



# HOW DO ORGANIZATIONS SHAPE ENTREPRENEURSHIP? EXPLAINING EMPLOYEE ENTREPRENEURS' ENTRY AND PERFORMANCE

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## Abstract

My three-essay dissertation consists of three independent chapters that examine how two major institutions, organizations and family, shape entrepreneurship in Sweden. In chapter one, I frame a contingent approach to social influence on entrepreneurship and empirically test the specifications about the contingencies. I first conceptualize entrepreneurship as a process of discovering and pursuing startup opportunities, I then theorize the conditions that amplify or reduce peer influence on entrepreneurship. In chapter two, I investigate the question of under what conditions spousal couples leave their wage jobs to become co-entrepreneurs. Whereas some spousal couples jointly create new business together, others may decide to have one person becoming an entrepreneur while the other person remaining employed in an established organization. I distinguish between competing theoretical accounts by investigating wives and husbands' transitions into entrepreneurship, taking into account their separate employment in the labor market and their joint household conditions. In chapter three, I investigate how founders and their recruited employees jointly create new businesses, contingent on the founding context of new businesses. I argue that an important dimension of developing routines and delineating boundaries is manifest in entrepreneurs' selections of employees from their local labor markets (Scott 2008). Once recruited, employees join the founders to create new organizations and exert influences on organizations' structures and

performances. Even though entrepreneurs largely follow the blueprints they learned from prior employer organizations to recruit employees, the effects of transferring routines may be contingent on the founding conditions surrounding the new businesses. Tackling these research questions requires big data on founders' employment history and their workplaces. I use a large-scale data set that are well-suited for my research questions, which are *panel data from multiple cohorts* on employer organizations and their employees in all industries in Sweden from 1989 to 2002.

Key words

Entrepreneurship, Social Inequality, Self-employment, Organizations, Peer Influence

## Executive Summary of Dissertation

My three-essay dissertation consists of three independent chapters that examine how two major institutions, organizations and family, shape entrepreneurship. Viewing entrepreneurs as organizational products (Freeman 1986; Stinchcombe 1965), contextual accounts of entrepreneurship have theorized work environments as one of the most important settings explaining individuals' transitions to entrepreneurship (Dobrev and Barnett 2005; Sørensen 2007; Sørensen and Fassiotto 2011). Empirical findings have shown that the vast majority of entrepreneurs discover startup opportunities at their wage jobs in established organizations (Agarwal et al. 2004; Hellmann 2007; Klepper 2001; Klepper and Sleeper 2005). In addition to work environments, family is another social context in which most new businesses are founded. In post-industrial societies where profound social changes in labor market and employment have led to dramatic increases in dual-earner couples, family households have become increasingly important in shaping entrepreneurial processes (Curtis 1986; Western et al. 2008). Thus I examine the joint effects of work environments and family households on entrepreneurial processes – entrepreneurial entry and business outcomes.

## Essay One

The significant contrast between voluminous entrepreneurial attempts and a low likelihood of startup success has led researchers to investigate the consequences of entrepreneurial processes for organizations and individuals (Aldrich and Yang 2012; Sorensen and Sorenson 2007). Theorists have noted that entrepreneurial processes – the foundings and dissolutions of new businesses – generate new populations of organizations and ensure the reproduction of existing populations (Aldrich and Ruef 2006;

Hannan and Carroll 1992). As new organizations emerge, grow, and decline, they shape the opportunity structures facing employees (Carroll et al. 1992; Mamede 2009; Stovel and Savage 2006). Foundings create new jobs, while dissolutions destroy jobs. When former entrepreneurial founders move back to established organizations, they may affect the job mobility of employees working for the organizations to which the entrepreneurs return (White 1970). Many scholars have examined how returns of entrepreneurs to established workplaces affect current employees' within-firm and between-firm job mobility (Haveman et al. 2009 ; Haveman and Cohen 1994; Stovel and Savage 2006), however, we need to know more about the mechanisms by which former entrepreneurs affect their work peers' employment-to-entrepreneurship mobility.

To the extent that individuals' attitudes about startups and their propensities to undertake startup activities are affected by people who already have such experiences, entrepreneurial entry can be seen as an outcome of a social contagion process. The diffusion of social behaviors among peers has previously been investigated in sociological research (Cartwright 1965; Lippitt et al. 1952; March 1955). Empirical evidence has shown that individuals are affected by people with whom they share a social context (Friedkin and Cook 1990; Marsden and Friedkin 1993). For example, the happiness of Americans is affected by the income of those living nearby (Firebaugh and Schroeder 2009); High-school students' college aspirations and attendance are affected by their friends (Hallinan and Williams 1990). Among the many kinds of behaviors occurring in social contexts, peer influence has found to be particularly salient in spreading behaviors that are viewed as deviant, including delinquency (Gardner and Steinberg 2005; Haynie and Osgood 2005), drug use (Kaplan et al. 1984), and health-risk

behaviors (Prinstein et al. 2001). Entrepreneurship – the act of founding a new business – is often seen as somewhat deviant because it is risky and full of uncertainty, as suggested by insights from organizational sociology and organizational theory. Scholars have coined many constructs to describe the precarious life chances of new businesses, including liability of smallness (Freeman et al. 1983), liability of newness (Stinchcombe 1965) and liability of disconnectedness (Powell et al. 1996). Entrepreneurship theories share the insight that a big challenge facing entrepreneurs is how to cope with uncertain situations (Amit et al. 1990; Palich and Bagby 1995; Simon et al. 2000). These theories jointly suggest that entrepreneurial activities may occur as a result of social contagion among peers.

In studies of employee startups (employees leaving their employer firms to found new businesses), some researchers have noted the contagion of entrepreneurship among work peers, indicated by a larger likelihood of employees' transitions into entrepreneurship when they are surrounded by more work peers with startup experiences. The central argument is that social actors in workplaces influence potential entrepreneurs' propensity to start new businesses by shaping their knowledge about startup opportunities and their attitudes about leaving their wage jobs to start new businesses (Kacperczyk 2012b; Nanda and Sørensen 2010). Preliminary results are in support of the peer-influence argument on entrepreneurship: Analyzing a sample of Danish employees at risk of entering into entrepreneurship between 1990 and 1997, Nanda and Sørensen (2010) found that employees are more likely to become entrepreneurs if their coworkers have had prior self-employment experience; Based on data on hedge fund foundings between 1979 and 2006, Kacperczyk (2012b) found that past entrepreneurial behaviors of

university peers are an important driver of individual rates of entrepreneurship. Similarly, Stuart and Ding (2006) found that individual academic scientists' propensities to get involved in entrepreneurship depended on the extent to which their work settings included pro-entrepreneurship scientists. Although these studies support peer influence accounts of entrepreneurship, a deeper understanding of the mechanisms require an investigation of under what conditions former entrepreneurs affect their peers' transitions into entrepreneurship.

The two conditions crucial for the occurrence of peer influence on entrepreneurship concern knowledge of and attitudes about entrepreneurship as individuals discover and evaluate startup opportunities. First, the degree to which knowledge shared by previous entrepreneurs fosters entrepreneurial entry among their peers may depend on whether their knowledge helps identify or/and evaluate startup opportunities in the workplace context. Human capital theory maintains that compared to explicit knowledge codified in formal procedures or written documents, tacit knowledge - know-how or the noncodified components of an activity -- is particularly useful for discovering (hidden) opportunities (Becker 1975; Polanyi 1966). But tacit knowledge about business is difficult to obtain and more specific with regard to the business setting. Research on entrepreneurship has suggested that tacit knowledge about new businesses is highly industry-specific (Agarwal et al. 2004), and is often cultivated via personal experience and practical learning (Davidsson and Honig 2003; Polanyi 1966). Thus, former entrepreneurs would be more likely to contribute to the accumulation of their work peers' tacit knowledge if they have had startup experience in relevant industries.

Second, whether previous entrepreneurs' prior startup experiences encourage their peers to start new businesses may be dependent on if they help would-be entrepreneurs perceive the discovered opportunity to be valuable. Entrepreneurship scholars have argued that individuals are more willing to bear this risk and exploit opportunities when they (1) frame information more positively (Palich and Bagby 1995), or/and (2) perceive higher chances of success (Cooper et al. 1988). Because most startups fail, it is implausible that every entrepreneur's experience would encourage others to do the same. Two conditions might affect the influence of former entrepreneurs on their peers: First, the extent to which their startup experience was positive; Second, individuals' perceptions of others' startup experiences. Previous research has found systematic differences between entrepreneurs and non-entrepreneurs, such as managers of existing firms (Amit et al. 1990; Busenitz and Barney 1997). It shows that entrepreneurs are more likely than others to underestimate the risks, and even when the perceived risks are the same, they tend to overestimate the likelihood that their favored outcomes will occur (Forbes 2005; Zacharakis and Shepherd 2001). Opportunity perception-based explanations also suggested that entrepreneurs are more sensitive to successful events than to failures (Tversky and Kahneman 1974). Thus an in-depth inquiry of peer influence on entrepreneurship needs to unpack how former entrepreneurs' previous experiences affect their work peers' perceptions of opportunity cost of pursuing startup activities.

In my study, I frame a contingent approach to social influence on entrepreneurship and empirically test the specifications about the contingencies. Building on previous studies, I synthesize an entrepreneurial learning perspective and social influence theory to



develop hypotheses. The empirical context for my analysis is the knowledge-intensive industries in Sweden. I conclude the paper by summarizing the key results and discuss implications from my study.

## Essay Two

Post-industrial societies have experienced profound social changes in labor market and employment, leading to dramatic increases in dual-earner couples. In the United States, the percentage of dual earner couples among families with at least one labor force participant has increased to 67% in 2010, from 41% in 1980 (Benson 2010 ). The outnumbering of male earner families by dual-earner families is not limited to the United States but is a feature shared by every capitalist society. In France, 62.4% of couples in 2002 were double earners, according to the Labor Force Survey (LFS) (Lesnard 2008). In Nordic countries, men and women have nearly same labor participation rates in 2010, and a full- time dual-earner family model has become the predominant family model (Larsen and Møberg 2012). Recognizing the rises of dual-earner families in modern society, some sociologists have suggested that family households have become increasingly important in shaping gender inequality (Curtis 1986; Western et al. 2008).

Family households not only redistribute income but also affect men and women's access to opportunities in the labor market. Studies have shown that wives and husbands' socio-economic attainments have become highly interdependent, manifest in their associated earnings (Cancian and Reed 1999; Fernandez et al. 2005; Schwartz 2010; Western et al. 2008), and job mobility (Benson 2010 ; Bielby and Bielby 1992; Geist and McManus 2012). Even though they are seemingly independent employees of the labor

force, wives and husbands often make their joint decisions together and their joint decisions have found to be influential in increasing gender inequality in wage earnings (Sorenson and Dahl 2013).

The existing literature has focused on understanding the conditions under which spousal couples jointly change their wage jobs and how their joint choices affect husbands and wives' wage salaries (Bielby and Bielby 1992; Geist and McManus 2012; McKinnish 2008). The intense focus on wage jobs is natural: most people are employees of established organizations for the bulk of their careers, and most spousal couples earn income from their wage jobs. Yet, employment in an established firm is far from the only career choice (Sørensen and Sharkey 2014), and economic production is far from being entirely separated from family production in modern society (Winch 1970).

Every year, millions of individuals embark on new venture creation and the numbers are still increasing. Empirical evidence has shown that one fifth of American women have had experience with creating new businesses by their mid-thirties (Ferber and Waldfogel 1998), and 40% of American men had such experience by their mid-fifties (Arum and Mueller 2004). In post-industrial societies where the service sector has replaced the manufacturing sector in taking the precedence in the economy (Kalleberg 2011), it is expected that more individuals will enter into entrepreneurship because creating new businesses requires less financial resources than before. Because service industries are less male-predominated than manufacturing, scholars have also anticipated a larger percentage of younger women entering into small enterprises than older cohorts. Among the numerous people starting their own businesses, about 80% of them involve family members and at least 35% of them have spouses as co-owner founders (Aldrich

and Cliff 2003; Ruef et al. 2003; Sharifian et al. 2012). Taking together, numerous spousal couples face the problem of choosing between wage jobs and starting their own new businesses, and their decisions may have profound influences for their careers, as well as their overall family well-being.

This paper investigates the question of under what conditions spousal couples depart from their wage jobs to become co-entrepreneurs. Whereas some spousal couples jointly create new business together, others may decide to have one person becoming an entrepreneur while the other person remaining employed in an established organization. Two theoretical models, one economic, the other sociological, have provided different explanations of the heterogeneity of spousal couples' joint entrepreneurial statuses. The neoclassical economic model conceptualizes entrepreneurship as a process of discovering and pursuing startup opportunities. It posits that individuals acquire knowledge know-how to discover startup opportunities, and they are more likely to exploit opportunities if they can mobilize resources needed for achieving success (Agarwal et al. 2004; Franco and Filson 2006; Hellmann 2007; Shane 2003). In the process of discovering and pursuing startup opportunities, individuals are likely to recruit others when they receive informational or material support from potential team members. An implicit assumption of the neoclassical economic model is that discoveries and pursuit of startup opportunities are gender-neutral, i.e. universalistic with regard to gender. Accordingly, a spousal couple is likely to get involved in creating new businesses together if at least one of them has discovered a startup opportunity and the other person is capable of providing resource. It means that a spousal couple's chances of becoming co-entrepreneurs are independent

of whether it is the wife or the husband who discovers an opportunity or/and initiates entrepreneurial activities.

However, the sociological literature suggests that the process of spousal couples' transitions to co-entrepreneurship may be gender asymmetric. The first potential gender asymmetry may stem from the gender-biased perceptions of entrepreneurial opportunities discovered by men and women. Status expectation theory posits that social beliefs about gender imply hegemonic assumptions, leading individuals to discriminate (often unconsciously and automatically) against women by discounting their competencies at highly valued skills (Berger et al. 1980; Ridgeway et al. 1994). Abundant empirical evidence shows that new venture creation has historically been seen as an arena for businessmen, and the purported characteristics of successful entrepreneurs, such as "agentic," "pragmatic," and "risk-taking," are stereotypically masculine characteristics (Calas et al. 2009). When gender acts as a salient status characteristic, cultural beliefs about gender prescribe higher expectations for men's competence (Foschi 2000). Accordingly, a startup opportunity discovered by a man may be perceived as more promising, and thus worth his own effort and his wife's time and resource. Such a gender-biased perception of men's better capability of identifying startup opportunities makes them more accountable as the person initiating entrepreneurial activities and more likely to convince their spouses to join as co-founders.

The second possible gender asymmetry in the process of co-entrepreneurship may be from family-embedded gender roles, male breadwinner and female homemaker roles (Brines 1994; Gorman 1999). Men and women's self-fulfillment of their gender roles affect their propensities to exit their wage jobs to join their spouses in founding new

businesses. Research has shown that women's own wages are less predictive of their exits from the labor force than their husbands' (Shafer 2011), in spite of women's increased labor participation rates since the 1960s. Similar gender patterns -- women compromise their own careers for families or husbands' entrepreneurial ventures -- have also been found in studies of self-employment (Budig 2006a; Jurik 1998). The implication of these findings for spousal couples' co-entrepreneurship is that even when startup opportunities discovered by men and women are equally valuable, women would be less likely to recruit their husbands as co-founders than men to recruit their wives because normative expectations presume the priority of men's career choice and women's support for their husbands' careers. It suggests that men may be less likely to act as co-founders if they themselves were not persons discovering a startup opportunity.

Distinguishing between the two competing theoretical accounts is crucial for achieving a better understanding of spousal couples' joint choices in the setting of entrepreneurship, which has been less explored than other socioeconomic attainments in the labor market. However, it has been difficult to conduct causal analysis of spousal couples' joint involvement in entrepreneurship rigorously. First, it has been difficult to demonstrate the causal effect of spousal relationships on their co-entrepreneurship. It requires one to sort out the contingent effects of workplaces and family households in a two-stage process: Once men or women identified startup opportunities at their wage jobs, how do gendered roles embedded in spousal relationships affect their spouses' likelihood to join as co-founders? Previous research has suggested that working on wage jobs in established organizations allows prospective entrepreneurs to discover opportunities and assemble resources. In addition, the opportunity cost of launching a startup is dependent

on a promising entrepreneur's current wage salary (Amit et al. 1995). Thus, a prediction of spousal couples' co-entrepreneurship requires information on the potential opportunities wives and husbands face in their workplaces. In addition, family conditions, including the relative wage income of husband and wife, and the number of children, affect the salience and relevance of gendered roles, and accordingly the magnitude of gender asymmetry in decision-making. However, previous designs have rarely collected information on both. Whereas data sets on households, including Panel Study of Income Dynamics, have little information on individuals' workplaces, research designs for businesses, such as Panel Study of Entrepreneurial Dynamics, have focused on new businesses but fail to provide rich information on family households.

Second, it has been difficult to observe a full set of spousal couples' entrepreneurship status even though they all contribute to the heterogeneity: neither of a spousal couple became an entrepreneur, one of them, wife or husband, and both of them. Most previous designs have included entrepreneurial founders and thus left out the group of people who did not become entrepreneurs. Without an observation of a complete set of outcomes regarding entrepreneurial entry, it would be difficult to identify the mechanisms of sorting spousal couples into different entrepreneurial status, in order to explain why some couples become entrepreneurs together whereas others only have one person involved.

I address these limitations by using data from Sweden to investigate wives and husbands' transitions into entrepreneurship, taking into account their separate employment in the labor market and their joint household conditions. Sweden has been an exemplary corporatist society that has a long tradition of adopting public policies to

rectify gender-stereotyped social roles for men and women (Furåker 2005). Studying a country that has always been expected to have less gender inequality than other capitalist societies allows me to demonstrate the resilient cultural beliefs about gender and their effects on perpetuating gender inequality. To develop a theoretical model, I first identify the “lead entrepreneur” and the “follower” in a spousal couple by estimating each person’s propensity to entrepreneurial entry based on organizational conditions. These conditions include networks of work peers and the bureaucratic characteristics of employer organizations. I then theorize family household conditions – spousal couples’ comparative wage advantage and gender expectations associated with children – that affect spousal couples’ joint involvement in entrepreneurship. The data I use for my analysis combine a matched employee-employer data set of working adults in the Swedish labor markets between 1994 and 2002 and a matched husbands-wives data set. While the matched employee-employer data allow me to track employees as examine their workplace conditions, the matched husbands-wives data provide rich information on family households that may contribute to spousal couples’ transitions into entrepreneurship.

My results suggest that women’s chances to become entrepreneurs are constrained by their limited access to entrepreneurial peers at workplaces. Meanwhile, the differential effects of work peers on men and women’s exposures to information on and skills for creating startups are substantially moderated by family conditions. Three family conditions are particularly important: men’s dominance in spousal relationships, the relative comparative advantage of spousal couples’ earnings, and the presence of children in the households. My results show that family-embedded gender logic interacts

with gender difference in social dynamics at workplaces in shaping gender inequality in entrepreneurship.

### Essay Three

Understanding the process of organizational emergence has long been important for theorizing organizations. Since the 1960s, organizational scholars have begun to theorize the conditions that shape the foundings of organizations. A classic approach, typified by perspectives in the entrepreneurship literature, emphasizes entrepreneurial founders and their personal attributes (Aldrich and Waldinger 1990). An alternative approach, typified by theories in the sociology literature, focuses on environmental contexts in which organizations are founded (Aldrich 1979; Johnson 2007; Steinmetz and Wright 1989; Stinchcombe 1965). Over the past four decades, as research into organizational emergence became more developed along these two lines, researchers have begun to pay more attention to the connections between the founders and the environmental context.

Among the many attempts linking entrepreneurial founders and their founding contexts, a fruitful stream of research has been investigating the genealogical process of organizations emergence in which new firms originate from existing organizations (Agarwal et al. 2004; Audia and Rider 2010; Brittain and Freeman 1980; Freeman 1986; Klepper 2001). In a genealogical framework, Phillips (2002) argued that entrepreneurs' knowledge about how to run businesses is largely obtained (consciously or unconsciously) from their prior work experiences. Based on the observation that the vast majority of entrepreneurs have had work experiences in established organizations, Sørensen and Fassiotta (2011) theorized that “organizations are fonts of entrepreneurship” such that the



components and tools that entrepreneurs draw on to build new firms are shaped by their employer organizations. A core proposition regarding the genealogical process of organizational emergence is that entrepreneurs transfer knowledge and routines from previous workplaces to build their new firms. Empirical evidence in support of the close connections between founders' previous workplaces and their new firms has been found in research on a variety of groups, including scientist entrepreneurs (Stuart and Ding 2006; Zucker and Darby 2006), executive managers (Sørensen 1999; Stuart and Sorenson 2003b), and employees of various industries (Audia and Rider 2010; Sorenson and Audia 2000).

While research tapping into the genealogical process of organizational emergence has contributed to the middle-level theories bridging organizational actors and the social contexts, two questions remain underexplored. First, scholars have neglected organizational actors who might be minor figures compared to entrepreneurial founders, but nonetheless are involved in shaping new firms (Ruef 2010: Chapter 4). One of the groups of actors who have been rarely studied by previous research is the group of employees. In theoretical development, scholars have focused on entrepreneurial founders, assuming the founders to be the primary (or the solo) forces driving the development of new organizations (Alvarez and Barney 2005; Bird 1988; Shane 2002). In empirical studies, most researchers have treated initial hiring and subsequent recruitment as temporary outcomes achieved by startups (Barron et al. 1994; Greve 2008). Indeed, organizational emergence is a process in which entrepreneurial founders take on elements from their contexts to construct organizations (Aldrich 2009; Johnson 2007). A crucial element that entrepreneurs draw on from their environment is employees (Aldrich

and Ruef 2006: 93; Scott and Davis 2007: 152). Once recruited, employees join the founders to create new organizations and exert influences on organizations' structures and performances. Even though employers may hire employees that resemble workers in the employers' previous jobs, the effects of transferring routines may be contingent on the broader environmental contexts.

Second, scholars have paid little attention to the contingencies existing at multiple levels that may moderate the effect of transferred routines. Although researchers have convincingly argued that entrepreneurs transfer routines from existing organizations to their new firms (Phillips 2002), less effort has been directed at revealing the conditions under which the transferred routines effectively improve new firms' performance. A few researchers have suggested that the routines that entrepreneurs learn from parent firms might not be favorable for the new firms, under scenarios when there is competition between them and when the routines had led to the failure of parent firms (Phillips 2005; Sørensen 1999). However, a more nuanced understanding of the conditions under which routines influence new firms' performance requires a systematic depiction of the environmental conditions under which new firms are founded.

In this chapter, I address the two underexplored areas by investigating how founders and their recruited employees jointly create new businesses, contingent on the founding context of new businesses. I argue that an important dimension of developing routines and delineating boundaries is manifest in entrepreneurs' selections of employees from their local labor markets (Scott 2008). Once recruited, employees join the founders to create new organizations and exert influences on organizations' structures and performances. Even though entrepreneurs largely follow the blueprints they learned from

prior employer organizations to recruit employees, the effects of transferring routines may be contingent on the founding conditions surrounding the new businesses.