

Thank you for the opportunity to participate in the Productivity Partnership Workshop last week. There were several interesting presentations which I would like circulate within our shop once they're shared with attendees or posted on your website.

We look forward to reviewing Michael Veall's proposed research agenda. To help Mike and the other attendees, please feel free to circulate the attached speaking points/key policy questions for research that I presented at the workshop.

From my perspective, there appears to be consensus among partners on two key fronts:

1. Statistics Canada's micro-firm level data should be more easily, more widely and more cheaply available.
2. Funded research projects should reflect a more strategic approach, one that is "policy relevant".

Pursuing a broad theme(s) for future research likely requires a common database which would go a long way towards addressing the key issues noted above, as well as help establish a micro-level database for others to access down the road and, at the same time, support research that aligns with our interests for policy development.

Also, as conveyed at the workshop, we encourage researchers to consider exploring our Ontario tax and administrative micro-level datasets for future projects. Please ask any interested parties to contact Brian Lewis' Executive Assistant, Ghufuran Tarin Ghufuran.Tarin@ontario.ca.

Research Ideas for Productivity Partnership

Tuesday, September 26, 2017

The Office of Economic Policy (OEP) participated in an afternoon session called “*Going Forward—Partner’s Key Policy-Relevant Questions for Research*” at the Workshop of the SSHRC-Funded Research Partnership on Productivity, Firms and Incomes. The workshop was hosted by the Bank of Canada in Ottawa on Tuesday, September 26, 2017.

The purpose of OEP’s involvement would be to set out the context for policy issues of interest and identify a few key policy-relevant questions that could be addressed in future research.

Speaking Points

- On behalf of the Office of Economic Policy at the Ontario Ministry of Finance and Brian Lewis our Assistant Deputy Minister and the Chief Economist, I would like to express our appreciation and support for all the hard work of the Productivity Partnership thus far and the ambitious research agenda that has been set forth by the wide range of collaborators.
- The Office of Economic Policy provides the Ontario Minister of Finance and the Government with analytical support and policy advice on a wide range of economic, fiscal and emerging issues and trends that affect economic growth and job creation.
- OEP recently underwent a strategic review and one key priority that emerged from this process was a focus on collaboration and integration of external economic research into the policy making process. We view the Productivity Partnership as an important component in achieving this goal.

Key Policy Question: Micro/Firm-Level Database for Productivity Research

- Productivity data at the macro level has been sufficiently analyzed at the international, country and provincial levels.
- It is commendable that such efforts are being made by the Network and Statistics Canada to compile vast amount of micro-level productivity data that would be immensely useful to the broader community of researchers on productivity.
- Notwithstanding the partnership research outcomes themselves, a micro-level database would be a **key legacy piece** for future analysis and policy research by the broader community.
- At MOF, we have stewardship of an immense administrative dataset for the province. Although this is just covers Ontario, we are willing to explore granting researchers access to the dataset.

Key Policy Question: What can or should Government Policy do to Promote Productivity at the Micro-Firm Level?

- Macro policies have largely been implemented quite successfully in Canada over the past years.
- However, there is considerable room to investigate determinants of productivity at the firm level which would help in policy analysis and design.
- It is important that research is policy-relevant and equally vital to connect with policy makers to best communicate and understand insights from the research.

Key Policy Question: Trade and Firm Productivity [*Overlap Miguel Cardoso, Stephanie Houle*]

- Ontario's *Going Global* trade strategy aims to expand and diversify provincial exports. The Government is constantly trying to refine its policy approach to achieving its trade objectives through a better understanding of the link between productivity and exports.
- Do high productivity firms tend to export more, and to more diverse destinations? Are other drivers of export success evident in the data?
- Do exporting firms have higher productivity growth (e.g. through learning-by-doing, greater capital investments)?
- Analyze link between exchange rate movements, firm survival rates and sales.

Key Policy Question: Competition Policy and Firm Productivity

- The Productivity Partnership and others have found underperformance in innovation is a main drag on Canadian productivity growth.
- One possible explanation might be a lack of competition in the Canadian economy.
- Do regulated firms/markets have lower productivity?
- Is deregulation associated with higher productivity growth?

Key Policy Question: Public Sector Investment and Long-Term Productivity Growth

- Research by Statistics Canada, the Conference Board of Canada, C4SE and others have found public capital promotes long-term economic growth and productivity by reducing costs for private businesses, hence providing a compelling case for public funding of this capital.
- We would be interested in updating and extending this analysis, particularly at the sub-national level and for specific key industries such as public transit, where the Ontario Government is making significant investments.

Key Policy Question: Financial Constraints and Productivity [Overlap Gorkem Ozdemir, Yasin Salimibeni]

- Research from the European Central Bank¹ and others has found the impact of financial constraints on labour productivity is significant and negative across a wide range of countries. What does the Canadian firm level data tell us?
- What is the relationship between a firm's financial structure, access to external finance and productivity?
- Does the choice of financing through debt, shares or retained earnings matter?
- Do firms' cash positions affect their investments and productivity?
- Are publicly-listed firms more productive than privately-held firms?
- Do banking regulations and securities regulations enhance or impede the size and growth of firms in Canada?

Key Policy Question: Causes of Persistent Underinvestment in ICT by Canadian Firms

- Investigate this question at the micro level and assess whether low ICT investment by Canadian firms has impeded their growth and performance?
- Is the rate of ICT replacement an important contributor to the underinvestment in Canada?

**Ontario Ministry of Finance
Office of Economic Policy
September 27, 2017**

¹ Annalisa Ferrando and Alessandro Ruggieri (July 2015), "Financial constraints and productivity: evidence from euro area companies." European Central Bank Working Paper Series, No 1823.

Appendix:

Productivity Partnership Funded Projects Aligned to Ministry of Finance Research Interests

Accounting for Foreign-born Employees in a Firm's Decision to Export, Miguel Cardoso

It is generally accepted that exporting firms have higher productivity than firms that do not export. There are suggestions that this is a two-way relationship: more efficient firms are positioned to export but that there is also feedback from the exporting process that makes firms more efficient. In this context, this project will document the relationship between firms that export and the composition of their employees, and explore how Canada's immigration policy may have affected firms' ability to export productivity.

Miguel Cardoso is a Partnership research associate of the Partnership and Ph.D. candidate in Economics at partner Western University.

Canadian International Investment Agreements with Emerging Economies and Firm Structure Stephanie Houle, Michael Veall

This project aims to study how the signing of International Investment Agreements (IIAs) changes the structure of Canadian firms that trade and invest in IIA partner countries. The goal is to estimate how the investment protection portion of these agreements impacts Canadian firms' decision to vertically integrate with its intermediate input suppliers in those countries or to horizontally integrate by expanding to new markets. The key issue is determining how much those agreements affect economic growth in Canada.

Stephanie Houle is a Partnership research associate of the Partnership and a Ph.D. candidate in Economics at partner McMaster University.

Dr. Mike Veall is the Partnership Project Director and Professor at partner, McMaster University.

Employment Growth and Financial Frictions at Firm Level: Empirical Evidence From Canada, Gorkem Ozdemir, Hafedh Bouakez

This study, using Canadian firm-level CDER data, will test the effects of borrowing constraints following a financial shock on the entry decisions of potential entrepreneurs, as well as the early lifetime dynamics of new firms with a focus on their hiring decisions.

Gorkem Ozdemir is a Partnership research associate and Ph.D. candidate.

Hafedh Bouakez is an Associate Professor of Applied Economics. Both are at partner HEC Montréal.

Relationship-Lending and SMEs in Canada, Yasin Salimibeni, Nicolas Vincent

From a welfare perspective, it is crucial that creditors price debt efficiently in order to ensure that the most productive firms can access capital and other inputs to expand. Yet, information asymmetry makes it challenging and costly to assess whether the borrowing firm will be able and willing to pay back its debt. Accordingly, financing of Small and Medium Enterprises (SMEs) is assumed to be a more challenging and riskier process compared to that of large firms.

This research investigates the causes and effects of imperfect and asymmetric information in credit markets, a type of friction that necessarily pervades typical borrower-lender relationships. We use data from the Survey of Financing of Small and Medium Enterprises to evaluate the informational factors that shape the availability and cost of external funds to firms. We take into account the range of monitoring tools available to creditors including both hard (accounting-based) and soft (relationship-based) information. Our objective is to evaluate if a bank-firm relationship improves the debt pricing of SMEs in the sense that banks acquire more reliable information about the firms' risk and price debt accordingly. We see this as a first step in building a macro-financial model that gives a prominent and evidence-based role for information incompleteness, with the goal of improving our understanding of financial crises and macroprudential management.

Yasin Salimibeni is a Partnership research associate and Ph.D. candidate. Nicolas Vincent is an Associate Professor of Applied Economics. Both are at partner HEC Montréal.