal Years Before Registration*, however, is indistinguishable from zero in both Models 8 and 9.

Table 5 provides evidence supporting our hypothesis that politically connected firms will benefit more from immediate formalization than firms without such contacts (H4). Model 1

constrains the sample to firms led by entrepreneurs that did not previously work for government, for the military, or as a manager of an SOE. Here the coefficient on immediate registration is negative and weakly significant ( $p < 0.07$ ). In Model 2, which analyzes only firms whose owners did have one of these types of political connections, the coefficient is not distinguishable from zero. The interaction of *Political Connection* and *Registration at Startup* in Model 3 is positive and significant ( $p < 0.02$ ), confirming the statistical significance of this difference. There does not, however, appear to be a statistically significant difference in the value of spending longer in the informal economy for politically connected versus unconnected firms. Results are unchanged by including both interactions together in Model 5.

Finally, Table 6 also provides evidence in support of our hypothesis that immediate formalization will be more beneficial for male-founded firms than for female-founded firms (H5). Model focuses on only male entrepreneurs and finds no effect for *Registration at Startup*. Model 2 then focuses only on female-owned firms and produces a negative and highly significant coefficient ( $p < 0.01$ ) on *Registration at Startup*. The significance of the difference between Model 1 and 2 is confirmed by the negative and significant coefficient on the interaction between *Female Owner* and *Registration at Startup* in Model 3. We do not, however, find any gender influence on the performance effect of spending more time in the informal economy before registration.

Models 6-8 in Table 6 then show the results on all of the moderating hypotheses interactions to be robust to a set of increasingly stringent specifications. Model 6 combines all eight interactions and the main difference is just that the significance for the *Reg at Startup x Pol Connection* coefficient falls slightly to  $p = 0.07$ . Model 7 then adds in the two temporal dynamics

interactions, with little influence on any of the moderating effects. Finally, Model 8 adds in provincial fixed effects, but, again, this does not weaken the results.

## **DISCUSSION AND CONCLUSIONS**

We find evidence in a decade's worth of responses to annual surveys in Vietnam that, on net, domestic private firms have performed better when they initially start operations in the informal economy rather than immediately registering with government. This difference is particularly evident in the first years after registration. Consistent with what we term the Internal Resources Development Mechanism, we find that the benefits of starting in the informal economy are greatest for firms lacking the entrepreneurial ties that facilitate overcoming institutional voids in external resource markets. In so doing, we extend theory on the mechanism by which the business formalization decision influence subsequent firm performance by adding in the role of heterogeneity in founder characteristics. This also represents a contribution to the institutional voids literature, which has focused overwhelmingly on strategic implications for large, elite firms at the expense of those for the vast majority of emerging economy firms.

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**Table 1: Descriptive Statistics**

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Variable Name	Obs	Mean	Std. Dev.	Min	Max
Firm Performance	41,052	3.35	1.01	1	5
Registered at Startup	41,052	0.39	0.49	0	1
Years Informal Before Registration	41,052	0.03	0.40	0	11
Equity at Startup	41,052	2.72	1.17	1	8
Employees at Startup	41,052	1.86	0.96	1	8
Owner's Household Land	41,052	0.55	0.50	0	1
Land Use Rights Certificate	41,052	0.38	0.48	0	1
Bank Loan	41,052	0.44	0.50	0	1
Exporter	41,052	0.06	0.24	0	1
Female Owner	41,052	0.21	0.41	0	1
SOE Employee	41,052	0.11	0.31	0	1
SOE Manager	41,052	0.08	0.26	0	1
Government Official	41,052	0.02	0.15	0	1
Military	41,052	0.02	0.15	0	1
Political Connection	41,052	0.11	0.32	0	1
University Degree	41,052	0.63	0.48	0	1
Population (logged)	41,052	7.25	0.71	5.7	9.1
Income Inequality	41,052	7.46	1.07	5.4	11.1
Average Income	41,052	7.88	0.49	6.3	8.9
Share of Households with Electricity	41,052	97.91	4.74	55.8	100.0
Provincial Governance at Registration	41,052	56.83	6.08	41.6	76.0
Limited Liability Company	41,052	0.64	0.48	0	1
Joint Stock Company	41,052	0.20	0.40	0	1
Construction	41,052	0.24	0.43	0	1
Services	41,052	0.64	0.48	0	1
Agriculture	41,052	0.07	0.26	0	1
Mining	41,052	0.02	0.13	0	1
Formal Economy Experience	41,052	1.31	0.73	0	3.296

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**Table 2: Correlation Table**

Variable Name	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
1 Firm Performance	1.00																											
2 Registered at Startup	-0.01	1.00																										
3 Years Informal Before Registration	0.01	-0.07	1.00																									
4 Equity at Startup	0.03	0.14	0.01	1.00																								
5 Employees at Startup	0.13	0.15	0.01	0.39	1.00																							
6 Owner's Household Land	0.06	-0.17	-0.01	-0.13	-0.10	1.00																						
7 Land Use Rights Certificate	0.10	-0.01	0.02	0.13	0.20	0.22	1.00																					
8 Bank Loan	0.10	-0.05	0.01	0.13	0.16	0.05	0.18	1.00																				
9 Exporter	-0.01	0.06	0.01	0.13	0.12	-0.08	0.03	0.02	1.00																			
10 Female Owner	-0.01	-0.04	0.00	-0.05	-0.05	0.04	0.02	-0.02	0.00	1.00																		
11 SOE Employee	0.01	-0.09	-0.01	-0.04	-0.04	0.04	0.00	0.03	-0.01	0.02	1.00																	
12 SOE Manager	0.02	-0.01	0.01	0.04	0.06	0.00	0.05	0.04	0.03	-0.03	-0.01	1.00																
13 Government Official	0.02	0.02	0.00	0.03	0.03	-0.02	0.02	0.00	0.01	-0.01	-0.03	0.04	1.00															
14 Military	0.01	-0.04	0.01	0.01	0.02	0.02	0.04	0.02	0.00	-0.06	-0.03	0.00	0.03	1.00														
15 Political Connection	0.03	-0.02	0.01	0.04	0.06	0.01	0.07	0.04	0.02	-0.05	-0.04	0.79	0.42	0.43	1.00													
16 University Degree	-0.02	0.03	0.01	0.04	-0.04	-0.10	-0.15	-0.06	0.05	-0.03	-0.22	-0.11	-0.03	-0.11	-0.16	1.00												
17 Population (logged)	-0.05	0.07	0.01	-0.02	-0.04	-0.10	-0.14	-0.10	0.06	0.01	-0.03	-0.02	-0.01	-0.02	-0.03	0.09	1.00											
18 Income Inequality	-0.01	-0.03	0.01	0.04	-0.09	-0.01	-0.04	-0.01	0.01	0.02	0.01	0.00	0.01	0.00	0.00	0.08	-0.03	1.00										
19 Average Income	-0.08	-0.03	0.02	0.04	-0.13	-0.10	-0.20	-0.11	0.12	0.03	-0.01	-0.03	-0.02	-0.02	-0.04	0.21	0.54	0.13	1.00									
20 Share of Households with Electricity	-0.05	-0.03	0.01	-0.03	-0.05	-0.04	-0.07	-0.04	0.05	0.02	-0.01	-0.01	-0.01	-0.02	-0.02	0.08	0.33	-0.03	0.56	1.00								
21 Provincial Governance at Registration	-0.06	0.00	0.00	-0.02	-0.06	-0.02	-0.05	-0.09	0.04	0.02	-0.01	-0.02	-0.02	-0.03	-0.03	0.06	0.11	-0.08	0.34	0.24	1.00							
22 Limited Liability Company	-0.03	-0.06	0.00	-0.10	-0.09	0.05	-0.09	-0.04	0.01	0.04	-0.01	-0.04	-0.04	-0.02	-0.05	0.02	0.00	-0.02	0.09	0.05	0.07	1.00						
23 Joint Stock Company	-0.01	0.17	0.00	0.27	0.19	-0.18	-0.03	0.03	0.04	-0.10	-0.03	0.05	0.04	0.00	0.05	0.13	0.08	0.03	0.00	-0.03	-0.08	-0.67	1.00					
24 Construction Services	0.07	0.06	-0.01	0.08	0.06	0.07	-0.05	0.00	-0.10	-0.13	0.01	0.02	0.00	-0.01	0.01	0.09	-0.11	0.01	-0.13	-0.13	-0.08	-0.03	0.12	1.00				
25 Agriculture	-0.02	-0.10	0.01	-0.15	-0.17	0.01	-0.04	-0.03	-0.04	0.13	0.02	-0.01	0.01	0.01	-0.01	-0.04	0.10	-0.03	0.08	0.08	0.03	0.05	-0.12	-0.55	1.00			
26 Mining	-0.05	-0.03	0.00	0.06	0.06	-0.01	0.08	0.05	0.11	-0.02	-0.01	0.02	0.02	0.01	0.03	0.00	-0.06	0.05	-0.04	-0.01	-0.01	-0.01	0.01	-0.12	-0.28	1.00		
27 Formal Economy Experience	-0.02	0.03	0.01	0.08	0.05	-0.04	0.04	0.01	0.01	-0.02	0.00	0.02	0.01	0.01	0.03	-0.01	-0.06	0.01	-0.08	-0.07	-0.04	-0.03	0.05	-0.02	-0.11	0.00	1.00	
28	0.18	-0.02	-0.04	0.07	0.16	0.01	0.11	0.18	0.02	-0.01	0.03	0.03	0.02	0.04	0.05	0.02	0.00	0.06	0.12	0.03	-0.18	-0.10	0.07	0.02	-0.03	-0.03	0.01	1.00

**Table 2: The Performance Effect of Starting Up Formal (H1a v. H1b Horse Race Test)**

		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
		Reg at Startup	Years Informal	Both Formality	Equity at Startup	Employee at Startup	Both Startup Size Vars	Firm Controls	Province Controls	Province FE
Firm Formality at Startup	Registered at Startup	-0.015 (0.438)		-0.008 (0.688)	-0.016 (0.375)	-0.028 (0.105)	-0.028 (0.103)	-0.011 (0.489)	-0.020 (0.182)	-0.019 (0.152)
	Years Informal Before Registration		0.015*** 0.000	0.015*** 0.000	0.016*** 0.000	0.011*** 0.000	0.012*** 0.000	0.012*** 0.000	0.037* (0.020)	0.036* (0.020)
Firm Size at Startup	Equity at Startup				0.032*** (0.000)		0.004 (0.370)	-0.003 (0.574)	-0.009 (0.117)	-0.007 (0.253)
	Employees at Startup					0.092*** 0.000	0.091*** 0.000	0.082*** 0.000	0.100*** 0.000	0.098*** 0.000
Firm Level Variables	Operations on Owner's Household Land							0.068*** (0.000)	0.082*** (0.000)	0.078*** (0.000)
	Land Use Rights Certificate							0.088*** 0.000	0.075*** 0.000	0.066*** 0.000
	Bank Loan							0.065** (0.003)	0.086*** (0.000)	0.091*** (0.000)
	Exporter							-0.001 (0.980)	-0.012 (0.604)	-0.010 (0.655)
	Female Owner							-0.016t (0.077)	0.000 (0.965)	-0.004 (0.724)
	SOE Manager							0.052** (0.004)	0.038* (0.016)	0.033* (0.026)
	SOE Employee							0.028 (0.150)	0.017 (0.435)	0.014 (0.502)
	Government Official							0.087*** (0.000)	0.104* (0.011)	0.100* (0.014)
	Military							0.000 (0.984)	0.033 (0.244)	0.040 (0.161)
	University Degree							0.038** (0.001)	0.041** (0.004)	0.042** (0.004)
Provincial Level Variables	Population (logged)								-0.012 (0.375)	-0.105 (0.245)
	Income Inequality (top quintile / Bottom Quintile)								0.006 (0.571)	-0.021 (0.399)
	Average Income								-0.084** (0.003)	0.140 (0.199)
	Share of Households with Electricity								-0.002 (0.260)	0.003t (0.094)
	Provincial Governance (overall PCI score) at Registration								0.001 (0.597)	-0.002t (0.093)
Formal Exp	Formal Economy Experience	0.246*** 0.000	0.244*** 0.000	0.244*** 0.000	0.243*** 0.000	0.216*** 0.000	0.217*** 0.000	0.198*** 0.000	0.240*** 0.000	0.235*** 0.000
	Limited Liability Company	-0.014 (0.293)	-0.018 (0.216)	-0.017 (0.191)	-0.035** (0.008)	-0.051*** (0.000)	-0.054*** (0.000)	-0.033** (0.002)	-0.044*** (0.000)	-0.032*** (0.000)
Firm Legal Form	Joint Stock Company	0.006 (0.782)	-0.012 (0.619)	-0.010 (0.643)	-0.049* (0.017)	-0.082*** (0.000)	-0.090*** (0.000)	-0.067*** (0.001)	-0.108*** (0.000)	-0.081*** (0.000)
	Economic Sector of Business Operations	Construction	0.111*** 0.000	0.114*** 0.000	0.114*** (0.000)	0.114*** (0.000)	0.129*** (0.000)	0.130*** (0.000)	0.127*** (0.000)	0.155*** 0.000
Services		0.016 -0.199	0.019 -0.166	0.018 (0.170)	0.025t (0.082)	0.055*** (0.000)	0.056*** (0.000)	0.048*** (0.000)	0.057*** (0.001)	0.054*** (0.001)
Agriculture		-0.0912*** 0.000	-0.0909*** 0.000	-0.0916*** (0.000)	-0.105*** (0.000)	-0.100*** (0.000)	-0.106*** (0.000)	-0.121*** (0.000)	-0.144*** (0.000)	-0.159*** (0.000)
Mining		-0.155*** 0.000	-0.141*** 0.000	-0.141*** (0.000)	-0.155*** (0.000)	-0.153*** (0.000)	-0.155*** (0.000)	-0.172*** (0.000)	-0.214*** (0.000)	-0.209*** (0.000)
Survey Year Fixed Effects	Province Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	Province Fixed Effects	No	No	No	No	No	No	No	No	Yes
Constant	Constant	2.796*** 0.000	2.796*** 0.000	2.798*** 0.000	2.726*** 0.000	2.700*** 0.000	2.693*** 0.000	2.619*** 0.000	3.472*** 0.000	2.277 (0.118)
	Observations	80,671	78,469	78,469	72,744	73,411	71,432	58,321	41,052	41,052
	R-squared	0.063	0.065	0.065	0.066	0.072	0.072	0.072	0.073	0.081

Note: Robust p-values in parentheses. \*\*\* p<0.001, \*\* p<0.01, \* p<0.05, t p<0.1

**Table 3: The Moderating Effect of Formal Economy Experience on the Performance Effect of Starting Up Formal (H2)**

		(1)	(2)	(3)	(4)	(5)	(6)	(7)
		<2yrs formal experience	<4yrs formal experience	>=4yrs formal experience	Full			
					Reg at Startup x Reg Age	Informal Yrs x Reg Age	Both Formality Vars x Reg Age	Province FE
Firm Formality at Startup	Registered at Startup	-0.0947** (0.004)	-0.0547* (0.045)	0.005 (0.701)	-0.0760* (0.031)	-0.020 (0.183)	-0.0760* (0.031)	-0.0790* (0.016)
	Years Informal Before Registration	0.049 (0.176)	0.0382* (0.027)	0.023 (0.577)	0.0353* (0.025)	0.041 (0.147)	0.036 (0.205)	0.034 (0.228)
Temporal Matters (H2)	Formal Economy Experience (years, logged)	0.299*** 0.000		0.149*** 0.000	0.224*** 0.000	0.240*** 0.000	0.224*** 0.000	0.217*** 0.000
	Reg at Startup x Formal Experience				0.0431* (0.015)		0.0430* (0.016)	0.0458** (0.006)
	Years Informal x Formal Experience					-0.005 (0.885)	-0.001 (0.974)	0.001 (0.980)
	Constant	3.347*** 0.000	3.239*** 0.000	3.661*** 0.000	3.506*** 0.000	3.472*** 0.000	3.506*** 0.000	2.358 (0.107)
	Observations	5,637	17,551	23,501	41,052	41,052	41,052	41,052
	R-squared	0.087	0.079	0.034	0.073	0.073	0.073	0.081

Note: Robust p-values in parentheses. \*\*\* p<0.001, \*\* p<0.01, \* p<0.05, t p<0.1

**Table 4: The Moderating Effect of Firm Size at Startup on the Performance Effect of Starting Up Formal (H3)**

		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
		Full				Full				
		<5 workers @startup	>=5 workers @startup	Reg at Startup x Emp at Startup	Informal Yrs x Emp at Startup	<VND 1 billion @startup	>=VND 1 billion @startup	Reg at Startup x Equity at Startup	Informal Yrs x Equity at Startup	Formality Vars x Startup Size Vars
Firm Formality at Startup	Registered at Startup	-0.0355t (0.067)	-0.003 (0.849)	-0.0793*** (0.000)	-0.020 (0.176)	-0.009 (0.689)	-0.022 (0.331)	0.039 (0.229)	-0.020 (0.180)	-0.007 (0.828)
	Years Informal Before Registration	0.0575*** (0.001)	0.018 (0.425)	0.0372* (0.018)	0.0879** (0.006)	0.0463t (0.064)	0.0356* (0.038)	0.0360* (0.023)	0.050 (0.175)	0.0813* (0.043)
Size Matters (H3)	Equity Size at Startup	-0.010 (0.257)	-0.008 (0.394)	-0.009 (0.114)	-0.009 (0.120)	0.0332* (0.023)	-0.0661*** (0.000)	0.000 (0.974)	-0.009 (0.103)	0.007 (0.437)
	Employees Size at Startup		0.0615** (0.001)	0.0848*** 0.000	0.101*** 0.000	0.0806*** 0.000	0.110*** 0.000	0.100*** 0.000	0.100*** 0.000	0.0793*** 0.000
	Reg at Startup x Emp Size			0.0315*** (0.000)						0.0457*** 0.000
	Informal Yrs x Emp Size				-0.0254t (0.092)					-0.0248t (0.057)
	Reg at Startup x Equity Size							-0.0211t (0.054)		-0.0359*** (0.000)
	Informal Yrs x Equity Size								-0.005 (0.640)	0.002 (0.787)
	Constant	3.877*** 0.000	3.317*** 0.000	3.496*** 0.000	3.468*** 0.000	3.509*** 0.000	3.551*** 0.000	3.446*** 0.000	3.471*** 0.000	3.458*** 0.000
	Observations	18,287	22,765	41,052	41,052	15,703	25,349	41,052	41,052	41,052
	R-squared	0.082	0.044	0.073	0.073	0.074	0.075	0.073	0.073	0.074

Note: Robust p-values in parentheses. \*\*\* p<0.001, \*\* p<0.01, \* p<0.05, t p<0.1

**Table 5: The Moderating Effect of Political Connections on the Performance Effect of Starting Up Formal (H4)**

		(1)	(2)	(3)	(4)	(5)
		Not Connected	Politically Connected	Reg at Startup x Connected	Years Informal x Connected	Both Formality x Connected
Firm Formality at Startup	Registered at Startup	-0.0268t (0.066)	0.036 (0.245)	-0.0260t (0.078)	-0.019 (0.190)	-0.0258t (0.078)
	Years Informal Before Registration	0.0398* (0.013)	0.012 (0.719)	0.0367* (0.020)	0.0396* (0.014)	0.0391* (0.016)
Political Connections Matter (H4)	Political Connection			0.0291t (0.077)	0.0513*** (0.000)	0.0302t (0.059)
	Reg at Startup x Pol Connection			0.0626* (0.014)		0.0613* (0.019)
	Years Informal x Pol Connection				-0.025 (0.433)	-0.020 (0.544)
	Constant	3.435*** 0.000	3.767*** 0.000	3.475*** 0.000	3.474*** 0.000	3.476*** 0.000
	Observations	36,355	4,697	41,052	41,052	41,052
	R-squared	0.073	0.071	0.073	0.073	0.073

Note: Robust p-values in parentheses. \*\*\* p<0.001, \*\* p<0.01, \* p<0.05, t p<0.1



**Table 6: The Moderating Effect of Female Entrepreneurs on the Performance Effect of Starting Up Formal (H5)**

		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
		Male Only	Female Only	Reg at Startup x Female	Years Informal x Female	Both Formality x Female	All Hypothesized Interactions	Plus Time Interactions	Plus Province FE
Firm Formality at Startup	Registered at Startup	-0.013 (0.437)	-0.047** (0.004)	-0.011 (0.476)	-0.020 (0.182)	-0.011 (0.484)	0.002 (0.947)	-0.037 (0.366)	-0.033 (0.425)
	Years Informal Before Registration	0.037t (0.051)	0.036t (0.063)	0.037* (0.020)	0.037t (0.051)	0.038* (0.048)	0.081* (0.045)	0.080* (0.048)	0.078t (0.055)
Gender Matters (H5)	Female Owner			0.015 (0.189)	0.000 (0.969)	0.016 (0.239)	0.015 (0.195)	0.015 (0.190)	0.012 (0.299)
	Reg at Startup x Female Owner			-0.044* (0.024)		-0.044* (0.030)	-0.042* (0.031)	-0.041* (0.036)	-0.041* (0.043)
	Years Informal x Female Owner				-0.001 (0.975)	-0.004 (0.874)			
Size Matters (H3)	Equity Size at Startup	-0.013* (0.048)	0.002 (0.827)	-0.009 (0.110)	-0.009 (0.116)	-0.009 (0.109)	0.007 (0.423)	0.007 (0.409)	0.011 (0.192)
	Employees Size at Startup	0.104*** (0.000)	0.082*** (0.000)	0.100*** (0.000)	0.100*** (0.000)	0.100*** (0.000)	0.080*** (0.000)	0.082*** (0.000)	0.080*** (0.000)
	Reg at Startup x Emp Size						0.044*** (0.000)	0.040*** (0.000)	0.039*** (0.000)
	Informal Yrs x Emp Size						-0.025t (0.053)	-0.025t (0.055)	-0.023t (0.071)
	Reg at Startup x Equity Size						-0.037*** (0.000)	-0.037*** (0.000)	-0.040*** (0.000)
	Informal Yrs x Equity Size						0.002 (0.760)	0.002 (0.762)	0.001 (0.877)
	Political Connection						0.040* (0.018)	0.041* (0.016)	0.038* (0.021)
Political Connections Matter (H4)	Reg at Startup x Pol Connection						0.051t (0.070)	0.049t (0.083)	0.049t (0.061)
	Years Informal x Pol Connection						-0.006 (0.840)	-0.007 (0.820)	-0.008 (0.809)
	Formal Economy Experience	0.240*** (0.000)	0.239*** (0.000)	0.240*** (0.000)	0.240*** (0.000)	0.240*** (0.000)	0.240*** (0.000)	0.226*** (0.000)	0.219*** (0.000)
Temporal Matters (H2)	Reg at Startup x Formal Economy Experience							0.037* (0.036)	0.040* (0.014)
	Years Informal x Formal Economy Experience							0.001 (0.985)	0.003 (0.938)
	Constant	3.456*** (0.000)	3.548*** (0.000)	3.468*** (0.000)			3.454*** (0.000)	3.479*** (0.000)	2.231 (0.129)
Observations	32,439	8,613	41,052			41,052	41,052	41,052	
R-squared	0.074	0.075	0.073			0.074	0.074	0.082	

Note: Robust p-values in parentheses. \*\*\* p<0.001, \*\* p<0.01, \* p<0.05, t p<0.1