



Comments on Two Papers: one by Eurostat and the other by Matilde

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The contributions of two papers

- Investment and increase in capital intensity are the key determinant of economic growth.
- The measurement of capital is difficult. There are many challenges that statistical agencies and researchers need to overcome, some of those are discussed in the papers in this session.
- Both papers represented major progress in capital measurement.
- The papers presented databases related to capital stock, one on capital related productivity indicators by Eurostat and the other on capital stock by Spanish regions by Matilde.
- The two paper also summarized what we can learn from those databases on the source of economic growth, technological changes, knowledge capital, and structural changes.

Comments on the paper “Analysis of capital related productivity indicators” by Eurostat

- As the paper mentioned, there is a need to analyze the comparability and consistency of the indicators that is ongoing at Eurostat.
- Comparability of capital stock measures depends on the comparability of data sources and estimation methods.
 - Data sources for investment and capital stock: sample survey for some industries; administrative data for other assets such as those in public sector; and imputation such as own account software and own-account R&D.
 - Estimation methods: the sensitivity of capital stock estimate to the choice of depreciation and service lives and initial capital stock. Eurostat task force on this issue.
- Consistency of capital stock measures with gross value added
 - The data for GVC and capital stock often comes from different data sources which may differ in coverage. Capital stock measure may not be fully consistent with output measure.
 - There may be too little capital and too much capital compared with output, especially at the industry level. Example, construction industry: activity-based measure for output, capital that is consistent with that output measure is a challenge.

Questions

- What do we know about the comparability of capital stock measure and capital related productivity indicators in the database: data sources, estimation (depreciation, investment deflators on ICTs...)?
- What about TFP measures?
 - We have capital and labour productivity measures. TFP growth is just a weight sum of the growth in those measures.
 - If the TFP measure is not released, the users will calculate TFP measures themselves using their own judgements with TFP measures that may be contradictory.
- The interpretation of the measures for the users? The users may mis-use or misinterpret the measures. From our experience, it is important to have those documents on the interpretation such as the interpretation of partial productivity indicators: labour and capital productivity.

Contributions of “Spanish Capital Stock at Regional Level”

- Two capital stock data bases at the regional level: one on tangible capital and the other on intangible.
- Very long time series and very up to date: 1964- 2021 for databases on tangible capital and 1995 to 2020 for intangible capital.
- Detailed industry and detailed asset classification.
- 1000 publications that make use of the database!

Comments

- The database is among the most advanced in the world.
- The main findings that Matilde represented are a good sample of the key policy relevant questions we can answer using the databases.

Questions

- Are those database used or will be used to compare the productivity levels of Spanish regions?
- Many firms may operate in different regions. Output and inputs of those firms will need to allocate between different regions. What are the issues and lessons that you have learned about the comparability of the database that is important for the compilers and users of the database?