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Pay, promotions, and performance

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PART 3

7 CONCLUSIONS

In this chapter, the spotlight falls on the (theoretical) conclusions of the different chapters. The first section reflects on the research questions that were raised in the Introduction and draws conclusions based on the results from the empirical studies in Part 2. Section 7.2 discusses the limitations of the studies. Finally, Section 7.3 presents suggestions for further research.

7.1 Research Questions and Conclusions

Chapters 3 and 4 analyze the specific determinants of the motivation of individual employees in a single firm. The first research question – “What is the effect of performance measurement and compensation on motivation?” – is addressed in Chapter 3. We show that the design of a compensation system (monetary compensation and promotions) has a strong impact on both intrinsic and extrinsic motivation. We define three basic characteristics (transparency, fairness and controllability) and investigate the perceptions of these characteristics for two elements of the compensation system: namely, monetary compensation and promotion. Five out of six characteristics (the perception of fairness and controllability of monetary compensation and the perception of transparency, fairness and controllability of promotions) have a significant relationship with extrinsic motivation; only the transparency of monetary compensation has no significant relationship with extrinsic motivation. Intrinsic motivation has a significant relationship with the transparency and controllability of promotions, but not with any of the three characteristics of monetary compensation. This result has implications for crowding theory. Crowding theory states that “all interventions originating from outside the person under consideration, i.e. both positive monetary rewards and regulations accompanied by negative sanctions may affect intrinsic motivation”. In this study, no relationship is found between the perceptions of the monetary compensation system and intrinsic motivation, an observation which is not in line with the predictions of crowding theory. Still, one could argue that evidence in favor of crowding theory is more likely to be found in a situation where pay-for-performance is a significant component of overall pay. Crowding effects are more likely to be located in such a setting, although crowding theory on its own does not distinguish different types of monetary compensation. Unfortunately, we are unable to test crowding theory in a situation where many employees have an incentive contract, as the firm studied did not meet this criterion. The answer to the research question is that most characteristics of the compensation system are related to motivation, but that in particular promotions are of great importance, since promotions are positively related to both extrinsic and intrinsic motivation.

The second research question – “To what extent do careers within an organization motivate employees?” – further investigates the incentive effect of promotions. Chapter 4 makes job movements within a firm the central subject of study. An important observation in this study is that the wage policy of the firm is explicitly arranged in a CLA. This provides an opportunity for personnel economists to not only rely on the personnel files of workers but also use these administrative rules to investigate questions such as those presented in Table 2.4. Incentive compensation is not an important incentive instrument in this firm, therefore we only study the motivational effects of promotions. We show that the prospect of a promotion clearly influences the level of extrinsic motivation, in line with what the tournament model predicts (see Section 2.2.2). Additionally, we find that promotions are related to intrinsic motivation: intrinsic motivation increases not only before but also *after* a

promotion has been realized. This additional beneficial effect of promotions has not been recognized in the (economics) literature before. The conclusions of Chapter 4 regarding the relationship between promotions and motivation are a further extension to the conclusions of Chapter 3.

Chapter 5 addresses the third research question “In what way are external conditions related to mobility within the firm?” The conditions that are studied in this chapter are the organizational size, the growth rate and the profitability level of the company, as well as the industry in which the company operates. We find that all four determinants influence ports of entry and exit, which are important characteristics of ILMs. The conclusion that relatively large, growing or profitable organizations are better able to organize internal job movements has two major theoretical implications. First of all, it provides a frame of reference for the purpose of interpreting the single-firm investigations into ILMs (see Section 2.4): the scores on these determinants for an organization that is used as a case study can partly explain the presence or absence of certain stylized facts. For example, Table 5.1 (a précis of Table 2.4) shows that companies with less growth also have less distinct ports of entry. Second, the results show that the incentive effect of promotions (e.g. the organization investigated in Chapter 4 relied mainly on promotions to provide incentives) can be dependent on these determinants. For example, a company with a low level of profitability and zero or negative growth will have high turnover at all levels of the organization and is likely to hire outsiders in the top of the organization to fill the vacancies. This potentially undermines the incentive effect of promotions. The company that was analyzed in Chapter 4 indeed shows low profitability and negative growth, which indicates that alternatives for promotions as a motivational instrument have to be investigated to maintain the original level of motivation.

The fourth research question – “Is there an optimal level of job mobility between organizations for employees?” – is central in Chapter 6. While Chapters 3 and 4 emphasize the importance of internal job mobility and Chapter 5 shows some of the required conditions to create internal career tracks, Chapter 6 indicates that, from a learning perspective, switching firms is actually beneficial for the wage level of individual employees. The proposition that job mobility enhances the wage level is only predicted by matching theory. Therefore, the positive relationship between job mobility and wages has theoretical implications: coalescent human capital is a possible extension to standard human capital theory and also indicates a restriction for ILMs.

The conclusions and implications of Chapters 4 and 6 appear to be conflicting at first sight, but in fact they are complementary. Chapter 4 emphasizes the importance of internal mobility. Chapter 6 introduces a rationale for job mobility and thus the importance for employers and employees to use the external labor market. This paradox can easily be explained. Both chapters build on the conjecture that workers are seeking challenges in their work, whether this is with their current or alternative employers. Whenever the incumbent organization is unable to meet this rudimentary desire of job challenge, employees will want to look elsewhere. Also, from the perspective of the firm, both internal and external mobility provide advantages. Internal job mobility will motivate employees to reach out for the new, higher position (in line with tournament theory), while external job mobility is required to bring new ideas into the organization and escape organizational inertia (see organizational change literature, and the results in both Chapters 5 and 6). Hence, both types of job mobility are required and are complementary to each other.

7.2 Limitations

The various chapters are subject to multiple limitations that have been addressed separately in each chapter. In this section I review the main limitations. A first limitation concerns the research methodology. Chapters 3 and 4 both investigate individual worker data within a single firm. Chapters 5 and 6 make use of a large multi-firm Danish database. Both techniques represent two extremes: while the first approach complicates generalization, the second technique does not allow investigation at a great level of detail. For example, in Chapter 5, ports of entry and exit on a multi-firm data set are investigated. This analysis requires comparing job levels between firms. Since job descriptions vary across firms, making perfectly distinct job groups is nearly impossible. The result is that only a limited number of job levels can be distinguished. Moreover, the job levels are not uniformly distributed across firms: in some industries, the majority of workers will be blue-collar workers, while in other industries white-collar workers are predominant. To mitigate this problem a single industry could be studied, which would include differentiation (e.g. differences in size, profitability and corporate culture between firms) without losing the ability to distinguish job levels (assuming that the different firms have a comparable typology of organizational structure).

Difficulties regarding causality are the second limitation. Empirically distinguishing the cause and the effect in the investigated cross-sectional relationships is difficult. Chapter 3 in particular suffers from this limitation; the causality in the relationship between the perceived design quality of a compensation system and the level of motivation is uncertain. A partial solution to the problem is offered in Chapter 4 and Chapter 6. In these chapters relationships are investigated across time: for example, the effect of the number of previous jobs on current wage levels, and the effect of a realized promotion on subsequent (intrinsic) motivation.

A third limitation concerns the measurement of motivation and performance. In Chapters 3 and 4 it was already emphasized that measuring motivation is extremely difficult. It would be highly preferable to measure the complete triangle of motivation, ability, and performance (see Figure 2.1). Instead, the levels of motivation and effort are assessed by the employees *themselves*, by means of a questionnaire and it is not possible to measure effort and performance objectively. In Chapter 6 wage levels are used as a proxy for the performance of workers. Identifying in what way the perceived motivation enhances the desired performance, or measuring individual ability and performance of employees are topics which are suitable for additional research.

7.3 Suggestions for Further Research

The conclusions and limitations of this dissertation generate several suggestions for further investigations. I phrase four questions that indicate topics for future research.

What is the cause and what is the effect in the relationship between the perceived characteristics of the compensation system and motivation?

In Chapter 3, while investigating the relationship between the perceived characteristics of the compensation system and intrinsic and extrinsic motivation, it is not possible to identify cause and effect. This first suggestion for additional research directly results from that problem.

Economic theory (e.g. agency theory) suggests that a compensation system involving a considerable amount of risk for the workers will not make the work-averse employee produce high levels of effort (refers to motivation). This introduces the idea that the perceived characteristics of the compensation system (for example, the control that employees have over their own wage level) are the cause and that motivation is the effect. Unfortunately, the data does not make it possible to test this theory and, furthermore, a reverse effect is not excluded.

A method to deal with this complicated issue is offered in Chapters 4 and 6 (using changes over time). More specifically, future research could externally change the perceived characteristics and investigate its effect on the level of motivation or the other set of variables. For example, field research can increase the perceived transparency of a compensation system (e.g. organizing sessions that explain all facets of the compensation system to employees) and examine if this external shock affects extrinsic or intrinsic motivation. Also, externally influencing motivation (e.g. increasing intrinsic motivation by means of informing employees about their performance as proposed in cognitive evaluation theory) makes it possible to see whether the reverse relationship exists. The combination of both these studies will provide valuable insights about the causal relationship between the perceived characteristics of the compensation system and motivation.¹¹⁵

What is the empirical validity of crowding theory?

Crowding theory is not without dispute. In Chapter 2 (theoretical background) previous empirical studies were discussed that investigated crowding theory without a definitive outcome. In Chapter 3, I was unable to find supportive results for this theory myself. This ambiguity calls for further investigation.

First of all, the exact specification of crowding theory is unclear. Frey and Jegen (2001) distinguish two different definitions of crowding theory (see Section 2.2.3), one assuming fixed preferences, and the other assuming that the preference for a task can change. Theoretical consensus will facilitate further research and improve the testability of crowding theory. For instance, consider a job where a worker is on an hourly wage and has the freedom to decide which tasks to perform. According to crowding theory, the introduction of an external intervention that is perceived as controlling (for example, workers are asked to limit themselves to a single task) will lead to the crowding-out of intrinsic motivation. But this setting also implies that numerous tasks, the tasks not included in the incentive contract, as well as the 'task' that workers can organize their own time and set priorities themselves, have been taken away. Whereas crowding theory calls this 'crowding-out', it is also fair to state that the job itself has altered. A change in job responsibilities that is accompanied with a change in intrinsic motivation is not what psychological cognitive evaluation theory intends to explain.

Second, previous empirical results supporting crowding theory are mostly found in exceptional situations. Often, especially in experiments, a situation where no monetary payments are offered is compared with a situation with monetary compensation. These experimental settings call for careful interpretation. The change in motivation in such a distinct setting can be explained by many other theories besides crowding theory: for

¹¹⁵ While conducting these type of analyses, the possibility of the 'Hawthorne effect' (See Section 2.2.4.1) should be accounted for.

instance, attribution theory. Future analyses of crowding theory should carefully test those assumptions and predictions that are unique for crowding theory.

The combination of these observations leads me to conclude that it would be desirable to make for further investigations in order to find (1) consensus on the definition of crowding theory; and (2) economic settings where tests of the theory can be rigorously conducted. In my opinion, future research should explore a setting where workers are already involved in an incentive scheme and where the evaluation process is altered (for example, by an increase in the frequency of evaluations). By doing so, the job itself remains unchanged, while in a work situation the controlling and informing component of compensation can be investigated. Alternatively, a situation can be investigated where incentive compensation is introduced, although such a situation includes the risk that the job itself also changes as discussed above.

Are the results on ILMs idiosyncratic?

This question is not new and has been asked before (e.g. Gibbs and Hendricks, 2004). In Chapter 2 (theoretical background), some attention was given to existing evidence on ILMs, and in Chapter 5 potential determinants of an ILM were identified. However, the analyses in Chapter 5 concentrated on ports of entry without including the other 16 stylized facts (see Table 2.4). Obviously, including those 16 stylized facts would call for more thorough analyses. Most existing case studies have been conducted in a setting that is likely to be advantageous for internal mobility (e.g. white collar workers employed in large, or growing, profitable, financial service companies). Thus, although stylized facts such as fast tracks are often identified in case studies, they might not be as common once settings are investigated where ILMs create less value and might even have negative (side) effects.

The stylized facts concerning the wage policy of the firm are a separate matter. Whereas in previous studies the wage policy has been studied using personnel data, I include the CLA and identify most stylized facts in the explicit policy of one specific firm (Chapter 4). This approach is potentially useful for further analyses in other, mostly European, countries where CLAs are also available for research. The nature of such a wage policy invites researchers to investigate the source of the ILM, the administrative rules themselves, on a multi-firm level across countries. More specifically, personnel economists could explore whether a generalization into different categories is possible. It offers the opportunity to analyze if firms that do not have an incentive compensation system in place have instead higher wage increases upon promotions in order to motivate employees.

What is the relationship between job mobility and performance?

Chapter 6 explicitly focuses on the beneficial effects of job mobility. I investigate how the wage level is influenced by historical job mobility. The results are used to empirically analyze the idea that performance is affected by previous job changes, but I have not directly quantified the workers' performance. This offers many opportunities for further research. In particular, quantifying the learning curve of individual workers will contribute to general knowledge of human capital theory. This requires measuring ability. An example of quantifying ability would be to pose questions to recruiters about the attractiveness of (hypothetical) applicants, similar to Van Beek et al. (1997). In order to investigate the specific research question as posed in this situation, it would be necessary to test if having multiple previous jobs benefits career opportunities. Another possibility would be to investigate companies that have installed competence management. These companies

have information on the competences and thus the ability of employees and offer the opportunity to see directly if having had multiple previous job experiences benefits the workers' competency level.

These suggestions for further research concentrate on the ability of workers. It is also possible to investigate the relationship between job mobility and performance more directly. For example, the number of previous jobs outside the current firm can also be used to explain the employees' evaluation scores and their internal career track, which are directly related to their current performance. A single-firm analysis (see Table 2.4, Chapter 3 and Chapter 4) is particularly suitable for this approach.

Third, it is also possible to investigate the relationship between ILMs and the performance of *the firm*. Do firms with a large degree of internal mobility benefit from the incentive effect of promotions? Alternatively, is it value-creating to hire workers from the outside and escape inertia? Although I have addressed the pros and cons of internal mobility for individual firms, the overall effect for the organization has remained unaddressed.

In sum, this dissertation began by posing a number of research questions that had to be answered, but these answers have led to new questions. The goal of this dissertation was to add empirical facts to personnel economics. More specifically, it was investigated in what way the design of a compensation system, the internal labor market, and external job mobility opportunities motivate workers. This dissertation has provided the reader with some answers on these topics, but still further explorations in all areas are needed by academic researchers. Nonetheless, personnel economics is a practical topic in nature, with also considerable managerial relevance. In the next and final chapter, I will explore the implications of the essays for practitioners.