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Toward Incentives for Military Transformation

A Review of Economic Models of Compensation

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Prepared for the Office of the Secretary of Defense

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SUMMARY

This report reviews economic models of compensation that apply to hierarchical organizations. It outlines how models of compensation can help make the military compensation system more compatible with the goals of transformation. Two objectives of transformation are important here: (1) assuring that the compensation system provides flexibility in managing personnel, and (2) assuring that the system induces innovatory activities and well-calculated risk-taking. These aims should accompany the usual goals of the military compensation system in providing incentives for performance, retention, and skill acquisition.

This report is organized around four main paradigms of personnel compensation. First, it discusses the advantages and disadvantages of providing incentives through promotion tournaments. This is the most important model of compensation in the military. Next, it examines how incentives are provided in compensation systems that defer some part of the rewards into the future. This analytical approach to compensation applies to the military because performance in the military in the current period is partially rewarded by higher pay in the future through promotions and eventually retirement. The report also looks at the benefits and costs of tying pay directly to certain performance metrics. This approach provides the most flexibility in personnel management and can provide strong incentives for individual performance. However, its application in the military is limited to those occupations where performance is easy to measure. In addition, the report outlines how nonmonetary factors can affect performance and sorting in the organization, and how they should be associated with monetary incentives.

Each of these models of rewarding personnel has its benefits. A well-designed compensation system can ensure that workers with the right skills and abilities apply for open positions in an organization and stay there for their careers. When deciding where to work and later whether to separate from a firm, workers consider the compensation that they receive and compare it to the opportunities available elsewhere. In
addition, a compensation system can ensure that employees work hard on their jobs.

However, each of the systems of rewarding personnel has its costs. Monetary costs of rewarding personnel include wages, costs of monitoring performance, and possible administrative expenses. More important, reward systems might create unintended outcomes, brought about by the strategic response of personnel to the peculiarities of the compensation system. Some of these unintended outcomes include the following:

- Workers may inefficiently allocate their efforts among different tasks. If not all dimensions of the output are rewarded, workers may prefer to work harder only in measured and rewarded dimensions at the expense of unmeasured and unrewarded ones.
- Incentive systems can affect workers’ risk-taking behavior. Workers can either take excessive risks or limit their risk-taking too much.
- Workers may strategically shift their effort between measurement periods.
- Workers may prefer to influence supervisors’ evaluations. When performance evaluations include subjective components, workers may invest too much of their time into affecting the supervisors’ evaluations, because good evaluations affect future pay and workers’ reputations.
- Supervisors may rely on favoritism or preferences in deciding whom to promote. This makes the evaluations less informative about workers’ talents.
- Strong incentives for individual performance may undermine team effort and team performance.
- Strong incentives for individual performance may mute effects of nonmonetary factors.

Although it is difficult to eliminate all of the unintended outcomes of the compensation system, the system should be designed with these outcomes in mind. The purpose of the compensation system in a firm is to induce the desired behavior of workers to achieve an organization’s objectives. The effectiveness of each alternative way to reward personnel depends on external as well as internal factors that may affect workers’ behavior. Compensation systems should balance costs and benefits to achieve the organization’s objectives in recruitment, retention, and skill acquisition. Therefore, the organization’s system of rewards can be viewed as a tool to achieve desired personnel outcomes.
Most of the factors identified in this report are important determinants of the effectiveness of the military compensation system. The pay system structure, the distribution of service members between grades and occupations, the members’ progression through the ranks, the nature of performance evaluations, and job characteristics can affect decisions to recruit, reenlist, acquire important skills, and be innovative. The economics literature provides a method for looking at these effects together as a coherent system and for outlining how these effects might constrain or facilitate military transformation goals. Furthermore, the peculiarities of the military compensation system may limit some of the unintended outcomes that can arise.

Although the economics literature provides many useful insights into how a compensation system operates, it has some notable weaknesses. First, with the exception of a few studies, available theoretical literature is not directly applicable to the peculiarities of the military compensation system. Second, a lack of empirical studies constrains understanding of whether the theoretical arguments are important determinants of workers’ behavior. Third, few studies look at the systems of rewards as a coherent mechanism, where different methods of inducing performance and sorting interact. This report considers these limitations while examining what economic models suggest for the efforts of the military transformation.