



**House of Representatives Standing Committee on Economics:
Inquiry into Raising the Level of Productivity Growth in the
Australian Economy**

**Supplementary Submission from the Australian Bureau of
Statistics**

Please find enclosed a supplementary submission by the Australian Bureau of Statistics (ABS) regarding the House of Representatives Standing Committee on Economics: Inquiry into Raising the Level of Productivity Growth in the Australian Economy. This supplementary submission provides updated information in relation to ABS productivity statistics.

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Recent Developments in the ABS Multifactor Productivity Statistics

Background

The ABS provided a submission to the inquiry in August 2009 ('the ABS submission') and appeared at the public hearing on 23 October 2009. Since the original ABS submission was provided, there have been a number of important changes to ABS productivity statistics.

These changes reflect the implementation of a new Australian and New Zealand Standard Industrial Classification 2006 (ANZSIC06) and other changes, which have resulted in revisions to the entire national accounts time-series.

In addition, the ABS has received queries in relation to the coverage of the multifactor productivity (MFP) statistics for the Australian economy.

Recent changes to ABS MFP estimates

As detailed in the ABS submission, a key limitation associated with MFP measures is that these statistics relate to selected industries rather than the whole economy. Ideally, MFP measures should cover all economic activities, but this is only possible if all of the necessary data are available.

For this reason, official MFP estimates internationally are confined to particular industries, with varying degrees of coverage depending on data suitability and availability. Statistics Canada terms their coverage as the *business sector*, and Statistics New Zealand labels their coverage as the *measured sector*.

In Australia, the ABS labels the relevant group of industries as the *market sector*. This grouping is used to present economic statistics including MFP estimates in the *Australian System of National Accounts* (ASNA) (ABS cat. no. 5204.0). Until recently the *market sector* consisted of 12 industries (divisions A to K and P of Australian and New Zealand Standard Industrial Classification 1993 (ANZSIC93)). The ABS has recently expanded the scope of the *market sector* in ASNA to include new industries, reflecting the growing influence of services industries in the Australian economy. The key change in the revised definition of the *market sector* is the addition of four new services industries (Divisions L, M, N and S of ANZSIC06):

- 1) *Rental, hiring and real estate services;*
- 2) *Professional, scientific and technical services;*
- 3) *Administrative and support services;* and
- 4) *Other services.*

Expanding the definition of the *market sector* has a significant impact on the landscape of the ABS MFP statistics. The old market sector MFP time series covering 12 industries covered a span of more than four decades, with eight productivity cycles. A suitable real output time series for the new services industries, an essential component for MFP estimates, commence

from the mid-1990s. While the 16 industries covered in the new *market sector* definition are more representative of economic activity, the shorter time series, however, allow the calculation of only two productivity cycles.

To accommodate user requirements for continuity and scope, the ABS makes two aggregate MFP estimates available:

- 1) A time series for the expanded *market sector* definition (ANZSIC06 Divisions A to N and Divisions R and S) dating back to 1994-95; and
- 2) A longer time series produced for the group of 12 selected ANZSIC06 industries (divisions A to K and R).

The proportion of the Australian economy covered by ABS MFP estimates

As noted above, it is desirable for productivity measures to cover all economic activities. Put differently, *measured* market sector productivity should accurately reflect all of the *actual* market activities in the economy. The ABS has recognised the importance of this issue in expanding the scope of the *market sector* to include new industries, reflecting the growing influence of services industries in the Australian economy.

The revised definition of the *market sector* took effect from the December 2009 issue of ASNA. However, the ABS is currently completing the implementation of those changes in its MFP estimates. Consequently, the coverage of MFP measurement in the December 2009 issue of ASNA temporarily deviated from the revised *market sector* definition.

In terms of gross value added, based on ASNA data for 2008-09, the proportion of the Australian economy covered by the MFP estimates for the 12 selected industries is about 62% for the year 2008-09.

Experimental MFP estimates for the expanded market sector definition (Divisions A to N, R and S) were subsequently published in the productivity datacube *Experimental estimates of industry multifactor productivity, 2008-09* (ABS cat. no. 5260.0.55.002), released on 5 February 2010. These estimates will be incorporated into the ASNA in 2010. It is anticipated this will raise the coverage of ABS MFP estimates to around 75% or more of the Australian economy, which would cover the vast majority of the actual market part of the economy.

Historical comparisons of MFP statistics and coverage

In order to examine longer-term trends in productivity growth and to allow historical comparisons, the ABS maintains the historical data underpinning the MFP estimates. For instance, based on the data for the 12 selected industries in the December 2009 issue of ASNA, the proportion of the Australian economy covered by ABS MFP estimates is estimated to be around 62% for 1988-89.

For the 16 industries covered under the expanded *market sector* label, estimates for MFP only date back to 1994-95 when suitable real output time series for the new services industries commences. The proportion of the economy covered by MFP estimates in 1994-95 is around 73%, which accounts for the bulk of market activities in the economy.

Productivity growth cycles

Analysis of productivity growth cycles will be reinstated in the next release of ASNA in 2010. In the interim, users interested in the long time span productivity measures commencing 1964–65 can access the datacube noted above.

Additional background on ABS MFP estimates

Experimental MFP estimates were first released by the ABS in 1989 in *Information Paper, Development of Multifactor Productivity Estimates for Australia 1974-75 to 1987-88* (ABS cat. no. 5229.0). In 1990, the detailed technical issues in relation to those preliminary MFP estimates were covered in *Occasional Paper, Estimates of Multifactor Productivity Australia* (ABS cat. no. 5233.0).

Estimates of MFP were first included in *Australian National Accounts Multifactor Productivity* (ABS cat. no. 5234.0) released in June 1994. From 1999, the aggregate MFP statistics were incorporated into the *Australian System of National Accounts* (ABS cat. no. 5204.0).

These aggregates are complimented by experimental industry level estimates available in an electronic data cube (ABS cat. no. 5260.0.55.002).

Productivity statistics continue to evolve internationally as national statistical agencies gain more experience with estimating MFP statistics. As such, further investment in research and development is an ongoing process for the ABS and its MFP estimates.

Australian Bureau of Statistics
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