Free Agents in an Embedded World

Career Mobility in the Japanese Financial Market

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ABSTRACT

I evaluate the utility of economic and sociological models of job turnover in explaining patterns of career mobility in the Japanese financial market. I employ a mixed methods approach using exploratory interviews and two separate datasets of finance professionals in Japan. I examine mobility by separating the Japanese labor market into two distinct sectors – the domestic and the foreign. In the domestic firms, worker behavior is embedded in social relations and mobility is low. In stark contrast to this status quo, workers in foreign firms behave closer to the predictions of economic exchange characterized by atomistic and instrumental actions. However, I also find evidence where behavior in foreign firms deviates from the predictions of economic theory. For example, workers do not necessarily move because of higher pay, but because they seek greater individual recognition, and because they do not conform to the group-oriented norms of Japanese corporations. We also discover evidence of social capital building between workers and their former bosses. This results in striking patterns of team mobility, where workers migrate in teams across firms. In the end, we observe that patterns of career mobility for free agents in an embedded world resemble a hybrid: The spot-market features are there, but so are the social exchange aspects of market transactions. The labor market does not operate in a vacuum but is shaped by larger social forces.

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INTRODUCTION

The essence of sociology is the idea that individual behavior is embedded in a larger social and cultural framework (Block 1990; Granovetter 1985). Individuals do not act in isolation. Their actions are determined and likewise constrained by ongoing social relations, and by the behavior and expectation of others. Under the economic approach, human behavior is driven by self-interest. Context is less important. The model rests on the rational calculation of costs and benefits in deciding one's actions. It assumes self-interest maximizing behavior, where maximization is determined primarily by the price mechanism (Becker 1976). The embeddedness and rationality paradigm do not contradict, but rather, complement each other's positions. Individuals make rational decisions, but that rationality depends on the social-institutional context.

The labor market is a fascinating arena which demonstrates the utility of integrating the economic and sociological approaches. Begin with the *homo economicus* view of the worker/ agent. Much like free agents in professional sports, sellers of labor (= workers) seek buyers (= employers) offering the highest possible price for their labor. Deals are struck and matches are made when the workers and employers agree on a price. But the employment relationship may be fickle and short-lasting. Workers may change jobs from one after the other in search of higher offers. Employers may dismiss workers at will in place of higher quality labor.

This may be a highly simplified and stylized view of the labor market, but such a market characterized by short-term employment, high mobility, and instrumental behavior does exist, and is not limited to professional sports. The case at point is the finance sector and its market for security analysts, traders, investment bankers, and other highly specialized professionals. At face value, it looks like these agents behave in perfect consonance with *homo economicus*. Each

agent knows her market price, and the market knows hers. They respond instrumentally to potential buyers offering higher prices for their labor. All of this is fodder to the economist. Agents are behaving according to the predictions of price theory.

The sociologist views this phenomenon with awe but with skepticism. Just as the economist is unwilling to accept irrational behavior, the sociologist cannot fathom the idea that behavior is *not* socially embedded. Sociologists are generally skeptical when the results are too clean (Hirsch et al 1987). The finance market may be driven by pure economic forces but it too must be shaped by its larger social environment. This line of sociological inquiry has led to a number of influential research by sociologists who have persuasively documented that the behavior of financial markets is socially situated (see for example, Adler & Adler 1984; Baker 1984; Burke 1988; Zuckerman 2004a).

The current paper builds on this tradition by challenging the neoclassical position that the market is an exclusively economic structure (Baker 1984). The advancement of the sociological agenda into a terrain traditionally held by economists is but another example of a constructive "turf war" between sociologists and economists (Swedberg and Granovetter 1992). Yet as Zuckerman (2004b) argues, economic sociologists often maintain an "excessively confrontational posture against neoclassical economics" (p.459). This is unfortunate, because the two disciplines have much to learn from each other. My mission is not to reject the economic framework but to use the neoclassical position as a starting point of our analysis. We then build on the model by following the sociologists' hunches, and applying our own tools of analysis. My main objective is to evaluate the utility of economic and sociological models of job turnover in explaining patterns of career mobility among finance professionals in Japan. I hypothesize that the behavior of finance professionals is embedded in ongoing social relations,

and examine the extent to which their behavior deviates from the predictions of economic theory.

The market for finance professionals in Japan offers an ideal environment to examine this hypothesis. In Japan, the labor market is characterized by norms and institutions that prize the values of loyalty and trust. There is an implicit understanding between workers and employers that the relationship will be long-lasting, and that benefits over the long-run will override short-term interests. Workers who breach this implicit contract and switch jobs are viewed as social "defects," and are penalized for their actions through lower pay and limited career opportunities.

Along with globalization and capital flows crossing international barriers, a new labor market has emerged in the country alongside its Japanese counterpart. This is the market for foreign-owned firms. Deeply rooted in an Anglo-American home base, this market constitutes the extreme opposite of the Japanese status quo, and operates more like a spot-market where transactions are dictated primarily by quantity and price signals. There is more fluidity and less loyalty. Workers switch jobs in response to higher pay. Employers dismiss workers with little notice when their performance is subpar, or when the firm undergoes financial duress. In short, workers behave much like free agents, and firms prioritize short-term profits in place of long-term relations.

In a country that is characterized by one of the lowest turnover rates in the world, the workers in the foreign-owned firms truly stand out for their seemingly unrestrained pattern of interfirm mobility. Some envy their lifestyle – one that is uninhibited and higher paying. Others disdain at their money-motivated and short-sighted values, and are turned off by the jobs that offer no job security and stability. Who works in the foreign firms? What compels them to move? How do workers find jobs in the foreign firms?

I apply the models of human capital and social capital to examine patterns of career

mobility between domestic and foreign firms. The key concept here is the role of firm-specific human capital and firm-specific social capital which both reinforces the workers' attachment to the firm, but at the same time constrains their options for mobility outside of the firm. I also examine career transitions from the perspective of deviance. In a country where labor market processes are deeply embedded in the structure of social relations, becoming a free agent is a deviant act that carries with it enormous risks. I apply social control theory to illuminate the process by which some workers lose their attachment with their employers, and the consequences of doing so.

I employ a mixed methods approach using exploratory interviews and two separate datasets of finance professionals in Japan to examine this hypothesis. My empirical analysis reveals that much of the observed behavior among workers in foreign firms is consistent with the predictions of the spot-market and the economic mode of exchange. However, I also find evidence that career mobility in the foreign firms is influenced by social relations. For example, workers do not necessarily move because of higher pay. They change employers because they seek greater recognition for their worth, and because they do not conform to the stifling work norms of Japanese corporations. Instead of a random pattern of turnover, we find a systematic pattern of path dependency, where one's origin determines her destination. We also discover evidence of social capital building between workers and their former bosses. This results in striking patterns of team mobility, where workers migrate in teams across firms. In the end, we observe that patterns of career mobility for free agents in an embedded world resemble a hybrid structure: The spot-market features are there, but so are the social exchange aspects of market transactions. The labor market does not operate in a vacuum but is shaped by larger social forces.

MARKET OVERVIEW

The current study focuses on the finance sector in Japan. The Tokyo Stock Exchange is the second largest exchange in the world by market value. Japan's financial market is a truly global operation. The leading brokerage firms of the U.S. and Europe are all represented there. Accordingly, the finance sector has the highest rate of employment in the foreign-firms (measured by the number of workers in foreign firms divided by the total number of workers in that industry sector) – 8.2 percent, compared to the industry average of 2.4% (JETRO 2007).[1]

There are important substantive reasons for examining the finance sector. The financial market epitomizes the advanced capitalist system. Financial products are exchanged, often amongst anonymous buyers and sellers, over a market interface where transactions are conducted instantaneously based primarily on prices and quantity. Based on the atomized view of the financial market, it is tempting to extrapolate that the labor market for finance professionals also resembles this pattern of anonymous short-term trade. But the labor market in finance does not operate like a spot market, at least not in Japan. Rather, it is sheltered from the pure market forces. The internal labor market is well-developed in the finance sector, and accordingly, there is lower turnover than the industry average. Key features are presented in Table 1. We discuss highlights below.

First, workers in finance are well-educated and well-paid. 56 percent are university graduates compared to 30 percent in other industries. Workers in finance on average earn 30 percent more than they do in other industries.

Second, there is lower turnover in the finance sector. This pattern is more pronounced among men. On average, male workers in finance remain with the same firm for 16.1 years versus the industry average of 13.5 years. Following Ono (2005), I estimate the share of workers

that are "lifetime employed." This is the number of workers in the age group 50 to 54 who have never left their employers divided by the total number of workers in that age group. I find that close to 60 percent of male workers are "lifetime employed," compared to the industry average of 27 percent in this age group.

Third, there is a larger gender gap in earnings. Salary for women in finance is higher than the industry average, but the gender earnings gap is much larger than in other industries. Across all industries, women earn 38 percent less than do men; in finance, they earn 51 percent less. The sizeable gender gap suggests that occupational segregation by sex – where men are assigned to the career track, and women are sidelined to the secondary track – may be greater in the finance sector.

And fourth, workers in finance are more likely to be employed in large firms (employing more than 1000 persons) – 62 versus 18 percent for the industry average. Since features of the internal labor market are generally stronger in larger firms, workers in finance are more likely to experience the benefits of the internal labor market such as extensive training, internal promotion, and generous benefits. Higher coverage in the internal labor market would be consistent with their lower overall turnover and higher pay.

Finance sector and the market for foreign firms

One of the drawbacks of the research relating to foreign firms is that oftentimes we do not know the home-country identity of the firms because of data limitations. We make the distinction – domestic versus foreign – but foreign could represent, in this case, any firm that is not Japanese, whether it be American, European, Asian, or any other.

The available data do indicate, however, that there is a strong representation of Anglo-American (U.K. and U.S.) firms in Japan. Among the 3,478 firms surveyed in the *Toyo Keizai* survey of foreign firms in Japan, the U.S. takes the top position with 1,554 firms, or 45 percent of the total. The Anglo-American share, i.e. the share of the U.S. and U.K. firms combined, was 53 percent. The same survey reports that the foreign firms in the finance sector also had a majority Anglo-American representation. The U.S. takes the top position with regards to the share of workers employed in the foreign firms, at 60 percent (JETRO 2006). The Anglo-American share of employment was 65 percent.

Table 2 highlights the differences in human resource (HR) practices between domestic and foreign firms, taken from a 1999 survey on the finance sector by the NLI Research Institute in Japan. In hiring, we see that the domestic firms conform to the internal labor market setup with significantly larger numbers of new graduate hires compared to mid-career hires. The new graduates enter the organization at the bottom, and rise through the ranks after receiving extensive training from the firm. We observe the opposite pattern in the foreign firm, with greater numbers of mid-career hires compared to new graduates. This pattern thus suggests that the port of entry in the foreign firms is open at all levels of the organization. The hiring practice also assumes that workers are hired as experienced professionals who are ready to perform with minimum training.

One of the key features of the HR function of Japanese firms is that it is highly centralized, and in most cases, physically located in the corporate headquarters (Jacoby 2005). In contrast, the foreign firms have an organizational setup where the sections and departments are fairly autonomous. HR functions are decentralized, so the hiring and compensation policies are determined at the section (or department) level, and not by corporate headquarters.

Accordingly, we observe that a larger number of foreign firms hire workers at the section level (Table 2). Compensation is likewise determined at the section level.

If the modus operandi of Japanese corporations is implicit and long-term, then the counterpart for the foreign firms is explicit and short-term. In place of a compensation system where wages are determined by seniority and service to the firm, compensation in the foreign firm is tied in closer to the workers' performance. In the economics language, pay is tied in closer to the worker's marginal product, and less to non-market attributes such as loyalty and commitment. Foreign firms are also more likely to use the annual salary system, where terms and conditions of pay are negotiated on an annual basis. Foreign firms are also more likely to offer bonuses that are linked to performance, in order to further adjust and augment short-term fluctuations in worker performance.

If the domestic firms are more likely to have an internal labor market setup, then it follows that the domestic firms will have more extensive training programs. This is indeed what we observe. First, foreign firms are less likely to provide training than domestic firms, either internally or externally. Second, foreign firms are less likely to offer study programs domestically or abroad. Under these programs, workers are offered the opportunity to study for an extensive period, usually in a graduate school of their choice. Domestic firms offer these programs to the workers with the expectation that the workers will upgrade their human capital and professional skills, which will subsequently benefit the firm. However, this arrangement may not work in the absence of long-term commitment and trust between worker and employer, which may be the case in the foreign firm. And third, if foreign firms are not in a position to offer training and nurture specialists internally, then it follows that they are more likely to select specialists at the time of firm entry. Hiring specialists off the market may be more costly, but the

decision can be rationalized if we again consider the fact that the foreign firms can save by cutting back on training costs.

Lastly, we consider the survey responses to the question: How is starting pay determined for mid-career workers? The column labeled, "national average" shows the response rates from a comparable survey of firms representing all industries, also conducted by the NLI Research Institute. Multiple answers were allowed, so the responses do not add up to 100. The top response – "harmony with existing employees" – re-emphasizes the widely-held view that Japanese employers generally prefer to minimize pay imbalances in the interest of maintaining harmony and equity in the workplace (Baron 1988). Similar differences are found in the comparison between domestic and foreign firms. While professional skills are valued at the top position in the domestic firm, "harmony with existing employees" comes in at a close second position. In contrast, professional skill is a clear top response for the foreign firm, with "harmony" in a distant second. Whether pay differences are equalized with other employees or not does not seem to have the same bearing in the foreign firm. These responses are very much consistent with the earlier observations. Workers in foreign firms are hired from the market as experienced professionals with a set of skills that can be put to use immediately.

THEORETICAL FRAMEWORK

Marketness and the duration of employment

We begin by laying out the relationship between marketness and employment duration. Following Block (1990), we define marketness as the extent to which price considerations dictate economic transactions. Movement toward low marketness implies that nonprice considerations take on greater importance in the transactions. In Figure 1(a), points D and F indicate the ideal

types representing polar opposite positions. Point F is the spot market – an extreme manifestation of a highly atomized market under which anonymous buyers and sellers of labor come together for an instant to seal a deal based entirely on quantity and prices. This is a frictionless market where all changes occur through perfectly operating markets with zero transaction costs (North 1994; Williamson 1981). In contrast, at point D, market transactions are deeply embedded in ongoing social relations. Here, the employment relationship may last for a lifetime; goodwill, trust, and commitment between employers and workers override price considerations. Hence marketness and employment duration are negatively correlated.

FIGURE 1 ABOUT HERE

Economic versus social exchange

The distinction between points D and F parallels the distinction between the social and the economic modes of exchange as outlined by Blau (1964). Economic exchange assumes that individuals are motivated primarily by prices. Every transaction has a price, and individuals maximize utility through cost-benefit calculations. Social influences are seen as something that disturbs economic action (Swedberg and Granovetter 1992). Economic exchange occupies point F in Figure 1(a), a position that is characterized by high marketness, and short employment durations. Under this mode of exchange, terms and conditions of employment are documented as explicitly as it is possible. Compensation and incentives are stipulated, negotiated, and written into a detailed contract. Tacit knowledge (Polanyi 1966), in whatever shape or form, is made explicit, with job functions clearly defined. Under high marketness, there is little room for ambiguities. Workers who compete under high marketness know their market price.

Social exchange, which remains the status quo of the Japanese employment relationship (Murakami and Rohlen 1992; Ono 2007), deviates greatly from the economic mode of exchange. Workers may be motivated by prices, but their actions are likewise influenced, and in many cases constrained by their intimate relationships with their employers. Lifetime employment – one of the stylized features of the Japanese employment system – is not an explicit contract, but an implicit agreement formed between workers and employers with the expectation that the relationship will be long-lasting (Moriguchi and Ono 2006). Lifetime employment is thus a prime example of social exchange, and occupies point D in Figure 1b.

The intimacy of the employment relationship presumes closure, where favors are exchanged on a daily basis. This closure fosters trust. Employers are then able to invest in the workers, and the workers reciprocate by committing their utmost loyalty. The closure further enables workers to build human capital and social capital within the firm. Much of this capital is specific to the firm, and thus will be lost once the relationship is breached. Much of the knowledge that is built within this relationship is tacit knowledge (Polanyi 1966); it cannot be easily codified nor transmitted, and it cannot be quantified nor priced. Workers who are employed in these firms are not fully aware of their market worth.

Free agents

In a labor market where long-term attachment to the firm is the norm, and group affiliation and dependence are highly valued, the decision to work for foreign firms is essentially a declaration to become a free agent. The concept of the free agent assumes first and foremost that agents are autonomous and freely mobile. Agents compete against other agents in an open market where they sell their skills for the highest going price. Deals are struck between the

sellers (= agents) and buyers (= firms/ employers), but the relationship may be short-lasting, because the agents are always scoping around for other options. A better outside offer may prompt them to move to another firm. The firms are likewise short-sighted. The firms avoid making long-term commitments to the workers and sign only short-term contracts, because they can exercise the option to dismiss workers if they turn out to be duds. There is no training because firms have no interest in investing in their workers, and workers have no intention of receiving lower compensation or paying for their training. In this way, the behavior and expectations of both the buyers and sellers of labor reinforce the general mode of short-term transactions and high-turnover.

Job mobility in a spot market: The null hypotheses conditions

Are career patterns in foreign firms shaped by purely economic forces? Following Figure 1(a), we begin with the idealized distinction that the modus operandi of employment relations in the domestic firm is positioned at D. Foreign firms constitute the categorical opposite of the foreign firms, and are positioned at position F.

There are several reasons why foreign firms occupy this position. First, the majority of workers in foreign firms are employed by U.S. firms.[2] Since the U.S. has one of the highest labor turnover in the world, and Japan the lowest (Ono 2005), the contrast between the domestic versus the foreign in the Japanese labor market constitutes the extremes. The second reason, which is also related to the first, concerns the distinction between the shareholder versus the stakeholder model of corporate governance. Japanese management is characterized by the stakeholder model of governance, which prioritizes long-term gains over short-term profits, and looks after the well-being of their workers and other stakeholders (Jacoby 2005). Anglo-

American firms, on the other hand, operate under different conceptions of legitimacy. Their management style is driven more by maximizing shareholder value, and does not share the long-term approach that is common in Japanese management. For example, in the famous case of Kentucky Fried Chicken's entry into the Japanese market, the former head of operations in Japan highlights the contrasting management style as follows:

> In Tokyo, they think that we should take a long-term view and ignore short-term losses. But the reality is, we are an American public company and Wall Street will start screaming if the quarterly earnings dip. (Bartlett and Rangan 1992)

Using the example of lifetime employment, Ahmadjian and Robinson (2001) explain that the practice may be deemed legitimate among Japanese investors, but it is less so among U.S. and European investors who demand immediate attention to shareholder value.

Third, by default, foreign firms that set up their business operations overseas face a latecomer disadvantage arising from differences in local customs, language, and institutions (Fukao and Ito 2003). These firms do not have the luxury of time. Overcoming the latecomer disadvantage places these firms in high-pressure situations where they are expected to produce immediate results, so that they can catch up to the local competition. These three factors combined push the foreign firms away from position D, and toward position F in Figure 1(a).

Our main objective is to assess the extent to which the features of the foreign firms deviate from these spot-market conditions where transactions are driven primarily by market mechanisms. In order to evaluate our claims, we first establish the conditions of the spot market that is to be our null-hypotheses.[3] These conditions are highly stylized positions of a perfectly operating market, and are to be viewed as ideal types. The economic approach offers a valid

starting point for analysis. But it should be viewed as only the beginning and not the end of the analysis (Gilpin 2001). These then are the starting conditions.

(i) Free market entry (and exit): Workers and employers are free to enter or leave the market at will, and workers can move freely from one employer to another. All job vacancies are filled through the market. We ignore the fact that in practice many vacancies are filled through internal promotion.

(ii) Interchangeable workers: Workers are interchangeable and anonymous in the eyes of the employer and are of equal efficiency. We overlook the fact that workers differ in efficiency and that to achieve full efficiency on a particular job usually requires a training period. Labor is divisible, and can be bought and sold in any quantity.

(iii) Perfect (or sufficient) information: Workers and employers are well informed. Workers know about vacant jobs, the wage rates they pay, and other terms of employment. Employers know about workers available for employment, and they know what wage it will take to attract them.

(iv) Economic motivation is dominant: Other things equal, a worker will prefer a higher wage to a lower one. Other things equal, an employer will prefer more profit to less.

(v) Wages are equal to the marginal product: Because we assume perfect information ([iii] above), employers know how productive their workers are, and offer the market wage that is equal to their marginal product.

MODELS OF JOB TURNOVER

Much of this paper concerns the career transition from domestic to foreign firm in Japan. Who moves? Why do they move? And, what are the consequences? We apply the sociological and economic models of job turnover to evaluate this career transition.

Internal labor market and human capital formation

Job turnover in Japan is remarkably low compared to the other industrialized economies (Ono 2005). Much of this is due to the strong internal labor market setup that emphasizes job training, job security, internal promotion, and fringe benefits (Doeringer and Piore 1971). From the viewpoint of human capital theory, extensive on-the-job training is associated with low job mobility, because workers accumulate skills that are specific to the firm. In fact, two of the top reasons that workers do not change jobs in Japan are because they fear that their skills cannot be transferred across firms, and because they will lose their returns to seniority (Ono and Rebick

2003). The longer the worker remains with the firm, the more embedded her skills become, and the more costly it becomes to change firms.

In contrast, if workers do not receive training, then they do not acquire firm-specific skills, at least in theory. They are free agents in the sense that they do not have any attachment to the firm. They have not invested in the firm, and the firm has not invested in them. Job mobility is costless; there is no wage loss if they were to relocate to another firm. For free agents, there is no time dimension. Their level of attachment is independent of the time they spend with the firm. Free agents are better endowed with general human capital, or a set of skills that is portable across firm boundaries. Maintaining mobility is synonymous with maintaining generality and avoiding specificity (Hirsch 1987). Because it is easier to put a price on general skills than it is on firm-specific skills, free agents have a better sense of their market worth.

Features of the internal labor market depart from the spot-market conditions outlined previously, and are closer to the position of low marketness as depicted in Figure 1(a). The spot-market presupposes an organizational setup where the ports of entry are open at all levels of the hierarchy. Workers at any level can be replaced by other workers as long as the incoming offers a more competitive price than the incumbent. The internal labor market is less open because new recruits can only enter at the bottom. By creating a labor market within a firm, the internal labor market shelters workers from the brunt of business cycle fluctuations and the demand volatility that accompanies it. Employers use internal promotion to induce worker commitment, which in turn lowers overall turnover.

The movement from D to F implies a shift from firm-specific to general skills, and from high-attachment to low-attachment. Workers that move from domestic to foreign firms relinquish their employment security, because they have left the internal labor market setup, and

are no longer insulated from external market forces. But they receive higher pay in return, as illustrated in Figure 1(b). This is intuitively straightforward. The movement towards low employment security involves higher risk for the worker. Thus, difference in wages between D and F in Figure 1(b) is essentially a risk premium, i.e. $\Delta Wages/\Delta Risk > 0$. Alternatively, from the perspective of workers in domestic firms, they pay an "insurance" to protect them against the risk of low employment security. Put another way, it is inconceivable, if not irrational, that a worker would voluntarily move to a position that carries with it higher risk but lower pay. Relatedly, the foreign firms are able to offer higher wages, because they do not provide training. They are thus able to pass on the "savings" to their workers. Hence, Figure 1(b) informs us that: (a) workers in foreign firms, have less employment security; but that (b) they receive higher wages. These have been documented empirically (Ahmadjian and Robinson 2001; Fukao and Ito 2003; Ono 2007; Ono and Odaki 2004), and we take them as given.

Social capital and job matching

The analysis of how workers are matched to jobs is one of the key contributions of sociologists, and an area much neglected by the economic approach. Under the neoclassical framework, employers have perfect information about the worker's productivity, and which candidates are looking for job openings; workers in turn know exactly their market worth, and which firms are looking to fill job vacancies. Job matching is costless because workers and employers are matched to each other instantaneously in a perfectly operating market. In reality, there are considerable transaction costs to job matching. Employers must invest time and resources searching for the right candidate through a number of channels, e.g. posting advertisements, hiring headhunters, spreading information by word of mouth, etc.

Social capital theorists assert that job matching can be facilitated by taking advantage of the resources that are embedded in social relations. The quantity, quality and value of the social capital vary by an individual's location in a social network (Lin 2000). For free agents, attracting outside options requires maintaining high visibility and cultivating social networks (Hirschi 1987). To this end, free agents maintain extensive professional networks both within and outside of the firm. These resources can be used strategically in securing the next job, and in advancing their careers in general.

While social capital may facilitate career changes for some, it may inhibit mobility for others. Like the concept of firm-specific human capital, a worker may accumulate social capital that is specific to the firm, which would be lost if she changed jobs. Fear of losing personal contacts is the other top reason that workers do not change jobs in Japan (Ono and Rebick 2003).

Job mobility as a deviant act

To the extent that the social exchange is the default mode of transactions in the Japanese labor market, movement towards economic exchange is a deviation from this mode. Models of deviance then become a helpful framework in profiling the type of persons who may deviate from the norm, and in predicting the circumstances under which they deviate.

Social control theories start with the assumption that all persons would naturally commit deviant acts if left to their own devices. Deviance is thus taken for granted. It is conformity that is to be explained (Hirschi 1969). Control theories focus on the "controlling" forces that restrain the person from deviance (Void et al 2002).

Applying control theory to the Japanese labor market thus begs the obvious questions: Why do Japanese workers conform to the norm of lifetime employment? Why don't we observe

more defectors from this system? Who defects from the system? Under what circumstances do workers defect from the norm? Control theory would argue that the forces of social control and bonding operate strongly in the Japanese work environment, and this strengthens their attachment to the workplace. Some workers defect from the system when these restraining forces have weakened or broken down.

Paralleling the discussion of firm-specific human capital, it can be argued that commitment to an organization or to other persons is a form of investment that would be lost if the worker engages in deviant acts. Akers and Sellers (2004) explain:

> The greater the commitment, the more one risks losing by non-conformity. The cost of losing one's investment in conformity prevents one from norm violation. Commitment, therefore, refers to a more or less rational element in the decision to commit crime. (p.118)

Control theory thus points to some key predictions. First, the smaller the commitment, the less one loses by defecting. The aim is then to identify the ones that are not committed, or are not able to commit, for one reason or another. And second, workers will defect when the benefits of defecting outweigh the costs of commitment. Here, the cost of commitment is theoretically equal to the "insurance" shown in Figure 1(b). Workers who deviate from the norm are those that do not need the insurance, and are confident enough to walk away from the employment security offered by the domestic firms.

Weakened social attachment also informs us about subsequent patterns of deviance. A person who has violated a norm is no longer bound by it, and is free to deviate (Hirschi 1969). Having violated the norm once may compel him to think that he has less to lose, and this would further weaken his attachment. The marginal cost of deviance thus declines with subsequent acts of deviance. Hirschi (1969), for example, notes how a divorced man is more likely to commit a

number of deviant acts after divorce. Likewise, workers once having violated the norm of commitment with one firm may feel free to deviate. They may be less stigmatized by subsequent moves, and this would compel them to move more frequently with less hesitation.

DATA AND METHODS

I use multiple methods and data in my empirical analysis. I conducted exploratory interviews with finance professionals in Tokyo to examine preliminary hypotheses and to generate new ones. These interviews provided an excellent starting point to understand the social dynamics of the labor market for finance professionals in Japan, and the key determinants of their mobility.

I conduct statistical analysis from two data sources. The first is individual-level data from the "Survey of finance professionals" collected by the Nippon Life Insurance Research Institute in June 1999 (hereafter NLI survey). The final sample size of 340 finance professionals were selected from questionnaires that were distributed to 252 finance firms that are listed in the Japan Company Handbook (*Kaisha Shikiho*, published by Toyo Keizai). 33 percent of the respondents are currently employed in foreign firms. 25 percent of the sample is female. The survey collected a wide range of information relating to the respondent's current work description, career history, education and training, work conditions, etc. in addition to the basic demographic information.

The second dataset is individual-level data of security analysts compiled and constructed by the author (hereafter security analysts database). Data were collected from analysts featured in the *Nikkei Financial Daily*. I briefly describe the data collection process below.

The *Nikkei Financial Daily* is a Japanese daily newspaper specializing in the reporting of financial news. Every week, the newspaper features a column where a security analyst diagnoses a particular company's financial standing and performance. The column also features a brief profile of the analyst. A typical profile looks like the following:

> Analyst X, Morgan Stanley
> Male. Born 1963. Joined Daiwa Securities after graduating with B.A. in Economics from Hokkaido University in 1986. Employed at Morgan Stanley since 1994.

Using a customized template, I then coded all information for each analyst. In this way, I profiled and codified a total of 308 security analysts from the *Nikkei Financial Daily* issues ranging from January 2000 to December 2006. 58 percent of the sample is currently employed in foreign firms. 8 percent of the sample is female.

ANALYSIS AND RESULTS

Worker profiles: Who works in the foreign firms?

We begin by profiling finance professionals that are employed in foreign firms. Table 3 shows probit coefficients describing the determinants of being employed in foreign firms. Column (a) shows the results using the NLI data. The basic variables included in this regression are sex, education, age, and tenure. In addition, we include: (i) foreign university dummy variable indicating whether the respondent graduated from a university outside of Japan; and (ii) English certificate dummy variable indicating whether the respondent holds a certificate in English proficiency approved by the Japanese ministry. And finally, we include the variable years of specialization and its quadratic, where the area of specialization may include for example, financial product development, personal loans, international finance, mergers and

acquisitions, risk management, etc. It is important to note that this variable is a separate measure from tenure. A worker may be highly specialized in a particular area for a number of years, but she may have changed firms in the interim, in which case her years of specialization would be greater than her tenure. On the other hand, she may have experienced a number of specialized areas within the same firm, e.g. through job rotation, in which case her tenure would be longer than her years of specialization.

We also conducted similar regressions using the sample of security analysts to predict whether current employer is foreign (column [b]), and whether first employer was foreign (column [c]). There are fewer variables included compared to the NLI sample, but we have information on whether the analyst was a foreign national or not, and we include this as a dummy variable.

The results show some interesting patterns. First, workers in domestic and foreign firms are similarly matched with respect to educational achievement.[4] Second, workers in foreign firms are more likely to be female, a finding which is consistent in all three regressions. Third, they have shorter tenure. Fourth, they are more likely to have graduated from a foreign university. It should be noted that this variable was also included in the sample for security analysts to predict whether current employer is foreign or not, but it had to be excluded because attendance at a foreign university is highly correlated with being a foreign national. Fifth, they are more likely to have a higher proficiency in English, as indicated by the positive effect of holding an English certificate among the NLI sample. Sixth, they are more likely to be foreign nationals, as confirmed by the results from the sample of security analysts. And seventh, they are more likely to be specialists, as measured by longer years of specialization.

In sum, the profile of finance professionals in the foreign firms deviates from the status quo in several ways. The average Japanese worker fits all of the stereotypes of the so-called salaryman figure. He is male, a graduate from a Japanese university, a generalist, and a job stayer. In contrast, the foreign firm counterpart has a higher likelihood of being a female, a graduate from a foreign university, a specialist, and a job mover. She also has better English skills, and is more likely to be a foreign national.

Social control theory predicts that workers with weak attachments are more likely to deviate from the norm. Our findings are consistent with this prediction. Many women in Japanese society are not in a position to commit to the lifetime employment system, because they are expected to take on a disproportionate share of household obligations. The foreign firm does not presume long-term employment, and so a natural match is formed between foreign firms and Japanese women with high professional aspirations (Ono and Piper 2004).

In contrast, the risk-averse Japanese salaryman presumably has the most to lose from defecting, which reinforces his commitment to the firm. They would rather pay the insurance than be exposed to market risk and volatility.

TABLE 3 ABOUT HERE

The issue of selection

A fundamental problem in the empirical analysis concerns the selection of workers into foreign firms. Much of what we have discussed thus far suggests that worker selection into foreign firms hinges on some systematic process, thus violating the assumption of random

selection (or assignment). I proceed with the Heckman method (1979) to address the selection problem.

We begin with a bivariate probit selection model predicting employment in the foreign firm (F) where the error term (δ_i) follows a bivariate normal distribution:

$$F_i = \mathbf{Z}_i\boldsymbol{\gamma} + \delta_i \quad (1)$$

Equation (1) is identical to the probit equation presented in Table 3, where the vector **Z** corresponds to the variables shown in the table. From equation (1), I construct the inverse Mills ratio (λ) which is entered into equation (2) to correct for selection bias, given by:

$$Y_i = \sigma F_i + \mathbf{X}_i\boldsymbol{\beta} + \pi\lambda_i + \varepsilon_i \quad (2)$$

where Y is an arbitrary outcome of interest. In order to avoid collinearity, we must exclude one variable that is included in **Z** but not in **X**. The variable, graduating from a university outside of Japan, is used to meet this exclusion criteria. This variable is a significant predictor of employment in foreign firm, but it has no effect on the outcomes of interest in our analyses.

Why do foreign firms have higher turnover?

Table 4a shows summary statistics for job changes. In the security analysts data, I also provide categorical dummies to differentiate the types of domestic and foreign firms, according to their ranking of security analysts as listed in the publication, *Institutional Investor* for various years. Top domestic firms include Nomura, Daiwa and Nikko. Top foreign firms include

Deutsche Bank, Goldman Sachs, JP Morgan, Merrill Lynch, Morgan Stanley, Nikko Salomon Smith Barney, and UBS Warburg.[5]

In both samples, workers in foreign firms have experienced a greater number of job moves. On average, the number of job changes in foreign firms (versus domestic firms) is greater by more than one in both datasets. In the security analysts data, we further find that there is clear differentiation among domestic firms, and among foreign firms. Specifically, the firms in ascending order of job changes are: Top domestic < Other domestic < Top foreign < Other foreign. The median number of job changes also follows this rank order.

There is a culture of higher turnover in the foreign firms. But the results also suggest that job hopping may be acceptable only up to a point. One analyst responded as follows in the interview:

> It's definitely true that there is less stigma for job movers in foreign firms. But even in the foreign firms, too much mobility is not a good thing. Some analysts get into the habit of job hopping, and I know someone who has changed jobs six times. This does not look good.

There is also some market lingo that is associated with frequent movers that hop from one foreign firm to another. These generally take on a negative connotation, e.g. gypsies (Ikaros 2000). By all means, workers avoid being labeled by these terms.

The fact that the median number of jobs is lower in the top foreign firms compared to the other foreign firms suggests that job hoppers, in this case those who change jobs more than once, may be less tolerated in the top foreign firms. Too much mobility may signal distrust and defection even for the foreign firms. Job hoppers may thus end up migrating to other (lower-status) foreign firms. As for the top domestic firms, the median number of job changes is zero, i.e. the majority are inbred and have never changed jobs. The percentage that has never changed

jobs is in fact found to be 87 percent (not shown here). Clearly these top domestic firms do not have a culture of high turnover.

Table 4b shows Poisson regressions predicting the frequency of job changes as a function of firm- and individual-level characteristics. In the Poisson regression model, the outcome μ is a positive count. μ has a Poisson distribution with a conditional mean that depends on the set of covariates **x**. The basic form of the model is:

$$\mu_i = \exp(\mathbf{x}_i\boldsymbol{\beta}) \tag{3}$$

In modeling the frequency of job changes, we account for the fact that different respondents have different exposure times (t). This is done by multiplying both sides of equation (3) by t (Long and Freese 2006). Since $t = \exp(\ln t)$, equation (3) becomes:

$$\mu_i t_i = \exp(\mathbf{x}_i\boldsymbol{\beta} + \ln t_i) \tag{4}$$

In my estimations, we use the respondents' age as the measure of exposure time.

The results clearly show that workers in foreign firms have higher turnover than do workers in domestic firms. In the NLI data (column [a]), these workers are predicted to have a turnover rate that is 2.4 times greater ($= e^{0.877}$) than their domestic counterparts. In Model (b), we find that analysts who are currently employed in foreign firms have a significantly higher rate of turnover than do analysts in domestic firms. More interestingly, we find that analysts who started out in the top domestic firms (as their first employer) are significantly less likely to have changed jobs, in comparison to analysts who started in other firms. This finding thus confirms

that the point of origin is an important determinant of subsequent mobility. Top domestic firms generally have the most well-established internal labor market setup. They provide the most extensive training, and pay the highest salaries. These overall benefits may strengthen their attachment to the firm. In Model (c), we break down the current employer into four categories, designating the top domestic firm as the reference (omitted) category. We confirm the same rank order of job changes, with analysts in top domestic firms predicted to be the least frequent and analysts in other foreign firms predicted to be the most frequent job changers.

Among the other predictors, we find that analysts who were foreign nationals have experienced fewer job changes than have their Japanese counterparts. This is a key finding which weakens the cultural myth that the Japanese are inherently more loyal than are people from other parts of the world (e.g. Ashkenazi 2008). If that is the case, then we would expect that foreign analysts have a higher rate of turnover than do Japanese analysts. But what we in fact observe is the opposite. This outcome is thus consistent with earlier findings by Ono (2007), who concluded that the high commitment culture observed among Japanese workers is less a cultural attribute, and more the outcome of the organizational environment of the Japanese firm.

TABLE 4 ABOUT HERE

FIGURE 2 ABOUT HERE

Figure 2 shows the predicted counts. In the NLI sample shown in Figure 2(a), both curves are declining monotonically. As the number of job changes increases, the probability of larger counts decreases. The predicted curve for foreign firms lies above the curve for domestic firms (except for count zero), which leads to their higher average number of job changes. In the

analysts sample shown in Figure 2(b), both curves for the domestic firms are declining monotonically. The curve for top foreign firms is flat for counts zero and one, then declines monotonically. The curve for other foreign firms predicts the highest probability count at one, then declines monotonically.

We have thus far established that there is greater turnover in the foreign firm. We now set out to investigate why. Table 5 shows logit coefficients predicting differences in employment characteristics between domestic and foreign firms using the NLI sample. Each row reports the results of separate logistic regressions as shown in equation (2). In the interest of space, I present only the coefficient for the foreign firm dummy, which corresponds to σ in equation (2). All regressions control for the vector **X** and the Heckman selection term (λ), but these are suppressed from the output.

TABLE 5 ABOUT HERE

First, workers in foreign firms are more likely to be hired under short-term contracts, and more likely to undergo annual salary negotiations. These conditions explicitly stipulate that their employment can be terminated at any time due to reasons having to do with the worker's performance, or the firm's. The short-term and explicit nature of their employment is thus consistent with the spot-market features of the labor market, but deviates from the implicit and long-term employment relationship that is the standard in the domestic firm. Workers in foreign firms have less employment security than do their domestic counterparts.

Second, if there is high turnover in the foreign firm, then the worker is also likely to be working under a supervisor who came from another firm. This is actually an important but

neglected factor that is related to lower worker commitment. In Table 5, the coefficient for "I work for an inbred boss" is negative. Here, an inbred boss refers to an internally promoted boss who entered the firm at the bottom immediately after school graduation, and has never left. They are inbred in the sense that they have never worked outside of their current employer. The results thus imply that workers in foreign firms are more likely to be working under a boss who has previous work experience with another employer.

In my interviews, the finance professionals were quick to point out that their bosses are highly influential in building their careers. In a parent-child analogy, a child is more likely to deviate herself if she sees her parents engage in deviant acts. One analyst explained, "It's hard to pledge loyalty to your employer when your boss himself is not loyal." In the finance profession, it is not uncommon for current or previous bosses to invite their members to change jobs with them. We discuss these examples in the next section.

Third, workers in foreign firms are less likely to receive training from the firm. Table 5 shows the responses to the question: Which of the following has helped you improve your expertise? Workers in foreign firms are less likely to respond that they learned from their boss, and more likely to respond that they honed their skills through self-improvement. These responses thus reveal the relatively atomistic work environment of the foreign firm, where workers are for the most part on their own when it comes to human capital development. These conditions differ greatly from the Japanese employment setup characterized by extensive training, both internal and external (see Table 2). The fact that they receive less training implies that they acquire less firm-specific skills, which lowers their commitment to the firm. Table 5 also shows the response to the question: In what area do you seek improvement in your firm? Workers in foreign firms are significantly more likely to seek more education and training from the firm.

In the finance profession, the fact that foreign firms provide less training than do domestic firms is common market knowledge. In fact, many finance professionals take advantage of this notable distinction. In some extreme cases, a worker from a domestic firm may get fully sponsored to receive an MBA, then relocate to a foreign firm. One investment banker gave the following advice for young professionals considering a career in the foreign firm:

It is unwise for college graduates to choose a foreign firm as their first employer. They should start in a domestic firm first, get as much training as they can, then consider the next move.

Human capital development

The fact that foreign firms provide less training implies that these firms expect their workers to be productive immediately. This leads to a key difference in the human capital investment strategy. While workers in domestic firms invest in the firm and build firm-specific skills, workers in foreign firms invest in themselves, to further specialize in their (general) professional skills.

My findings support this view. First, workers in foreign firms have more years of specialization, and less tenure than do their domestic counterparts (Table 3). On average, the mean years of specialization is greater than tenure in foreign firms, but the reverse is true in domestic firms (not shown here). Workers in foreign firms may change jobs more frequently, but they are less likely to change their areas of specialization.

Second, workers in foreign firms are less likely to undergo job rotation as shown in Table 5. Job rotation is a common HR practice in the Japanese organization. Workers advance through the internal labor market in an upward spiral, by experiencing a wide range of assignments in different sections. Job rotation is less common in the foreign firm. The emphasis is instead for workers to develop a deep sense of professionalism in their area of specialization.

Survey results shown in Table 5 indicate that workers' responses are consistent with these prominent differences in human capital development. Workers in foreign firms are more likely to respond that they are highly evaluated for their expertise, and that the firm recognizes the importance of professional skills.

Autonomy, independence and recognition

High-commitment is reinforced through the strong sense of group affiliation and dependence, while independence and autonomy weaken the attachment to the organization. Two findings are consistent with this prediction. Workers in foreign firms are more likely to respond that I am happy with the freedom I have in my job, and that my firm respects my creativity and uniqueness (Table 5). One analyst explained in the interviews:

Picture what happens in a centrifuge. Once the machine starts spinning, we are the first ones to separate because we are so loosely attached in the first place.

For many professionals that move from domestic to foreign firms, the *lack* of respect for individuality and the *lack* of freedom and flexibility to do one's own job in the domestic firms are key motives for their move.

Workers in foreign firms are also more likely to respond that their performance is directly linked to compensation and promotion. A consistent pattern among the professionals that I interviewed was that they demanded clear recognition for their achievement and performance. Many moved to the foreign firms because they were frustrated with the lack of recognition for individual achievement with their previous (domestic) employers.

For these reasons, some contend that working in domestic firms is like working under socialism (AERA 2005). The firm can exert excessive pressure on their workers to conform to the prevailing norm towards consensus, harmony, and group identity. Those that do not conform to these conventional views naturally lose their attachment over time. Many migrate to foreign investment banks to experience market capitalism in its most naked form (Suenaga 1999). Over time, finance professionals who seek greater individual recognition for their work feel the effect of a big fish in a little pond (Frank 1985). One trader who moved from Mitsubishi to Goldman Sachs explained as follows:

> When I was with Mitsubishi, I was reasonably happy, but I always wanted to be in the big leagues. To me, Mitsubishi is like the Yomiuri (Tokyo) Giants, and Goldman Sachs is like the New York Yankees. Who would turn down an offer to play in the Major League?

Another consistent opinion in the interviews was the different perceptions of time. Domestic firms are widely recognized for their long-term vision. Domestic firms provide extensive training, with the expectation that the employment relationship will be long-lasting. This is another way of saying that the firms are investing in the workers' future. In the gift exchange rhetoric (Akerlof 1982), firms provide gifts to their workers, with the expectation that the gift will be repaid later on in their careers. But some workers may not appreciate this gift, because it prolongs the training period, and pushes back the timing of when they can actually start working and get compensated for their marginal product.[6] Further, given the higher frequency of job rotation, workers may have to endure time served in various sections of the firm until they are able to work in the job that they truly desire (if at all).

In my interviews, respondents who were employed by foreign firms repeatedly remarked that they did not have the patience to deal with the long-term orientation of the Japanese firm,

and that they wanted to put their skills to use immediately. This opinion was especially strong among those who started working for foreign firms as their first employers. One respondent remarked that (from the perspective of the foreign firm), it looks like the workers in Japanese firm are under hypnosis. Another respondent made the analogy to the rabbit and the tortoise. Workers in domestic firms do not have the sense of urgency because they are in this long-term employment, and they know that they cannot be dismissed. Baron (1988)'s imagery of Newton's first law of motion may be appropriate here: "employees remain in a state of rest unless compelled to change that state by a stronger force impressed upon them" (p.494). With little imminent threat of dismissal, workers in domestic firms may not feel compelled to change from their tepid state of equilibrium.

Workers in foreign firms are more likely to respond that their firm demands individual accountability from their job (Table 5). This view was also confirmed in the interviews. One respondent explained that one of the most important attributes demanded in the foreign firm is to be able to consistently justify your actions. This again differs from the Japanese corporate culture where accountability and responsibility falls on the group, and not on the individual.

If workers in foreign firms value independence and autonomy, then we would expect that they are less likely to work in teams. The results, shown in the last row of Table 5, indicate that this is not the case. Team work is equally valued in the foreign firm as it is in the domestic firm. I follow up on this in the following section.

Analysis of movers

We now examine career mobility among the movers in the NLI sample. Here, movers are defined as those with previous work history with a different employer. Of the full NLI sample of 340, there were 101 movers. The current analysis is restricted to this subsample.

TABLE 6 ABOUT HERE

TABLE 7 ABOUT HERE

Table 6 shows the breakdown of the four possible mobility patterns between the two sectors. We observe that foreign firms are more likely to be the destination rather than the origin, while the opposite holds true for domestic firms. Most strikingly, we observe a conspicuous pattern of one-way transition between domestic and foreign firms. Of the 101 possible moves, only 3 made the transition from foreign to domestic. This finding strongly confirms the rigid structure of the internal labor market in the domestic firms. The port of entry is only open at the bottom rung, and is not open for mid-career job movers.

Table 7 shows responses to a number of questions from the NLI survey regarding career changes. The outcome variable here is a yes/no binary response. I ran logistic regressions to predict the "yes" outcome to each survey question. Table 7 shows only the coefficient for the foreign firm dummy, which corresponds to σ in equation (2). All regressions control for the vector $\mathbf{X}$ and the Heckman selection term (λ), but these are suppressed from the output.

We first confirm that workers who are currently employed in foreign firms are more likely to have moved there from a foreign firm. We also confirm that workers that moved to foreign firms ended up with higher salary.

We next examine the reasons for moving. Recognition for individual performance is highly valued among workers in foreign firms. This finding is largely consistent with our previous discussion, that workers migrate to foreign firms in pursuit of greater recognition.

Higher pay is a less important motive for moving to foreign firms. In fact, the response rate is statistically insignificant between workers in domestic and foreign firms. This finding does not necessarily contradict the earlier one. The two findings suggest that workers generally end up with higher salary as a result of moving to foreign firms, but this is not necessarily the main motive for their move. The trader from Goldman Sachs explained that his main motivation for moving there was because of greater recognition, and because he wanted to test his skills in the big leagues.

Goldman Sachs offered a higher compensation package than the one at Mitsubishi. But this was not the reason for my move. *I moved because they were a foreign firm*. If Nomura had offered a higher salary, for example, I would not have moved.

Job matching

We next examine how workers are matched to employers. Table 7 results do not show a definitive pattern in the job search method. Workers in foreign firms were less likely to use newspaper ads, suggesting that they found employers through other informal means. But they were more likely to find jobs via headhunters. The other results – via acquaintance and via direct invitation – are both insignificant.

Headhunters seem to play a big role in the job search process, and were mentioned frequently in the interviews. Some were approached by headhunters, while others approached headhunters themselves to find their next jobs. And still others made it a point to periodically meet with headhunters to learn about their market worth, and also to update the headhunters with

their latest achievements. Headhunters maintain an enormous database of information, but that information tends to be old, according to one investment banker in my interviews. He felt that it was his responsibility to update his information with the headhunters.

Incidentally, I learned during my interviews that there exist headhunters that specialize completely in the placement into foreign firms. This market imbalance is suggestive evidence that the demand for midcareer placement is considerably larger among the foreign firms. The internal labor market structure of domestic firms is not accommodating to midcareer professionals. Domestic firms, in turn, are not looking to hire midcareer professionals.

Team mobility and social capital building

The one channel that is not mentioned here, but was raised consistently in the interviews is the role of the former boss. Without doubt, bosses and superiors are instrumental players in finding jobs and more generally, in advancing their careers. Because finance professionals often work in teams, it is common practice for them to migrate in teams. These teams then build up a lot of team-specific capital (Groysberg et al 2008) – be it human capital or social capital – which loses its value when broken up into smaller parts. As a notable example of social capital building, the importance of maintaining a good reputation with their former bosses was repeatedly emphasized in my interviews.

Social capital can facilitate mobility in some situations, and constrain it in others. A veteran researcher in a large domestic brokerage firm explained how he built his "empire" over time.

> Over time, I drew upon my resources and built my own "empire." And once you build your empire, you are locked in. If I were to move, I think about how many phone calls I have to make internally. You really cannot put a value on this network you have built in-house. The headhunters used to call me frequently when I was younger, but they stopped calling because they realized that I cannot be bought.

This is a notable example of firm-specific social capital. Clearly, his reason for not moving is social and not economic; he does not move because the social costs outweigh the benefits.

Career mobility among security analysts

Table 8 displays the patterns of career mobility using the database of security analysts. At the very left, column (a) records the number of job moves, which ranges from zero for non-movers up to five (for those who experienced six employers). Column (b) records the number of employers, ranging from a minimum of one to a maximum of six. Column (c) records the number of persons that correspond to each category, and column (d) records the total number of moves, which is the number of moves multiplied by the number of persons.

The most frequently observed pattern is the group of non-movers in the domestic firm. Among the total sample of 308 analysts, 88 (or 29 percent) fall in this category. In contrast, only 8 analysts (or 3 percent) are in the category of non-movers in the foreign firm. Only 37 analysts (or 12 percent) started out in foreign firms. This is consistent with earlier discussion, that foreign firms are generally the destination and not the origin of careers. As suggested by one of the interview comments, these analysts may be taking advantage of the extensive training offered by domestic firms, then moving on to the foreign firms where they can be rewarded with higher compensation.

I highlight the transition from foreign to domestic firms by boxes in Table 8. The results again clearly show the *un*-likelihood of this move. Only 18 analysts moved from foreign to domestic firms. This is just 6 percent of the total number of analysts, or 4 percent of the total number of possible moves shown here.

TABLE 8 ABOUT HERE

Table 9 presents the mobility table which illustrates how security analysts move from their origin to their destinations. The left-hand column shows the origin, i.e. their first employers. The remaining columns are the destinations of their first job move. The firms listed in Table 9 are the top performing financial institutions that employ the highest ranking security analysts, as tabulated and ranked by Institutional Investor, and other publications in finance.

TABLE 9 ABOUT HERE

The numbers in the cells indicate job-moves. If one person moves from Nomura to Goldman Sachs, then this is recorded as a job move. If the person does not move at all, then this is recorded in the diagonal. In this way, I recorded the 308 analysts and their career mobility patterns. The results are striking, and I highlight these below.

Domestic firm is the origin: Foreign firm is the destination. We confirm the well-established pattern of one way transition from domestic to foreign firms. This can be read directly from Table 9. We observe a clear pattern where the total outflow is greater than the total inflow among the domestic firms, and a reverse pattern among the foreign firms. For example, there were 48 analysts that originated at Daiwa, but only 29 that are still remaining there. On the other hand, 2 analysts started at Goldman Sachs, but 15 ended up there.

Our findings are consistent with the prediction that the initial act of deviance leads to subsequent deviance. Detachment from the Japanese employer is an act of becoming a free

agent. These agents then sell their labor in a separate labor market subject to a vastly different set of norms and expectations. Previous experience with another employer is not stigmatized but valued, and commands a fair market price. But the free agents, having once made the move to the foreign firms, cannot return to the domestic firms. Thus begins the cycle in which the free agents hop from one foreign firm to another.

Mobility and immobility at the top. The top two domestic firms have the highest share of immobility than do other firms. But about half move on to other firms, as recorded in the last column of the table labeled "% stayers." For the movers from these top domestic firms, the destinations are very clearly the top foreign firms. For the analysts in the other domestic firms that are not in the top two, the majority move on to the lower-status foreign firms.

This finding thus suggests that mobility to the high-status foreign firms is determined by your point of origin. Of the 31 analysts that departed Nomura, 64 percent were placements into the high-status foreign firms. At Daiwa, this ratio was 70 percent. In contrast, among the other domestic firms, placement into the high-status foreign firms was only 34 percent.

Moving into the top two domestic firms is virtually impossible. Mobility into Nomura and Daiwa from foreign firms was zero. Nine analysts moved into the two top domestic firms, but these moves originated from other domestic firms. This finding confirms again the rigid internal labor market setup of the top Japanese firms, and the barrier to entry for midcareer professionals. An analyst from Nomura Securities explained as follows:

> We are gradually adapting to the competitive environment in the finance sector, but we are still a Japanese company. This means that we still train our analysts inhouse, and we still try to fill vacancies internally.

Interestingly, there is no mobility between the top two domestic firms; no one moves from Nomura to Daiwa, or the other way around. The analyst from Nomura commented:

In the analyst rankings, Nomura is usually ranked ahead of Daiwa. But it is common knowledge in the financial sector that there is a big distance between these two brokerage firms. No one from Nomura would consider working for Daiwa, and presumably, it would be the same for the people from Daiwa. Also, the pay scale is very different between domestic and foreign firms. If we were to leave our (Japanese) firm, it doesn't make sense to move to another Japanese firm which offers the same level of compensation.

This may also explain why only one analyst from Nomura and one from Daiwa moved to the other (lower-status) domestic firms.

Team mobility. In Table 9, we observe that mobility from the top domestic firms to the top foreign firms is not a random process. For example, at Nomura, 8 analysts moved to Goldman Sachs; at Daiwa, 7 moved to Deutsche Bank. While there is a strong Nomura-Goldman Sachs connection, there is no migration from Nomura to Deutsche Bank.

This herd behavior could be related to team migration, although the numbers are too small to claim statistical significance. Working in teams is standard practice among security analysts, be it domestic or foreign. When one moves, s/he may take their team members with them, especially if s/he happens to be a team leader. One analyst at Deutsche Bank explained:

At one point there was a massive influx of analysts that came from Daiwa Securities. Much of this move was initiated by upper-level managers who were formerly at Daiwa, and they pulled their teams into Deutsche. In some cases, an entire section can be formed of Daiwa analysts.

One famous example in the finance sector concerns the case of the mergers and acquisition team at Merrill Lynch. The section head of the M&A team spun off and launched his own company specializing in the M&A business. When he quit Merrill Lynch, he took his entire team with him, thus leaving the M&A section at Merrill Lynch vacant and scrambling to fill up these vacancies.

Heterogeneity: The positive association between workforce heterogeneity and turnover is one of the basic claims in the organizational demography literature (e.g. Sorensen 2000). If

outflow is greater than inflow in the domestic firms, and the opposite is true in the foreign firms, then we would expect greater heterogeneity in the foreign firms.

In Table 9, the last two rows report the percentage of analysts that are inbred, and the index of differentiation in each firm. It should be noted that the numbers reported here are approximations. Since Table 9 only tabulates the first job change, the destination is the second employer which is not necessarily the current employer (I did re-estimate the numbers using a table that records the current employer instead of the second employer, and achieved similar results). Also, the sample of analysts recorded here is not comprehensive, but a sub-sample that was featured in the *Nikkei Financial News*. The reported numbers should be interpreted in the context of these simplifications.

For each firm, the index of differentiation is estimated by the following equation (Gibbs and Poston 1975):

$$\text{Index of differentiation} = 1 - \frac{\sum_{i=1}^{C} N_i^2}{\left(\sum_{i=1}^{C} N_i\right)^2} \qquad (5)$$

where N is the number of analysts who moved to the current employer from firm i. The index is bound by the absolute minimum of zero, and a relative maximum, $1 - 1/C$ where C is the number of previous firms represented in the current employer. The condition of zero heterogeneity, or perfect homogeneity is achieved when C is equal to one, or when all analysts in the firm come from the same origin.

We first observe that the percentage of inbred analysts is over 80 percent in the top domestic firms. This is significantly higher compared to 5 percent in the top foreign firms, and 3 percent in the other foreign firms. These numbers confirm that the culture of inbreeding – where analysts are trained and raised internally – remains the norm in the top domestic firms, and a culture of poaching is pervasive in the foreign firms.

Accordingly, we find that the index of differentiation is low – 0.25 and 0.26 – in the top domestic firms, and high in the top foreign firms, where it ranges from 0.69 to 0.97. The heterogeneous composition of the analysts at foreign firms can also be confirmed by simply eyeballing the numbers on Table 9. At Morgan Stanley for example, there are analysts who moved there from Nomura, Daiwa, JP Morgan and Morgan Stanley, as well as other domestic and other foreign firms. This demographic heterogeneity is both the cause and the outcome of high turnover in the foreign firms. The low percentage of inbred workers means that there is a large influx of workers with previous experience. This large influx results in a more diverse and heterogeneous workforce, which in turn leads to higher turnover.

In my final analysis, I estimate mobility probabilities between origins and destinations among the security analysts. Table 10(a) shows the 5 x 5 mobility table. This is a collapsed version of Table 9 where I group the top foreign firms into one category. I compare five different specifications of models. Four of these are standard in the literature – independence, quasi-independence, symmetry, and quasi-symmetry. In the fifth model, I construct my own customized design matrix as shown in Table 10(b). I call this the asymmetry model. Our analysis thus far has found strong evidence the mobility from domestic to foreign only goes in one direction. The asymmetry model is a direct test of this one way transition. I hypothesize that the mobility between the origin and destination is not symmetric across the diagonals. The

designated reference category is cell number 1 which corresponds to immobility in the top domestic firms, i.e. this is the group of analysts in the top domestic firms that did not move. I note one caveat here. In the three diagonal cells numbered 5, we are unable to distinguish between those who moved and those who did not. For example, in the category of top foreign firms, cell 5 is confounded by the immobility of analysts who remained in the top foreign firms, as well as the transition of analysts that moved from one top foreign firm to another top foreign firm. The pattern of immobility is rare among the foreign firms and in the other domestic firms (as shown in Table 9), but we cannot rule out the possibility that the parameter estimates in these three diagonal cells may be confounded by this heterogeneous population.

I estimate mobility probabilities by fitting generalized linear models where the link is the natural logarithmic function, and outcome y takes on a Poisson distribution:

$$\ln \{E(y)\} = \mathbf{x}\boldsymbol{\beta} \qquad y \sim \text{Poisson} \tag{6}$$

Table 10(c) shows the model comparisons. The asymmetry model, which assumes an asymmetric pattern of mobility between domestic and foreign firms, achieves the best fit as evaluated by the BIC statistics. I proceed to present these results in Table 10(d).

All parameters in Table 10(d) are negative, thus indicating that all patterns of mobility shown here are *less* likely to occur than the immobility between the top domestic firms. I highlight the main findings below.

We again confirm the overwhelming pattern of one way transition from the domestic to the foreign. The results clearly show that the transition into the domestic firms is significantly less likely than is the transition into the foreign firms, regardless of origin. The coefficients

reported under the top domestic firms and other domestic firms are significantly more negative than the ones reported under top foreign and other foreign.[7] Regardless of one's origin, analysts who change jobs in midcareer are more likely to end up in foreign firms. These findings are consistent with the commonly observed cycle of job hopping in the foreign firms.

Moreover, we confirm that entry into the top domestic firms is the most restricted among the firm categories shown here. Among the four columns, the coefficients for top domestic are the most negative. Analysts who started their careers elsewhere are unlikely to find midcareer opportunities in the top domestic firms.

If analysts in the top domestic firms move, they are least likely to move to other domestic firms. As discussed earlier in the interview results, there is no incentive for these analysts to move to another domestic firm, because any domestic firm will be inferior to their current employer. If they move at all, analysts from the top domestic firms will choose foreign firms as their destinations because of the reasons aforementioned – higher salaries, better recognition for their worth, etc. And if they have the choice, they will choose the top foreign firms over other foreign firms because the benefits are generally better there. This is in fact what we find. For the analysts from the top domestic firms, the likelihood of mobility is lowest going into other domestic firms, and highest for the top foreign firms.

DISCUSSION

Re-evaluating the null hypothesis

The key aim of this research agenda is to demonstrate the utility of integrating the economic and sociological approaches to examine labor market mobility. We now re-evaluate the null hypothesis conditions in light of the evidence presented.

(i) Free market entry (and exit): We find evidence to both support and weaken this claim. There is greater turnover in the foreign firm. Workers in foreign firms change employers more frequently, and they are more likely to be hired under short-term contracts. The higher turnover is related to human capital development and skill formation. Foreign firms do not offer training, so the workers do not acquire firm-specific skills. These workers invest mainly in general skills, which subsequently weakens their attachment to the firm, and improves their outside options.

However, *mobility is not entirely uninhibited and barrier-free*. Job mobility is not flexible in all directions, but "sticky." Workers only move in one direction, from the domestic to the foreign, but not the other way around. Instead random mobility between origin and destination, we find a systematic pattern where the destinations depend on their origins. More importantly, instead of an atomized pattern of individual mobility, we find evidence of team mobility, dictated by informal contacts between workers and their former bosses.

(ii) Interchangeable workers: Not all workers are interchangeable. Labor is not divisible, and it cannot be bought and sold in any quantity. This condition is directly rejected by the fact that finance professionals are more likely to move in teams. They do so because they have built team-specific capital which can be transferred across firm boundaries, but more difficult to rebuild when the team is broken up.

Workers are not anonymous and identity is important. Workers want to maintain a positive reputation with their bosses because the bosses will pull them into the valuable jobs.

(iii) Perfect (or sufficient) information: We find strong evidence that workers in foreign firms are better informed than are their domestic counterparts. They know their market worth. They maintain contacts within and outside of their organization, and actively exchange

information. They use headhunters strategically, to keep themselves informed of outside options, and to periodically check their market value.

(iv) Economic motivation is dominant: Foreign firms offer higher salary on average, but this is not the key driver of mobility. The main motivation for moving is the pursuit of greater recognition. Many workers who migrate to foreign firms do so because they do not conform well to the group-oriented approach of the Japanese organization. These workers seek positions in foreign firms because they are frustrated by the lack of recognition for individual achievement, and they do not have the patience to cope with the long-term orientation of the domestic firm.

For some, the cost-benefit calculation is more social, and economic motivation is less important. They build and invest in firm-specific social capital. The social costs of moving outweigh the economic benefits from moving.

(v) Wages are equal to the marginal product: This condition receives the strongest support. *Wages are closer to their marginal product in the foreign firm*. This is related to the previous position, that individuals seek greater individual recognition. In return, they are rewarded with compensation that is more closely tied in to their individual performance and contribution. It is also easier to place a value on general skills than it is on firm-specific skills.

Deviance revisited

What constitutes deviance depends on the institutional context. If the prevailing norm is long-term employment, then frequent job mobility is a transgression from this status quo. Workers who quit Japanese firms are labeled as defects. This stigma in turn discourages job quits, and strengthens their attachment with their employers. But in the foreign firms, workers with previous experience are actually valued, and command a high market price. There is a

culture that encourages mobility because workers are paid according to their contributions. Mobility is not seen as a deviant act but a legitimate one. From the perspective of deviance, it is therefore natural that we observe a one-way transition from the domestic to the foreign firm. Workers are simply adapting to the change in the normative environment. Workers who consider changing jobs avoid domestic firms because they will be penalized. They instead move to foreign firms because they are not stigmatized there.

Also consistent with the predictions of social control theory, we find that workers who are employed in foreign firms match the attributes of those who are least attached to the Japanese employment system to begin with. In contrast to the traditional Japanese male salaryman figure, women and foreign nationals, for example, have less to lose by defecting from an employment system that presumes "lifetime" commitment. These workers would rather tradeoff job security for higher pay, and seek employment in foreign firms.

But too much mobility is not a good thing, even in the foreign firms. Mobility is tolerated up to a point, but too much of it may signal defection and deviance even in the foreign firms.

Sociology and economics: Towards a constructive interdisciplinary discourse

Economics lays out the systematic and rigorous framework for understanding the economy and many aspects of society (Gilpin 2001). However, because of its reliance on mathematical derivations and clean models, the results too are often too clean (Hirsch et al 1987). But instead of dismissing the discipline for its lack of fit with reality, sociologists can still learn by using economics as a starting point of analysis, then building on its weaknesses by asking sociological questions and applying our tools of analysis. This paper has applied this integrated

approach, and in so doing, I hope to have demonstrated that economics and sociology offer complementary perspectives that enrich our understanding of the behavior of workers and firms. The labor market does not operate in a vacuum but is shaped by larger social force. In order to best under stand its social dynamics, the labor market must be interpreted in its appropriate institutional context.

We now reflect back on our starting point. In Figure 3, I map out the continuum of marketness on the horizontal axis. Under high marketness, transactions are determined primarily by the price mechanism; low marketness marks the opposite position where prices are less important, and transactions are deeply embedded in ongoing social relations. Figure 3 also adds another dimension, that of rationality, which distinguishes behavior that is rational from the irrational.

FIGURE 3 ABOUT HERE

Homo-economicus occupies the top northeast corner of zone *F* (marked by the point *HE*). From the sociologist's perspective, homo-economicus is the undersocialized view of man. He is characterized at the extreme end of high marketness and high rationality. Homo-sociologicus is to be found in the lower corner of zone *D* (marked by the point *HS*). He is the oversocialized view of man, characterized by low marketness; his actions are determined almost entirely by social relations.

The important point here is that homo-sociologicus is still behaving rationally. Economists often equate markets with rational behavior. That much is fine, but [markets = rational] does not imply [non-market = irrational]. There appears to be a tendency to extrapolate

a 45 degree line from zone *F* into zone *Y,* leading some economists to conclude that economics is the study of rational behavior, and sociology is the study of irrational behavior.[8] This is simply not true. Sociologists often study non-market behavior, but that behavior is decidedly rational. The cost-benefit calculation is still there. It is simply based on more social and less economic factors. Social exchange is but a weaker form of rational choice theory (Coleman 1993). The case of the veteran researcher who chooses not to move to foreign firms because the social costs outweigh the benefits is a prime example of this.

In sociology, behavior is always embedded in the social structure. We are trained to interpret behavior in its social context, as the two cannot be separated. This is a key feature that distinguishes sociology from the economic approach which emphasizes the universal model of mankind regardless of context. For sociology, rationality is still there, but that rationality depends on the social context (Block 1990). In the foreign firm, short-term employment and high mobility are the norm. The employment contract is explicit and short-term. There is no gift exchange in this relationship. Workers exercise the exit option over loyalty (Hirschman 1970) because that is the rational course of action. But such is not the case in the domestic firm, where loyalty and long-term commitment are the norm, and job mobility is perceived as a deviant act. In this context, loyalty is far from irrational behavior. The social scientist that studies these differing markets must therefore consider the social context. If the behavior is interpreted out of context, then it could easily be misconstrued as being irrational.

Over time, the Japanese employment system is destined to move from social to the economic mode of exchange (Murakami and Rohlen 1992). Along with globalization, the foreign firms increase their market presence, and this has spillover effects and normalization pressures to the wider facets of the Japanese economy. I discovered some evidence to this effect

in my interviews. For example, domestic firms suffered a long spout of brain drain of their best and brightest to the foreign firms during the 1990s. They are now fighting back by introducing a separate track for specialists, and vastly overhauling their compensation system to better match that of the foreign firms. Some domestic firms are starting to invite their former employees back to them.[9] Such actions would have been unthinkable under the traditional Japanese employment system. The co-existence of domestic and foreign firms, and the expanding presence of the latter are fascinating areas of research, and I reserve this for my future agenda.

There are also changes in the supply side behavior, i.e. among workers and job candidates. Foreign investment banks are increasing their presence in the Japanese labor market, and are becoming more successful in recruiting young workers.[10] There are some signs that younger workers are responding more favorably to employment opportunities in foreign firms, especially those who are willing to forego employment security for higher pay. In 1999, a former trader from Salomon Brothers in Japan was in the spotlight for writing his memoirs in a book titled, *Make Money!* (Suenaga 1999). The book is an autobiographical account of how he made enough money at Salomon Brothers which allowed him to retire at the age of 43.

Recent developments in economics point to the general trend where the economists are moving more towards the study of non-market behavior (from zone *F* to zone *D* in Figure 3). This movement poses a threat to some sociologists who construe this as an invasion of their turf. But there is nothing stopping the sociologist from approaching the economists' turf. The distinction between market versus non-market, and economic versus social is an arbitrary one at best. By paying closer attention to the study of economic behavior, and the economic discipline in general, sociologists have much to learn from economics, as much as economists have to learn from ours.

Notes

[1] The lowest penetration rates are found in construction (0.2 percent) and services (0.6 percent).
[2] Several data sources point to the large representation of Anglo-American (U.K. and U.S.) firms in Japan. Among the 3,478 firms surveyed in the *Toyo Keizai* survey of foreign firms in Japan, the U.S. takes the top position with 1,554 firms, or 45 percent of the total. The Anglo-American share, i.e. the share of the U.S. and U.K. firms combined, was 53 percent. The same survey reports that the foreign firms in the finance sector also had a majority Anglo-American representation. The U.S. takes the top position with regards to the share of workers employed in the foreign firms, at 60 percent (JETRO 2006). The Anglo-American share of employment was 65 percent. Finally, METI (2006) statistics show that 53 percent of workers in foreign firms are employed by U.S. firms and 40 percent are employed by European firms.
[3] These conditions are edited from Reynolds, Masters and Moser (1991).
[4] The NLI sample includes the variable for graduate school. I did not include this variable in the regression because it is highly correlated with the foreign university dummy.
[5] I experimented with several variations of these classifications, and achieved similar results.
[6] This is the case of deferred compensation. If workers accept the gift, in this case training, then they will be paid lower than their marginal product, and they will have to wait until the training period is over to recoup their losses.
[7] The one exception here is the transition from top foreign to other domestic (cell 11), and the transition from top foreign to other foreign (cell 12). The coefficient in cell 11 is more negative than the one in cell 12, but this difference is not statistically significant.
[8] This is a quote by Vilfredo Pareto cited in Baron and Hannan (1994).
[9] For example, a high-flying analyst who started at Nomura was invited back to Nomura after spending some time with two other foreign investment banks (featured in Institutional Investor 2003).
[10] Tett and Nakamae (1999) write that Merrill Lynch Japan received over 3,500 applications for 73 job openings in 1999. The president is quoted as follows: "Two years ago, if a Japanese graduate said they wanted to work at Merrill Lynch their mother would probably be shocked — what would she tell the neighbors? People had never heard of Merrill Lynch… But now we are choosing from an incredible talent pool."

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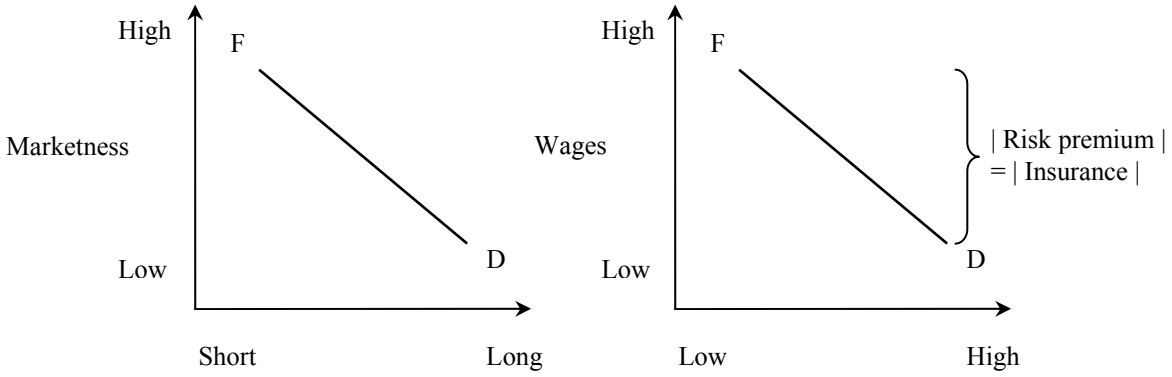
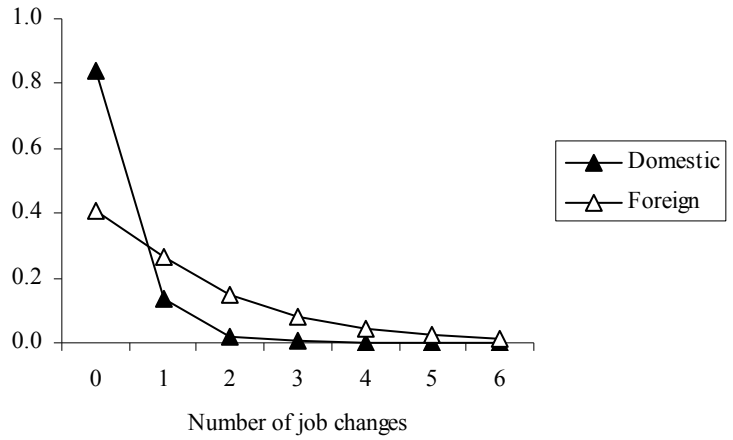
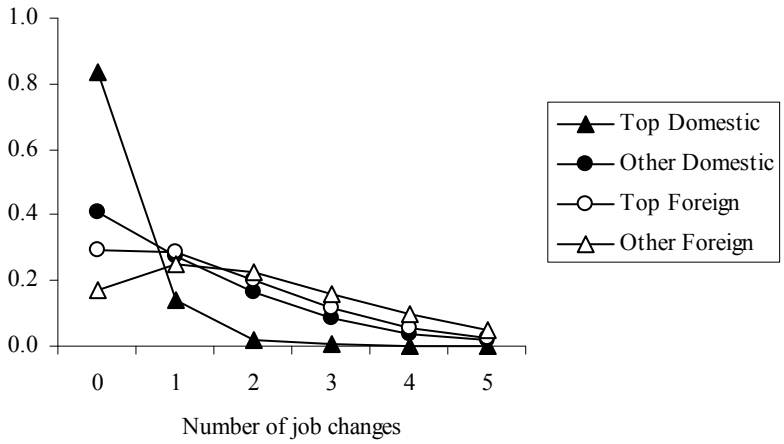


(a) Employment duration (b) Employment security

Figure 1: Foreign versus domestic firms



(a) NLI sample



(b) Security analysts

Figure 2: Predicted probabilities of mobility counts

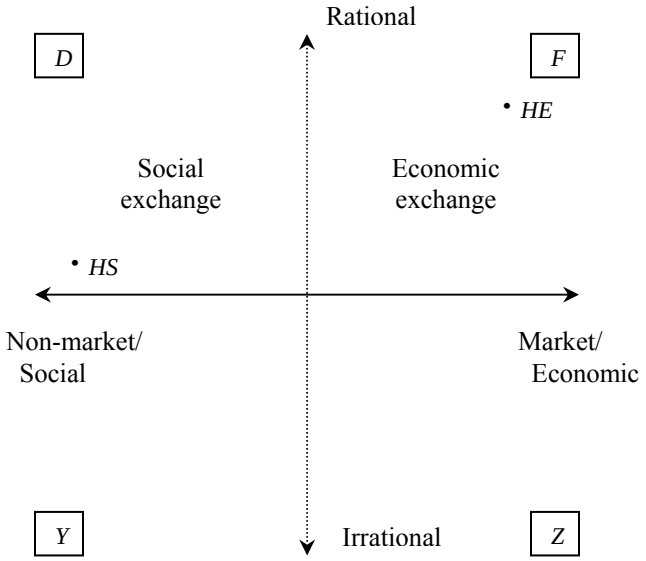


Figure 3 Rationality and the marketness continuum

TABLE 1: Characteristics of finance and insurance sector compared to industry average

	Age	Tenure	% Lifetime Employed [a]	Annual Salary (1,000 yen)	% University Graduates	% Large Firms [b]
All industries						
All	41.0	12.0	20.6	4,893	29.8	17.5
Men	41.8	13.5	26.6	5,555	35.7	19.2
Women	39.1	8.8	5.8	3,433	16.8	15.3
Finance + Insurance						
All	40.6	13.4	42.6	6,338	55.8	61.6
Men	42.2	16.1	57.0	8,287	81.4	58.1
Women	38.8	10.3	18.1	4,070	25.9	66.2

[SOURCE: Wage Census 2006]

[a] Estimated as the percentage of workers who have never changed jobs among age group 50-54.

[b] Firms employing more than 1000 workers. Source: MIAC 2005

TABLE 2: Comparison of selected human resource practices between domestic and foreign firms in the finance sector (percentages)

	Domestic	Foreign
Hiring		
New graduates [persons]	44.8	8.8
Mid-career hires [persons]	7.9	21.8
Plan to continue mid-career hires	58.3	92.3
Section-specific hiring	30.9	66.7
Compensation		
Section-specific compensation	11.6	31.3
Annual salary system	27.9	70.6
Bonuses linked to performance	56.8	76.5
Training		
Internal training	66.7	50.0
External training	64.4	44.4
Study domestic programs	31.1	0.0
Study abroad programs	44.4	5.6
Specialists selected at firm entry	17.5	52.9

Q: How is starting pay determined for mid-career hires?

	National average [a]	Domestic [b]	Foreign [b]
Professional skills	14.5	30.4	66.7
Compensation and status with previous employer	28.0	21.7	16.7
Age	32.7	17.4	0.0
Harmony with existing employees	70.0	26.1	8.3

[SOURCE: Author's own tabulations based on NLI dataset of financial firms, 1999]

[a] Based on multiple responses. [SOURCE: Shouzukawa 2000]

[b] Based on single responses.

Table 3: Determinants of entry into foreign firms (probit coefficients)

	NLI data (a)			Security analysts: Current employer is foreign (b)			Security analysts: First employer was foreign (c)		
	Coef		S.E.	Coef		S.E.	Coef		S.E.
Schooling completed									
High school	(reference)								
University	-0.482		(0.310)	(reference)			(reference)		
Graduate school/ MBA				0.537	*	(0.287)	-0.031		(0.403)
Foreign university	1.011	***	(0.347)				0.856	**	(0.375)
Female	0.617	**	(0.214)	1.169	***	(0.437)	0.689	**	(0.318)
Foreign national				1.498	***	(0.572)	0.950	**	(0.473)
Age	0.052	***	(0.020)	0.053	***	(0.018)	-0.056	**	(0.023)
Tenure	-0.110	***	(0.019)	-0.145	***	(0.017)	-0.015		(0.021)
English skills	0.432	**	(0.186)						
Years of specialization	0.165	***	(0.048)						
Years of specialization squared	-0.006	***	(0.003)						
Constant	-2.522		(0.758)	-0.895		(0.649)	0.521		(0.810)
Log likelihood	-149.0			-135.6			-74.3		
Pseudo R^2	0.26			0.33			0.25		

* $p<.10$, ** $p<.05$, *** $p<.01$. Standard errors in parentheses.
Security analysts data also includes survey year dummies to control for year-specific fixed effects.

Table 4a: Summary statistics for job changes

	Mean	S.D.	Median
NLI data			
Number of jobs			
Domestic	0.205	0.630	0
Foreign	1.352	1.330	1
Security analysts			
Domestic	0.565	0.937	0
Foreign	1.876	1.101	2
Top domestic	0.194	0.557	0
Other domestic	1.208	1.110	1
Top foreign	1.563	1.082	1
Other foreign	2.216	1.254	2

Table 4b: Poisson regression coefficients predicting frequency of job changes

	NLI data (a)			Security analysts (b)			(c)		
	Coef		S.E.	Coef		S.E.	Coef		S.E.
Current employer									
Foreign firm	0.877	***	(0.316)	0.468	***	(0.106)			
Top domestic firm							(reference)		
Other domestic firm							0.759	**	(0.310)
Top foreign firm							0.958	***	(0.303)
Other foreign firm							1.193	***	(0.307)
First employer									
Top domestic firm				-0.326	***	(0.088)	-0.298	***	(0.083)
Schooling completed									
University	-0.104		(0.241)						
Graduate school/ MBA	-0.026		(0.295)	-0.413	***	(0.147)	-0.366	**	(0.146)
Female	-0.210		(0.210)	-0.266		(0.171)	-0.228		(0.163)
Foreign national				-0.741	***	(0.236)	-0.763	***	(0.236)
Cohort 30	0.843	***	(0.267)	0.625	*	(0.333)	0.615	*	(0.316)
Cohort 40	1.102	***	(0.331)	0.575	*	(0.337)	0.519		(0.323)
Cohort 50	0.049		(0.619)	0.503		(0.361)	0.453		(0.345)
Lambda	-1.531	***	(0.307)	-1.432	***	(0.129)	-1.333	***	(0.138)
Constant	-1.019		(0.764)	-1.164	***	(0.357)	-1.801	***	(0.428)
Log likelihood	-217.1			-318.7			-315.5		
Pseudo R^2	0.37			0.27			0.28		

* $p<.10$, ** $p<.05$, *** $p<.01$. Standard errors in parentheses.
NLI data also controls for job year.
Security analysts data also includes survey year dummies to control for year-specific fixed effects.

Table 5: Logit coefficients predicting differences in employment characteristics between domestic and foreign firms

	Foreign firm coefficient			Log likelihood	Pseudo R^2
Short-term contract	1.261	**	(0.616)	-51.5	0.34
Annual salary negotiation	2.440	***	(0.399)	-117.4	0.37
My boss is an inbred (internally promoted)	-1.861	***	(0.328)	-139.1	0.34
Q: Which of the following has helped you improve your expertise?					
Boss supervision on the job	-0.628	**	(0.300)	-336.3	0.03
Self-improvement	0.625	**	(0.310)	-270.3	0.03
Q: What areas do you seek improvement in your firm?					
Evaluation commensurate with expertise	-0.995	***	(0.325)	-204.1	0.07
Compensation commensurate with performance	-0.596	*	(0.317)	-202.7	0.05
Education and training	0.850	***	(0.330)	-183.9	0.06
Prospect of job rotation	-1.730	***	(0.414)	-158.8	0.26
I am evaluated highly for my expertise	0.796	**	(0.313)	-285.8	0.08
My firm recognizes the importance of professionals and professional skills	0.624	**	(0.285)	-369.2	0.04
My performance is directly linked to compensation	1.098	***	(0.282)	-358.4	0.05
My performance is directly linked to promotion	0.634	**	(0.302)	-332.0	0.05
I am happy with the freedom I have in my job	0.989	***	(0.316)	-374.6	0.04
My firm respects my creativity and uniqueness	0.923	***	(0.324)	-364.6	0.05
My firm demands individual accountability from my job	0.838	***	(0.282)	-360.5	0.05
I work in teams	-0.036		(0.339)	-178.6	0.03

* $p<.10$, ** $p<.05$, *** $p<.01$. Standard errors in parentheses.
Shown are coefficients for the foreign firm dummy for separate ordered logit regressions. All regressions control for sex, education, age, tenure, years of specialization, and the Heckman selection term (λ).

Table 6: Mobility patterns between domestic and foreign firms (in persons)

	Current employer	
	Domestic	Foreign
Previous employer		
Domestic	26	40
Foreign	3	32

Table 7: Employment characteristics of movers (logit coefficients)

	Foreign firm coefficient			Log likelihood	Pseudo R^2
My previous employer was a foreign firm.	2.251	**	(0.785)	-40.7	0.35
My salary is now higher as a result of the move.	1.874	***	(0.667)	-56.5	0.16
Reasons for moving:					
I moved because there was a well-established system of performance evaluation in place at the current firm.	2.039	**	(0.908)	-31.5	0.22
I moved because of higher pay	-0.484		(0.687)	-43.2	0.11
Job search channel:					
I found the job through a newspaper ad.	-1.674	***	(0.645)	-47.5	0.18
I found the job through a headhunter.	1.045	*	(0.629)	-42.1	0.14
I was recommended by an acquaintance.	0.240		(0.668)	-48.1	0.04
I was directly invited by the current employer.	0.575		(0.830)	-37.2	0.13

* $p<.10$, ** $p<.05$, *** $p<.01$. Standard errors in parentheses.
Shown are coefficients for the foreign firm dummy for separate ordered logit regressions. All regressions control for sex, education, age, tenure, years of specialization, and the Heckman selection term (λ).

Table 8: Mobility table of security analysts

Number of moves (a)	(b) Number of employers						Number of persons (c)	Total number of moves (d) = (a) × (c)
	1	2	3	4	5	6		
0	*D*						88	0
0	*F*						8	0
1	*D*	*D*					27	27
1	*D*	*F*					55	55
1	***F***	***D***					1	1
1	*F*	*F*					12	12
2	*D*	*D*	*D*				7	14
2	*D*	*D*	*F*				8	16
2	*D*	***F***	***D***				1	2
2	*D*	*F*	*F*				32	64
2	***F***	***D***	*D*				0	0
2	***F***	***D***	*F*				1	2
2	*F*	***F***	***D***				0	0
2	*F*	*F*	*F*				9	18
3	*D*	*D*	*D*	*D*			1	3
3	*D*	*D*	*D*	*F*			0	0
3	*D*	*D*	***F***	***D***			0	0
3	*D*	*D*	*F*	*F*			3	9
3	*D*	***F***	***D***	*D*			1	3
3	*D*	***F***	***D***	*F*			2	6
3	*D*	*F*	***F***	***D***			6	18
3	*D*	*F*	*F*	*F*			28	84
3	***F***	***D***	*D*	*D*			0	0
3	***F***	***D***	*D*	*F*			0	0
3	***F***	***D***	***F***	***D***			0	0
3	***F***	***D***	*F*	*F*			0	0
3	*F*	***F***	***D***	*D*			0	0
3	*F*	***F***	***D***	*F*			0	0
3	*F*	*F*	***F***	***D***			1	3
3	*F*	*F*	*F*	*F*			3	9
4	*D*	*D*	*D*	*F*	*F*		1	4
4	*D*	*D*	*F*	*F*	*F*		1	4
4	*D*	***F***	***D***	*D*	*F*		1	4
4	*D*	*F*	***F***	***D***	*F*		1	4
4	*D*	*F*	*F*	***F***	***D***		1	4
4	*D*	*F*	*F*	*F*	*F*		4	16
4	*F*	***F***	***D***	*F*	*F*		1	4
:	(other possible mobility patterns suppressed)						:	:
5	*D*	*F*	***F***	***D***	*F*	*F*	1	5
5	*D*	*D*	*F*	*F*	*F*	*F*	1	5
5	*D*	*F*	*F*	*F*	*F*	*F*	1	5
5	*F*	*F*	*F*	*F*	*F*	*F*	1	5
:	(other possible mobility patterns suppressed)						:	:
Total							308	406

D: Domestic firm, *F*: Foreign firm

Table 9: Mobility of security analysts

Origin	Destination											Total	% Stayers
	NM	*DW*	*NSSB*	*GS*	*DB*	*JPM*	*ML*	*MS*	*UBS*	*Other D*	*Other F*		
D: Nomura (NM)	33	0	3	8	0	2	4	3	1	1	9	64	51.6
D: Daiwa (DW)	0	25	2	0	7	0	2	4	1	1	6	48	52.1
D/F: Nikko/NSSB (NSSB)	0	0	19	0	2	1	0	0	0	5	9	36	52.8
F: Goldman Sachs (GS)	0	0	1	1	0	0	0	0	0	0	0	2	
F: Deutsche Bank (DB)	0	0	0	0	0	0	0	0	0	0	0	0	
F: JP Morgan (JPM)	0	0	1	0	0	1	0	1	0	0	0	3	
F: Merrill Lynch (ML)	0	0	0	0	0	0	0	0	0	0	0	0	44.4
F: Morgan Stanley (MS)	0	0	0	0	0	0	0	1	1	0	0	2	
F: UBS Warburg (UBS)	0	0	0	0	1	0	0	0	1	0	0	2	
D: Other domestic	5	4	7	4	5	3	5	6	8	35	45	127	11.0
F: Other foreign	0	0	6	2	0	0	0	2	1	2	11	24	8.3
Total inflow	38	29	39	15	15	7	11	17	13	44	80	308	
% Inbred	86.8	86.2	48.7	5.1						31.8	2.5	31.5	
Index of differentiation	0.25	0.26	0.73	0.69	0.76	0.88	0.83	0.89	0.97	0.98	0.95	0.91	

D: Domestic firm, *F*: Foreign firm

Table 10: Mobility tables

(a) Counts

Origin	Destination				
	Nomura	Daiwa	Top F	Other D	Other F
Nomura	33	0	21	1	9
Daiwa	0	25	16	1	6
Top Foreign	0	0	31	5	9
Other Domestic	5	4	38	35	45
Other Foreign	0	0	11	2	11

(b) Design matrix – Asymmetry model

Origin	Destination				
	Nomura	Daiwa	Top F	Other D	Other F
Nomura	1	6	7	8	9
Daiwa	6	1	7	8	9
Top Foreign	10	10	5	11	12
Other Domestic	6	6	13	5	14
Other Foreign	15	15	16	17	5

(c) Model comparisons

Model Specification	G^2	*df*	*BIC*
Independence	198.76	16	147.25
Quasi-independence	15.06	11	-20.35
Symmetry	164.80	13	122.96
Quasi-symmetry	7.18	6	-12.13
Asymmetry	0.22	7	-22.31

(d) Estimated parameters

Origin	Destination									
	Nomura		Daiwa		Top F		Other D		Other F	
Nomura	-		-4.078	***	-0.440	**	-2.979	***	-1.305	***
			(1.008)		(0.208)		(0.592)		(0.282)	
Daiwa	-4.078	***	-		-0.440	**	-2.979	***	-1.305	***
	(1.008)				(0.208)		(0.592)		(0.282)	
Top Foreign	-6.261	***			-2.117	**	-3.863	***	-3.316	***
	(1.475)				(1.070)		(1.166)		(1.132)	
Other Domestic	-4.078	***			-2.036	*	-2.117	**	-1.869	*
	(1.008)				(1.069)		(1.070)		(1.067)	
Other Foreign	-5.253	***			-2.117	*	-3.643	***	-2.117	**
	(1.494)				(1.148)		(1.278)		(1.070)	

* $p<.10$, ** $p<.05$, *** $p<.01$. Standard errors in parentheses.