

**Beyond the Romance:
Labor Market Shocks and Entrepreneurship in Knowledge-Intensive Industries**

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ABSTRACT

Entrepreneurship is frequently seen as a separate, almost romantic, category of action. By placing entrepreneurship in the context of labor markets – highlighting how individual investment in specialized skills can be threatened by environmental turbulence – this paper provides a theoretical basis for the effects of career concerns on the formation of new firms. The institutional rigidities created by internal labor markets both facilitate the accumulation of skill and, paradoxically, foster entrepreneurship under particular turbulent conditions. A theory of entrepreneurship, drawing on human capital theory, skills-opportunity theory, and internal labor market theory outlines the conditions under which spin-offs will develop in knowledge-intensive industries.

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Studies of the etiology of entrepreneurship consider a) the psychological characteristics of entrepreneurs, b) the social and economic context of firm-formation, and c) the career dynamics leading toward entrepreneurship (Martinelli, 1994; Reynolds, Carter, Gartner, Greene, and Cox, 2005; Westhead and Wright, 2000). A large literature stretching back to Schumpeter (1950) and McClelland (1960) emphasizes the role of individual psychological attributes towards entrepreneurship. Empirical support for the effect of psychological factors is mixed (Brockhaus, 1982; Cooper and Gascon, 1992), however, and there appears to be several contrasting entrepreneurial psychological types (Langan-Fox and Roth, 1995). Another line of research studies the impact of the economic and social (Jackson and Rodkey, 1994) milieu on entrepreneurship. Some researchers have suggested that the key contextual attribute is rising demand (Reynolds, 1994; Shane, 1996); others hypothesized that imperfect information in product markets creates opportunities for entrepreneurship (e.g., Casson, 1982); still others have focused on the local availability of business support services (Malecki, 1991). A few works have outlined the development of ideal-typical entrepreneurial careers (Dyer, 1994; Katz, 1994).

Existing theories tap important aspects of the entrepreneurship process but are incomplete. Psychological, contextual, and career explanations separately lack a consideration of how underlying attributes, environmental stimuli, and careers are intertwined. This paper develops a labor market theory of entrepreneurship in knowledge-intensive industries that builds on the career concerns of those with specialized knowledge. It complements, rather than replaces, existing entrepreneurship theories by extending basic human capital theory and institutional economics to deal with situations of partial institutional breakdown that are directly or indirectly brought on by a turbulent organizational environment.

In knowledge-intensive industries, the information and skills possessed by the key members of firms

constitutes the basis of earning power and the critical factor for participating in the industry. These industries are as diverse as semiconductors and biotechnology, legal services and advertising, and watchmaking and gardening. Knowledge-intensive industries are growing in economic importance and interesting in their own right but focusing on them also allows the presentation of the theory to be simplified. With appropriate adaptations, the theory presented here would also apply to industries where accumulating sufficient specialized knowledge is not the primary barrier to industry entry.

Labor market theories of entrepreneurship are not new. The labor market theory of entrepreneurship holds that firm-formation will occur when the expected reward is higher than that of paid employment. However, contrary to expectation, entrepreneurs earn less than their employed counterparts (Hamilton, 2000). Moreover, almost one quarter of all firms disband within the first two years of their founding (U.S. Small Business Agency, 1995). These counter-intuitive findings present a puzzle to social scientists. Despite occasional claims to the contrary, financial benefit is almost certainly a critical component of entrepreneurial motivation. It is apparently not frequently the result. Much entrepreneurship, in fact, occurs under less than promising circumstances. Therefore, the circumstances under which entrepreneurship might appear to be attractive need to be more closely specified.

Although it has wider applicability, the theory developed here concentrates on entrepreneurship within the industry of previous employment. I define entrepreneurship as the formation of a new firm. Although commonly used, there is a conceptual elision in equating entrepreneurship with firm-formation. Many entrepreneurs in knowledge-intensive industries perform the same basic tasks in cooperation with the same set of colleagues as they did before starting new firms. In other words, the firm is new but the work is not. While labor economists sometimes refer to firm-specific human capital, skills gained on the job may be specific to particular firms only to the extent that a single firm operates in a particular market and technological niche. As employees change employers or start new firms, they transfer skills gained on-the-job to new settings. Further, the value of workplace social relationships (social capital) can often be retained when coalitions of employees leave particular “parents” to begin start-ups, so that many facets of what has

been termed firm-specific human capital may be transferable in certain situations, especially spin-offs. In fact, such transfer may be a prerequisite of successful firm-formation in knowledge-intensive firm-formation.

Spinning off from a firm is not the only, or even the most frequent, path to entrepreneurship but it is central when specialized skills are acquired through employment experience. Most entrepreneurs were employed before forming a new firm; therefore, the character of firms and employment spells could influence the decision to form a new firm. The argument developed in this paper builds on those features to explain entrepreneurship and suggest how geographic centers of entrepreneurship emerge.

Firms are coalitions of individuals who join together for mutual benefit (Cyert and March, 1963; Pfeffer and Salancik, 1978; Thompson, 1967). Those coalitions allow mutual benefits of specialization and cooperation, analogous to the gains from trade. The level of individual benefit is not fixed, but depends in part upon firm performance. That depends, in turn, an individual's own performance and that of his or her colleagues. In knowledge-intensive industries, these depend upon the accumulation of specialized human capital. Individuals, therefore, have an interest in being a member of the best possible coalition. Shocks brought about by the unpredictable events of an uncertain operating environment also have an effect on earnings. Consistent successful organizational performance **B** even for the largest and most successful firms **B** is not unproblematic and the prospect of firm failure is real.

The underlying thesis is that the same types of forces that drive job change determine entrepreneurship. Employment in a particular firm is desirable when it offers the highest possible earnings among available options. Imminent or potential threats to employee income and can diminish the commitment of individuals to their employers. Those with high levels of specialized skill may be most affected by such threats. The immediate alternative to entrepreneurship may be switching employers rather than continued employment in the original job. A critical difference between job change and entrepreneurship is that the latter often requires a coalition of co-entrepreneurs. Employees who fear their own future earnings to be jeopardized may band together to spin off new firms when labor market imperfections prevent them from individually finding suitable jobs elsewhere. Therefore, the entrepreneurial option may appear more attractive

than job change when mid-career labor markets are poorly developed and when social and economic infrastructure eases firm-formation. Under special circumstances, a series of such decisions can lead to concentrations of entrepreneurship that are later reinforced by support organizations and a corresponding culture. Consequently entrepreneurship is frequently an unanticipated by-product (Elster, 1983) of attempts to build a career as an employee. By complementing existing theory, this paper expands our understanding of the stable and situational employment factors that can block individual careers and, thereby, lead to entrepreneurship.

In what follows, I outline a simplified model of labor relations in knowledge-intensive industries, paying attention to the complementary concerns of career and institutional support. I then discuss the types of shocks to the labor market that would lead to job change and entrepreneurship. The main argument assumes privately-owned firms with well-developed internal labor markets but can be extended to other types of work organizations.

THE CAREER IMPERATIVE

Labor economists assert that individuals have an interest in maximizing their expected long-term income stream (Polachek and Siebert, 1993:2). In attempting that, individuals sometimes accumulate skills and knowledge **B** human capital **B** that make their labor attractive to employers through formal training prior to career employment and through on-the-job experience. Figure One shows a stylized representation of the effects of additions to human capital on earnings. (Becker (1975) provides a detailed discussion.) Advanced training prior to employment raises wages from S_1-S_1 to S_2-S_2 . On-the-job learning deepens the age-earnings profile, O-O, as accumulating knowledge overcomes the initial skill acquisition costs, becomes increasingly valuable to the individual's employer, and is rewarded. Because wages are limited by productivity, employees have an interest in their stocks of knowledge and skills being adequately used. To cite an extreme example, a person with a PhD is worth as much as a high school dropout behind a fast food restaurant counter.

(Figure One about here.)

Individuals can benefit from specialization. Much of the increase in earnings indicated by the O-O curve may be due to specialized learning that may be of value to a small number of employers, or only one. Some of the value of a narrow concentration may derive from specialized technical knowledge that contributes to a firm's particular projects; some may derive from team skills: an ability to work well with particular colleagues, customers, or suppliers. Knowledge-intensive firms often attempt to accumulate unique sets of such complementary specialized skills (Barney, 1991; Wernerfelt, 1984). The persons with those skills form the core of the coalition comprising a firm.

Whether built on specialized or generalized human capital, a substantial portion of the early careers of those on an O-O trajectory, is spent as an investment. The full payoff comes later (Polachek and Siebert, 1993: 14). Hirschman's (1970) definition of loyalty as the costs of exit implies that a person with a narrow specialty will be more committed to a particular career line than someone with a broader knowledge base, particularly as the investment in that knowledge builds up but the major rewards are still in the future. Most of the discussion that follows assumes a narrow specialization wherein commitment to that specialty increases over time.

Institutional Support for Careers

When firm competitiveness is based on the technical knowledge that generates a series of products, rather than a particular good, firms have an interest in securing the best possible employees. Individuals have a complementary interest in finding employers that value their skills and will allow further specialization, maximizing their expected long-term income stream. Some individuals, by virtue of prior training or other factors, are more skilled than others and some firms, because they already have accumulated a set of skills that allow them access to desirable market niches and thereby generate larger revenues, are able to offer more attractive compensation than others. Employees and employers, therefore, rank each other in terms of the estimated present value of the income stream that would be received and the estimated present value of the productive labor that would be offered, respectively (Sorensen, 1977). The technical and social skills offered

by persons (relative to others), the long-term earnings stream **B** as indicated by the technical and market success of the employer **B** offered by jobs (relative to others), and the respective interests of individuals and employers in each (Coleman, 1991) determine the outcomes of the matching process which reaches equilibrium when firms and individuals can find no better alternatives (Roth and Sotomayor, 1990). A successful matching with a coalition will allow each individual to concentrate on his or her comparative earnings advantage.

Human capital theory implies that, when firms and individuals increase their earning power by specializing, both firms and individuals have an interest in preserving those optimal skill-opportunity matches (Granovetter, 1988). A loss of personnel with the appropriate skills is tantamount to a loss of assets and the potential revenue stream that could be generated (Becker, 1975). Cases in which products or processes were initially developed at the expense of one firm but produced to the benefit of another are common. Therefore, firms and employees frequently attempt to stabilize employment relations subsequent to the initial match. In addition, human capital theory suggests that when income depends upon the full use of accumulated knowledge, leaving a situation where specialized skills are utilized can result in a severe decrease in income, flattening the O-O income trajectory, even if other jobs are readily available. This is the basis of the commitment to a particular career mentioned above. Although mutual information imperfections may result in substantial turnover in the early stage of a career (Jovanovich, 1979), a termination of the employment arrangement by either side may represent a cost to the other.

Maintaining that equilibrium match, as problematic as it may be to attain, forms the basis for the complementary managerial concern of preserving the best possible coalition and the employee career development concern of maximizing lifetime income. Employees will be satisfied and loyal if, as their careers unfold, they maintain or improve their position in the relative ranking of individuals but become dissatisfied if they do not.

Firm internal labor markets have developed, in part, to aid and institutionalize the skill-opportunity matching process. Steady employment (and the basic job rights implied) provides advantages over spot

market hiring by reducing search and waiting costs (Doeringer and Piore, 1971: 2). Williamson (1975, Chap. 4) suggests that in collective tasks that require a division of labor, each participant, if not immediately replaceable, has veto power over the collective project. Individuals who have learned particular tasks might, without the assurance of steady employment, opportunistically extract large payments from their employers-of-the-moment at critical points or shift to employers willing to make a long-term commitment. Internal labor markets facilitate the swift and accurate control of employees necessary for the timely completion of complex tasks by essentially promising payment in the future for work performed in the present (Lazear, 1981). Therefore, the credibility of that promise (Thompson, 1967: 33) is critical to maintaining the coalitions that make up firms.

When idiosyncratic tasks turn individuals into valuable firm resources and when task-specific skills are gained on the job at employer expense, as they often are among the key employees in knowledge-intensive industries, internal labor markets need to incorporate provisions for increasing remuneration (Williamson, 1975: 59). Job ladders and restricted ports of entry (Althauser and Kalleberg, 1981) institutionalize the expected long-term age-earnings (O-O) trajectories required to maximize the development of specialized skills and work effort over long periods of time. The details of internal labor market form vary substantially between manufacturing, services industries, and consulting firms but, even in the flat forms of organization emphasizing team work and a collaborative culture, the basic features recur. When specialized skills or the ability to work in teams is needed, especially when the outcome of the work is not immediately observable, employers can not hire from a “spot market” and potential employees cannot be kept waiting in a labor queue. Internal labor markets help support careers of specialized skill.

BREAKDOWNS IN INSTITUTIONAL CAREER SUPPORT

The labor market theory of entrepreneurship predicts that an unexpected shock that decreases the expected earnings of a job can upset labor market matches and thereby create a tension that, under some circumstances, leads to entrepreneurship. An unexpected event that precipitates the actions that lead to

entrepreneurship is necessary for the theoretical explanation of the timing of entrepreneurship. Figure Two illustrates the employment adjustment options when skills-opportunity matches are perturbed from their former equilibrium.

(Figure Two about here.)

One possible reaction to an upset is to make no labor market adjustment. A small drop in the expected earnings stream afforded by a particular job might elicit only a change in work effort. A small drop in expected earnings might be insufficient to outweigh even minimal transition costs of finding a new job because a small perturbation may not upset the equilibrium in rank ordering of skills and opportunities. Employees might remain with their employers and either hope that earnings potential rebounds or simply accept the implied relative loss of income. This option might be more likely in firms that have demonstrated their ability to recover from crisis and to protect employee careers than in firms that have not done so.

With a sufficiently large decline in the attractiveness of a particular employer (as in Figure Two), a more perceptible adjustment might be warranted. In the absence of internal labor market job rights, Person B would simply shift to Position $n+1$ (Adjustment e) if Position n declined in relative attraction. Such adjustments may occur in some craft labor markets, as in the construction industry, when one job finishes and one employer's labor needs decrease. That sort of adjustment does not occur in many industries, however. Job ownership rights create considerable friction in labor markets (Stinchcombe, 1990). Occupants cannot always be replaced by someone more suitable and even firms with growing market shares may not always be willing or able to offer appropriate employment that takes advantage of someone's specialized knowledge.

Job ownership rights imply that Person B might need to shift to the first available vacant position (Adjustment a) if, as in the figure, the labor market match was sufficiently upset. Those with narrow specializations would have a strong commitment to their subfield, especially when they are in a phase of their career when they have made substantial investments but have not yet reaped the rewards of their efforts. Being narrowly focused, the market for workers with specialized skills is often relatively small and, therefore,

in the short run often constrained by available vacancies (White, 1970). Filling an existing vacancy may entail changing specialties and accepting an imperfect skill-opportunity match that could reduce earnings to the S_2 - S_2 line shown in Figure One (albeit with the possibility that renewed investments in another specialty could restart, after an initial decline, an upward earnings trajectory). Labor market searches tend to be national among high-skill workers (Appold, 1998; Herzog, Schlottman, and Johnson, 1986; Ladinsky, 1967), suggesting the salience of job ownership rights and that the costs of accepting an imperfect skill-opportunity match outweigh the costs of relocating.

The career threats caused by a labor market upset and by the restricted opportunities afforded by a limited labor market imply that the substantial risks and costs of raising capital, assembling collaborators, and winning customers may be less than the costs of accepting available employment and re-specialization. Entrepreneurship (Adjustment b) may make it possible for individuals to reduce the drop in relative income brought about by a labor market match upset. That is, forming a new coalition **B** possibly with a subset of one's present colleagues **B** may generate more income than the post-labor market upset earnings capacity of the present job and the available existing alternatives. That the new alternative is less attractive than the initial position helps explain why the firm was not formed previously. Mid-career entrepreneurship, then, is a result of a shock that reduces the value of the present position sufficiently so that the costs of entrepreneurship are outweighed by the costs of either remaining in their present employment and by the costs of accepting available employment.

Sources of Labor Market Upsets

Firm performance failures and internal managerial decisions could upset labor market matches. These types of upsets would have the most potent effect in causing entrepreneurship because these upsets facilitate the creation of new coalitions by affecting the earnings of several individuals concurrently. Industry (or economy)-wide recessions and failures in the personnel sorting process may be somewhat less effective as motivating factors. The discussion concentrates on mainly negative upsets. Since the attractiveness of

entrepreneurship depends on its relative costs, individual attributes and institutional frictions can affect the trade-off between job change and firm-formation.

Maintaining internal labor markets depends upon stable product market structures (White, 1981). A loss of market share causes a reduction in the revenue stream an employer generates *relative to other employers*. Even if sales do not decline (and thus continued employment is assured), market share loss would still jeopardize the slope of the expected O-O career earnings trajectory illustrated above and thus decrease the value of a job relative to other jobs. The rate of employees leaving a firm would, therefore, be sensitive to decreases in market share. Because the O-O earnings curve is steepest for the employees who have accumulated a high level of specialized skill, market share declines may affect such employees most seriously. The temporally concentrated dissatisfaction caused by market share loss may lead a sub-group of employees to break away and cooperate on the formation of a new firm. The reduction in the credibility of implied or explicit promises of future income, is a major factor in entrepreneurship. A spin-off may result.

Factors internal to a firm can have as much effect as upsets in product markets in causing entrepreneurship. To the extent that individuals are rewarded for championing successful technological programs, a management decision not to pursue particular lines of development can mean the difference between an income trajectory similar to O-O and one similar to S_2 - S_2 , illustrated in Figure One for a group of employees. The model illustrates the potential threat to careers posed by technical and managerial decisions and implies that managerial decisions that threaten the income trajectories of groups of employees can also foment entrepreneurship.

Industry-wide downturns and recessions can have effects similar to the firm-specific factors just outlined. Firms can accumulate an appropriate level of high-skill workers and generate salary increments sufficient for their continued participation in a coalition only when sales growth is favorable. Drops in sales can result in inadequate resources to hold a coalition together. Some employees may then choose to leave the firm (or be asked to).

Labor market theory suggests that positive shocks to a person's earning capacity, such as a new bit

of market information or a new invention, are insufficient causes of entrepreneurship. An employee could use such resources to act as an idea or product champion and build their career within the organization. Large industrial organizations are designed to incorporate and exploit new innovations (Galbraith, 1967); it follows that when existing firms successfully maintain market share, manage innovation, deal with critical members of the firm's core coalition fairly **B** the whole range of business functions, entrepreneurship will be rare and mid-career labor markets will be poorly developed.

The labor market theory of entrepreneurship holds that shocks that upset labor market equilibria are responsible for the movement of individuals from their previous employers. Labor market upsets that affect a group of highly skilled employees simultaneously are most likely to lead to entrepreneurship. Nevertheless, these shocks may affect different people differently and vary in their effects over time and place.

THE CHOICE BETWEEN ENTREPRENEURSHIP AND JOB CHANGE

Labor market upsets of a certain magnitude will affect individuals differently depending upon their level of specialized skill and personal factors. Those with little industry-specific human capital, and less derived team-building capability, may be below a minimum threshold and would find the trouble of gathering the resources needed for entrepreneurship unattractive but could switch to employment in another industry with minimal earnings penalty. Those with a broad range of skills or a low level of skill would then be less likely to form a new firm, as opposed to change jobs, after a labor market upset than those with a narrow set of skills because the cost of accepting the alternatives will be lower.

Those who have made substantial investments in narrow specialties are most vulnerable to the performance failures of their employers and colleagues. They will have strong commitments to their specialty. With substantial investments in specialized knowledge (and sometimes reputations carefully built through publication in professional journals and presentation at professional meetings), careers could suffer by accepting an imperfect skills-opportunity match inside or outside the industry. To the extent that firm competitive assets are embodied in individuals, the employees with high levels of specialized skill might

plausibly believe that they could successfully form a coalition and achieve market success on their own. Therefore, the technically and commercially proficient individuals will be more likely to form spin-offs than other employees.

At the extreme, a small number of individuals with the very highest level of specialized skill may have sufficient opportunity to continue career advancement that they may never need to become entrepreneurs. That is, Adjustment a in Figure Two may be sufficiently small for such individuals that adjustment b never becomes attractive. Those with extremely high levels of specialized skill may be above a maximum threshold and would find entrepreneurship unnecessary because existing employers would be more likely to create jobs for them. A ceiling effect on entrepreneurship might be expected. Therefore, those with the highest level of specialized skill will be less inclined towards entrepreneurship because existing employers may be eager to create vacancies for the dissatisfied employees of the most technically and commercially successful firms.

SUMMARY AND CONCLUSION

The theory developed here holds that there are two basic pre-conditions for entrepreneurship to occur. First, potential entrepreneurs need to believe they have found the possibility of earning a profit. Second, the potential entrepreneurs need to believe that entrepreneurship would be more attractive than both their current positions and their other employment possibilities. Both are important (Van Praag and Van Ophem, 1995). A host of theories suggest the conditions under which profit potential might arise but that potential is not a sufficient condition for entrepreneurship. Since most entrepreneurs were already employed before forming firms and since they took their jobs believing those positions were the best option, something must have subsequently occurred to create dissatisfaction. This theory identifies the conditions under which the second pre-condition would be satisfied. It might be thought of as specifying the reservation wage for entrepreneurship. The theory thereby provides a complement to demand-pull theories of firm-formation by explaining the conditions under which market opportunities become attractive to individuals.

Entrepreneurship is only one, and because of the difficulties entailed possibly the least common,

reaction to a career threatened by a labor market upset. This paper has concentrated on the options when market opportunities for new firms are present. When market opportunities are not present or when the employer, rather than individual skill, is the basis of earnings power (Lazear, 1981), the options will be rather different. “Voice” (Hirschman, 1970) may be a more common response than “exit” in industries with little potential for market expansion. Career threats may then result in increased corporate loyalty (Meyer and Zucker, 1989) although this might be possibly paired with the downward readjustment of aspirations and withdrawal of effort (March and Simon, 1958). Internal management takeovers (Zald and Berger, 1978) may be a more prevalent reaction to labor market upsets than entrepreneurship in this case. Early retirement may become more attractive to those with sufficient accrued pension rights. Asymmetries in information about opportunities could be an element of a theory of entrepreneurship but it is also true that many people know about promising opportunities that they, at least provisionally, choose not to pursue.

The theory presented here differs from earlier labor market theories of entrepreneurship in four ways. First, it assumes that there are returns to trade among employees that encourages cooperation. Therefore, labor market matching with others of similar skill is important and maintaining a coalition is important in managing firms and building a new one is critical to entrepreneurship. Second, those coalitions allow for the development of specialized human capital with experience through functional cooperation. Individuals thereby gain an investment in a specialty over time. Third, the existence of real-time exogenous shocks to the labor market implies that maintaining the most attractive matches is a continuing problem. The relative attractiveness of individuals and employers (particular coalitions) may vary over time and firms may exert considerable effort in maintaining their attraction to employees. Fourth, institutional rigidities in the labor market both facilitate the development of specialized skill through work experience and create the market imperfections that sometimes make entrepreneurship an attractive option.

The theory developed here has had little to say about much of the complex process of firm formation or the problems new firms face in negotiating their environments. In addition to forming a new coalition, the several non-labor inputs: capital, customers, suppliers, and equipment, need to be secured. Not mentioning

these critical tasks does not imply they are a trivial aspect of entrepreneurship. Such concerns are complementary to the aspects of entrepreneurship discussed here and their effect is to reduce the attractiveness of entrepreneurship relative to job change and to reduce the numbers of firms formed by those with the basic motivation to do so.

The imperfections in the labor market brought about by job rights and promotion rules that help explain entrepreneurship may also be a better explanation for the persistence of self-employment when earnings are low than is the receipt of intrinsic reward (Blanchflower and Oswald, 1992). Entrepreneurs may sometimes feel passionately about their work and some may pursue particular paths far beyond the dictates of prudence. Nevertheless, their actions are still amenable to this analysis. They may continue in their self-employment, not because they derive so much pleasure but because the market for their assets and the imperfections in the labor market impose costs on a career change (Gimeno, Folta, Cooper, and Woo, 1997).

Most entrepreneurship requires specific skills and knowledge about particular markets. These may be most commonly developed through employment experience. Paradoxically, the institutional arrangements that help facilitate the accumulation of such specialized skill and increase loyalty to a firm (Williamson, 1975) also contribute to the causation of entrepreneurship. Internal labor markets may be well-suited to building coalitions of high-skill labor for long-term projects but are ill-adapted to the contingencies of market uncertainties and their effects. Many entrepreneurs are employed in the same industry as, and compete with, their former employers either directly (in business the former employers are in) or indirectly (in a business the former employers could be in). Since new firms are arguably disadvantaged, entrepreneurship implies a weakness of the part of the former employer and other existing firms. A firm performance failure creates both the opportunity and the motivation for entrepreneurship. In a more perfect world, agile, learning organizations would spot the opportunities and act upon them; there would be no entrepreneurship.

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Figure One

Hypothetical Career Trajectories Human Capital Theory Predictions

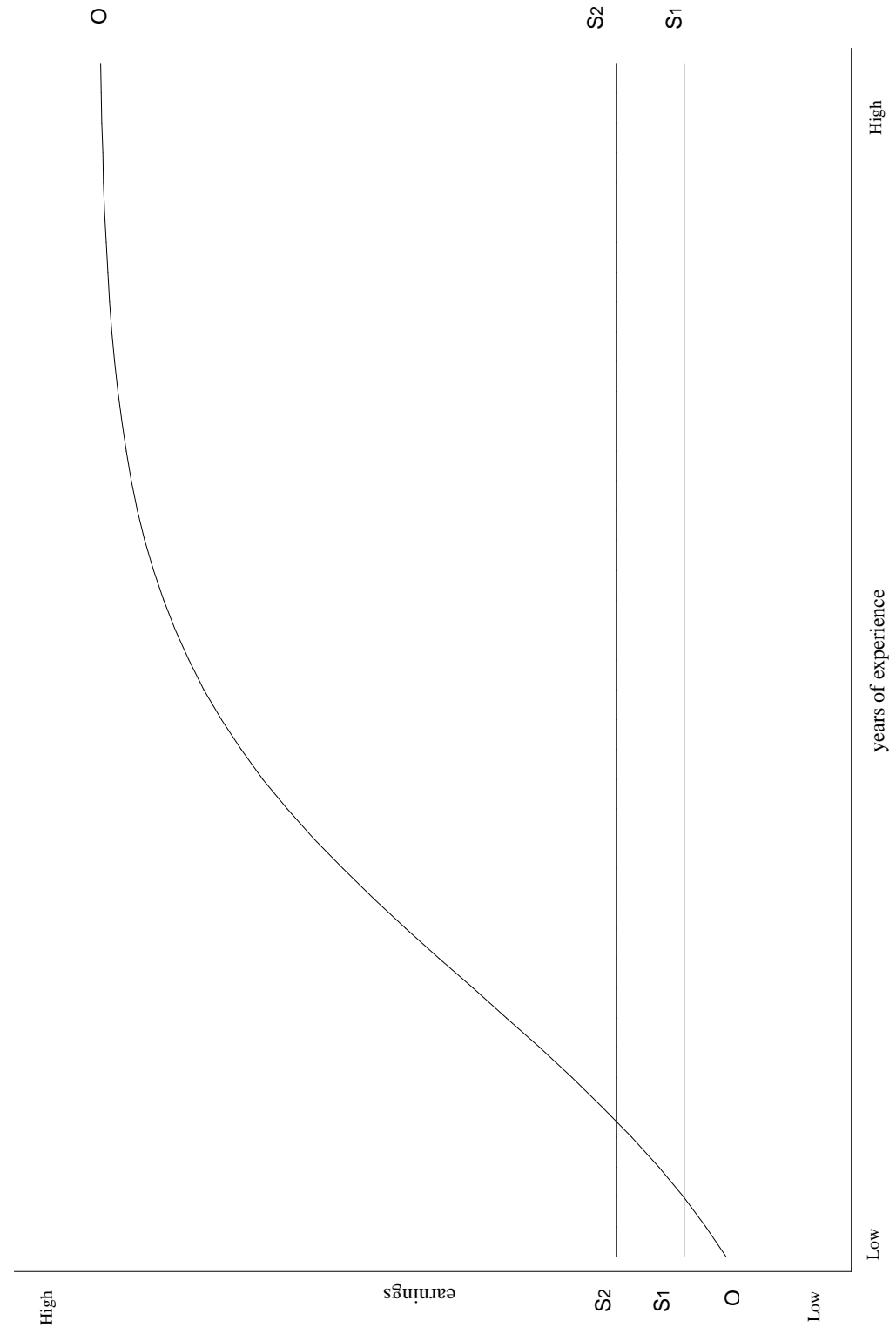
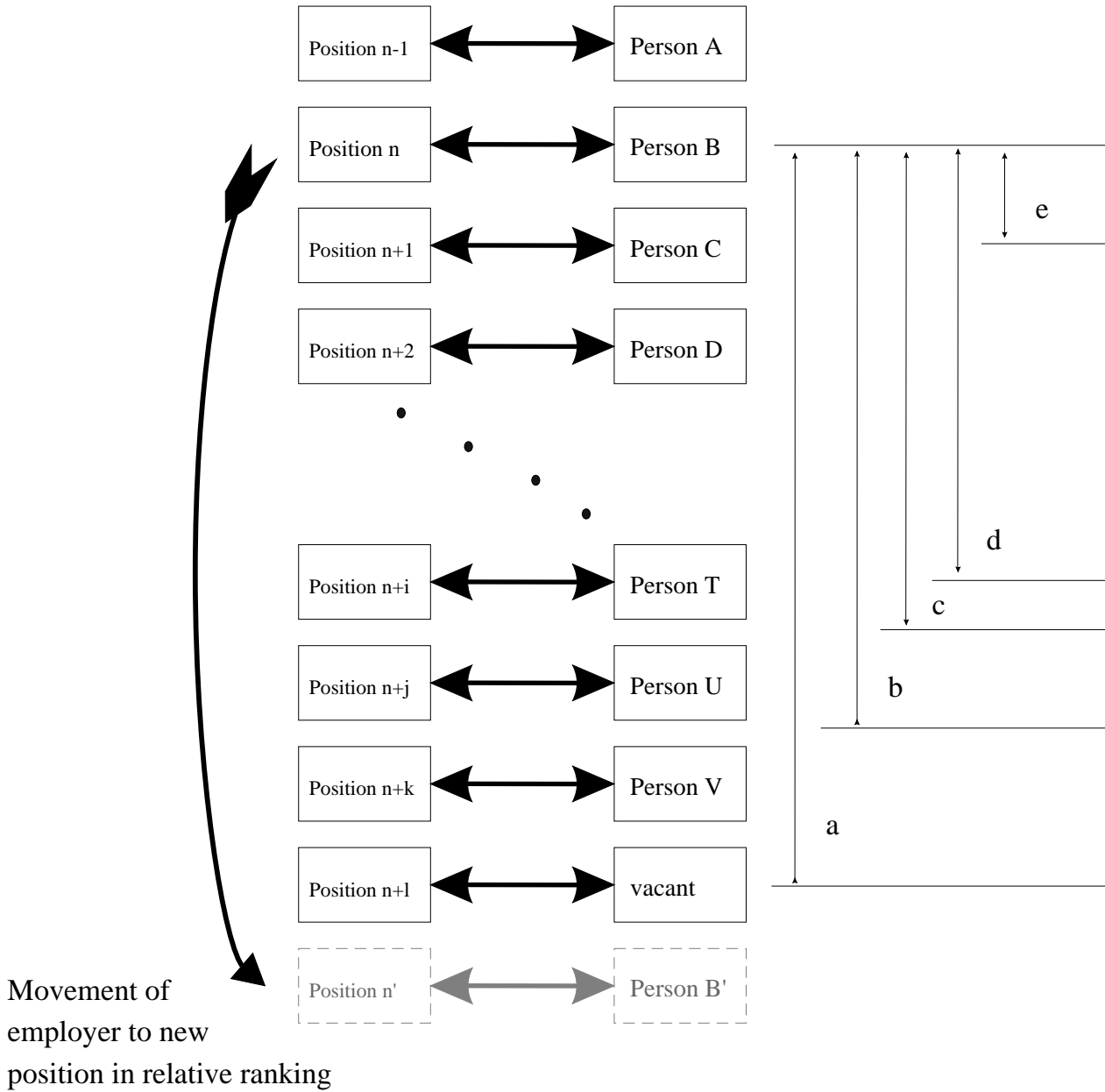


Figure Two

Typology of Adjustment in Labor Markets (from previous equilibrium position)



- a: Labor market adjustment with job rights
- b: Labor market adjustment with entrepreneurship
- c: Labor market adjustment with institutionalized entrepreneurship
- d: Labor market adjustment with a developed mid-career labor market
- e: Labor market adjustment with no job rights