CompNet The Competitiveness Research Network

What comes next?

Data Provider Forum

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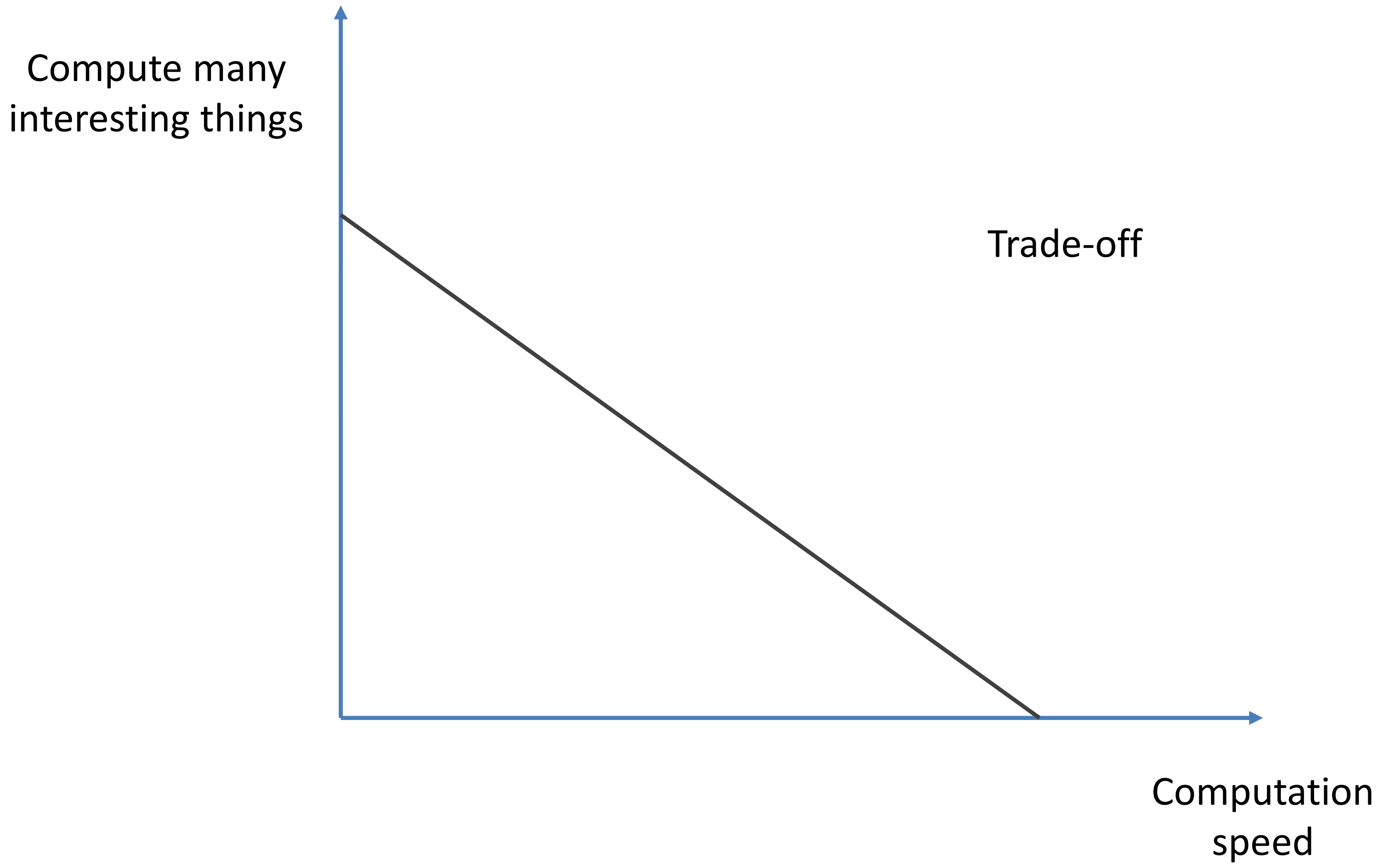
Current situation with the code and data

- 7th vintage has improved a lot.
- Rich set of indicators; code became very large
- Running time gets extreme in some countries.
- Burden for some data providers
- For the 8th vintage: Make code more efficient, reduce running time.
- However, we also aim for implementing new variables (and drop existing)
- Who can we do this?

Rich data and speed of computations trade-off

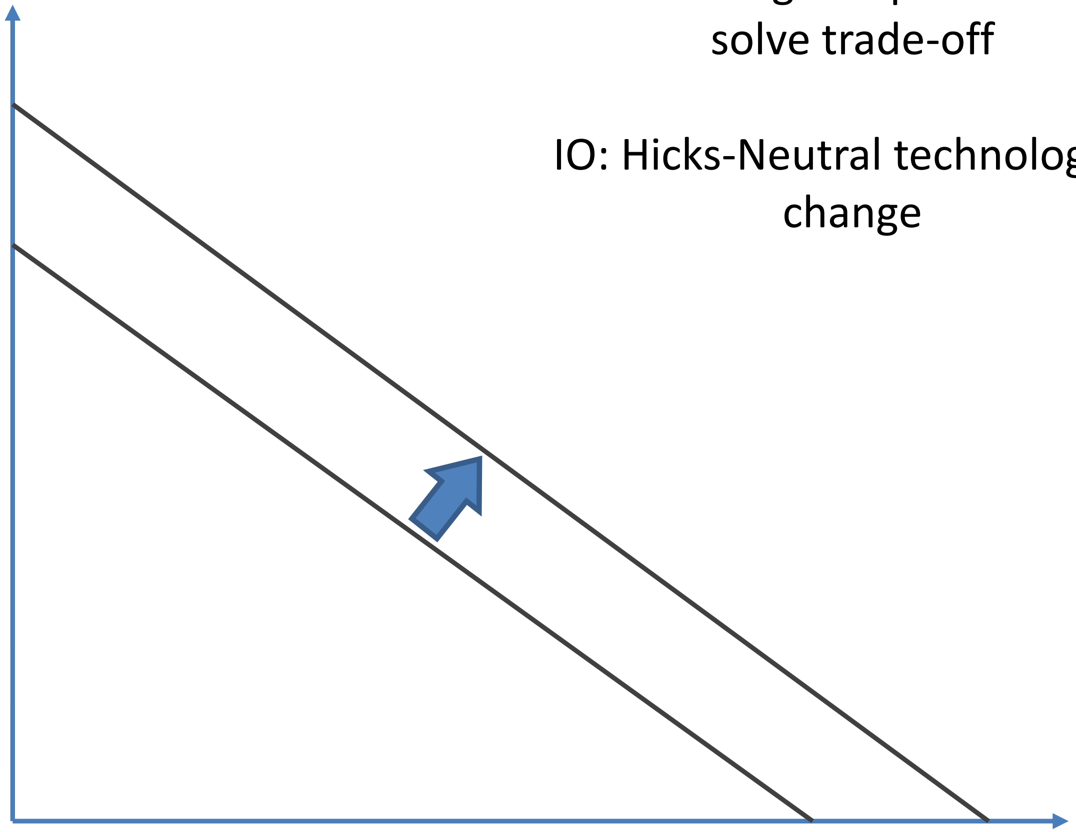


Rich data and speed of computations trade-off

Ethics: “Orthgonal positioning” to solve trade-off

IO: Hicks-Neutral technological change

Compute many interesting things



Computation speed

How do we innovate?

- Core: Allow to freely adjust which variables are computed in which dimensions. Currently: Each variable for each JD.
- Expected reduction: 20%-30%
- Reduce overall variables and JDs. To make qualified judgement, we need YOU and the USERS! Which variables are important to you and the users? Feedback is always welcomed.
- Module 7 takes most time: We will make the code start form its last break point if it broke.

Data quality

Key Question:
How can we ensure and further advance high quality standards?

Data quality

- Current disclosure routine based on **sample statistics and done for all variables**
- For some variables this is meaningless, e.g. TFP, JDR, JCR, LS
- Here the routine creates too many missing values as mean*number of observations does not give you a total, nor there is a meaningful total of these variables.
- We plan to adjust the dominance criteria to do this only for raw data input and value-added (i.e. revenue, capital, employment,..)

Data quality

- CompNet only reports weighted statistics
- Hence, testing for statistical dominance should be based on **weighted sums**.
- This will greatly increase the amount of data points we can store.
- Addresses problem of “many missing values” in some countries.
- As far as we know: It is a standard that statistical offices test for dominance based on the **relevant population.**

Data quality and discussion

- First question of the discussion:
  Do you think this is feasible (make the dominance routine based on the relevant population statistics if we report population figures)?

- What about running the dominance routine only for the raw data input?

- What about minimum number of observations. Would this be feasible to? Theoretically justified if we **do not save** number of firms in sample. What do you think?

- Other questions, ideas, suggestions (General discussion)?

Open discussion

Thanks for your attention.

Questions and comments are welcome!