Center for Research on Startup Finance

Working Paper Series No.014

Who is a Good Advisor for Entrepreneurs?

Yuta Ogane

April 22, 2018

Center for Research on Startup Finance,
Graduate School of Business Administration, Kobe University
2-1, Rokkodai-cho, Nada-ku, Kobe, 657-8501, JAPAN
http://www.b.kobe-u.ac.jp/~uchida/CRSF/CRSF_toppage.html

Who is a Good Advisor for Entrepreneurs?*

Yuta Ogane†

Department of Economics, Nanzan University

April 22, 2018

Abstract

This paper examines the types of advisors that contribute to solving entrepreneurs' fund-raising problems before and immediately after startup, as well as improve new firms' performance immediately after startup, by using a survey in Japan that includes 3,011 new firms. We find that advice concerning the startup plans from managers in the same industries contributes to solving entrepreneurs' fund-raising problems before and immediately after startup. Our results suggest that their advice enables the entrepreneurs to pass the screening by financial institutions. We also find that advice from accountants improves new firms' performance immediately after startup and that advice from official startup support institutions, franchisers, and irreplaceable partners in management is likely to improve such firms' performance immediately after startup.

JEL classification: L26; M13; M21

Keywords: External business advice; Entrepreneur; New firm; Fund-raising problem; Business performance

* I would like to thank Hikaru Fukanuma, Mohammad Hoque, Kazuyuki Inagaki, Ichihiro Uchida, and Kazuki Yokoyama, as well as the participants at the 11th Regional Finance Conference, the 1st Chubu Area Study Group of the Japan Society of Monetary Economics in 2017, the seminar at Nanzan University, the 47th International Business Research Conference, the Monetary Economics Workshop, and the Society for the Economic Studies of Securities for their helpful comments. I am also grateful to the Japan Finance Corporation Research Institute for the data provision. I acknowledge financial support from the Japan Society for the Promotion of Science (JSPS) through a Grant-in-Aid for Research Activity Start-up No. 17H07226. All remaining errors are my own responsibility.

† Department of Economics, Nanzan University, 18 Yamazato-cho, Showa-ku, Nagoya, Aichi, 466-8673, Japan
E-mail address: ogane@nanzan-u.ac.jp

1. Introduction

In many developed countries, promotion of entrepreneurial activity is one of the most important policy issues. However, such promotion has not been successful because entrepreneurs continue to face various business management problems. In particular, the fund-raising problem and low business performance are serious, and thus, these factors are likely to make potential entrepreneurs hesitate to start new businesses. For example, the 2013 Survey on Business Startups in Japan (Special Survey), conducted by the Japan Finance Corporation Research Institute (JFCRI), indicates that 68.5% of the entrepreneurs had anxiety about financing prior to startup, which is the largest share of their anxiety.[1] In addition, the survey indicates that the proportion of entrepreneurs who are generally satisfied with their current business performance is 29.5%. Thus, these figures suggest that fund-raising problems and low business performance are likely to prevent potential entrepreneurs from starting businesses.[2]

Numerous previous studies suggest that external advice could be an effective measure to solve these problems. For example, Cumming and Fischer (2012) suggest that business advisory services contribute to solving fund-raising problems of early-stage firms. In addition, several previous studies find that external advice improves firm performance (e.g., Kent, 1997; Bennett and Robson, 1999; Chrisman and McMullan, 2000; Chrisman and McMullan, 2004; Lambrechet and Pirnay, 2005; Cumming and Fischer, 2012; Sawang et al., 2016).

However, the most significant problems have long been open questions. Specifically, previous studies have not examined the types of advisors who contribute to solving entrepreneurs' fund-raising problems and improve new firms' performance. Moreover, to promote entrepreneurial activity, we also have to reveal the types of advisors that contribute to solving their fund-raising problems before startup as

[1] In regard to the JFCRI, we will explain in Section 3.1.

[2] Inderst and Mueller (2009) suggest that fund-raising difficulty is associated with new firms' performance. More specifically, they argue that new ventures that have difficulty in procuring funds grow slower.

approximately 70% of entrepreneurs felt anxiety about financing before startup. In spite of this, to the best of our knowledge, no study has examined as to who contributes to solving fund-raising problems prior to startup.

Against this background, this paper is the first to examine the types of advisors who contribute to solving entrepreneurs' fund-raising problems prior to startup. In addition, this paper also investigates the types of advisors who improve new firms' performance because, to the best of our knowledge, no study has investigated who improves new firms' performance. The 2013 Survey on Business Startups in Japan (Special Survey) conducted by JFCRI enables us to conduct this study. This survey includes information on 3,011 firms in the early stages of the entrepreneurial process (including four pre-startup firms) and their actual status of business startup, such as the characteristics of entrepreneurs' advisors, funding sources, and firm characteristics.

The major findings of this paper are as follows: First, advice concerning the startup plans from managers in the same industries contributes to solving entrepreneurs' fund-raising problems before and immediately after startup. This could be because advice from such managers enables the entrepreneurs to pass the screening by financial institutions. Second, advice from accountants improves new firms' performance and advice from official startup support institutions, franchisers, and irreplaceable partners in management is also likely to improve such firms' performance.[3] This result is intriguing because the roles of these institutions or people will be a good research question for future research.

The most significant contribution of this study is that it focuses on entrepreneurs and examines the types of advisors who contribute to solving their fund-raising problems and improve their business performance. Although several previous studies classify the types of advisors (e.g., Bennett and Robson, 1999; Robson and Bennett, 2000a; Robson and Bennett, 2000b), these studies do not focus on new firms and do

[3] Although several studies have examined the types of small firms that use accountants as business advisors and the effects of accountants on management capability (e.g., Kirby and King, 1997; Gooderham et al., 2004), few studies have examined the effects of accountants on new firms' performance.

not investigate fund-raising problems. In addition, other prior studies focus on new firms (e.g., Cumming and Fischer, 2012; Lahti, 2014; Rostamkalaei and Freel, 2017), but these studies do not classify the types of advisors. It should be necessary to combine a sample of new firms with the classification of advisor types to provide useful implications for business managers and entrepreneurs. This is because the effects of external advice differ according to the type of advisor who gives it and most entrepreneurs do not know which advisors are good at solving their problems.

The remainder of the paper is organized as follows. Section 2 reviews previous literature. Section 3 introduces our data set and the empirical methodology. Section 4 presents the empirical results. Section 5 checks the robustness of the baseline estimation results obtained in Section 4. Section 6 conducts further analyses. Section 7 concludes the paper.

2. Literature review

This paper is considerably related to Robson and Bennett (2000a), Cumming and Fischer (2012), Lahti (2014), and Rostamkalaei and Freel (2017). However, it can be clearly distinguished from these studies in terms of the following points. Specifically, although Robson and Bennett (2000a) investigate who helps small and medium-sized enterprises (SMEs) grow, they do not focus on entrepreneurs and do not investigate who contributes to solving fund-raising problems. Similarly, Cumming and Fischer (2012) indeed examine the effects of business advisory services on new firms' growth and finances but they do not provide a classification of advisors and do not investigate fund-raising problems prior to startup. Lahti (2014) examines the determinants of the value-added contribution offered by advisors using entrepreneurial ventures, but it focuses on entrepreneurs seeking venture capital funding. Furthermore, although Rostamkalaei and Freel (2017) investigate the relationship between entrepreneurs' diligence and finance-related advice-seeking before initiating loan applications, they

do not reveal the types of advisors who contribute to solving the entrepreneurs' fund-raising problem.

In addition, this paper is closely related to the following two strands of literature. First, the literature on the effects of external advice on firm performance falls under it. In this strand, Bennett and Robson (1999) examine the relationship between sources of advice and employment growth. Sawang et al. (2016) investigate the kind of small business advisory program that enhances firms' skills or capabilities, such as learning and subsequent firm innovation behavior. Moreover, several studies suggest that external advice improves such performance. For instance, Kent (1997) finds that management advisory services from external advisors are positively related to profit and sales growth of small clients. Chrisman and McMullan (2000) argue that outsider assistance during the early stages leads to subsequent development of ventures. Chrisman and McMullan (2004) imply that venture preparation under the direction of an outside counselor increases the survival time of entrepreneurs. Lambrechet and Pirnay (2005) argue that subsidized private external consultancies to SMEs are effective in a region in the south of Belgium.

Second, this paper is also related to the literature on the characteristics of advisors and their clients. These studies investigate the kind of SMEs that seek advice and the types of advisors (Robson and Bennett, 2000b); the difference between the use of centralized and localized services out of government advice services (Bennett and Robson, 2003); the relationship between the types of business advisors and the level of impact and satisfaction focusing on SMEs (Bennett and Robson, 2005); and the types of SMEs that use external business advice (Boter and Lundström, 2005; Johnson et al., 2007; Mole et al., 2013).

Other strands of literature, which are related to this paper to some extent, examine the reason for taking advice. For example, Harvey and Fischer (1997) argue that people seek advice for accepting help, improving judgment, and sharing responsibility. In addition, Bennett and Robson (2003) argue that SMEs seek advice to increase their

competitive capacity.[4] Moreover, some studies investigate the type of advice that SMEs seek (Robson and Bennett, 2000b; Bennett and Robson, 2003) and other studies examine the relationship between geographical distance and external advice (Bennett et al., 2001; Bennett and Smith, 2002; Bennett and Robson, 2005).

3. Data and methodology

3.1. Data

In this paper, we use the 2013 Survey on Business Startups in Japan (Special Survey) carried out by JFCRI on August 1, 2013. JFCRI is the research institute of the Japan Finance Corporation (JFC), which is one of the major government-controlled financial institutions in Japan and "offers a wide spectrum of services by drawing on the combined expertise of the respective fields of operations" (cited from the JFC homepage). In this paper, we focus on two units of the JFC—the Micro Business and Individual Unit and the Small and Medium Enterprise Unit. These units provide financial support, such as loans and credit insurance, to SMEs and micro businesses for policy objectives, such as "contribution to the growth and development of the Japanese economy" and "contribution to regional revitalization."

The target of this survey are the firms that were provided loans by these two units of the JFC between April 2012 and March 2013. The purpose of the survey is to ascertain the actual status of business startups with survey items such as entrepreneurs' characteristics and careers, funds for entry, and fund raising. The anonymous questionnaires were sent out to 12,813 firms. These 12,813 firms are all under seven-year-old firms (including pre-startup firms) out of the firms to which these two units of the JFC (i.e., the Micro Business and Individual Unit and the Small and Medium Enterprise Unit) provided finance during this period. In Japan, most SMEs

[4] This is based on the resource-based theory (see, e.g., Penrose, 1959; Teece, 1986; Porter, 1998).

and micro businesses apply for loans from these two units of the JFC because they provide unsecured and unguaranteed long-term loans. Hence, these 12,813 firms are representative sample of Japanese startups. Responses were received from 3,011 firms, giving a response rate of 23.5%.

Among the 3,011 firms in our sample, 524 firms are 0-1 years of their establishment, 1,198 firms are 1-2 years of their establishment, 442 firms are 2-3 years of their establishment, 314 firms are 3-4 years of their establishment, 254 firms are 4-5 years of their establishment, 214 firms are 5-6 years of their establishment, and 65 firms are 6-7 years of their establishment.

3.2. Variables

Tables 1 and 2 show the variable definitions and the descriptive statistics, respectively. In addition, Fig. 1 shows the timeline of the decision to start a business, startup, and questionnaire. [5] In baseline estimations, we employ two dependent variables: D_FINANCING_B and SURPLUS. D_FINANCING_B is a dummy variable to examine what types of advisors contribute to solving entrepreneurs' fund-raising problems prior to startup and it equals one if an entrepreneur had anxiety about financing prior to startup but he/she had no difficulty in financing at the startup. In other words, this variable indicates whether his/her fund-raising problem was solved during the "Preparation for startup" in Fig. 1. SURPLUS is a dummy variable to investigate the types of advisors that improve new firms' performance and it equals one if a firm was in the black at the time it answered the questionnaire.

Our key explanatory variables are the thirteen variables that represent entrepreneurs' advisors: MANAGER_S, MANAGER_D, MANAGE_CONSULTANT, ACCOUNTANT, CHAMBER_COM_IND, START_SUP_INSTI_O,

[5] As explained later, in Fig. 1, the timing of estimating D_FINANCING_B is the "Preparation for startup," that of SURPLUS is the "Questionnaire," and that of D_FINANCING_A is the "Early stage of startup."

START_SUP_INSTI_P, PRIVATE_FIN_INSTI_A, JFC_ADVICE, ACQUAINTANCE, FAMILY, OTHERS_A, and NO_ADVICE (default). These are dummy variables that equal one if an entrepreneur received advice concerning the startup plan from the aforementioned people or institutions. Specifically, MANAGER_S represents advice from managers in the same industries; MANAGER_D represents advice from managers in different industries; MANAGE_CONSULTANT represents advice from management consultants; ACCOUNTANT represents advice from accountants; CHAMBER_COM_IND represents advice from chambers of commerce and industry; START_SUP_INSTI_O represents advice from official startup support institutions; START_SUP_INSTI_P represents advice from private startup support institutions; PRIVATE_FIN_INSTI_A represents advice from private financial institutions; JFC_ADVICE, represents advice from the Japan Finance Corporation; ACQUAINTANCE represents advice from friends or acquaintances; FAMILY, OTHERS_A represents advice from other people or institutions other than the above; NO_ADVICE (default) takes the value of one if an entrepreneur did not receive advice from anyone.[6] For these dummy variables, multiple answers are allowed.

In addition, we construct thirteen other variables that represent entrepreneurs' advisors: D_MANAGER_S, D_MANAGER_D, D_MANAGE_CONSUL, D_ACCOUNTANT, D_CHAMBER_COM_IND, D_START_SUP_INSTI_O, D_START_SUP_INSTI_P, D_ PRIVATE_FIN_INSTI_A, D_JFC_ADVICE, D_ACQUAINTANCE, D_FAMILY, D_OTHERS_A, and D_NO_ADVICE. These are dummy variables that equal one if an entrepreneur does not receive advice from the aforementioned people or institutions during "Preparation for startup" in Fig. 1 but receives it during "Early stage of startup" in the same figure.[7] Hereafter, we group these thirteen variables together under D_ADVISOR for convenience. Using D_ADVISOR mitigates reverse causality concerns because entrepreneurs who innately

[6] For simplicity, we call people or institutions that fall under OTHERS_A "others" hereafter.
[7] The aforementioned people or institutions are same as the above advisors.

show good business performance should already receive it during “Preparation for startup” in Fig. 1. We do not expect that entrepreneurs who do not receive external advice until “Early stage of startup” in the same figure are innately more competent than entrepreneurs who do not receive external advice until the time of answering the questionnaire. Hence, we can conclude that D_ADVISOR is useful in mitigating reverse causality problems.

Other explanatory variables are broadly classified into three groups: funding sources, entrepreneur characteristics, and firm characteristics. The variables on funding sources represent the entities from whom an entrepreneur raises funds for entry and represent the amount of funds raised from the relevant source. In this paper, PERSONAL_FUNDS, CLOSE_RELATIVES, COLLEAGUES, SUPPORTERS, FRIENDS, JFC_FINANCE, LOCAL_GOV_INSTI, PUBLIC_FIN_INSTI, PRIVATE_FIN_INSTI_F, EQUIPMENT_N_P, and OTHERS_F fall under the “funding sources” group. Although funding sources are unlikely to be associated with the outcome variables, these should be associated with entities from whom entrepreneurs receive advice. Note that being able to raise funds and facing a financial constraint are not flip sides of the same coin because entrepreneurs may not obtain the desired loan amount even if they can raise funds. In other words, the entrepreneurs may be faced with financial constraints even after being able to raise some funding.

In addition, we control for entrepreneur characteristics variables. First, we use fundamental characteristics (MANAGER_AGE, MALE, GRADUATE, and SPOUSE). These variables should be associated with not only the external advice sources, but also the dependent variables. For example, younger entrepreneurs may seek external advice more actively, but their firms’ performance is likely to be poorer than that of elderly entrepreneurs’. Second, we include entrepreneurs’ experience (NUMBER_Y_F, NUM_EMP_F_SMALL, NO_MANAGEMENT_EXPERIENCE, FORMER_JOB_R, MONTHLY_INC_F, and KNOW_HOW). These variables are also likely to be associated with external advice sources and the dependent variables, particularly with

the outcome variables. Specifically, entrepreneurs' management experience and/or the length of service in their former jobs seem to affect fund-raising conditions and/or business performance. Finally, we control for entrepreneurs' philosophy (NO_ROLE_MODEL, MAXIMIZING_PROFIT, HIGH_RISK, and SHORTSIGHTED). Although these variables may not be strongly associated with external advice sources, these should affect the dependent variables.

Moreover, we include firm characteristics variables (FRANCHISE, HOME, EMPLOYEES, PARTNER, FIRM_AGE, STARTUP_COST, MONTHLY_SALES, E_MONTHLY_SALES, and D_MONTHLY_SALES). These variables are likely to affect external advice sources and the dependent variables (especially the outcome variables). D_MONTHLY_SALES takes a positive value if an entrepreneur overestimates his/her firm's future sales. In other words, D_MONTHLY_SALES is a variable to indicate entrepreneurs' ability to forecast future sales.[8]

Furthermore, dummy variables for opening year and industry are also included in the regressions.

3.3. Empirical approaches

Using the data set and variables just described, we examine the types of advisors who contribute to solving entrepreneurs' fund-raising problems prior to startup. To examine this, we conduct a probit estimation of the form:

$$\Pr\left(\text{D\_FINANCING\_B}_i = 1\right) = \Phi\left(\begin{array}{l}\beta_0 + \beta_1 \text{ADVISORS}_i + \beta_2 FUNDING\_SOURCES_i \\ + \beta_3 ENTREPRENEURS_i + \beta_4 FIRMS_i\end{array}\right), \quad (1)$$

where the dependent variable D_FINANCING_B_i is a dummy variable that equals

[8] For further details, see Table 1.

one if the fund-raising problem for entrepreneur i is solved during preparations for startup. This variable is created according to the following procedure. To begin, questionnaire respondents answer the following two questions about financing: "Did you have anxiety about financing prior to startup?" and "Did you have difficulties with financing at startup?" These questions take one if the questionnaire respondent replied "yes." It should also be noted that these questions do not take one in the case that anxiety or difficulties are ranked among the questionnaire respondent's top three anxieties or difficulties. Next, we take the difference of the values corresponding to the two answers, and thus, D_FINANCING_B_i takes one if entrepreneur i had anxiety about financing prior to startup but he/she had no difficulty in financing at the startup, and takes zero otherwise.[9] In other words, this variable takes one if entrepreneur i 's fund-raising problem before startup was solved during his/her preparation for startup.

ADVISORS_i is a key variable of interest in this regression; it is a dummy variable that equals one if entrepreneur i received advice concerning the startup plan from someone. $FUNDING\_SOURCES_i$, $ENTREPRENEURS_i$, and $FIRMS_i$ denote the funding sources, the characteristics of entrepreneur i, and the characteristics of firm i, respectively.[10] In this regression, we use delta-method standard errors with respect to firms.

As mentioned earlier, we also investigate the types of advisors who improve new firms' performance. To investigate this, we conduct a probit estimation of the form:

$$\Pr(\text{SURPLUS}_i = 1) = \Phi\left(\begin{array}{l}\beta_0 + \beta_1 \text{ADVISORS}_i + \beta_2 FUNDING\_SOURCES_i \\ + \beta_3 ENTREPRENEURS_i + \beta_4 FIRMS_i\end{array}\right), \quad (2)$$

where the dependent variable SURPLUS_i is a dummy variable that equals one if firm

[9] To conduct probit estimations, we substitute zero for the values of -1. It should also be noted that the regression results are almost the same as the case where we conduct linear probability regressions while using the values of -1.

[10] Firm i is the enterprise founded by entrepreneur i.

i is in the black when the entrepreneur is answering the questionnaire. Other vectors such as ADVISORS_i, $FUNDING\_SOURCES_i$, $ENTREPRENEURS_i$, and $FIRMS_i$ are the same as in regression equation (1).

In addition, we conduct a heteroskedastic probit estimation because the standard probit estimation yields inconsistent estimates when its error terms are heteroskedastic. The regression is of the form:

$$\Pr(\text{SURPLUS}_i = 1) = \Phi\left\{ \begin{pmatrix} \beta_0 + \beta_1 \text{ADVISORS}_i \\ + \beta_2 FUNDING\_SOURCES_i \\ + \beta_3 ENTREPRENEURS_i \\ + \beta_4 FIRMS_i \end{pmatrix} \Big/ \exp(\gamma_1 \text{ENTREPRENEURS\_OTHER}_i) \right\}, \quad (3)$$

where vectors other than $\text{ENTREPRENEURS\_OTHER}_i$ are the same as in regression equation (2). $\text{ENTREPRENEURS\_OTHER}_i$ is a factor that is likely to lead to heteroskedastic error terms out of the characteristics of entrepreneur i. In this regression, we use HIGH_RISK as $\text{ENTREPRENEURS\_OTHER}_i$. As in regression with regression equation (1), we use delta-method standard errors with respect to firms.

4. Baseline estimations

4.1. Probit estimations of financing

To reveal the types of advisors that contribute to solving entrepreneurs' fund-raising problems prior to startup, we conduct probit estimations of financing. Table 3 reports the results of the probit estimations with dependent variable D_FINANCING_B, which are based on regression equation (1). In all columns, the Lagrange Multiplier tests are not rejected at the 10% significance level. Hence, we do not conduct heteroskedastic probit estimations for this regression.

As for the variable of interest, the marginal effects of MANAGER_S are positive and statistically significant at the 5% (columns (1), (3), (4), and (5)) or 10% levels (columns (2) and (6)), suggesting that advice from managers in the same industries contributes to solving entrepreneurs' fund-raising problems at the time of startup. Specifically, in these columns, their advice contributes to solving such problems by 0.032–0.049 percentage points, and thus, these variables are economically important. This result is likely to be because of the fact that their experience is useful to entrepreneurs for fund-raising. Specifically, managers in the same industries may tell the entrepreneurs how to prepare startup plans that enable the entrepreneurs to receive funds from financial institutions.[11] If the way of raising funds differs by industry, it is no wonder that the marginal effects of MANAGER_S are statistically significant whereas those of MANAGER_D are statistically insignificant. In general, existing managers hesitate to give advice to new entrepreneurs in the same industries because such entrepreneurs are potential competitors for them. However, there are existing managers who intend to give advice to such entrepreneurs to train younger entrepreneurs. For example, business managers who prefer participating in the exchanges through business and industry associations are unlikely to hesitate to train new entrepreneurs, and thus, give advice to them.

In addition, the marginal effects of MANAGE_CONSULTANT are positive and significant in columns (1) and (2), implying that advice from management consultants also contributes to solving entrepreneurs' fund-raising problems. However, in columns (3)–(6), which we also control for funding sources and firm characteristics, the marginal effects of MANAGE_CONSULTANT are statistically insignificant. In contrast, the marginal effects of PRIVATE_FIN_INSTI_A are significantly negative in all columns except (2) and FAMILY also has significant negative marginal effects in columns (3)–(6). These results do not mean that advice from these institutions or people increases fund-raising problems at the time of startup; it means that fund-raising

[11] In this regard, we will discuss in Section 6.2

problems for entrepreneurs who receive their advice do not tend to be solved, compared with entrepreneurs who do not receive any external advice. This is because the default of the dummy variable for advisors is NO_ADVICE. More specifically, the 2013 Survey on Business Startups in Japan (Special Survey) indicates that 65.5% of the entrepreneurs who do not receive external advice responded "we do not need external advice," which suggests that such entrepreneurs are likely to have confidence in their own business or ability. Thus, compared with entrepreneurs who do not receive any advice, it may be difficult for entrepreneurs who receive advice from private financial institutions or family to solve their fund-raising problem.

Among other variables, the marginal effects of JFC_FINANCE are positive and significant, indicating that financing from JFC contributes to solving entrepreneurs' fund-raising problems at the time of startup. Specifically, the marginal effects of JFC_FINANCE are statistically different from zero at the 1% level in columns (3) and (4), where we do not control for opening year, whereas they are statistically different from zero at the 5% level in columns (5) and (6), where we control for opening year. Thus, the effects of financing from JFC on the fund-raising problem before startup for entrepreneurs differ according to the year of opening. In addition, the marginal effects of MANAGER_AGE are significantly negative in columns (3)–(6), indicating that the younger entrepreneurs are, the more difficult it is for them to solve the fund-raising problem before startup. This may be because their creditworthiness is lower than that of older entrepreneurs. Moreover, the marginal effects of NUM_EMP_F_SMALL are positive and significant, suggesting that before startup, the fund-raising problem for entrepreneurs with fewer employees in their former jobs is apt to be solved. This result is contrary to our expectations that entrepreneurs with many employees in their former jobs find it easier to raise funds because they have higher creditworthiness than those with few employees. However, it is possible to interpret this as follows: entrepreneurs with few employees in their former jobs know how to procure funds for small firms, or lenders tend to give higher credit to these entrepreneurs. Furthermore,

D_MONTHLY_SALES also has significant negative marginal effects in columns (3)–(6), indicating that the fund-raising problem before startup is difficult to solve for entrepreneurs who cannot forecast future sales precisely. However, the economic impact of this variable is negligible.

4.2. Probit and heteroskedastic probit estimations of firm performance

To confirm the types of advisors that improve new firms' performance, we conduct probit and heteroskedastic probit estimations of firm performance. Table 4 reports the results of the probit and heteroskedastic probit estimations whose dependent variable is SURPLUS, which are based on regression equations (2) and (3). In columns (1) and (3), the Lagrange Multiplier tests are rejected at the 1% significance level, and thus, we also conduct heteroskedastic probit estimations in columns (2) and (4).

In Table 4, advisors such as MANAGER_S and MANAGER_D are likely to be driven by reverse causality, and thus, we focus on D_ADVISOR to address it. As for the variable of interest, the marginal effects of D_ACCOUNTANT and D_START_SUP_INSTI_O are positive and significant at the 1% or 5% levels in columns (1)–(4), indicating that advice from accountants and official startup support institutions improves new firms' performance. The economic importance of these variables is not negligible. The result that accountants improve business performance of new firms is consistent with previous studies that argue that small business accountants play important roles as business advisors for small firms (e.g., Kirby and King, 1997; Gooderham et al., 2004). In addition, the marginal effects of D_OTHERS_A are positive and significant in columns (1)–(4), suggesting that advice from "others" as external advisors improves the business performance of new firms. This result gives rise to a question, that is, who the other advisors are. We will discuss this issue in Section 6.2. Moreover, the marginal effects of D_MANAGE_CONSUL are positive and significant in columns (1) and (3), implying that advice from

management consultants also improves new firms' performance. In contrast, the marginal effects of D_CHAMBER_COM_IND and D_FAMILY are significantly negative in columns (1)–(4). Similar to the results in Table 3, these results do not mean that advice from these institutions or people deteriorate the business performance of new firms, but mean that entrepreneurs who do not receive any external advice are likely to have confidence in their own business or ability, and thus, their business performance is better than that of entrepreneurs who receive advice from chambers of commerce and industry or their families.

Turning to other variables, the marginal effects of almost all funding sources are statistically insignificant, implying that funding sources do not affect firm performance. On the other hand, among firm characteristics, the marginal effects of NUM_EMP_F_SMALL and those of FORMER_JOB_R are positive and significant in columns (1)–(4), indicating that the business performance of new firms improves if the entrepreneurs were regular employees in their former jobs or did their former job at a place that had fewer than five employees. The marginal effects of KNOW_HOW are significantly positive in columns (1)–(4), suggesting that new firms' performance improves if the entrepreneurs acquired the know-how or ideas about core competences through experience at their former jobs. The marginal effects of HIGH_RISK are positive and significant, indicating that firms whose managers prefer high risk/high return to low risk/low return have a higher probability of being in the black. FRANCHISE has significant negative marginal effects in columns (1)–(4), suggesting that the business performance of franchisees is bad. Other variables such as MANAGER_AGE, MONTHLY_SALES, and D_MONTHLY_SALES are also statistically significant, but these are economically not very important.

5. Robustness checks

5.1. Propensity score matching (PSM) estimations

In this subsection, we check the robustness of the results in Section 4 by using propensity score matching (PSM) estimations. Under the assumption that treatment assignment is strongly ignorable, this estimation approach enables us to accurately estimate causal effects, even if the treatment assignment depends on covariates (Rosenbaum and Rubin, 1983). In other words, even if there are endogeneity problems between the financial constraint or the firm's performance and the availability of external advice, we can obtain unbiased estimates of the treatment effects as far as the assumption of strongly ignorable treatment assignment is satisfied.

Here, we employ MANAGER_S, D_ACCOUNTANT, and D_START_SUP_INSTI_O as key variables of interest because these variables are positive and significant in all columns in Tables 3 and 4. In other words, the advisors that these variables represent are likely to contribute to solving the entrepreneurs' fund-raising problem before startup or improve their firm performance.

Table 5 reports the results of the probit estimations whose dependent variables are MANAGER_S (column (1)), D_ACCOUNTANT (column (2)), and D_START_SUP_INSTI_O FAMILY (column (3)), respectively. These probit estimations are useful in capturing what characteristics of entrepreneurs or firms receive the advice from the aforementioned people or institutions. Although the explanatory variables in column (2) are the same as those in Table 4, we drop some explanatory variables in columns (1) and (3) from the variables in Tables 3 and 4 to satisfy the balancing property.[12] In this respect, we check for covariate balance and the results are shown in Figs. 2–4; specifically, Fig. 2 indicates the results whose treatment is MANAGER_S; Fig. 3 indicates the results whose treatment is D_ACCOUNTANT; and Fig. 4 indicates the results whose treatment is D_START_SUP_INSTI_O.

[12] The case where the balancing property is satisfied suggests that the treatment and control groups are likely to be sufficiently similar to reduce selection bias in the treatment effect estimation.

Although Fig. 4 does not show that the treatment and control groups are likely to be similar even after the matching, Figs. 2 and 3 show that the two groups after the matching are likely to be sufficiently similar to reduce selection bias in the treatment effect estimations.

In column (1), the marginal effects of MANAGER_D, ACCOUNTANT, JFC_ADVICE, and ACQUAINTANCE are positive and significant, indicating that entrepreneurs who seek advice from these people or institutions tend to receive advice from managers in the same industries. In addition, the marginal effects of PRIVATE_FIN_INSTI_F, SPOUSE, NO_MANAGEMENT_EXPERIENCE, and EMPLOYEES are positive and significant, while the marginal effect of GRADUATE is significantly negative. In particular, the economic importance of NO_MANAGEMENT_EXPERIENCE is not negligible, and thus, entrepreneurs who do not have management experience tend to seek advice from managers in the same industries.

In column (2), the marginal effects of JFC_ADVICE and FAMILY are significantly negative, implying that entrepreneurs who receive advice from JFC or their families do not ask for accountants' advice. Moreover, GRADUATE also has a significant negative marginal effect, suggesting that entrepreneurs who graduate university or graduate school do not tend to receive advice from accountants. In contrast, LOCAL_GOV_INSTI, EQUIPMENT_N_P, MONTHLY_INC_F, and FRANCHISE have significant positive marginal effects; in particular, the effects of MONTHLY_INC_F and FRANCHISE are economically important. This result suggests that entrepreneurs in franchise chains or those who had large incomes in their former jobs tend to seek advice from accountants.

In column (3), the marginal effects of START_SUP_INSTI_P and FRANCHISE are positive and significant, whereas those of MONTHLY_SALES and D_MONTHLY_SALES are significantly negative. However, the economic magnitude of these variables is negligible and the Wald test is not rejected at the 10% significance

level, indicating that column (3) does not have explanatory power. This may be because the number of treatment observations in column (3) is only 12.

Turning to the treatment effect of MANAGER_S on the fund-raising problem before startup for entrepreneurs and the treatment effects of D_ACCOUNTANT and D_START_SUP_INSTI_O on new firms' performance, Table 6 reports the results of the unmatched and average treatment effect on the treated (ATT) estimators using PSM; specifically, Table 6 (A) reports the results whose matching algorithm is 10-nearest neighbor matching and Table (B) reports the results whose matching algorithm is kernel matching. To address the problems raised by King and Nielsen (2016), we employ these matchings.[13]

We start from the results where the dependent variable is D_FINANCING_B. In rows (1) and (4), the ATT estimators of MANAGER_S are positive and statistically significant at the 10% level and statistically significant at the 5% level, respectively. These results indicate that advice from managers in the same industries increases the probability of the fund-raising problem being solved before startup for entrepreneurs by 4.6 percentage points (row (1)) and 4.9 percentage points (row (4)), which are consistent with the results in Table 3. In rows (2) and (5), the ATT estimators of D_ACCOUNTANT are positive and statistically significant at the 5% level, indicating that advice from accountants increases the probability of improving such performance by 6.0 percentage points (row (2)) and 6.2 percentage points (row (5)). These results are consistent with the results in Table 4. In rows (3) and (6), the ATT estimators of D_START_SUP_INSTI_O are positive and statistically significant at the 5% level and statistically significant at the 1% level, respectively. These results suggest that advice from official startup support institutions increases the probability of improving such performance by 25.0 percentage points, which are also consistent with the results in Table 4.

On balance, the results in this section are consistent with those in Tables 3 and 4,

[13] The problems raised by King and Nielsen (2016) are discussed in Section 5.3.

and thus, advice from managers in the same industries contributes to solving the entrepreneurs' fund-raising problem prior to startup, and advice from accountants or official startup support institutions improves new firms' performance.

5.2. Rosenbaum's sensitivity analysis

To check whether the results in Table 6 are free of hidden bias, in this subsection, we conduct a sensitivity analysis proposed by Rosenbaum (2002), which is useful to verify the extent to which the obtained ATT estimators are robust to unobserved confounders. If the estimated treatment effects are insensitive or not much sensitive to hidden bias, the assumption of strongly ignorable treatment assignment is likely to be satisfied. Table 7 reports the results of this analysis; columns (1)–(6) in Table 7 correspond to rows (1)–(6) in Table 6. In Table 7, Γ is a sensitive parameter that measures the degree of departure from random assignment of treatment; $\Gamma = 1$ means the assumption of no hidden bias. In this sensitivity analysis, an increase of 0.01 in Γ indicates that the odds of entrepreneurs who receive external advice become 1.01 times higher.

In Table 7, column (1) indicates that Γ is statistically significant at the 1% level up to $\Gamma = 1.07$, statistically significant at the 5% level up to $\Gamma = 1.15$, and statistically significant at the 10% level up to $\Gamma = 1.20$, suggesting that the result in row (1) in Table 6 is statistically significant at the 1% level even if the odds of entrepreneurs who receive external advice become 1.07 times higher, is statistically significant at the 5% level even if such odds become 1.15 times higher, and is statistically significant at the 10% level even if such odds are 1.20 times higher. Column (2) indicates that Γ is statistically significant at the 1% level up to $\Gamma = 1.10$, statistically significant at the 5% level up to $\Gamma = 1.19$, and statistically significant at the 10% level up to $\Gamma = 1.25$, suggesting that the result in row (2) in Table 6 is statistically significant at the 1% level even if the odds increase by 0.10, is statistically significant at the 5% level even if the

odds increase by 0.19, and is statistically significant at the 10% level even if the odds increase by 0.25. Column (3) indicates that Γ is statistically significant at the 10% level up to $\Gamma = 1.22$, indicating that the result in row (3) in Table 6 is statistically significant at the 10% level even if the odds become 1.22 times higher.

Turning to the results in columns (4) and (5), we find that they are similar to those in columns (1) and (2), suggesting that the results whose treatments are MANAGER_S and D_ACCOUNTANT are not much sensitive to hidden bias. In contrast, the result in column (6) is clearly different from that in column (3), implying that the result whose treatment is D_START_SUP_INSTI_O is sensitive to the bias when we employ kernel matching as a matching algorithm.

On balance, the results in this subsection indicate that those in Table 6 are moderately robust to hidden bias except for the result whose treatment is D_START_SUP_INSTI_O. It indicates that treatment assignments in PSM treatment effect estimations whose treatments are MANAGER_S and D_ACCOUNTANT (rows (1), (2), (4), and (5) in Table 6) are likely to be strongly ignorable to some extent, and thus, the obtained estimates of the treatment effects in Section 5.1 are likely to be unbiased.

5.3. Discussion

In this subsection, we consider the validity of the results obtained in Section 5.1 by reconsidering the problems raised by King and Nielsen (2016); specifically, we discuss the problems of imbalance, inefficiency, model dependence, and bias. They argue that pruning observations at random increases imbalance because a decrease in the size of sample increases variance. More variance means more model dependence, and this dependence increases the discretion of researchers. In addition, random pruning increases bias, that is, overestimation of treatment effects. However, King and Nielsen (2016) indicate that these problems are not serious when the number of pruned

observations is small. In other words, they suggest that the matching algorithms, such as 5-nearest neighbor matching and 10-nearest neighbor matching, which do not prune many observations do not cause these problems. [14] For this reason, we employ 10-nearest neighbor matching in Table 6 (A). In addition, we employ kernel matching in Table 6 (B) because Jann (2017) shows that kernel matching can also reduce variance, model dependence, and researcher discretion.

On the contrary, as far as we employ these matching algorithms, the problems of imbalance, inefficiency, model dependence, and bias are likely to be addressed, indicating that we can accurately estimate the treatment effects. Thus, the results obtained in Section 5.1 are likely to be valid.

6. Further analyses

From the analyses thus far, we find that advice from managers in the same industries contributes to solving fund-raising problems before startup, advice from accountants improves new firms' performance immediately after startup, and advice from "others" improves new firms' performance immediately after startup. The next questions that arise are as follows: First, does advice from managers in the same industries also contribute to solving fund-raising problems after startup? Second, how do managers in the same industries contribute to solving such problems? Finally, who are the "others" in improving new firms' performance? In this section, we solve these three questions.

6.1. Fund-raising problems after startup

In this subsection, we examine whether advice from managers in the same industries also contributes to solving fund-raising problems after startup. To investigate this, we

[14] Jann (2017) argues that PSM matching algorithms, other than one-to-one matching without replacement, are less affected by the random pruning problem.

employ a propensity score matching-difference-in-differences (PSM-DID) approach, which is a more powerful approach in eliminating possible selection bias than PSM in that it can also eliminate unobserved time-invariant entrepreneur characteristics. The reason why we do not employ PSM-DID in Section 5.1 despite the fact that PSM-DID is more powerful is that data limitations do not permit it.

In this estimation, we focus on firms that did not seek advice from managers in the same industries before startup, and employ D_MANAGER_S, which equals one if an entrepreneur does not receive advice from managers in the same industries during "Preparation for startup" in Fig. 1 but receives it during "Early stage of startup" in the same figure. This dummy variable is a key variable of interest in this estimation. In addition, the dependent variable is D_FINANCING_A, which equals one if the fund-raising problem for an entrepreneur is not solved during "Preparation for startup" in Fig. 1 but is solved during "Early stage of startup" in the same figure. In this estimation, we drop some explanatory variables from the variables in Table 3 to satisfy the balancing property. As a result, the treatment and control groups after the matching are likely to be sufficiently similar to reduce selection bias in the treatment effect estimations, as shown in Fig 5.

Table 8 reports the results of the probit estimations where the dependent variable is D_MANAGER_S. The marginal effect of ACQUAINTANCE is positive and significant and JFC_ADVICE has a significant negative marginal effect. This result indicates that entrepreneurs who seek advice from their acquaintances or "others" come to ask for advice from managers in the same industries after startup, whereas entrepreneurs who ask for JFC's advice are unlikely to come to seek advice from managers in the same industries after startup. In addition, the marginal effect of PARTNER is significantly negative, suggesting that entrepreneurs who have irreplaceable partners in management are not apt to come to seek advice from managers in the same industries. Moreover, the Wald test is rejected at the 5% significance level, indicating that the explanatory variables in this regression have

explanatory power.

Turning to the treatment effects of D_MANAGER_S on the fund-raising problem after startup for entrepreneurs on new firms' performance, Table 9 (A) reports the results of the unmatched and the ATT estimators using PSM-DID. In this regression, we employ three matching algorithms, that is, 5-nearest neighbor matching (row (1)), 10-nearest neighbor matching (row (2)), and kernel matching (row (3)).[15] In row (1), the ATT estimator of D_MANAGER_S is positive and statistically significant at the 1% level, and the result indicates that advice from managers in the same industries increases the probability of entrepreneurs' fund-raising problems being solved after startup by 8.7 percentage points. Similarly, in rows (2) and (3), the ATT estimators of D_MANAGER_S are positive and statistically significant at the 5% level, indicating that such advice increases the aforementioned probability by 7.3 percentage points (row (2)), 6.3 percentage points (row (3)), respectively.

Next, we check whether the results in subsection are free of hidden bias. Table 9 (B) reports the results of Rosenbaum's sensitivity analyses; columns (1)–(3) in Table 9 (B) correspond to rows (1)–(3) in Table 9 (A). Column (1) indicates that Γ is statistically significant at the 5% level up to $\Gamma = 1.04$ and statistically significant at the 10% level up to $\Gamma = 1.11$, suggesting that the result in row (1) in Table 9 (A) is statistically significant at the 5% level even if the odds increase by 0.04 and statistically significant at the 10% level even if the odds increase by 0.11. Column (2) indicates that Γ is statistically significant at the 10% level only in the case of $\Gamma = 1$, suggesting that the result in row (4) in Table 9 (A) is statistically significant at the 10% level under the condition of the assumption of no hidden bias, indicating that the result whose matching algorithm is sensitive to hidden bias. Moreover, column (3) indicates Γ is statistically insignificant even if $\Gamma = 1$, and thus, this result is also sensitive to

[15] In this subsection, the results whose matching algorithms are 10-nearest neighbor and kernel matchings are sensitive to hidden bias, and thus, we also conduct 5-nearest neighbor matching. It should also be noted that it does not necessarily mean that the treatment does not significantly affect the dependent variable even if the estimates are sensitive to hidden bias. For instance, the results in Dehejia and Wahba (1999) are sensitive.

bias.[16] These results are likely to result from using PSM-DID. In other words, because this approach enables us to eliminate unobserved time-invariant factors, hidden bias itself is relatively small.

All in all, advice from managers in the same industries also contributes to solving fund-raising problems after startup and this result is not much sensitive to hidden bias. This result implies that treatment assignments in these PSM-DID treatment effect estimations are also strongly ignorable, and thus, the obtained estimates of the treatment effects in this subsection are likely to be unbiased.

6.2. What advice managers in the same industries give

The findings thus far consistently indicate that managers in the same industries contribute to solving entrepreneurs' fund-raising problems. Hence, in this subsection, we investigate how managers in the same industries contribute to solving such problems. Here, we focus on the amount of borrowing from the JFC, private financial institutions, and the sum of these two institutions as the outcome variables for the following reasons. The amount of these funds for entrepreneurs who receive advice from managers in the same industries is larger than it is for entrepreneurs who do not receive it (not reported).[17] The common point among these funds is that the entrepreneurs must pass the loan screening by these institutions to receive the funds, and thus, the managers in the same industries may give advice about how to prepare startup plans and how to pass the interview.[18] If we obtain the results that

[16] Because the way of eliminating outliers in Rosenbaum's sensitivity analysis differs from that in propensity score matching estimation, Γ is statistically insignificant even if $\Gamma = 1$.

[17] It should also be noted that the difference in other funds (e.g., PERSONAL_FUNDS, CLOSE_RELATIVES) between two groups (MANAGER_S = 1 and MANAGER_S = 0) is mostly statistically insignificant. However, EQUIPMENT_N_P in the group of MANAGER_S = 1 is statistically larger than that of MANAGER_S = 0 at the 5% level. In addition, LOCAL_GOV_INSTI in the group of MANAGER_S = 1 is statistically smaller than that of MANAGER_S = 0 at the 5% level.

[18] To receive these funds, the entrepreneurs must prepare of startup plans and clear the interview with loan officers in these institutions. Note that although entrepreneurs must pass the screening also when they receive funds from local government institutions and public financial institutions, the screening by these institutions is less strict than that by the JFC and private financial institutions.

entrepreneurs who receive advice from managers in the same industries can raise funds from these institutions, these results suggest that their advice contributes to passing the loan screening by such institutions because their advice is unlikely to increase other funds.

To confirm our expectations, we conduct an ordinary least squares (OLS) regression of the form:

$$\begin{aligned} &\text{FINANCE}_i \\ &= \beta_0 + \beta_1 \text{ADVISORS}_i + \beta_2 \textit{ENTREPRENEURS}_i + \beta_3 \textit{FIRMS}_i + \varepsilon_i, \end{aligned} \tag{4}$$

where the dependent variable FINANCE_i represents the amount of borrowing from the JFC, private financial institutions, or the sum of these two institutions. Other vectors such as ADVISORS_i, $\textit{ENTREPRENEURS}_i$, and $\textit{FIRMS}_i$ are the same as in regression equation (1), (2), and (3). ε_i is a mean zero error term that encompasses unobservable factors. In this regression, we use heteroscedasticity-robust standard errors with respect to firms.

Table 10 reports the results of the OLS regressions whose dependent variables are JFC_FINANCE _S (columns (1) and (2)), PRIVATE_FIN_INSTI_F (columns (3) and (4)), and the sum of JFC_FINANCE _S and PRIVATE_FIN_INSTI_F (columns (5) and (6)), respectively. Regarding the key explanatory variable, the coefficients on MANAGER_S are positive and significant other than in column (2), suggesting that advice from managers in the same industries increases the borrowing from these institutions. In addition, this result implies that their advice enables the entrepreneurs to pass the screening by these financial institutions. The economic impact of MANAGER_S is important in all columns. Specifically, in these columns, advice from managers in the same industries increases the amount of borrowing from the JFC by 0.708 million yen (column (1)), from the PRIVATE_FIN_INSTI_F by 1.073 million yen (column (3)) and by 0.858 million yen (column (4)), and from the sum of these

two institutions by 1.781 million (column (5)) and 1.173 million yen (column (6)).

The results for the other variables are mostly consistent with our expectations. The coefficients on GRADUATE are positive and significant in columns (1)–(6), indicating that entrepreneurs who graduate university or graduate school receive more borrowing from these financial institutions. In addition, the coefficients on MONTHLY_INC_F are positive and significant except in column (4), suggesting that entrepreneurs who received more monthly income in their former job obtain more borrowing from them. Moreover, EMPLOYEES has significant positive coefficients in columns (1)–(6), indicating that firms with more employees receive more borrowing. In contrast, NUM_EMP_F_SMALL, FORMER_JOB_R and FIRM_AGE have significant negative coefficients in columns (1), (2), (5), and (6), suggesting that entrepreneurs, in whose former jobs the number of employees were less than five, obtain less borrowing. These results also suggest that the JFC tend to provide finance to the firms that are more immature or more vulnerable.

Note that the coefficients on MANAGER_S are statistically insignificant when the dependent variables are PERSONAL_FUNDS, CLOSE_RELATIVES, COLLEAGUES, SUPPORTERS, FRIENDS, PUBLIC_FIN_INSTI, and OTHERS_F, suggesting that advice from managers in the same industries does not increase the amount of borrowing from these people or institutions.[19] This result is also consistent with our expectations that their advice contributes to passing the screening by the JFC and private financial institutions.

6.3. Who are others

To reveal who "others" in improving new firms' performance are, in this subsection, we conduct probit and heteroskedastic probit estimations of the form:

[19] In contrast, the coefficient on MANAGER_S is positive and significant at the 10% level when the dependent variable is EQUIPMENT_N_P and that on LOCAL_GOV_INSTI is significantly negative at the 10% level.

$$\Pr\left(\text{OTHERS\_A}_i = 1\right) = \Phi\left(\beta_0 + \beta_1 \text{FIRMS}_i + \beta_2 \text{ENTREPRENEURS}_i\right), \qquad (5)$$

and

$$\begin{aligned}&\Pr\left(\text{OTHERS\_A}_i = 1\right)\\ &= \Phi\left\{\left(\beta_0 + \beta_1 \text{FIRMS}_i + \beta_2 \text{ENTREPRENEURS}_i\right)/\exp\left(\gamma_1 \text{FIRMS\_OTHER}_i\right)\right\},\end{aligned} \qquad (6)$$

where the dependent variable OTHERS_A_i is a dummy variable that equals one if entrepreneur i receives advice about the startup plans from "others" during his/her preparation for startup. FIRMS_i and ENTREPRENEURS_i are the characteristics of firm i and entrepreneur i, respectively. FIRMS_OTHER_i is a factor that is likely to lead to heteroskedastic error terms out of the characteristics of firm i. In this estimation, we employ FRANCHISE as FIRMS_OTHER_i and delta-method standard errors with respect to firms.

Table 11 reports the results of the probit and heteroskedastic probit estimations where the dependent variable is OTHERS_A. In column (1), the marginal effect of FRANCHISE is positive and significant, suggesting that entrepreneurs in franchise chains tend to seek advice from "others." In addition, the marginal effect of PARTNER is also significantly positive, implying that entrepreneurs who have irreplaceable partners in management tend to seek advice from "others." However, in column (1), the Wald test is not rejected, which suggests that our explanatory variables do not have explanatory power. To deal with this problem, we only control for FRANCHISE and PARTNER, and the result is shown in column (2). In this column, although the Wald test is rejected at the 1% significance level and the marginal effects of FRANCHISE and PARTNER are also positive and significant, the Lagrange Multiplier tests are rejected at the 5% significance level. Hence, we also conduct heteroskedastic probit estimations and the result is shown in column (3). In this column, the marginal effects

of FRANCHISE and PARTNER are positive and significant. Moreover, the Wald test is rejected at the 5% significance level, and thus, the result in column (3) indicates that entrepreneurs in franchise chains or have irreplaceable partners in management are likely to seek advice from "others." Furthermore, this result simultaneously suggests that other people or institutions are franchisers or irreplaceable partners in management.

7. Conclusion

Using a unique questionnaire survey, we examine the types of advisors that contribute to solving entrepreneurs' fund-raising problems before and/or immediately after startup and the types of advisors that improve new firms' performance. We find that advice about the startup plans from managers in the same industries contributes to solving entrepreneurs' fund-raising problems, before and immediately after startup. These results may be because advice from such managers contributes to passing the screening by financial institutions. We also find that advice from accountants improve new firms' performance and advice from official startup support institutions, franchisers, and irreplaceable partners in management are likely to improve such firms' performance.

Our findings suggest that there are many important remaining issues to be addressed in future research. First, examining how accountants and official startup support institutions improve new firms' performance is of interest. In other words, what advice they give to entrepreneurs contributes to solving their problems may allow us to reveal the mechanism that improves their business performance. Another important question is what types of managers in the same industries and accountants are competent. All these advisors cannot necessarily contribute to solving fund-raising problems or improve business performance. It is no wonder that their contribution depends on their age, experience, and degree of intimacy with the entrepreneurs. Finally, how to build relationships with the advisors who contribute to solving

fund-raising problems and/or improve business performance is an interesting issue for future studies. In particular, investigating the way of establishing relationships with managers in the same industries is important because literature on entrepreneurs' fund-raising problems is the critical deficiency in prior research on entrepreneurship. Examining these open questions can contribute to not only future research on entrepreneurship but also to future entrepreneurs in the real world.

References

Bennett, R. J., Robson, P. J. A. 1999. The use of external business advice by SMEs in Britain. *Entrepreneurship & Regional Development*, 11, 155–180.

Bennett, R. J., Robson, P. J. A. 2003. Changing use of external business advice and government supports by SMEs in the 1990s. *Regional Studies*, 37, 795–811.

Bennett, R. J., Robson, P. J. A. 2005. The advisor-SME client relationship: Impact, satisfaction and commitment. *Small Business Economics*, 25, 255–271.

Bennett, R. J., Robson, P. J. A., Bratton, W. J. A. 2001. The influence of location on the use by SMEs of external advice and collaboration. *Urban Studies*, 38, 1531–1557.

Bennett, R. J., Smith, C. 2002. The influence of location and distance on the supply of business advice. *Environment and Planning A*, 34, 251–270.

Boter, H., Lundström, A. 2005. SME perspectives on business support services: The role of company size, industry and location. *Journal of Small Business and Enterprise Development*, 12 244–258.

Chrisman, J. J., McMullan, W. E. 2000. A preliminary assessment of outsider assistance as a knowledge resource: The longer-term impact of new venture counseling. *Entrepreneurship Theory and Practice*, 24, 37–53.

Chrisman, J. J., McMullan, W. E. 2004. Outsider assistance as a knowledge resource for new venture survival. *Journal of Small Business Management*, 42, 229–244.

Cumming, D. J., Fischer, E. 2012. Publicly funded business advisory services and

entrepreneurial outcomes. *Research Policy*, 41, 467–481.

Dehejia, R. H., Wahba, S. 1999. Causal effects in nonexperimental studies: Reevaluating the evaluation of training programs. *Journal of the American Statistical Association*, 94, 1053–1062.

Harvey N., Fischer, I. 1997. Taking advice: Accepting help, improving judgment, and sharing responsibility. *Organizational Behavior and Human Decision Processes*, 70, 117–133.

Inderst, R., Mueller, H. M. 2009. Early-stage financing and firm growth in new industries. *Journal of Financial Economics*, 93, 276–291.

Jann, B. 2017. Why propensity scores should be used for matching. Available at: https://www.stata.com/meeting/germany17/slides/Germany17_Jann.pdf.

Johnson, S., Webber, D. J., Thomas, W. 2007. Which SMEs use external business advice? A multivariate subregional study. *Environment and Planning A*, 39, 1981–1997.

Kent, P. 1994. Management advisory services and the financial performance of clients. *International Small Business Journal*, 12, 45–58.

King, G., Nielsen, R. 2016. Why propensity scores should not be used for matching. Working paper.

Kirby, D. A., King, S. H. 1997. Accountants and small firm development: Filling the expectation gap. *Service Industries Journal*, 17, 294–304.

Gooderham, P. N., Tobiassen, A., Døving, E., Nordhaug, O. 2004. Accountants as sources of business advice for small firms. *International Small Business Journal*, 22, 5–22.

Lahti, T. 2014. The value-added contribution of advisors in the process of acquiring venture capital. *International Small Business Journal*, 32, 307–326.

Lambrecht, J., Pirnay, F. 2005. An evaluation of public support measures for private external consultancies to SMEs in the Walloon Region of Belgium. *Entrepreneurship & Regional Development*, 17, 89–108.

Mole K. F. Baldock, R., North, D. 2013. Who takes advice? Firm size threshold, competence, concerns and informality in a contingency approach. ERC Research Paper No.9.

North, D., Smallbone, D., Vickers, I. 2001. Public sector support for innovating SMEs. *Small Business Economics*, 16, 303–317.

Penrose, E. T. 1959. The Theory of Growth of the Firm. Blackwell, Oxford.

Porter, M. E. 1998. On Competition. Harvard Business Review Press, Boston, MA.

Robson, P. J. A., Bennett, R. J. 2000a. SME growth: The relationship with business advice and external collaboration. *Small Business Economics*, 15, 193–208.

Robson, P. J. A., Bennett, R. J. 2000b. The use and impact of business advice by SMEs in Britain: an empirical assessment using logit and ordered logit models. *Applied Economics*, 32, 1675–1688.

Rosenbaum, P. R. 2002. Observational Studies (2nd ed.), Springer, New York.

Rosenbaum, P. R., Rubin, D. B. 1983. The central role of the propensity score in observational studies for causal effects. *Biometrika*, 70, 41–55.

Rostamkalaei A., Freel, M. 2017. Business advice and lending in small firms. *Environment and Planning C: Politics and Space*, 35, 537–555.

Sawang, S., Parker, R., Hine, D. 2016. How small business advisory program delivery methods (collective Learning, tailored, and practice-based approaches) affect learning and Innovation. *Journal of Small Business Management*, 54, 244–261.

Teece, D. J. 1986. Firm boundaries, technological innovation and strategic management. In: Thomas, L. (Eds.), The Economics of Strategic Planning, 187–99. Lexington Books, Lexington, MA.

Table 1 Variable definitions

Variable	Definition
Dependent variables	
D_FINANCING_B	1 if the entrepreneur had anxiety about financing at the time before startup but he/she had no difficulty in financing at the time of startup, 0 otherwise
SURPLUS	1 if the firm is in the black at the time the entrepreneur is answering the questionnaire, 0 otherwise
D_FINANCING_A	1 if the entrepreneur had difficulty in financing at the time of startup but he/she has no difficulty in financing when answering the questionnaire, 0 otherwise
Advisors	
MANAGER_S	1 if the entrepreneur received advice concerning the startup plans from managers in the same industries, 0 otherwise
MANAGER_D	1 if the entrepreneur received advice concerning the startup plans from managers in different industries, 0 otherwise
MANAGE_CONSULTANT	1 if the entrepreneur received advice concerning the startup plans from management consultants, 0 otherwise
ACCOUNTANT	1 if the entrepreneur received advice concerning the startup plans from accountants, 0 otherwise
CHAMBER_COM_IND	1 if the entrepreneur received advice concerning the startup plans from chambers of commerce and industry, 0 otherwise
START_SUP_INSTI_O	1 if the entrepreneur received advice concerning the startup plans from official startup support institutions, 0 otherwise
START_SUP_INSTI_P	1 if the entrepreneur received advice concerning the startup plans from private startup support institutions, 0 otherwise
PRIVATE_FIN_INSTI_A	1 if the entrepreneur received advice concerning the startup plans from private financial institutions, 0 otherwise
JFC_ADVICE	1 if the entrepreneur received advice concerning the startup plans from the Japan Finance Corporation, 0 otherwise
ACQUAINTANCE	1 if the entrepreneur received advice concerning the startup plans from his/her friends or acquaintances, 0 otherwise
FAMILY	1 if the entrepreneur received advice concerning the startup plans from his/her family, 0 otherwise
OTHERS_A	1 if the entrepreneur received advice concerning the startup plans from other people or institutions other than the above, 0 otherwise
NO_ADVICE	1 if the entrepreneur did not receive advice concerning the startup plans from anyone, 0 otherwise (default)
D_MANAGER_S	1 if the entrepreneur did not receive advice from managers in the same industry before startup but he/she does when answering the questionnaire, 0 otherwise
D_MANAGER_D	1 if the entrepreneur did not receive advice from managers in the different industry before startup but he/she does when answering the questionnaire, 0 otherwise
D_MANAGE_CONSUL	1 if the entrepreneur did not receive advice from management consultants before startup but he/she does when answering the questionnaire, 0 otherwise
D_ACCOUNTANT	1 if the entrepreneur did not receive advice from accountants before startup but he/she does when answering the questionnaire, 0 otherwise
D_CHAMBER_COM_IND	1 if the entrepreneur did not receive advice from chambers of commerce and industry before startup but he/she does when answering the questionnaire, 0 otherwise
D_START_SUP_INSTI_O	1 if the entrepreneur did not receive advice from official startup support institutions before startup but he/she does when answering the questionnaire, 0 otherwise
D_START_SUP_INSTI_P	1 if the entrepreneur did not receive advice from private startup support institutions before startup but he/she does when answering the questionnaire, 0 otherwise
D_ PRIVATE_FIN_INSTI_A	1 if the entrepreneur did not receive advice from private financial institutions before startup but he/she does when answering the questionnaire, 0 otherwise
D_JFC_ADVICE	1 if the entrepreneur did not receive advice from the Japan Finance Corporation before startup but he/she does when answering the questionnaire, 0 otherwise
D_ACQUAINTANCE	1 if the entrepreneur did not receive advice from his/her acquaintances before startup but he/she does when answering the questionnaire, 0 otherwise
D_FAMILY	1 if the entrepreneur did not receive advice from his/her family before startup but he/she does when answering the questionnaire, 0 otherwise
D_OTHERS_A	1 if the entrepreneur did not receive advice from others except for the above before startup but he/she does when answering the questionnaire, 0 otherwise
D_NO_ADVICE	1 if the entrepreneur did not receive advice from anyone before startup but he/she does when answering the questionnaire, 0 otherwise (default)
Funding sources	
PERSONAL_FUNDS	Personal funds (million yen)
CLOSE_RELATIVES	Funds raised from the entrepreneur's close relatives (million yen)
COLLEAGUES	Funds raised from the entrepreneur's colleagues (million yen)
SUPPORTERS	Funds raised from the entrepreneur's supporters (million yen)
FRIENDS	Funds raised from the entrepreneur's friends (million yen)
JFC_FINANCE	Funds raised from the Japan Finance Corporation (million yen)
LOCAL_GOV_INSTI	Funds raised from local government institutions (million yen)
PUBLIC_FIN_INSTI	Funds raised from public financial institutions (million yen)
PRIVATE_FIN_INSTI_F	Funds raised from private financial institutions (million yen)
EQUIPMENT_N_P	Funds raised from equipment notes payable (million yen)
OTHERS_F	Funds raised from other people or institutions except for the above (million yen)
Entrepreneur characteristics	
MANAGER_AGE	Age of the entrepreneur at the time of startup
MALE	1 if the entrepreneur is male, 0 otherwise
GRADUATE	1 if the entrepreneur is a university or graduate school graduate, 0 otherwise
SPOUSE	1 if the entrepreneur has a spouse, 0 otherwise
NUMBER_Y_F	Number of years that the entrepreneur worked in his/her former job
NUM_EMP_F_SMALL	1 if the number of employees in the entrepreneur's former job is less than 5
NO_MANAGEMENT_EXPERIENCE	1 if the entrepreneur does not have management experience, 0 otherwise
FORMER_JOB_R	1 if the entrepreneur was a regular employee in his/her former job, 0 otherwise
MONTHLY_INC_F	Entrepreneur's monthly income in his/her former job (million yen)
KNOW_HOW	1 if the entrepreneur acquires know-how or ideas about core competences through experience at his/her former job, 0 otherwise
NO_ROLE_MODEL	1 if the entrepreneur did not have a role model as managers or entrepreneurs when establishing his/her company, 0 otherwise
MAXIMIZING_PROFIT	1 if the entrepreneur places top priority on maximizing profit in business management, 0 otherwise
HIGH_RISK	1 if the entrepreneur prefers high-risk, high-return to low-risk, low-return in drafting business plans, 0 otherwise
SHORTSIGHTED	1 if the entrepreneur is shortsighted, 0 otherwise
Firm characteristics	
FRANCHISE	1 if the enterprise is a franchisee, 0 otherwise
HOME	1 if the entrepreneur works at home, 0 otherwise
EMPLOYEES	Number of employees in the present company
PARTNER	1 if the entrepreneur has irreplaceable partners in management, 0 otherwise
FIRM_AGE	Number of months between at the time of startup and the time of answering the questionnaire
STARTUP_COST	Cost of startup (million yen)
MONTHLY_SALES	Current monthly sales (million yen)
E_MONTHLY_SALES	Expected monthly sales (million yen)
D_MONTHLY_SALES	Difference between the current monthly sales and the estimated monthly sales before startup (million yen)

Table 2 Descriptive statistics

Variable	N	Mean	S.D.	Min.	Median	Max.
Dependent variables						
D_FINANCING_B	3,011	0.303	0.459	0	0	1
SURPLUS	2,863	0.687	0.464	0	1	1
D_FINANCING_A	3,011	0.215	0.411	0	0	1
Advisors						
MANAGER_S	3,011	0.437	0.496	0	0	1
MANAGER_D	3,011	0.140	0.347	0	0	1
MANAGE_CONSULTANT	3,011	0.066	0.248	0	0	1
ACCOUNTANT	3,011	0.234	0.423	0	0	1
CHAMBER_COM_IND	3,011	0.106	0.308	0	0	1
START_SUP_INSTI_O	3,011	0.035	0.184	0	0	1
START_SUP_INSTI_P	3,011	0.018	0.134	0	0	1
PRIVATE_FIN_INSTI_A	3,011	0.029	0.168	0	0	1
JFC_ADVICE	3,011	0.092	0.290	0	0	1
ACQUAINTANCE	3,011	0.275	0.447	0	0	1
FAMILY	3,011	0.121	0.326	0	0	1
OTHERS_A	3,011	0.013	0.112	0	0	1
NO_ADVICE	3,011	0.204	0.403	0	0	1
D_MANAGER_S	3,011	0.167	0.373	0	0	1
D_MANAGER_D	3,011	0.139	0.346	0	0	1
D_MANAGE_CONSUL	3,011	0.038	0.190	0	0	1
D_ACCOUNTANT	3,011	0.316	0.465	0	0	1
D_CHAMBER_COM_IND	3,011	0.051	0.221	0	0	1
D_START_SUP_INSTI_O	3,011	0.009	0.093	0	0	1
D_START_SUP_INSTI_P	3,011	0.007	0.085	0	0	1
D_ PRIVATE_FIN_INSTI_A	3,011	0.043	0.203	0	0	1
D_JFC_ADVICE	3,011	0.042	0.200	0	0	1
D_ACQUAINTANCE	3,011	0.171	0.377	0	0	1
D_FAMILY	3,011	0.125	0.331	0	0	1
D_OTHERS_A	3,011	0.010	0.098	0	0	1
D_NO_ADVICE	3,011	0.034	0.182	0	0	1
Funding sources						
PERSONAL_FUNDS	2,832	3.278	5.027	0.000	2.000	100.000
CLOSE_RELATIVES	2,832	0.934	3.618	0.000	0.000	80.000
COLLEAGUES	2,832	0.299	2.303	0.000	0.000	71.840
SUPPORTERS	2,832	0.499	5.190	0.000	0.000	210.000
FRIENDS	2,832	0.128	1.432	0.000	0.000	50.000
JFC_FINANCE	2,832	4.156	9.996	0.000	1.950	300.000
LOCAL_GOV_INSTI	2,832	0.201	1.964	0.000	0.000	50.000
PUBLIC_FIN_INSTI	2,832	0.310	3.038	0.000	0.000	72.500
PRIVATE_FIN_INSTI_F	2,832	1.985	9.863	0.000	0.000	190.000
EQUIPMENT_N_P	2,832	0.221	1.984	0.000	0.000	40.000
OTHERS_F	2,832	0.132	2.123	0.000	0.000	59.000
Entrepreneur characteristics						
MANAGER_AGE	3,011	41.854	10.441	21	40	85
MALE	3,011	0.867	0.340	0	1	1
GRADUATE	2,988	0.395	0.489	0	0	1
SPOUSE	3,011	0.755	0.430	0	1	1
NUMBER_Y_F	2,904	18.881	10.095	1	18	58
NUM_EMP_F_SMALL	2,671	0.119	0.324	0	0	1
NO_MANAGEMENT_EXPERIENCE	2,878	0.815	0.388	0	1	1
FORMER_JOB_R	2,970	0.842	0.365	0	1	1
MONTHLY_INC_F	2,832	0.385	0.264	0.000	0.300	3.000
KNOW_HOW	2,926	0.765	0.424	0	1	1
NO_ROLE_MODEL	3,011	0.354	0.478	0	0	1
MAXIMIZING_PROFIT	2,903	0.114	0.318	0	0	1
HIGH_RISK	2,950	0.195	0.396	0	0	1
SHORTSIGHTED	2,944	0.497	0.500	0	0	1
Firm characteristics						
FRANCHISE	3,008	0.059	0.235	0	0	1
HOME	2,959	0.236	0.425	0	0	1
EMPLOYEES	2,874	4.268	9.700	0	2	223
PARTNER	2,505	0.586	0.493	0	1	1
FIRM_AGE	3,011	27.925	18.500	0	21	76
STARTUP_COST	2,813	10.955	19.557	0.000	5.450	310.000
MONTHLY_SALES	2,798	6.830	18.714	0.000	2.000	500.000
E_MONTHLY_SALES	2,779	6.025	15.503	0.000	2.000	300.000
D_MONTHLY_SALES	2,779	-0.792	14.421	-490.000	0.000	220.000

Fig. 1　Timeline of decision, startup, and questionnaire

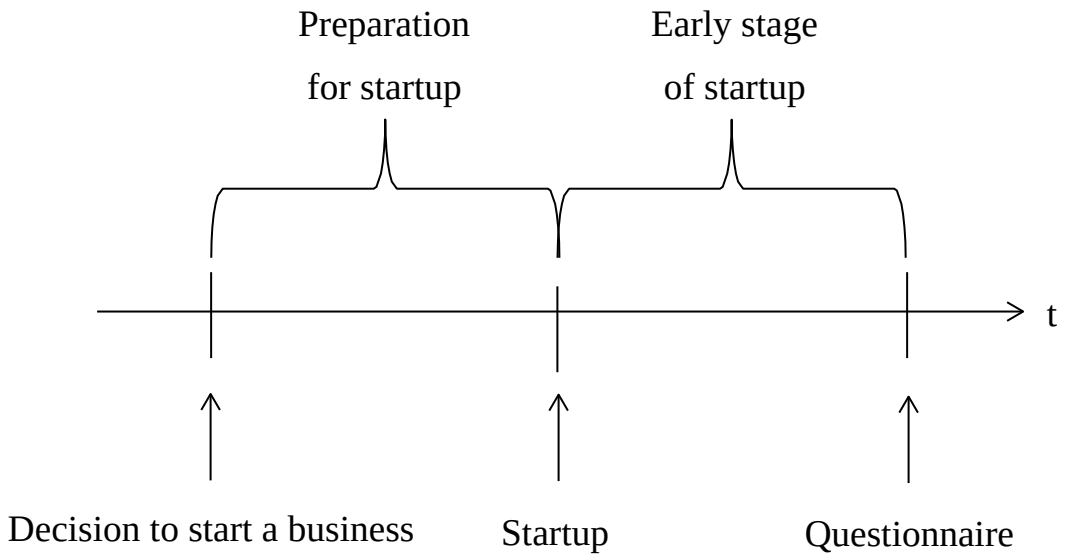

Table 3 Probit estimations of financing

Dependent variable: D_FINANCING_B	(1)	(2)	(3)	(4)	(5)	(6)
Advisors						
MANAGER_S	0.036**	0.032*	0.049**	0.044**	0.049**	0.043*
	(0.017)	(0.017)	(0.022)	(0.022)	(0.022)	(0.022)
MANAGER_D	-0.006	-0.003	-0.000	0.007	0.002	0.009
	(0.024)	(0.025)	(0.031)	(0.031)	(0.031)	(0.031)
MANAGE_CONSULTANT	0.074**	0.060*	0.026	0.020	0.020	0.015
	(0.033)	(0.033)	(0.042)	(0.043)	(0.042)	(0.042)
ACCOUNTANT	0.002	0.001	-0.020	-0.010	-0.018	-0.009
	(0.020)	(0.020)	(0.026)	(0.026)	(0.026)	(0.026)
CHAMBER_COM_IND	-0.009	-0.021	-0.002	0.001	-0.004	-0.001
	(0.028)	(0.028)	(0.037)	(0.037)	(0.037)	(0.037)
START_SUP_INSTI_O	0.044	0.048	0.053	0.054	0.053	0.054
	(0.046)	(0.046)	(0.060)	(0.060)	(0.059)	(0.059)
START_SUP_INSTI_P	0.064	0.039	0.026	0.026	0.017	0.018
	(0.061)	(0.061)	(0.076)	(0.076)	(0.076)	(0.076)
PRIVATE_FIN_INSTI_A	-0.094*	-0.078	-0.127*	-0.132**	-0.108*	-0.112*
	(0.053)	(0.054)	(0.065)	(0.065)	(0.065)	(0.065)
JFC_ADVICE	0.036	0.009	0.051	0.041	0.044	0.034
	(0.030)	(0.030)	(0.040)	(0.040)	(0.040)	(0.040)
ACQUAINTANCE	0.029	0.028	0.030	0.029	0.030	0.029
	(0.019)	(0.019)	(0.024)	(0.025)	(0.024)	(0.025)
FAMILY	0.003	0.003	-0.079**	-0.076**	-0.078**	-0.076**
	(0.026)	(0.026)	(0.035)	(0.035)	(0.035)	(0.035)
OTHERS_A	-0.055	-0.076	-0.040	-0.039	-0.050	-0.048
	(0.078)	(0.076)	(0.108)	(0.108)	(0.108)	(0.108)
Funding sources						
PERSONAL_FUNDS			-0.000	-0.000	-0.000	-0.000
			(0.003)	(0.003)	(0.003)	(0.003)
CLOSE_RELATIVES			-0.002	-0.002	-0.003	-0.002
			(0.004)	(0.004)	(0.004)	(0.004)
COLLEAGUES			-0.008	-0.006	-0.009	-0.007
			(0.007)	(0.007)	(0.007)	(0.007)
SUPPORTERS			0.001	0.001	0.000	0.001
			(0.003)	(0.003)	(0.003)	(0.003)
FRIENDS			-0.004	-0.004	-0.004	-0.004
			(0.008)	(0.008)	(0.007)	(0.008)
JFC_FINANCE			0.007***	0.007***	0.006**	0.006**
			(0.003)	(0.003)	(0.003)	(0.003)
LOCAL_GOV_INSTI			-0.013	-0.012	-0.012	-0.012
			(0.008)	(0.008)	(0.008)	(0.008)
PUBLIC_FIN_INSTI			0.002	0.002	0.002	0.002
			(0.004)	(0.004)	(0.004)	(0.004)
PRIVATE_FIN_INSTI_F			0.003	0.003	0.003	0.003
			(0.002)	(0.002)	(0.002)	(0.002)
EQUIPMENT_N_P			0.001	-0.000	0.001	-0.000
			(0.005)	(0.005)	(0.005)	(0.005)
OTHERS_F			-0.021	-0.021	-0.019	-0.019
			(0.020)	(0.021)	(0.018)	(0.019)

cont'd

Entrepreneur characteristics						
MANAGER_AGE			-0.006**	-0.006**	-0.005*	-0.006**
			(0.003)	(0.003)	(0.003)	(0.003)
MALE			-0.066*	-0.053	-0.057	-0.047
			(0.040)	(0.040)	(0.040)	(0.040)
GRADUATE			0.004	0.011	0.005	0.012
			(0.025)	(0.026)	(0.025)	(0.026)
SPOUSE			-0.025	-0.024	-0.027	-0.026
			(0.027)	(0.027)	(0.027)	(0.027)
NUMBER_Y_F			0.003	0.004	0.003	0.004
			(0.003)	(0.003)	(0.003)	(0.003)
NUM_EMP_F_SMALL			0.073**	0.067*	0.069**	0.064*
			(0.034)	(0.034)	(0.034)	(0.034)
NO_MANAGEMENT_EXPERIENCE			0.011	0.001	0.005	-0.005
			(0.032)	(0.032)	(0.032)	(0.032)
FORMER_JOB_R			0.047	0.055	0.050	0.057
			(0.043)	(0.043)	(0.043)	(0.043)
MONTHLY_INC_F			0.013	0.028	0.015	0.028
			(0.045)	(0.046)	(0.045)	(0.045)
Firm characteristics						
FRANCHISE			0.062	0.065	0.057	0.061
			(0.043)	(0.044)	(0.043)	(0.044)
EMPLOYEES			0.000	0.000	0.001	0.000
			(0.001)	(0.001)	(0.001)	(0.001)
PARTNER			0.030	0.033	0.030	0.032
			(0.022)	(0.022)	(0.022)	(0.022)
FIRM_AGE			-0.000	-0.000	0.001	0.001
			(0.001)	(0.001)	(0.001)	(0.001)
STARTUP_COST			-0.001	-0.001	-0.001	-0.001
			(0.002)	(0.002)	(0.002)	(0.002)
D_MONTHLY_SALES			-0.001*	-0.001*	-0.001*	-0.001*
			(0.001)	(0.001)	(0.001)	(0.001)
Opening year dummies	No	Yes	No	No	Yes	Yes
Industry dummies	No	Yes	No	Yes	No	Yes
Number of observations	3,011	3,011	1,765	1,740	1,765	1,740
Lagrange multiplier test (prob > chi2)	0.722	0.786	0.909	0.371	0.898	0.298
Prob > chi2	0.059	0.001	0.000	0.000	0.000	0.000
Pseudo R2	0.006	0.013	0.036	0.041	0.039	0.044
Log likelihood	-1,836	-1,822	-1,033	-1,013	-1,029	-1,010

Note: The upper rows are marginal effects and the lower rows are delta-method standard errors.

*Significant at the 10% level.

**Significant at the 5% level.

***Significant at the 1% level.

Table 4 Probit and heteroskedastic probit estimations of firm performance

	(1)	(2)	(3)	(4)
Dependent variable: SURPLUS	Probit	Hereroskedastic probit	Probit	Hereroskedastic probit
Advisors				
MANAGER_S			0.020	0.011
			(0.026)	(0.027)
MANAGER_D			-0.074**	-0.080**
			(0.032)	(0.032)
MANAGE_CONSULTANT			0.033	0.049
			(0.043)	(0.041)
ACCOUNTANT			0.007	0.006
			(0.028)	(0.027)
CHAMBER_COM_IND			0.049	0.053
			(0.038)	(0.036)
START_SUP_INSTI_O			-0.068	-0.074
			(0.060)	(0.060)
START_SUP_INSTI_P			0.030	0.027
			(0.079)	(0.081)
PRIVATE_FIN_INSTI_A			0.009	0.005
			(0.064)	(0.062)
JFC_ADVICE			-0.035	-0.021
			(0.042)	(0.040)
ACQUAINTANCE			0.010	0.006
			(0.027)	(0.026)
FAMILY			0.007	0.008
			(0.036)	(0.034)
OTHERS_A			0.262**	0.264**
			(0.126)	(0.131)
D_MANAGER_S	-0.011	-0.018	-0.009	-0.020
	(0.029)	(0.028)	(0.032)	(0.032)
D_MANAGER_D	-0.030	-0.023	-0.046	-0.038
	(0.031)	(0.031)	(0.031)	(0.032)
D_MANAGE_CONSUL	0.109*	0.086	0.119*	0.089
	(0.061)	(0.061)	(0.061)	(0.064)
D_ACCOUNTANT	0.067***	0.062***	0.069***	0.064**
	(0.024)	(0.024)	(0.026)	(0.026)
D_CHAMBER_COM_IND	-0.134***	-0.116**	-0.129***	-0.112**
	(0.047)	(0.048)	(0.048)	(0.047)
D_START_SUP_INSTI_O	0.395**	0.407***	0.382**	0.396***
	(0.187)	(0.156)	(0.188)	(0.151)
D_START_SUP_INSTI_P	-0.044	-0.051	-0.016	-0.019
	(0.147)	(0.143)	(0.153)	(0.138)
D_ PRIVATE_FIN_INSTI_A	0.037	0.042	0.036	0.040
	(0.059)	(0.054)	(0.060)	(0.054)
D_JFC_ADVICE	0.035	0.028	0.042	0.039
	(0.062)	(0.066)	(0.063)	(0.067)
D_ACQUAINTANCE	0.002	-0.010	0.012	-0.000
	(0.029)	(0.029)	(0.031)	(0.031)
D_FAMILY	-0.069**	-0.068**	-0.068**	-0.063**
	(0.033)	(0.030)	(0.033)	(0.030)
D_OTHERS_A	0.345**	0.347**	0.347**	0.353**
	(0.168)	(0.149)	(0.166)	(0.146)
Funding sources				
PERSONAL_FUNDS	0.004	0.004	0.004	0.005
	(0.003)	(0.003)	(0.003)	(0.003)
CLOSE_RELATIVES	-0.005	-0.005	-0.004	-0.005
	(0.004)	(0.003)	(0.004)	(0.004)
COLLEAGUES	0.011	0.011	0.011	0.012*
	(0.008)	(0.007)	(0.008)	(0.007)
SUPPORTERS	-0.000	-0.001	0.001	-0.000
	(0.004)	(0.003)	(0.004)	(0.003)
FRIENDS	-0.002	-0.002	-0.002	-0.002
	(0.007)	(0.006)	(0.007)	(0.006)
JFC_FINANCE	-0.003	-0.004	-0.003	-0.003
	(0.003)	(0.002)	(0.003)	(0.003)
LOCAL_GOV_INSTI	-0.002	-0.002	-0.000	0.001
	(0.008)	(0.007)	(0.008)	(0.007)
PUBLIC_FIN_INSTI	-0.001	-0.001	-0.000	0.000
	(0.004)	(0.004)	(0.004)	(0.004)
PRIVATE_FIN_INSTI_F	-0.001	-0.001	-0.001	-0.000
	(0.002)	(0.002)	(0.002)	(0.002)
EQUIPMENT_N_P	-0.004	-0.003	-0.004	-0.003
	(0.005)	(0.004)	(0.005)	(0.004)
OTHERS_F	-0.005	-0.006	-0.005	-0.006
	(0.006)	(0.006)	(0.006)	(0.006)

cont'd

Entrepreneur characteristics				
MANAGER_AGE	-0.006**	-0.005*	-0.006**	-0.005*
	(0.003)	(0.003)	(0.003)	(0.003)
MALE	-0.011	-0.009	-0.008	-0.005
	(0.041)	(0.038)	(0.041)	(0.039)
GRADUATE	-0.032	-0.033	-0.032	-0.035
	(0.025)	(0.025)	(0.025)	(0.025)
SPOUSE	-0.008	-0.014	-0.010	-0.016
	(0.028)	(0.026)	(0.028)	(0.026)
NUMBER_Y_F	-0.000	-0.001	-0.000	-0.001
	(0.003)	(0.003)	(0.003)	(0.003)
NUM_EMP_F_SMALL	0.107***	0.107***	0.109***	0.111***
	(0.037)	(0.037)	(0.037)	(0.037)
NO_MANAGEMENT_EXPERIENCE	-0.006	-0.018	-0.005	-0.018
	(0.032)	(0.032)	(0.032)	(0.032)
FORMER_JOB_R	0.077*	0.083**	0.088**	0.096**
	(0.041)	(0.038)	(0.041)	(0.039)
MONTHLY_INC_F	0.010	0.002	0.004	-0.005
	(0.046)	(0.047)	(0.046)	(0.048)
KNOW_HOW	0.047*	0.049*	0.049*	0.052*
	(0.028)	(0.026)	(0.028)	(0.026)
NO_ROLE_MODEL	-0.032	-0.039*	-0.027	-0.038
	(0.023)	(0.023)	(0.024)	(0.026)
MAXIMIZING_PROFIT	-0.024	-0.026	-0.021	-0.023
	(0.034)	(0.034)	(0.034)	(0.034)
HIGH_RISK	0.194**	0.164***	0.192**	0.178***
	(0.078)	(0.050)	(0.078)	(0.063)
Firm characteristics				
FRANCHISE	-0.086*	-0.088**	-0.102**	-0.106**
	(0.045)	(0.043)	(0.045)	(0.044)
HOME	0.039	0.045	0.034	0.038
	(0.030)	(0.030)	(0.030)	(0.030)
EMPLOYEES	0.002	0.002*	0.002	0.002*
	(0.001)	(0.001)	(0.001)	(0.001)
PARTNER	0.021	0.024	0.018	0.020
	(0.023)	(0.022)	(0.023)	(0.022)
FIRM_AGE	0.000	0.000	0.000	0.000
	(0.001)	(0.001)	(0.001)	(0.001)
STARTUP_COST	0.001	0.001	0.001	0.001
	(0.002)	(0.002)	(0.002)	(0.002)
MONTHLY_SALES	0.004***	0.004*	0.003***	0.004*
	(0.001)	(0.002)	(0.001)	(0.002)
D_MONTHLY_SALES	-0.003***	-0.004**	-0.003***	-0.004**
	(0.001)	(0.002)	(0.001)	(0.002)
Opening year dummies	Yes	Yes	Yes	Yes
Industry dummies	Yes	Yes	Yes	Yes
Number of observations	1,605	1,605	1,605	1,605
Lagrange multiplier test (prob > chi2)	0.000	-	0.001	-
Prob > chi2	0.000	0.002	0.000	0.000
Pseudo R2	0.086	-	0.094	-
Wald test of lnsigma2 = 0 (prob > chi2)	-	0.002	-	0.010
Log (pseudo) likelihood	-874.415	-873.779	-867.238	-866.083

Note: The upper rows are marginal effects and the lower rows are delta-method standard errors.

*Significant at the 10% level.

**Significant at the 5% level.

***Significant at the 1% level.

Table 5 Probit estimations of advisors

	(1)	(2)	(3)
Dependent variables:	MANAGER_S	D_ACCOUNTANT	D_START_SUP_ INSTI_O
Advisors			
MANAGER_S		-0.002	-0.000
		(0.025)	(0.005)
MANAGER_D	0.064*	-0.043	0.004
	(0.033)	(0.034)	(0.005)
MANAGE_CONSULTANT	0.002	-0.039	0.001
	(0.046)	(0.047)	(0.009)
ACCOUNTANT	0.067**		0.001
	(0.027)		(0.005)
CHAMBER_COM_IND	-0.005	-0.029	-0.001
	(0.040)	(0.042)	(0.008)
START_SUP_INSTI_O	-0.057	0.056	
	(0.066)	(0.065)	
START_SUP_INSTI_P	0.069	-0.001	0.023**
	(0.085)	(0.088)	(0.009)
PRIVATE_FIN_INSTI_A	0.059	-0.055	
	(0.068)	(0.072)	
JFC_ADVICE	0.111**	-0.081*	
	(0.044)	(0.048)	
ACQUAINTANCE	0.072***	-0.018	-0.001
	(0.026)	(0.027)	(0.005)
FAMILY	0.038	-0.066*	
	(0.037)	(0.038)	
OTHERS_A	-0.083	-0.052	
	(0.116)	(0.110)	
Funding sources			
PERSONAL_FUNDS		0.001	0.000
		(0.003)	(0.001)
CLOSE_RELATIVES	0.001	0.003	-0.001
	(0.003)	(0.004)	(0.002)
COLLEAGUES	0.004	0.005	0.001
	(0.005)	(0.005)	(0.002)
SUPPORTERS	0.000	-0.000	0.001
	(0.002)	(0.003)	(0.001)
FRIENDS	0.010	0.006	0.001
	(0.008)	(0.007)	(0.001)
JFC_FINANCE		-0.002	0.001
		(0.003)	(0.001)
LOCAL_GOV_INSTI	-0.009	0.014*	
	(0.007)	(0.008)	
PUBLIC_FIN_INSTI	0.003	-0.005	0.001
	(0.004)	(0.005)	(0.001)
PRIVATE_FIN_INSTI_F	0.002*	-0.002	0.001
	(0.001)	(0.002)	(0.001)
EQUIPMENT_N_P	0.006	0.012**	-0.000
	(0.005)	(0.006)	(0.002)
OTHERS_F	-0.006	0.009	
	(0.007)	(0.006)	

cont'd

Entrepreneur characteristics			
MANAGER_AGE	-0.004	0.004	-0.000
	(0.003)	(0.003)	(0.001)
MALE	-0.027	0.031	-0.010
	(0.044)	(0.044)	(0.008)
GRADUATE	-0.064**	-0.070***	0.001
	(0.027)	(0.027)	(0.005)
SPOUSE	0.065**	-0.018	0.015
	(0.029)	(0.030)	(0.011)
NUMBER_Y_F	-0.001	-0.005	0.000
	(0.003)	(0.003)	(0.001)
NUM_EMP_F_SMALL	0.058	-0.052	
	(0.038)	(0.040)	
NO_MANAGEMENT_EXPERIENCE	0.155***	0.048	-0.001
	(0.034)	(0.035)	(0.006)
FORMER_JOB_R	-0.021	0.020	
	(0.045)	(0.047)	
MONTHLY_INC_F	0.058	0.139***	0.001
	(0.049)	(0.048)	(0.009)
KNOW_HOW		-0.009	-0.003
		(0.030)	(0.005)
NO_ROLE_MODEL		-0.009	-0.000
		(0.026)	(0.005)
MAXIMIZING_PROFIT		0.012	
		(0.037)	
HIGH_RISK		0.010	
		(0.071)	
Firm characteristics			
FRANCHISE	0.015	0.124***	0.014*
	(0.049)	(0.048)	(0.007)
HOME		-0.033	0.004
		(0.032)	(0.006)
EMPLOYEES	0.004***	0.001	-0.000
	(0.001)	(0.001)	(0.000)
PARTNER	-0.016	0.038	-0.001
	(0.024)	(0.024)	(0.004)
FIRM_AGE	-0.001	0.001	0.000
	(0.001)	(0.001)	(0.000)
STARTUP_COST		-0.001	-0.001
		(0.002)	(0.001)
MONTHLY_SALES		0.000	-0.002*
		(0.001)	(0.001)
D_MONTHLY_SALES		-0.000	-0.002*
		(0.001)	(0.001)
Opening year dummies	Yes	Yes	No
Industry dummies	Yes	Yes	Yes
Number of observations	1,740	1,605	1,605
Prob > chi2	0.000	0.000	0.270
Pseudo R2	0.059	0.051	0.296
Log likelihood	-1,125.972	-971.005	-49.806

Note: The upper rows are marginal effects and the lower rows are delta-method standard errors.

*Significant at the 10% level.

**Significant at the 5% level.

***Significant at the 1% level.

Fig. 2 Balance plot (treatment: MANAGER_ S)

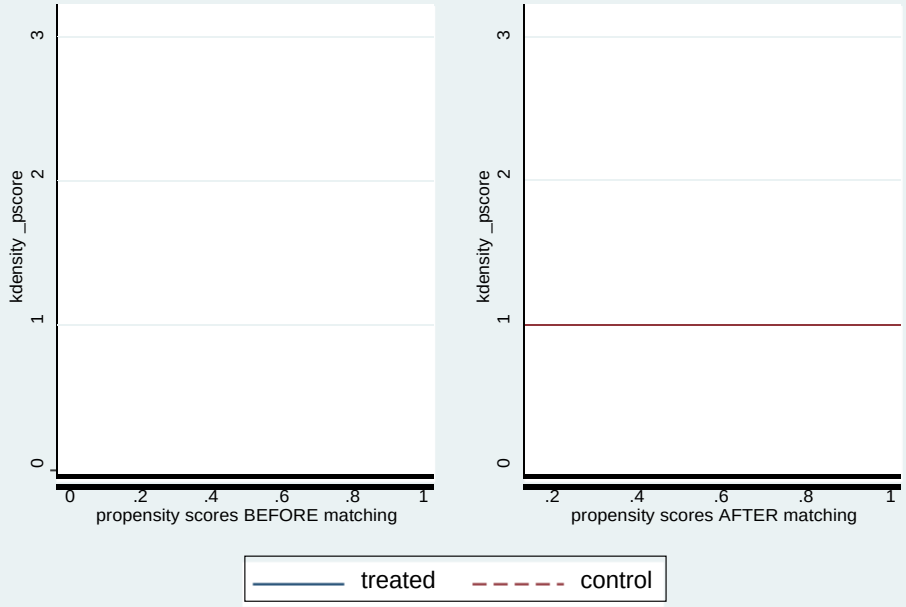

Fig. 3 Balance plot (treatment: D_ ACCOUNTANT)

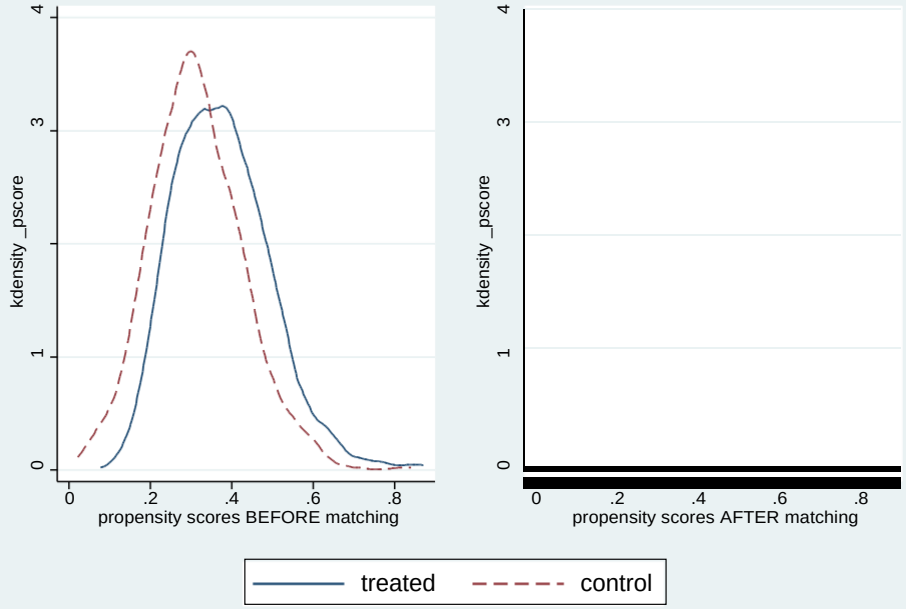

Fig. 4 Balance plot (treatment: D_ START_ SUP_ INSTI_ O)

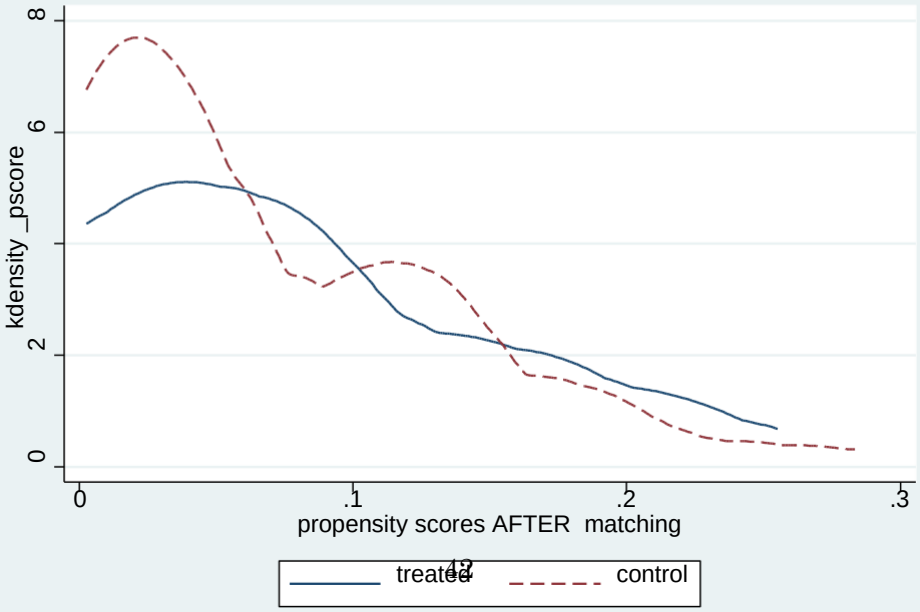

Table 6 PSM treatment effect estimations of financing before startup and firm performance

(A) 10-nearest neighbor matching

Treatments	Treated	Controls	Difference	S.E.	T-stat
Dependent variable: D_FINANCING_B					
(1) MANAGER_S					
Unmatched	0.332	0.266	0.066	0.022	3.03 ***
ATT	0.332	0.287	0.046	0.025	1.82 *
Dependent variable: SURPLUS					
(2) D_ACCOUNTANT					
Unmatched	0.770	0.690	0.080	0.024	3.36 ***
ATT	0.770	0.709	0.060	0.025	2.37 **
(3) D_START_SUP_INSTI_O					
Unmatched	0.917	0.715	0.202	0.131	1.54
ATT	0.917	0.667	0.250	0.104	2.41 **

*Significant at the 10% level.

**Significant at the 5% level.

***Significant at the 1% level.

(B) Kernel matching

Treatments	Treated	Controls	Difference	S.E.	T-stat
Dependent variable: D_FINANCING_B					
(4) MANAGER_S					
Unmatched	0.332	0.266	0.066	0.022	3.03 ***
ATT	0.332	0.283	0.049	0.024	2.02 **
Dependent variable: SURPLUS					
(5) D_ACCOUNTANT					
Unmatched	0.770	0.690	0.080	0.024	3.36 ***
ATT	0.770	0.708	0.062	0.024	2.54 **
(6) D_START_SUP_INSTI_O					
Unmatched	0.917	0.715	0.202	0.131	1.54
ATT	0.917	0.639	0.278	0.090	3.09 ***

*Significant at the 10% level.

**Significant at the 5% level.

***Significant at the 1% level.

Table 7 Rosenbaum's sensitivity analyses (PSM estimations)

Matching algorithms:	(1)		(2)		(3)		(4)		(5)		(6)	
	10-nearest neighbor matching						Kernel matching					
Treatments:	MANAGER_S		D_ACCOUNTANT		D_START_SUP_ INSTI_O		MANAGER_S		D_ACCOUNTANT		D_START_SUP_ INSTI_O	
Γ	p_mh+	p_mh-	p_mh+	p_mh-	p_mh+	p_mh-	p_mh+	p_mh-	p_mh+	p_mh-	p_mh+	p_mh-
1.00	0.001	0.001	0.001	0.001	0.062	0.062	0.002	0.002	0.001	0.001	0.111	0.111
1.01	0.002	0.001	0.001	0.001	0.063	0.060	0.002	0.001	0.001	0.000	0.113	0.108
1.02	0.002	0.001	0.002	0.000	0.064	0.058	0.003	0.001	0.001	0.000	0.116	0.106
1.03	0.003	0.000	0.002	0.000	0.066	0.057	0.004	0.001	0.001	0.000	0.118	0.104
1.04	0.004	0.000	0.002	0.000	0.067	0.055	0.005	0.000	0.002	0.000	0.121	0.101
1.05	0.005	0.000	0.003	0.000	0.069	0.054	0.007	0.000	0.002	0.000	0.123	0.099
1.06	0.007	0.000	0.004	0.000	0.071	0.052	0.009	0.000	0.003	0.000	0.126	0.097
1.07	0.008	0.000	0.005	0.000	0.072	0.051	0.011	0.000	0.003	0.000	0.128	0.095
1.08	0.011	0.000	0.006	0.000	0.074	0.050	0.014	0.000	0.004	0.000	0.131	0.093
1.09	0.013	0.000	0.008	0.000	0.076	0.049	0.018	0.000	0.005	0.000	0.133	0.091
1.10	0.017	0.000	0.009	0.000	0.077	0.047	0.022	0.000	0.006	0.000	0.136	0.089
1.11	0.020	0.000	0.011	0.000	0.079	0.046	0.027	0.000	0.008	0.000	0.138	0.087
1.12	0.025	0.000	0.014	0.000	0.081	0.045	0.032	0.000	0.009	0.000	0.141	0.085
1.13	0.030	0.000	0.017	0.000	0.082	0.044	0.039	0.000	0.011	0.000	0.143	0.083
1.14	0.037	0.000	0.020	0.000	0.084	0.043	0.047	0.000	0.014	0.000	0.146	0.081
1.15	0.044	0.000	0.024	0.000	0.086	0.042	0.055	0.000	0.017	0.000	0.148	0.080
1.16	0.052	0.000	0.028	0.000	0.087	0.041	0.065	0.000	0.020	0.000	0.151	0.078
1.17	0.061	0.000	0.033	0.000	0.089	0.040	0.076	0.000	0.023	0.000	0.153	0.076
1.18	0.071	0.000	0.038	0.000	0.091	0.039	0.088	0.000	0.027	0.000	0.156	0.075
1.19	0.083	0.000	0.044	0.000	0.093	0.038	0.102	0.000	0.032	0.000	0.158	0.073
1.20	0.095	0.000	0.051	0.000	0.094	0.037	0.117	0.000	0.037	0.000	0.161	0.072
1.21	0.109	0.000	0.058	0.000	0.096	0.036	0.133	0.000	0.043	0.000	0.163	0.070
1.22	0.124	0.000	0.066	0.000	0.098	0.035	0.150	0.000	0.050	0.000	0.166	0.069
1.23	0.141	0.000	0.075	0.000	0.100	0.034	0.169	0.000	0.057	0.000	0.168	0.067
1.24	0.159	0.000	0.085	0.000	0.101	0.034	0.189	0.000	0.065	0.000	0.171	0.066
1.25	0.178	0.000	0.096	0.000	0.103	0.033	0.210	0.000	0.074	0.000	0.173	0.064
1.26	0.198	0.000	0.107	0.000	0.105	0.032	0.233	0.000	0.084	0.000	0.176	0.063
1.27	0.219	0.000	0.120	0.000	0.107	0.031	0.256	0.000	0.094	0.000	0.178	0.062
1.28	0.242	0.000	0.133	0.000	0.109	0.030	0.281	0.000	0.106	0.000	0.181	0.060

Note: Dependent variables are D_FINANCING_B (columns 1 and 4) and SURPLUS (columns 2, 3, 5, and 6), respectively.

Γ : Odds of differential assignment due to unobserved factors.

p_mh+ : Significance level (assumption: overestimation of treatment effect).

p_mh- : Significance level (assumption: underestimation of treatment effect).

Fig. 5 Balance plot (treatment: D_MANAGER_S)

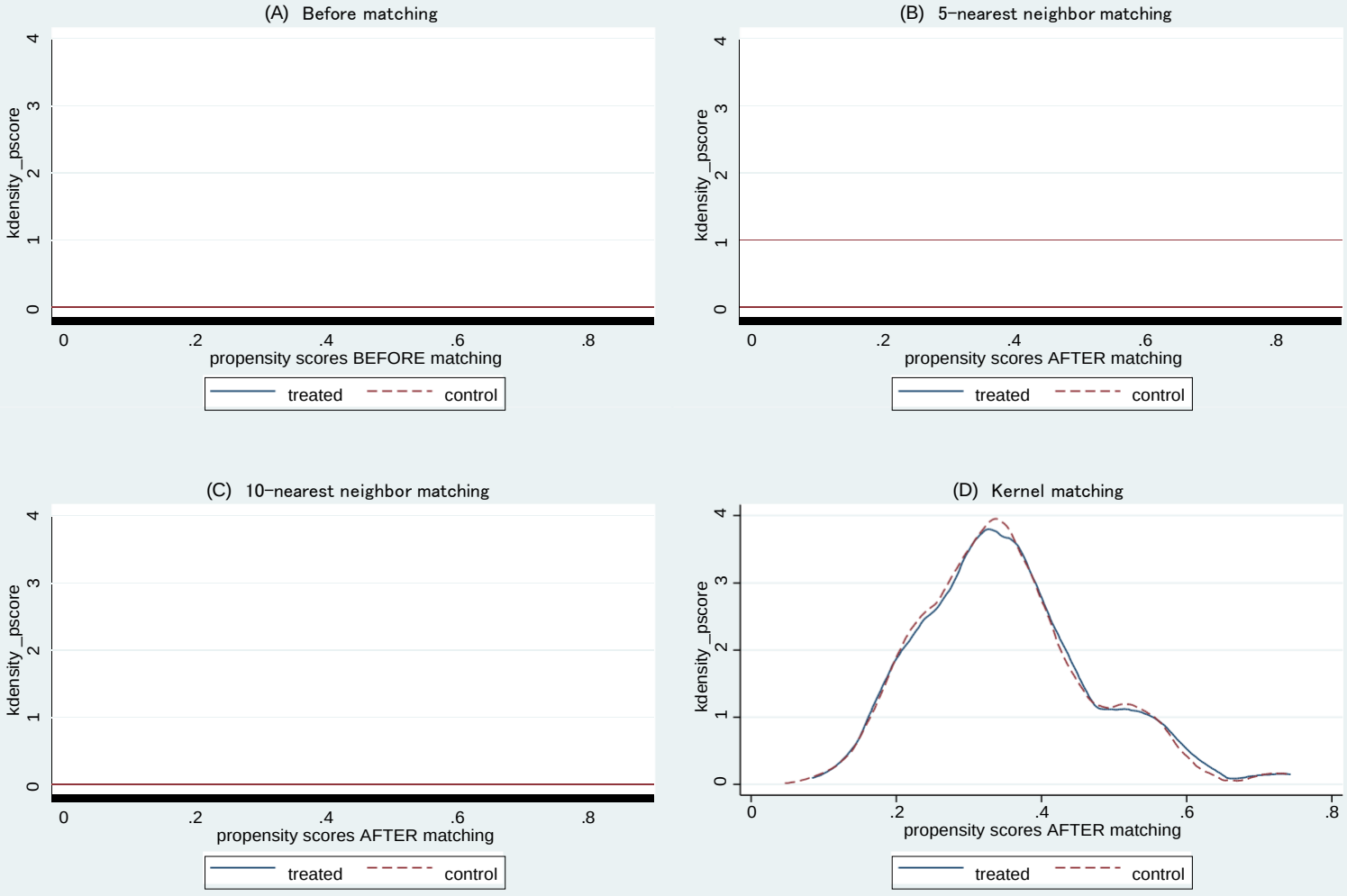

Table 8 Probit estimations of managers in the same industries

Dependent variable:	D_MANAGER_S
Advisors	
MANAGER_D	-0.004
	(0.045)
MANAGE_CONSULTANT	0.072
	(0.060)
ACCOUNTANT	-0.038
	(0.037)
CHAMBER_COM_IND	0.035
	(0.053)
START_SUP_INSTI_O	-0.088
	(0.087)
START_SUP_INSTI_P	0.166
	(0.110)
PRIVATE_FIN_INSTI_A	-0.003
	(0.102)
JFC_ADVICE	-0.131*
	(0.068)
ACQUAINTANCE	0.070**
	(0.034)
FAMILY	-0.003
	(0.049)
OTHERS_A	0.193
	(0.120)
Funding sources	
PERSONAL_FUNDS	-0.000
	(0.003)
CLOSE_RELATIVES	0.007*
	(0.004)
COLLEAGUES	0.007
	(0.009)
SUPPORTERS	-0.006
	(0.004)
FRIENDS	0.013
	(0.012)
JFC_FINANCE	-0.000
	(0.002)
LOCAL_GOV_INSTI	0.012*
	(0.007)
PUBLIC_FIN_INSTI	-0.000
	(0.007)
PRIVATE_FIN_INSTI_F	-0.000
	(0.001)
EQUIPMENT_N_P	0.013
	(0.010)
OTHERS_F	-0.019
	(0.025)

cont'd

Entrepreneur characteristics	
MANAGER_AGE	-0.006*
	(0.004)
MALE	0.084
	(0.059)
GRADUATE	-0.029
	(0.033)
SPOUSE	0.034
	(0.037)
NUMBER_Y_F	0.001
	(0.004)
NUM_EMP_F_SMALL	0.013
	(0.050)
NO_MANAGEMENT_EXPERIENCE	-0.015
	(0.040)
FORMER_JOB_R	0.027
	(0.061)
MONTHLY_INC_F	-0.006
	(0.062)
Firm characteristics	
FRANCHISE	0.075
	(0.061)
EMPLOYEES	0.002
	(0.002)
PARTNER	-0.061**
	(0.030)
FIRM_AGE	-0.001
	(0.001)
D_MONTHLY_SALES	-0.000
	(0.002)
Opening year dummies	Yes
Industry dummies	Yes
Number of observations	960
Prob > chi2	0.020
Pseudo R2	0.054
Log likelihood	-563.398

Note: The upper rows are marginal effects and the lower rows are delta-method standard errors.

*Significant at the 10% level.

**Significant at the 5% level.

Table 9 PSM-DID treatment effect estimations and Rosenbaum's sensitivity analyses

(A) PSM-DID treatment effect estimations of financing after startup

	Matching algorithms	Treated	Controls	Difference	S.E.	T-stat
(1)	5-nearest neighbor matching					
	Unmatched	0.254	0.215	0.039	0.029	1.35
	ATT	0.254	0.167	0.087	0.033	2.62 ***
(2)	10-nearest neighbor matching					
	Unmatched	0.254	0.215	0.039	0.029	1.35
	ATT	0.254	0.182	0.073	0.032	2.23 **
(3)	Kernel matching					
	Unmatched	0.254	0.215	0.039	0.029	1.35
	ATT	0.253	0.190	0.063	0.031	2.00 **

Note 1: Dependent variable is D_FINANCING_A.

2: Treatment is D_MANAGER_S.

*Significant at the 10% level.

**Significant at the 5% level.

***Significant at the 1% level.

(B) Rosenbaum's sensitivity analyses (PSM-DID estimations)

Matching algorithms:	(1) 5-nearest neighbor matching		(2) 10-nearest neighbor matching		(3) Kernel matching	
Γ	p_mh+	p_mh-	p_mh+	p_mh-	p_mh+	p_mh-
1.00	0.027	0.027	0.0996	0.0996	0.108	0.108
1.01	0.031	0.024	0.110	0.089	0.120	0.097
1.02	0.035	0.021	0.122	0.080	0.132	0.087
1.03	0.040	0.018	0.135	0.072	0.146	0.078
1.04	0.045	0.016	0.148	0.064	0.160	0.070
1.05	0.051	0.014	0.162	0.057	0.174	0.062
1.06	0.057	0.012	0.176	0.051	0.189	0.056
1.07	0.063	0.010	0.191	0.045	0.205	0.049
1.08	0.070	0.009	0.207	0.040	0.222	0.044
1.09	0.078	0.008	0.224	0.035	0.239	0.039
1.10	0.086	0.007	0.241	0.031	0.257	0.034
1.11	0.094	0.006	0.258	0.027	0.275	0.030
1.12	0.103	0.005	0.276	0.024	0.293	0.027

Γ : Odds of differential assignment due to unobserved factors.

p_mh+ : Significance level (assumption: overestimation of treatment effect).

p_mh- : Significance level (assumption: underestimation of treatment effect).

Table 10 OLS regressions of financing

	(1)	(2)	(3)	(4)	(5)	(6)
Dependent variables:	JFC_FINANCE		PRIVATE_FIN_INSTI_F		JFC_FINANCE + PRIVATE_FIN_INSTI_F	
Advisors						
MANAGER_S	0.708**	0.315	1.073**	0.858*	1.781***	1.173*
	(0.349)	(0.354)	(0.506)	(0.488)	(0.646)	(0.634)
MANAGER_D		-0.359		0.351		-0.008
		(0.504)		(1.031)		(1.136)
MANAGE_CONSULTANT		3.217***		2.796		6.013***
		(0.963)		(1.982)		(2.181)
ACCOUNTANT		1.302***		0.757		2.059**
		(0.467)		(0.713)		(0.886)
CHAMBER_COM_IND		-0.347		-0.413		-0.760
		(0.750)		(0.538)		(1.026)
START_SUP_INSTI_O		-0.567		-0.256		-0.823
		(1.478)		(2.591)		(2.925)
START_SUP_INSTI_P		3.212*		-0.654		2.558
		(1.668)		(1.236)		(1.960)
PRIVATE_FIN_INSTI_A		2.748		11.946***		14.694***
		(2.325)		(3.632)		(4.389)
JFC_ADVICE		4.174***		-1.665*		2.509
		(1.271)		(0.947)		(1.662)
ACQUAINTANCE		-0.225		-1.001*		-1.226*
		(0.394)		(0.553)		(0.695)
FAMILY		0.189		-0.008		0.181
		(0.526)		(0.709)		(0.896)
OTHERS_A		-0.721		-1.541*		-2.261
		(1.399)		(0.918)		(2.065)
Entrepreneur characteristics						
MANAGER_AGE	0.079	0.092*	0.018	0.028	0.097	0.121
	(0.055)	(0.053)	(0.049)	(0.047)	(0.076)	(0.074)
MALE	0.345	0.492	0.292	0.288	0.637	0.780
	(0.678)	(0.653)	(0.841)	(0.786)	(1.157)	(1.093)
GRADUATE	1.346***	1.033**	2.328***	2.222***	3.673***	3.255***
	(0.427)	(0.416)	(0.594)	(0.594)	(0.764)	(0.754)
SPOUSE	0.250	0.305	0.028	0.045	0.278	0.349
	(0.419)	(0.395)	(0.683)	(0.668)	(0.828)	(0.799)
NUMBER_Y_F	-0.078	-0.097*	0.018	0.005	-0.060	-0.092
	(0.057)	(0.053)	(0.058)	(0.061)	(0.083)	(0.083)
NUM_EMP_F_SMALL	-0.959**	-0.980**	-0.648	-0.624	-1.607**	-1.604**
	(0.407)	(0.400)	(0.523)	(0.523)	(0.708)	(0.698)
NO_MANAGEMENT_EXPERIENCE	-0.677	-0.481	-1.045	-0.879	-1.722	-1.361
	(0.654)	(0.650)	(0.990)	(0.949)	(1.226)	(1.185)
FORMER_JOB_R	-1.940**	-2.205**	-0.234	-0.334	-2.174*	-2.539**
	(0.917)	(0.884)	(0.704)	(0.725)	(1.226)	(1.208)
MONTHLY_INC_F	2.399***	2.029**	3.281*	2.511	5.680**	4.540**
	(0.844)	(0.810)	(1.975)	(1.946)	(2.272)	(2.227)
Firm characteristics						
FRANCHISE	-0.815	-0.645	-1.972***	-1.764***	-2.787***	-2.409***
	(0.568)	(0.586)	(0.657)	(0.672)	(0.895)	(0.900)
EMPLOYEES	0.037**	0.030*	0.112**	0.100*	0.149**	0.130**
	(0.015)	(0.015)	(0.055)	(0.056)	(0.062)	(0.062)
PARTNER	-0.093	-0.236	0.544	0.447	0.451	0.211
	(0.376)	(0.370)	(0.502)	(0.531)	(0.662)	(0.672)
FIRM_AGE	-0.037**	-0.027*	-0.026	-0.012	-0.063**	-0.039
	(0.016)	(0.015)	(0.026)	(0.026)	(0.031)	(0.030)
D_MONTHLY_SALES	0.015*	0.015*	0.001	-0.000	0.016	0.015
	(0.008)	(0.008)	(0.015)	(0.016)	(0.017)	(0.017)
Constant	6.986***	5.634***	0.284	-0.037	7.270***	5.597**
	(1.797)	(1.745)	(1.851)	(1.714)	(2.674)	(2.545)
Opening year dummies	Yes	Yes	Yes	Yes	Yes	Yes
Industry dummies	Yes	Yes	Yes	Yes	Yes	Yes
Number of observations	1,741	1,741	1,741	1,741	1,741	1,741
Prob > F	0.000	0.000	0.000	0.001	0.000	0.000
Adjusted R2	0.157	0.205	0.040	0.078	0.102	0.160

Note: The upper rows are coefficients and the lower rows are heteroscedasticity-robust standard errors.

*Significant at the 10% level.

**Significant at the 5% level.

***Significant at the 1% level.

Table 11 Probit and heteroskedastic probit estimations of other advisors

	(1)	(2)	(3)
Dependent variable: OTHERS_A	Probit	Probit	Hereroskedastic probit
Firm characteristics			
FRANCHISE	0.018**	0.017**	0.018**
	(0.008)	(0.008)	(0.009)
HOME	0.010		
	(0.006)		
EMPLOYEES	-0.000		
	(0.001)		
PARTNER	0.013*	0.012*	0.012*
	(0.007)	(0.007)	(0.007)
FIRM_AGE	-0.000		
	(0.000)		
STARTUP_COST	0.000		
	(0.000)		
E_MONTHLY_SALES	-0.000		
	(0.000)		
D_MONTHLY_SALES	0.000		
	(0.000)		
Entrepreneur characteristics			
MANAGER_AGE	-0.000		
	(0.001)		
MALE	0.000		
	(0.009)		
GRADUATE	-0.006		
	(0.006)		
SPOUSE	-0.007		
	(0.006)		
NUMBER_Y_F	0.000		
	(0.001)		
NO_MANAGEMENT_EXPERIENCE	-0.008		
	(0.007)		
FORMER_JOB_R	-0.004		
	(0.009)		
MONTHLY_INC_F	0.013		
	(0.010)		
KNOW_HOW	-0.005		
	(0.006)		
NO_ROLE_MODEL	0.001		
	(0.005)		
HIGH_RISK	0.002		
	(0.006)		
SHORTSIGHTED	0.000		
	(0.005)		
Opening year dummies	Yes	No	No
Industry dummies	Yes	No	No
Number of observations	1,590	1,590	1,590
Lagrange multiplier test (prob > chi2)	0.820	0.012	-
Prob > chi2	0.606	0.008	0.047
Pseudo R2	0.115	0.052	-
Wald test of lnsigma2 = 0 (prob > chi2)	-	-	0.026
Log (pseudo) likelihood	-83.282	-89.199	-89.166

Note: The upper rows are marginal effects and the lower rows are delta-method standard errors.

*Significant at the 10% level.

**Significant at the 5% level.