

Frontiers and Opportunities in Productivity Research

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ABSTRACT

This article highlights intangible capital, management practices, and human capital as areas for future productivity research. It also stresses the importance of developing reliable productivity estimates for emerging and developing countries, and of enhancing collaboration between national statistical offices and academic researchers.

FRONTIERS IN PRODUCTIVITY RESEARCH include, but are not limited, to research on intangibles, management practices and human capital. The pioneering work of Corrado, Hulten, and Sichel (2009) kicked off investigation into the role of intangibles in economic growth and productivity. How and why do some firms' management practices lead to higher productivity and what can be done to disseminate such practices across countries and borders? Nick Bloom and others (Bloom *et al.*, 2012) are important contributors to this line of research. An early contributor to the notion that not only physical capital matters for productivity was Eric Brynjolfsson (Brynjolfsson and Hitt, 2000).

What are the implications for future economic growth and productivity of younger workers being much more highly educated than older workers in many countries (although not in the United States)? Detailed human capital estimates for a growing number of countries, including China and India, are facilitating investigation of such questions (Gundimeda *et al.*,

2006; Li *et al.*, 2013; and Liu, 2011). Expectations are that the specific role of human capital in current and future productivity will more often enter into academic discussions in the near future.

It is important to develop productivity estimates for all countries, but particularly for emerging and developing countries. Most understand the importance of China, whose GDP has apparently recently surpassed that of the United States. Data issues make measurement of productivity in China particularly challenging. In my opinion, analysis of economic growth and productivity in Latin America will become an increasingly fertile area for research. I have noted that there is a growing presence of Latin American economists, as well as national statistical office staff, at international meetings I have attended. Challenges facing such research may still be very significant, but I expect they will lessen.

As this conference illustrates, our understanding of the forces that shape productivity has been enhanced by interactions, and even collab-

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orations, between national statistical agency staff and academic researchers. Events organized by the International Association for Research in Income and Wealth (IARIW), EU KLEMS and World KLEMS, the US-based NBER Conference on Research in Income and Wealth (CRIW) and the new Society for Economic Measurement are all important vehicles for dissemination and presentation of such research. Hopefully these linkages will continue and even strengthen despite statistical agency budget stresses.

The good news is that there are more than enough opportunities to keep anyone interested in the productivity field busy. I hope that as we move forward younger researchers will continue to be become engaged in this line of research as the grey beards such as those on this panel become less active.

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