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Revisions in Chile's BOP Statistics

Prepared by the Central Bank of Chile

REVISIONS IN CHILE'S BOP STATISTICS

I- Introduction

This paper describes the Central Bank of Chile's revision practice for BOP statistics, discusses the main reasons for revisions, shows their magnitude for the current and financial accounts during the last seven years, and compares current practice with the standards of the IMF's Data Quality Assessment Framework.

II - BOP revision practice

Since 1990, the publication of a set of macroeconomic statistics within certain time frames was established explicitly by the Central Bank. A summary quarterly BOP statement was to be released no later than three months after the close of each quarter, and a more detailed BOP publication, with final figures, within two years after the end of each calendar year. In practice, the quarterly releases have complied fully with the calendar, and are currently being released close to two months after each reference quarter. On the other hand, the detailed publications, which had been postponed for several years, were updated, and are including latest, not necessarily final, annual data. The latest publication was released in August, 2003, and presents detailed, provisional 2002 data.

In addition to the above, in 1996 Chile subscribed the SDDS, and has met its demands for disseminating BOP quarterly statistics within the three month period following the close of each quarter, and for giving advance notice of the dates when the data are to be made available to the public.

The process of BOP compilation has been very dynamic in Chile during recent years. There have been important changes in data sources and methods, also affecting revision practices. However, a certain pattern for revisions has developed over the years. At present, it is one whereby data of annual statements are not changed during at least twelve months after the first release of the fourth quarter, while data for the first three quarters are updated at the time of each quarterly release.¹

The purpose of this practice has been to give stability to "historical" data, i.e., pertaining to periods prior to the current calendar year, but at the same time, to incorporate updated data for the most recent quarters. Accordingly, associated with the first release of a BOP summary statement for the most recent quarter, the previous quarters of the same calendar year are revised, as necessary. When BOP figures for the fourth quarter of a certain year are

¹ The information about revisions in Chile's BOP Base page in the DSBB, which is the most explicit statement of BOP revision policy states: "The data are provisional when first released. The data are revised during fifteen months after first released when more accurate basic information is available. The final annual data are published in the Central Bank publication *Chilean Balance of Payments*." The text then explains that important changes in methodology are announced and explained, and informs of the release of a new series on February 25, 1998. Finally, it ends with the following "Further revisions to the series have been published since then." This information will be updated to better reflect current practice.

first released, all data for the previous quarters of that year are revised. Further revisions to data of that calendar year are postponed at least twelve months, when the following year's fourth quarter and annual data are disseminated, and/or until a detailed BOP publication is released.

The schedule for quarterly releases and revisions, as it stands at present, is set out below.

Reference period	Release	Nature of data	lag (months)
1st quarter year t:	May year t	First release	2
	August, year t	Revision	5
	November, year t	Revision	8
	February, year t+1	Revision	11
	February, year t+2	Revision	23
	February year t+3	Revision	35
2nd quarter year t:	August , year t	First release	2
	November , year t	Revision	5
	February year t+1	Revision	8
	February, year t+2	Revision	20
	February, year t+3	Revision	32
3d quarter year t:	November, year t	First release	2
	February, year t+1	Revision	5
	February, year t+2	Revision	17
	February, year t+3	Revision	29
4 th quarter year t:	February, year t+1	First release	2
	February, year t+2	Revision	14
	February, year t+3	Revision	26
Annual, year t:	February, year t+1	First release	2
	February, year t+2	Revision	14
	February, year t+3	Revision	26

Normally, revised numbers are presented without advance notice to the public, and are not accompanied at the time of dissemination by special tables or texts explaining the changes to the data. Nonetheless, the detailed BOP publication includes a section describing the main methodological aspects and sources of data, and highlights important features of revisions. This practice seems fairly well accepted by users.

Exceptions to the above-mentioned practices have been made for significant revisions, arising mainly from methodological changes. Such was the case of the introduction of reinvested earnings to the BOP series, in February, 1998, when a revised series covering the period 1989 to 1997 was released. At the time, wide coverage was given to the new series, including a press release, seminar, press conference, and an article in the publication in which BOP summary statements are first published. Again, in May 2002, when a revised BOP series for 1996-2001, compiled for the first time according to BPM5, was released, a special report was included in the same publication. Both the regular publication including the summary BOP statement and the BOP publication were posted on the Central Bank's website.

As can be seen in Tables N°1.1 of the Appendix, actual practice during the past seven years has differed somewhat from the above described cycle, resulting in a varying number of revisions and lags, both over the years and within the quarters of each year. The different number of revisions depending on what quarter of a year is considered, is mainly a consequence of the revision practice that has been established over time. In general, the number of revisions and lags may be considered excessive for some periods, but it must be borne in mind that it has been affected by methodological changes, because when these have been made, "historical" series have been revised as far back as possible.

For that reason, Tables N°s 1.2, 2.3 and 2.4 break down the information of Table N°2.1 into periods when similar methodologies were applied. Table N°2.2 covers the period before the methodological changes introduced in March, 1998 (Reinvested earnings). Table N°2.3 covers the period from March, 1998, up to the latest release dates prior to the changes of May, 2002 (BPM5). The lags shown are the number of months elapsed since the reference quarter, for the first release, or since the last methodological change, when applicable. Compared to Table N° 2.1, the results show a reduction in number of revisions and time lags, and a reduction of these numbers for recent years, part of which is explained because the regular revision cycle has not been completed for the last years. In reviewing the tables, it must be noted that although the most important factors in the March 1998 and May 2002 revisions were methodological, other changes were also made to the data at the time. Isolating the different types of changes that have affected the data for any given period is not an easy task.

The tables show the numbers and lags of quarterly BOP statements that have been made available to the public. They do not reflect changes to BOP data for selected components which are calculated and released with higher frequency (weekly or monthly), prior to the first quarterly BOP statements. Among these data are trade in goods, which are currently being released weekly, and financial account flows, which are being disseminated monthly. These figures are revised monthly, as necessary, before a complete summary quarterly BOP statement is first released. Therefore, it is possible for users to calculate, prior to BOP releases, a first estimate of goods and financial account flows for each quarter as the sum of monthly data. Once the data are incorporated in the BOP statement, there are no further revisions to high frequency data until a new quarterly BOP is released.

III - Reasons for revisions

There are many reasons for revisions to Chile's BOP data. Underlying them is the desire to provide the most accurate information as soon as it becomes available, as well as to comply with accepted international definitions. However, stability is seen as part of quality, so revisions, specially if they are significant, could be taken as an indication of poor statistical practices or sources, even though they may actually result in more accurate data.

A dilemma in revisions is whether to provide them as soon as they are available, creating frequent changes in the series, or to accumulate them only for a few set dates. In favor of the latter view it can be said that it is likely that, to some extent, revisions will offset one another over time and across different components of accounts.

Chile is currently following a practical approach that tries to combine both aspects. A very important factor underlying current practice as well as any future changes, is the need to synchronize BOP and National Accounts data. BOP and National Accounts came under the same management in late 2000, and an important point in the agenda has been to coordinate the data sources and methods common to both systems, including the timing of revisions. Therefore, the BOP revision policy needs to carefully consider the impact that changes to current and past data will have on the system of national accounts. Another important factor to consider is the existence of monthly and weekly dissemination of selected BOP components, which should also be consistent with revised quarterly data. This means that any changes resulting from new data and/or methodology need to be made not only to quarterly series but also, in some cases, to monthly and even weekly data.

The main reasons for revisions are set out below. It must be noted that many times, revisions result from combinations of these factors.

a- Different frequency and lags for source data. Data sources come from a wide variety of sources, and have changed over the years. Annual surveys coexist with monthly and quarterly forms, weekly information from customs, and even daily data associated with the redesigned transaction reporting system. This means that at the close of every quarter, there is likely to be new information that affects some BOP component for quarters for which BOP statements have already been released to the public, on the basis of partial data, indicators or estimations.

b- Change in number of reporters

This has occurred with some new forms, which have not been completed by all reporters, and where the total reporting population was unknown. Cross-checks with other data sources revealed the fact that some of them were not filing reports

c- Corrections of errors

These are mainly due to respondents' revisions, fairly frequent after the introduction of new reporting forms. Occasionally, there are also errors of compilation, either in processing or because of incorrect interpretation of data on forms. Corrections are fairly common in financial account transactions. In the case of exports, preliminary prices in customs export declarations are estimates in the case of goods sold on consignment, and are later replaced by actual prices at which the merchandise was sold.

d- New data sources

These have replaced previous ones, specially during recent years, when the whole data collection process has undergone important changes. The new data sources have improved the quality of data but have caused revisions and breaks in the series, specially in some categories of services and financial account flows. Examples of this type of revisions are data which used to be taken from the net flows of foreign exchange reported via the foreign exchange reporting system, and which are now reported directly, such as pension funds net purchases of instruments issued by nonresidents.

e- Replacing estimates with actual data

This is related to "a", and arises from differences in periodicity and lags in source data, so that provisional estimates based on indirect indicators are later replaced by actual data.

Examples of this type of revision are data that come from annual surveys, mainly for services and direct investment earnings, as well as BIS reported data on deposits held abroad by non-bank residents. This is also the case of benchmark surveys, whose results lead to a revision of estimates for the period between surveys.

f- Changes in estimating procedures

Whenever estimated figures are used, it is possible to improve the techniques used. For instance, the way in which totals are estimated from a sample, as in the case of surveys or forms that do not cover the whole population. This has been the case, for example, of reinvested earnings on direct investment.

g- Conciliation exercises with national accounts

In the past, reconciling data with national accounts frequently led to revisions, specially for services components, where different sources and methods of estimations were used by BOP and NA compilers. The work undertaken during the past year will result in a fall in this source of revisions.

h- Validation against companies' accounts

This has also been a part of recent revisions, mostly related to direct investment income, in Chile and abroad.

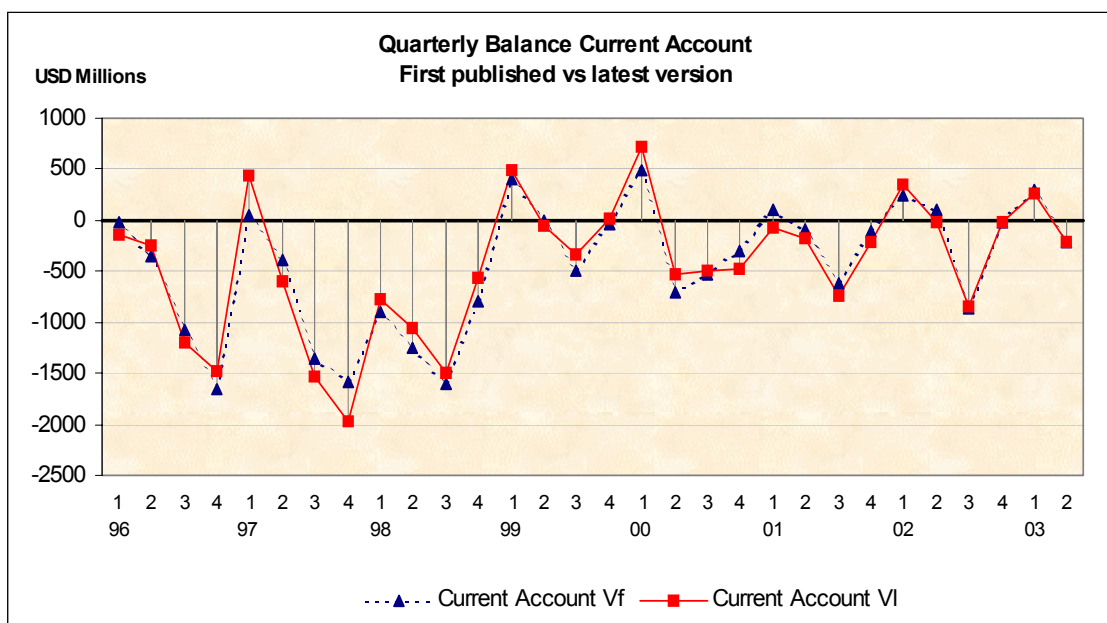
i- Methodological changes, including changes in definitions and classifications. Among the most important during the past decade have been the introduction of reinvested earnings, which affected both the current and financial account (February 1998), and the implementation of BPM5 categories (May 2002).

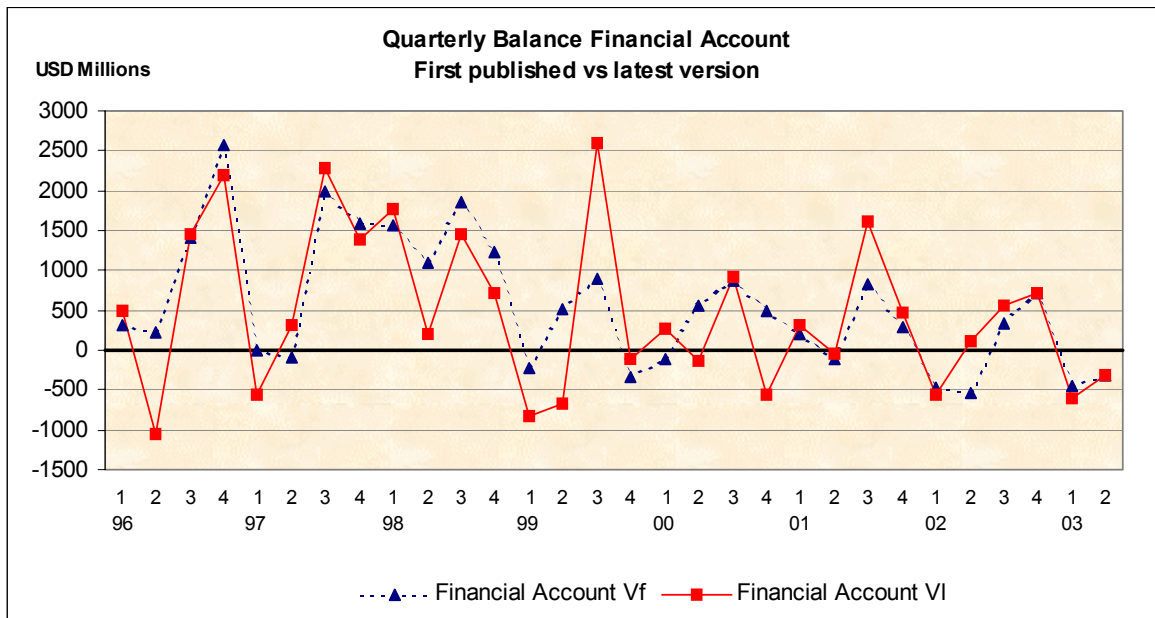
The extent to which each of the above explain revisions in Chile's BOP is hard to determine, because each revision includes a combination of them. However, the major changes in the numbers are explained mainly by methodological changes.

IV- Magnitude of Revisions

The quarterly evolution of the current and financial account balances measured according to the first and latest releases of the data are shown in the graphs presented below. Additional graphs for the main components of the current and financial accounts are also presented in the Appendix, as are tables with the actual numbers of successive versions and revisions to BOP statements that were disseminated to the public.

The most significant variations in absolute terms have affected the financial account, mostly reflecting methodological changes, but also, the difficulty in estimating more volatile flows. Within the current account, the differences in total net balances sometimes are the result of offsetting revisions in its main components, which should also be analyzed in terms of gross flows, and in relative, not absolute terms.





V- Comparison with DQAF standards

The standards consider the following elements:

- a- Studies and analyses of revisions are carried out routinely and used to inform statistical processes

Commentary: Although revision studies are not a practice, the regular work process considers validating, assessing and explaining major changes to the data. When revisions are significant, the public is informed of the main reasons for them. The texts that accompany regular quarterly releases mention the provisional nature of the latest data.

- b- Revisions follow a regular, well-established and transparent schedule

Commentary: The schedule described above has developed from practice. Exceptions to the general practice are made, specially on the occasion of major methodological changes, such as those which have occurred twice during the last decade. The public is informed of major changes in methodology or significant revisions to the numbers, through one of the BCCH's publications and, on special occasions, by other means (press release and/or conference, seminar).

c- Preliminary data are clearly identified

Commentary: In the most recent BOP publications, preliminary data were not identified as such in the tables, because the possibility of further revisions was not discarded, even for data generally considered final.

VI- Conclusions

In 2003 the Central Bank has taken significant steps to increase the amount of data it releases to the public, to shorten the lags between reference and dissemination dates, and to enhance transparency in general. As a result, in the field of BOP statistics, it began disseminating weekly data on transactions in goods and reserve assets. Added to the fact that the release of an IIP statement and monthly dissemination of BOP financial flows had begun in mid 2002, as well as the strong commitment to coordinate BOP and National Accounts, revising existing revision practices is strongly advisable.

For that purpose, conducting a revision study would be helpful, as it could shed light on when and how many revisions it is worthwhile to conduct, what categories are most affected by revisions, and whether there are biases that would be worth investigating in order to improve data quality. However, the difficulty in identifying the different types of revisions may affect the conclusions to be drawn from such a study.

Even without such a comprehensive revision study, it is possible to evaluate current practice and to define a more explicit policy, in line with recent developments. This policy could consider dissemination of tables that show changes in latest release (compared to previous data), regular provision of explanations for them, and the practice of anticipating upcoming changes in the data. If possible, it should schedule certain revisions for specific dates, as well as revision studies at regular intervals. It could also consider establishing a fixed number of revisions for each quarter, instead of a different number of revisions depending on the quarter.

APPENDIX