Business Incubators, Networking and Firm Survival: Evidence from Turkey[1]

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Abstract

The aim of this study is to examine the effects of external networking activities of business incubators on tenant firms' survival performance through the lenses of "Business Development Centers" (ISGEMs) in Turkey, a kind of business incubator programs generally focusing low-tech firms. The sample consist total 414 tenant firms in 12 ISGEMs in 10 provinces (all ISGEMs in Turkey). External networking activities are categorized as: (1) off-incubator firms, (2) university, (3) external service providers, (4) commercial unions and (5) financial institutions. As methodology, survival analysis is used and the effects of different networking services on survival rates are presented through Kaplan-Meier survival estimates. As a result of the study, it is concluded that the external networking service in business incubators have positive effect on firms' survival. In all networking categories, results show that the firms which have networking ties with related actors have higher survival probabilities than firms which have not any networking activities.

Keywords: Business Incubators, Network Theory, Survival Analysis, Kaplan-Meier Method

JEL Codes: D02, D04, M13

Introduction

Small and medium-sized enterprises (SMEs) are becoming main targets of economic development policies in both developed and developing countries and their importance for local, regional and national development has been increased (Ndabeni, 2008: 259; Cooper and Park; 2008: 27; Lalkaka and Abetti, 1999: 197). SMEs create significant employment, jobs and output in many countries (Verma, 2004: 1; Birch, 1979: 8; Neumark et al., 2008: 1; Berney, 1985: 687; Nichter and Goldmark, 2009: 1454). But vary across countries; the share of SMEs in total enterprises in many countries is around 90%. In this context, many SME support policies/programs based on the assumption that small enterprise development is crucial for successful local and national economic development.

In addition to their role in the economy, the principal justification for SME support is that the failure rates of the small businesses is fairly high especially in the beginning years (OECD, 1997: 14; Scarborough et al., 2008: 16). Both in developed and developing countries, many new ventures fail, and only a small part is to survive and growth (Ndabeni, 2008: 259). Especially in developing countries, the difficult conditions faced by entrepreneurs make simply survival a miracle (Steel, 1995: 12). On average, one-third of every new enterprise that failed at the end of the second year and 50-60% of these firms cannot manage to survive until the end of the seventh year (OECD, 2002: 35). Hence, supporting SMEs are crucial for growth and survival.

In this context, many national policies include various plans, programs, and instruments with regard supporting SMEs (Scaramuzzi, 2002: 3). These kinds of programs are mainly aimed at increasing the formation, survival, and success rates of SMEs (Rice, 2002: 165).

[1] This study was supported by The Scientific and Technological Research Council of Turkey (TUBITAK) with the research project no: 109K139 titled 'The Factors Affecting Survival and Growth Performance of Newly Established Enterprises in Business Incubators: A Survey on the KOSGEB Business Development Centres (ISGEMs)'.

Among these concepts and strategies, “business incubators” as one of SME support mechanisms, aim to improve entrepreneurial talent by offering supplemental services to newly established firms. Business incubators, in general, focus on supporting new enterprises, promoting entrepreneurship and increasing employment by creating new job opportunities at the local/regional and national level. The term "incubator" is a general concept to define supportive institutions which focus on growth and development of new firms that provide them the chance to develop (Ndabeni, 2008: 262; Adegbite, 2001: 157). Incubators can dramatically increase survival and growth rates of the newly established firms. Incubators reduce failure rates of newly established businesses below 10%, in other words, increase survival rates up to 90% (Adegbite, 2001: 157; Nowak and Grantham, 2000: 130). The basic proposition of business incubators, as a tool for economic development, is the fact that through these programs, more businesses will be established and -even though some of which will fail- that a larger percentage of the established firms will survive.

With the spread of business incubators, discussions on whether incubator programs are successful as a SME support tool and discussions on the effectiveness of services offered in incubators on tenant firm performance have increased. Examining, analyzing business incubators and comparing them with other SME support programs and determination of the factors behind the best and worst examples of business incubators have great importance. Evaluating of the services offered in business incubators have also great importance for a better understanding of the role of business incubators on growth, survival and networking.

In this context, the overall purpose of this study is to investigate the effect of services offered in business incubators on firm performance. The study particularly discusses the role of networking activities as a service group offered in business incubators on firm performance in the framework of network theory. In the framework of the study, it is examined that if the relational networks between tenant firms and other firms outside incubator and local/regional agents have any impact on the survival of the firm as entrepreneurial networking theory anticipates.

The study consists of three sections. In the first section, the network theory and the importance of networking in entrepreneurial process are discussed. In the second section, the networking services of business incubators and the importance of these services for tenant firms are discussed. In third section, the results of the research conducted on the effects of external networking on survival are presented through the case of Business Development Centers (ISGEMs) in Turkey. Study ends with conclusion and suggestion.

1. Network Theory: Definition and Its Importance in Entrepreneurial Process

According to Johannisson (2002: 370); a network consists of interconnected dyadic relationships where the nodes may be roles, individuals or organizations. Hence, different network types can be defined expressing different nodes (actors) and different relationships. For example; a “social network” can be defined as a set of nodes (e.g. persons, organizations) linked by a set of social relationships (e.g. friendship, transfer of funds, overlapping membership) of a specified type (Laumann et al., 1978: 458). Similarly, a “business network” can be defined as a set of two or more connected business relationships. In other words, business network refers to relationships between two or more firms that interact with each other (Kajikawa et al., 2010: 171).

There are various both theoretical and empirical studies emphasizing the importance of networking in entrepreneurial process (Birley, 1985; Larson and Starr, 1993; Gilmore, Carson and Rocks, 2006; Jarillo, 1989; Donckels and Lambrecht, 1997; Brüderl and Preisendörfer, 1998). It has been emphasized in many studies that networking is vital source of gaining competitive advantage, firm performance and innovativeness (Powell et al., 1996: 116-145; 2005: 1132-1205; Dyer and Singh, 1998: 660-679; Owen-Smith et al., 2002: 24-43). Networks play an important role for the survival of new ventures by providing information, knowledge and expertise and also reducing the uncertainty that the firms face with (Collinson and Gregson, 2003).

The positive effects of networking on newly and small enterprises’ growth, sales and survival performance have been emphasized in many studies such as Granovetter (1985: 481-510), Larson and Starr (1993: 5-15), Gulati (1998: 293-317; 1999; 397-420), Andersson et al. (2002: 979-996). Jarillo (1989) investigated whether growing firms use external sources more frequently and found that external source using and external networking effect firm growth positively. Zhao and Aram (1995) concluded that the new ventures which have higher growth rates also have more external relationships and relationship frequency than firms which have lower growth rates. Similarly, in the study done by Brown and Butler (1995) it is stated that networking with competitors fosters firm growth.

Donckels and Lambrecht (1997) conducted a research with 900 firms in manufacturing and service sectors and found that a part of growth of firms in both sectors can be explained by networking activities. In the study done by Brüderl and Preisendörfer (1998) on the impact of entrepreneurial networking on survival, employment and sales growth, it is concluded that networking has positive effects on both survival and growth. In a study conducted by Dean et al. (1997), authors found that networking has a positive effect on profitability, sustainable growth, knowledge sharing, product and service quality, and sales. In contrast, there are also some empirical studies which find no or negative effect of networking on entrepreneurial performance and success. For example in the study which was conducted by Aldrich et al. (1987) on firm founders in North Carolina, the authors didn't find any significant effect of networking on firm profitability. Similarly, the study of Reese and Aldrich (1995) also showed that personal networks don't increase the firm performance. Also, Bates (1994) found that networking has a negative effect on profitability. The results of abovementioned studies show that there is no decisive solution on the relation between networking and firm growth.

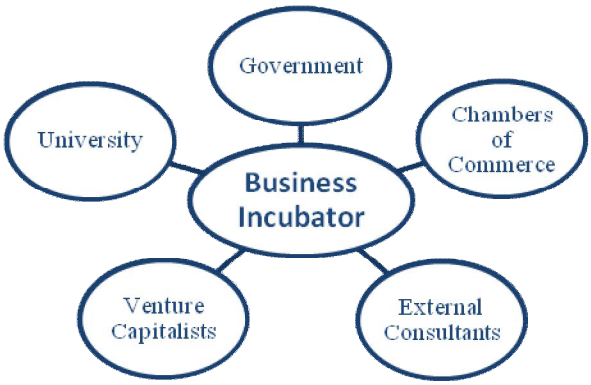
2. Business Incubators and Networking: Literature Review

"Business incubator" is a broad definition that refers to any institution that provides physical workspace, management assistance, access to finance, and other supporting services to newly founded firms and helps them survive and grow during their early years (Suk and Mooweon, 2006: 30). Allen and McCluskey (1990: 61) define business incubators as organizations that "provide affordable space, shared support services, and business development assistance in an environment conducive to enterprise creation, survival, and early-stage growth". Carayannis and von Zedtwitz (2005: 104-105) identified five services as central to incubation. These are:

- Access to physical resources (office space, furniture, computer network etc.),
- Office support (mail, fax and copying services, computer network, book-keeping etc.)
- Access to financial resources (business angels, venture capitalists etc.)
- Entrepreneurial start-up support (business plan, legal/accounting advice etc.)
- Access to networks

Among the aforementioned types of services, many studies have underlined networking services as the most important element of the incubation process (Roper, 1999; Shepherd et al., 2003; Sherman, 1999; Smilor, 1987, Tamasy, 2007). The studies investigating the effect of locating in a business incubator emphasize the importance of business incubators as intermediaries to help establishing collaborative relationships of newly founded firms with various economics actors through incubator's network (Löfsten and Lindelöf, 2003; Rothschild and Darr, 2005; Bergek and Norrman, 2008; Peters et al., 2004; Bollingtoft and Ulhoi, 2005; Grimaldi and Grandi, 2005; Rice, 2002). An incubator's external network is composed of potential customers and suppliers, specialist service providers (lawyers, accountants, tax specialists, etc.), financial institutions (banks, venture capitalists etc.), public and private research organizations and political institutions (such as the regional development agencies) (see Figure 1).

Figure 1: External Networks of Business Incubators



Source: Hallam and Devora, 2009: 1877.

Through the business incubator's network, tenant firms can access the critical resources they need such as knowledge, technology, financial capital, human capital etc.

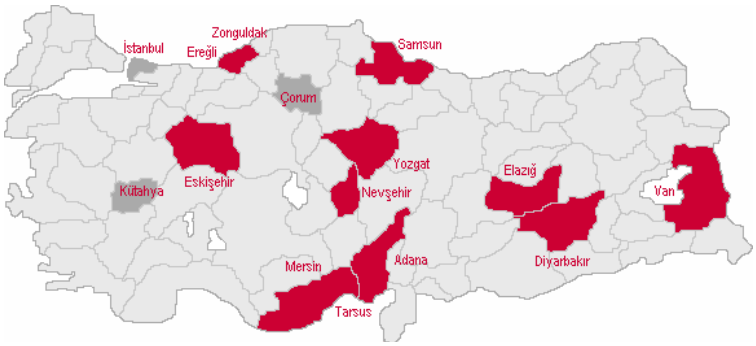
Access to such networks can help new entrepreneurial firms to overcome some difficulties associated with "liability of smallness" (Freeman, Carroll and Hannan, 1983) and "liability of newness" (Stinchcombe, 1965) and support to develop cooperative relationships which are critical in early stages of business (McAdam and Marlow, 2007: 363). Incubators, via external networks, connect the entrepreneurs to the channels where they can reach resources they don't have (Rice, 2002). Internal and external networks of business incubators create a synergy and potential to growth for tenant firms by combining firms' internal resources and external resources through collaboration and joint ventures. There are numerous studies emphasizing the facilitator role of business incubators and discussing the effect of networking on tenant firm performance (Verma, 2004; Suk and Mooweon, 2006; Zhang and Jiang, 2009).

Although there is an extensive literature on business incubators in other countries, the number of the studies in this field is relatively low in Turkey (Çiçek, 2007; Köseoğlu, 2007; Sungur, 2014; Sungur and Dulupçu, 2013; Akçomak and Taymaz, 2004; Çetindamar, 2007; Turan and Çiçek, 2007; 2011; Karaöz et al., 2011, Demirgil et al., 2011). One of the reasons of this is that business incubators is relatively new in Turkey compared with Western countries.

3. Brief Evaluation on Business Incubators in Turkey

In Turkey business incubators have been widely used to support newly established businesses. Compare to USA and many European countries, business incubators are relatively new in Turkey. There are two different incubator programs which is used to foster entrepreneurship, innovation, and creation and survival of newly established firms. These are: Business Development Centers (ISGEMs), and Technology Development Centers (TEKMERs).

Figure 2: Business Development Centres (ISGEMs) included in the Survey



Business Development Centers (ISGEMs), which came on the agenda for the first time in Turkey in 1997, have been used to support local development and fostering entrepreneurship in Turkey since then. The first ISGEM was established in Zonguldak province in 1997. Following, six new ISGEMs were established in Tarsus, Ereğli, Eskişehir, Adana, Mersin and Van provinces as a result of "Privatization Social Support Project (PSSP)-1" implemented during the years 2001-2005 which was co-financed by World Bank and Republic of Turkey Prime Ministry Privatization Administration. With the success of the PSSP-1, five more ISGEMs were established in Avanos, Samsun, Elazığ, Yozgat and Diyarbakır under the "Privatization Social Support Project (PSSP)-2" between 2005 and 2009.

4. Business Incubators, External Networking and Firm Survival: The Case of Business Development Centers (ISGEMs) in Turkey

4.1. Sample

The study consists of total 414 incubated firms in 12 ISGEMs (all ISGEMs in Turkey) in 10 different provinces (See Figure 2). These firms include 238 tenant firms which are still in ISGEMs and 176 firms incubated and exited ISGEMs (both graduated and failed). In detail, 331 firms still alive, among them 238 firms are still in ISGEMs and 93 firms are graduated from these incubators. On the other hand, 83 firms are failed. However, 36 firms of total 83 closed firms was closed after leaving incubators, whereas, 47 firms failed while still in these incubators. The distribution of these firms by ISGEMs is represented by Table 1.

Table 1: Number of Surveyed Firms by ISGEMs

ISGEM	n	%
Adana ISGEM	57	13,77
Diyarbakır ISGEM	14	3,38
Elazığ ISGEM	20	4,83
Ereğli ISGEM	35	8,45
Eskişehir ISGEM	21	5,07
Mersin ISGEM	23	5,56
Nevşehir ISGEM	7	1,69
Samsun ISGEM	32	7,73
Tarsus ISGEM	119	28,74
Van ISGEM	38	9,18
Yozgat ISGEM	17	4,11
Zonguldak ISGEM	31	7,49
Total	**414**	**100,00**

4.2. Methodology

In the literature, there are two main research methods related to the business incubators: (1) survey technique based on e-mail, fax, web-based or face-to-face interview and (2) case study technique based on observation, narrative and in-depth interviews with one or few incubators/firms. In this research, face-to-face survey method was used. Because of the study covers 414 firms in 12 ISGEMs in 10 provinces, longitudinal analysis was not preferred due to time and budget constraints.

Survey was conducted between June-July 2010. Previous studies of Demirgil (2008), Verma (2004), Shahidi (1998), Köseoğlu (2007) and Sungur (2007) were used for the preparation of the survey questions. While the vast majority of the survey questions were binary variable (Yes-No questions), open-ended questions and multiple-choice questions were also asked when necessary. In addition, Likert Scale was used for some questions (i.e. collaboration-networking activities). Survival performance of tenant firms is used as performance criteria. Dependent and independent variables used in this research and their definitions are given in Table 2 below.

Table 2: Research Variables and Definitions

DEPENDENT VARIABLES		DEFINITIONS
FAILURE	Firm survival status	0 = survive, 1 = failure
TIME	Firm survival time	Month
INDEPENDENT VARIBLES		
EXTFRMS	Networking with off-incubator firms	0 = no networking, 1 = networking
UNIVRSTY	Networking with university	0 = no networking, 1 = networking
EXTSRVC	Networking with external service providers	0 = no networking, 1 = networking
COMMERCL	Networking with commercial unions	0 = no networking, 1 = networking
FINANCE	Networking with credit-finance institutions	0 = no networking, 1 = networking

Survival analysis was applied to test the effects of networking activities on firms' survival performance and STATA 11 program was used for data analysis. In this context, Kaplan-Meier survival estimates (Karaöz and Albeni, 2011; Anavatan, 2011; Karaöz, Albeni and Demirgil, 2011; Kleinbaum and Klein, 2005; Göz Çekçeki, 2007; Demirgil, 2008; Demirgil et al., 2011) and Log-Rank tests were used.

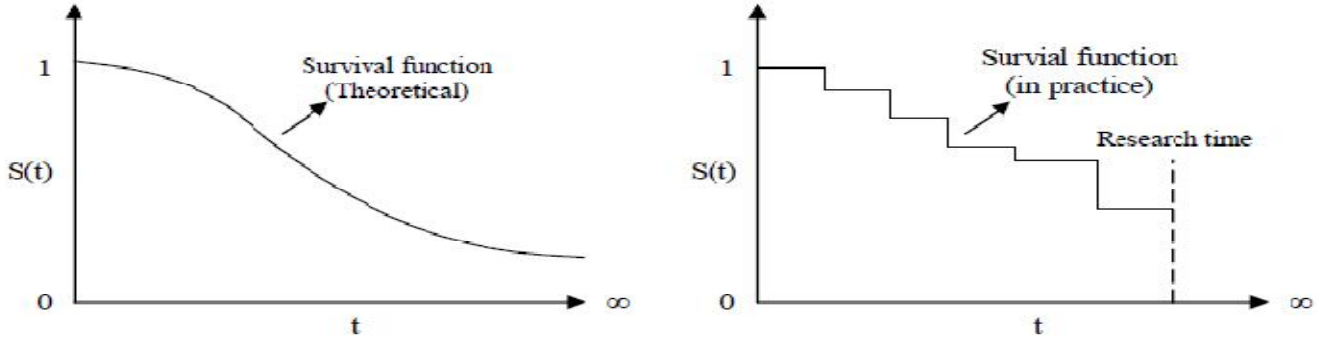
Survival analysis is a method for analyzing data comprising "time" period as outcome variable until the occurrence of an 'event'. It also can be defined as "failure time analysis" or "event time analysis" (Göz Çekçeki, 2007: 1).

When observation's survival time is denoted as T and its observed survival time at observation time is denoted as t, then survival function is defined as:

$$S(t) = P(T > t) = \int_t^{\infty} f(t)dt \qquad 0 < t < \infty$$

In this equation, survival function, which is denoted by S(t), is the probability that the random variable (T) exceeds the specified time (t). In other words, survival function S(t) represents the probability of survival of an observation at time T (the real survival time), which is known to be alive at time t. In this context, the survival function begins at S(t) = 1 as t is 0 and then diminishes toward S(t) = 0 as t increases toward infinity (Kleinbaum and Klein, 2005: 49).

Figure 3: Survival Function



Source: Kleinbaum and Klein, 2005: 49.

4.3. Results

Descriptive statistics with regard survival status and survival time are presented through Table 3 below. As can be seen, 10 of the 414 firms could not be included the survival analysis due to the uncertainty of entry date to ISGEMs. It is observed that 47 observations (firms) failed among 403 firms included in the analysis. Minimum exit time is calculated as 2 months and maximum exit time is calculated as 158 months. Average exit time is calculated as 29.19 months for these firms.

Table 3: Firms' Survival Status and Survival Times

```
      414  total obs.
       10  event time missing (incubtime>=.)                    PROBABLE ERROR
        1  obs. end on or before enter()

      403  obs. remaining, representing
      403  subjects
       47  failures in single failure-per-subject data
    11766  total analysis time at risk, at risk from t =         0
                             earliest observed entry t =         0
                                  last observed exit t =       158
                                   |------------- per subject -------------|
Category                   total        mean         min     median        max

no. of subjects              403
no. of records               403           1           1          1          1

(first) entry time                         0           0          0          0
(final) exit time                   29.19603           2         24        158

subjects with gap              0
time on gap if gap             0           .           .          .          .
time at risk               11766    29.19603           2         24        158

failures                      47    .1166253           0          0          1
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If the survival period of 47 firms that failed analyzed in detail, it is observed that 12 firms failed in the first six months. The number of firms that failed has reached to 22 for the first 12 months and 37 for the first 25 months. The last observed exit is at 76 months. Firms' survival probabilities are presented in the following Figure 4. Accordingly; firms' survival probabilities are calculated as 94.06% at 12 months. Following the first year, probability of survival is 88.54% at the end of 24 months, and it reduces to 85.59% at the end of 36 months. Survival probability falls to 80.40% at 60 months and finally it is stabilized as 76.91% at the end of 76 months.

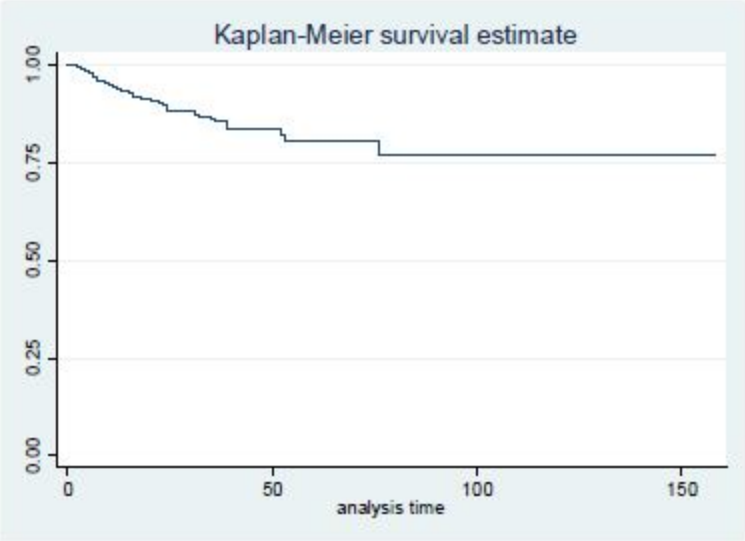


Figure 4: Survival Probabilities

The effects of tenant firms' external networking activities on their survival rates are examined in five groups. These are: (1) networking with off-incubator firms, (2) networking with university, (3) networking with external service providers, (4) networking with commercial unions and (5) networking with credit-finance institutions.

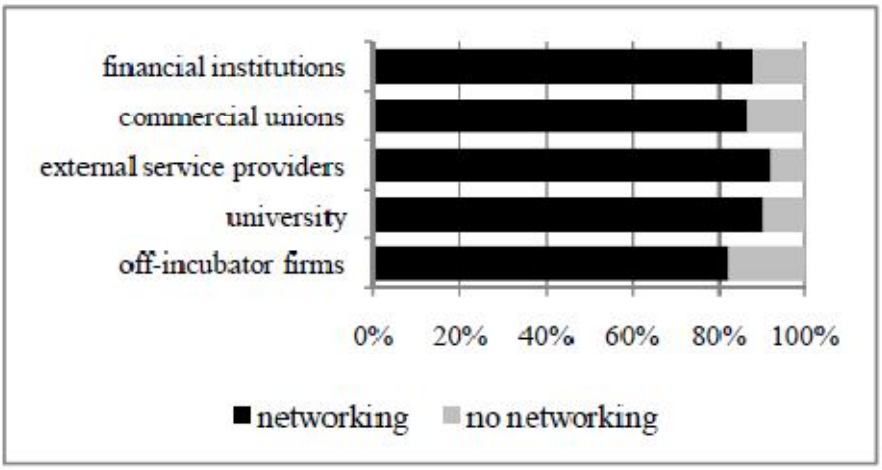


Figure 5: Firms' Networking Activities with External Actors

Networking with Off-Incubator Firms

As seen in Figure 6-a, there is a positive and important effect of networking activities between incubated firms and outside firms on tenant firms' survival rates. While survival rate of tenant firms which have not any collaboration with off-incubator firms is approximately 50%, the survival rate of tenant firms which establish relationship at least one off-incubator firm is about 90% level. By the way, tenant firms which have not any collaboration with off-incubator firms are quickly fail especially within the first 24 months. Results show that, as mentioned in Section 1, the networking of newly established firms with other firms is an important factor to survive in early stages of development.

Networking with University

The importance of connection of business incubators with the universities as an important success factor for both incubators' and their tenants' performance has been emphasized in various studies. The differences in university linkages can explain difference in performance (Ratinho and Henriques, 2010: 282). For example; as a result of study conducted by Westhead and Storey (1995: 345) on tenant firms' performance in science parks, the authors found that firms that connected with universities are more likely to survive in competitive environment.

In this research, in order to determine the effects of tenant firms' networking level with universities on their survival rates, cooperation and collaboration level with university located in the province and the usage of university facilities (laboratories, academia, conferences, libraries, etc.) were asked to tenant firms. The results on the effects of networking with university on firm survival are shown in Figure 6-b.

Results show that there is no significant difference between the survival rates of firms which have cooperation with local universities and the firms which have no connection with universities. Generally, in all business incubators, tenant firms' cooperation level with universities is quite low and consequently networking with university is not a distinguishing factor on firm survival. One of the explanations of this result is that many of business incubators are located outside of university and the distances between university and business incubators are quite high. However, the low level of cooperation with universities cannot be solely explained with "physical" distance. Besides, different factors such as low technology level, low R&D efforts, and unwillingness to collaboration are also effective on collaboration with universities.

Networking with External Service Providers

In addition to the services provided by business incubators, tenant firms may also receive services from other external actors who provide services to tenant firms in specific fields. These external service providers are, for example, education and training firms, accountancy firms and consulting firms who provide counseling service in the fields such as financial, administration, marketing, human resources, advertising etc. It is thought that especially external consulting firms and education-training firms have a significant effect on tenant firm survival.

In this line, research findings show that networking with external service providers have positive effect on tenant firms' survival rates (Figure 6-c). Kaplan-Meier survival curves indicates that survival rates of tenant firms which have collaboration with external service providers is approximately 90%, whereas 75% for non-collaborative firms.

Networking with Commercial Unions

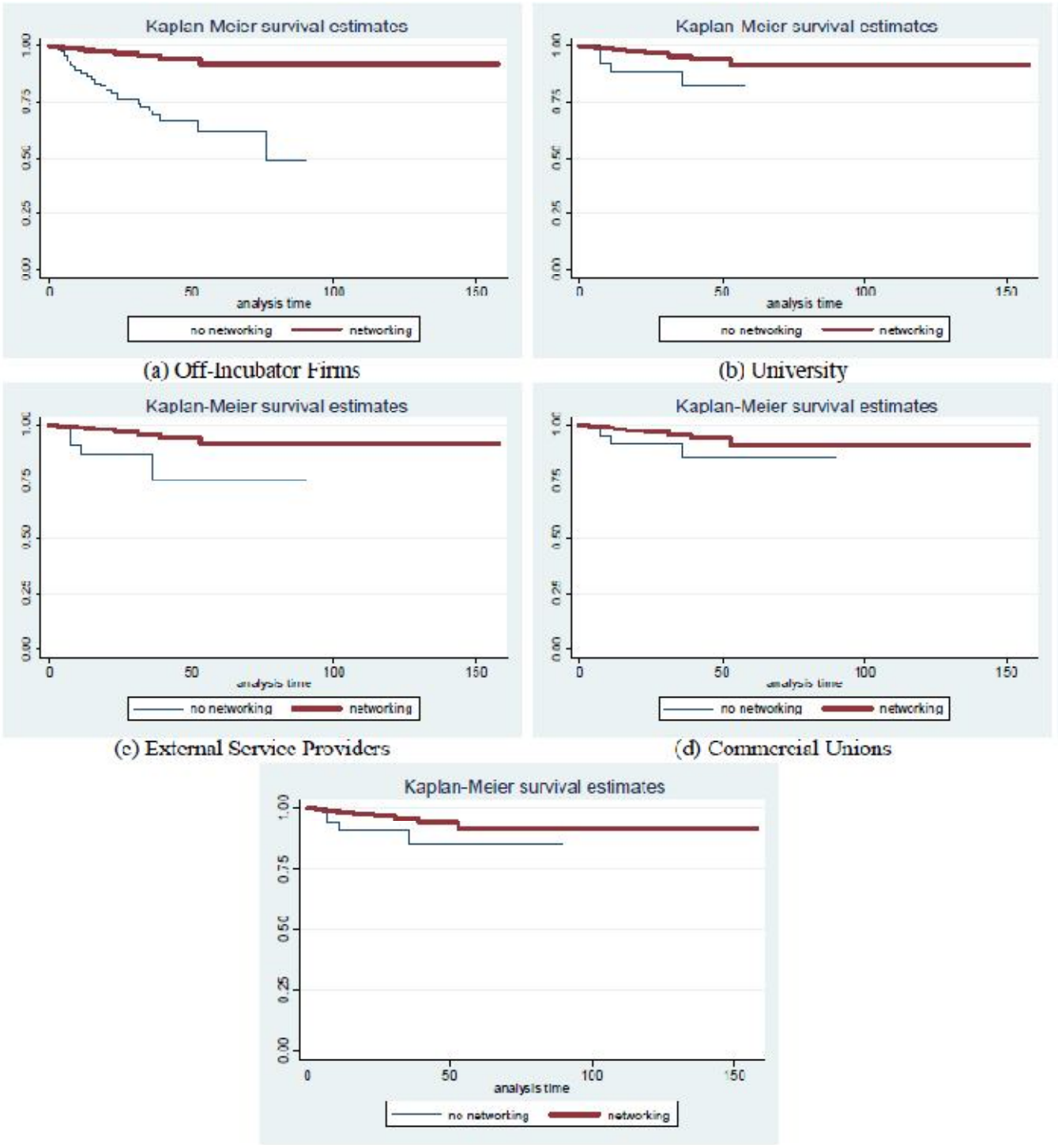
Commercial associations are also important external actors for tenant firms in business incubators. Collaborating tenant firms in business incubators with sectoral/commercial unions and associations can facilitate to reach other companies operating in same industry and easy access to the most current information about the sectoral developments.

The estimates on the effect of networking with commercial associations on firm survival are shown in Figure 6-d. As can be seen from the survival curves there is no significant effect of networking with commercial unions on survival probabilities. The survival probabilities of tenant firms collaborate with commercial unions are approximately same with survival probabilities of tenant firms which have no connection with commercial unions.

Networking with Credit and Finance Institutions

Finally, the effect of tenant firms' networking with banks, credit and finance institutions on their survival rates is tested in accordance with the theoretical framework of the study. As can be seen from Kaplan-Meier survival curves (Figure 6-e) it is not possible to say that cooperation with banks, credit and finance institutions have a significant effect on the survival rates. Such networking has not any significant effect on tenant survival.

Figure 6: The Effects of External Networking on Survival Rates



Log-Rank (LR) test results to test the significance of the Kaplan-Meier survival curves are presented in the following table. According to the LR test results, networking with off-incubator firms (EXTFRMS) and external service providers (EXTSRVC) have a statistically significant effects on survival rates at 1% significance level, and networking with university is significant at 5% level. In addition, networking with commercial unions and credit & finance institutions are significant at 10% level. Results show that especially there is a significant difference of survival rates between tenant firms who have cooperation with off-incubators firms and external service providers and who have not any collaboration with these actors. In other words, networking with off-incubator firms and external service providers are major determinant of tenant firms' survival rates.

Table 4: Log-Rank (LR) Test Results

Variable	Non-Collaborative Firms		Collaborative Firms		Chi2(1)	Pr>Chi2
	Observed	Expected	Observed	Expected		
EXTFRMS	38	16.76	9	30.24	42.33	0.0000 [a]
UNIVRSTY	4	1.33	10	12.67	5.93	0.0149 [b]
EXTSRVC	4	1.10	10	12.90	8.3	0.0039 [a]
COMMERCL	4	1.76	10	12.24	3.28	0.0701 [c]
FINANCE	4	1.71	10	12.29	3.50	0.0614 [c]
a: significant at 1% level, b: significant at 5% level, c: significant at 10% level.						

Networking with university, commercial unions and credit-financial institutions are also effective on survival rates of tenant firms. However, the impacts of networking with these actors are not as strong as the other variables. This can also be seen in Kaplan-Meier survival curves of UNIVRSTY, COMMERCL and FINANCE variables.

Conclusion

In this study, the effect of networking activities in business incubators which is supporting the formation and growth of new and small businesses on tenant firm performance is investigated through the example of Business Development Centers (ISGEMs) in Turkey. As a result of analysis, it is concluded that external networking activities of tenant firms in business incubators increase the survival probability. In addition, it is possible to say that types of external networking have not same effect on survival probability. While especially networking with off-incubator firms and external service providers has significant effects on tenant firms' survival rates, the networking activities with universities, commercial unions and credit and finance institutions have relatively weak impact on tenant firms' survival.

The findings of this study also have consistency with other former studies. However, the chance to make comparisons is limited because there are not many studies on this topic in Turkey. In studies on services offered in ISGEMs and performance of tenant firms, it is concluded that incubator services have great impacts on both growth and survival. For example; as a result of the study carried out by Karaöz, Albeni and Demirgil (2011); it is concluded that the number of firm partners, innovation activities, office services, counseling services and networking services of business incubators increase the survival probability. Similarly, as a result of the study by Demirgil et al. (2011) on the effect of networking activities on tenant firms' growth performance, it is concluded that the networking level among tenant firms explains growth performance. In this context, it is found that there are differences between the growth performance of firms that have no networking with other companies and of firms that have networking with other firms.

The findings of the study propounds that not only providing financial capital for ventures and supporting by offering access facility to these resources but also networking services are required. In this context; the promotion of local and regional-national-international networking, will increase the possibilities for growth and survival of small businesses. As from the perspective of ISGEMs; activities that support networking will increase survival chance and ensure continuity of the operations of these firms after graduation. This will also increase of overall effectiveness of ISGEMs as a policy tool.

The results of this study confirm that business incubators play an important role on networking. External networking activities provided by business incubators are crucial for tenant firms' survival probabilities. In this context, supporting both local and regional-national-international networking activities would increase the survival chance of newly established firms. In this regard; regional/national policy makers (for example regional development agencies - RDAs) must be aware of the importance of networking and support establishment and sustainability of business incubators as a mediator and facilitator structure in terms of cooperation and collaboration. In this context, RDAs, as an important -regional- actor, can play an active role in the establishment of business incubators. However, this support should not be limited with financial support; RDAs should be included in this networking as an important actor and even in management of business incubators.

Lastly, possible research areas for future researches/studies on business incubators need to be noted. In this study, business incubators are investigated through the case of ISGEMs. However; as suggested in previous chapters; there are other formations in Turkey that can be inspected as business incubators.

For example; the study can be carried out in point of TEKMERs to investigate if there is a difference between two different business incubator types regarding success models. In addition, similar comparisons can be made between public and private incubators or between ISGEMs and KISGEMs (women entrepreneur oriented ISGEMs). These kinds of comparisons can present useful information for policymakers in revealing the differences of similar programs all of which can basically be seen as "incubator".

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