

## **Discussion of “Delegated Job Design” by Hans Hvide and Todd R. Kaplan**

**Andrew Leigh  
PhD Student  
Kennedy School of Government  
Harvard University  
andrew\_leigh@ksg02.harvard.edu**

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### **Summary**

This is a fascinating paper that models the interaction between career concerns and delegation. Its central conclusion – that workers should be delegated more when career concerns are weaker – is a provocative and interesting one. My favorite quote in the paper is “career concerns is the dark force that creates agency costs and necessitates limits to delegation” (p.5).

### **Critique**

1. A central assumption of the paper is that IT increases the productivity of skilled workers performing easy tasks. Near the end of the paper, the authors acknowledge that skill-biased technological change raises the productivity of skilled workers more than unskilled workers. But in their main model, the main productivity boost is among skilled workers performing easier tasks.

I felt I needed more evidence to convince me that this was a reasonable assumption. The authors cite evidence from Bresnahan et al (QJE 2002), that

simple decisions are the most amenable to automation (p.344). But the same page of that paper also goes on to stress the increased analytical and abstract decision-making that can come from using new data on customer needs or product development. Perhaps if someone had looked at SBTC within college graduates, we might have something to work with – but I’m not aware of work on this.

2. A recurring theme in the paper is that the IT industry and government have different levels of delegation. However, it is difficult to know whether the two industries are really comparable. In choosing two industries, one wants to compare apples with apples, not apples with bureaucrats. The US government differs from Microsoft in that it is about 200 years older, orders of magnitude larger, and much more heavily unionized. But perhaps the biggest concern is that it isn’t clear that we can assume that governments are operating on their production possibility frontier, since their ultimate concern is not profitability but re-election. A better option might be to instead compare two sectors that have been around for a comparable length of time, but devote quite different fractions of their costs to research and development – such as the pharmaceutical industry and the motor vehicle industry.
3. The authors begin by assuming that workers know their ability (akin to Prendergast JPE 2002). (They say “each worker privately knows whether he has either low or high ability” (p.10).). But in proving Proposition 1 (the conditions for a separating equilibrium), they assume that some workers make mistakes

about their true ability. This seems to be at odds with the opening assumption, which seems to suggest that no worker should ever be mistaken about his or her type. Of course, workers might try to deceive firms of their type, or disguise themselves as a different type, but I'm not sure that this will necessarily lead to the same result. It would be useful to see whether this holds.

4. The authors say link their theory to broader economic circumstances, which is a particularly interesting extension. They conclude that in the boom, firms will focus on exploitation (fine-tuning), while in recessions, they will focus on exploration (innovating new products). This seems an interesting idea, but it would be useful to buttress it with some evidence. My intuitive sense is that innovation in the tech industry would have fallen from the height of the boom in 1999 to the slump in 2001 – but perhaps I'm thinking of net innovation, rather than the exploitation/exploration split within firms.

### **Possible Extensions**

The authors themselves cover many of the possible extensions. The only one I have to add to their thorough list is an extension to their discussion of effort. How would it affect the model if IT can make monitoring of employees' effort levels easier? (Bresnahan et al (2002) finds that managers believe it does.)

## **Smaller issues**

p.12, Footnote 8 – should this be real wages, rather than nominal wages?

p.13 – should the expected production in the second paragraph be per worker?