Entrepreneurial Teams, Optimal Team Size, and Founder Exits*

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Abstract

The extant literature on entrepreneurial teams has rarely examined the role of teamsize and team environment for entrepreneurial firm performance and exit of team members from entrepreneurial teams. We contribute to the literature by examining the role of teamsize and team environments of dissonance and synergy for exit of founding team members from entrepreneurial teams using a novel database of entrepreneurial firms. The empirical results suggest that the size of the entrepreneurial team has an inverted U shape relationship with firm performance indicating the existence of an optimal team size for entrepreneurial firms. Further, teams with size larger than the optimal team size and teams in dissonance are more likely to experience founder exits from entrepreneurial teams.

Keywords:

Entrepreneurial Teams, Spinoffs, Team Turnover, Team Entry and Exit, Optimal Team Size, Firm Growth

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1 Introduction

Recent studies suggest that continuous innovative change leads to knowledge accumulation and complexity of knowledge, and this causes individuals to opt for specialisation in knowledge (Jones, 2009). As a result, innovation has become task of specialised individuals (Audretsch, 1995; Jones, 2009; Wuchty et al., 2007). Team formation is desirable when team members gain from complementarities, encourage knowledge transfer of idiosyncratic information, and create synergy (Lazear, 1998; Hamilton et al., 2003; Rose, 2002). A vast body of literature finds that team ownership significantly improves firm performance (Keeley and Roure, 1990; Haleblian and Finkelstein, 1993; Finkelstein and Hambrick, 1990). The size of top management team has a positive impact on innovation in the firm (Somech, 2006) and large teams are more likely to radically innovate (West and Anderson, 1996; Jones, 2009). Top management team size has a positive impact on growth of market share (Hambrick et al., 1996).

However, the extant literature is not unequivocal on the role of teamsize for firm performance. Many studies on team processes are based on an assumption that a large team size can make coordination, communication, allocation of task and decision making more tedious. Large teams are more likely to have disagreements over firm strategy resulting in increased coordination costs for resolving these disagreements. Large teams exhibit greater dependence on unspecified tasks (Hambrick et al., 1996) and are slow in competitive moves (Hambrick et al., 1996). They require greater monitoring and coordination to maintain productivity (Liang et al., 2008). Members of large teams form subteams and are less likely to have agreement over firm's strategy (Iaquinto and Fredrickson, 1998). An increase in team size brings the possibility of free riding by individual members of the team and reduces its efficiency (Alchian and Demsetz, 1972). Large teams may lack commitment, experience more

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conflicts and become ineffective (Chowdhury, 2005; Amason and Sapienza, 1997). This body of research suggests that large team size does not foster firm performance- it may even have a negative influence.

While the debate on the role of teamsize for firm performance remains inconclusive, the role of teamsize for the performance of entrepreneurial firms' and, in particular, its role in shaping exit of team members from entrepreneurial teams has received little attention in the extant literature. Entrepreneurial teams are formed on a basic premise that team members aid firm performance by their own particular expertise, whether it is knowledge, skills or interpersonal relationships. However, teams experience more intra-team disturbances as their size increases. The dissonance and synergy theory of spinoffs proposed in Shrivastava and Rao (2010) suggests that members of teams in dissonance are more likely to exit and start spinoff firms. Thus larger entrepreneurial teams are more likely to experience founding team members exits. This conjecture is tested empirically by examining the factors shaping the growth of entrepreneurial firms and exit of founding team members from entrepreneurial teams.

Unlike earlier studies, we use a large representative database of entrepreneurial firms and examine the role of team characteristics for firm performance as well as exit of founding team members from entrepreneurial teams. We make several important contributions to the literature of entrepreneurial teams, spinoffs and firm growth. First, although a number of studies have examined the role of top management team size for performance of large established firms, the impact of team size for growth of entrepreneurial firms have received little attention in the extant literature. Second, the emerging body of literature on spinoffs

¹A recent exception is Ucbasaran et al. (2003) who study factors influencing entry and exit in a small sample of entrepreneurial teams. In contrast to their study, we use a relatively larger and more representative database of entrepreneurial start-ups; and, many of the results presented here are qualitatively different from their findings.

has rarely examined spinoffs from entrepreneurial ventures, and spinoffs by founding team members of existing entrepreneurial ventures. By examining the exit process of entrepreneurs from the teams they have established, we take a step forward into this relatively unexplored area of research. Further we examine the role of synergy and dissonance in team production environments for founder exits and empirically test the theoretical predictions of Shrivastava and Rao (2010). Shrivastava and Rao (2010) predict that while teams in synergy are less likely to have spinoffs, teams in dissonance are more likely to have them. The empirical results suggest that teamsize has an inverted U shaped relationship with entrepreneurial firms' performance indicating the existence of an optimal team size. Teams that have a size larger than the optimal size under-perform. Teamsize has a significantly positive impact on the exit of founding team members from entrepreneurial teams. Consistent with the hypotheses, the empirical results suggest that team environments of dissonance and synergy influence exits from entrepreneurial teams.

The next section presents the theoretical background and hypotheses linking teamsize and team characteristics with firm performance and exit of team members from entrepreneurial teams. The third section describes the database and descriptive statistics. The fourth section discusses the empirical results. The final section presents conclusions and future research directions.

2 Theoretical Background and Hypothesis

Individuals form teams to accomplish complex tasks. Most teams are formed under an assumption that team environments capitalize on complimentarities leading to more efficient economic outcomes. As a growing body of literature on scientific knowledge production

shows, team formation has become a critical component for advancing scientific knowledge.² There is compelling evidence that radical innovation is more likely to emerge from teams of specialized individuals. By pooling individuals talents, teams resolve complex problems (Hambrick and D'Aveni, 1992; Eisenhardt and Schoonhoven, 1990).³ Using information processing and agency theories, Sanders and Carpenter (1998) show that a large team size enables firms to manage and cope with the information processing demands and agency issues arising from internationalization. Team size is found to have a positive association with firm performance in a variety of settings as larger teams are likely to have more resources (Cooper and Bruno, 1977; Eisenhardt and Schoonhoven, 1990; Feeser and Willard, 2006; Haleblian and Finkelstein, 1993; Colombo and Grilli, 2005).

Entrepreneurs face formidable constraints in the firm start-up process. A majority of individuals give-up on their entrepreneurial ambitions because of these constraints and never become entrepreneurs. An alternate route to escaping these constraints is to form teams with individuals who can provide complimentary skills for the start-up firm in its nascence. In dynamic environments and industries with rapid technological change, firms are more likely to be started by entrepreneurial teams (Cooper and Bruno, 1977). Entrepreneurial teams are relatively more successful in attracting resources critical to the functioning of start-up firms. Venture capitalists are more likely to fund teams of entrepreneurs and even traditional financial institutions such as banks are more likely to provide support for teams of entrepreneurs (Teece, 1982; Cooper and Daily, 2000; Beckman et al., 2007). A vast body of literature suggests that ventures found by entrepreneurial teams are often more successful

²In many disciplines it is increasingly observed that scientific articles are written by teams of authors, and the size of such scientific teams in increasing over time.

³Firms nearing bankruptcy tended to have smaller teams Hambrick and D'Aveni (1992). D'Aveni (1990) also argue that organisations with large top management teams are less likely to be bankrupt however they do not find a significant relationship.

than those founded by solo entrepreneurs (Cooper and Bruno, 1977; Cooper, 1985; Chandler and Hanks, 1998; Roberts, 1991; Finkelstein and Hambrick, 1990; Keeley and Roure, 1990; Haleblian and Finkelstein, 1993). The size of the founding entrepreneurial team has an influence on basic firm strategy and (Beckman, 2006) and is associated with higher firm growth (Cooper and Bruno, 1977; Colombo and Grilli, 2005).

While team formation leads to efficient outcomes in a variety of settings, individuals working in teams face restrictions and must conform to group norms. Actions of team members may not be outcomes of independent thinking, and team members may develop conformist attitudes. Team organization may force individuals to accept majority decisions. Conflicts within the team may inhibit team cohesion and exacerbate team members' discontentment leading to inefficient team outcomes. As Shrivastava and Rao (2010) demonstrate, while synergetic team production environments have superior firm performance, the outcomes of teams in dissonance are less efficient. Although firms started by entrepreneurial teams are expected to outperform firms started by individual entrepreneurs, team production environments of synergy and dissonance play an important role in shaping the team outcomes. The propositions in Shrivastava and Rao (2010) suggest that entrepreneurs in teams with dissonance prefer to exit and start their own teams independently. Furthermore, it is established in the literature that individuals become entrepreneurs for non-pecuniary gains such as freedom and autonomous decision making powers. In entrepreneurial teams, individual entrepreneurs have to sacrifice this freedom to some extent.

An important insight emerging from Kremer's "O-ring theory of development" is that optimal output is determined by the weakest member of a team production environment (Kremer, 1993). As the size of the team increases, arm-length co-ordination costs, information asymmetry with in a team and shirking by individual team members increases. Free

rider problems arise due to the inverse relationship between team size and monitoring (Liang et al., 2008). This results in an inverted U-shaped relationship between effort and team-size (Backes-Gellner et al., 2004). Thus, in large teams, effort exerted by individual team members may be less than optimal team effort in large teams. The team member who exerts the least effort serves as the weakest link in the team, and determines the team outcomes. Following Kremer's "O-ring theory", as large entrepreneurial teams are more likely to have shirking team members, large teams should have lower performance.

Small teams are more aware of team goals and are better acquainted with other team members' personalities, work roles and communication styles (Bradner et al., 2003), larger teams require more monitoring, and have less coordination and effectiveness in innovative strategies (Liang et al., 2008; Chowdhury, 2005; Backes-Gellner et al., 2004; Alchian and Demsetz, 1972). Further, as entrepreneurs group together to form very large teams, asymmetric information about the capabilities of other individuals prevents them from making an accurate assessment of the contribution of the team member. Thus, the ability to identify individuals who contribute most to the team decreases as the size of the team increases. This increases the likelihood that some of the team members are not the "best fit" for the team, resulting in divergence in member entrepreneurs' beliefs about appropriate firm strategy. This may lead to dissonance in the team and cause founding team members to exit from the team.

Although entry and exit of top managers is a widely observed phenomenon across firms, very little is known about entry and exit of entrepreneurs from entrepreneurial teams. Studies focused on large established firms have examined the role of team turnover for organizational

⁴Hambrick et al. (1996) find that although team size is positively related to growth in market share, team size was negatively related to response propensity and to three measures of competitive magnitude (action significance, action noteworthiness, and action scope).

strategy and performance (Hambrick and Mason, 1984; Jackson et al., 1991). In high technology firms almost half of the firms have at least one founder exit (Cooper and Bruno, 1977). The propositions in Shrivastava and Rao (2010) discussed the role of dissonance in teams for team performance and the team member exits. As large teams are more likely to have dissonance because of lack of coordination, free-rider problems and interdependencies, large teams are more likely to be in dissonance. When large founder team size impedes the work processes in the firm as founders have diverse views, less communication and obsolete knowledge or skills, the process of churning the top management team members sets in. This team turnover process adjusts the teams to the optimal size. Thus firms that have large entrepreneurial teams shed team members. These arguments suggest the following hypotheses:

Hypothesis 1a: Entrepreneurial teamsize has an inverted U shaped relationship with firm performance. Put differently, although performance of entrepreneurial firm increases with founding size of the entrepreneurial team, an optimal teamsize exists such that entrepreneurial teams larger than this optimal size under-perform.

Hypothesis 1b: Large entrepreneurial teams are more likely to experience founder exits.

Role of Team and Firm Characteristics for Founder Exits

Team characteristics such as founders' average human capital, entrepreneurial experience, work experience, and team heterogeneity are likely to have an impact on exit of founding team members of entrepreneurial teams (Colombo and Grilli, 2005; Colombo et al., 2004; Gimeno et al., 1997; Watson et al., 2003). Greater human capital stocks in the team can create synergies and decrease the likelihood of exit of founders. Previous entrepreneurial experience and work experience provide entrepreneurial team members with abilities to pursue a wider

scope of entrepreneurial activities and may have a positive impact on their departure from their current team (Gimeno et al., 1997; Stuart Pier and Robert, 1990). Racial composition, and proportion of women may decrease team cohesion and give rise to more disagreements within the team on the one hand, and improve teams' ability to reconcile with opposing viewpoints on the other hand (Smith et al., 2006).

If heterogeneity causes synergies in the team, team members are less likely to exit; however, if heterogeneity causes dissonance in the team, team members are more likely to exit.

Diversity in average effort should proxy for dissonance in the team as it indicates that some
members work less than others. When some owners exert higher effort and others exert much
lower effort, conflicts are likely to result. This may lead to disagreements over allocation
of returns. Thus, diversity in the hours worked is likely to have a positive impact on team
member exits. However, if team members exert high average effort, the team is less likely to
be in dissonance. Thus, a higher average effort by team members should make founders less
likely to exit as it proxies for synergies in the entrepreneurial team.

Entrepreneurial teams with concentrated ownership work differently than the entrepreneurial teams with equally distributed ownership. Firms with team members who have a diverse ownership share will have lesser disagreements as team members have varied levels of control on firm strategy. However, in teams with similar ownership shares across team members, disagreements and conflicts are more likely to result as team members disagree with one another when they have similar control on the firm. In such a setting, distribution of tasks and delegation of decision powers to team members must be clear. These arguments lead to the following hypotheses.

Hypothesis 2a: Entrepreneurial teams that are in dissonance are more likely to experience founder exits.

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Hypothesis 2b: Entrepreneurial teams that are in synergy are less likely to experience founder exits.

3 Data

The database of entrepreneurial firms examined in this study is the collected by the Kaufman Foundation. Data on nearly 5000 entrepreneurial firms are collected beginning from 2004 using a stratified sampling methodology to ensure representativeness of the sample. The sampling design for data collection is extensively documented (DesRoches et al., 2010).

Insert Table 1 about here.

Table 1 provides descriptive statistics for the variables used in the empirical analysis in the next section. Although data is collected for almost 4900 firms, data on employment growth is available for only 3320 firms and data on revenue growth is reported for only 1532 firms. As expected, revenue growth has a greater dispersion compared to employment growth. 14.25% of the firms are in high-tech sector and 21% of the firms have some type of intellectual property (intellectual property = 1 if firm has a patent, trademark or copyright). Nearly 21.5% of firms are actively involved in R &D activities. The average age of the entrepreneurs in the sample is 44.7 years. More than 50% of entrepreneurs in the sample have college degrees. While average working experience of the teams is 12.35 years. Blacks and asians are about 12.5% of the sample. The diversity measures of the team characteristics are generated using Blau (1977) index. Blau's diversity measure is widely used in the literature. It is defined as $Diversity(I) = 1 - \sum (Pi)^2$ where Pi is the proportion of outcome i. While

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perfectly homogenous teams have a diversity measure of 0, perfectly heterogenous teams have a diversity measure equal to 1. Age diversity in the team is measured by the coefficient of variation. For all other team characteristics, diversity measures are constructed using Blau index.

Insert Figure 1 and Figure 2 about here.

Figure 1 and Figure 2 show the relationship between team size and firm growth using bar graphs. Figure 1 presents a plot for a one year period growth rate in employment and Figure 2 presents a plot for a two year period growth rate in employment. A striking observation is that, consistent with the hypothesis 1(a), both plots show that teamsize has a non-linear inverted U shaped relationship with the growth of entrepreneurial firms. Both plots suggest that firm growth increases as entrepreneurs add team members until they form a team of three entrepreneurs. However, firms with entrepreneurial teams of size four or more have lower growth rates than firms owned by entrepreneurial teams with four entrepreneurs.

Insert Figure 3 and Figure 4 about here.

Figure 3 and Figure 4 present plots showing the link between teamsize and team turnover. Team turnover is defined as the net change in the founding teamsize over the first two years after firm founding. A positive team turnover in Figure 3 indicates that teams had net entry over the two year period; a negative team turnover in Figure 3 indicates that team had net exits. Consistent with hypothesis 1(b), both plot shows that while small teams had

positive team turnover, large teams experienced more exits. As Figure 3 does not provide information about average team turnover across teams of different sizes, we plot the average team turnover over the two year period in Figure 4. This plot shows that teams of all sizes experienced net exits over the two year period, and largest teams had the greatest average number of team member exits.

In the empirical analysis presented in the following section, these descriptive relationships are tested more formally using econometric models. The sampling design is taken into account by estimating econometric models of survey data. ⁵ Survey weights provided with the database are used in the estimations.

4 Empirical Results

The following empirical models are estimated to examine the role of team characteristics and firm characteristics for firm growth and exit of team members from entrepreneurial teams:

$$growth_{(t+2,t)} = log(size_{(t+2)}) - log(size_{(t)}) = \alpha + \beta_1 team size + \beta_2 team size^2 + \beta_3 (firm - characteristics) + \beta_4 (team - characteristics) + \epsilon$$

 $teamexit_{(t+2,t)} = 1/0 = \alpha + \beta_1 teamsize + \beta_2 (firm - characteristics) + \beta_3 (team - characteristics) + \epsilon$

For the growth estimations, the full sample of all the firms is considered for analysis to correctly estimate the non-linearity of the teamsize effect. However, for models estimating team exit, a subsample of firms that are owned by entrepreneurial teams of two or more than two entrepreneurs is considered for analysis.

⁵The panel version of the database was at a very early stage of development at the time of writing this article; the analysis is done using the data released in the years 2006, 2007 and 2008.

Insert Table 2 about here.

The estimation results for the firm growth equation are presented in Table 2. The results provide credence to the conjecture that size of the entrepreneurial team has a non-linear effect on firm growth. In particular, the positively significant coefficient on teamsize variable and the negatively significant coefficient on the teamsize squared variable in different specifications estimated in columns (1)-(5) consistently predict that the *optimal team size* is about three members.⁶ Thus, teams of size smaller than three members experience faster growth by the addition of an entrepreneur to the team; however, teams that have more than three members have lower growth rates. This confirms the hypothesis that large entrepreneurial teams are more likely to under-perform.

The estimated coefficients of firm characteristics presented in columns (2) and (3) for firm performance are as expected. While firm size has a significantly negative impact on firm growth, firms' in high-tech industries grow faster by 18-19%. Firms that are home based have lower growth rates, confirming that home based entrepreneurs do not have high growth aspirations. The coefficients of intellectual property and R&D are insignificant suggesting that entrepreneurial firms do not benefit from these immediately in the early phases of firm start-up.⁷

⁶Optimal team size is obtained by dividing the coefficient of the teamsize variable by two times the coefficient of the teamsize squared variable.

⁷ A vast literature has examined the role of firm characteristics for firm growth (see Coad, 2009, for a survey). Firms in high technology sectors are more likely to grow as they are in a dynamic and rapidly evolving environment (Feeser and Willard, 1990). Intellectual property forms resource base of firms, sustains firm specific competitive advantage and plays an important role for firm growth (Zucker et al., 1998; Riahi-Belkaoui, 2003). Innovative effort, measured by firms' commitment to R&D is likely to result in higher growth rate of firms as such firms tend to succeed in the product market (Del Monte and Papagni, 2003).

The effects of team characteristics for firm growth are estimated in the full model in columns (4) and (5) of Table 2. The signs of the estimated coefficients are as expected. However, in contrast to many previous studies, for example, Stuart Pier and Robert (1990), the estimated coefficient of average age is significantly negative. Although age is associated with increased human capital and access to resources, age can diminish cognitive skills and impede growth ambitions of entrepreneurs. Consistent with many prior studies, proportion of females in an entrepreneurial team has a significantly negative impact on firm growth. Extant literature suggests many reasons for this negative effect. Women are more risk averse and prefer stability and they attract fewer financial and technological resources that are critical to the firm growth (Cliff, 1998; Du Rietz and Henrekson, 2000; Verheul and Thurik, 2001).

Consistent with the existing literature, that educated entrepreneurs are capable of attracting more resources for the firm (Colombo and Grilli, 2005; Beckman et al., 2007; Gormon and Sahlman, 1989), education of team founders has a significant and positive impact on firm growth and grow faster. Average number of hours worked proxies for synergy in team. Teams in dissonance are less likely to have members working for longer periods of time. The average number of hours worked by the members of an entrepreneurial team has a significant and positive impact on firm growth. Thus, consistent with the hypothesis 2(a), synergetic teams have higher growth rates. In contrast to earlier studies, the results suggest

⁸Team characteristics such as founders' age, educational background, and functional heterogeneity are likely to influence firm performance (Colombo and Grilli, 2005). Hsu (2007) finds that founding teams with a team member who has doctoral degree are more likely to get higher valuations and funding from venture capitalists. Beckman et al. (2007) find that firms whose top management teams have affiliation diversity are more likely to be successful than firms whose founders have fewer company affiliations. Team composition is an important determinant of exploitative or explorative behaviour in innovation (Beckman, 2006). Individual factors such as industry experience of founders enhance firm survival and sales (Delmar and Shane, 2006). The functional backgrounds of the founders of new ventures (Haleblian and Finkelstein, 1993; Pitcher and Smith, 2001; Somech, 2006) and the social capital of founders (Shane and Stuart, 2002) have a positive influence on firm performance.

that previous experience of team members does not have a significant effects on firm growth in the early phases of their formation. Furthermore, the effect of race is insignificant. Team heterogeneity measures based on these characteristics are all insignificant.

Insert Table 3 about here.

In Table 3, the growth equation is re-estimated using an alternate measure of firm growth (given by growth of revenue over a two year period). The estimated coefficients are broadly consistent with the effects in Table 2. In particular, while team size has a significant and positive coefficient, team size squared has a significant and negative impact on firm growth. Thus, the results are robust to alternate specifications.¹⁰

Insert Table 4 about here.

The estimated results for the team member exit equation are presented in Table 4. The dependent variable for these estimations is binary and takes value 1 if the entrepreneurial team had net exit of team members over a two year period after the start-up and 0 otherwise. Columns (1), (3), and (5) present the estimated coefficients of logistic regression, and columns (2), (4) and (6) present the marginal effects. Consistent with hypothesis 2(b), teamsize has a positive and significant impact on exit of founding team members from entrepreneurial teams in all the specifications suggesting that larger teams are more likely to experience net team exits.

⁹These are not reported here for brevity reasons.

¹⁰For the estimations in Table 5.2, many firms are excluded from the estimations, as the dependent variable, growth in revenue has only 1500 observations.

The proxy for team synergy, average effort, measured by average hours worked by team members, has a significantly negative effect in columns (3)- (5). This supports hypothesis 2(b) that teams in synergy are less likely to experience exits. However, consistent with hypothesis 2(a), the proxy for dissonance, measured by the diversity of effort (hours worked by team members), has a significantly positive impact on exit of founders from entrepreneurial teams suggesting the teams in dissonance are more likely to experience founder exits. As expected, ownership diversity has a significantly negative effect on team exits. Top management teams where ownership is concentrated have different routines compared to when ownership equally distributed. Entrepreneurial teams with a diverse ownership share will have lesser disagreements as team members have varied levels of control on firm strategy. However, in teams with similar ownership shares across team members, disagreements and conflicts are more likely to result as team members may disagree with one another when they have equal control on the firm.

Proportion of women in the team has a significant effect in the second model presented in columns (3) and (4) but the effect disappears when the team heterogeneity measures are introduced in columns (5) and (6). As the negative and significant coefficient on proportion of entrepreneurs with college degrees suggests, teams with more educated entrepreneurs are less likely to have founder exits. This may be because educated individuals have superior social skills that enable them to manage conflicts within the team.

The coefficient of high tech is significantly negative in the base model suggesting that teams in high-technology sectors are less likely to experience exits. However, the significance becomes weaker in the second model presented in columns (3) and (4), and vanishes in the full model presented in columns (5) and (6). All firm level variables are insignificant in the full model specified in columns (5) and (6) suggesting that for founder member exits, team

characteristics play a more important role than firm characteristics.

Insert Table 5 about here.

The logistic estimations estimate the factors influencing exit of team members. However, the logistic regressions treat teams with net team entry and zero team turnover alike (both are coded as 0 exits). In order to disentangle the effects more precisely, a multinomial logistic regression model is estimated in Table 5 to examine the effects of the team size, and team characteristics of dissonance and synergy on team entry, team exit and team neutrality. The dependent variable, "team dynamics" assumes a value equal to 1 if the team had next exits over the two year period. If there was no change in the size of the team the dependent variable teamdynamics is coded as 2. The results of the multinomial estimations for team exit are broadly consistent with the logistic regression equations. The multinomial logit estimation further provides insights into factors shaping entry of team members into entrepreneurial teams. While teamsize does have a positive impact on team member exit, it has no effect on team entry. 11 Team dissonance, measured by the diversity in hours worked has a significantly negative impact on team exits. Furthermore, it has a significantly negative impact on team entry, suggesting that firms in dissonance deter both exit and entry of team members. The measure of synergy, given by the average number of hours worked by team members has an insignificant relationship with exit but a significantly positive relationship with synergy. This result is consistent with the propositions in Shrivastava and Rao (2010)

¹¹This may be explained by the observation that majority of team entry occurs in solo entrepreneur firms, and the sample for the multinomial estimation is restricted to the teams that have at least two entrepreneurs at the first year of start-up. In logistic estimations of team entry on full samples (not reported here), teamsize has a significantly negative effect on team entry.

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and the hypotheses developed in this paper that teams in synergies are less likely to have spinoffs. Positive coefficient of the synergy measure suggests that teams in synergy attract new team members. Teams that have a higher proportion of women entrepreneurs are more likely to have zero turnover during the early periods of firm start-up and less likely to have entry, confirming that women prefer stability in workplace. A similar effect is observed for entrepreneurs with college degrees—teams with a higher proportion of highly educated entrepreneurs are less likely to have founder exits. Such teams are more likely to have a zero turnover.

5 Conclusion

Two broad theories have emerged with regard to the role of teams for firm performance first, a theory of team synergy and second, a theory of team dissonance. The synergy theory
primarily focuses on the positive impact of team ownership on firm performance, and the
dissonance theory cautions about the adverse effects of a large team size for productivity.
This paper brings together these two strands of literature to examine the impact of teamsize
on firm performance and exit of founding team members from entrepreneurial teams.

While the debate on the role of teamsize for firm performance continues to be inconclusive, the extant literature has rarely examined the role of teamsize and team synergy and dissonance for exit of team members from entrepreneurial teams. This article contributes to the extant literature by examining the role of teamsize and team characteristics of dissonance and synergy for exits from entrepreneurial teams using a novel dataset on entrepreneurial firms. The empirical findings presented here suggest that although team ownership has a positive impact on a variety of firm performance measures, the size of the entrepreneurial team has an inverted U shape relationship with these measures indicating the existence of

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an optimal team size for entrepreneurial firms. The results show that teamsize has an inverted U shaped relationship with firm performance suggesting that teams of size larger than optimal team size under-perform. Further, large teams and teams in dissonance shed team members. Both dissonance and synergy have an impact on team member exits. We provide a compelling foundation for studying spinoffs from entrepreneurial teams in future work. Future research can extend this research to more dynamic settings.

References

Alchian, A. and Demsetz, H. (1972). Production, information costs, and economic organization. *The American Economic Review*, pages 777–795.

- Amason, A. and Sapienza, H. (1997). The effects of top management team size and interaction norms on cognitive and affective conflict. *Journal of management*, 23(4):495.
- Audretsch, D. (1995). Innovation and Industry Evolution. MIT Press.
- Backes-Gellner, U., Mohnen, A., and Werner, A. (2004). Team Size and Effort in Start-Up-Teams-Another Consequence of Free-Riding and Peer Pressure in Partnerships. *Social Science Research Network*.
- Beckman, C. (2006). The influence of founding team company affiliations on firm behavior. *Academy of Management Journal*, 49(4):741–758.
- Beckman, C., Burton, M., and O'Reilly, C. (2007). Early teams: The impact of team demography on VC financing and going public. *Journal of Business Venturing*, 22(2):147–173.
- Blau, P. (1977). Inequality and heterogeneity. New York: Free Press.
- Bradner, E., Mark, G., and Hertel, T. (2003). Effects of team size on participation, awareness, and technology choice in geographically distributed teams. *Proceedings of the 36th Hawaii International Conference on System Sciences*.
- Chandler, G. and Hanks, S. (1998). An investigation of new venture teams in emerging businesses. Frontiers of entrepreneurship research, pages 318–330.
- Chowdhury, S. (2005). Demographic diversity for building an effective entrepreneurial team: is it important? *Journal of Business Venturing*, 20(6):727–746.
- Cliff, J. (1998). Does one size fit all? Exploring the relationship between attitudes towards growth, gender, and business size. *Journal of Business Venturing*, 13(6):523–542.
- Coad, A. (2009). The growth of firms: A survey of theories and empirical evidence. Edward Elgar Publishing.
- Colombo, M., Delmastro, M., and Grilli, L. (2004). Entrepreneurs' human capital and the start-up size of new technology-based firms. *International Journal of Industrial Organization*, 22(8-9):1183–1211.
- Colombo, M. and Grilli, L. (2005). Founders' human capital and the growth of new technology-based firms: A competence-based view. *Research Policy*, 34(6):795–816.

Cooper, A. (1985). The role of incubator organizations in the founding of growth-oriented firms. *Journal of Business Venturing*, 1(1):75–86.

- Cooper, A. and Bruno, A. (1977). Success among high-technology firms. *Business Horizons*, 20(2):16–22.
- Cooper, A. and Daily, C. (2000). Entrepreneurial teams. *Entrepreneurship*, 1997:127–150.
- D'Aveni, R. (1990). Top managerial prestige and organizational bankruptcy. *Organization Science*, 1(2):121–142.
- Del Monte, A. and Papagni, E. (2003). R&D and the growth of firms: empirical analysis of a panel of Italian firms* 1. Research policy, 32(6):1003–1014.
- Delmar, F. and Shane, S. (2006). Does experience matter? The effect of founding team experience on the survival and sales of newly founded ventures. *Strategic Organization*, 4(3):215.
- DesRoches, D., Robb, A., and Mulcahy, T. M. (2010). Kauffman Firm Survey (KFS) Baseline/First/Second/Third/Fourth Follow-Ups: Study Metadata Documentation (April 12, 2010).
- Du Rietz, A. and Henrekson, M. (2000). Testing the female underperformance hypothesis. Small Business Economics, 14(1):1–10.
- Eisenhardt, K. and Schoonhoven, C. (1990). Organizational growth: Linking founding team, strategy, environment, and growth among US semiconductor ventures, 1978-1988. *Administrative Science Quarterly*, 35(3):504–529.
- Feeser, H. and Willard, G. (1990). Founding strategy and performance: A comparison of high and low growth high tech firms. *Strategic Management Journal*, 11(2):87–98.
- Feeser, H. and Willard, G. (2006). Founding strategy and performance: A comparison of high and low growth high tech firms. *Strategic Management Journal*, 11(2):87–98.
- Finkelstein, S. and Hambrick, D. (1990). Top-management-team tenure and organizational outcomes: The moderating role of managerial discretion. *Administrative Science Quarterly*, 35(3):484–503.
- Gimeno, J., Folta, T., Cooper, A., and Woo, C. (1997). Survival of the Fittest? Entrepreneurial Human Capital and the Persistence of Underperforming Firms. *Administrative Science Quarterly*, 42(4).
- Gormon, M. and Sahlman, W. (1989). What do venture capitalists do? *Journal of Business Venturing*, pages 231–248.

Haleblian, J. and Finkelstein, S. (1993). Top management team size, CEO dominance, and firm performance: The moderating roles of environmental turbulence and discretion. *Academy of Management Journal*, 36(4):844–863.

- Hambrick, D., Cho, T., and Chen, M. (1996). The influence of top management team heterogeneity on firms' competitive moves. *Administrative Science Quarterly*, 41(4).
- Hambrick, D. and D'Aveni, R. (1992). Top team deterioration as part of the downward spiral of large corporate bankruptcies. *Management Science*, 38(10):1445–1466.
- Hambrick, D. and Mason, P. (1984). Upper echelons: The organization as a reflection of its top managers. *Academy of management review*, 9(2):193–206.
- Hamilton, B., Nickerson, J., and Owan, H. (2003). Team incentives and worker heterogeneity: An empirical analysis of the impact of teams on productivity and participation. *Journal of Political Economy*, 111(3).
- Hsu, D. (2007). Experienced entrepreneurial founders, organizational capital, and venture capital funding. *Research Policy*, 36(5):722–741.
- Iaquinto, A. and Fredrickson, J. (1998). Top management team agreement about the strategic decision process: A test of some of its determinants and consequences. Strategic Management Journal, 18(1):63-75.
- Jackson, S., Brett, J., Sessa, V., Cooper, D., Julin, J., and Peyronnin, K. (1991). Some differences make a difference: Individual dissimilarity and group heterogeneity as correlates of recruitment, promotions, and turnover. *Journal of Applied Psychology*, 76(5):675–689.
- Jones, B. (2009). The burden of knowledge and the death of the renaissance man: Is innovation getting harder? *Review of Economic Studies*, 76(1):283–317.
- Keeley, R. and Roure, J. (1990). Management, strategy, and industry structure as influences on the success of new firms: A structural model. *Management Science*, pages 1256–1267.
- Kremer, M. (1993). The O-ring theory of economic development. The Quarterly Journal of Economics, 108(3):551–575.
- Lazear, E. P. (1998). Personnel Economics for Managers. New York: Wiley.
- Liang, P., Rajan, M., and Ray, K. (2008). Optimal team size and monitoring in organizations. *Accounting Review*, 83(3):789.
- Pitcher, P. and Smith, A. (2001). Top management team heterogeneity: Personality, power, and proxies. *Organization Science*, 12(1):1–18.

Riahi-Belkaoui, A. (2003). Intellectual capital and firm performance of US multinational firms. *Journal of Intellectual Capital*, 4(2):215–226.

- Roberts, E. (1991). Entrepreneurs in high technology: Lessons from MIT and beyond. Oxford University Press New York.
- Rose, D. (2002). Marginal productivity analysis in teams. *Journal of Economic Behavior and Organization*, 48(4):355–363.
- Sanders, W. and Carpenter, M. (1998). Internationalization and firm governance: The roles of CEO compensation, top team composition, and board structure. *Academy of Management Journal*, 41(2):158–178.
- Shane, S. and Stuart, T. (2002). Organizational endowments and the performance of university start-ups. *Management Science*, 48(1):154–170.
- Shrivastava, M. and Rao, T. (2010). Organizational Synergies, Dissonance, and Spinoffs. *Available at SSRN*, *Social Science Research Network*.
- Smith, N., Smith, V., and Verner, M. (2006). Do women in top management affect firm performance? A panel study of 2,500 Danish firms. *International Journal of Productivity and Performance Management*, 55(7):569–593.
- Somech, A. (2006). The effects of leadership style and team process on performance and innovation in functionally heterogeneous teams. *Journal of Management*, 32(1):132.
- Stuart Pier, A. and Robert, W. (1990). Impact of entrepreneurial and management experience on early performance. *Journal of Business Venturing*, 5(3):151–162.
- Teece, D. (1982). Towards an economic theory of the multiproduct firm. *Journal of Economic Behavior & Organization*, 3(1):39–63.
- Ucbasaran, D., Lockett, A., Wright, M., and Westhead, P. (2003). Entrepreneurial founder teams: Factors associated with member entry and exit. *Entrepreneurship Theory and Practice*, 28(2):107–128.
- Verheul, I. and Thurik, R. (2001). Start-Up Capital: Does Gender Matter? Matter? Small Business Economics, 16(4):329–346.
- Watson, W., Stewart, W., et al. (2003). The effects of human capital, organizational demography, and interpersonal processes on venture partner perceptions of firm profit and growth. *Journal of Business Venturing*, 18(2):145–164.
- West, M. and Anderson, N. (1996). Innovation in top management teams. *Journal of Applied Psychology*, 81(6):680–693.

Wuchty, S., Jones, B., and Uzzi, B. (2007). The increasing dominance of teams in production of knowledge. *Science*, 316(5827):1036.

Zucker, L., Darby, M., and Brewer, M. (1998). Intellectual human capital and the birth of US biotechnology enterprises. *The American Economic Review*, 88(1):290–306.

Figure 1: Growth (t+1, t) and Teamsize

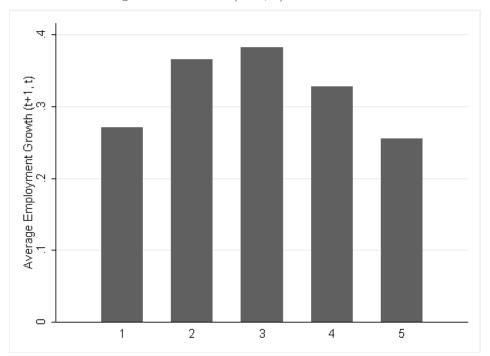
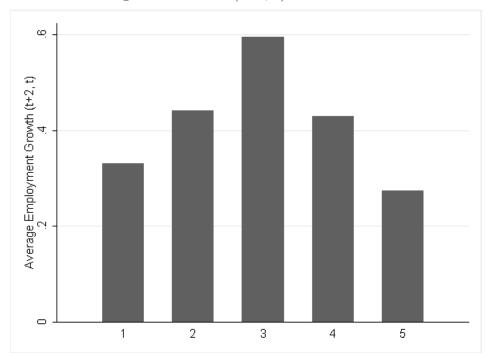


Figure 2: Growth (t+2, t) and Teamsize



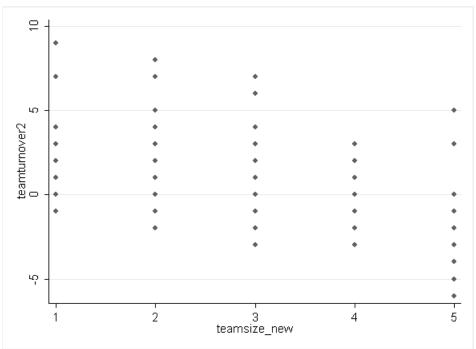


Figure 3: Turnover (t+2, t) and Teamsize

Figure 4: Average Turnover (t+2, t) and Teamsize

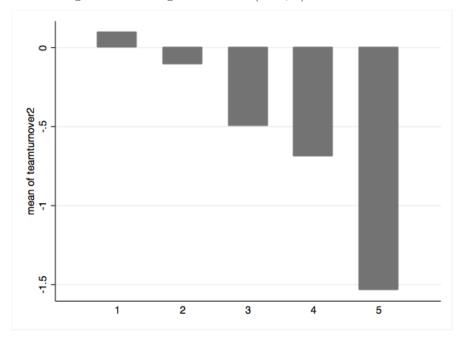


Table 1: Summary Statistics

Employment Growth $(t+2, t)$ 3320 .3720365 .765836 -2.876386 4.795791 Revenue Growth $(t+2, t)$ 1532 1.008677 1.549933 -6.907755 13.12236 Teamsize (All firms) 4876 1.410582 .7266381 1 7
Teamsize (All firms) 4876 1.410582 .7266381 1 7
Teamsize (Only Teams) 1524 2.313648 .7092282 2 7
Log (Employment) 4782 .5542046 .810091 0 5.111988
High Tech 4884 .1425061 .3496043 0 1
Intel. Property 4884 .2119165 .4087078 0 1
Homebased 4878 .5065601 .5000082 0 1
R and D 4865 .2141829 .4102965 0 1
Avg. Age 4832 44.7265 10.3657 17 87
Prop. Female 4878 .2738076 .4037407 0 1
Prop. College 4875 .5104249 .4769372 0 1
Prop. Some College 4875 .3542271 .4499313 0 1
Average Experience 4871 12.35658 10.01321 0 60
Avg. Hours Worked 4798 40.63816 23.02989 0 120
Avg. Buss. Owned 4871 .9351311 2.228059 0 65
Prop. Black 4810 .0842238 .2738091 0 1
Prop. Asian 4810 .0407138 .1904053 0 1
Age Diversity 4832 .2311859 .8438673 0 12.05645
Gender Diversity 4878 .0717277 .173266 0 0.5
Education Diversity 4875 .0629023 .1648445 0 0.6666666
Racial Diversity 4810 .021405 .100684 0 0.6666666
Other Business Diversity 4871 .0652051 .1683166 0 0.6666666
Experience Diversity 4871 .0784376 .181213 0 0.6666666
Ownership Diversity 4850 .2244824 .3879486 0 1
Hours Worked Diversity 4798 .1767544 .3381261 0 1

Table 2: Team Characteristics and Firm Growth (Employment)

	Team Charac	deristics and		т (Ешрюушен	
Teamsize	0.288***	0.285***	0.262***	0.317***	0.418***
	(0.0589)	(0.0591)	(0.0592)	(0.0579)	(0.0968)
Teamsize Square	-0.0438***	-0.0437***	-0.0430***	-0.0471***	-0.0632***
	(0.0113)	(0.0114)	(0.0117)	(0.0110)	(0.0150)
Log (Employees)	-0.252***	-0.254***	-0.300***	-0.324***	-0.320***
	(0.0184)	(0.0185)	(0.0207)	(0.0215)	(0.0214)
High Tech		0.191***	0.174***	0.186***	0.180***
		(0.0424)	(0.0417)	(0.0419)	(0.0421)
Intel. Property		0.0345	0.0246	-0.0100	-0.0134
		(0.0365)	(0.0361)	(0.0367)	(0.0372)
Homebased			-0.274***	-0.226***	-0.224***
			(0.0330)	(0.0334)	(0.0335)
R and D			0.00724	-0.0305	-0.0239
			(0.0383)	(0.0383)	(0.0385)
Avg. Age				-0.00953***	-0.00928***
				(0.00151)	(0.00151)
Prop. Female				-0.0986***	-0.0894**
				(0.0364)	(0.0373)
Prop. College				0.0776*	0.0794*
				(0.0443)	(0.0452)
Prop. Some College				0.00300	0.00530
				(0.0462)	(0.0463)
Average Experience				0.00592***	0.00562***
				(0.00151)	(0.00151)
Avg. Hours Worked				0.00386***	0.00375***
				(0.000718)	(0.000723)
Avg. Buss. Owned				0.00956	0.00967
				(0.00892)	(0.00902)
Prop. Black				0.0761	0.0694
				(0.0550)	(0.0549)
Prop. Asian				0.0638	0.0640
				(0.0959)	(0.0973)
Diversity Measures	No	No	No	No	Yes
					(insig)
Constant	0.208***	0.203***	0.394***	0.498***	0.408***
	(0.0571)	(0.0571)	(0.0637)	(0.112)	(0.129)
Observations	3315	3315	3302	3198	3186
R-squared	0.072	0.073	0.103	0.140	0.143
F	65.71	43.45	35.39	21.08	14.54

Notes: *Signifies p< 0.05; ** Signifies p<0.01;*** Signifies p<0.001. Standard errors are reported in parentheses. Dependent variable is growth in employment in two years after start-up.

Table 3: Team Characteristics and Firm Growth (Revenue)

Teamsize	0.836***	0.829***	0.793***	1.025***
Teamsize Square	(0.221) -0.0860* (0.0511)	(0.223) -0.0856* (0.0511)	(0.224) -0.0829 (0.0520)	(0.229) -0.111** (0.0527)
Log(Revenue 2004)	-0.301*** (0.0311)	-0.302*** (0.0312)	(0.0320) $-0.343***$ (0.0329)	-0.423***
High Tech	(0.0311)	0.366*** (0.101)	0.319*** (0.101)	0.312*** (0.101)
Intel. Property		0.0463 (0.111)	-0.0149 (0.114)	-0.145 (0.111)
Homebased		(0.111)	-0.558*** (0.0948)	-0.456*** (0.0914)
R and D			0.0341 (0.0994)	(0.0914) -0.0548 (0.102)
Avg. Age			(0.0334)	-0.0137*** (0.00476)
Prop. Female				-0.482*** (0.115)
Prop. College				0.365***
Prop. Some College				(0.131) 0.0234
Average Experience				(0.134) 0.00700
Avg. Hours Worked				(0.00471) 0.0148***
Avg. Buss. Owned				(0.00233) 0.0136
Prop. Black				(0.0235) -0.326*
Prop. Asian				(0.198) -0.314
Constant	3.190***	3.190***	3.940***	(0.225) 4.338***
Observations	(0.355) 1531	(0.355) 1531	(0.407) 1525	(0.454) 1501
R-Squared	0.161	0.162	0.187	0.257
Observations	1531	1531	1525	1501
R-squared	0.161	0.162	0.187	0.257
F	40.91	27.34	22.94	14.39

F 40.91 27.34 22.94 14.39

Notes: *Signifies p< 0.05; ** Signifies p<0.01;*** Signifies p<0.001. Standard errors are reported in parentheses. Dependent variable is growth in revenue in two years after start-up.

Table 4: Exit from Entrepreneurial Teams

Estimates of Logistic Regression

		imaies of Log			1 ', 6	1 ', 6
In demandant West	logit coefs	logit mfx	logit coefs	logit mfx	logit coefs	logit mfx
Independent Var.	Exit	Exit	Exit	Exit	Exit	Exit
	(1)	(2)	(3)	(4)	(5)	(6)
Teamsize	0.718***	0.135***	0.706***	0.126***	0.540***	0.0952***
T (D)	(0.155)	(0.0296)	(0.165)	(0.0298)	(0.189)	(0.0335)
Log (Employees)	-0.0429	-0.00809	0.000252	0.0000450	-0.0326	-0.00574
	(0.101)	(0.0190)	(0.110)	(0.0196)	(0.110)	(0.0194)
High Tech	-0.406*	-0.0690**	-0.379	-0.0612*	-0.325	-0.0525
	(0.216)	(0.0340)	(0.233)	(0.0347)	(0.228)	(0.0343)
Intel. Property	0.272	0.0529	0.209	0.0384	0.219	0.0397
	(0.201)	(0.0403)	(0.212)	(0.0399)	(0.213)	(0.0398)
Homebased	0.206	0.0389	0.114	0.0204	0.114	0.0202
	(0.179)	(0.0337)	(0.190)	(0.0338)	(0.197)	(0.0351)
R and D	-0.000414	-0.0000781	0.238	0.0425	0.193	0.0350
	(0.210)	(0.0397)	(0.227)	(0.0403)	(0.228)	(0.0427)
Avg. Age			-0.00789	-0.00141	-0.00935	-0.00165
			(0.0104)	(0.00186)	(0.0109)	(0.00191)
Prop. Female			-0.542*	-0.0968*	-0.473	-0.0834
			(0.316)	(0.0561)	(0.403)	(0.0709)
Prop. College			-1.074***	-0.192***	-1.182***	-0.208***
			(0.318)	(0.0568)	(0.340)	(0.0598)
Prop. Some College			-0.295	-0.0527	-0.403	-0.0710
			(0.357)	(0.0638)	(0.361)	(0.0637)
Average Experience			0.00617	0.00110	0.00394	0.000695
			(0.0122)	(0.00217)	(0.0123)	(0.00217)
Avg. Hours Worked			-0.00933*	-0.00167*	-0.0102**	-0.00181**
			(0.00504)	(0.000897)	(0.00517)	(0.000910)
Avg. Buss. Owned			0.0216	0.00386	0.0119	0.00209
			(0.0354)	(0.00633)	(0.0368)	(0.00648)
Prop. Black			0.390	0.0697	0.448	0.0790
•			(0.416)	(0.0743)	(0.414)	(0.0728)
Prop. Asian			-0.238	-0.0426	-0.235	-0.0415
-			(0.489)	(0.0874)	(0.494)	(0.0873)
Age Diversity			, ,	` /	-0.0187	-0.00330
					(0.0718)	(0.0126)
Gender Diversity					0.149	0.0263
V					(0.486)	(0.0856)
Education Diversity					-0.0916	-0.0161
· · · · · · ·					(0.388)	(0.0684)
Racial Diversity					-0.435	-0.0767
					(0.602)	(0.106)
Other Business Diversity					0.500	0.0880
21.010109					(0.369)	(0.0648)
Experience Diversity					-0.165	-0.0291
						$\frac{1}{n \ next \ page \dots}$
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Table 4: (continued)

Independent Var.	logit coefs Exit	logit mfx Exit	logit coefs Exit	logit mfx Exit	logit coefs Exit	logit mfx Exit
Ownership Diversity					(0.382) -0.612** (0.266)	(0.0675) -0.108** (0.0465)
Hours Worked Diversity					0.525** (0.265)	0.0925** (0.0465)
Constant	-2.835*** (0.385)		-1.495** (0.660)		-0.716 (0.741)	(00)
Observations	1047	1047	1019	1019	1008	1008

Notes: *Signifies p < 0.05; ** Signifies p < 0.01; *** Signifies p < 0.001. Standard errors are reported in parentheses. Dependent variable is team exit =1 if net change in teamsize over a two year period after start-up is negative.

Table 5: Entry and Exit in Entrepreneurial Teams

Estimates of Multinomial Logit Regression

mlogit coefs mlogit marginal effects							
Independent Var.	Exit Entry		Exit	No Change Entry			
тиверениени чит.	(1)	(2)	(3)	(4)	(5)		
Teamsize	0.560***	0.181	0.101***	-0.102***	0.00101		
Teamsize	(0.199)	(0.334)	(0.0358)	(0.0376)	(0.00738)		
Log (Employees)	-0.0286	0.0188	-0.00530	0.0370	0.000590		
Log (Employees)	(0.112)	(0.193)	(0.0201)	(0.0205)	(0.00436)		
High Tech	-0.333	-0.177	-0.0547	0.0570	-0.00229		
Iligii Tecii	(0.230)	(0.376)	(0.0355)	(0.0367)	(0.00776)		
Intel. Property	0.262	(0.370) 0.491	0.0459	-0.0567	0.0108		
inter. I toperty	(0.216)	(0.334)	(0.0433)	(0.0419)	(0.00870)		
Homebased	0.210) 0.155	(0.334) 0.407	0.0260	-0.0348	0.00879		
Homebased	(0.201)	(0.429)	(0.0366)	(0.0379)	(0.0103)		
R and D	0.201) 0.271	(0.429) 0.464	0.0481	-0.0582	0.0103)		
R and D	(0.230)	(0.351)	(0.0481)	(0.0453)	(0.0101)		
Avg. Age	-0.00610	0.0395*	-0.00133	0.000388	0.000938*		
Avg. Age	(0.0110)	(0.0207)	(0.00198)	(0.00200)	(0.000938)		
Prop. Female	-0.584	-2.618***	-0.0914	0.148**	-0.0567**		
Frop. remaie		(0.998)	(0.0735)				
Prop. College	(0.406) -1.201***	(0.998) -0.642	-0.214***	(0.0750) $0.222***$	(0.0257)		
Prop. College					-0.00799 (0.0179)		
Prop. Some College	(0.341)	(0.743)	(0.0613)	(0.0623)	(0.0172)		
Prop. Some Conege	-0.410	-0.428	-0.0720	0.0795	-0.00752		
Arrana ma Erra anian aa	(0.364)	(0.820)	(0.0656)	(0.0673)	(0.0188)		
Average Experience	0.00509	-0.000274	0.000926	-0.000891	-0.0000347		
A TT TX711	(0.0125)	(0.0208) $0.0281***$	(0.00225)	(0.00229)	(0.000471)		
Avg. Hours Worked	-0.00768		-0.00155	0.000863	0.000687***		
A D 0 1	(0.00530)	(0.00846)	(0.000955)	(0.000963)	(0.000215)		
Avg. Buss. Owned	0.0224	0.0499	0.00379	-0.00480	0.00102		
D DI I	(0.0440)	(0.0469)	(0.00787)	(0.00814)	(0.000994)		
Prop. Black	0.563	1.621**	0.0930	-0.127	0.0340*		
D 4 :	(0.423)	(0.778)	(0.0761)	(0.0782)	(0.0191)		
Prop. Asian	-0.256	0.136	-0.0473	0.0427	0.00454		
A D: ::	(0.498)	(0.739)	(0.0901)	(0.0908)	(0.0167)		
Age Diversity	-0.0220	0.0366	-0.00420	0.00324	0.000961		
G 1 D: ::	(0.0732)	(0.109)	(0.0132)	(0.0134)	(0.00241)		
Gender Diversity	0.0707	0.194	0.0117	-0.0158	0.00405		
	(0.491)	(1.050)	(0.0886)	(0.0904)	(0.0241)		
Education Diversity	-0.256	-2.294**	-0.0337	0.0848	-0.0511**		
D 11D1	(0.394)	(0.960)	(0.0709)	(0.0739)	(0.0237)		
Racial Diversity	-0.318	1.088	-0.0638	0.0371	0.0267		
	(0.605)	(0.928)	(0.109)	(0.110)	(0.0216)		
Other Business Diversity	0.470	-0.0171	0.0854	-0.0824	-0.00302		
	(0.374)	(0.737)	(0.0671)	(0.0688)	(0.0167)		
Experience Diversity	-0.212	-0.430	-0.0362	0.0448	-0.00865		
				continued of	on next page		

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Table 5: (continued)

	mlogi	t coefs	mlogit marginal effects			
$Independent\ Var.$	Exit	Entry	Exit	No Change	Entry	
	(0.389)	(0.774)	(0.0701)	(0.0720)	(0.0172)	
Ownership Diversity	-0.739***	-1.599***	-0.125***	0.158***	-0.0325***	
	(0.270)	(0.529)	(0.0484)	(0.0496)	(0.0125)	
Hours Worked Diversity	0.528**	0.290	0.0943**	-0.0980**	0.00368	
	(0.267)	(0.544)	(0.0479)	(0.0494)	(0.0122)	
Constant	-0.789	-4.419***				
	(0.766)	(1.461)				
Observations	1008	1008	1008	1008	1008	

Notes: *Signifies p < 0.05; ** Signifies p < 0.01;*** Signifies p < 0.001. Standard errors are reported in parentheses. Dependent variable is discrete and 1 if teamturnover is less than 0, 2 if teamturnover is equal to 0, and 3 if teamturnover is greater than 0.