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離職金為員工選任之工具

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摘要：本研究以個案公司為研究對象，欲了解離職金是否能成為有效的員工選任工具讓不適任之員工自願性的離開，同時讓適任的員工選擇繼續留下。實證結果顯示，相對於領取離職金且自願離開的試用業務人員，選擇留任之試用業務人員確實有較好銷售件數，且銷售案件之金額也較高。此外，實證結果進一步發現，相對於只以單一傳統面試下所選入的試用業務人員，以傳統面試輔以離職金方案所選入且留任之試用業務人員有較長的留任天數以及較好的業績表現。整體而言，實證解果顯示離職金為一個有效的選任工具。

關鍵詞：離職金、員工選擇、自我選擇、員工適配度

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Pay-to-Quit as a Means for Employee Selection

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Abstract: This study uses data from a real estate company to investigate whether a pay-to-quit program can be a valid selection mechanism that encourages ill-fitting employees to voluntarily leave but retains better fitting employees. The empirical results indicate that probationary sales agents who stayed sold more and higher-valued houses than those who took the payment and left the company. To further explore whether the pay-to-quit program can improve the matching quality of hired probationary sales agents, we examine whether probationary sales agents who were selected through the traditional interview with a pay-to-quit program and stayed would show a higher level of matching quality in terms of duration and job performance than those who were only selected through the traditional interview. The results indicate that probationary sales agents who were selected through the traditional interview with a pay-to-quit program and stayed show a lower rate of departure and better job performance. The results provide evidence that a pay-to-quit program can serve as a useful selection mechanism.

Keywords: pay-to-quit program, employee selection, self-selection, matching quality

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I. Introduction

A recent practice has emerged among companies such as Amazon to encourage the early departure of potentially ill-fitting employees by offering them a lump sum payment to voluntarily quit, which is called the "pay-to-quit program." Paying someone to quit seems counterintuitive and even bizarre, since employee turnover is harmful and costly. Companies that use this program assert that they incentivize the departure of workers who discover, during the early stages of employment, that their skills or goals do not fit well with the company. By paying these employees to leave early, the firms avoid the costs of ill-fitting employees. Simultaneously, paying employees to quit can foster a strong corporate culture by ensuring that the remaining staff is composed of better-fitting employees (Hsieh, 2013). Nonetheless, it remains an open question whether a pay-to-quit program can work as a selection mechanism and induce ill-fitting employees to leave without also encouraging better-fitting employees to do so.

This study aims to empirically examine whether a pay-to-quit program can serve as an effective selection mechanism. If this program works as expected, the retained employees should demonstrate a higher level of matching quality in terms of duration and job performance. To address our research question, first, we use field data from a realty company in Taiwan and examine whether probationary sales agents who took the payment and voluntarily left under the program show inferior performance compared to those who stayed. This examination is conducted to validate the incremental screening effect of the pay-to-quit program and provide *ex ante* evidence that those who take pay are relatively inadequate to perform the job instead of having higher ability and preferring a place with stronger incentive pay (Lazear, 2000). Since the case company combines the program with a traditional interview, it is important to further validate whether the program will screen out poor-fitting probationers and make a difference. Then, we examine whether probationary sales agents who were selected through the traditional interview with the program and stayed demonstrate a lower departure rate and better job performance than those who were only selected through the traditional interview.

This study focuses only on probationers because probationers in this case company must satisfy the criteria for becoming formal sales agents and will be forced to leave if he/she cannot satisfy the criteria. Therefore, passing the criteria is another selection mechanism in addition to the interview and the program. Organizational socialization can also influence the behavior and performance of an individual (Taormina and Bauer, 2000). Using probationers as our sample can avoid extraneous factors that affect our results and better assess the screening effect of the pay-to-quit program.

The results show that probationers who took the payment and voluntarily left under the program show inferior sales performance in terms of the number and value of houses sold compared to those who stayed. We also find that probationers who were selected through the traditional interview with the program and stayed show a lower departure rate and better job performance than those who were only selected through the traditional interview.

The case company changed its selection tool from a traditional interview to a structured (fit-focused) interview and subsequently to a traditional interview with a pay-to-quit program. Thus, we further investigate whether the matching quality of probationers varied among those three types of selection mechanisms. We use probationers who were selected through the traditional interview (*Group 1*) as the reference group and examine whether the probationer-firm matching quality varied between probationers who were selected through the structured (fit-focused) interview (*Group 2*) and those who were selected through the traditional interview with a pay-to-quit program (*Group 3*) after controlling the reference group. The results indicate that probationers in both *Group 2* and *Group 3* outperform *Group 1* regarding their matching quality; however, probationers in *Group 2* show better matching quality than those in *Group 3*. These findings may suggest that a structured interview may be a more effective method to help the case company find suitable individuals for the jobs.

Our study contributes to literature in two ways. First, Our results provide evidence that when probationers have superior information over the company in terms of their ability and fitness with the company, a self-selection mechanism such as a pay-to-quit program can serve as an effective selection method that induce mismatch probationer to quit.

Second, this study extends the empirical literature on organizational design. Much of the literature has focused on how to solve employee-firm matching problems by finding and retaining the right employees (Campbell, 2012; Grabner and Speckbacher, 2016; Hoffman, Kahn, and Li, 2018; Liu, Liu, and Chu, 2019; Deller and Sandino, 2020). The empirical results of this study indicate that encouraging ill-fitting employees to leave can also solve the employee-firm matching problem. Dessler (2016) mentions that a well-designed employee management practice should identify candidates who are suited to the organization and enhance their retention while encouraging those who are ill-suited to voluntarily leave. By focusing only on the finding-and-retaining mechanism, researchers and practitioners may ignore various mechanisms that organizations can use to achieve better outcomes.

The remainder of this paper is organized as follows. The next section reviews the related literature and presents our hypotheses. The third section presents our research

setting, data and empirical models, and the fourth section describes our results. The last section concludes and addresses the study's limitations.

II. Literature Review and Hypothesis Development

2.1 Employee Selection

Theoretical studies on economics, accounting and management have long recognized that employee selection is a form of control to help companies achieve their desired objectives (Ouchi, 1979; Eisenhardt, 1985; Merchant and Van der Stede, 2017).

Merchant and Van der Stede (2017) explain that to align employees with organizational goals, a firm should not only consider action controls and results controls but also personnel and cultural controls, such as selection system, to attract and develop employees who are naturally aligned. Selection is especially relevant when standards, monitoring and rewards alone cannot be used to achieve alignment successfully because management (1)cannot specify in advance the specific actions that will attain organizational goals in all circumstances, (2)has trouble monitoring or verifying standardized actions, (3)cannot measure or verify employee results, and/or (4)cannot reliably attribute organizational results to employee actions (Campbell, 2012; Merchant and Van der Stede, 2017). Even if management could rely on monitoring or rewards to align individuals' interests with company goals, these systems could be prohibitively costly. Finding people who can be trusted to do the right thing could reduce the costs of prescribing actions and enforcing them, or of setting targets and measuring results (Deller and Sandino, 2020).

Studies have examined the validity of different employee selection methods. For example, Barclay (1999) shows that traditional face-to-to interviews have the poorest predictor of job performance, however, it remains the most popular selection technique in use in countries. To conquer the concern of traditional interviews, studies have shown that structured interviews have more predictive validity than unstructured interviews (Huffcutt and Arthur, 1994; McDaniel, Whetzel, Schmidt, and Maurer, 1994). Similarly, recent accounting research has examined the effect of selection mechanisms on control outcomes and provided empirical evidence to support the notion that the desired control outcomes can be achieved through appropriate selection mechanisms. For example, Chatman (1991) shows that the person-organization fit has a high validity in predicting employee tenure. Campbell (2012) finds that employees selected through a new referral channel are more likely to use their decision-making authority to advance organizational objectives than those not selected in this manner. Van Iddekinge, Putka, and Campbell (2011) reveal that

vocational interest-based selection tests predict an employee's job knowledge, job performance and continuance intentions. Hoffman et al. (2018) also demonstrate that job-test score recommendations significantly increase the duration of worker tenure. Liu et al. (2019) show that a fit-focused selection program yields longer tenures. Finally, Deller and Sandino (2020) show that decentralization can improve employee alignment and is associated with lower employee turnover rates if the business unit manager has a local advantage. These studies underscore the importance of appropriate selection mechanisms and suggest that such mechanisms are relevant to employee retention, job performance and the likelihood of achieving company objectives.

Selection is especially crucial when the task of an employee is not programmed and does not have a measurable outcome (Ouchi, 1979; Eisenhardt, 1985). Using appropriate selection mechanisms to screen out individuals with incompatible preferences to the objectives of a given company and minimize the divergence of preferences among organizational members can increase the likelihood of achieving desired organizational goals. However, the problem of hiring the right employees is complicated because employee quality is imperfectly observed at the time of hiring, and employees may have an incentive to misrepresent qualifications and experience (Salop and Salop, 1976). The problem of adverse selection could co-exist with the moral hazard problem for firms. As a result, firms seek to use different search channels and judgements regarding the suitability of job applicants relate to the problem of asymmetric information, that is, job applicants have more knowledge of their capability than the prospective employers do (Behrenz, 2001; Hu and Taber, 2011). Firms could contend with the possibility of a bad employee even when there is a rigorous selection mechanism (Spence, 1973; Kugler and Saint-Paul, 2004). Therefore, firms have to search for more effective ways to observe and keep good employees and reduce the probability of hiring "lemons" persons with bad job qualification (Behrenz, 2001).

2.2 The Pay-to-Quit Program

The pay-to-quit program can be characterized as an extended form of selection that depends on the effects of self-selection. The purpose of the pay-to-quit program is to address the obstacle of employment initiation and force the two parties, i.e., the firms and the employees, to confront their mutual prospects and the consequences of dismissal when their relationship has not been fully established.

At hiring, both company and employee have incomplete information regarding the ability and preference of each other. This information asymmetry can make employees misrepresent their capabilities to win the job (Hendry, 2005) or have imperfect knowledge

of their own ability to perform the job (Greenwald, 1986). Even when the capabilities and preferences of the employees are fairly represented, the inherent ambiguities in hiring still create a hazard for decision-making (Simon, 1976). Therefore, this scenario increases the likelihood of a failed relationship between the firm and employees.

Failed relationships impose risk on both the firm and the employee. From the perspective of the company, termination entails the cost of replacement, training, productivity loss and possibly the decrease in employee morale and motivation (Tziner and Birati, 1996; O'Connell and Kung, 2007). From the perspective of an employee, termination involves both financial and nonfinancial losses (Fee and Hadlock, 2004). Gibbons and Katz (1991) show that displacement events signal unfavorable information to the market and make the displaced workers suffer from the loss of future wages. Hu and Taber (2011) also demonstrate that if firms have discretion as to which workers to lay off, a layoff provides a signal to the outside market that a worker is of low quality. In this way, a layoff provides a negative signal about ability, one would expect wages to fall more following a layoff. Thus, those losses indicate that the attractiveness of a position depends on the rewards of continued employment and assessment of termination risk. A higher possibility of dismissal corresponds to a lower willingness to accept that particular position (Cowen, King, and Marcel, 2016). As a result, both firm and employee have reasons to seek a solution that can increase their willingness to initiate the employment relationship (Xia, 2010).

A pay-to-quit program can be such a solution. In the applied literature, the topic that most closely relates to pay-to-quit programs is the use of severance pay. The lump-sum payment can be considered a form of severance that offsets financial losses associated with termination and functions as a form of insurance. Prior studies have indicated that severance pay can cause efficient turnover because not everyone will maximize his/her utility by quitting and receiving severance pay (Kahn, 1985). The opportunity cost of quitting (i.e., the difference between the present value of the wage stream in the current company and the present value of the severance pay plus the alternative stream in other companies) is higher when the employee is more productive in the current company and vice versa. Therefore, severance pay can induce efficient quitting behavior because it makes the exit option more attractive to low-productivity workers and encourages truth-telling (Lazear, 1983; Kahn, 1985). A study from Jeon and Laffont (1999) also supports this notion. In their study, they show that severance pay can induce self-selection because each worker attaches a different value to the possibility of keeping the job according to the productivity efficiency and job opportunities of the worker. In the similar vein, Laux (2008) shows that severance pay is crucial for making CEO willing to reveal unfavorable information that leads to his own replacement.

At the time of hiring, probationary sales agents at our case company may have imperfect prior knowledge of their ability and not fully understand the requirements and expectations of the case company. During the training period, the probationary agents learn more accurate information about whether their ability and preferences fit the job and company. Therefore, it is reasonable for ill-fitting probationers to expect their utility to be maximized by leaving the case company because of the increasing likelihood of being dismissed.

Since the valuations of the pay-to-quit payment are heterogeneous among probationers, probationers who accept the payment and leave should be those who are pessimistic about his/her own prospects in this company. Here, the pay-to-quit program will encourage probationers to signal their information by leaving the case company, which would not be chosen by better fitting probationers.

Additionally, in the case company, a probationary sales agent is not guaranteed a formal offer to work as an agent. A probationary agent can be discharged if he or she cannot satisfy the criteria to become an agent when the probation period ends.[1] This condition increases the risk of being dismissed, which makes probationary sales agents choose between the possibilities of (a) being dismissed without payment when probation ends[2] and (b) truthfully revealing his or her incompetence or lack of interest and being paid to leave. This more restrictive condition increases the incentive of a probationary sales agent to reveal the fit between him/herself and the case company. Therefore, we presume that the pay-to-quit program should encourage ill-fitting probationary sales agents or at least those with inferior job-related abilities to self-remove. This presumption leads to our first hypothesis:

Hypothesis 1*: Compared to probationary sales agents who chose to stay under this program, probationary sales agents who took the payment and voluntarily left would demonstrate inferior job performance.*

Studies indicate that employees who better match with the firm's objectives have higher job satisfaction and seek to maintain their employment relationship (Kristof, 1996; van Knippenberg, De Cremer, and van Knippenberg, 2007; Edwards and Cable, 2009). These studies suggest that identification with the organization influences how employees perceive and evaluate their jobs, influencing their job satisfaction and tenure. Bretz and Judge (1994) point out that job tenure is a basic indicator of congruency, because an

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1 The criteria to become a sales agent are consumer satisfaction, teamwork, absenteeism, and individual sales performance. Each category has a benchmark, and probationers must achieve it to become sales agents. Those criteria are also used as incentives for probationer conduct. The criteria to become a formal sales agent did not change during our studied period.

2 The probation period is six months in this company.

individual finds the organization acceptable and vice versa. This correspondence between the employee's and the organization's goals decreases the employee's inclination to leave and the organization's likelihood of terminating the employee.

In addition, motivation is maximized when an individual's characteristics match with those of the organization (Blau, 1987; O'Reilly III, Chatman, and Caldwell, 1991; Bretz and Judge, 1994). Employees who are better matched with the firm are more likely to be motivated and perform better than those who are not (Blau, 1987; O'Reilly III et al., 1991; Bretz and Judge, 1994). This sort of employee not only has an innate preference for certain goals but also the ability to realize them.

In summary, prior studies suggest that higher employee-firm matching level employees are more likely to show superior job-related performance and tend to stay longer. Because we presume that pay-to-quit programs should induce ill-fitting probationary sales agents or at least induce those with inferior job-related abilities to self-remove, it is reasonable to expect that the remaining probationers who stayed under the program would have better job-related ability and a higher employee-firm matching level. However, as we mention that the case company changed its selection tool from a traditional interview to a structured (fit-focused) interview and subsequently to a traditional interview with a pay-to-quit program. It is an empirical question to investigate which selection method generates the best result for the case company.

Because the fit-focused selection program examined applicants' goal congruence during the interview, it should help recruiters find candidates whose goals resemble those of the case company, and this should increase the level of goal congruence. Therefore, probationers who were selected through the fit-focused interview should be more likely to show higher congruence compared with probationers through a traditional interview or a traditional interview with the pay-to-quit program. Nonetheless, the pay-to-quit programs could induce ill-fitting probationary sales agents or at least induce those with inferior job-related abilities to self-remove, it is, therefore, to expect that the remaining probationers who stayed under the pay-to-quit program would have better job-related ability and a higher employee-firm matching level than those selected through the traditional interview only. This presumption leads to our second hypothesis:

Hypothesis 2*: Compared to probationary sales agents who were only selected through a traditional interview, probationary sales agents who were selected through a traditional interview with the program and chose to stay would demonstrate a higher level of probationer-firm matching; therefore, they are less likely to leave and more likely to have superior job performance.*

III. Research Setting, Data and Method

3.1 The Case Company

We test our hypotheses using data from a publicly held real estate company based in Taiwan. At the end of 2016, the company had 426 branches, each of which was considered a separate business unit with its own branch office manager.

The beliefs of the company include compassionate customer service and ethics. The company cares about the financial performance of its sales agents, but its primary responsibilities are to act appropriately and serve customers with compassion.

In this labor-intensive, service-oriented industry, sales personnel are critical for building a competitive advantage. Unlike other realty companies in its markets, which prioritize sales performance and determine agent salaries based on individual performance, the case company equally stresses ethics and service. It has been found that it is difficult to use monetary rewards to align the company's interests with those of its sales agents, because of difficulties in measuring ethics and compassion in customer service. This difficulty—and the implicit weak link between employees' efforts and outcomes—results in high turnover among sales agents. The circumstance of high turnover and inconsistent performance among sales agents have posed significant concerns for the case company. To address this issue, the case company has attempted to identify different human resource practices, such as employee selection and reward techniques, to help it identify and keep suitable sales agents.

3.2 Evolution of Selection Practices

3.2.1 The Traditional Interview

Before the structured (fit-focused) interview was implemented, interviewers in the case company evaluated applicants by taking the form of a free-flowing conversion and enabling discretion in hiring criteria. During this period, interviewers evaluated the applicants based on their personal impressions and sometimes asked irrelevant questions to the job. The traditional interview procedure entailed two stages: preliminary and follow-up interviews. In the preliminary stage, applicants were interviewed by two branch-office managers, who were appointed by the regional head manager. After this stage, the selected applicants were called for a follow-up interview, which was conducted by the regional head manager. Regional head managers selected applicants for employment based on their interviews with the evaluation notes of the branch office managers as references.

The situation in which interviewers sometimes asked irrelevant questions posed a concern to the company. The company spent significant resources and time in advertising, training, and mentoring sales agents, in addition to helping them gain the knowledge and

skills to perform their work. Bad hires incurred significant tangible and intangible costs to the company. To address this situation, the company decided to implement a new employee selection interview: a so-called fit-focused interview.

3.2.2 The Fit-Focused Interview

In 2013, the case company adopted a selection practice known as the fit-focused interview.[3] The adopted fit-focused interview structure had several key features. First, the company identified characteristics that it sought in sales agents, which fit the company's values and the job context. From the identified characteristics, the company selected four characteristics[4] that a sales agent should possess to succeed. Then, the HR department of the company developed interview questions and designed a rating format based on these four characteristics for interviewers to reference during interviews. Additionally, the case company arranged for a five-hour training program for interviewers, which elaborated on the meaning of the four characteristics and their origins. The program taught interviewers how to conduct interviews and provided opportunities to role play to ensure that they understood how to effectively execute fit-focused interviews.

The company believed that fit-focused interviews with their clear selection guidelines would help interviewers find better fitting and performing sales agents.

3.2.3 The Pay-to-Quit Program

Change is never easy. Some interviewing staff raised concerns about the fit-focused interview. They asserted that the interview constrained their ability to find the right sales agents and provided limited information on the personalities of the applicants. Simultaneously, the need to re-attend training programs regularly wasted their time. The interviewers believed that traditional interviews, which enabled them to ask various questions, could better identify the right employees. They hoped that the company would stop using the fit-focused interview and instead use traditional interviews.

The case company understood these complaints, but it also recognized that hiring decisions made based on discretional criteria could be problematic and cause mismatches between the hired sales agents and the company. Thus, the company hoped to find a way to ease the concerns of its interviewers while also hiring the "right" sales agents. In late

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[3] In 2013, the fit-focused interview was first implemented in the Taipei branch offices because all interviewers had completed the training program by the end of 2012 compared to only some managers in other areas. In 2014, all branch offices implemented the new interview format.

[4] The characteristics are: 1) having an ambitious and pioneering spirit, 2) serving customers and their needs with compassion, 3) prioritizing teamwork, and 4) being aware of the corporate ideology and image.

2014,[5] the case company decided to abandon the fit-focused interview and use a traditional interview approach to select its sales agents with a pay-to-quit program to compensate for possible sale agent/company mismatch problems that resulted from traditional interviews. The company studied other companies that had adopted pay-to-quit programs and collaborated with its top managers, HR staff, and branch managers to determine the amount and timing options to offer.

The case company first implemented its pay-to-quit program on April 1, 2015. The program operated as follows. Once candidates passed a two-stage face-to-face interview process, they started their employment as probationary sales agents. All probationary agents had to attend a four-week intensive training course[6] in the first month. During this course, probationers learn about the company's ideology, which the company takes very seriously and strives to foster and maintain. By taking the course, probationers are more closely exposed to the realities of the difficulties and struggles that they will face as sales agents in the company's industry. They also learn about how the company compensates its agents and additional benefits that the company offers to its agents.[7]

At the beginning of training, the company makes a pay-to-quit offer to its probationers. When a probationary sales agent decides to quit before completing the training course, the company gives that probationary agent a $3,200 USD[8] cash bonus. This payment is designed to incentivize the early selection of candidates who discover during training that they are not a good fit for the company or the position.

Figure 1 gives an overview of the study timeline that outlines the evolution of the selection practice.

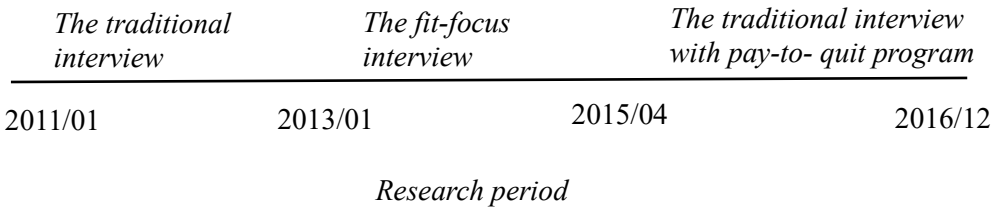

Figure 1 The Evolution of the Selection Practice

[5] While the case company decided to stop running its fit-focused interview program in late 2014, the company did not stop using fit-focused interviews until March 31, 2015.

[6] The orientation/training program for new hires did not change after implementing the pay-to-quit program.

[7] In the case company, the salary package for a formal sales agent contains a fixed salary with cash bonuses and employee benefits. Here, the fixed salary is graded pay, i.e., basic pay changes with promotion. Cash bonuses are determined by the individual sales performance, customer satisfaction ratings and net profit (loss) of the chain office where the agent works.

[8] One US dollar is equal to 31 NT dollars.

3.3 Data Collection and Sample Selection

The case company collected and provided monthly data on probationary sales agents in all of its branch offices. To examine our first hypothesis and validate the screening effect of the pay-to-quit program, we used data from Apr. 1, 2015, to Dec. 31, 2016, as our first dataset. The final sample had 2,114 probationary sales agents, and the final number of monthly probationer-to-office observations was 2,114.[9] Table 1 shows the number of recruited, departing, and retained probationary sales agents during the traditional interview, fit-focused interview and pay-to-quit program period.

Table 1 Number of Recruited and Retained Sales Agents

	The traditional interview	The fit-focus interview	The traditional interview with pay- to- quit program
Number of recruited sales agents	2,758	1,299	2,114
Voluntary resignations			(398)
Forced departures			(938)
Number of departing sales agents	1,601 (58%)	764 (59%)	1,336 (63%)
Number of remaining sales agents	1,157 (42%)	535 (41%)	778 (37%)

Table 1 shows that in the pay-to-quit program period, the company recruited 2,114 sales agents, and 1,336 of them left when the probationary period ended. Among those 1,336 sales agents, 398 sales agents took the payment and left, and 938 sales agents failed to achieve the required criteria and were forced to leave. Contrary to prior studies (McFarland, 2008; Hsieh, 2013) show 1% to 3% turnover rate under a pay-to-quit program, in this study, approximately 18.82 percent of recruited sales agents took the payment and voluntarily left the company.[10]

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[9] We used the monthly probationer-to-office matching as our measurement unit instead of probationer (person) because probationers may transfer to a different branch office in the same metro area (e.g., probationers *j* may work for branch office A for three months and for branch office B for two more months). This probationer-to-office matching is designed to better control any office-related factors that can influence the results.

[10] The ratio of voluntary leaving (18.82%) seems much higher than prior literature (McFarland, 2008; Hsieh, 2013), however, the research site in those studies is an e-commerce and retailing company and ours is a real-estate company. The industrial difference could result in the different results between our study and

We used data from Jan. 1, 2011, to Dec. 31, 2016, but excluded the probationary sales agents who were selected during Jan. 1, 2013, to Mar. 30, 2015, since the case company used a structured (fit-focused) interview to select its sales agents during this period. This second data set helps us further investigate whether the presence of a pay-to-quit program improves the matching quality of hired probationers. Specifically, we compare the matching quality between probationers who were selected through the traditional interview with the pay-to-quit program and chose to stay and those who were only selected through the traditional interview. The final number of monthly probationer-to-office observations is 23,609.[11]

3.4 Measurement of Dependent Variables

3.4.1 Dependent Variables for Hypothesis 1

To compare the performance differences between probationers who took the payment and voluntarily left and those who stayed under the program, we follow Jackson, Schlacter, and Wolfe (1995) and use the number of houses sold (*P_Deal_First*) and value of houses sold (*P_Value_First*) of the probationer in the first month of his/her probationary period to proxy his/her job performance.

3.4.2 Dependent Variables for Hypothesis 2

To investigate the matching quality of probationary sales agents who stayed under the program, we follow prior studies (Jackson et al., 1995; Munneke and Yavas, 2001; Hoffman et al., 2018; Liu et al., 2019; Deller and Sandino, 2020) and use the employment duration and job performance as our empirical proxies for the probationer-firm matching quality.

The probationer's employment duration (*Duration*) is the number of days between the hired date and the exit date during the probationary period.[12] For probationary sales agents who remain active after their probationary period, the job duration is the number of days between the hired date and the last recorded date as a probationary sales agent.

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those studies. Anecdotal documents support our assertion and show that, on average, the turnover rate among sales agents is around 80% and 30% in real-estate and e-commerce industry, respectively (*Why Real Estate Agents Turnover Rate is So High* https://realtytimes.com/real-industry-news-articles/item/1039690-why-real-estate-agents-turnover-rate-is-so-high; *Retail Sector Wages Are Rising Due to Higher Employee Turnover and e-Commerce Demand* https://humancapital.aon.com/insights/articles/2020/retail-sector-wages-are-rising-due-to-higher-employee-turnover-and-e-commerce-demand).

[11] In total, 2,758 sales agents were employed during the traditional interview period. Among those 2,758 probationers, 1,601 left the company. However, we cannot distinguish whether the sales agents voluntarily left the company in the pre-program period. In addition, among those 938 sales agents in the pay-to-quit program period, some may have voluntarily left the company instead of having been forced out. However, we cannot identify whether the exit was a self-made decision or requested by a branch manager.

[12] Probationers' employment durations were censored at the final sample period exit date for probationers who were still active with the company at that time.

To measure the probationer's job performance, we also use the monthly number of houses sold (*P_Deal*) and value of houses sold (*P_Value*) of the probationer during his/her probationary period to proxy his/her job performance.

3.5 Research Design

3.5.1 Empirical Models for Hypothesis 1

To test our first hypothesis, we use observations from our first dataset and adopt ordinary least squares (OLS) regression models with robust standard errors and clustering by branch offices to examine the association between probationers' job performance and voluntary leavers under the program (*P_Quit*). The coefficients of interest in Equation (1) and (2) are α_1 and β_1 respectively, and we expect that probationers who decide to leave under the pay-to-quit program are less likely to have better sales performance (i.e., number of houses sold, and value of house sold) when compared with those who decide to stay under the program.

Studies show that the relation between age and job performance was modestly positive among young employees (McEvoy and Cascio, 1989). However, most studies have suggested that the relationship between age and sales performance generally was unrelated (Cleveland and Shore, 1992; Levy and Sharma, 1994). Gender differences among salespeople are shown in many studies (Schul and Wren, 1992; Goolsby, Lagace, and Boorom, 1992). Women develop different traits than man that may aid their performance in selling. For example, women are regarded to be better listeners at developing interdependent and ongoing relationships. In addition, women are seen as sensitive and over-nurturing their customers (Bernard, 1981; Goolsby et al., 1992). Despite the differences between genders, there is no consistent empirical evidence of a relationship between the gender of a salesperson and their job performance. Studies suggest that there should be a positive relationship between education and job performance, due to the educational process is designed to foster critical thinking and the ability to view situations from multiple perspectives (Levy and Sharma, 1994; Bolander, Bonney, and Satornino, 2014). However, Lambert, Marmorstein, and Sharma (1990) find that education was inversely related to salespersons' job performance because highly educated salesperson may be frustrated with repetitive selling tasks. Following prior studies (Spence, 1973; McLaughlin, 1991; Campbell III, 1997; Kugler and Saint-Paul, 2004), we include the age (*P_Age*), gender (*P_Gender*) and education level (*P_Edu*) of the probationers and propose that there are no differences between the performance of probationers and their age, gender and education.

We also include the branch office size (*B_Size*), number of houses sold (*B_Deal*), number of managed houses (*B_Managed*), turnover (*B_Turn*), age (*B_Age*), and value of houses sold (*B_Value*) to control for the impact of the branch office characteristics on the

probationers' job performance. As studies (Bartel, 2004; Lee, 2017) show that a branch office's sales performance, size, experience, and the price of housing have a positive impact on salespersons' job performance, in addition, employee turnover of the branch office is indirectly related to low level of employee performance. Therefore, we predict that branch office size (*B_Size*), number of houses sold (*B_Deal*), number of managed houses (*B_Managed*), age (*B_Age*), and value of houses sold (*B_Value*) are positive correlated with probationers' job performance, but (*B_Turn*) is negatively related to probationers' job performance. Moreover, we include the gender (*Mgt_Gender*) and length of service period (*Mgt_Sen*) of the office manager to control for the influence of the office managers on the decisions of the probationers and do not predict the sign of gender and length of a service period of the office manager on probationers' job performance based on prior studies' findings (Levy and Sharma, 1993; Levy and Sharma, 1994). We also include the number of other branch offices in the metropolitan area where the office is located (*Com*), the number of residential house transaction volume in the administrative district (*Cycle*), and median value of houses sold in the metropolitan area (*Metro_Price*) to control for the influence of the market/metropolitan environment. As Lee (2017) suggests that the association between the location of the branch office and salespersons' job performance is unclear, therefore, we do not predict the sign of *Com*, *Cycle*, and *Metro_Price* on probationers' performance. Finally, we include the month[13] and year to control for unobserved effects of time that are conjunct with the pay-to-quit program. The detailed variable definitions are presented in Table 2. We express our models as follows:

$$\begin{aligned} P\_Deal\_First = {} & \alpha_1 P\_Quit + \alpha_2 P\_Age + \alpha_3 P\_Gender + \alpha_4 P\_Edu + \alpha_5 B\_Size \\ & + \alpha_6 B\_Deal + \alpha_7 B\_Managed + \alpha_8 B\_Turn + \alpha_9 B\_Age \\ & + \alpha_{10} B\_Value + \alpha_{11} Mgt\_Gender + \alpha_{12} Mgt\_Sen + \alpha_{13} Com \\ & + \alpha_{14} Cycle + \alpha_{15} Metro\_Price + \sum Month + \sum Year + \varepsilon_{it} \end{aligned} \quad (1)$$

$$\begin{aligned} P\_Value\_First = {} & \beta_1 P\_Quit + \beta_2 P\_Age + \beta_3 P\_Gender + \beta_4 P\_Edu + \beta_5 B\_Size \\ & + \beta_6 B\_Deal + \beta_7 B\_Managed + \beta_8 B\_Turn + \beta_9 B\_Age \\ & + \beta_{10} B\_Value + \beta_{11} Mgt\_Gender + \beta_{12} Mgt\_Sen + \beta_{13} Com \\ & + \beta_{14} Cycle + \beta_{15} Metro\_Price + \sum Month + \sum Year + \varepsilon_{it} \end{aligned} \quad (2)$$

In our models, the variable *P_Quit* indicates that the probationer chose to take the payment and voluntarily left the case company under the program. Our coefficients of interest are α_1 and β_1.

[13] Prior studies (Colwell and Park, 1990; Kaplanski and Levy, 2012) have shown that the real estate industry is more affected by seasonal effects than annual effects. Thus, we include the months to control for unobserved time effects.

Table 2 Variable Definitions

Variable		Definition
P_Deal_First	=	Number of houses sold in the first month of probationary period by probationary sales agent *j*.
P_Value_First	=	Natural logarithm of value of houses sold in the first month of probationary period by probationary sales agent *j*. Value of houses sold is defined as total sales price of houses sold divided by number of houses sold.
Duration	=	Job duration of probationary sales agent *j* in days during his/her probationary period.
P_Deal	=	Monthly number of houses sold by probation sales agent *j*.
P_Value	=	Natural logarithm of monthly value of houses sold by probation sales agent *j*.
P_Quit	=	Equals one if the probation sales agent chose to take the payment and left the company voluntarily under the program; otherwise, it equals zero.
P_Program_Stay	=	Equals one if the probation sales agent was selected through the traditional interview with a pay-to-quit program and chose to stay; otherwise, it equals zero.
P_Age	=	Probationary sales agent's age.
P_Gender	=	Probationary sales agent's gender; equals one when a probation sales agent is male.
P_Edu	=	Probationary sales agent's education level; equals one if the probationary sales agent has a bachelor's degree or above.
Transfer	=	Equals one if the probationary sales agent transferred to other branch office during his/her probationary period.
B_Size	=	Average monthly number of employees in branch office *i.*
B_Deal	=	Monthly number of houses sold by branch office *i.*
B_Managed	=	Monthly number of managed houses by branch office *i.*
B_Turn	=	Average sales agent turnover at a branch in months.
B_Age	=	Age of branch office *i* in years.
B_Value	=	Natural logarithm of monthly value of houses sold by branch office *i.*
Mgt_Gender	=	Branch office manager's gender; equals one when a manager is male.
Mgt_Sen	=	Branch office manager's length of service in years.

Table 2 Variable Definitions (Continued)

Variable		Definition
Com	=	Number of other branch offices in the same metropolitan area where the branch office is located.
Cycle	=	The number of residential house transaction volume in the administrative district classified by the Taiwan Construction and Planning Agency Ministry of the Interior in the *t* th month of the year.
Metro_Price	=	Natural logarithm of monthly median value of houses sold in the metropolitan area where the branch office is located.
A_Deal	=	Monthly number of houses sold by sales agent *j*.
A_Value	=	Natural logarithm of monthly value of houses sold by sales agent *j*.
A_Program_Stay	=	Equals one if the formal sales agent was selected through the traditional interview with a pay-to-quit program and chose to stay; otherwise, it equals zero.
External Job Opportunity	=	Score of business monitoring indicator from National Development Council.
Month	=	Set of indicator variables representing months.
Year	=	Set of indicator variables representing years.

3.5.2 Empirical Models for Hypothesis 2

Our approach to testing the second hypothesis involves utilizing observations from the second dataset and referencing prior studies (Liu et al., 2019; Deller and Sandino, 2020) by applying a parametric survival model with Weibull distribution[14]and clustering by branch offices.[15] Equation (3) compares duration for probationers hired with and without pay-to-quit program. We regress *Duration* for a probationer *i* hired to a branch office *j*, at time *t*, on an indicator for whether the branch office *j* had pay-to-quit program at time *t*. The hazard rate model demonstrates the probability that a probationer will depart at a point in time, given that he/she has not already. We expect that probationers who opt to stay in the pay-to-quit program have a decreased probability of departing, as indicated by the γ_1 coefficient.

Several other factors that influence an employee's retention are included as control variables in the regression model. Following previous studies (Abelson and Baysinger,

[14] A parametric survival with Weibull distribution model is one in which survival time is assumed to follow the Weibull distribution. The Weibull probability density function is shown as: $f(t)=\lambda p t^{p-1} exp(-\lambda t^{p})$, *where,* $h(t)=\lambda p t^{p-1}$ *and* $S(t)=exp(-\lambda t^{p})$. A value that is greater than 1 is applied for t in this study, due to the hazard function for probationer's employment duration is monotonically increasing, that is the failure rate increases with time.

[15] The global test rejects the proportional hazard assumptions; therefore, a parametric survival model with Weibull distribution is applied in this study instead of a proportional Cox regression model.

1984; O'Reilly III et al., 1991; Huselid, 1995; Bhatnagar, 2007), we include the age, gender and educational level of the probationary sales agent to control for individual effects. The coefficient of educational level should be negative because research has found a clear negative relationship between the level of education and organizational commitment (Glisson and Durick, 1988). Research on the relationship between age, gender and retention has not resulted in a clear conclusion, as such, we do not predict the sign of the coefficient of probationers' age and gender. We also include the indicator variable *Transfer* to control for the transfers of probationers. The characteristics of a branch office (i.e., office size, number of houses deal, number of managed houses, turnover, office age, and value of houses sold) are included to control the impact of the branch office's characteristics on employee retention. Previous studies show that a firm's size and performance is negatively related to employee turnover (Huselid, 1995; Trevor, Gerhart, and Boudreau, 1997). Accordingly, we expect that office size, number of houses deal, number of managed houses, office age, and value of houses sold are positively correlated with probationers' retention.

The gender and length of a service period of the office manager are included to control the effects of the characteristics of a branch manager. Some researchers (Abelson, Kacmar, and Jackofsky, 1990; LeBlanc, Rich, and Mulvey, 2000) posit that senior personnel are more familiar with employee needs which positively affect employees' retention. Therefore, we predict the coefficient of office manager's tenure should be positive. The number of other branch offices in the metropolitan area where the office was located (*Com*), the number of residential house transaction volume in the administrative district (*Cycle*), and median value of houses sold in the metropolitan area (*Metro_Price*) are included to control for the influence of the environment. Finally, we include the month and year to control unobserved effects of time and any changes that are conjunct with the selection methods (traditional interview and combination of the traditional interview and the program). The detailed variable definitions are presented in Table 2. We express our model as follows:

$$\begin{aligned} Duration = {} & \gamma_1 P\_Program\_Stay + \gamma_2 P\_Age + \gamma_3 P\_Gender + \gamma_4 P\_Edu \\ & + \gamma_5 Transfer + \gamma_6 B\_Size + \gamma_7 B\_Deal + \gamma_8 B\_Managed \\ & + \gamma_9 B\_Turn + \gamma_{10} B\_Age + \gamma_{11} B\_Value + \gamma_{12} Mgt\_Gender \\ & + \gamma_{13} Mgt\_Sen + \gamma_{14} Com + \gamma_{15} Cycle + \gamma_{16} Metro\_Price \\ & + \sum Month + \sum Year + \varepsilon_{it} \end{aligned} \tag{3}$$

Then, we apply OLS regression models with robust standard errors and clustering by branch offices to examine whether probationary sales agents who were selected through the traditional interview with the program and stayed will demonstrate better job performance

than those who were only selected through the traditional interview. The coefficients of interest in Equation (4) and (5) are denoted as τ_1 and υ_1 respectively. It is anticipated that probationers who opt to remain in the pay-to-quit program will display higher sales performance compared to their counterparts.

Factors that would influence the job performance of an employee are included as control variables in the regression model. Following previous studies (Spence, 1973; Abelson and Baysinger, 1984; Abelson et al., 1990; McLaughlin, 1991; Kugler and Saint-Paul, 2004), we include the age, gender and educational level of the probationary sales agent to control for individual effects and propose that there are no differences between the performance of probationers and their age, gender and education according to prior studies (Cleveland and Shore, 1992; Levy and Sharma, 1994). We include the indicator variable *Transfer* to control for the transfers of probationers. Because studies have shown that the job performance of employees is influenced by increasing tenure (O'Reilly III et al., 1991; Bretz and Judge, 1994; Kristof-Brown, Zimmerman, and Johnson, 2005), we include the job duration of the probationer (*Duration*) to control for the influence of the job duration on the job performance of probationers and predict the coefficient of *Duration* is positively related to probationers' job performance. The characteristics of the branch office (i.e., office size, number of houses deal, number of managed houses, turnover, office age, and value of houses sold) are included to control the impact of the characteristics of the branch office on the job performance of the probationer. Studies (Bartel, 2004; Lee, 2017) show that a branch office's sales performance, size, experience, and the price of housing have a positive impact on salespersons' job performance. In addition, employee turnover of the branch office is indirectly related to the low level of employee performance. Therefore, we propose that *B_Size*, *B_Deal*, *B_Managed*, *B_Age*, and *B_Value* are positively correlated with probationers' job performance, but *B_Turn* is negatively related to probationers' job performance. The gender and length of a service period of the office manager are included to control for the effects of the characteristics of branch managers and do not predict the sign of gender and length of service period of the office manager on probationers' job performance based on prior studies' findings (Levy and Sharma, 1993; Levy and Sharma, 1994). We also include the number of other branch offices in the metropolitan area where the office is located (*Com*), the number of residential house transaction volume in the administrative district (*Cycle*), and median value of houses sold in the metropolitan area (*Metro_Price*) to control for the influence of the market/metropolitan environment. Similar to previous assertion, we do not predict the sign of *Com*, *Cycle*, and *Metro_Price* on probationers' performance due to Lee (2017) suggests that the association between the location of the branch office and salespersons' job performance is unclear. Finally, we

include the month and year to control for unobserved effects of time and any changes that are conjunct with selection methods. The detailed variable definitions are presented in Table 2. We express our models as follows:

$$\begin{aligned} P\_Deal = {} & \tau_1 P\_Program\_Stay + \tau_2 P\_Age + \tau_3 P\_Gender + \tau_4 P\_Edu + \tau_5 Transfer \\ & + \tau_6 Duration + \tau_7 B\_Size + \tau_8 B\_Deal + \tau_9 B\_Managed + \tau_{10} B\_Turn \\ & + \tau_{11} B\_Age + \tau_{12} B\_Value + \tau_{13} Mgt\_Gender + \tau_{14} Mgt\_Sen + \tau_{15} Com \\ & + \tau_{16} Cycle + \tau_{17} Metro\_Price + \sum Month + \sum Year + \varepsilon_{it} \end{aligned} \quad (4)$$

$$\begin{aligned} P\_Value = {} & \upsilon_1 P\_Program\_Stay + \upsilon_2 P\_Age + \upsilon_3 P\_Gender + \upsilon_4 P\_Edu + \upsilon_5 Transfer \\ & + \upsilon_6 Duration + \upsilon_7 B\_Size + \upsilon_8 B\_Deal + \upsilon_9 B\_Managed + \upsilon_{10} B\_Turn \\ & + \upsilon_{11} B\_Age + \upsilon_{12} B\_Value + \upsilon_{13} Mgt\_Gender + \upsilon_{14} Mgt\_Sen + \upsilon_{15} Com \\ & + \upsilon_{16} Cycle + \upsilon_{17} Metro\_Price + \sum Month + \sum Year + \varepsilon_{it} \end{aligned} \quad (5)$$

In the above models, the variable *P_Program_Stay* indicates that the probationer was selected through the traditional interview with the program and chose to stay. Our coefficients of interest are γ_1, τ_1 *and* υ_1.

IV. Empirical Analysis

4.1 Descriptive Statistics and Pearson Correlations

Panel A of Table 3 presents the summary statistics for the main variables in hypothesis 1. Regarding our main dependent variables, on average, the number and value of houses sold of probationers in the first month of their probationary period are 0.006 and 265,348.700, respectively. Panel B of Table 3 shows descriptive statistics for the main variables in hypothesis 2. Concerning the main dependent variables for hypothesis 2, probationers worked 160 days on average (13-182 days) during their probationary period. In addition, the average number and value of houses sold by probationers during their probationary period are 0.152 and 5,176,988.000, respectively.

Table 3 Descriptive Statistics

Panel A: Descriptive Statistics for Hypothesis 1 (*n*=2,114)				
Variable	Mean	Std. Dev.	Min	Max
P_Deal_First	0.006	0.056	0.000	1.000
P_Value_First	265,348.700	3,006,990.000	0.000	80,700,000.000
P_Age	27.856	3.484	19.370	46.345
P_Gender	0.699	0.459	0.000	1.000
P_Edu	0.830	0.376	0.000	1.000
B_Size	7.829	1.076	4.500	11.500
B_Deal	2.419	1.559	0.000	13.700

Table 3 Descriptive Statistics (Continued)

Variable	Mean	Std. Dev.	Min	Max
B_Managed	4.322	2.709	0.000	16.000
B_Turn	0.039	0.071	0.000	0.267
B_Age	10.797	7.296	0.660	31.101
B_Value	17,100,000.000	40,300,000.000	0.000	980,000,000.000
Mgt_Gender	0.835	0.371	0.000	1.000
Mgt_Sen	10.101	4.699	2.167	27.333
Com	10.234	5.770	1.000	27.000
Cycle	2,767.393	1,108.657	374.000	8,004.000
Metro_Price	10,700,000.000	6,037,776.000	500,000.000	34,000,000.000
Panel B: Descriptive Statistics for Hypothesis 2 (*n*=23,609)				
Variable	Mean	Std. Dev.	Min	Max
Duration	160.278	43.801	13.000	182.000
P_Deal	0.152	0.350	0.000	4.000
P_Value	5,176,998.000	22,200,000.000	0.000	1,760,000,000.000
P_Age	30.131	3.873	19.370	44.959
P_Gender	0.717	0.450	0.000	1.000
P_Edu	0.793	0.405	0.000	1.000
Transfer	0.297	0.457	0.000	1.000
B_Size	8.287	1.143	4.000	14.000
B_Deal	3.064	1.992	0.000	16.000
B_Managed	6.726	4.346	0.000	35.000
B_Turn	0.042	0.070	0.000	0.267
B_Age	11.538	7.098	0.493	31.101
B_Value	16,500,000.000	32,500,000.000	0.000	980,000,000.000
Mgt_Gender	0.865	0.342	0.000	1.000
Mgt_Sen	4.306	3.791	0.083	25.833
Com	10.169	5.997	1.000	27.000
Cycle	3,409.290	1,640.345	232.000	11,003.000
Metro_Price	9,898,064.000	5,537,803.000	450,000.000	34,600,000.000
External Job Opportunity	19.502	5.116	13.000	34.000

See Table 2 for the variable definitions.

Panel A of Table 4 demonstrates the correlations among the main variables of interest for our first hypothesis. The probationers sold more and higher-value houses in offices with more houses sold and sold fewer and lower-value houses when they had a bachelor's degree. The correlations among the explanatory variables for hypothesis 1 were low, and

all calculated VIFs of explanatory variables in our hypothesis 1 model were below 10, which suggests that multicollinearity is not a concern.

Panel C of Table 4 shows correlations among the main variables of interest for our second hypothesis. The job duration of probationers positively correlates with their number of houses sold, value of houses sold, whether they have a bachelor's degree, whether they transfer to another office, the office size, manager gender and seniority. All correlations among the explanatory variables for hypothesis 2 were below 0.40, and all calculated VIFs of explanatory variables in our hypothesis 2 models were below 10, which suggests that multicollinearity is not a concern.

4.2 Empirical Results for Hypotheses

The empirical results for our first hypothesis are shown in Table 5 and Table 6. Panel A of Table 5 reports the mean-difference test results of the variables of interest: *P_Deal_First*, and *P_Value_First*. Panel A of Table 5 shows that probationers who took the payment and left under the program show inferior job performance in terms of the number of houses sold (t=-2.43) and value of houses sold (t=-2.42) compared to others. However, the probationer and office characteristics could have led to important differences instead of the pay-to-quit program regarding the number and value of houses sold by the probationer. Therefore, the results from Panel A in Table 5 should be interpreted with caution.

To ensure that probationers who took the payment and voluntarily left are comparable to those who did not, we match leavers (*P_Quit*=1) with non-leavers (*P_Quit*=0) according to the probationer's age (*P_Age*), educational level (*P_Edu*), gender (*P_Gender*), office size (*B_Size*), office's number of deals (*B_Deal*) and office's age (*B_Age*). We apply one-to-one no replacement matching with a caliper of width of 0.01[16], and the matching provides a final sample of 790 probationers (395 leavers and 395 non-leavers). Panel B of Table 5 presents a covariate balance analysis using a t-test to compare the differences in means between the variables to match leavers and non-leavers. The results suggest that the mean-difference test of the selected variables that are used in the matching process shows no significant mean difference between two groups regarding each variable. Therefore, our non-leaver group is sufficiently similar to compare with the leaver group.

Panel C of Table 5 presents the mean-difference test results of the variables of interest (*P_Deal_First* and *P_Value_First*) after matching. Consistent with our expectation, we find that leavers show fewer houses sold (t=-3.05) and lower value of houses sold (t=-3.20) after balancing the probationer and office characteristics between leavers and non-leavers. The results from Table 5 provide preliminary evidence to support our first hypothesis and validate the screening effect of the pay-to-quit program.

[16] Our caliper is equal to 0.01 of the standard deviation of the logit of the propensity scores. We use a more conservative caliper than that suggested by Austin (2011) to ensure comparability across matched branch offices.

Table 4 Pearson Correlations of the Variables

Panel A: Pearson Correlations of Variables for Hypothesis 1 (n=2,114)									
	1.	2.	3.	4.	5.	6.	7.	8.	9.
1. *P_Deal*	1.000								
2. *P_Value_First*	0.709***	1.000							
3. *P_Age*	-0.009	-0.010	1.000						
4. *P_Gender*	0.024	0.023	-0.036	1.000					
5. *P_Edu*	-0.055**	-0.022	-0.17***	-0.009	1.000				
6. *B_Size*	0.009	-0.012	-0.036	-0.032	0.001	1.000			
7. *B_Deal*	0.052**	0.052**	0.031	-0.031	-0.048**	0.238***	1.000		
8. *B_Managed*	-0.007	0.002	-0.022	-0.078***	-0.020	0.260***	0.248***	1.000	
9. *B_Turn*	-0.017	-0.017	0.028	-0.020	-0.004	-0.068***	-0.082***	-0.059***	1.000
10. *B_Age*	-0.018	-0.008	0.009	0.038*	-0.001	0.062***	-0.042*	0.055**	-0.028
11. *B_Value*	-0.032	-0.017	0.020	-0.001	0.023	0.102***	0.137***	0.097***	-0.030
12. *Mgt_Gender*	-0.004	-0.005	0.033	0.034	0.007	-0.028	-0.042*	-0.075***	-0.037*
13. *Mgt_Sen*	0.007	0.019	0.056**	0.009	0.026	0.002	-0.069***	-0.068***	0.025
14. *Com*	0.003	0.024	0.024	0.031	0.050	-0.211***	-0.203***	-0.167***	-0.094***
15. *Cycle*	-0.048**	-0.022	0.012	0.081***	0.026	-0.015	0.038*	-0.049**	0.003
16. *Metro_Price*	-0.023	0.001	0.0681***	0.033	0.022	-0.326***	-0.254***	-0.234***	-0.082***

Table 4 Pearson Correlations of the Variables (Continued)

Panel A: Pearson Correlations of Variables for Hypothesis 1 (Continued)

	10.	11.	12.	13.	14.	15.
10. *B_Age*	1.000					
11. *B_Value*	0.059***	1.000				
12. *Mgt_Gender*	0.149***	0.024	1.000			
13. *Mgt_Sen*	0.179***	0.043*	0.110***	1.000		
14. *Com*	0.160***	-0.057***	0.112***	0.15***	1.000	
15. *Cycle*	0.015	0.031	0.038	-0.047**	-0.133***	1.000
16. *Metro_Price*	0.196***	-0.098***	0.195***	0.189***	0.603***	-0.017

Panel B: Pearson Correlations of Variables for Hypothesis 2 (n=23,609)

	1.	2.	3.	4.	5.	6.	7.	8.	9.
1. *Duration*	1.000								
2. *P_Deal*	0.159***	1.000							
3. *P_Value*	0.088***	0.261***	1.000						
4. *P_Age*	-0.129***	0.054***	0.008	1.000					
5. *P_Gender*	-0.002	-0.011*	-0.006	0.021***	1.000				
6. *P_Edu*	0.029***	-0.030***	0.001	-0.169***	-0.016**	1.000			
7. *Transfer*	0.224***	0.157***	0.078***	0.130***	0.057***	-0.019***	1.000		
8. *B_Size*	0.058***	0.023***	-0.015**	0.041***	-0.032***	-0.025***	0.020***	1.000	
9. *B_Deal*	-0.050***	0.283***	0.052***	0.174***	-0.010	-0.058***	0.087***	0.255***	1.000
10. *B_Managed*	-0.067***	0.109***	0.012*	0.267***	-0.030***	-0.066***	0.126***	0.318***	0.393***

Table 4 Pearson Correlations of the Variables (Continued)

	1.	2.	3.	4.	5.	6.	7.	8.	9.
11. *B_Turn*	-0.294***	-0.060***	-0.047***	0.054***	-0.002	-0.016**	-0.082***	-0.093***	-0.034***
12. *B_Age*	-0.029***	-0.010	0.007	0.055***	0.003	0.021***	0.010	0.140***	0.098***
13. *B_Value*	-0.010	0.022***	0.026***	0.061***	0.005	0.001	0.005	0.108***	0.103***
14. *Mgt_Gender*	0.012*	-0.005	0.008	0.061***	0.026***	0.005	0.015**	0.010	-0.008
15. *Mgt_Sen*	0.069***	-0.043***	-0.002	-0.091***	-0.006	0.010	-0.069***	0.060***	-0.089***
16. *Com*	0.004	-0.090***	0.037***	0.033***	0.035***	0.065***	0.010	-0.167***	-0.202***
17. *Cycle*	-0.083***	0.026***	0.013*	0.190***	0.058***	-0.015**	0.093***	-0.013**	0.167***
18. *Metro_Price*	0.021***	-0.135***	0.054***	-0.022***	0.041***	0.077***	-0.016**	-0.244***	-0.302***

Panel B: Pearson Correlations of Variables for Hypothesis 2 (Continued)

	10.	11.	12.	13.	14.	15.	16.	17.
10. *B_Managed*	1.000							
11. *B_Turn*	-0.001	1.000						
12. *B_Age*	0.09***	-0.032***	1.000					
13. *B_Value*	0.090***	-0.022***	0.081***	1.000				
14. *Mgt_Gender*	-0.009	-0.020***	0.118***	0.002	1.000			
15. *Mgt_Sen*	-0.115***	-0.049***	0.113***	-0.011*	0.089***	1.000		
16. *Com*	-0.196***	-0.052***	0.119***	0.006	0.089***	0.108***	1.000	
17. *Cycle*	0.032***	0.004	0.065***	0.095***	0.113***	-0.098***	-0.024***	1.000
18. *Metro_Price*	-0.303***	-0.067***	0.116***	-0.016**	0.118***	0.150***	0.657***	0.093***

See Table 2 for the variable definitions.

Table 5 Mean-Difference Test for the Variables of Interest between Leaver and Non-Leaver Under the Program

Panel A: Mean-Difference without Matching			
	Leavers (*P_Quit*=1) n=398	Non-Leavers (*P_Quit*=0) n=1,716	Mean-Difference (t-test)
P_Deal_First	0.000	0.008	-0.008** (t=-2.43)
P_Value_First	0.000	0.243	-0.243** (t=-2.42)
Panel B: Covariate Balance Analysis			
	Leavers (*P_Quit=1*) n=395	Non-Leavers (*P_Quit=0*) n=395	Mean-Difference (t-test)
P_Age	28.054	28.159	-0.105 (t=-0.43)
P_Gender	0.684	0.671	0.013 (t=0.38)
P_Edu	0.828	0.843	-0.015 (t=-0.58)
B_Size	7.637	7.647	-0.01 (t=-0.14)
B_Deal	2.316	2.345	-0.029 (t=-0.30)
B_Age	11.047	11.002	0.045 (t=0.09)
Panel C: Mean-Difference after Matching			
	Leavers (*P_Quit=1*) n=395	Non-Leavers (*P_Qiut=0*) n=395	Mean-Difference (t-test)
P_Deal_First	0.000	0.013	-0.013*** (t=-3.05)
P_Value_First	0.000	0.425	-0.425*** (t=-3.20)

[a] *, **, and *** denote significance at the 0.10, 0.05, and 0.01 levels, respectively (two-tailed test).
[b] See Table 2 for the variable definitions.

Table 6 shows the regressions in models (1) and (2) and explores whether the probationers who left and took the payment would have had inferior job performance in terms of the number and value of houses sold. Column (1) and column (2) in Table 6 indicate that after controlling for known factors that influence the probationers' job performance, there is a negative relation between *P_Quit* and *P_Deal_First* (t=-4.83) and a negative relation between *P_Quit* and *P_Value_First* (t=-4.82).

Although OLS regression models can produce reliable estimates of the pay-to-quit program screening effect on average, the linear model can be biased due to imbalance between leavers and non-leavers. To ease this concern, we use the propensity score matching sample from Table 5 and rerun our models (1) and (2). Columns (3) and (4) in Table 6 show the regression results of the matching sample. The findings also support our assertion, i.e., probationers who took the payment and voluntarily left sold fewer (t=-2.98) and lower-value houses (t=-3.20) than those who stayed under the program.

To further ensure our regression results from the matching sample, we bootstrap our matching sample 100 times and randomly (with replacement) match each leaver to one of the non-leaver available in that sample. The results are shown in column (5) and column (6) in Table 6 and suggest that the probationers who left and took the payment sold fewer (z=-2.81) and lower-value houses (z=-3.06) than those who stayed.

In general, the results from Table 5 and Table 6 support hypothesis 1 and confirm the incremental screening effect of the pay-to-quit program.

Table 6 Empirical Result for Hypothesis 1

	Full Sample		Propensity Score-Matched Sample		Randomly Matched Sample	
Dep. Var	*P_Deal_First*	*P_Value_First*	*P_Deal_First*	*P_Value_First*	*P_Deal_First*	*P_Value_First*
	Coefficient	*Coefficient*	*Coefficient*	*Coefficient*	*Coefficient*	*Coefficient*
	(1)	(2)	(3)	(4)	(5)	(6)
P_Quit	-0.007***	-0.228***	-0.013***	-0.436***	-0.013**	-0.436***
	(t=-4.83)	(t=-4.82)	(t=-2.98)	(t=-3.20)	(z=-2.81)	(z=-3.06)
P_Age	-0.001	-0.006	-0.001	-0.005	-0.001	-0.005
	(t=-0.63)	(t=-0.48)	(t=-0.30)	(t=-0.18)	(z=-0.32)	(z=-0.19)
P_Gender	0.003	0.102	0.007	0.261*	0.007*	0.261**
	(t=1.36)	(t=1.40)	(t=1.57)	(t=1.92)	(z=1.71)	(z=2.13)
P_Edu	-0.008*	-0.203	-0.004	-0.089	-0.004	-0.089
	(t=-1.74)	(t=-1.44)	(t=-0.55)	(t=-0.41)	(z=-0.52)	(z=-0.40)
B_Size	-0.001	-0.031	0.002	0.037	0.002	0.037
	(t=-0.23)	(t=-0.75)	(t=0.79)	(t=0.52)	(z=0.75)	(z=0.49)

Table 6 Empirical Result for Hypothesis 1 (Continued)

	Full Sample		Propensity Score-Matched Sample		Randomly Matched Sample	
Dep. Var	*P_Deal_First*	*P_Value_First*	*P_Deal_First*	*P_Value_First*	*P_Deal_First*	*P_Value_First*
	Coefficient	*Coefficient*	*Coefficient*	*Coefficient*	*Coefficient*	*Coefficient*
	(1)	(2)	(3)	(4)	(5)	(6)
B_Deal	0.002***	0.074***	0.002	0.082	0.002	0.082
	(t=2.75)	(t=2.89)	(t=1.18)	(t=1.59)	(z=1.11)	(z=1.50)
B_Managed	-0.001	-0.010	-0.001	-0.029	-0.001	-0.029
	(t=-1.06)	(t=-0.77)	(t=-1.49)	(t=-1.33)	(z=-1.55)	(z=-1.44)
B_Turn	-0.005	-0.127	-0.006	-0.359	-0.006	-0.359
	(t=-0.41)	(t=-0.29)	(t=-0.38)	(t=-0.68)	(z=-0.35)	(z=-0.63)
B_Age	-0.001	-0.003	-0.001	-0.013	-0.001	-0.013
	(t=-0.56)	(t=-0.61)	(t=-1.07)	(t=-1.27)	(z=-1.11)	(z=-1.27)
B_Value	-0.001	-0.009	0.001	0.005	0.001	0.005
	(t=-1.45)	(t=-1.00)	(t=1.43)	(t=0.96)	(z=1.19)	(z=0.75)
Mgt_Gender	-0.001	0.017	0.004	0.135	0.004	0.135
	(t=-0.13)	(t=0.16)	(t=0.63)	(t=0.65)	(z=0.75)	(z=0.76)
Mgt_Sen	0.001	0.001	0.001	0.002	0.001	0.002
	(t=0.48)	(t=0.56)	(t=1.09)	(t=1.25)	(z=1.13)	(z=1.22)
Com	0.001	0.007	0.001	0.007	0.001	0.007
	(t=0.65)	(t=0.83)	(t=0.88)	(t=0.82)	(z=0.79)	(z=0.75)
Cycle	-0.006*	-0.160	-0.002	-0.018	-0.002	-0.018
	(t=-1.90)	(t=-1.56)	(t=-0.66)	(t=-0.16)	(z=-0.71)	(z=-0.18)
Metro_Price	-0.003	-0.116	0.001	0.005	0.001	0.005
	(t=-0.87)	(t=-1.11)	(t=0.13)	(t=0.03)	(z=0.13)	(z=0.03)
Month-Year FE	Yes	Yes	Yes	Yes	Yes	Yes
N	2,114	2,114	790	790	790	790
R-Squared	0.195	0.190	0.551	0.452	0.08	0.08

[a] *, **, and *** denote significance at the 0.10, 0.05, and 0.01 levels, respectively (two-tailed test)
[b] See Table 2 for the variable definitions.

Table 7 presents the results of the regressions in models (3), (4) and (5) and explores whether probationers who were selected through the traditional interview with the pay-to-quit program and stayed could have had better probationer-firm matching quality than those who were only selected through the traditional interview. The results from column (1) in Table 7 report that after controlling for known factors that influence the probationer's job

duration, there is a negative relation between *P_Program_Stay* and the probability of leaving (z=-6.38), and the rate of leaving decreases by 26 percent if the probationer was selected through the traditional interview with the program and chose to stay[17]. The results from column (2) and column (3) in Table 7 indicate a positive relation between *P_Program_Stay* and the number of houses sold (t=5.30) and value of houses sold (t=5.57) of the probationer. The empirical results from regression models suggest that probationers who were selected through the traditional interview with the program and stayed show better probationer-firm matching quality, as measured by the job duration, number of houses sold and value of houses sold, than those who were only selected through the traditional interview. Hence, the findings support our hypothesis 2.

Table 7 Empirical Result for Hypothesis 2

Dep. Var	*Duration* *Hazard Rate* (1)	*P_Value* *Coefficient* (2)	*P_Deal* *Coefficient* (3)
P_Program_Stay	0.736***	0.070***	1.428***
	(z=-6.38)	(t=5.30)	(t=5.57)
P_Age	1.014***	0.003***	0.051***
	(z=4.02)	(t=3.72)	(t=3.88)
P_Gender	1.110***	-0.013***	-0.246***
	(z=4.30)	(t=-2.65)	(t=-2.68)
P_Edu	1.041	-0.007	-0.166
	(z=1.45)	(t=-1.34)	(t=-1.60)
Transfer	0.140***	0.072***	1.579***
	(z=-51.41)	(t=14.17)	(t=16.16)
Duration		0.095***	2.025***
		(t=21.53)	(t=23.73)
B_Size	1.018	-0.029***	-0.430***
	(z=1.48)	(t=-12.66)	(t=-9.83)
B_Deal	0.996	0.049***	0.726***
	(z=-0.60)	(t=37.13)	(t=28.49)
B_Managed	0.992**	0.001	0.008
	(z=-2.48)	(t=0.39)	(t=0.63)

[17] A hazard rate greater than 1 indicates that the variable is associated with a shorter time to employee departure, whereas a hazard ratio less than 1 suggests that the variable is associated with longer time to employee departure.

Table 7 Empirical Result for Hypothesis 2 (Continued)

Dep. Var	*Duration*	*P_Value*	*P_Deal*
	Hazard Rate	*Coefficient*	*Coefficient*
	(1)	(2)	(3)
B_Turn	36.115***	-0.064**	-3.050***
	(z=26.88)	(t=-1.99)	(t=-4.87)
B_Age	1.647	-0.001	-0.010
	(z=0.01)	(t=-1.07)	(t=-1.47)
B_Value	0.996	0.001	0.027**
	(z=-1.49)	(t=0.12)	(t=2.38)
Mgt_Gender	0.966	0.003	0.087
	(z=-0.82)	(t=0.46)	(t=0.67)
Mgt_Sen	0.999*	-0.001	-0.001
	(z=-1.95)	(t=-0.94)	(t=-1.48)
Com	1.041***	0.001	0.167***
	(z=2.74)	(t=0.34)	(t=3.05)
Cycle	1.007	-0.055***	-0.865***
	(z=0.34)	(t=-5.11)	(t=-4.15)
Metro_Price	1.115***	-0.022*	-0.143
	(z=5.74)	(t=-1.87)	(t=-0.64)
Month-Year FE	Yes	Yes	Yes
Branch office FE	Yes	Yes	Yes
N	23,609	23,609	23,609
LR Chi^2	7739.05***		
R_Squared		0.164	0.146

[a] *, **, and *** denote significance at the 0.10, 0.05, and 0.01 levels, respectively (two-tailed test).
[b] See Table 2 for the variable definitions.

4.3 Additional Tests

4.3.1 Matching Quality among Three Selection Methods

As we mention in the research site section, the case company changed its employee selection method from a traditional interview alone to a structured (fit-focused) interview and subsequently to a traditional interview with the pay-to-quit program. It would be interesting to examine the probationer-firm matching quality among these three types of employee selection methods and verify the employee selection method that resulted in a better outcome for the case company.

We set the probationers who were selected through the traditional interview alone as the reference group (*Group 1*) and investigate whether those who were selected through the fit-focused interview (*Group 2*) and those who were selected through the traditional interview with the program and stayed (*Group 3*) showed better matching quality than the probationers in *Group 1*. Then, we compare the regression coefficient difference between *Group 2* and *Group 3* to determine which group demonstrates better probationer-firm matching quality.

The regression results are shown in Panel A of Table 8. From column (1) in Panel A of Table 8, we can discern that compared to probationers who were selected through the traditional interview alone, the rate of leaving decreases by 69 percent if the probationers were selected through the fit-focused interview and by 56 percent if the probationers were selected through the traditional interview with the program and stayed. The Wald test shows a significant coefficient difference between *Group 2* and *Group 3* (Chi^2=63.40, $p<0.01$), which indicates that probationers who were selected through the fit-focused interview stayed longer than those who were selected through the traditional interview with a pay-to-quit program and stayed.

Column (2) and column (3) in Table 8 also indicate that probationers in both *Group 2* and *Group 3* outperform those in *Group 1* regarding the number and value of houses sold. The F-statistic test also shows that the difference in coefficient between *Group 2* and *Group 3* is statistically significant regarding the number of houses sold (F value=194.36, $p<0.01$) and the value of houses sold (F value=194.42, $p<0.01$). Thus, probationers who were selected through the fit-focused interview outperform those who were selected through the traditional interview with a pay-to-quit program and stayed.

4.3.2 The Persistent Effect of the Pay-to-Quit Program

To evaluate the effectiveness of the pay-to-quit program, we also investigate whether probationers who are selected by the pay-to-quit program and decide to stay perform better and stay longer after they become formal sales agents.

We use probationers' employee ID number as identification and use monthly data from Jan. 1, 2011, to Dec. 31, 2016. We also excluded the sales agents who were selected during Jan. 1, 2013, to Mar. 30, 2015, since the case company used a structured (fit-focused) interview to select its sales agents during this period. Subsequently, we compare the duration of stay and sales performance between sales agents who were selected through the traditional interview only and those selected through the traditional interview with the pay-to-quit program to determine whether agents selected through the traditional interview with the pay-to-quit program still stay longer and perform better. We use the same regression

models for H2 to investigate the association between an agent's duration of stay, sales performance and the pay-to-quit program.

Panel B of Table 8 presents the regression results: program-selected agents stay longer ($z = -5.55$, $p < 0.01$) and perform better ($t = 2.41$, $p < 0.05$; $t=1.75$, $p<0.10$). These results further demonstrate that agents selected through the pay-to-quit program are more likely to better match with the organization (i.e., longer duration) and have better sales performance.

4.3.3 The Effect of Probationers' Age

In our empirical examination, we find that probationers who decide to stay during the pay-to-quit program tend to stay longer and have better sales performance. However, generational workforce differences could affect the outcomes of the pay-to-quit program (e.g., probationers at a young age could be more likely to take the payment and leave when compare to probationers at an old age). Although, we have included probationer's age as one of the control variables in the regression models, to further exclude the impact of probationers' age on our empirical results, we split our sample into *Younger* and *Older* probationer sub-sample using median value of the probationers' age in our sample and re-examine our second hypothesis.

The results are shown in Panel C of Table 8. From Panel C of Table 8, we can observe that the coefficients on *P_Program_Stay* are significantly negative for *Duration* in both subsample, and the coefficients on *P_Program_Stay* are significantly positive for *P_Value* and *P_Deal* in both sub-samples. The results in Panel C of Table 8 provide primary results suggesting that generational workforce differences do not react differently to the pay-to-quit program. A further Wald test shows that the coefficients on *P_Program_Stay* estimated over the younger group are statistically equal to the coefficients estimated over the older group for *Duration*, *P_Value* and *P_Deal* ($Chi^2=0.06$, $p=0.80$; $Chi^2=0.15$, $p=0.70$; $Chi^2=1.53$, $p=0.22$, respectively). The Wald test provides more evidence and indicates that generational workforce differences do not react differently to the pay-to-quit program.

4.3.4 The Influence of External Job Opportunity

Prior studies have indicated that availability of alternative jobs had positive correlation with turnover intentions of the employees (Kirschenbaum and Mano-Negrin, 1999; Hwang and Kuo, 2006). Therefore, to consider the influence of external labor market condition on our empirical results, we further include business monitoring indicator from National Development Council[18] as one of the control variables and re-run our equation (3) to (5).

[18] Studies (Soto, 2009; Leshoro, 2013) have showed that economic growth is a prerequisite for increasing productive employment. As business monitoring indicator is measuring economic situation, this indicator sufficiently represents economic activities and can be a suitable proxy to capture growth in employment.

The business monitoring indicator is an overall monitoring indicator that uses leading, coincident and lagging indicators to calculate its overall score, and each indicator (i.e., leading, coincident and lagging) has its own components (e.g., real monetary aggregate MIB) to calculate its own score. A higher (lower) score indicates a better (worser) economic situation. The results are present in column (1), (3) and (5) of Panel D of Table 8. Consistent with what we find in Table 7, we can discern that the coefficients on *P_Program_Stay* are significantly negative for *Duration*, and the coefficients on *P_Program_Stay* are significantly positive for *P_Value* and *P_Deal*. The results provide results suggesting that after controlling the influence of external job opportunities, our results remain unchanged.

Furthermore, we test the moderating role of external job opportunity on the association between probationers who chose to stay under the program, their job duration and sales performance. Studies (Lambert, Hogan, and Barton, 2001; Thatcher, Stepina, and Boyle, 2002) have revealed a significant positive correlation between external job opportunities and turnover intention, therefore, we also expect that the better an external job opportunity is, the more likely a probationer will leave the case company. As for the association between probationer's duration and the interaction between external job opportunity and the pay-to-quit program, we expect that if the program can effectively screen out unsuitable probationers, the existence of external job opportunity would reinforce the effect of the pay-to-quit program and decrease the likelihood of suitable probationers to leave.

Regarding the correlation between external job opportunity and employee productivity, studies (Kale, Ryan, and Wang, 2019; Murphy, 2021) have mixed results. As a result, we propose a null form for the relationship between external job opportunity and probationers' sales performance. The association between probationer's productive and the interaction term of external job opportunity and pay-to-quit program, we anticipate that external job opportunity will strengthen the impact of the pay-to-quit program and reduce the probability of eligible probationers departing. Consequently, we should expect to observe a positive correlation between the interaction term and the sales performance of the probationers.

The results are present in column (2), (4) and (6) of Panel D of Table 8. As shown in column (2) of Panel D, the hazard rate on *P_Program_Stay* ×*External Job Opportunity* is 0.280 and significant and the 1% level, which suggests that the probationers who decided to stay under the pay-to-quit program are less likely to leave, even there are more employment opportunity in the market. We also find that the coefficients on *P_Value* and *P_Deal* are positive and significant at 1% level, suggesting that better economic situation and growth in employment strengthen the sales performance of program-stayed probationers.

Table 8 Additional Tests

Panel A: Matching Quality among Three Types of Selection Method			
Dep. Var	*Duration*	*P_Value*	*P_Deal*
	Hazard Rate	*Coefficient*	*Coefficient*
	(1)	(2)	(3)
Group2	0.310***	4.518***	0.217***
	(z=-15.31)	(t=13.33)	(t=12.91)
Group3	0.445***	2.155***	0.098***
	(z=-14.32)	(t=8.58)	(t=8.07)
Constant	Yes	Yes	Yes
Control	Yes	Yes	Yes
Month-Year FE	Yes	Yes	Yes
Branch office FE	Yes	Yes	Yes
N	31,101[19]	31,101	31,101
Panel B: The Persistent Effect of the Pay-to-Quit Program			
Dep. Var	*Duration*	*A_Value*	*A_Deal*
	Hazard Rate	*Coefficient*	*Coefficient*
	(1)	(2)	(3)
A_Program_Stay	0.506***	3.609**	0.046*
	(z=-5.55)	(t=2.41)	(t=1.75)

[19] The increase of number of observations is due to the inclusion of probationers who selected through the fit-focused interview.

Table 8 Additional Tests (Continued)

Dep. Var	*Duration Hazard Rate* (1)	*A_Value Coefficient* (2)	*A_Deal Coefficient* (3)
Constant	Yes	Yes	Yes
Control	Yes	Yes	Yes
Month-Year FE	Yes	Yes	Yes
Branch office FE	Yes	Yes	Yes
N	68,514[20]	68,514	68,514

Panel C: The Impact of Probationers' Age

	Probationers with younger age			Probationers with older age		
Dep. Var	*Duration Hazard Rate*	*P_Value Coefficient*	*P_Deal Coefficient*	*Duration Hazard Rate*	*P_Value Coefficient*	*P_Deal Coefficient*
	(1)	(2)	(3)	(1)	(2)	(3)
P_Program_Stay	0.685***	2.026**	0.081***	0.826**	1.239***	0.068**
	(z=-5.17)	(t=5.25)	(t=4.28)	(z=-2.01)	(t=2.58)	(t=2.63)
Constant	Yes	Yes	Yes	Yes	Yes	Yes
Control	Yes	Yes	Yes	Yes	Yes	Yes
Month-Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Branch office FE	Yes	Yes	Yes	Yes	Yes	Yes
N	11,807	11,807	11,807	11,802	11,802	11,802

[20] The increase of number of observations is due to the expansion of observed period (i.e., period after the probation) for probationers.

Table 8 Additional Tests (Continued)

Panel D: The Influence of External Job Opportunity						
Dep. Var	*Duration*		*P_Value*		*P_Deal*	
	Hazard Rate	*Hazard Rate*	*Coefficient*	Coefficient	Coefficient	*Coefficient*
	(1)	(2)	(3)	(4)	(5)	(6)
P_Program_Stay	0.477***	0223***	2.157***	1.972***	0.106***	0.108***
	(z=-11.34)	(z=-8.65)	(t=7.89)	(t=5.93)	(t=7.52)	(t=6.30)
External Job		2.878***		1.029***		0.062***
Opportunity		(z=3.09)		(t=4.65)		(t=5.44)
P_Program_Stay		0.280***		1.645***		0.086***
×*External Job*		(z=-3.27)		(t=5.10)		(t=5.17)
Opportunity						
Constant	Yes	Yes	Yes	Yes	Yes	Yes
Control	Yes	Yes	Yes	Yes	Yes	Yes
Month-Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Branch office FE	Yes	Yes	Yes	Yes	Yes	Yes
N	23,609	23,609	23,609	23,609	23,609	23,609

[a] *, **, and *** denote significance at the 0.10, 0.05, and 0.01 levels, respectively (two-tailed test)

[b] See Table 2 for the variable definitions.

V. Conclusion and Limitations

In this study, we show that a pay-to-quit program can serve as a self-selection mechanism to encourage ill-fitting sales agents to voluntarily leave the company, which results in a better level of fit between the firm and the remaining probationers. Our empirical results support the screening effect of the pay-to-quit program and show that the probationers who left and took the payment demonstrate inferior job performance in terms of the number and value of houses sold. Meanwhile, the empirical results indicate that probationers who were selected through the traditional interview with a pay-to-quit program and stayed demonstrate better matching quality than probationers who were only selected through the traditional interview. However, the empirical results show that probationers who were selected through the traditional interview with a pay-to-quit program demonstrate a lower matching quality than those who were selected through the fit-focused interview. Overall, the findings suggest that self-selection can be achieved by using a pay-to-quit program. These findings echo prior findings (Salop and Salop, 1976; Guasch and Weiss, 1981; Dohmen and Falk, 2010), which suggests that when there is heterogeneity among potential employees and incomplete information for employers, a self-selection device can be a useful mechanism for selection.

Like many other studies, this study has several limitations. First, unlike Amazon, which provides such incentives to their employees every year, the case company provides payments only during the beginning of the probationers' careers and gives probationers one month to consider whether they would like to stay with the company. Given the unique organizational context of the case company, our results may not be generalizable to other companies.

Second, because of the limited data availability, we could not set treatment/control groups and compare probationers who were only selected through the traditional interview to those who were selected through the traditional interview with a pay-to-quit program to directly examine the matching quality between these two groups. In this study, we exploit the observed variations in the control outcomes under two different selection methods. Therefore, it may raise concern about the conjunctive effect of the pay-to-quit program and traditional interviews. However, comparing job performance between probationers who voluntarily left under the program and those who stayed can provide some evidence to support the incremental screening effect of the pay-to-quit program and ease the concern that we cannot separate the effect of the pay-to-quit program from the traditional interview. Future studies that use data from randomized experiments may provide a clearer account of the effectiveness of pay-to-quit in matching employees and firms.

Third, the learning effects of training may contaminate our findings. As we mentioned, in the fit-focused interview period, the recruiters were required to attend training courses to understand how to appropriately conduct fit-focused interviews. The recruiters may have developed recruiting skills through this training, which resulted in a learning effect. However, if learning effects had persisted, we would not have observed a difference in matching quality among the groups of probationers. Studies including companies adopting consistent human resource practices may overcome this complication and provide a clearer account of the effects of different selection practices.

Forth, all the branch offices implemented the same selection practice (e.g., pay-to-quit program) during our research period, expect for the fit-focused interview[21]. Therefore, we cannot apply a quasi-experimental approach (i.e., the difference-in difference method), which could be a more appropriate method to estimate treatment effects, to compare the changes in outcomes over time between selection practices.

Fifth, the case company does not combine the fit-focused interview with the pay-to-quit program, as a result, we cannot further examine which type of interview can help the case company to find the highest matching quality probationers when it works with the pay-to-quit program.

Sixth, external labor market conditions could have a certain influence on our empirical results. Although we have considered such an effect in the additional test section, still, our results might mingle with the condition of external labor market. Future study could further eliminate the effect of external labor market and provide more rigorous evidence of the effect of pay-to-quit.

Finally, our study shows that a self-selection mechanism such as a pay-to-quit program can serve as an effective selection method that induce mismatch probationer to quit. However, this evidece cannot see as an evidence that the selestion of suitbale employees is from the employee side because this study does not use survey questionnair to ask probationers directly. However, the unique data from the case company offers an opportunity for us to take a glance at when employees have the chance to use a screening tool, such as pay-to-quit program, to signal their preference and leave the company, effective turnover could happen.

In summary, this study shows that self-selection can be achieved by using a pay-to-quit program. This incentive may be a useful screening tool that enables a company to retain better workers. However, the findings of this study call for caution in its use. The results suggest that a structured (fit-focused) interview may be a more effective selection

[21] Please see section 3.2 and footnote 3 for more detail information about the evolution of the selection practices.

mechanism to solve matching problems than the use of a traditional interview with a pay-to-quit program in this case company. This finding may indicate that a pay-to-quit program cannot replace a rigorous hiring practice, and the pay-to-quit program should serve as an additional tool to help a company solve matching problems. As the issue of goal congruency has received much attention in academic research and the business media. Recruiting employees naturally aligned with company goals and values might foster productivity and employee attitudes that are otherwise difficult to induce. However, there are situations that require employee initiative and flexibility, and appropriate measures are then difficult to obtain. The results of our study have practical implications for the choice of recruitment practices. Pay-to-quit program can facilitate the employer-employee matching process by mitigating information fractions. However, the program itself cannot replace rigorous recruitment but only an additional tool that helps employer to solve matching program. Therefore, we suggest that companies with high cost of not removing a bad hire, should use means of applicant screening and self-selection to select out bad type employees *ex ante* and increase the probability of hiring the right employees.

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