## INVENTORIES AND SALES, SELECTED INDUSTRIES

AUSTRALIA

EMBARGO: 11:30AM (CANBERRA TIME) MON 10 SEPT 2001

## Inventories \% change

Trend Estimates



- For further information about these and related statistics, contact Karen Young on 0292684165 or the National Information and Referral Service on 1300135070.


## JUNE QTR KEY FIGURES

## TREND(b)

|  | Jun 2000 | Mar 2001 | Jun 2001 | Mar 2001 to Jun 2000 to <br> Jun 2001 <br> \% change | Jun 2001 <br> \% change |
| :--- | :--- | :--- | :--- | :--- | :---: |
|  | $\$ m$ | $\mathbf{\$ m}$ | $\mathbf{\$ m}$ | 88644 | -0.3 |

## SEASONALLYADJUSTED(b)

|  | Jun 2000 | Mar 2001 | Jun 2001 | Mar 2001 to Jun 2000 to <br> Jun 2001 <br> \% change | Jun 2001 <br> \% change |
| :--- | :--- | :--- | :--- | :--- | :---: |
|  | $\$ \boldsymbol{m}$ | $\$ \boldsymbol{m}$ | $\mathbf{\$ m}$ | 88603 | 0.1 |

(a) A break in series occurred in Wholesale Trade between the June and September 1999 quarters. See paragraphs 39 and 40 of the Explanatory Notes.
(b) Estimates for private businesses, in volume terms.

## JUNE QTR KEY POINTS

## INVENTORIES

- The trend estimate (in volume terms) of inventories held by private businesses for the June quarter 2001 is $\$ 88,644 \mathrm{~m}$, a decrease of $\$ 294 \mathrm{~m}(-0.3 \%)$ from the revised March quarter 2001 estimate of $\$ 88,938 \mathrm{~m}$. The decrease in the current quarter follows slowing growth rates in the previous two quarters. However, the June quarter 2001 estimate is $1.6 \%$ higher than the June quarter 2000 estimate.
- Wholesale trade (down $\$ 238 \mathrm{~m},-0.8 \%$ ) was the major contributor to the fall in inventories in the June quarter 2001, with decreases also recorded in the Manufacturing and Mining industries (down $\$ 94 \mathrm{~m},-0.3 \%$, and $\$ 39 \mathrm{~m},-1.1 \%$ respectively).


## SALES

- The trend estimate for Wholesale trade sales increased by $\$ 207 \mathrm{~m}(0.4 \%)$ after three quarters of decline. The trend estimate for Manufacturing sales has increased in the past two quarters, after decreasing in the previous two quarters.


## RELEASE DATE

3 December 2001

The ABS has implemented some major changes to selected ABS quarterly business indicators. These involve the integration of samples, questionnaires, data collection, data processing and data dissemination for three existing surveys (including the Survey of Inventories, Sales and Services) into a single Quarterly Economic Activity Survey, which is now the source for the statistics in this publication. These changes will improve the consistency and coherence of these statistics, particularly for compiling the quarterly Australian National Accounts. For more details, see the Information Paper: Improvements to ABS Quarterly Business Indicators (Cat. no. 5677.0).

With the introduction of the Quarterly Economic Activity Survey, inventories data are no longer collected from businesses with fewer than 20 employees. Instead estimates are now derived using quarterly sales information for small businesses and an estimated sales to inventories ratio. Refer to paragraph 7 of the explanatory notes for more information.

In the March quarter 2001, the ABS conducted the Quarterly Economic Activity Survey and the Survey of Inventories, Sales and Services in parallel, and has used this to link the estimates from the previous survey to the new survey. There are differences in the estimates which are mostly due to the different samples. For the March quarter 2001, the new level estimates for total inventories, Manufacturing sales and Wholesale trade sales are $0.9 \%, 2.2 \%$, and $1.3 \%$ greater in original current price terms than those from the previous survey and $1.0 \%, 2.6 \%$, and $1.9 \%$ greater in seasonally adjusted terms. The linking process has ensured that the movement estimates for earlier periods are largely unchanged.

As part of the changes associated with The New Tax System, the ABS has recently changed the way in which it updates its Business Register, which provides the population framework for ABS collections including the Quarterly Economic Activity Survey. Refer to paragraphs 8-9 of the explanatory notes for more information.
The quarterly chain volume data in this issue incorporate a new base year, 1999-2000, which has resulted in revisions to growth rates, small in most cases, for the last year. In addition, the reference year has been advanced to 1999-2000, which has resulted in revisions to levels, but not growth rates, for all periods. Revisions are also due to incorporating revised benchmarks from the annual supply and use tables into the derivation of the price deflators.

This issue incorporates new seasonal factors which take into account the latest available data. An interim analysis of the new series was undertaken, and a more detailed analysis will be done before the September quarter 2001 issue and this may result in further revisions to the seasonally adjusted estimates. Refer to paragraphs $33-37$ of the explanatory notes for more information.

[^0]ALL SELECTED INDUSTRIES(b) The trend estimate (in volume terms) of inventories held by private businesses has decreased in the current quarter following six quarters of increase since the trend break in September quarter 1999.


The trend estimate for Mining inventories has continued to fall from the most recent peak in June quarter 1998. Mining inventories are at the lowest level since September quarter 1989, however the rate of decline has slowed in the last three quarters.


The trend estimate for Manufacturing inventories has declined in the past two quarters. The major contributor to the decrease in June quarter 2001 was Metal products (down $\$ 188 \mathrm{~m},-4.1 \%$ ). The June quarter 2001 trend estimate for Manufacturing inventories is slightly higher than June quarter 2000 (up $\$ 337 \mathrm{~m}, 1.0 \%$ ).

(a) Reference year for chain volume measures is 1999-2000.
(b) A break in series occurred in Wholesale trade between the June and September 1999 quarters. See paragraphs 39 and 40 of the Explanatory Notes.

WHOLESALE TRADE(b)

## RETAIL TRADE

OTHER SELECTED INDUSTRIES
(Electricity and gas supply; accommodation, cafes and restaurants)

The trend estimate for Wholesale trade inventories has declined for the second successive quarter after no growth in the previous quarter. The June quarter 2001 estimate is $0.9 \%$ lower than June quarter 2000.


Growth in the trend estimate of inventories held by Retail trade has slowed in the past three quarters. The June quarter 2001 estimate is $\$ 30 \mathrm{~m}(0.1 \%)$ higher than the March quarter 2001 estimate and $\$ 1,504 \mathrm{~m}(7.4 \%)$ higher than June quarter 2000.


The trend estimate for inventories held by Other selected industries has recorded 21 successive quarters of growth. Growth rates in the last four quarters have been relatively strong ( $4.1 \%, 6.1 \%, 5.1 \%$, and $3.6 \%$ respectively). The June quarter 2001 estimate of $\$ 1,312 \mathrm{~m}$ is $\$ 221 \mathrm{~m}(20.3 \%)$ higher than June quarter 2000.

(a) Reference year for chain volume measures is 1999-2000.
(b) A break in series occurred in Wholesale trade between the June and September 1999 quarters. See paragraphs 39 and 40 of the Explanatory Notes.

## S ALES: Trend estimates-Chain volume measures(a)

MANUFACTURING SALES

WHOLESALE TRADE SALES(b)

The trend estimate for Manufacturing sales has increased in the past two quarters, but the June quarter 2001 estimate is relatively unchanged from the estimate for June quarter 2000. The major contributor to the increase in the current quarter was Petroleum, coal, chemical and associated products, continuing the increases recorded in the previous four quarters. Textiles, clothing, footwear and leather, and Non-metallic mineral products have recorded decreases in the past three quarters.


Wholesale trade sales have increased slightly in the current quarter after decreasing in the previous three quarters. The June quarter 2001 estimate of $\$ 53,715 \mathrm{~m}$ is $\$ 1,365 \mathrm{~m}$ $(-2.5 \%)$ lower than June quarter 2000.

(a) Reference year for chain volume measures is 1999-2000.
(b) A break in series occurred in Wholesale trade between the June and September 1999 quarters. See paragraphs 39 and 40 of the Explanatory Notes.

|  | Mining | Manufacturing | Wholesale trade(a) | Retail trade | Other selected industries(b) | Total selected industries(a) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| At end of | \$m | \$m | \$m | \$m | \$m | \$m |
| ORIGINAL |  |  |  |  |  |  |
| June 1999 | 3786 | 31305 | 24508 | 18857 | 1036 | 79492 |
| June 2000 | 4081 | 34093 | 28886 | 19652 | 1172 | 87884 |
| June 2001 | 3722 | 35930 | 30901 | 21404 | 1322 | 93279 |
| 1998-1999 |  |  |  |  |  |  |
| June | 3786 | 31305 | 24508 | 18857 | 1036 | 79492 |
| 1999-2000 |  |  |  |  |  |  |
| September | 3972 | 31658 | 27235 | 19679 | 1093 | 83637 |
| December | 4015 | 31510 | 30114 | 20450 | 1259 | 87348 |
| March | 4097 | 33324 | 29433 | 20588 | 1142 | 88584 |
| June | 4081 | 34093 | 28886 | 19652 | 1172 | 87884 |
| 2000-2001 |  |  |  |  |  |  |
| September | 4063 | 34719 | 29761 | 20520 | 1121 | 90185 |
| December | 3879 | 34918 | 33012 | 21915 | 1248 | 94972 |
| March | 3904 | 35830 | 31535 | 21742 | 1306 | 94316 |
| June | 3722 | 35930 | 30901 | 21404 | 1322 | 93279 |
| SEASONALLY ADJUSTED |  |  |  |  |  |  |
| June 1999 | 3798 | 31156 | 25485 | 19339 | 1067 | 80845 |
| June 2000 | 4097 | 33922 | 29542 | 20146 | 1205 | 88912 |
| June 2001 | 3739 | 35708 | 31917 | 21947 | 1359 | 94670 |
| 1998-1999 |  |  |  |  |  |  |
| June | 3798 | 31156 | 25485 | 19339 | 1067 | 80845 |
| 1999-2000 |  |  |  |  |  |  |
| September | 3939 | 31641 | 27607 | 19722 | 1125 | 84034 |
| December | 4056 | 32070 | 28640 | 20123 | 1181 | 86070 |
| March | 4075 | 32932 | 28991 | 20360 | 1153 | 87511 |
| June | 4097 | 33922 | 29542 | 20146 | 1205 | 88912 |
| 2000-2001 |  |  |  |  |  |  |
| September | 4028 | 34679 | 30442 | 20591 | 1156 | 90896 |
| December | 3920 | 35560 | 31449 | 21559 | 1170 | 93658 |
| March | 3880 | 35412 | 31205 | 21490 | 1317 | 93304 |
| June | 3739 | 35708 | 31917 | 21947 | 1359 | 94670 |
| TREND ESTIMATES |  |  |  |  |  |  |
| June 1999 | 3851 | 31161 | 25372 | 19285 | 1080 | 80749 |
| June 2000 | 4079 | 33860 | 29640 | 20367 | 1170 | 89116 |
| June 2001 | 3759 | 35715 | 31813 | 21953 | 1357 | 94597 |
| 1998-1999 |  |  |  |  |  |  |
| June | 3851 | 31161 | 25372 | 19285 | 1080 | 80749 |
| 1999-2000 |  |  |  |  |  |  |
| September | 3918 | 31558 | 27939 | 19786 | 1126 | 84327 |
| December | 4027 | 32177 | 28431 | 20086 | 1161 | 85882 |
| March | 4090 | 32972 | 28979 | 20193 | 1179 | 87413 |
| June | 4079 | 33860 | 29640 | 20367 | 1170 | 89116 |
| 2000-2001 |  |  |  |  |  |  |
| September | 4026 | 34619 | 30514 | 20732 | 1171 | 91062 |
| December | 3943 | 35090 | 31076 | 21223 | 1213 | 92545 |
| March | 3851 | 35433 | 31499 | 21645 | 1281 | 93709 |
| June | 3759 | 35715 | 31813 | 21953 | 1357 | 94597 |
|  | (a) A break in series occurred in Wholesale trade between the June and September 1999 quarters. See paragraphs 39 and 40 of the |  |  | (b) Includes Electricity and gas supply and Accommodation, cafes and restaurants. |  |  |

and September 1999 quarters. See paragraphs 39 and 40 of the Explanatory Notes.
(b) Includes Electricity and gas supply and Accommodation, cafes and restaurants.

INVENTORIES, By Industry-Chain volume measures(a)
$\bullet \bullet \bullet \bullet \bullet \bullet \bullet$ At end of
Mining Manufacturing
\$m
Manufacturing
\$m

| Wholesale <br> trade(b) | Retail trade |
| :--- | :--- |
| $\$ \mathrm{~m}$ | $\$ \mathrm{~m}$ |

Other selected
industries(c)
$\$ m$

Total selected industries(b)
\$m
$\qquad$
ORIGINAL

| June 1999 | 4083 | 32497 | 24538 | 19018 | 1005 | 81043 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| June 2000 | 3847 | 32719 | 28468 | 19439 | 1049 | 85521 |
| June 2001 | 3418 | 33055 | 28345 | 21386 | 1276 | 87480 |
| 1998-1999 |  |  |  |  |  |  |
| June | 4083 | 32497 | 24538 | 19018 | 1005 | 81043 |
| 1999-2000 |  |  |  |  |  |  |
| September | 4120 | 32440 | 27601 | 19770 | 1006 | 84906 |
| December | 3988 | 31682 | 31060 | 20468 | 1186 | 88442 |
| March | 3933 | 32631 | 29616 | 20527 | 1037 | 87765 |
| June | 3847 | 32719 | 28468 | 19439 | 1049 | 85521 |
| 2000-2001 |  |  |  |  |  |  |
| September | 3691 | 32864 | 28840 | 21134 | 1128 | 87657 |
| December | 3434 | 32616 | 31422 | 22407 | 1252 | 91131 |
| March | 3561 | 33266 | 29432 | 21968 | 1283 | 89511 |
| June | 3418 | 33055 | 28345 | 21386 | 1276 | 87480 |


|  | SEASONALLY ADJUSTED |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| June 1999 | 4096 | 32348 | 24840 | 19503 | 1034 | 81717 |
| June 2000 | 3861 | 32542 | 29046 | 19927 | 1078 | 86454 |
| June 2001 | 3434 | 32846 | 29083 | 21928 | 1312 | 88603 |
| 1998-1999 |  |  |  |  |  |  |
| June | 4096 | 32348 | 24840 | 19503 | 1034 | 81717 |
| 1999-2000 |  |  |  |  |  |  |
| September | 4085 | 32435 | 28666 | 19814 | 1035 | 86017 |
| December | 4029 | 32254 | 29231 | 20141 | 1112 | 86764 |
| March | 3911 | 32258 | 29188 | 20300 | 1047 | 86710 |
| June | 3861 | 32542 | 29046 | 19927 | 1078 | 86454 |
| 2000-2001 |  |  |  |  |  |  |
| September | 3660 | 32833 | 29565 | 21207 | 1163 | 88428 |
| December | 3470 | 33218 | 29639 | 22043 | 1174 | 89544 |
| March | 3540 | 32884 | 29087 | 21714 | 1295 | 88519 |
| June | 3434 | 32846 | 29083 | 21928 | 1312 | 88603 |

TREND ESTIMATES

| June 1999 | 4125 | 32220 | 24691 | 19444 | 1026 | 81378 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| June 2000 | 3810 | 32553 | 29306 | 20451 | 1091 | 87211 |
| June 2001 | 3443 | 32890 | 29043 | 21955 | 1312 | 88644 |
| 1998-1999 |  |  |  |  |  |  |
| June | 4125 | 32220 | 24691 | 19444 | 1026 | 81378 |
| 1999-2000 |  |  |  |  |  |  |
| September | 4064 | 32348 | 28804 | 19882 | 1059 | 86166 |
| December | 4016 | 32331 | 29074 | 20051 | 1068 | 86534 |
| March | 3942 | 32323 | 29171 | 20113 | 1075 | 86619 |
| June | 3810 | 32553 | 29306 | 20451 | 1091 | 87211 |
| 2000-2001 |  |  |  |  |  |  |
| September | 3663 | 32863 | 29432 | 21074 | 1136 | 88168 |
| December | 3551 | 33003 | 29438 | 21643 | 1205 | 88841 |
| March | 3482 | 32984 | 29281 | 21925 | 1266 | 88938 |
| June | 3443 | 32890 | 29043 | 21955 | 1312 | 88644 |

(a) Reference year for chain volume measures is 1999-2000.
(c) Includes Electricity and gas supply and Accommodation, cafes and restaurants.
(b) A break in series occurred in Wholesale trade between the June and September 1999 quarters. See paragraphs 39 and 40 of the Explanatory Notes.

|  | Mining | Manufacturing | Wholesale trade(b) | Retail trade | Other selected industries(c) | Total sel industrie |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year to/Quarter to | \% | \% | \% | \% | \% | \% |
|  | ORIGINAL |  |  |  |  |  |
| June 1999 | -13.8 | 8.0 | 6.5 | 11.5 | 20.9 | 7.1 |
| June 2000 | -5.8 | 0.7 | 16.0 | 2.2 | 4.4 | 5.5 |
| June 2001 | -11.1 | 1.0 | -0.4 | 10.0 | 21.7 | 2.3 |
| 1998-1999 |  |  |  |  |  |  |
| June | -3.4 | 1.4 | 2.8 | -0.5 | 2.9 | 1.1 |
| 1999-2000 |  |  |  |  |  |  |
| September | 0.9 | -0.2 | 12.5 | 4.0 | 0.2 | 4.8 |
| December | -3.2 | -2.3 | 12.5 | 3.5 | 17.9 | 4.2 |
| March | -1.4 | 3.0 | -4.7 | 0.3 | -12.5 | -0.8 |
| June | -2.2 | 0.3 | -3.9 | -5.3 | 1.1 | -2.6 |
| 2000-2001 |  |  |  |  |  |  |
| September | -4.0 | 0.4 | 1.3 | 8.7 | 7.5 | 2.5 |
| December | -7.0 | -0.8 | 9.0 | 6.0 | 11.0 | 4.0 |
| March | 3.7 | 2.0 | -6.3 | -2.0 | 2.5 | -1.8 |
| June | -4.0 | -0.6 | -3.7 | -2.7 | -0.5 | -2.3 |

$\qquad$
SEASONALLY ADJUSTED

| June 1999 | -13.9 | 8.0 | 6.5 | 11.5 | 20.8 | 7.1 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| June 2000 | -5.7 | 0.6 | 16.9 | 2.2 | 4.2 | 5.8 |
| June 2001 | -11.1 | 0.9 | 0.1 | 10.0 | 21.7 | 2.5 |
| 1998-1999 |  |  |  |  |  |  |
| June | -2.7 | 2.1 | 3.2 | 3.1 | 4.9 | 2.5 |
| 1999-2000 |  |  |  |  |  |  |
| September | -0.3 | 0.3 | 15.4 | 1.6 | 0.1 | 5.3 |
| December | -1.4 | -0.6 | 2.0 | 1.6 | 7.4 | 0.9 |
| March | -2.9 | 0.0 | -0.1 | 0.8 | -5.8 | -0.1 |
| June | -1.3 | 0.9 | -0.5 | -1.8 | 2.9 | -0.3 |
| 2000-2001 |  |  |  |  |  |  |
| September | -5.2 | 0.9 | 1.8 | 6.4 | 7.9 | 2.3 |
| December | -5.2 | 1.2 | 0.3 | 3.9 | 0.9 | 1.3 |
| March | 2.0 | -1.0 | -1.9 | -1.5 | 10.3 | -1.1 |
| June | -3.0 | -0.1 | 0.0 | 1.0 | 1.3 | 0.1 |

TREND ESTIMATES

| June 1999 | -11.7 | 7.4 | 6.2 | 11.4 | 16.9 | 6.9 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| June 2000 | -7.6 | 1.0 | 18.7 | 5.2 | 6.4 | 7.2 |
| June 2001 | -9.6 | 1.0 | -0.9 | 7.4 | 20.2 | 1.6 |
| 1998-1999 |  |  |  |  |  |  |
| June | -2.2 | 1.0 | 2.6 | 3.1 | 4.5 | 1.8 |
| 1999-2000 |  |  |  |  |  |  |
| September | -1.5 | 0.4 | 16.7 | 2.2 | 3.3 | 5.9 |
| December | -1.2 | -0.1 | 0.9 | 0.9 | 0.9 | 0.4 |
| March | -1.8 | 0.0 | 0.3 | 0.3 | 0.6 | 0.1 |
| June | -3.4 | 0.7 | 0.5 | 1.7 | 1.5 | 0.7 |
| 2000-2001 |  |  |  |  |  |  |
| September | -3.9 | 1.0 | 0.4 | 3.0 | 4.1 | 1.1 |
| December | -3.0 | 0.4 | 0.0 | 2.7 | 6.1 | 0.8 |
| March | -2.0 | -0.1 | -0.5 | 1.3 | 5.1 | 0.1 |
| June | -1.1 | -0.3 | -0.8 | 0.1 | 3.6 | -0.3 |

(a) Reference year for chain volume measures is 1999-2000.
(c) Includes Electricity and gas supply and Accommodation, cafes and restaurants.
(b) A break in series occurred in Wholesale trade between the June and September 1999 quarters. See paragraphs 39 and 40 of the Explanatory Notes.

INVENTORIES, By Manufacturing industries-Current prices

|  | Food, beverage and tobacco | Textiles, clothing, footwear and leather(a) | Wood and paper products | Printing, publishing and recorded media | Petroleum, coal, chemical and assoc. products | Non- <br> metallic mineral product | Metal product | Machinery <br> and <br> equipment | Other manufacturing | Total <br> manu- <br> facturing |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| At end of | \$m | \$m | \$m | \$m | \$m | \$m | \$m | \$m | \$m | \$m |


| ORIGINAL |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| June 1999 | 7090 | 1830 | 2134 | 792 | 5901 | 1353 | 5059 | 6374 | 771 | 31305 |
| June 2000 | 7881 | 1699 | 2044 | 878 | 6822 | 1214 | 4685 | 7983 | 889 | 34093 |
| June 2001 | 8805 | 1778 | 2069 | 782 | 7441 | 1306 | 4560 | 8367 | 822 | 35930 |
| 1998-1999 |  |  |  |  |  |  |  |  |  |  |
| June | 7090 | 1830 | 2134 | 792 | 5901 | 1353 | 5059 | 6374 | 771 | 31305 |
| 1999-2000 |  |  |  |  |  |  |  |  |  |  |
| September | 6923 | 1771 | 2026 | 864 | 6025 | 1132 | 4928 | 7112 | 877 | 31658 |
| December | 6795 | 1868 | 2043 | 801 | 6119 | 1022 | 4648 | 7379 | 836 | 31510 |
| March | 7386 | 1861 | 2044 | 829 | 6786 | 1128 | 4815 | 7547 | 930 | 33324 |
| June | 7881 | 1699 | 2044 | 878 | 6822 | 1214 | 4685 | 7983 | 889 | 34093 |
| 2000-2001 |  |  |  |  |  |  |  |  |  |  |
| September | 7563 | 1786 | 1773 | 895 | 7562 | 1355 | 4779 | 8098 | 908 | 34719 |
| December | 7624 | 1797 | 1901 | 849 | 7185 | 1262 | 5335 | 8066 | 898 | 34918 |
| March | 8327 | 1875 | 2067 | 808 | 7621 | 1170 | 4947 | 8220 | 795 | 35830 |
| June | 8805 | 1778 | 2069 | 782 | 7441 | 1306 | 4560 | 8367 | 822 | 35930 |

## SEASONALLY ADJUSTED

| June 1999 | 6790 | 1873 | 2104 | 806 | 5936 | 1338 | 5111 | 6404 | 794 | 31156 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| June 2000 | 7540 | 1746 | 2017 | 895 | 6866 | 1198 | 4733 | 8008 | 919 | 33922 |
| June 2001 | 8419 | 1831 | 2042 | 796 | 7489 | 1286 | 4606 | 8388 | 851 | 35708 |
| 1998-1999 |  |  |  |  |  |  |  |  |  |  |
| June | 6790 | 1873 | 2104 | 806 | 5936 | 1338 | 5111 | 6404 | 794 | 31156 |
| 1999-2000 |  |  |  |  |  |  |  |  |  |  |
| September | 6996 | 1753 | 2049 | 855 | 5971 | 1115 | 4919 | 7114 | 869 | 31641 |
| December | 7084 | 1866 | 2085 | 799 | 6266 | 1051 | 4678 | 7409 | 832 | 32070 |
| March | 7337 | 1836 | 2007 | 825 | 6649 | 1129 | 4741 | 7492 | 916 | 32932 |
| June | 7540 | 1746 | 2017 | 895 | 6866 | 1198 | 4733 | 8008 | 919 | 33922 |
| 2000-2001 |  |  |  |  |  |  |  |  |  |  |
| September | 7646 | 1764 | 1792 | 885 | 7487 | 1333 | 4774 | 8100 | 898 | 34679 |
| December | 7952 | 1797 | 1944 | 848 | 7368 | 1299 | 5374 | 8087 | 891 | 35560 |
| March | 8270 | 1847 | 2026 | 804 | 7462 | 1174 | 4867 | 8177 | 785 | 35412 |
| June | 8419 | 1831 | 2042 | 796 | 7489 | 1286 | 4606 | 8388 | 851 | 35708 |


| TREND ESTIMATES |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| June 1999 | 6775 | 1844 | 2093 | 846 | 5903 | 1267 | 4992 | 6607 | 834 | 31161 |
| June 2000 | 7498 | 1781 | 1945 | 870 | 6996 | 1221 | 4737 | 7896 | 916 | 33860 |
| June 2001 | 8453 | 1847 | 2070 | 789 | 7469 | 1231 | 4712 | 8325 | 819 | 35715 |
| 1998-1999 |  |  |  |  |  |  |  |  |  |  |
| June | 6775 | 1844 | 2093 | 846 | 5903 | 1267 | 4992 | 6607 | 834 | 31161 |
| 1999-2000 |  |  |  |  |  |  |  |  |  |  |
| September | 6942 | 1826 | 2082 | 819 | 6042 | 1157 | 4903 | 6954 | 833 | 31558 |
| December | 7141 | 1821 | 2064 | 818 | 6260 | 1086 | 4779 | 7343 | 865 | 32177 |
| March | 7316 | 1809 | 2021 | 843 | 6609 | 1115 | 4700 | 7662 | 897 | 32972 |
| June | 7498 | 1781 | 1945 | 870 | 6996 | 1221 | 4737 | 7896 | 916 | 33860 |
| 2000-2001 |  |  |  |  |  |  |  |  |  |  |
| September | 7711 | 1768 | 1897 | 879 | 7291 | 1281 | 4827 | 8062 | 903 | 34619 |
| December | 7955 | 1797 | 1926 | 850 | 7426 | 1275 | 4856 | 8140 | 865 | 35090 |
| March | 8214 | 1827 | 1992 | 816 | 7472 | 1251 | 4812 | 8213 | 836 | 35433 |
| June | 8453 | 1847 | 2070 | 789 | 7469 | 1231 | 4712 | 8325 | 819 | 35715 |

(a) In using the seasonally adjusted series extra care should be exercised because of the difficulties associated with reliably estimating its seasonal pattern.

INVENTORIES, By Manufacturing industries—Chain volume measures(a)

|  | Food, beverage and tobacco | Textiles, clothing, footwear and leather(b) | Wood and paper products | Printing, publishing and recorded media | Petroleum, coal, chemical and assoc. products | Nonmetallic mineral product | Metal product | Machinery and equipment | Other <br> manufacturing | Total <br> manufacturing |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| At end of | \$m | \$m | \$m | \$m | \$m | \$m | \$m | \$m | \$m | \$m |


| ORIGINAL |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| June 1999 | 7216 | 1827 | 2203 | 785 | 6684 | 1368 | 5224 | 6472 | 777 | 32497 |
| June 2000 | 7749 | 1664 | 1951 | 876 | 6117 | 1193 | 4447 | 7845 | 877 | 32719 |
| June 2001 | 8118 | 1646 | 1949 | 730 | 6404 | 1246 | 4187 | 8021 | 755 | 33055 |
| 1998-1999 |  |  |  |  |  |  |  |  |  |  |
| June | 7216 | 1827 | 2203 | 785 | 6684 | 1368 | 5224 | 6472 | 777 | 32497 |
| 1999-2000 |  |  |  |  |  |  |  |  |  |  |
| September | 7005 | 1793 | 2092 | 864 | 6458 | 1137 | 5078 | 7170 | 884 | 32440 |
| December | 6771 | 1901 | 2066 | 804 | 6221 | 1024 | 4707 | 7384 | 838 | 31682 |
| March | 7324 | 1868 | 1989 | 833 | 6390 | 1118 | 4711 | 7497 | 929 | 32631 |
| June | 7749 | 1664 | 1951 | 876 | 6117 | 1193 | 4447 | 7845 | 877 | 32719 |
| 2000-2001 |  |  |  |  |  |  |  |  |  |  |
| September | 7411 | 1721 | 1651 | 872 | 6550 | 1319 | 4458 | 8002 | 879 | 32864 |
| December | 7374 | 1710 | 1748 | 810 | 6130 | 1221 | 4916 | 7869 | 838 | 32616 |
| March | 7922 | 1749 | 1906 | 760 | 6557 | 1129 | 4549 | 7953 | 742 | 33266 |
| June | 8118 | 1646 | 1949 | 730 | 6404 | 1246 | 4187 | 8021 | 755 | 33055 |

## SEASONALLY ADJUSTED

| June 1999 | 6911 | 1870 | 2172 | 799 | 6724 | 1353 | 5278 | 6502 | 798 | 32348 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| June 2000 | 7414 | 1710 | 1925 | 893 | 6156 | 1177 | 4493 | 7870 | 904 | 32542 |
| June 2001 | 7762 | 1695 | 1923 | 744 | 6446 | 1227 | 4229 | 8040 | 779 | 32846 |
| 1998-1999 |  |  |  |  |  |  |  |  |  |  |
| June | 6911 | 1870 | 2172 | 799 | 6724 | 1353 | 5278 | 6502 | 798 | 32348 |
| 1999-2000 |  |  |  |  |  |  |  |  |  |  |
| September | 7079 | 1775 | 2116 | 855 | 6400 | 1120 | 5069 | 7172 | 877 | 32435 |
| December | 7059 | 1899 | 2109 | 802 | 6370 | 1053 | 4738 | 7414 | 839 | 32254 |
| March | 7275 | 1843 | 1954 | 829 | 6261 | 1119 | 4639 | 7442 | 911 | 32258 |
| June | 7414 | 1710 | 1925 | 893 | 6156 | 1177 | 4493 | 7870 | 904 | 32542 |
| 2000-2001 |  |  |  |  |  |  |  |  |  |  |
| September | 7493 | 1700 | 1670 | 862 | 6485 | 1297 | 4454 | 8004 | 869 | 32833 |
| December | 7692 | 1710 | 1787 | 809 | 6286 | 1257 | 4952 | 7889 | 837 | 33218 |
| March | 7868 | 1723 | 1869 | 756 | 6420 | 1132 | 4475 | 7912 | 729 | 32884 |
| June | 7762 | 1695 | 1923 | 744 | 6446 | 1227 | 4229 | 8040 | 779 | 32846 |


| June 1999 | 6860 | 1844 | 2158 | 837 | 6616 | 1277 | 5149 | 6696 | 838 | 32220 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| June 2000 | 7385 | 1752 | 1853 | 865 | 6274 | 1199 | 4533 | 7797 | 900 | 32553 |
| June 2001 | 7842 | 1707 | 1922 | 744 | 6417 | 1185 | 4355 | 7980 | 758 | 32890 |
| 1998-1999 |  |  |  |  |  |  |  |  |  |  |
| June | 6860 | 1844 | 2158 | 837 | 6616 | 1277 | 5149 | 6696 | 838 | 32220 |
| 1999-2000 |  |  |  |  |  |  |  |  |  |  |
| September | 7009 | 1847 | 2141 | 819 | 6506 | 1165 | 5046 | 7015 | 840 | 32348 |
| December | 7145 | 1846 | 2081 | 822 | 6333 | 1087 | 4826 | 7345 | 870 | 32331 |
| March | 7251 | 1814 | 1980 | 846 | 6255 | 1106 | 4584 | 7606 | 894 | 32323 |
| June | 7385 | 1752 | 1853 | 865 | 6274 | 1199 | 4533 | 7797 | 900 | 32553 |
| 2000-2001 |  |  |  |  |  |  |  |  |  |  |
| September | 7547 | 1704 | 1767 | 858 | 6322 | 1248 | 4620 | 7925 | 871 | 32863 |
| December | 7682 | 1704 | 1780 | 812 | 6375 | 1235 | 4648 | 7949 | 816 | 33003 |
| March | 7784 | 1710 | 1845 | 768 | 6405 | 1204 | 4543 | 7949 | 775 | 32984 |
| June | 7842 | 1707 | 1922 | 744 | 6417 | 1185 | 4355 | 7980 | 758 | 32890 |

(a) Reference year for chain volume measures is 1999-2000.
(b) In using the seasonally adjusted series extra care should be exercised because of the difficulties associated with reliably estimating its seasonal pattern.

|  | Food, beverage and tobacco | Textiles, clothing, footwear and leather | Wood and paper products | Printing, publishing and recorded media | Petroleum, coal, chemical and assoc. products | Non- <br> metallic mineral product | Metal product | Machinery and equipment | Other manufacturing | Total manufacturing |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year to/Quarter to | \% | \% | \% | \% | \% | \% | \% | \% | \% | \% |


| ORIGINAL |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| June 1999 | 10.3 | -0.9 | 8.4 | -10.4 | 9.6 | 18.8 | 14.6 | 3.3 | -0.3 | 8.0 |
| June 2000 | 7.4 | -8.9 | -11.4 | 11.7 | -8.5 | -12.8 | -14.9 | 21.2 | 12.8 | 0.7 |
| June 2001 | 4.8 | -1.1 | -0.1 | -16.7 | 4.7 | 4.4 | -5.8 | 2.2 | -14.0 | 1.0 |
| 1998-1999 |  |  |  |  |  |  |  |  |  |  |
| June | 9.5 | -4.1 | 0.6 | -11.5 | -1.2 | 3.1 | 3.4 | -1.0 | -11.0 | 1.4 |
| 1999-2000 |  |  |  |  |  |  |  |  |  |  |
| September | -2.9 | -1.8 | -5.0 | 10.1 | -3.4 | -16.9 | -2.8 | 10.8 | 13.7 | -0.2 |
| December | -3.3 | 6.0 | -1.3 | -7.0 | -3.7 | -10.0 | -7.3 | 3.0 | -5.1 | -2.3 |
| March | 8.2 | -1.7 | -3.7 | 3.6 | 2.7 | 9.2 | 0.1 | 1.5 | 10.8 | 3.0 |
| June | 5.8 | -10.9 | -1.9 | 5.2 | -4.3 | 6.7 | -5.6 | 4.6 | -5.6 | 0.3 |
| 2000-2001 |  |  |  |  |  |  |  |  |  |  |
| September | -4.4 | 3.5 | -15.4 | -0.5 | 7.1 | 10.5 | 0.3 | 2.0 | 0.2 | 0.4 |
| December | -0.5 | -0.7 | 5.9 | -7.1 | -6.4 | -7.4 | 10.3 | -1.7 | -4.7 | -0.8 |
| March | 7.4 | 2.3 | 9.0 | -6.2 | 7.0 | -7.5 | -7.5 | 1.1 | -11.4 | 2.0 |
| June | 2.5 | -5.9 | 2.2 | -3.9 | -2.3 | 10.4 | -8.0 | 0.8 | 1.7 | -0.6 |

SEASONALLY ADJUSTED

| June 1999 | 10.0 | -0.3 | 8.4 | -10.2 | 9.7 | 18.8 | 14.5 | 3.2 | 0.3 | 8.0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| June 2000 | 7.3 | -8.6 | -11.4 | 11.8 | -8.4 | -13.0 | -14.9 | 21.0 | 13.3 | 0.6 |
| June 2001 | 4.7 | -0.9 | -0.1 | -16.7 | 4.7 | 4.2 | -5.9 | 2.2 | -13.8 | 0.9 |
| 1998-1999 |  |  |  |  |  |  |  |  |  |  |
| June | 5.5 | -0.7 | 0.7 | -9.4 | 1.3 | 2.2 | 5.9 | 0.5 | -6.6 | 2.1 |
| 1999-2000 |  |  |  |  |  |  |  |  |  |  |
| September | 2.4 | -5.1 | -2.6 | 7.0 | -4.8 | -17.2 | -4.0 | 10.3 | 9.9 | 0.3 |
| December | -0.3 | 6.9 | -0.4 | -6.2 | -0.5 | -6.0 | -6.5 | 3.4 | -4.4 | -0.6 |
| March | 3.1 | -2.9 | -7.3 | 3.3 | -1.7 | 6.3 | -2.1 | 0.4 | 8.7 | 0.0 |
| June | 1.9 | -7.2 | -1.5 | 7.7 | -1.7 | 5.2 | -3.2 | 5.8 | -0.8 | 0.9 |
| 2000-2001 |  |  |  |  |  |  |  |  |  |  |
| September | 1.1 | -0.6 | -13.2 | -3.5 | 5.3 | 10.2 | -0.9 | 1.7 | -3.8 | 0.9 |
| December | 2.7 | 0.6 | 7.0 | -6.2 | -3.1 | -3.1 | 11.2 | -1.4 | -3.8 | 1.2 |
| March | 2.3 | 0.8 | 4.6 | -6.5 | 2.1 | -9.9 | -9.6 | 0.3 | -12.9 | -1.0 |
| June | -1.3 | -1.6 | 2.9 | -1.6 | 0.4 | 8.4 | -5.5 | 1.6 | 7.0 | -0.1 |

TREND ESTIMATES

| June 1999 | 9.1 | -0.3 | 7.8 | -8.8 | 8.0 | 7.4 | 12.5 | 6.1 | 4.3 | 7.4 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| June 2000 | 7.6 | -5.0 | -14.1 | 3.3 | -5.2 | -6.1 | -12.0 | 16.4 | 7.4 | 1.0 |
| June 2001 | 6.2 | -2.6 | 3.7 | -14.0 | 2.3 | -1.1 | -3.9 | 2.4 | -15.8 | 1.0 |
| 1998-1999 |  |  |  |  |  |  |  |  |  |  |
| June | 2.4 | -1.9 | 1.8 | -3.1 | 0.1 | -5.1 | 1.4 | 3.0 | -2.3 | 1.0 |
| 1999-2000 |  |  |  |  |  |  |  |  |  |  |
| September | 2.2 | 0.2 | -0.8 | -2.2 | -1.7 | -8.7 | -2.0 | 4.8 | 0.2 | 0.4 |
| December | 1.9 | 0.0 | -2.8 | 0.5 | -2.7 | -6.7 | -4.4 | 4.7 | 3.6 | -0.1 |
| March | 1.5 | -1.7 | -4.8 | 2.9 | -1.2 | 1.7 | -5.0 | 3.5 | 2.8 | 0.0 |
| June | 1.9 | -3.4 | -6.4 | 2.2 | 0.3 | 8.4 | -1.1 | 2.5 | 0.6 | 0.7 |
| 2000-2001 |  |  |  |  |  |  |  |  |  |  |
| September | 2.2 | -2.8 | -4.6 | -0.8 | 0.8 | 4.1 | 1.9 | 1.6 | -3.2 | 1.0 |
| December | 1.8 | 0.0 | 0.8 | -5.3 | 0.8 | -1.1 | 0.6 | 0.3 | -6.3 | 0.4 |
| March | 1.3 | 0.4 | 3.6 | -5.5 | 0.5 | -2.5 | -2.2 | 0.0 | -5.1 | -0.1 |
| June | 0.7 | -0.2 | 4.2 | -3.1 | 0.2 | -1.5 | -4.1 | 0.4 | -2.1 | -0.3 |

(a) Reference year for chain volume measures is 1999-2000.

WHOLESALE
TRADE

|  | Food, beverage and tobacco | Textiles, clothing, footwear and leather | Wood and paper products | Printing, publishing and recorded media | Petroleum, coal,chemical and assoc. products | Non- <br> metallic <br> mineral <br> product | Metal product | Machinery <br> and <br> equipment | Other manufacturing | Total manufacturing | Total wholesale(a) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Period | \$m | \$m | \$m | \$m | \$m | \$m | \$m | \$m | \$m | \$m | \$m |


| ORIGINAL |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year to |  |  |  |  |  |  |  |  |  |  |  |
| June 1999 | 49835 | 12117 | 15592 | 15995 | 37128 | 11231 | 33706 | 45527 | 7759 | 228892 | 191272 |
| June 2000 | 53226 | 11650 | 18177 | 17258 | 39060 | 9639 | 34492 | 50427 | 7745 | 241677 | 216968 |
| June 2001 | 61133 | 11485 | 16146 | 16505 | 45671 | 10456 | 35811 | 52043 | 7174 | 256423 | 232195 |
| 1998-1999 |  |  |  |  |  |  |  |  |  |  |  |
| June | 11546 | 2999 | 4016 | 4135 | 9372 | 2835 | 8582 | 11178 | 1789 | 56453 | 48364 |
| 1999-2000 |  |  |  |  |  |  |  |  |  |  |  |
| September | 12194 | 3005 | 4300 | 4363 | 9646 | 2408 | 8517 | 12326 | 1903 | 58663 | 51913 |
| December | 14229 | 2843 | 4674 | 4571 | 9955 | 2279 | 8695 | 12851 | 2045 | 62143 | 55296 |
| March | 13012 | 2873 | 4485 | 3977 | 9487 | 2344 | 8351 | 12092 | 1737 | 58358 | 52597 |
| June | 13791 | 2929 | 4718 | 4347 | 9972 | 2608 | 8929 | 13158 | 2060 | 62513 | 57162 |
| 2000-2001 |  |  |  |  |  |  |  |  |  |  |  |
| September | 14791 | 2976 | 4147 | 4304 | 11105 | 2947 | 8553 | 13549 | 1947 | 64317 | 57529 |
| December | 16518 | 3027 | 3977 | 4183 | 11223 | 2691 | 9516 | 13209 | 1968 | 66311 | 59622 |
| March | 14408 | 2738 | 3864 | 3789 | 10978 | 2304 | 8344 | 11918 | 1529 | 59872 | 55337 |
| June | 15415 | 2744 | 4159 | 4228 | 12366 | 2515 | 9398 | 13367 | 1730 | 65923 | 59706 |

SEASONALLY ADJUSTED

| Year to |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| June 1999 | 49864 | 12148 | 15578 | 15987 | 37087 | 11206 | 33745 | 45558 | 7759 | 228931 | 190355 |
| June 2000 | 53143 | 11608 | 18137 | 17241 | 39012 | 9644 | 34354 | 50365 | 7757 | 241257 | 215569 |
| June 2001 | 61221 | 11490 | 16155 | 16474 | 45744 | 10454 | 35836 | 52061 | 7156 | 256592 | 232136 |
| 1998-1999 |  |  |  |  |  |  |  |  |  |  |  |
| June | 12072 | 2999 | 3952 | 4128 | 9243 | 2835 | 8442 | 11139 | 1811 | 56621 | 47691 |
| 1999-2000 |  |  |  |  |  |  |  |  |  |  |  |
| September | 11970 | 2899 | 4260 | 4337 | 9604 | 2356 | 8339 | 11916 | 1895 | 57576 | 51637 |
| December | 12980 | 2863 | 4547 | 4305 | 9693 | 2224 | 8458 | 12432 | 1883 | 59385 | 52356 |
| March | 13822 | 2914 | 4701 | 4274 | 9882 | 2466 | 8790 | 12912 | 1898 | 61659 | 55035 |
| June | 14371 | 2931 | 4629 | 4324 | 9832 | 2598 | 8766 | 13106 | 2080 | 62637 | 56541 |
| 2000-2001 |  |  |  |  |  |  |  |  |  |  |  |
| September | 14700 | 2917 | 4115 | 4198 | 10986 | 2860 | 8422 | 13101 | 1923 | 63222 | 57151 |
| December | 15045 | 3023 | 3875 | 3968 | 11040 | 2659 | 9411 | 12766 | 1771 | 63558 | 57282 |
| March | 15439 | 2803 | 4092 | 4112 | 11525 | 2435 | 8783 | 12876 | 1716 | 63781 | 58262 |
| June | 16038 | 2747 | 4073 | 4196 | 12193 | 2500 | 9220 | 13319 | 1745 | 66031 | 59441 |


| TREND ESTIMATES |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year to |  |  |  |  |  |  |  |  |  |  |  |
| June 1999 | 49716 | 11896 | 15624 | 16060 | 37249 | 11027 | 33595 | 45692 | 7831 | 228690 | 190854 |
| June 2000 | 53217 | 11633 | 17971 | 17179 | 39164 | 9822 | 34374 | 50181 | 7686 | 241224 | 214712 |
| June 2001 | 61227 | 11503 | 16288 | 16483 | 45425 | 10353 | 36175 | 52025 | 7183 | 256663 | 232298 |
| 1998-1999 |  |  |  |  |  |  |  |  |  |  |  |
| June | 12208 | 2991 | 3998 | 4232 | 9320 | 2685 | 8355 | 11474 | 1932 | 57195 | 48514 |
| 1999-2000 |  |  |  |  |  |  |  |  |  |  |  |
| September | 12301 | 2921 | 4256 | 4287 | 9511 | 2443 | 8399 | 11817 | 1857 | 57792 | 50919 |
| December | 12864 | 2886 | 4545 | 4306 | 9660 | 2321 | 8530 | 12400 | 1884 | 59396 | 52920 |
| March | 13710 | 2892 | 4667 | 4324 | 9830 | 2417 | 8639 | 12893 | 1961 | 61333 | 54819 |
| June | 14342 | 2933 | 4503 | 4262 | 10162 | 2641 | 8806 | 13071 | 1983 | 62703 | 56054 |
| 2000-2001 |  |  |  |  |  |  |  |  |  |  |  |
| September | 14719 | 2958 | 4206 | 4161 | 10635 | 2734 | 8933 | 13006 | 1924 | 63276 | 57252 |
| December | 15074 | 2926 | 4023 | 4089 | 11144 | 2658 | 9024 | 12920 | 1815 | 63673 | 57604 |
| March | 15496 | 2853 | 3999 | 4089 | 11617 | 2539 | 9088 | 12972 | 1736 | 64389 | 58293 |
| June | 15938 | 2766 | 4060 | 4144 | 12030 | 2422 | 9130 | 13127 | 1708 | 65325 | 59149 |

(a) A break in series occurred in Wholesale trade between the June and September 1999 quarters

See paragraphs 39 and 40 of the Explanatory Notes.
12 Abs . INVENTORIES AND SALES, SELECTED INDUSTRIES . 5629.0 . JUNE QUARTER 2001

## MANUFACTURING

WHOLESALE
TRADE

|  | Food, beverage and tobacco | Textiles, clothing, footwear and leather | Wood and paper products | Printing, publishing and recorded media | Petroleum, coal, chemical and assoc. products | Non- <br> metallic <br> mineral <br> product | Metal product | Machinery and equipment | Other manufacturing | Total manufacturing | Total wholesale(b) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Period | \$m | \$m | \$m | \$m | \$m | \$m | \$m | \$m | \$m | \$m | \$m |

ORIGINAL

| ORIGINAL |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year to |  |  |  |  |  |  |  |  |  |  |  |
| June 1999 | 50527 | 12148 | 15882 | 16723 | 39033 | 11269 | 34874 | 46196 | 7973 | 234592 | 193110 |
| June 2000 | 53229 | 11649 | 18175 | 17258 | 39061 | 9639 | 34495 | 50432 | 7745 | 241683 | 216968 |
| June 2001 | 58963 | 11252 | 15250 | 15927 | 42113 | 10359 | 34063 | 50712 | 6741 | 245380 | 215157 |
| 1998-1999 |  |  |  |  |  |  |  |  |  |  |  |
| June | 11820 | 3008 | 4097 | 4314 | 9917 | 2854 | 8967 | 11345 | 1829 | 58131 | 49803 |
| 1999-2000 |  |  |  |  |  |  |  |  |  |  |  |
| September | 12387 | 3025 | 4361 | 4372 | 9935 | 2416 | 8808 | 12436 | 1931 | 59657 | 52862 |
| December | 14258 | 2856 | 4715 | 4575 | 10115 | 2288 | 8811 | 12891 | 2087 | 62592 | 55851 |
| March | 12997 | 2857 | 4454 | 3985 | 9402 | 2341 | 8234 | 12088 | 1725 | 58089 | 52588 |
| June | 13587 | 2912 | 4645 | 4327 | 9610 | 2594 | 8642 | 13017 | 2002 | 61345 | 55668 |
| 2000-2001 |  |  |  |  |  |  |  |  |  |  |  |
| September | 14671 | 2969 | 3932 | 4181 | 10370 | 2925 | 8240 | 13386 | 1868 | 62543 | 54797 |
| December | 16132 | 2969 | 3734 | 4044 | 10172 | 2666 | 8993 | 12921 | 1839 | 63470 | 54819 |
| March | 13791 | 2664 | 3648 | 3646 | 10225 | 2277 | 7940 | 11570 | 1426 | 57187 | 51439 |
| June | 14370 | 2650 | 3935 | 4057 | 11347 | 2491 | 8889 | 12834 | 1607 | 62180 | 54102 |


| SEASONALLY ADJUSTED |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year to |  |  |  |  |  |  |  |  |  |  |  |
| June 1999 | 50527 | 12148 | 15882 | 16723 | 39033 | 11269 | 34874 | 46196 | 7973 | 234592 | 193110 |
| June 2000 | 53229 | 11649 | 18175 | 17258 | 39061 | 9639 | 34495 | 50432 | 7745 | 241683 | 216968 |
| June 2001 | 58963 | 11252 | 15250 | 15927 | 42113 | 10359 | 34063 | 50712 | 6741 | 245380 | 215157 |
| 1998-1999 |  |  |  |  |  |  |  |  |  |  |  |
| June | 12359 | 3007 | 4038 | 4311 | 9798 | 2859 | 8822 | 11304 | 1851 | 58332 | 49638 |
| 1999-2000 |  |  |  |  |  |  |  |  |  |  |  |
| September | 12176 | 2925 | 4330 | 4350 | 9910 | 2365 | 8652 | 12033 | 1920 | 58641 | 52775 |
| December | 13033 | 2888 | 4599 | 4312 | 9866 | 2232 | 8613 | 12488 | 1920 | 59944 | 53755 |
| March | 13837 | 2911 | 4681 | 4287 | 9806 | 2461 | 8712 | 12928 | 1884 | 61515 | 54889 |
| June | 14183 | 2925 | 4565 | 4309 | 9479 | 2581 | 8518 | 12983 | 2022 | 61582 | 55549 |
| 2000-2001 |  |  |  |  |  |  |  |  |  |  |  |
| September | 14587 | 2915 | 3904 | 4085 | 10251 | 2838 | 8127 | 12950 | 1849 | 61506 | 54600 |
| December | 14686 | 2965 | 3638 | 3843 | 9990 | 2635 | 8891 | 12487 | 1660 | 60794 | 52808 |
| March | 14761 | 2723 | 3860 | 3964 | 10711 | 2408 | 8344 | 12495 | 1605 | 60872 | 53714 |
| June | 14930 | 2649 | 3848 | 4035 | 11160 | 2478 | 8701 | 12780 | 1627 | 62208 | 54035 |


| TREND ESTIMATES |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year to |  |  |  |  |  |  |  |  |  |  |  |
| June 1999 | 50386 | 11904 | 15929 | 16779 | 39147 | 11087 | 34749 | 46331 | 8054 | 234467 | 193526 |
| June 2000 | 53383 | 11676 | 17981 | 17217 | 39203 | 9821 | 34546 | 50270 | 7678 | 241672 | 216408 |
| June 2001 | 58904 | 11264 | 15408 | 15957 | 41830 | 10265 | 34398 | 50665 | 6774 | 245294 | 215315 |
| 1998-1999 |  |  |  |  |  |  |  |  |  |  |  |
| June | 12435 | 3001 | 4081 | 4365 | 9825 | 2704 | 8729 | 11638 | 1978 | 58723 | 50044 |
| 1999-2000 |  |  |  |  |  |  |  |  |  |  |  |
| September | 12497 | 2942 | 4328 | 4350 | 9877 | 2457 | 8701 | 11939 | 1893 | 58967 | 52444 |
| December | 12955 | 2903 | 4590 | 4322 | 9820 | 2326 | 8664 | 12463 | 1902 | 59960 | 53904 |
| March | 13686 | 2901 | 4656 | 4317 | 9749 | 2412 | 8591 | 12885 | 1950 | 61133 | 54980 |
| June | 14246 | 2930 | 4408 | 4228 | 9757 | 2627 | 8589 | 12983 | 1933 | 61612 | 55080 |
| 2000-2001 |  |  |  |  |  |  |  |  |  |  |  |
| September | 14535 | 2938 | 4025 | 4074 | 9918 | 2712 | 8591 | 12833 | 1841 | 61333 | 54400 |
| December | 14688 | 2878 | 3795 | 3961 | 10260 | 2633 | 8600 | 12644 | 1711 | 61073 | 53692 |
| March | 14805 | 2776 | 3760 | 3939 | 10658 | 2514 | 8605 | 12579 | 1622 | 61234 | 53508 |
| June | 14876 | 2672 | 3828 | 3983 | 10994 | 2406 | 8602 | 12608 | 1601 | 61654 | 53715 |

(a) Reference year for chain volume measures is 1999-2000.
(b) A break in series occurred in Wholesale trade between the June and September 1999 quarters. See paragraphs 39 and 40 of the Explanatory Notes.

## MANUFACTURING

WHOLESALE TRADE

|  | Food, beverage and tobacco | Textiles, clothing, footwear and leather | Wood and paper products | Printing, <br> publishing <br> and recorded <br> media | Petroleum, coal, chemical and assoc. products | Non- <br> metallic mineral product | Metal product | Machinery <br> and equipment | Other manufacturing | Total manufacturing | Total wholesale(b) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Period | \% | \% | \% | \% | \% | \% | \% | \% | \% | \% | \% |

## ORIGINAL

| Year to |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| June 1999 | 1.8 | 13.7 | 5.9 | 2.6 | 0.7 | 16.3 | 7.5 | 5.3 | 5.3 | 4.8 | 8.6 |
| June 2000 | 5.3 | -4.1 | 14.4 | 3.2 | 0.1 | -14.5 | -1.1 | 9.2 | -2.9 | 3.0 | 12.4 |
| June 2001 | 10.8 | -3.4 | -16.1 | -7.7 | 7.8 | 7.5 | -1.3 | 0.6 | -13.0 | 1.5 | -0.8 |
| 1998-1999 |  |  |  |  |  |  |  |  |  |  |  |
| June | -1.8 | 2.4 | 11.3 | 4.9 | 6.2 | 6.4 | 10.0 | 4.5 | -6.9 | 4.3 | 7.3 |
| 1999-2000 |  |  |  |  |  |  |  |  |  |  |  |
| September | 4.8 | 0.5 | 6.4 | 1.3 | 0.2 | -15.3 | -1.8 | 9.6 | 5.6 | 2.6 | 6.1 |
| December | 15.1 | -5.6 | 8.1 | 4.6 | 1.8 | -5.3 | 0.0 | 3.7 | 8.1 | 4.9 | 5.7 |
| March | -8.8 | 0.1 | -5.5 | -12.9 | -7.0 | 2.3 | -6.5 | -6.2 | -17.4 | -7.2 | -5.8 |
| June | 4.5 | 1.9 | 4.3 | 8.6 | 2.2 | 10.8 | 5.0 | 7.7 | 16.0 | 5.6 | 5.9 |
| 2000-2001 |  |  |  |  |  |  |  |  |  |  |  |
| September | 8.0 | 2.0 | -15.3 | -3.4 | 7.9 | 12.8 | -4.6 | 2.8 | -6.7 | 2.0 | -1.6 |
| December | 10.0 | 0.0 | -5.0 | -3.3 | -1.9 | -8.9 | 9.1 | -3.5 | -1.6 | 1.5 | 0.0 |
| March | -14.5 | -10.3 | -2.3 | -9.8 | 0.5 | -14.6 | -11.7 | -10.5 | -22.5 | -9.9 | -6.2 |
| June | 4.2 | -0.5 | 7.9 | 11.3 | 11.0 | 9.4 | 12.0 | 10.9 | 12.7 | 8.7 | 5.2 |
| SEASONALLY ADJUSTED |  |  |  |  |  |  |  |  |  |  |  |
| Year to |  |  |  |  |  |  |  |  |  |  |  |
| June 1999 | 1.8 | 13.7 | 5.9 | 2.6 | 0.7 | 16.3 | 7.5 | 5.3 | 5.3 | 4.8 | 8.6 |
| June 2000 | 5.3 | -4.1 | 14.4 | 3.2 | 0.1 | -14.5 | -1.1 | 9.2 | -2.9 | 3.0 | 12.4 |
| June 2001 | 10.8 | -3.4 | -16.1 | -7.7 | 7.8 | 7.5 | -1.3 | 0.6 | -13.0 | 1.5 | -0.8 |
| 1998-1999 |  |  |  |  |  |  |  |  |  |  |  |
| June | -5.1 | -1.7 | 3.1 | -2.8 | 0.7 | 1.6 | 1.6 | -3.3 | -14.0 | -1.9 | 1.6 |
| 1999-2000 |  |  |  |  |  |  |  |  |  |  |  |
| September | -1.5 | -2.7 | 7.2 | 0.9 | 1.2 | -17.3 | -1.9 | 6.4 | 3.8 | 0.5 | 6.3 |
| December | 7.0 | -1.3 | 6.2 | -0.9 | -0.4 | -5.6 | -0.5 | 3.8 | 0.0 | 2.2 | 1.9 |
| March | 6.2 | 0.8 | 1.8 | -0.6 | -0.6 | 10.2 | 1.1 | 3.5 | -1.9 | 2.6 | 2.1 |
| June | 2.5 | 0.5 | -2.5 | 0.5 | -3.3 | 4.9 | -2.2 | 0.4 | 7.3 | 0.1 | 1.2 |
| 2000-2001 |  |  |  |  |  |  |  |  |  |  |  |
| September | 2.9 | -0.3 | -14.5 | -5.2 | 8.1 | 10.0 | -4.6 | -0.3 | -8.6 | -0.1 | -1.7 |
| December | 0.7 | 1.7 | -6.8 | -5.9 | -2.5 | -7.2 | 9.4 | -3.6 | -10.2 | -1.2 | -3.3 |
| March | 0.5 | -8.1 | 6.1 | 3.1 | 7.2 | -8.6 | -6.1 | 0.1 | -3.3 | 0.1 | 1.7 |
| June | 1.1 | -2.7 | -0.3 | 1.8 | 4.2 | 2.9 | 4.3 | 2.3 | 1.4 | 2.2 | 0.6 |

## TREND ESTIMATES

## Year to

| June 1999 | 1.8 | 10.9 | 6.5 | 3.6 | 1.3 | 13.3 | 6.5 | 5.5 | 7.3 | 4.7 | 9.1 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| June 2000 | 5.9 | -1.9 | 12.9 | 2.6 | 0.1 | -11.4 | -0.6 | 8.5 | -4.7 | 3.1 | 11.8 |
| June 2001 | 10.3 | -3.5 | -14.3 | -7.3 | 6.7 | 4.5 | -0.4 | 0.8 | -11.8 | 1.5 | -0.5 |
| 1998-1999 |  |  |  |  |  |  |  |  |  |  |  |
| June | -1.4 | -0.9 | 3.4 | 2.2 | 0.5 | -6.4 | -0.3 | 0.2 | -3.5 | -0.4 | 2.5 |
| 1999-2000 |  |  |  |  |  |  |  |  |  |  |  |
| September | 0.5 | -2.0 | 6.1 | -0.3 | 0.5 | -9.1 | -0.3 | 2.6 | -4.3 | 0.4 | n.p. |
| December | 3.7 | -1.3 | 6.1 | -0.7 | -0.6 | -5.3 | -0.4 | 4.4 | 0.5 | 1.7 | 2.8 |
| March | 5.6 | -0.1 | 1.4 | -0.1 | -0.7 | 3.7 | -0.8 | 3.4 | 2.5 | 2.0 | 2.0 |
| June | 4.1 | 1.0 | -5.3 | -2.1 | 0.1 | 8.9 | 0.0 | 0.8 | -0.8 | 0.8 | 0.2 |
| 2000-2001 |  |  |  |  |  |  |  |  |  |  |  |
| September | 2.0 | 0.3 | -8.7 | -3.6 | 1.7 | 3.3 | 0.0 | -1.2 | -4.8 | -0.5 | -1.2 |
| December | 1.1 | -2.0 | -5.7 | -2.8 | 3.5 | -2.9 | 0.1 | -1.5 | -7.0 | -0.4 | -1.3 |
| March | 0.8 | -3.6 | -0.9 | -0.6 | 3.9 | -4.5 | 0.1 | -0.5 | -5.2 | 0.3 | -0.3 |
| June | 0.5 | -3.7 | 1.8 | 1.1 | 3.1 | -4.3 | 0.0 | 0.2 | -1.3 | 0.7 | 0.4 |

(a) Reference year for chain volume measures is 1999-2000.
(b) A break in series occurred in Wholesale trade between the June and September 1999 quarters. See paragraphs 39 and 40 of the Explanatory Notes.

MANUFACTURING AND WHOLESALE TRADE INVENTORIES/SALES RATIO—Current prices(a)
-•••••

|  | MANUFACTURING. |  |  |  |  |  |  |  |  |  | WHOLESALE TRADE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year to/Quarter to | Food, beverage and tobacco | Textiles, clothing, footwear and leather | Wood and paper products | Printing, publishing and recorded media | Petroleum, coal,chemical and assoc. products | Non- <br> metallic <br> mineral <br> product | Metal product | Machinery and equipment | Other manufacturing | Total manufacturing | Total wholesale(b) |
| June 1999 | 0.56 | 0.62 | 0.53 | 0.20 | 0.64 | 0.47 | 0.61 | 0.57 | 0.44 | 0.55 | 0.53 |
| June 2000 | 0.52 | 0.60 | 0.44 | 0.21 | 0.70 | 0.46 | 0.54 | 0.61 | 0.44 | 0.54 | 0.52 |
| June 2001 | 0.52 | 0.67 | 0.50 | 0.19 | 0.61 | 0.51 | 0.50 | 0.63 | 0.49 | 0.54 | 0.54 |
| 1998-1999 |  |  |  |  |  |  |  |  |  |  |  |
| June | 0.56 | 0.62 | 0.53 | 0.20 | 0.64 | 0.47 | 0.61 | 0.57 | 0.44 | 0.55 | 0.53 |
| 1999-2000 |  |  |  |  |  |  |  |  |  |  |  |
| September | 0.58 | 0.60 | 0.48 | 0.20 | 0.62 | 0.47 | 0.59 | 0.60 | 0.46 | 0.55 | 0.53 |
| December | 0.55 | 0.65 | 0.46 | 0.19 | 0.65 | 0.47 | 0.55 | 0.60 | 0.44 | 0.54 | 0.55 |
| March | 0.53 | 0.63 | 0.43 | 0.19 | 0.67 | 0.46 | 0.54 | 0.58 | 0.48 | 0.53 | 0.53 |
| June | 0.52 | 0.60 | 0.44 | 0.21 | 0.70 | 0.46 | 0.54 | 0.61 | 0.44 | 0.54 | 0.52 |
| 2000-2001 |  |  |  |  |  |  |  |  |  |  |  |
| September | 0.52 | 0.60 | 0.44 | 0.21 | 0.68 | 0.47 | 0.57 | 0.62 | 0.47 | 0.55 | 0.53 |
| December | 0.53 | 0.59 | 0.50 | 0.21 | 0.67 | 0.49 | 0.57 | 0.63 | 0.50 | 0.56 | 0.55 |
| March | 0.54 | 0.66 | 0.50 | 0.20 | 0.65 | 0.48 | 0.55 | 0.64 | 0.46 | 0.56 | 0.54 |
| June | 0.52 | 0.67 | 0.50 | 0.19 | 0.61 | 0.51 | 0.50 | 0.63 | 0.49 | 0.54 | 0.54 |
|  | (a) Seasonally adjusted series. |  |  |  | (b) A break in series occurred in Wholesale trade between the June and September 1999 quarters. See paragraphs 39 and 40 of the Explanatory Notes. |  |  |  |  |  |  |

11

| Quarter to | Manufacturing | Wholesale trade | Motor <br> vehicle retail and services | Accommodation | Transport and storage | Communication services | Property <br> and <br> business <br> services | Cultural <br> and <br> recreational services | Personal services | Total selected industries |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | ORIGINAL ESTIMATES (\$million) |  |  |  |  |  |  |  |  |  |
| 1998-1999 |  |  |  |  |  |  |  |  |  |  |
| March | 54243 | 45478 | 13066 | 1560 | 11419 | 2507 | 22416 | 4764 | 888 | 156341 |
| June | 56453 | 48364 | 13523 | 1633 | 11739 | 2618 | 23836 | 4765 | 1010 | 163941 |
| 1999-2000 |  |  |  |  |  |  |  |  |  |  |
| September | 58663 | 51913 | 13831 | 1690 | 13052 | 2546 | 26893 | 5374 | 1177 | 175139 |
| December | 62143 | 55296 | 14049 | 1806 | 13862 | 2822 | 25909 | 5428 | 1184 | 182499 |
| March | 58358 | 52597 | 14345 | 1813 | 13342 | 2952 | 25606 | 5496 | 1209 | 175718 |
| June | 62513 | 57162 | 14340 | 1856 | 13985 | 3078 | 27943 | 5823 | 1178 | 187878 |
| 2000-2001 |  |  |  |  |  |  |  |  |  |  |
| September | 64317 | 57529 | 12881 | 1953 | 13992 | 3229 | 27184 | 5627 | 1171 | 187883 |
| December | 66311 | 59622 | 14229 | 2170 | 14672 | 3646 | 29192 | 5928 | 1244 | 197014 |
| March | 59872 | 55337 | 14051 | 1901 | 13233 | 3794 | 28139 | 5151 | 1226 | 182704 |
| June | 65923 | 59706 | 14642 | 2011 | 14193 | 3704 | 31988 | 5970 | 1273 | 199410 |


| CHANGE FROM PREVIOUS QUARTER (\%) |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1998-1999 |  |  |  |  |  |  |  |  |  |  |
| June | 4.1 | 6.3 | 3.5 | 4.7 | 2.8 | 4.4 | 6.3 | 0.0 | 13.7 | 4.9 |
| 1999-2000 |  |  |  |  |  |  |  |  |  |  |
| September | 3.9 | 7.3 | 2.3 | 3.5 | 11.2 | -2.8 | 12.8 | 12.8 | 16.5 | 6.8 |
| December | 5.9 | 6.5 | 1.6 | 6.9 | 6.2 | 10.8 | -3.7 | 1.0 | 0.6 | 4.2 |
| March | -6.1 | -4.9 | 2.1 | 0.4 | -3.8 | 4.6 | -1.2 | 1.3 | 2.1 | -3.7 |
| June | 7.1 | 8.7 | 0.0 | 2.4 | 4.8 | 4.3 | 9.1 | 5.9 | -2.6 | 6.9 |
| 2000-2001 |  |  |  |  |  |  |  |  |  |  |
| September | 2.9 | 0.6 | -10.2 | 5.2 | 0.1 | 4.9 | -2.7 | -3.4 | -0.6 | 0.0 |
| December | 3.1 | 3.6 | 10.5 | 11.1 | 4.9 | 12.9 | 7.4 | 5.3 | 6.2 | 4.9 |
| March | -9.7 | -7.2 | -1.3 | -12.4 | -9.8 | 4.1 | -3.6 | -13.1 | -1.4 | -7.3 |
| June | 10.1 | 7.9 | 4.2 | 5.8 | 7.3 | -2.4 | 13.7 | 15.9 | 3.8 | 9.1 |

1 This publication contains estimates of the book value of inventories and income from sales of goods and services for selected industries in Australia. The series have been compiled from data collected by the Australian Bureau of Statistics (ABS) in its Quarterly Economic Activity Survey. The survey collects data from private businesses only. Prior to March quarter 2001, the data were collected in the Survey of Inventories, Sales and Services. For more information on the introduction of the Quarterly Economic Activity Survey, see the Information Paper: Improvements to Australian Bureau of Statistics Quarterly Business Indicators (Cat no. 5677.0).

2 The industries, classified according to the Australian and New Zealand Standard Industrial Classification 1993 (ANZSIC), included in this publication are:


Personal services (95) excluding: Video hire X salons (9526)

3 The scope excludes public sector business units (i.e. all departments, authorities and other organisations owned and controlled by Commonwealth, State and Local Government).

4 The Quarterly Economic Activity Survey, like most ABS economic collections, takes its frame from the ABS Business Register which is primarily based on registrations to the Australian Taxation Office's Pay As You Go Withholding (PAYGW) scheme (and prior to 1 July 2000 its Group Employer scheme). The frame is updated quarterly to take account of new businesses, businesses which have ceased employing, changes in employment levels, changes in industry and other general business changes.

5 Businesses which have ceased employing are identified when the Australian Taxation Office cancels their PAYGW registration (or previously their GE registration). In addition, from September quarter 1999, businesses which did not remit under the GE scheme for the previous five quarters were removed from the frame. A similar process will be adopted to remove businesses who do not remit under the PAYGW scheme.

6 The statistics in this publication exclude non-employing businesses. Though there are a substantial number of these businesses, it is expected that they would not contribute significantly to the estimates, although the impact would vary from industry to industry.

7 Inventories data are not collected from businesses with fewer than 20 employees, as smaller businesses have difficulty in providing accurate quarterly information on the level of their inventories. Estimates for these businesses are derived by applying sales information to an estimated sales to inventories ratio. The sales to inventories ratio is based on data from the current quarter for medium sized businesses, and benchmarked to data from the annual Economic Activity Survey for small businesses. Investigations indicate that this technique produces estimates of inventories of sufficient quality.

8 The introduction of The New Tax System has a number of significant implications for ABS business statistics, and these are discussed in the Information Paper: ABS Statistics And The New Tax System (Cat. no. 1358.0). The replacement of the GE registration process by PAYGW registration resulted in a number of changes to most business survey frames. However, an adjustment has been made to the Inventories and Sales series so that these changes will not affect broader level estimates of level and movement.

9 From the September quarter 2002, the ABS will make further changes including adopting a new units model and expanding its Register to include all units on the Australian Business Register, including non-employers. Further information on the impact of these changes will be provided before they are implemented.

10 The survey is conducted by mail on a quarterly basis. It is based on a random sample of approximately 16,000 units which is stratified by industry, state/territory and number of employees. All private sector units with over 250 employees, and other statistically significant units, such as joint venture partners, are included in the sample.

11 Respondents are asked to provide data on the same basis as their own management accounts. Where a selected unit does not respond in a given survey period, a value is estimated. If data are subsequently provided, the estimated value is replaced with the reported data. Aggregates are calculated from all data using the 'number raised' estimation technique. Data are edited at both individual unit level and at aggregate level.

12 Surveys are conducted in respect of each quarter and returns are completed during the 8 or 9 week period after the end of the quarter to which survey data relate e.g. December quarter survey returns are completed during January and February.

13 The survey frames and samples are revised each quarter to ensure that they remain representative of the survey population. The timing for creating each quarter's survey frame is consistent with that of other ABS business surveys. This provides for greater consistency when comparing data across surveys.
14 Additionally, with these revisions to the sample, some of the units from the sampled sector are rotated out of the survey and are replaced by others, to spread the reporting workload equitably.

15 Adjustments are included in the estimates to allow for lags in processing new businesses to the ABS Business Register. The adjustments contributed 3.7\% to the current quarter's estimate of reported inventories and $3.5 \%$ to reported Manufacturing and Wholesale trade sales.

16 This survey uses the management unit as the statistical unit. The management unit is the highest-level accounting unit within a business, having regard to industry homogeneity, for which accounts are maintained. In nearly all cases it coincides with the legal entity owning the business (i.e. company, partnership, trust, sole operator, etc.). In the case of large diversified businesses, however, there may be more than one management unit, each coinciding with a 'division' or 'line of business'. A division or line of business is recognised where separate and comprehensive accounts are compiled for it.

17 The Australian and New Zealand Standard Industrial Classification has been developed for use in both countries for the production and analysis of industry statistics. For more information, users are referred to Australian and New Zealand Standard Industrial Classification (ANZSIC), 1993 (Cat. no. 1292.0).

18 In order to classify inventories and income from sales of goods and services data by industry, each statistical unit (as defined above) is classified to the Australian and New Zealand Standard Industrial Classification industry in which it mainly operates.

19 Income from the sales of goods and services. This includes income from sales of goods by the business and income from services provided such as commission income, repair and service income and fees, management fees, rent leasing and hiring income, delivery and installation charges, income from consulting services, sponsorship income, membership/subscription fees and royalties income.

20 Manufacturing Sales. Income from sales of goods and services (as defined above) by businesses classified to the Manufacturing industry. From the March quarter 2001 issue of this publication this series replaced the Manufacturers' sales series which was more narrowly defined. A consistent time series on the new basis has been compiled back to the June quarter 1984.

21 Wholesale Trade Sales. From September quarter 1999, Wholesale trade sales comprises all income from sales of goods and services (as defined above) by businesses classified to the Wholesale trade industry. Prior to September quarter 1999, only the sales of goods by wholesalers was collected. No break in series was identified with this change.

22 Inventories. All inventories of materials etc., work in progress and finished goods owned by the business, whether held at locations of the business or elsewhere.

23 As part of a strategy to increase the range of information available relating to service industries, the ABS introduced quarterly experimental estimates relating to income from sales of goods and services for most service industries in the June quarter 2000 issue of this publication. This information was first collected in the March quarter 1999. Previously, quarterly data relating to sales had only been released in respect of the Manufacturing and Wholesale trade industries.

24 Income from sales of goods and services is the most readily available measure of output across different industries. This measure is consistent with that used in the Manufacturing and Wholesale trade sales series currently released in this publication. Table 11 presents experimental estimates of income from sales of goods and services for private sector businesses in the newly-measured service industries, as well as comparable data for the Manufacturing and Wholesale trade industries.
25 Users should treat the estimates in table 11 with caution. They are experimental at this stage and further analysis is required to ensure that they are robust and reliable indicators for measuring income in the selected service industries over time.

26 In addition to the current price data, the ABS has recently produced chain volume estimates of income from sales of goods and services for service industries. These are also experimental, and require further analysis to ensure they are of sufficient quality for publication. However, if users are interested in accessing the chain volume data, they should contact Mark Wise on Sydney 0292684241.

27 The chain volume measures appearing in this publication are annually reweighted chain Laspeyres indexes referenced to current price values in the chosen reference year (currently 1999-2000). The current price values may be thought of as being the product of a price and quantity. The value in chain volume terms can be derived by linking together movements in volumes, calculated using the average prices of the previous financial year and applying compound movements to the current price estimates of the reference year. Each year's quarter-to-quarter growth rates in the chain volume series are based on the prices of the previous financial year, except for those quarters of the latest incomplete year which are based upon the second most recent financial year. Quarterly chain volume estimates are benchmarked to annual chain volume estimates, so that the quarterly estimates for a financial year sum to the corresponding annual estimate.

28 With each release of the June quarter issue of this publication, a new base year is introduced and the reference year is advanced one year to coincide with it. This means that with the release of the June quarter 2002 issue of this publication, the chain volume measures for 2001-2002 will have 2000-2001 (the previous financial year) as their base year rather than 1999-2000, and the reference year will be 2000-2001. A change in the reference year changes levels but not growth rates for all periods. A change in the base year can result in revisions, small in most cases, to growth rates for the last year.

29 Chain volume measures are not generally additive. In other words, component chain volume measures do not, in general, sum to a total in the way original current price components do. For inventories and sales data, this means that the original chain volume estimates for industry groups will not add to total inventories and sales for Australia. In order to minimise the impact of this, the ABS uses the latest base year as the reference year. By adopting this approach, addivity does exist for the quarters following the reference year and non-additivity is relatively small for the quarters in the reference year and those immediately preceding it. For further information on chain volume measures refer to the Information Paper: Introduction of Chain Volume Measures in the Australian National Accounts (Cat. no. 5248.0).

SEASONAL ADJUSTMENT

30 Estimates provided in this publication are subject to non-sampling and sampling error. The most common way of quantifying sampling error is to calculate the standard error for the published estimate. In calculating the standard error, the common practice for the statistics in this publication has been to examine the most recent two years of the quarterly series, and to produce a smoothed standard error for that period for the major published aggregates. This approach takes account of the variability in standard error estimates for quarterly statistics. This estimated standard error is then used as an indication of the sampling error for the current published series. The data in the current publication have been sourced from the new Quarterly Economic Activity Survey, which has been conducted since March quarter 2001, and this does not allow for a smoothed estimate of the standard error to be calculated. Therefore standard errors are based upon the data in the currently published quarter. Details of standard errors are on pages 24 and 25 of this publication.

31 Non-sampling errors may arise as a result of errors in the reporting, recording or processing of the data and can occur even if there is a complete enumeration of the population. These errors can be introduced through inadequacies in the questionnaire, treatment of non-response, inaccurate reporting by respondents, errors in the application of survey procedures, incorrect recording of answers, and errors in data entry and processing.

32 It is difficult to measure the size of non-sampling errors. However, every effort is made in the design of the survey and development of survey procedures to minimise their effects.

33 The quarterly inventories and sales series in this publication are affected to some extent by seasonal influences and it is useful to recognise and take account of this element of variation.

34 Seasonal adjustment is a means of removing the estimated effects of normal seasonal variations for the series so that the effects of other influences can be more clearly recognised.

35 In the seasonal adjustment of the series, account has been taken of both normal seasonal factors (e.g. increase in retail inventories due to Christmas period) and, in the case of sales, also trading day effects (arising from the varying lengths of the quarters and the varying numbers of Sundays, Mondays, Tuesdays etc. in each quarter). Seasonal adjustment does not remove from the series the effect of irregular or non-seasonal influences (e.g. change in interest rates), and reflects the sampling and other errors to which the original figures are subject. Particular care should be taken in interpreting quarterly movements in the adjusted figures in this publication, especially for detailed industry estimates.

36 At least once each year the seasonally adjusted series are revised to take account of the latest available data. The most recent reanalysis is interim only, and takes into account the data collected up to and including the June quarter 2001. A more detailed reanalysis of data collected up to and including the June quarter 2001 will be undertaken before the September quarter 2001 issue. Data for periods after June quarter 2001 are seasonally adjusted on the basis of extrapolation of historical patterns. The nature of the seasonal adjustment is such that the magnitude of some revisions resulting from the reanalysis may be quite significant especially for data for more recent quarters.

37 Seasonally adjusted data are not available for income from sales of goods and services in table 11 as at least five years of data are required to discern a seasonal pattern.

PRIVITISATION OF
PUBLIC SECTOR UNITS

COMPARABILITY WITH NATIONAL ACCOUNTS ESTIMATES

38 The trend estimates are derived by applying a 7 -term Henderson moving average to the seasonally adjusted series. The 7 -term Henderson average (like all Henderson averages) is symmetric, but as the end of a time series is approached, asymmetric forms of the average are applied. Unlike the weights of the standard 7-term Henderson moving average, the weights employed here have been tailored to suit the particular characteristics of individual series. While the asymmetric weights enable trend estimates for recent quarters to be produced, it does result in revisions to the estimates for the most recent three quarters as additional observations become available. There may also be revisions because of changes in the original data and as a result of the re-estimation of the seasonal factors. For further information, see Information Paper: A Guide to Interpreting Time Series Monitoring Trend, An Overview (Cat. no. 1348.0) or contact the Assistant Director, Time Series Analysis on Canberra 0262526345.

39 Three significant privatised marketing authorities came into scope of the estimates in this publication from the September quarter 1999. The introduction of these units resulted in a break in series between the June and September quarters 1999 and comparison of the series over time should be undertaken with care.
40 The methodology used by the ABS has ensured that the trend series has not been distorted by the introduction of these units, although the shift in level is still evident between the June and September quarters 1999. For this reason, the trend estimates of movement have not been published for the Wholesale trade inventories, Total inventories and Wholesale trade sales series in respect of the September quarter 1999.

41 The data collected in the Quarterly Economic Activity Survey are used to compile estimates of the increase in book value of non-farm inventories in the quarterly and annual national accounts. Income from the sales of goods and services for the Manufacturing and Wholesale trade industries are used to help derive quarterly chain volume measures of gross value added for these industries. For further details see Australian National Accounts: Concepts, Sources and Methods (Cat. no. 5216.0).
42 The statistics shown for the movement in the book value of inventories in this publication will differ from corresponding data for private non-farm inventories shown in the national accounts publications because the national accounts estimates are benchmarked to the annual supply and use tables and include estimates for the construction and transport industries.

43 Income from the sales of goods and services now collected from the service industries is eventually expected to lead to an improvement in the quality of the quarterly national accounts chain volume estimates of gross value added for the service industries involved, after the series have been subject to further analysis.


## STANDARD ERRORS

The estimates in this publication are based on a sample drawn from units in the surveyed population. Because the entire population is not surveyed, the published estimates are subject to sampling error. The most common way of quantifying such sampling error is to calculate the standard error for the published estimate or statistic.

To illustrate, let us say that the published level estimate for total inventories is $\$ 77,000 \mathrm{~m}$ and the calculated standard error in this case is $\$ 965 \mathrm{~m}$. The standard error is then used to interpret the level estimate of $\$ 77,000 \mathrm{~m}$.

For instance, the standard error of $\$ 965 \mathrm{~m}$ indicates that:

- There are approximately two chances in three that the real value falls within the range $\$ 76,035 \mathrm{~m}$ to $\$ 77,965 \mathrm{~m}(\$ 77,000 \mathrm{~m} \pm \$ 965 \mathrm{~m})$.
- There are approximately nineteen chances in twenty that the real value falls within the ranges $\$ 75,070 \mathrm{~m}$ and $\$ 78,930 \mathrm{~m}(\$ 77,000 \mathrm{~m} \pm \$ 1,930 \mathrm{~m})$.

The real value in this case is the result we would obtain if we could enumerate the total population.

The following tables show the standard errors for national quarterly level estimates based upon the data in the current quarter.

|  | Inventories |
| :---: | :---: |
|  | \$m |
| Mining | 71 |
| Manufacturing | 433 |
| Wholesale trade | 853 |
| Retail trade | 744 |
| Other | 62 |
| Total selected industries | 1210 |


|  | Income <br> goods |
| :--- | ---: |
|  | $\$ \mathrm{~m}$ |
| Manufacturing | 805 |
| Wholesale trade | 1919 |
| Motor vehicle retailing services | 747 |
| Accommodation | 153 |
| Transport and storage | 548 |
| Communication services | 189 |
| Property and business services | 1281 |
| Cultural and recreation services | 476 |
| Personal services | 221 |
| Total selected industries | 2671 |

## STANDARD ERRORS continued

The following example illustrates how to use the standard error to interpret a movement estimate. Let us say that one quarter the published level estimate for total inventories is $\$ 77,000 \mathrm{~m}$, and the next quarter the published level estimate is $\$ 79,000 \mathrm{~m}$. In this example the calculated standard error for the movement estimate is $\$ 754 \mathrm{~m}$. The standard error is then used to interpret the published movement estimate of $+\$ 2,000 \mathrm{~m}$.

For instance, the standard error of $\$ 754 \mathrm{~m}$ indicates that:

- There are approximately two chances in three that the real movement over the two quarter period falls within the range $\$ 1,246 \mathrm{~m}$ to $\$ 2,754 \mathrm{~m}(\$ 2,000 \mathrm{~m} \pm \$ 754 \mathrm{~m})$.
- There are approximately nineteen chances in twenty that the real movement falls within the range $\$ 492 \mathrm{~m}$ to $\$ 3,508 \mathrm{~m}(\$ 2,000 \mathrm{~m} \pm \$ 1,508 \mathrm{~m})$.

The following tables shows the standard errors for national quarterly movement estimates based upon the data in the current quarter.


Income from sales of goods and services
\$m

Manufacturing 654
Wholesale trade 1679
Motor vehicle retailing services 671
Accommodation 120
Transport and storage 448
Communication sevices 206
Property and business services 956
Cultural and recreation services 285
Personal services 158
Total selected industries 2221

## EFFECT OF NEW SEASONALLY ADJUSTED ESTIMATES ON TREND ESTIMATES

TREND REVISIONS
The examples in the tables below show two scenarios and the consequent revisions to previous trend estimates of inventories owned by private businesses and Manufacturing and Wholesale trade sales.

1 The September quarter seasonally adjusted estimate of chain volume measures is higher than the June quarter estimate by the percentage shown.

2 The September quarter seasonally adjusted estimate of chain volume measures is lower than the June quarter estimate by the percentage shown.

The percentages chosen are the long term average movements, without regard to sign, in the seasonally adjusted series.


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CPI INFOLINE For current and historical Consumer Price Index data, call 1902981074 (call cost 77c per minute).

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[^0]:    R. W. Edwards

    Acting Australian Statistician

