Manuscript 472:

Z. Haiyang and T. Sonobe: Business Incubators in China: An Inquiry into the Variables Associated with Incubatee Success

The paper in review is well-structured and fluently written. It is dealing with an interesting topic – the effectiveness of policies of support of start-ups – and is referring to a country, China, which is nowadays on the focus of attention of both policy and science. The results are also interesting, showing which factors lead to a better performance of public-funded incubators under the specific conditions of the Chinese economy.

The critical remarks are as follows:

(a) Conceptual part: The authors have identified based on existing literature a number of possible determinants of the performance of incubators: human, material and financial resources as well as environmental factors such as universities, foreign direct investment, urban industrial density etc. Since they did not have a priori any hypotheses as to the *relative importance* of these determining factors, they can formulate straightforward their empirical model and let econometric estimates show how strong the effects of the various right-hand variables are. At any rate, the three hypotheses (Hypothesis 1 to 3, p. 9ff) as they are formulated now appear to be data-driven, i.e. just ex post rationalization of empirical results. In this sense they are superfluous and can be dropped. Even for the performance differences between government-based and university-based incubators there are arguments pro and contra but not a priori clear-cut hypothesis.

(b) In the same context: It is not clear why the environmental factors ("urbanization variables", etc.) are introduced via random error term (p. 13f.) and not directly as part of the empirical model.

(c) Discussion of results:

Some more discussion on the *relative importance* of various determinants would be necessary, based on tests on the statistical significance of the difference of the elasticities of the right-hand variables.

It would be useful to add to the manager education variables also variables indicating professional experience (of course if available).

Differences of incubator performance may also be explained by the industry- or technology-mix represented by the client firms, given that the success chances of start-ups are different in different industries and/or technological fields. Is it possible to control for this effect?

The differences between the estimates for the period 2002-04 (table 4) and 2004-06 (table 5) can be traced back to many (unobservable) factors, so it is not reasonable to explain them just by the fact that in the second period equity investment was used as an additional support measure of start-ups, as the authors do (p. 19). If the authors can find a way to explain the

performance difference (e.g., in number of graduates from incubators) between the two periods by the existence of equity investment (say, represented by a dummy variable) this would be an interesting additional result. In any case, they have to refrain from using the comparison of the estimates of table 4 and 5 to identify an effect of the introduction of equity investment in the second period.

(d) Tables with results: Some measure of the significance of the model (e.g., Wald-test or something like this) and some fitness measure have to be added o the information in the result tables.

Minor remark: It would be useful to report the total number of STBIs in the period 2002-2006 in order to be able to assess the representativeness of the data used (of 62 STBIS) (p. 15).

In the whole, I recommend the paper fir publication in *Economics* after a revision along the line of this review.