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Revisions in Australia's Balance of Payments (BOP) Statistics

Prepared by the Australian Bureau of Statistics

REVISIONS IN AUSTRALIA'S BALANCE OF PAYMENTS (BOP) STATISTICS

INTRODUCTION

1. This paper details the Australian Bureau of Statistics (ABS) policy and practices for incorporating revisions to its BOP statistics, as well as presenting some results from a revision study. These are in line with the quality indicators identified for the *Revision Policy and Practice* element [a] of the *Serviceability* dimension of the IMF *Data Quality Assessment Framework* (DQAF) (IMF 2000, 2001a and b). In particular, a Dataset-Specific Framework has been developed for the balance of payments and the relevant *revision policy and practice* quality indicators are as follows:

- Revisions follow a regular, well-established and transparent schedule.
- Preliminary data are clearly identified.
- Studies and analyses of revisions are made public.

2. DQAF recognises *data quality* as a multidimensional concept and in terms of fitness for use, or meeting users' needs. The ABS also aims to support the appropriate use and interpretation of BOP statistics by users in its assessment of the quality of its BOP statistics for the purpose to which they will be put. Another objective of the assessment is to help identify the areas most requiring improvement. Revisions are central to meeting the reliability aspect of data quality.

ABS REVISION POLICY AND PRACTICE FOR BOP STATISTICS

3. The general revision policy adopted for the Australian balance of payments is to take every practical opportunity to incorporate more accurate information into the estimates as soon as possible. However, to minimise disruption to historical statistical series, revisions to periods prior to the current financial year for the investment income and capital account series, and prior to the previous financial year for all other series, are generally only made twice a year. These revisions are made in the July issue of the monthly publication of trade in goods and services and, consistently, in the June quarterly publication of balance of payments and international investment position (both of which come out at about the same time). Exceptions are made to this practice where significant revisions are identified and considered important to incorporate into the next available issue. Readers should note that in Australia the financial year ends in June.

4. As a practical matter, and generally reflecting the quarterly periodicity of many of the data sources used in balance of payments compilation, revisions to series for the current (and in many cases the previous) financial year are incorporated at quarterly intervals - in each quarterly issue and in the July, October, January and April issues of the monthly publication. Other monthly issues generally carry revisions for the latest one or two months only. Again, exceptions are made where significant revisions are identified.

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[a] The five DQAF quality dimensions can be mapped to the four best-dissemination-practice dimensions in the IMF Special Data Dissemination Standards (SDDS), and the DQAF *4.4 Revision Policy and Practice* element corresponds to the SDDS *Integrity* dimension's *Provision of information about revisions* element.

5. More specifically, a paramount consideration in framing BOP's revision policy is the requirement of its data for national accounting purposes. The revision policy was re-developed earlier this year in response to a new National Accounts (NA) benchmarking strategy, after consultation with the key NA users. The BOP revision policy follows the NA policy, so that the BOP and NA components are consistent.

6. In practice, the revised policy involves the following frequency and timing for BOP revisions (reference to year t relates to the current financial year):

Revisions to quarters	
September reference quarter	1. Previous 4 quarters for: Income Current Transfers Capital Account Financial Account International Investment levels 2. Previous 16 quarters for: Goods Services If BOP consider the need to make revisions prior to year t-3 then they should consult NA on the wider ramifications, including when the larger revisions are incorporated.
December reference quarter	Previous 5 quarters
March reference quarter	Previous 6 quarters
June reference quarter	1. Previous 15 quarters for: Income Current Transfers (nb. If there are offsetting revisions to services, then only 7 quarters of revisions will be allowed in the June qtr release. The rest of the revisions will need to be implemented in the Sept qtr release.) Capital Account Financial Account International Investment levels If BOP (including International Investment) wishes to make revisions prior to year t-3 to any of these items, then they should consult NA on the implications. A decision would then be made on when to make an historical revision. 2. Previous 7 quarters for: Goods Services nb. the entire history for chain volume estimates would be revised arising from the introduction of a new base year and re-referencing.

7. Each issue of the quarterly BOP/IIP publication includes a table summarising the revisions, that have been made since the previous issue, to the estimates for the last three financial years and previous six quarters. The publication also includes notes on page 2 about causes of revisions being made.

USER REQUIREMENT FOR BOP REVISIONS

8. From an analytical perspective, users want to know how much reliance they can place on BOP estimates. Ideally users would like there to be no difference between initial and final estimates but realistically they want the differences to be minimal, or a very low frequency in revisions. It would help users to have some measures of expected revisions and to have answers to questions such as: If data are likely to be revised, how much is that revision likely to be and in which direction? Are decisions made on the basis of initial estimates likely to prove ill-founded in the light of later revisions? To help answer these questions, an analysis of the revisability of the various BOP series, measured by the extent to which the estimate published initially is revised as it is republished, is undertaken by the ABS in a variety of ways. The two measures on which most focus is placed are bias and dispersion. For illustration, an example of such an analysis is provided below.

EXAMPLE OF A BOP REVISION STUDY

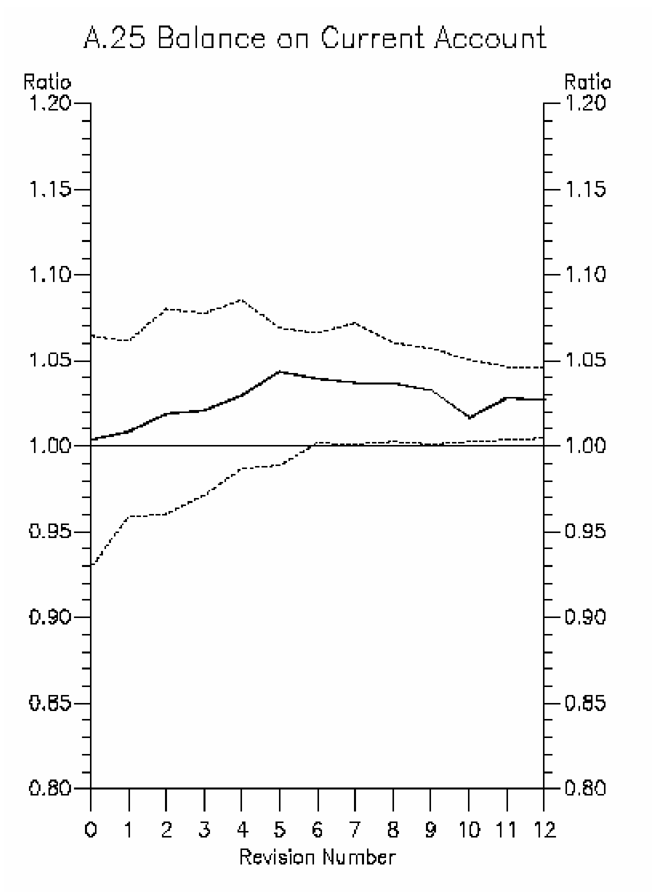
9. A study of bias in the balance on current account (BOCA) is presented here. For more details, see *Information Paper: Quality of Australian Balance of Payments Statistics, 1996* (cat. no. 5342.0) which analysed the data from 1986 to 1994 (BPM4 basis). Graph A25 below shows the pattern of revisions through which the quarterly BOCA pass from their initial estimates (denoted as zero on the horizontal axis) through various revision points (sequentially numbered on the horizontal axis) to "final" estimates at December 1994 (denoted as the unitary line at ratio 1.00 on the vertical axis). Initial quarterly estimates refer to the first published quarterly estimates appearing for that reference quarter in ABS quarterly publication Balance of Payments and International Investment Position, Australia (cat. no. 5302.0).

10. The initial estimate and revisions to it over the next 3 years (12 quarterly revisions) are plotted against the estimate as at December 1994. Observations plotted for each aggregate are ratios of preliminary estimates (including the initial estimate) to the latest estimate after various numbers of revisions. For example, a preliminary estimate of 180 for which the final estimate is 200 will have a ratio value of 0.90. Median ratio values, at each revision cycle, are shown as a heavy black curve.

11. Also shown in the graph, as dashed lines, are the upper boundaries of the first and third quartiles of ratio observations (i.e. the lines corresponding to 25% and 75% of ratio observations when they are ranked in order). The area between these two lines therefore portrays the behaviour of the middle 50% of ratios or, alternatively, the 25% of ratios immediately above the median and the 25% immediately below.

12. The quarterly series for the BOCA displays a pattern with the median initial estimate being close to the median final estimate but moves away with the first quarterly revision and continues to worsen the overstatement of the deficit through to the fifth revision point before improving. The immediate question arises: why did we have a tendency to make

revisions which overstated the deficit in the BOCA during the first 5 quarters, and then in subsequent quarters progressively unwind that picture. The answer can be largely found in the revisions studies for the component series, where using a broad generalisation, revisions to debits are identified earlier than revisions to the credits - this has to do with data sources and compilation methodologies employed. As a consequence of the study, the ABS has been slightly less ready to introduce significant revisions at an early stage to the debit series, tending to stockpile revisions until some of the updated data for the credit series are available. An assessment of our performance awaits another study: we now have five years of data which has been initially published on a BPM5 basis, to enable a similar study to be repeated.



In the above graph, dashed lines are the upper boundaries of the first and third quartiles of ratio observations.

LIST OF REFERENCES

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