

## RINVCHI – Real Changes in Inventories

1. **Definition (as of June 2011)<sup>1</sup>:** Changes in Inventories measure the increase in the book value of inventories adjusted by the inventory valuation adjustments. Constant price measures up to the 1998Q3 vintage and chain volume measures thereafter.
2. **Vintage Date:** The vintage date reflects the quarter in which the publication is released.
3. **Reference Date:** The reference date refers to the date to which the observation is referring to.
4. **Variable Name Changes:** This variable has undergone several name changes; see Table 1 for details.

*Table 1: Variable Name Changes*

Period	Variable Name
1960Q4 – 1963Q2	Investment in Stocks
1963Q4 – 1970Q4	Increase in Value of Stocks
1971Q1 – 1972Q4	Value of Physical Changes in Stocks
1973Q1 – 1998Q3	Increase in Stocks
1998Q4 - present	Changes in Inventories

5. **First Quarterly Vintage:** 1971Q3 dating back to 1969Q1.
6. **Earliest Observation:** Historical series available dating back to 1959Q3, although not for all vintages.
7. **Seasonality:** Seasonally adjusted from the 1971Q4 vintage.
8. **Unit of Observations:** Millions of dollars.
9. **Base Prices of Observations:** Observations are at constant prices. The base year changes approximately every five years before the introduction of the chain volume measure in 1998Q4 and every three to five quarters thereafter.
10. **Quarterly Vintage Names:** RINVCHIyyQq, where yy is the year of the vintage, Q refers to Quarter and q the number of the vintage quarter. For

<sup>1</sup> Source: *Australian System of National Accounts* (cat. no. 5204.0), 2009-10.

example, the column heading RINVCHI75Q1 indicates that this column contains observations available in the first quarter of 1975.

11. **Publication Delay:** The quarterly vintages are obtained from the issue released in the last month of any quarter (typically in the first week of the month). The data in these vintages relate to the observation of the respective series in the previous quarter. For example, data for the first quarter is available in the issue released in the first week of June. Therefore, there is a one quarter delay in the release of data.

*Table 2: Publication Delay*

First Observation of	Reference Date in ABS Publication	ABS Publication Date	Vintage Date
Q1	March	First week in June	Q2
Q2	June	First week in September	Q3
Q3	September	First week in December	Q4
Q4	December	First week in March	Q1

12. **Revisions:**

- a. An annual seasonal re-analysis took place in either the December or March quarter until 2006Q4. From 2007Q1 onwards, a concurrent adjustment for seasonality was adopted resulting in an updating of the estimates in every quarter.
- b. Annual revisions take place in either the June or September quarter following an adjustment to the annual data to ensure consistency with the quarterly data.

13. **Chain Volume Measure:** First introduced in the 1998Q4 vintage. Prior to this, the estimates are at constant prices where the base year changes approximately every five years. The method used to compute the chain volume index is detailed in the *Australian System of National Accounts: Concepts, Sources and Methods* (cat. no. 5216.0), Chapter 10. The chain volume measures are expressed in terms of the values of a particular reference year as recommended in the *System of National Accounts, 1993* (SNA93). The reference year is the year prior to the latest complete financial year and up

until the 2006Q3 vintage was updated annually. From 2007 onwards, the reference year is updated in the fourth quarter vintage.

14. **Data Sources:** The primary data source is the ABS publication *Australian National Accounts: National Income, Expenditure and Product* (cat. no. 5206.0). Deep-history vintages are obtained from various sources including the ABS publication *Supplement to Quarterly Estimates of National Income and Expenditure* (cat. no. 5207.0), *Time Series Data* (cat. no. 1311.0 & 1335.0) and *NIF-10S Model Data* (cat. no. 1313.0 & 1343.0) available on microfiche, PC AusStats CD ROMs and data obtained directly from ABS personnel; see Table 3 for details.

Table 3: Sources of Data Series

Publication Date	Reference	Format	Source
1971Q3 – 1972Q1	<i>Quarterly Estimates of National Income and Expenditure</i> (cat. no. 5206.0)	Microfiche	The University of Melbourne, Baillieu Library
1972Q2 – 1979Q3	<i>Quarterly Estimates of National Income and Expenditure</i> (cat. no. 5206.0)	PDF	Online
	<i>Supplement to Quarterly Estimates of National Income and Expenditure</i> (cat. no. 5207.0) and ABS	Microfiche	The University of Melbourne, Baillieu Library, ABS House, Canberra
1979Q4 – 1988Q1	<i>Quarterly Estimates of National Income and Expenditure, Australia</i> (cat. no. 5206.0)	PDF	Online
	<i>Time Series Data</i> (cat. no. 1311.0) and <i>NIF-10S Model Data</i> (cat. no. 1313.0)	Microfiche	The University of Melbourne, Baillieu Library, the National Library and ABS House, Canberra

Table 3: Sources of Data Series (Continued)

Publication Date	Reference	Format	Source
1988Q2 – 1992Q4	<i>Australian National Accounts, National Income and Expenditure</i> (cat. no. 5206.0)	PDF	Online
	<i>Time Series Data</i> (cat. no. 1335.0), <i>NIF-10S Model Data</i> (cat. no. 1343.0)	Micro-fiche	The University of Melbourne, Baillieu Library, the National Library and ABS House, Canberra
1993Q1 – 2005Q3	<i>Australian National Accounts, National Income, Expenditure and Product</i> (cat. no. 5206.0)	PDF	Online
	<i>NIF-10S Model Data</i> (cat. no. 1343.0), <i>PC AusStats CD ROMs</i> and <i>Australian National Accounts, 1998-2005 workbooks</i> .	Micro-fiche & CDs	The University of Melbourne, Baillieu Library, ABS House, Canberra
2005Q4 – 2006Q2	<i>Australian National Accounts, National Income, Expenditure and Product</i> (cat. no. 5206.0)	Lotus 123	Online
2006Q3 – present	<i>Australian National Accounts, National Income, Expenditure and Product</i> (cat. no. 5206.0); Table 2; Series ID: A2304112A.	Excel workbook	Online

**Special notes:**

1. **RINVCHI71Q3 – First constant price RINVCHI measures.** Observations at 1966-67 prices and are not seasonally adjusted.
2. **RINVCHI71Q4 – First constant price, seasonally adjusted RINVCHI measures (estimated).** Data are at 1966-67 prices.
3. **RINVCHI71Q4 to RINVCHI74Q4 – Irregularity in observations.** Data reported are the sum of the following two items: Value of Physical Changes in Stocks and Statistical Discrepancy.
4. **RINVCHI78Q1 – Unexpected revision.** Revision due to new methodologies and new data sources used in revaluing the current price estimates.
5. **RINVCHI78Q1 to RINVCHI81Q4 – At 1974-75 prices.**
6. **RINVCHI82Q1 – Unexpected revision.** Revision due to the use of new methodologies in some components (principally private gross fixed capital expenditure, increase in private non-farm stocks, and exports and imports of goods and services), the use of some new sources of data, the availability of firmer data and revised annual estimates.
7. **RINVCHI82Q1 to RINVCHI88Q2 – At 1979-80 prices.**
8. **RINVCHI85Q1 – Unexpected revision.** Revision is due to the conceptual and classificatory changes made to the Public Finance data system.
9. **RINVCHI86Q1 – Unexpected revision.** Revision is due to a more adequate allowance for understatement of income as reported for income tax purposes.
10. **RINVCHI87Q1 – Unexpected revision.** Revision is due to the adoption of the *Australian Accounting Standard 17 (AAS 17)*.
11. **RINVCHI87Q3 – Unexpected revision.** Revised due to a change in the treatment of payroll tax paid by the general government.
12. **RINVCHI88Q1 – Unexpected revision.** Estimates of all aggregates have been revised in accordance with the revised annual estimates published in the *Australian National Accounts: National Income and Expenditure, 1986-87, Summary* (cat. no. 5201.0). Significant revisions have been made to a number

of aggregates as a result of the incorporation of data from periodic benchmark collections (such as the 1985-86 Retail Census and the 1986 Population Census) or from the use of new data sources. In addition, many aggregates have been revised to incorporate later information from taxation assessment statistics, the gross value of farm production series and other sources.

13. **RINVCHI88Q2 – Two versions were released.** One version at 1979-80 prices and the other version at 1984-85 prices.
14. **RINVCHI88Q2 to RINVCHI91Q4 – At 1984-85 prices.**
15. **RINVCHI89Q3 – Unexpected revision.** Time series is revised due to annual benchmark revisions, the inclusion of preliminary annual estimates for 1988-89 and new data on trade in services. Estimates for the farm sector have been revised as a result of incorporating estimates of farm costs obtained from the *ABS Agricultural Finance Surveys* conducted in 1986-87 and 1987-88.
16. **RINVCHI92Q1 – At 1984-85 prices.**
17. **RINVCHI93Q1 – Unexpected revision.** Revisions are due to an annual seasonal re-analysis and changes in the sources and methods used to compile the constant price estimates. These are outlined in the Information Paper: *Australian National Accounts: Introduction of Constant Price Estimates at Average 1989-90 Prices* (cat. no. 5243.0) (25 February 1993).
18. **RINVCHI93Q1 to RINVCHI98Q3 – In 1989-90 Prices.**
19. **RINVCHI94Q3 – Unexpected revision.** Quarterly estimates have been revised as a result of incorporating annual benchmark data.
20. **RINVCHI97Q1 – Unexpected revision.** Revision due to revised annual benchmark estimates. In addition, seasonally adjusted estimates have been revised following the annual seasonal re-analysis.
21. **RINVCHI98Q4 – First published RINVCHI measures using chain volume method.** Major changes were introduced to reflect the implementation of new international standards for the compilation and presentation of national accounts as in the *System of National Accounts, 1993 (SNA93)*. The changes include the integration of input-output tables with the quarterly and annual

estimates of national income, expenditure and product and the introduction of chain volume measures. In addition, a number of other content and formatting changes were introduced. For further details, see the Information Papers *Upgraded Australian National Accounts*, 1998 (cat. no. 5253.0) (4 November 1998), the associated *Addendum* (11 November 1998), *Implementation of Revised International Standards in the Australian National Accounts* (cat. no. 5251.0) (30 September 1997) and *Introduction of Chain Volume Measures in the Australian National Accounts* (cat. no. 5248.0) (19 March 1998).

22. **RINVCHI98Q4 to RINVCHI99Q2 – Reference year is 1996-97.**
23. **RINVCHI99Q3 to RINVCHI00Q2 – Reference year is 1997-98.**
24. **RINVCHI00Q3 to RINVCHI01Q2 – Reference year is 1998-99.**
25. **RINVCHI01Q3 to RINVCHI02Q2 – Reference year is 1999-00.**
26. **RINVCHI02Q3 to RINVCHI03Q2 – Reference year is 2000-01.**
27. **RINVCHI02Q4 – Unexpected revision.** Revision due to more up-to-date data, a revised annual benchmark and an annual seasonal re-analysis.
28. **RINVCHI03Q3 to RINVCHI04Q2 – Reference year is 2001-02.**
29. **RINVCHI04Q3 to RINVCHI05Q2 – Reference year is 2002-03.**
30. **RINVCHI05Q3 to RINVCHI06Q2 – Reference year is 2003-04.**
31. **RINVCHI05Q4 – Unexpected revision.** Revised measures to many series as a result of benchmarking quarterly series to annual benchmarks from the annual Supply and Use Tables for 1994-95 to 2003-04.
32. **RINVCHI06Q3 to RINVCHI07Q3 – Reference year is 2004-05.**
33. **RINVCHI06Q4 – Unexpected revision.** Quarterly series are benchmarked to revised annual Supply and Use Tables for 2002-03 to 2004-05. In addition, an annual seasonal re-analysis was undertaken on all series.
34. **RINVCHI07Q1 – Unexpected revision.** Introduction of a concurrent adjustment for seasonality.
35. **RINVCHI07Q4 to RINVCHI08Q3 – Reference year is 2005-06.**
36. **RINVCHI08Q4 to RINVCHI09Q3 – Reference year is 2006-07.**

37. **RINVCHI09Q4 – Unexpected revision.** Introduction of new international standards.
38. **RINVCHI09Q4 to RINVCHI10Q3 – Reference year is 2007-08.**
39. **RINVCHI10Q4 to ... – Reference year is 2008-09.**