

# PROJECT NOTIFICATION

PN Issue Date	6 June 2019
Project Code	18-RP-36-GE-RES-B
Title	Research on Sustainable Productivity Measurement
Timing and Duration	July 2019–June 2020 (one year)
Venue	APO Secretariat
Arrangement of Experts	Team of individual and institutional experts in a research collaboration platform

#### 1. Objectives

- To develop a new concept of productivity measurement incorporating gains stemming from digital technology applications;
- To study the possibility of integrating forward-looking perspectives into a productivity measurement index indicating the ability of an economy to sustain its productivity growth in the long run; and
- c. To work with renowned research institutions to provide solutions to the current issues related to the global productivity downturn.

#### 2. Background

An unprecedented rate of technological progress, mostly attributed to the IT revolution, has brought new challenges in the form of the measurement of economic production together with its efficiency. The digital era has already resulted in significant increases in the variety and quality of products and services available, along with decreases in their prices. Digital products and services and the digitization of currently nondigital products and services are likely to bring about productivity and efficiency gains.

Existing economic and productivity measurement systems, however, do not adequately demonstrate the gains resulting from digital services. A significant portion, estimated at around 27%, of the benefits coming from free digital services/products such as search engines, real-time traffic apps, instant messaging, etc. is not accounted for in productivity measurement. This is a typical "productivity paradox," a term famously coined by Robert Solow in 1987. It implies that existing productivity measurement approaches may not be evaluating it correctly. While representing clear value to consumers and occupying an increasing share of consumption, the exclusion of digital products and services from the standard GDP accounting may obscure information on real economic activity and performance since GDP growth is reported to be slow while consumer welfare improves.

It is also important to view productivity improvement as a forward-looking concept in which what counts is not only how productive we are at a certain point in time but also our prospects for continuous productivity gains in the future. It would be beneficial to broaden the scope of traditional productivity measurement so that it can show the sustainability of productivity and efficiency gains. It is necessary to maintain productivity improvement over time to sustain economic growth. Furthermore, in a fast-changing global environment, innovation or quality improvement that is not forward looking toward the future may only yield limited, short-term benefits. The disruptive nature of technological progress requires the integration of an economy's external context and dynamics into its internal innovative processes to meet needs and expectations in the long term.

The APO, in its role as a catalyst for productivity enhancement in its member countries and beyond, has launched an initiative to contribute to the productivity measurement puzzle by offering a new approach called the Sustainable Productivity Index (SPI). The SPI integrates the overall economic value added of an economy including that of digital products and services together with quantification of its ability to sustain productivity gains in the long run (forward-looking productivity enhancement). The development of the index has two objectives: 1) measurement of overall economic productivity including welfare gains from the IT revolution; and 2) evaluating the capacity to sustain productivity enhancement. For cross-country comparisons, multidimensional productivity performance can be simplified through the construction of a composite index. This present project is clustered in a series of research projects to support the development of the new SPI.

# 3. Scope and Methodology

### Scope

- Measuring GDP and productivity in a digitized economy;
- b. Productivity growth indicators in the long run;
- c. Formulation of the SPI; and
- d. Statistical database and publication on the SPI.

## Methodology

The APO will establish a collaborative research platform comprising a team of APO-assigned experts and another team of institutional experts to undertake the research work. Qualified research partners will be appointed to conduct the project through a collaboration contract.

Using this methodology, there is no need to select a team of national experts from member countries.

## **Experts' tasks**

- a. Formulating and, in collaboration with the APO experts, leading the development of the research agenda including supporting the establishment of the research platform;
- b. Working with other experts within the collaborative platform to achieve the intended objectives;
- c. Managing the research team and agenda in line with the overall research agenda;
- d. Attending the research coordination meetings and contributing based on the agreed-upon arrangements;
- e. Maintaining regular communication with the APO regarding project implementation and updating the APO on its progress;
- f. Preparing the final report for publication;
- g. Contributing to the dissemination phase of the research project; and
- h. Assisting in the development of statistical publications/database on the SPI.

## 4. Qualifications of Experts

The members of the research collaboration platform must have demonstrated the necessary experience, educational background, qualifications, and professional contributions to the topic of the research project. The experts should be an experienced specialist in productivity and economic activity measurement and data analysis, particularly on the relationship between the digital economy and productivity, preferably with experience in developing national and/or international economic indexes and/or statistical work on productivity.

## 5. Financial Arrangements

The APO will bear full honoraria for the experts to be paid upon completion of the final research report or upon the delivery of agreed project milestones. Payments for travel and any other costs will be tied to specific research activities and made following APO regulations.

Dr. Santhi Kanoktanaporn Secretary-General