

Interactive comment on “Mobile talent or privileged sites? Making sense of biotech knowledge worker mobility and performance in Sweden” by H. Mattsson

Anonymous Referee #1

Received and published: 19 February 2007

Mobile talent or privileged sites?

General comments

This paper contributes to the literature on the innovativeness and productivity gains that geographic clustering yields to firms. The impetus of the paper rests on two elements: one is the conceptual opposition of the privileged sites-hypothesis and the talented people-hypothesis about differential cluster performance and innovativeness. The other is the use of an invaluable database allowing for a strong empirical assessment of its research question. Analyzing detailed statistics on the qualification, mobility and salaries of individual professionals in the Swedish biotech industry, the author

claims to make a number of inferences of location and geographical job mobility on innovation. Generally, the paper is well written and reveals a number of interesting findings which are also summarized at the end of each section (to the benefit of the reader). It shows that in Sweden and in the case of the educational elite in biotechnology, worker mobility is very limited. However, the small proportion of interregional job migrants experience significant salary increases. Moreover, income increases seems to grow with the number of job and location changes. As such, the paper is really interesting. However, there is one fundamental problem in the line of argument and some minor comments that I would like to discuss.

Specific comments

1) The key problem in the line of argument that is pursued in the paper rests in the linkage between theories on cluster innovativeness and the empirical analysis of salary gains from job mobility. While the introduction promises an empirical assessment of the rivalling hypotheses (privileged sites vs. talented people), the empirical part exclusively analyzes the association between knowledge worker mobility and income increase. Hence, there seems to be a problem of correspondence between theory and empirics. Let me develop this point: It is not convincing to treat individual income as a proxy of firm innovativeness (p. 12), first, because a measure at the level of the individual does not necessarily tell much about an aggregate outcome; second, because the measures are not only different in scale but also in nature (i.e. income is not the same as innovation); and third, because firm innovation may or may not be a result (or cause?) of individual income increase. If the salary of a job migrant increases it may be for other reasons than for the innovativeness of the entire firm: (1) it could be a mere upgrade in the hierarchy of management (which would not have been possible in her own company, hence a location change was necessary); (2) it could be the effect of a firm's market performance (which is not purely determined by innovation but also by exploitation); (3) it could be the effect of differential salary markets in different market segments (e.g. low pay tourism vs. high pay banking). My recommendation would

be to abandon the theoretical connection between individual income and firm-level innovation, and rather interpret the findings in a more direct framework. Therefore, the author's conclusion on p. 17 that “the present study advocates one of the underlying ideas of the talented people argument, namely that mobile creative people with diverse backgrounds are good for innovation processes”; remains unsubstantiated by the empirical findings in the paper.

2) The problem discussed above implies another problem: what is the more appropriate theory behind the data? The data are great and one can only envy the author for getting hold of such a detailed set of geo-coded individual parameters over a longer period of time. No doubt, the findings are interesting and add value to the cloudy level of evidence associated with many arguments raised in cluster theory. However, at the moment, the paper does not provide coherent propositions about the expected findings nor does it systematically reflect the findings in the context of an available theory, for example, on knowledge-worker mobility or wage theory. As it stands, the manuscript is illustrative descriptively, but would benefit from a better suited conceptual framework fitted to the empirical case it makes.

3) With respect to the theoretical debate offered, I wonder whether the two theories are necessarily contradictory alternatives. Places may yield superior rates of innovation because of privileged resource endowments but also because of the attraction of talent at the same time. This renders the construction of the argument to be a little overstated. Following the author's own conclusion, geographical clusters may confirm both sets of arguments. This suggests that both theories are partial explanations and that proving one of them in a case study does not disprove the other by any necessity.

4) With regard to the debate on worker mobility, I would invite the author to push the argument further beyond the current state. On page 17 he argues that the limited mobility of experts shifts the focus on the university choice prior to the first employment: since professionals stay in place it is their choice of university which preselects the future location of a talented career. I would follow the argument, yet it would be

[Full Screen / Esc](#)[Printer-friendly Version](#)[Interactive Discussion](#)[Discussion Paper](#)

important to know whether the local universities in the study regions perceive a considerable proportion of student immigration in the first place. If in one likely scenario, they received predominantly local students only, this would further challenge the core argument about the talented people hypothesis. Are there any clues in your data about the geographical composition of university students? Do Swedish students generally leave home to join a university in other regions? And more specifically, do biotech students move more frequently than the average? I would recommend developing the paper further toward issues of educational and job mobility.

5) Some further questions to better exploit the empirical data and provide conceptual interpretation: It is interesting to see the differential income gains in different source and target regions. But how does the author interpret these findings? What can we learn about the fact that job movers going to Linköping experienced the highest salary increases? As a matter of comparison, how much did local job movers (new jobs in the same region) increase their income? Are there different levels of mean income in the six biotech regions and, if yes, how can the author account for these differences?

I hope these comments are helpful to improve the paper.

Interactive comment on Soc. Geogr. Discuss., 3, 1, 2007.

[Full Screen / Esc](#)[Printer-friendly Version](#)[Interactive Discussion](#)[Discussion Paper](#)