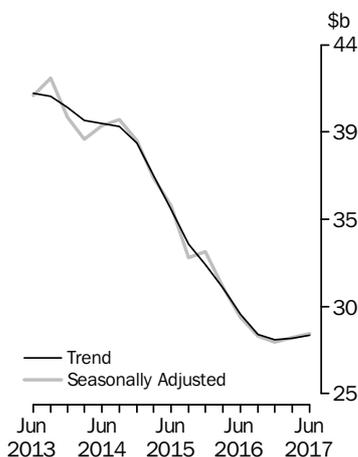


**PRIVATE NEW CAPITAL EXPENDITURE  
AND EXPECTED EXPENDITURE AUSTRALIA**

EMBARGO: 11.30AM (CANBERRA TIME) THURS 31 AUG 2017



**KEY FIGURES**

	<b>Jun Qtr 17</b>	<b>Mar Qtr 17 to Jun Qtr 17</b>	<b>Jun Qtr 16 to Jun Qtr 17</b>
	<b>\$m</b>	<b>% change</b>	<b>% change</b>
<b>Trend estimates<sup>(a)</sup></b>			
Total new capital expenditure	28 169	0.6	-4.0
Buildings and structures	15 800	0.3	-7.1
Equipment, plant and machinery	12 371	1.1	0.2
<b>Seasonally adjusted<sup>(a)</sup></b>			
Total new capital expenditure	28 275	0.8	-3.0
Buildings and structures	15 786	-0.6	-5.1
Equipment, plant and machinery	12 489	2.7	-0.1

(a) In volume terms

**KEY POINTS**

**ACTUAL EXPENDITURE (VOLUME TERMS)**

- The trend volume estimate for total new capital expenditure rose 0.6% in the June quarter 2017 while the seasonally adjusted estimate rose by 0.8%.
- The trend volume estimate for buildings and structures rose by 0.3% in the June quarter 2017 while the seasonally adjusted estimate fell by 0.6%.
- The trend volume estimate for equipment, plant and machinery rose by 1.1% in the June quarter 2017 while the seasonally adjusted estimate rose by 2.7%.

**EXPECTED EXPENDITURE (CURRENT PRICE TERMS)**

- This issue includes the seventh estimate (Estimate 7) for 2016-17 and the third estimate (Estimate 3) for 2017-18.
- Estimate 7 for 2016-17 is \$114,281m. This is 10.5% lower than Estimate 7 for 2015-16. Estimate 7 is 1.0% higher than Estimate 6 for 2016-17.
- Estimate 3 for 2017-18 is \$101,783m. This is 3.6% lower than Estimate 3 for 2016-17. Estimate 3 is 17.6% higher than Estimate 2 for 2017-18.
- See pages 7-10 for further commentary on expectations data.

**INQUIRIES**

Inquiries about these and related statistics, contact the National Information and Referral Service on 1300 135 070. The ABS Privacy Policy outlines how the ABS will handle any personal information that you provide to us.

# NOTES

## FORTHCOMING ISSUES

<i>ISSUE (Quarter)</i>	<i>RELEASE DATE</i>
Sept 2017	30 November 2017
December 2017	1 March 2018
March 2018	31 May 2018
June 2018	30 August 2018



## CHANGES TO THIS ISSUE

No changes to this issue.

## DATA NOTES

Mining projects tend to be complex in structure and comprise a number of different investment activities including exploration, engineering construction, plant and equipment and buildings. A feature article released in the March 2012 issue of *Private New Capital Expenditure and Expected Expenditure, Australia* (cat. no. 5625.0) provides a summary of the conceptual basis of the relevant ABS publications that measure investment in Australia, using a hypothetical mining project to illustrate how this investment is reflected in ABS data.



## ABBREVIATIONS

ABN	Australian Business Number
ABS	Australian Bureau of Statistics
ANZSIC	Australian and New Zealand Standard Industrial Classification
PAYG	pay-as-you-go tax
SNA08	System of National Accounts 2008 version
TAU	type of activity unit

David W. Kalisch  
Australian Statistician

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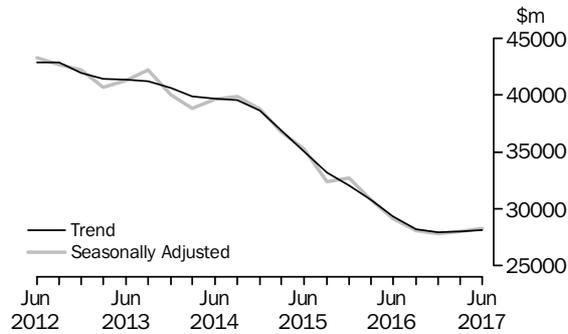
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# ACTUAL NEW CAPITAL EXPENDITURE IN VOLUME TERMS

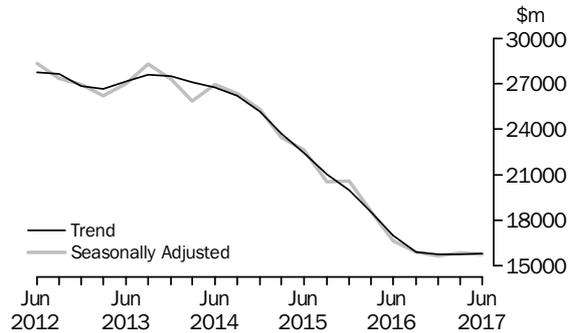
## TOTAL CAPITAL EXPENDITURE

The trend estimate for total new capital expenditure rose 0.6% in the June quarter 2017. By asset type, the trend estimate for buildings and structures rose 0.3% and equipment, plant and machinery rose 1.1%. The seasonally adjusted estimate for total new capital expenditure rose 0.8% in the June quarter 2017.



## BUILDINGS AND STRUCTURES

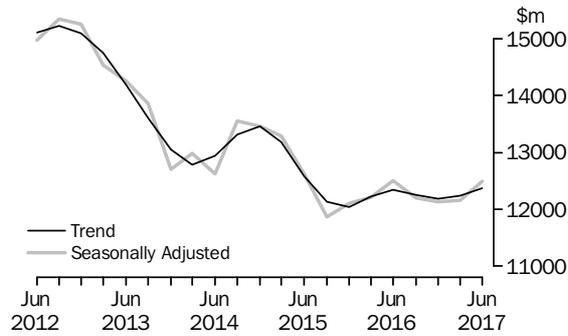
The trend estimate for buildings and structures rose 0.3% in the June quarter 2017. Buildings and structures for Mining fell 3.1%, Other Selected Industries rose 2.8% and Manufacturing rose 9.8%. The seasonally adjusted estimate for buildings and structures fell 0.6% in the June quarter 2017. Mining fell 3.8%, Other Selected Industries rose 2.8% and Manufacturing fell 0.3% in seasonally adjusted terms.



# ACTUAL NEW CAPITAL EXPENDITURE IN VOLUME TERMS *continued*

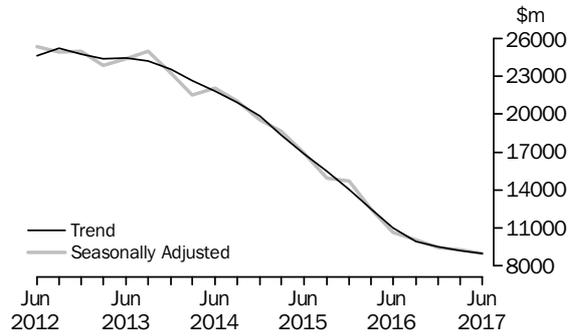
## EQUIPMENT, PLANT AND MACHINERY

The trend estimate for equipment, plant and machinery rose 1.1% in the June quarter 2017. Equipment, plant and machinery for Other Selected Industries rose 1.1%, Mining rose 0.8% and Manufacturing rose 1.3%. The seasonally adjusted estimate for equipment, plant and machinery rose 2.7% in the June quarter 2017. Other Selected Industries rose 2.7%, Manufacturing rose 2.1% and Mining rose 3.5% in seasonally adjusted terms.



## MINING

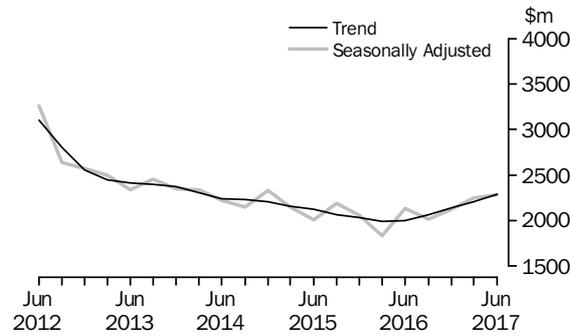
The trend estimate for Mining fell 2.8% in the June quarter 2017. Buildings and structures fell 3.1% and equipment, plant and machinery rose 0.8%. The seasonally adjusted estimate for Mining fell 2.8%. Buildings and structures fell 3.8% and equipment, plant and machinery rose 3.5% in seasonally adjusted terms.



# ACTUAL NEW CAPITAL EXPENDITURE IN VOLUME TERMS *continued*

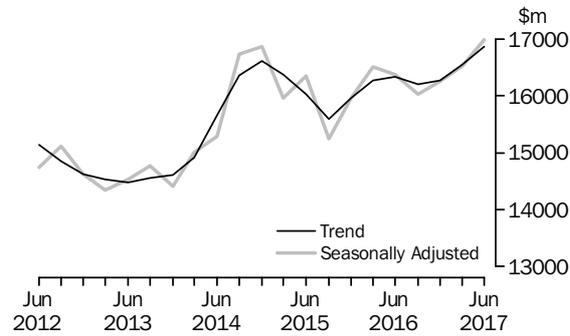
## MANUFACTURING

The trend estimate for Manufacturing rose 3.4% in the June quarter 2017. Buildings and structures rose 9.8% and equipment, plant and machinery rose 1.3%. The seasonally adjusted estimate for Manufacturing rose 1.4% in the June quarter 2017. Equipment, plant and machinery rose 2.1% and buildings and structures fell 0.3% in seasonally adjusted terms.



## OTHER SELECTED INDUSTRIES

The trend estimate for Other Selected Industries rose 2.0% in the June quarter 2017. Buildings and structures rose 2.8% and equipment, plant and machinery rose 1.1%. The seasonally adjusted estimate for Other Selected Industries rose 2.8% in the June quarter 2017. Equipment, plant and machinery rose 2.7% while buildings and structures rose 2.8% in seasonally adjusted terms.



# ACTUAL AND EXPECTED NEW CAPITAL EXPENDITURE

FINANCIAL YEARS AT  
CURRENT PRICES

The graphs below show the seven estimates of actual and expected expenditure for each financial year. The estimates appearing below relate to data contained in Tables 5 and 6. Advice about the application of realisation ratios to these estimates is in paragraph 26 to 29 of the Explanatory Notes.

The timing and construction of these estimates are as follows:

## TIMING & CONSTRUCTION OF SEVEN ESTIMATES

Estimate	Based on data reported at:	COMPOSITION OF ESTIMATE.....		
		Data on long-term expected expenditure	Data on short-term expected expenditure	Data on actual expenditure
1	Jan-Feb, 5-6 months before period begins	12 months	Nil	Nil
2	Apr-May, 2-3 months before period begins	12 months	Nil	Nil
3	Jul-Aug, at beginning of period	6 months	6 months	Nil
4	Oct-Nov, 3-4 months into period	6 months	3 months	3 months
5	Jan-Feb, 6-7 months into period	Nil	6 months	6 months
6	Apr-May, 9-10 months into period	Nil	3 months	9 months
7	Jul-Aug, at end of period	Nil	Nil	12 months

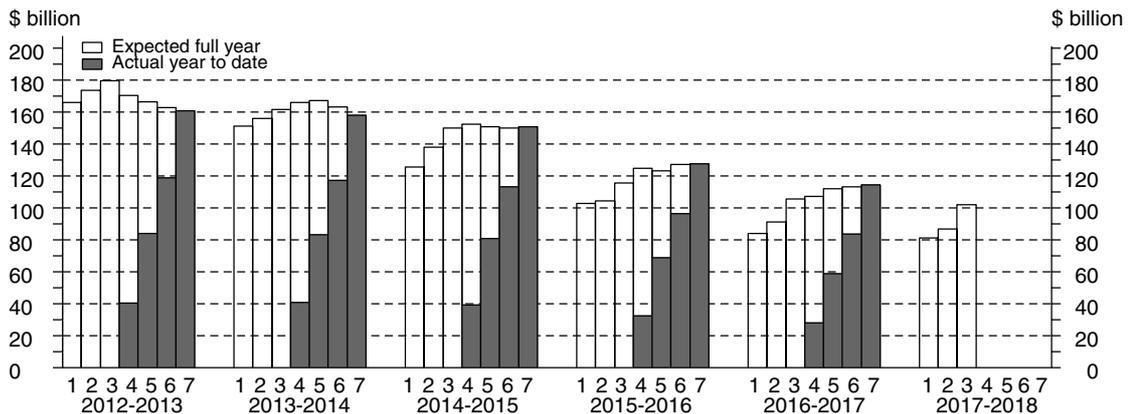
TOTAL CAPITAL  
EXPENDITURE

Estimate 7 for total capital expenditure in 2016-17 is \$114,281m. This is 10.5% lower than Estimate 7 for 2015-16. The main contributor to this decrease is Mining (-27.6%).

Estimate 7 is 1.0% higher than Estimate 6 for 2016-17. The main contributor to this increase is Other Selected Industries (2.1%).

Estimate 3 for total capital expenditure for 2017-18 is \$101,783m. This is 3.6% lower than Estimate 3 for 2016-17. The main contributor to the decrease is Mining (-22.2%).

Estimate 3 is 17.6% higher than Estimate 2 for 2017-18. The main contributor to the increase was Other Selected Industries (19.4%).



# ACTUAL AND EXPECTED NEW CAPITAL EXPENDITURE *continued*

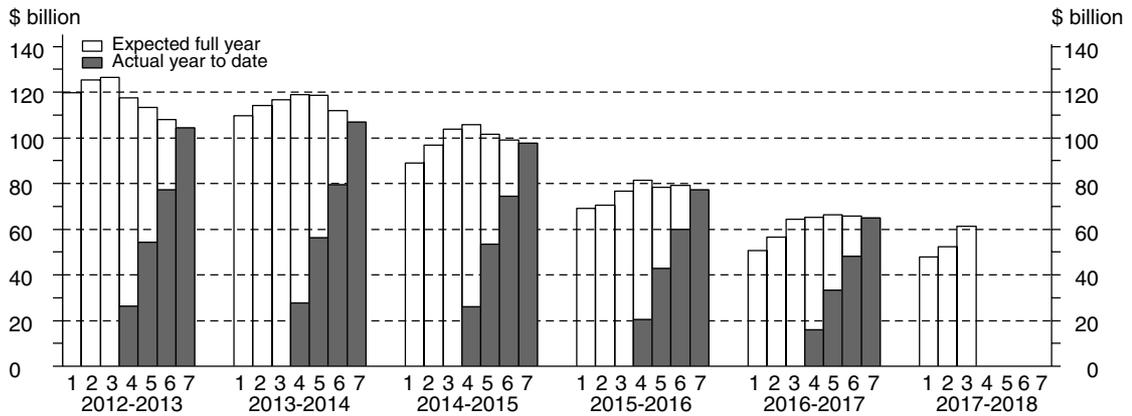
## BUILDINGS AND STRUCTURES

Estimate 7 for buildings and structures in 2016-17 is \$64,922m. This is 15.8% lower than Estimate 7 for 2015-16. The main contributor to this decrease is Mining (-30.2%).

Estimate 7 for buildings and structures is 1.4% lower than Estimate 6 for 2016-17. The main contributor to this decrease is Other Selected Industries (-3.2%).

Estimate 3 for buildings and structures for 2017-18 is \$61,348m. This is 4.8% lower than Estimate 3 for 2016-17. The main contributor to the decrease was Mining (-27.0%).

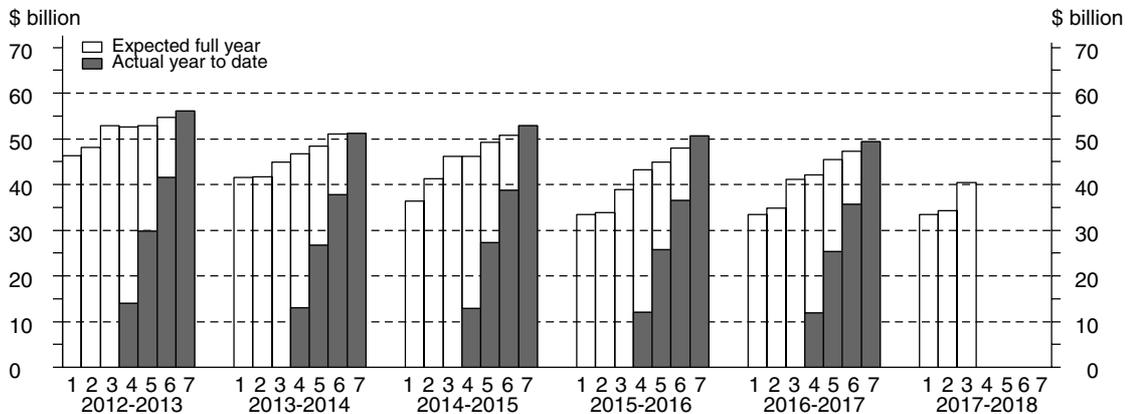
Estimate 3 is 17.4% higher than Estimate 2 for 2017-18. The main contributor to the increase was Other Selected Industries (18.7%).



## EQUIPMENT, PLANT AND MACHINERY

Estimate 7 for equipment, plant and machinery for 2016-17 is \$49,360m. This is 2.4% lower than Estimate 7 for 2015-16. The main contributor to this decrease is Other Selected Industries (-1.7%). Estimate 7 is 4.3% higher than Estimate 6 for 2016-17. The main contributor to this increase is Other Selected Industries (6.8%).

Estimate 3 for equipment, plant and machinery for 2017-18 is \$40,435m. This is 1.8% lower than Estimate 3 for 2016-17. The main contributor to this decrease is Other Selected Industries (-2.0%). Estimate 3 is 17.9% higher than Estimate 2 for 2017-18. The main contributor to the increase is Other Selected Industries (20.2%).

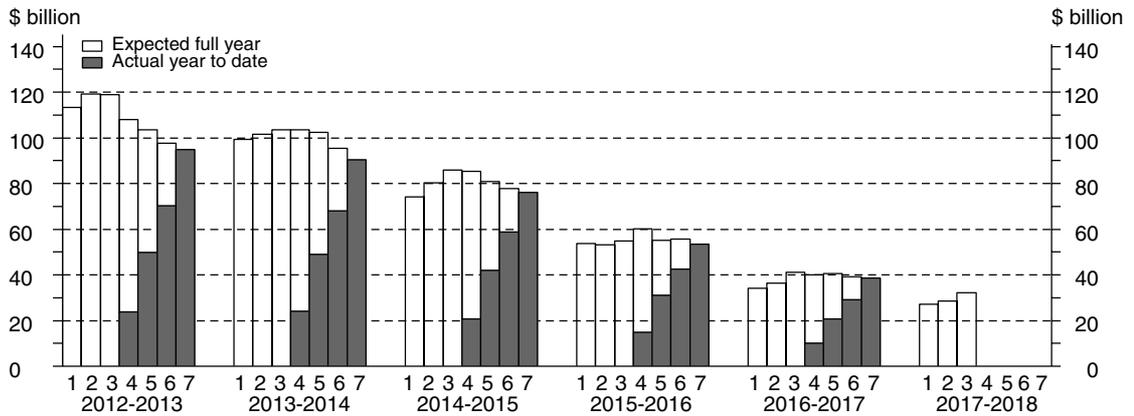


# ACTUAL AND EXPECTED NEW CAPITAL EXPENDITURE *continued*

## MINING

Estimate 7 for Mining for 2016-17 is \$38,668m. This is 27.6% lower than Estimate 7 for 2015-16. Estimate 7 is 1.0% lower than Estimate 6 for 2016-17. Buildings and structures is 0.2% higher and equipment, plant and machinery is 8.0% lower than the corresponding sixth estimate for 2016-17.

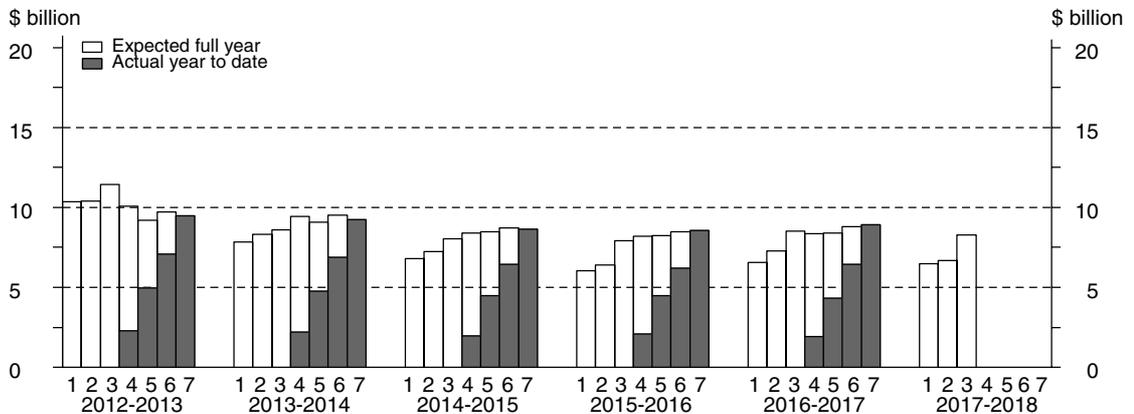
Estimate 3 for Mining for 2017-18 is \$32,058m. This is 22.2% lower than Estimate 3 for 2016-17. Estimate 3 is 12.8% higher than Estimate 2 for 2017-18. Buildings and structures is 15.6% higher and equipment, plant and machinery is 3.0% higher than the corresponding second estimate for 2017-18.



## MANUFACTURING

Estimate 7 for Manufacturing for 2016-17 is \$8,902m. This is 3.9% higher than Estimate 7 for 2015-16. Estimate 7 is 1.1% higher than Estimate 6 for 2016-17. Equipment, plant and machinery is 2.4% higher and buildings and structures is 2.3% lower than the corresponding sixth estimate for 2016-17.

Estimate 3 for Manufacturing for 2017-18 is \$8,282m. This is 2.6% lower than Estimate 3 for 2016-17. Estimate 3 is 24.2% higher than Estimate 2 for 2017-18. Equipment, plant and machinery is 26.6% higher and buildings and structures is 18.8% higher than the corresponding second estimate for 2017-18.

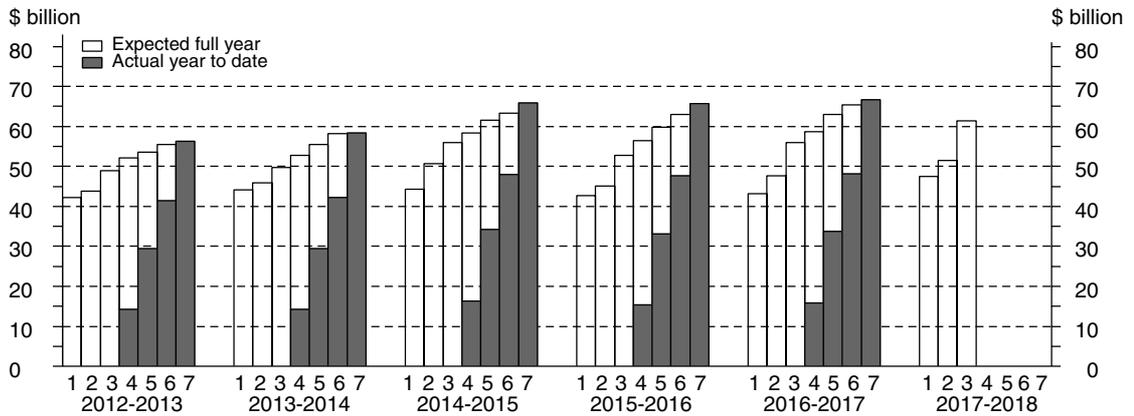


# ACTUAL AND EXPECTED NEW CAPITAL EXPENDITURE *continued*

## OTHER SELECTED INDUSTRIES

Estimate 7 for Other Selected Industries for 2016-17 is \$66,712m. This is 1.5% higher than Estimate 7 for 2015-16. Estimate 7 is 2.1% higher than Estimate 6 for 2016-17. Equipment, plant and machinery is 6.8% higher and buildings and structures is 3.2% lower than the corresponding sixth estimate for 2016-17.

Estimate 3 for Other Selected Industries for 2017-18 is \$61,443m. This is 10.0% higher than Estimate 3 for 2016-17. Estimate 3 is 19.4% higher than Estimate 2 for 2017-18. Equipment, plant and machinery is 20.2% higher and buildings and structures is 18.7% higher than the corresponding second estimate for 2017-18.



## ACTUAL AND EXPECTED EXPENDITURE, By type of asset and industry—Current prices

Period	BUILDINGS AND STRUCTURES				EQUIPMENT, PLANT AND MACHINERY				TOTAL			
	Mining	Manu- facturing	Other Selected Industries	Total	Mining	Manu- facturing	Other Selected Industries	Total	Mining	Manu- facturing	Other Selected Industries	Total
	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m
ORIGINAL (Actual)												
<b>2015-16</b>	47 515	1 950	27 646	77 111	5 874	6 616	38 090	50 581	53 389	8 566	65 737	127 692
<b>2016-17</b>	33 183	2 453	29 286	64 922	5 485	6 449	37 425	49 360	38 668	8 902	66 712	114 281
<b>2015-16</b>												
March	10 228	403	6 265	16 896	1 172	1 337	8 220	10 728	11 400	1 740	14 485	27 624
June	9 443	584	7 264	17 291	1 432	1 770	10 873	14 075	10 874	2 354	18 137	31 366
<b>2016-17</b>												
September	8 835	449	6 640	15 925	1 233	1 467	9 258	11 958	10 069	1 916	15 898	27 883
December	8 879	630	7 931	17 440	1 704	1 790	9 842	13 336	10 582	2 420	17 774	30 776
March	7 498	646	6 589	14 733	1 094	1 439	7 808	10 341	8 591	2 085	14 397	25 073
June	7 971	727	8 126	16 825	1 454	1 754	10 517	13 725	9 426	2 481	18 643	30 549
ORIGINAL (Expected)(a)												
<b>2017-18</b>												
6 mths to Dec	14 409	1 278	16 574	32 261	3 130	3 049	14 373	20 552	17 539	4 326	30 947	52 813
6 mths to Jun	11 124	1 180	16 783	29 087	3 395	2 776	13 713	19 884	14 519	3 955	30 496	48 971
Total fin year	25 533	2 457	33 358	61 348	6 525	5 824	28 086	40 435	32 058	8 282	61 443	101 783
SEASONALLY ADJUSTED (Actual)												
<b>2015-16</b>												
March	11 191	435	7 177	18 804	1 428	1 474	9 717	12 618	12 619	1 909	16 894	31 423
June	9 370	564	6 855	16 789	1 353	1 650	9 823	12 826	10 723	2 214	16 678	29 615
<b>2016-17</b>												
September	8 854	484	6 775	16 114	1 337	1 599	9 465	12 401	10 192	2 083	16 240	28 514
December	8 217	566	7 253	16 036	1 417	1 618	9 225	12 260	9 633	2 185	16 478	28 297
March	8 186	698	7 527	16 412	1 336	1 600	9 253	12 188	9 522	2 298	16 780	28 600
June	7 926	703	7 793	16 423	1 378	1 627	9 448	12 454	9 305	2 331	17 241	28 877
TREND (Actual)												
<b>2015-16</b>												
March	11 244	476	6 997	18 717	1 406	1 602	9 654	12 662	12 650	2 079	16 651	31 379
June	9 755	494	6 928	17 177	1 368	1 579	9 711	12 658	11 123	2 072	16 639	29 834
<b>2016-17</b>												
September	8 704	530	6 937	16 171	1 359	1 605	9 503	12 467	10 063	2 135	16 440	28 638
December	8 341	586	7 178	16 105	1 367	1 616	9 326	12 309	9 707	2 202	16 503	28 413
March	8 107	654	7 508	16 269	1 371	1 611	9 286	12 268	9 478	2 264	16 794	28 537
June	7 919	724	7 759	16 401	1 370	1 619	9 346	12 335	9 289	2 343	17 091	28 723

(a) Not directly comparable with estimates of actual expenditure due to likely over/under realisation. See paragraphs 26 to 29 of the Explanatory Notes.

## ACTUAL AND EXPECTED EXPENDITURE, By detailed industry—Current prices

Period	Mining	Manufacturing	Electricity, Gas, Water and Waste Services	Construction	Wholesale Trade	Retail Trade	Transport, Postal and Warehousing
	\$m	\$m	\$m	\$m	\$m	\$m	\$m
ORIGINAL (Actual)							
<b>2015-16</b>	53 389	8 566	5 406	5 437	4 243	5 152	10 529
<b>2016-17</b>	38 668	8 902	5 384	6 264	4 152	5 770	9 957
<b>2015-16</b>							
March	11 400	1 740	1 134	^ 1 266	^ 1 030	984	2 113
June	10 874	2 354	1 378	^ 1 922	^ 1 172	1 438	2 597
<b>2016-17</b>							
September	10 069	1 916	1 207	^ 1 306	962	1 285	2 425
December	10 582	2 420	1 410	^ 1 738	1 240	1 671	2 506
March	8 591	2 085	1 248	^ 1 113	856	1 174	2 172
June	9 426	2 481	1 519	^ 2 107	1 093	1 641	2 854
ORIGINAL (Expected)(a)							
<b>2017-18</b>							
6 mths to Dec	17 539	4 326	3 211	^ 1 690	1 928	2 442	5 752
6 mths to Jun	14 519	3 955	3 092	^ 1 517	^ 1 674	3 040	4 699
Total fin year	32 058	8 282	6 303	3 207	3 602	5 482	10 451
SEASONALLY ADJUSTED (Actual)							
<b>2015-16</b>							
March	12 619	1 909	1 319	1 431	1 231	1 269	2 677
June	10 723	2 214	1 298	1 561	1 136	1 319	2 374
<b>2016-17</b>							
September	10 192	2 083	1 232	1 512	1 005	1 302	2 316
December	9 633	2 185	1 288	1 721	1 045	1 444	2 326
March	9 522	2 298	1 449	1 266	1 038	1 513	2 656
June	9 305	2 331	1 421	1 697	1 075	1 509	2 692
TREND (Actual)							
<b>2015-16</b>							
March	12 650	2 079	1 344	1 362	1 124	1 269	2 569
June	11 123	2 072	1 277	1 530	1 127	1 293	2 410
<b>2016-17</b>							
September	10 063	2 135	1 265	1 579	1 069	1 350	2 339
December	9 707	2 202	1 317	1 540	1 031	1 423	2 409
March	9 478	2 264	1 387	1 523	1 044	1 488	2 562
June	9 289	2 343	1 448	1 541	1 062	1 530	2 680

^ estimate has a relative standard error of 10% to less than 25% and should be used with caution

(a) Not directly comparable with estimates of actual expenditure due to likely over/under realisation. See paragraphs 26 to 29 of the Explanatory Notes.

ACTUAL AND EXPECTED EXPENDITURE, By detailed industry—Current prices *continued*

Period	Information Media and Telecommunications	Financial and Insurance Services	Rental, Hiring and Real Estate Services	Professional, Scientific and Technical Services	Other Selected Services	Total
	\$m	\$m	\$m	\$m	\$m	\$m
ORIGINAL (Actual)						
<b>2015-16</b>	6 413	3 950	12 899	3 735	7 972	127 692
<b>2016-17</b>	7 787	3 609	12 784	3 336	7 669	114 281
<b>2015-16</b>						
March	1 671	773	2 804	^ 970	1 740	27 624
June	1 505	1 050	3 786	^ 1 044	2 245	31 366
<b>2016-17</b>						
September	1 804	1 046	3 246	^ 753	^ 1 864	27 883
December	1 962	970	3 463	836	1 978	30 776
March	1 860	815	2 727	^ 785	1 647	25 073
June	2 161	778	3 348	961	2 180	30 549
ORIGINAL (Expected)(a)						
<b>2017-18</b>						
6 mths to Dec	3 784	1 814	^ 5 920	^ 1 477	^ 2 928	52 813
6 mths to Jun	4 380	1 632	^ 6 063	^ 1 253	^ 3 148	48 971
Total fin year	8 164	3 446	11 982	2 731	6 076	101 783
SEASONALLY ADJUSTED (Actual)						
<b>2015-16</b>						
March	1 699	894	3 249	1 063	2 061	31 423
June	1 533	1 043	3 481	961	1 971	29 615
<b>2016-17</b>						
September	1 830	1 003	3 355	785	1 899	28 514
December	1 858	887	3 181	809	1 919	28 297
March	1 891	950	3 195	862	1 959	28 600
June	2 223	772	3 083	869	1 900	28 877
TREND (Actual)						
<b>2015-16</b>						
March	1 642	998	3 318	996	2 028	31 379
June	1 671	993	3 396	954	1 987	29 834
<b>2016-17</b>						
September	1 736	980	3 347	846	1 928	28 638
December	1 852	945	3 250	817	1 921	28 413
March	1 989	880	3 156	839	1 926	28 537
June	2 115	825	3 096	869	1 926	28 723

^ estimate has a relative standard error of 10% to less than 25% and should be used with caution

(a) Not directly comparable with estimates of actual expenditure due to likely over/under realisation. See paragraphs 26 to 29 of the Explanatory Notes.

## ACTUAL EXPENDITURE, By type of asset and industry—Chain volume measures(a)

Period	ASSET			INDUSTRY			
	Buildings and Structures	Equipment, Plant and Machinery	Total	Mining	Manufacturing	Other Selected Industries	Total
	\$m	\$m	\$m	\$m	\$m	\$m	\$m
ORIGINAL							
<b>2013-14</b>	108 451	52 171	160 641	91 746	9 375	59 476	160 641
<b>2014-15</b>	97 729	52 925	150 655	76 117	8 628	65 910	150 655
<b>2015-16</b>	76 394	48 678	125 072	52 746	8 227	64 099	125 072
<b>2016-17</b>	63 249	48 984	112 234	37 785	8 672	65 777	112 234
<b>2014-15</b>							
June	23 209	13 762	36 970	17 183	2 133	17 658	36 970
<b>2015-16</b>							
September	20 310	11 463	31 773	14 790	2 017	14 966	31 773
December	22 258	13 147	35 404	15 955	2 271	17 178	35 404
March	16 704	10 375	27 079	11 246	1 672	14 160	27 079
June	17 121	13 694	30 816	10 754	2 267	17 795	30 816
<b>2016-17</b>							
September	15 730	11 747	27 478	9 933	1 856	15 688	27 478
December	17 045	13 174	30 219	10 352	2 347	17 519	30 219
March	14 283	10 314	24 597	8 367	2 040	14 190	24 597
June	16 191	13 750	29 940	9 132	2 428	18 381	29 940
SEASONALLY ADJUSTED							
<b>2014-15</b>							
June	22 621	12 625	35 234	16 892	2 005	16 351	35 234
<b>2015-16</b>							
September	20 523	11 863	32 386	14 948	2 191	15 247	32 386
December	20 617	12 105	32 721	14 691	2 062	15 968	32 721
March	18 613	12 207	30 820	12 477	1 838	16 505	30 820
June	16 642	12 503	29 144	10 630	2 135	16 379	29 144
<b>2016-17</b>							
September	15 915	12 200	28 114	10 063	2 020	16 032	28 114
December	15 662	12 139	27 802	9 432	2 121	16 248	27 802
March	15 887	12 157	28 044	9 275	2 250	16 519	28 044
June	15 786	12 489	28 275	9 015	2 281	16 978	28 275
TREND							
<b>2014-15</b>							
June	22 454	12 585	35 034	16 882	2 125	16 032	35 034
<b>2015-16</b>							
September	21 021	12 131	33 150	15 499	2 070	15 587	33 150
December	19 995	12 043	32 037	14 046	2 033	15 957	32 037
March	18 545	12 223	30 768	12 507	1 996	16 263	30 768
June	16 999	12 340	29 340	11 000	1 999	16 341	29 340
<b>2016-17</b>							
September	15 942	12 258	28 200	9 929	2 069	16 202	28 200
December	15 741	12 190	27 934	9 522	2 143	16 272	27 934
March	15 758	12 232	27 990	9 234	2 212	16 545	27 990
June	15 800	12 371	28 169	8 978	2 288	16 871	28 169

(a) Reference year for chain volume measures is 2014-15.

ACTUAL EXPENDITURE, By type of asset and industry—Percentage change, Chain volume measures(a)

Period	ASSET			INDUSTRY			
	Buildings and Structures	Equipment, Plant and Machinery	Total	Mining	Manufacturing	Other Selected Industries	Total
	%	%	%	%	%	%	%
ORIGINAL							
<b>2013-14</b>	0.8	-12.1	-3.7	-6.5	-6.8	1.5	-3.7
<b>2014-15</b>	-9.9	1.4	-6.2	-17.0	-8.0	10.8	-6.2
<b>2015-16</b>	-21.8	-8.0	-17.0	-30.7	-4.6	-2.7	-17.0
<b>2016-17</b>	-17.2	0.6	-10.3	-28.4	5.4	2.6	-10.3
<b>2014-15</b>							
June	9.9	21.4	13.9	2.3	9.1	28.8	13.9
<b>2015-16</b>							
September	-12.5	-16.7	-14.1	-13.9	-5.5	-15.2	-14.1
December	9.6	14.7	11.4	7.9	12.6	14.8	11.4
March	-25.0	-21.1	-23.5	-29.5	-26.4	-17.6	-23.5
June	2.5	32.0	13.8	-4.4	35.5	25.7	13.8
<b>2016-17</b>							
September	-8.1	-14.2	-10.8	-7.6	-18.1	-11.8	-10.8
December	8.4	12.1	10.0	4.2	26.4	11.7	10.0
March	-16.2	-21.7	-18.6	-19.2	-13.1	-19.0	-18.6
June	13.4	33.3	21.7	9.1	19.0	29.5	21.7
SEASONALLY ADJUSTED							
<b>2014-15</b>							
June	-3.6	-5.0	-4.2	-9.4	-6.6	2.5	-4.2
<b>2015-16</b>							
September	-9.3	-6.0	-8.1	-11.5	9.3	-6.8	-8.1
December	0.5	2.0	1.0	-1.7	-5.9	4.7	1.0
March	-9.7	0.8	-5.8	-15.1	-10.9	3.4	-5.8
June	-10.6	2.4	-5.4	-14.8	16.2	-0.8	-5.4
<b>2016-17</b>							
September	-4.4	-2.4	-3.5	-5.3	-5.4	-2.1	-3.5
December	-1.6	-0.5	-1.1	-6.3	5.0	1.4	-1.1
March	1.4	0.1	0.9	-1.7	6.1	1.7	0.9
June	-0.6	2.7	0.8	-2.8	1.4	2.8	0.8
TREND							
<b>2014-15</b>							
June	-5.3	-4.5	-5.0	-8.0	-1.7	-2.1	-5.0
<b>2015-16</b>							
September	-6.4	-3.6	-5.4	-8.2	-2.6	-2.8	-5.4
December	-4.9	-0.7	-3.4	-9.4	-1.8	2.4	-3.4
March	-7.3	1.5	-4.0	-11.0	-1.8	1.9	-4.0
June	-8.3	1.0	-4.6	-12.1	0.1	0.5	-4.6
<b>2016-17</b>							
September	-6.2	-0.7	-3.9	-9.7	3.5	-0.8	-3.9
December	-1.3	-0.6	-0.9	-4.1	3.6	0.4	-0.9
March	0.1	0.3	0.2	-3.0	3.2	1.7	0.2
June	0.3	1.1	0.6	-2.8	3.5	2.0	0.6

(a) Reference year for chain volume measures is 2014-15.

EXPECTED EXPENDITURE AND REALISATION RATIOS, By type of asset—Current Prices

Financial Year	12 months expectation as reported in Jan-Feb of previous financial year (Estimate 1)	12 months expectation as reported in Apr-May of previous financial year (Estimate 2)	12 months expectation as reported in Jul-Aug (Estimate 3)	3 months actual and 9 months expectation as reported in Oct-Nov (Estimate 4)	6 months actual and 6 months expectation as reported in Jan-Feb (Estimate 5)	9 months actual and 3 months expectation as reported in Apr-May (Estimate 6)	12 months actual (Estimate 7)
<b>BUILDINGS AND STRUCTURES (\$ million)</b>							
2012-13	119 640	125 271	126 439	117 631	113 418	108 037	104 404
2013-14	109 775	114 042	116 782	118 995	118 538	112 038	106 820
2014-15	89 051	96 787	103 842	105 873	101 534	99 060	97 729
2015-16	69 097	70 607	76 759	81 484	78 344	79 159	77 111
2016-17	50 563	56 541	64 424	65 099	66 355	65 866	64 922
2017-18	47 783	52 263	61 348	n/a	n/a	n/a	n/a
<b>BUILDINGS AND STRUCTURES (Realisation Ratio)(a)</b>							
2012-13	0.87	0.83	0.83	0.89	0.92	0.97	1.00
2013-14	0.97	0.94	0.91	0.90	0.90	0.95	1.00
2014-15	1.10	1.01	0.94	0.92	0.96	0.99	1.00
2015-16	1.12	1.09	1.00	0.95	0.98	0.97	1.00
2016-17	1.28	1.15	1.01	1.00	0.98	0.99	1.00
<b>EQUIPMENT, PLANT AND MACHINERY (\$ million)</b>							
2012-13	46 252	48 185	52 841	52 596	52 891	54 751	56 126
2013-14	41 490	41 649	44 838	46 727	48 467	51 100	51 158
2014-15	36 326	41 273	46 105	46 221	49 264	50 754	52 925
2015-16	33 474	33 893	38 944	43 238	44 901	48 023	50 581
2016-17	33 374	34 768	41 175	42 080	45 400	47 311	49 360
2017-18	33 412	34 296	40 435	n/a	n/a	n/a	n/a
<b>EQUIPMENT, PLANT AND MACHINERY (Realisation Ratio)(a)</b>							
2012-13	1.21	1.16	1.06	1.07	1.06	1.03	1.00
2013-14	1.23	1.23	1.14	1.09	1.06	1.00	1.00
2014-15	1.46	1.28	1.15	1.15	1.07	1.04	1.00
2015-16	1.51	1.49	1.30	1.17	1.13	1.05	1.00
2016-17	1.48	1.42	1.20	1.17	1.09	1.04	1.00
<b>TOTAL (\$ million)</b>							
2012-13	165 892	173 457	179 279	170 227	166 308	162 789	160 530
2013-14	151 265	155 691	161 621	165 722	167 005	163 138	157 978
2014-15	125 378	138 060	149 948	152 094	150 798	149 814	150 655
2015-16	102 571	104 499	115 704	124 722	123 245	127 182	127 692
2016-17	83 937	91 309	105 599	107 179	111 755	113 177	114 281
2017-18	81 195	86 559	101 783	n/a	n/a	n/a	n/a
<b>TOTAL (Realisation Ratio)(a)</b>							
2012-13	0.97	0.93	0.90	0.94	0.97	0.99	1.00
2013-14	1.04	1.01	0.98	0.95	0.95	0.97	1.00
2014-15	1.20	1.09	1.00	0.99	1.00	1.01	1.00
2015-16	1.24	1.22	1.10	1.02	1.04	1.00	1.00
2016-17	1.36	1.25	1.08	1.07	1.02	1.01	1.00
<b>TOTAL (Percentage change over corresponding estimate for previous financial year)</b>							
2012-13	23.0	23.8	19.3	3.1	2.8	2.4	3.7
2013-14	-8.8	-10.2	-9.8	-2.6	0.4	0.2	-1.6
2014-15	-17.1	-11.3	-7.2	-8.2	-9.7	-8.2	-4.6
2015-16	-18.2	-24.3	-22.8	-18.0	-18.3	-15.1	-15.2
2016-17	-18.2	-12.6	-8.7	-14.1	-9.3	-11.0	-10.5
2017-18	-3.3	-5.2	-3.6	n/a	n/a	n/a	n/a

n/a not yet available

(a) Ratio of actual expenditure for the financial year to each progressive estimate for the financial year. See paragraphs 26 to 29 of the Explanatory Notes.

EXPECTED EXPENDITURE AND REALISATION RATIOS, By industry—Current prices

<i>Financial Year</i>	<i>12 months expectation as reported in Jan-Feb of previous financial year (Estimate 1)</i>	<i>12 months expectation as reported in Apr-May of previous financial year (Estimate 2)</i>	<i>12 months expectation as reported in Jul-Aug (Estimate 3)</i>	<i>3 months actual and 9 months expectation as reported in Oct-Nov (Estimate 4)</i>	<i>6 months actual and 6 months expectation as reported in Jan-Feb (Estimate 5)</i>	<i>9 months actual and 3 months expectation as reported in Apr-May (Estimate 6)</i>	<i>12 months actual (Estimate 7)</i>
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MINING (\$ million)

2012-13	113 396	119 290	118 984	108 065	103 622	97 587	94 710
2013-14	99 224	101 482	103 379	103 608	102 528	95 365	90 393
2014-15	74 199	80 201	85 927	85 327	80 752	77 832	76 117
2015-16	53 820	53 058	54 991	60 110	55 251	55 696	53 389
2016-17	34 143	36 438	41 224	40 112	40 465	39 059	38 668
2017-18	27 244	28 427	32 058	nya	nya	nya	nya

MINING (Realisation Ratio)(a)

2012-13	0.84	0.79	0.80	0.88	0.91	0.97	1.00
2013-14	0.91	0.89	0.87	0.87	0.88	0.95	1.00
2014-15	1.03	0.95	0.89	0.89	0.94	0.98	1.00
2015-16	0.99	1.01	0.97	0.89	0.97	0.96	1.00
2016-17	1.13	1.06	0.94	0.96	0.96	0.99	1.00

MANUFACTURING (\$ million)

2012-13	10 353	10 394	11 414	10 074	9 204	9 700	9 470
2013-14	7 838	8 304	8 592	9 422	9 059	9 524	9 229
2014-15	6 814	7 234	8 053	8 386	8 470	8 703	8 628
2015-16	6 021	6 410	7 931	8 199	8 244	8 468	8 566
2016-17	6 563	7 269	8 499	8 345	8 378	8 809	8 902
2017-18	6 474	6 670	8 282	nya	nya	nya	nya

MANUFACTURING (Realisation Ratio)(a)

2012-13	0.91	0.91	0.83	0.94	1.03	0.98	1.00
2013-14	1.18	1.11	1.07	0.98	1.02	0.97	1.00
2014-15	1.27	1.19	1.07	1.03	1.02	0.99	1.00
2015-16	1.42	1.34	1.08	1.04	1.04	1.01	1.00
2016-17	1.36	1.22	1.05	1.07	1.06	1.01	1.00

OTHER SELECTED INDUSTRIES (\$ million)

2012-13	42 143	43 772	48 882	52 088	53 482	55 502	56 350
2013-14	44 203	45 905	49 650	52 692	55 418	58 248	58 356
2014-15	44 364	50 624	55 968	58 381	61 576	63 280	65 910
2015-16	42 730	45 032	52 781	56 413	59 750	63 019	65 737
2016-17	43 231	47 602	55 877	58 722	62 912	65 308	66 712
2017-18	47 477	51 461	61 443	nya	nya	nya	nya

OTHER SELECTED INDUSTRIES (Realisation Ratio)(a)

2012-13	1.34	1.29	1.15	1.08	1.05	1.02	1.00
2013-14	1.32	1.27	1.18	1.11	1.05	1.00	1.00
2014-15	1.49	1.30	1.18	1.13	1.07	1.04	1.00
2015-16	1.54	1.46	1.25	1.17	1.10	1.04	1.00
2016-17	1.54	1.40	1.19	1.14	1.06	1.02	1.00

nya not yet available

(a) Ratio of actual expenditure for the financial year to each progressive estimate for the financial year. See paragraphs 26 to 29 of the Explanatory Notes.

## 7

## RATIOS OF ACTUAL TO SHORT TERM EXPECTATIONS (a), By type of asset and industry—Current prices

<i>Financial Year</i>	3 MONTHS ENDING		6 MONTHS ENDING	
	<i>31 December (collected in September Survey)</i>	<i>30 June (collected in March Survey)</i>	<i>31 December (collected in June Survey)</i>	<i>30 June (collected in December survey)</i>
TYPE OF ASSET				
<b>Buildings and Structures</b>				
2012-13	0.90	0.88	0.87	0.85
2013-14	0.93	0.84	0.95	0.81
2014-15	0.93	0.95	0.97	0.92
2015-16	0.88	0.89	0.97	0.97
2016-17	0.97	0.95	0.97	0.96
<b>Equipment, Plant and Machinery</b>				
2012-13	1.04	1.10	1.07	1.14
2013-14	1.08	1.00	1.16	1.12
2014-15	1.15	1.18	1.15	1.17
2015-16	1.13	1.22	1.28	1.30
2016-17	1.19	1.18	1.19	1.20
<b>Total</b>				
2012-13	0.95	0.95	0.93	0.93
2013-14	0.97	0.89	1.01	0.89
2014-15	0.99	1.02	1.03	1.00
2015-16	0.96	1.02	1.07	1.08
2016-17	1.05	1.04	1.05	1.05
TYPE OF INDUSTRY				
<b>Mining</b>				
2012-13	0.91	0.89	0.84	0.83
2013-14	0.93	0.82	0.93	0.77
2014-15	0.89	0.91	0.93	0.88
2015-16	0.84	0.83	0.96	0.92
2016-17	0.98	0.96	0.93	0.91
<b>Manufacturing</b>				
2012-13	0.84	0.91	0.88	1.06
2013-14	0.95	0.89	1.10	1.04
2014-15	0.97	0.97	1.07	1.04
2015-16	1.00	1.04	1.04	1.09
2016-17	0.92	1.04	0.97	1.13
<b>Other selected industries</b>				
2012-13	1.05	1.06	1.14	1.12
2013-14	1.06	1.01	1.15	1.11
2014-15	1.15	1.17	1.18	1.16
2015-16	1.10	1.18	1.20	1.22
2016-17	1.12	1.08	1.16	1.13
<b>Total</b>				
2012-13	0.95	0.95	0.93	0.93
2013-14	0.97	0.89	1.01	0.89
2014-15	0.99	1.02	1.03	1.00
2015-16	0.96	1.02	1.07	1.08
2016-17	1.05	1.04	1.05	1.05

(a) For more information on Realisation Ratios see paragraphs 26 to 29 of the Explanatory Notes.

## ACTUAL EXPENDITURE ON BUILDINGS AND STRUCTURES, By state—Current prices

<i>Period</i>	<i>New South Wales</i>	<i>Victoria</i>	<i>Queensland</i>	<i>South Australia</i>	<i>Western Australia</i>	<i>Tasmania</i>	<i>Northern Territory</i>	<i>Australian Capital Territory</i>	<i>Total</i>
	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m
ORIGINAL									
<b>2013–14</b>	9 606	6 822	34 064	3 346	46 060	268	6 337	318	106 820
<b>2014–15</b>	11 185	7 145	23 268	3 273	46 395	272	5 831	360	97 729
<b>2015–16</b>	11 669	7 338	14 173	2 549	35 658	357	4 991	376	77 111
<b>2016–17</b>	11 741	8 977	13 489	2 526	22 068	403	5 288	430	64 922
<b>2014–15</b>									
June	2 978	1 950	4 769	^ 576	11 459	87	1 316	107	23 242
<b>2015–16</b>									
September	2 444	1 757	3 953	^ 596	10 104	77	1 359	101	20 391
December	3 072	1 922	4 471	^ 749	10 793	105	1 331	90	22 533
March	2 791	1 667	2 784	^ 572	7 859	76	1 067	81	16 896
June	3 361	1 993	2 965	^ 632	6 902	^ 100	1 234	^ 104	17 291
<b>2016–17</b>									
September	2 592	2 054	3 431	^ 593	5 932	77	1 149	98	15 925
December	3 147	2 400	3 660	627	6 046	^ 130	1 319	111	17 440
March	2 760	2 072	2 908	580	4 743	^ 82	1 479	^ 108	14 733
June	3 243	2 451	3 490	726	5 347	113	1 341	113	16 825
SEASONALLY ADJUSTED									
<b>2014–15</b>									
June	2 812	1 877	4 663	563	11 174	85	1 316	107	22 601
<b>2015–16</b>									
September	2 575	1 794	3 952	595	10 238	82	1 359	101	20 544
December	2 847	1 777	3 975	676	9 994	89	1 331	90	20 815
March	3 063	1 853	3 272	657	8 631	92	1 067	81	18 804
June	3 154	1 910	2 900	620	6 756	94	1 234	104	16 789
<b>2016–17</b>									
September	2 754	2 110	3 429	593	6 032	82	1 149	98	16 114
December	2 909	2 215	3 242	564	5 563	111	1 319	111	16 036
March	3 033	2 306	3 431	668	5 214	102	1 479	108	16 412
June	3 027	2 339	3 411	713	5 240	104	1 341	113	16 423
TREND									
<b>2014–15</b>									
June	2 631	1 857	4 571	622	11 139	73	1 341	101	22 454
<b>2015–16</b>									
September	2 691	1 810	4 123	599	10 570	84	1 314	98	21 092
December	2 874	1 794	3 704	638	9 670	90	1 267	92	20 131
March	3 003	1 836	3 338	655	8 453	90	1 186	89	18 717
June	3 019	1 945	3 155	621	7 100	91	1 149	95	17 177
<b>2016–17</b>									
September	2 930	2 084	3 179	589	6 026	94	1 216	103	16 171
December	2 910	2 206	3 327	603	5 546	100	1 318	107	16 105
March	2 971	2 295	3 395	648	5 300	104	1 384	110	16 269
June	3 062	2 351	3 404	697	5 153	107	1 427	113	16 401

^ estimate has a relative standard error of 10% to less than 25% and should be used with caution

## ACTUAL EXPENDITURE ON EQUIPMENT, PLANT AND MACHINERY, By state—Current prices

<i>Period</i>	<i>New South Wales</i>	<i>Victoria</i>	<i>Queensland</i>	<i>South Australia</i>	<i>Western Australia</i>	<i>Tasmania</i>	<i>Northern Territory</i>	<i>Australian Capital Territory</i>	<i>Total</i>
	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m
ORIGINAL									
<b>2013-14</b>	13 682	11 029	12 082	2 671	9 886	596	859	353	51 158
<b>2014-15</b>	15 819	11 501	11 732	2 975	8 717	623	1 166	393	52 925
<b>2015-16</b>	16 585	12 324	9 884	2 694	7 502	587	585	419	50 581
<b>2016-17</b>	16 417	11 633	10 247	2 615	6 972	581	481	413	49 360
<b>2014-15</b>									
June	4 375	3 316	3 154	827	1 967	^ 169	251	^ 111	14 169
<b>2015-16</b>									
September	3 630	2 921	2 529	^ 663	1 796	150	184	^ 145	12 018
December	4 574	3 385	2 572	^ 764	2 081	152	134	^ 99	13 760
March	3 702	2 653	1 915	^ 567	1 609	^ 119	*97	65	10 728
June	4 680	3 365	2 868	699	2 016	^ 166	^ 170	^ 110	14 075
<b>2016-17</b>									
September	4 454	2 828	2 271	572	1 475	^ 129	106	^ 123	11 958
December	4 445	3 102	2 772	680	1 935	^ 150	138	^ 113	13 336
March	3 172	2 439	2 087	^ 684	1 685	^ 128	^ 80	^ 65	10 341
June	4 346	3 264	3 117	^ 678	1 877	^ 174	157	^ 112	13 725
SEASONALLY ADJUSTED									
<b>2014-15</b>									
June	4 114	3 003	2 885	774	1 850	154	228	107	12 991
<b>2015-16</b>									
September	3 621	3 033	2 695	712	1 900	158	178	120	12 418
December	4 205	3 143	2 406	691	1 884	132	125	99	12 645
March	4 402	3 111	2 352	635	1 805	148	126	89	12 618
June	4 369	3 028	2 416	654	1 899	151	150	104	12 826
<b>2016-17</b>									
September	4 443	2 951	2 421	612	1 573	136	104	101	12 401
December	4 093	2 881	2 599	620	1 748	132	129	113	12 260
March	3 785	2 856	2 532	760	1 884	158	105	92	12 188
June	4 045	2 935	2 658	635	1 764	158	136	105	12 454
TREND									
<b>2014-15</b>									
June	3 943	2 993	2 841	740	1 930	155	235	102	12 936
<b>2015-16</b>									
September	3 947	3 067	2 666	718	1 860	149	174	109	12 648
December	4 092	3 111	2 471	688	1 871	145	139	104	12 573
March	4 326	3 102	2 365	653	1 849	145	128	96	12 662
June	4 453	3 038	2 386	627	1 767	143	128	99	12 658
<b>2016-17</b>									
September	4 315	2 946	2 461	631	1 722	140	123	104	12 467
December	4 116	2 895	2 529	657	1 741	141	117	104	12 309
March	3 963	2 884	2 586	679	1 789	149	119	102	12 268
June	3 879	2 896	2 632	689	1 842	158	127	101	12 335

^ estimate has a relative standard error of 10% to less than 25% and should be used with caution

\* estimate has a relative standard error of 25% to 50% and should be used with caution

<i>Period</i>	<i>New South Wales</i>	<i>Victoria</i>	<i>Queensland</i>	<i>South Australia</i>	<i>Western Australia</i>	<i>Tasmania</i>	<i>Northern Territory</i>	<i>Australian Capital Territory</i>	<i>Total</i>
	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m
ORIGINAL									
<b>2013–14</b>	23 287	17 850	46 147	6 017	55 946	864	7 196	672	157 978
<b>2014–15</b>	27 004	18 646	35 000	6 249	55 112	895	6 996	753	150 655
<b>2015–16</b>	28 254	19 661	24 057	5 242	43 160	944	5 577	795	127 692
<b>2016–17</b>	28 158	20 610	23 736	5 142	29 040	983	5 769	843	114 281
<b>2014–15</b>									
June	7 353	5 266	7 923	1 403	13 426	^ 256	1 566	218	37 411
<b>2015–16</b>									
September	6 074	4 677	6 482	1 260	11 900	227	1 543	246	32 409
December	7 646	5 306	7 042	1 513	12 874	257	1 465	189	36 293
March	6 493	4 320	4 700	^ 1 139	9 468	^ 195	1 164	146	27 624
June	8 041	5 358	5 833	1 331	8 918	266	1 404	^ 214	31 366
<b>2016–17</b>									
September	7 046	4 882	5 702	1 165	7 407	206	1 255	221	27 883
December	7 591	5 502	6 432	1 308	7 982	^ 281	1 457	224	30 776
March	5 932	4 510	4 995	1 265	6 428	^ 211	1 559	^ 174	25 073
June	7 589	5 716	6 607	1 404	7 224	286	1 498	225	30 549
SEASONALLY ADJUSTED									
<b>2014–15</b>									
June	6 925	4 880	7 548	1 337	13 024	238	1 543	214	35 592
<b>2015–16</b>									
September	6 195	4 827	6 647	1 307	12 138	240	1 537	221	32 962
December	7 052	4 921	6 380	1 367	11 878	221	1 456	189	33 460
March	7 465	4 964	5 624	1 292	10 436	240	1 193	170	31 423
June	7 524	4 938	5 316	1 274	8 655	245	1 384	208	29 615
<b>2016–17</b>									
September	7 197	5 060	5 850	1 204	7 605	217	1 252	199	28 514
December	7 002	5 096	5 841	1 184	7 311	242	1 448	224	28 297
March	6 819	5 163	5 963	1 428	7 098	261	1 584	200	28 600
June	7 073	5 275	6 069	1 348	7 004	261	1 477	218	28 877
TREND									
<b>2014–15</b>									
June	6 574	4 851	7 412	1 362	13 068	228	1 575	203	35 390
<b>2015–16</b>									
September	6 638	4 878	6 789	1 316	12 429	233	1 487	207	33 740
December	6 966	4 905	6 175	1 326	11 542	236	1 406	196	32 704
March	7 330	4 938	5 703	1 308	10 302	234	1 314	186	31 379
June	7 472	4 983	5 541	1 248	8 867	233	1 277	194	29 834
<b>2016–17</b>									
September	7 245	5 031	5 640	1 219	7 748	234	1 339	207	28 638
December	7 026	5 102	5 856	1 260	7 287	241	1 435	211	28 413
March	6 935	5 179	5 981	1 327	7 090	254	1 502	212	28 537
June	6 941	5 247	6 035	1 386	6 996	265	1 554	214	28 723

^ estimate has a relative standard error of 10% to less than 25% and should be used with caution

<i>Period</i>	<i>New South Wales</i>	<i>Victoria</i>	<i>Queensland</i>	<i>South Australia</i>	<i>Western Australia</i>	<i>Tasmania</i>	<i>Northern Territory</i>	<i>Australian Capital Territory</i>	<i>Total</i>
	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m
ORIGINAL									
<b>2013-14</b>	9 802	6 901	34 754	3 367	46 586	269	6 507	323	108 451
<b>2014-15</b>	11 185	7 145	23 268	3 273	46 395	272	5 831	360	97 729
<b>2015-16</b>	11 386	7 322	13 952	2 528	35 495	350	4 991	370	76 394
<b>2016-17</b>	11 117	8 990	12 904	2 462	21 724	384	5 254	415	63 249
<b>2014-15</b>									
June	2 956	1 947	4 738	575	11 469	87	1 327	107	23 209
<b>2015-16</b>									
September	2 392	1 758	3 922	593	10 104	76	1 365	100	20 310
December	3 004	1 912	4 398	744	10 689	103	1 320	89	22 258
March	2 725	1 660	2 726	567	7 810	74	1 061	79	16 704
June	3 265	1 992	2 906	624	6 891	97	1 244	102	17 121
<b>2016-17</b>									
September	2 502	2 066	3 355	584	5 892	74	1 162	95	15 730
December	2 991	2 413	3 507	614	5 966	126	1 320	107	17 045
March	2 605	2 069	2 759	562	4 645	78	1 460	104	14 283
June	3 018	2 441	3 283	701	5 220	106	1 312	108	16 191
SEASONALLY ADJUSTED									
<b>2014-15</b>									
June	2 807	1 877	4 662	565	11 177	85	1 327	107	22 621
<b>2015-16</b>									
September	2 531	1 796	3 947	594	10 243	81	1 365	100	20 523
December	2 791	1 769	3 934	673	9 907	87	1 320	89	20 617
March	2 996	1 846	3 220	651	8 590	89	1 061	79	18 613
June	3 068	1 910	2 851	611	6 755	92	1 244	102	16 642
<b>2016-17</b>									
September	2 662	2 123	3 355	582	5 999	79	1 162	95	15 915
December	2 769	2 229	3 103	550	5 494	108	1 320	107	15 662
March	2 866	2 306	3 247	644	5 111	98	1 460	104	15 887
June	2 821	2 332	3 198	686	5 120	99	1 312	108	15 786
TREND									
<b>2014-15</b>									
June	2 621	1 858	4 573	623	11 134	73	1 345	101	22 454
<b>2015-16</b>									
September	2 655	1 808	4 106	598	10 546	83	1 316	97	21 021
December	2 818	1 789	3 672	635	9 627	89	1 263	91	19 995
March	2 935	1 831	3 294	649	8 413	88	1 184	88	18 545
June	2 937	1 948	3 098	613	7 075	88	1 155	93	16 999
<b>2016-17</b>									
September	2 827	2 095	3 094	577	5 995	92	1 226	100	15 942
December	2 775	2 216	3 195	587	5 480	97	1 317	104	15 741
March	2 802	2 298	3 217	626	5 202	100	1 368	106	15 758
June	2 856	2 344	3 188	670	5 033	102	1 402	108	15 800

(a) Reference year for chain volume measures is 2014-15.

<i>Period</i>	<i>New South Wales</i>	<i>Victoria</i>	<i>Queensland</i>	<i>South Australia</i>	<i>Western Australia</i>	<i>Tasmania</i>	<i>Northern Territory</i>	<i>Australian Capital Territory</i>	<i>Total</i>
	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m
ORIGINAL									
<b>2013-14</b>	13 954	11 254	12 322	2 731	10 067	607	874	359	52 171
<b>2014-15</b>	15 819	11 501	11 732	2 975	8 717	623	1 166	393	52 925
<b>2015-16</b>	16 009	11 892	9 511	2 581	7 155	564	559	406	48 678
<b>2016-17</b>	16 375	11 592	10 156	2 568	6 825	578	477	413	48 984
<b>2014-15</b>									
June	4 250	3 224	3 062	804	1 907	164	243	108	13 762
<b>2015-16</b>									
September	3 467	2 787	2 416	629	1 707	143	175	138	11 463
December	4 377	3 250	2 459	727	1 967	144	127	96	13 147
March	3 601	2 565	1 849	547	1 542	115	92	64	10 375
June	4 564	3 290	2 787	679	1 940	161	165	109	13 694
<b>2016-17</b>									
September	4 397	2 788	2 225	557	1 429	126	104	122	11 747
December	4 418	3 082	2 731	666	1 878	149	136	113	13 174
March	3 188	2 436	2 085	673	1 658	128	80	66	10 314
June	4 373	3 286	3 115	672	1 860	175	158	112	13 750
SEASONALLY ADJUSTED									
<b>2014-15</b>									
June	3 996	2 923	2 790	757	1 797	150	222	106	12 625
<b>2015-16</b>									
September	3 454	2 897	2 573	678	1 809	151	171	117	11 863
December	4 018	3 021	2 304	658	1 784	125	120	97	12 105
March	4 277	3 011	2 277	611	1 733	142	121	88	12 207
June	4 260	2 963	2 357	634	1 830	146	148	104	12 503
<b>2016-17</b>									
September	4 392	2 912	2 381	593	1 524	132	103	101	12 200
December	4 079	2 866	2 570	604	1 697	130	129	114	12 139
March	3 818	2 856	2 539	745	1 855	157	107	93	12 157
June	4 086	2 958	2 666	626	1 749	158	139	106	12 489
TREND									
<b>2014-15</b>									
June	3 833	2 916	2 753	722	1 874	151	229	101	12 585
<b>2015-16</b>									
September	3 783	2 947	2 553	688	1 775	143	167	107	12 131
December	3 920	2 985	2 366	656	1 778	138	133	102	12 043
March	4 182	3 001	2 285	626	1 767	138	124	95	12 223
June	4 352	2 970	2 327	606	1 701	138	125	98	12 340
<b>2016-17</b>									
September	4 261	2 907	2 420	613	1 668	137	122	104	12 258
December	4 103	2 879	2 508	641	1 698	139	117	105	12 190
March	3 986	2 886	2 583	666	1 759	149	120	103	12 232
June	3 934	2 913	2 642	678	1 818	158	129	102	12 371

(a) Reference year for chain volume measures is 2014-15.

## ACTUAL TOTAL EXPENDITURE, By state—Chain volume measures(a)

<i>Period</i>	<i>New South Wales</i>	<i>Victoria</i>	<i>Queensland</i>	<i>South Australia</i>	<i>Western Australia</i>	<i>Tasmania</i>	<i>Northern Territory</i>	<i>Australian Capital Territory</i>	<i>Total</i>
	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m
ORIGINAL									
<b>2013-14</b>	23 756	18 154	47 075	6 101	56 646	875	7 378	682	160 641
<b>2014-15</b>	27 004	18 646	35 000	6 249	55 112	895	6 996	753	150 655
<b>2015-16</b>	27 395	19 214	23 463	5 109	42 650	913	5 550	777	125 072
<b>2016-17</b>	27 493	20 582	23 060	5 030	28 549	962	5 731	828	112 234
<b>2014-15</b>									
June	7 206	5 171	7 801	1 377	13 377	251	1 570	215	36 970
<b>2015-16</b>									
September	5 860	4 544	6 338	1 222	11 811	219	1 540	239	31 773
December	7 381	5 162	6 857	1 471	12 655	247	1 448	185	35 404
March	6 327	4 226	4 575	1 114	9 353	189	1 153	143	27 079
June	7 828	5 283	5 693	1 303	8 831	259	1 409	210	30 816
<b>2016-17</b>									
September	6 899	4 854	5 580	1 141	7 321	200	1 265	218	27 478
December	7 409	5 496	6 239	1 280	7 844	274	1 456	220	30 219
March	5 793	4 505	4 844	1 236	6 304	206	1 540	170	24 597
June	7 391	5 727	6 397	1 374	7 081	281	1 470	220	29 940
SEASONALLY ADJUSTED									
<b>2014-15</b>									
June	6 803	4 799	7 454	1 320	12 974	234	1 547	213	35 234
<b>2015-16</b>									
September	5 983	4 694	6 525	1 272	12 055	232	1 535	217	32 386
December	6 809	4 790	6 238	1 331	11 689	212	1 440	186	32 721
March	7 275	4 858	5 496	1 262	10 323	232	1 184	168	30 820
June	7 329	4 872	5 204	1 245	8 582	238	1 391	206	29 144
<b>2016-17</b>									
September	7 058	5 035	5 735	1 175	7 524	212	1 264	197	28 114
December	6 850	5 094	5 669	1 154	7 191	237	1 449	221	27 802
March	6 677	5 162	5 782	1 389	6 965	256	1 566	196	28 044
June	6 909	5 291	5 874	1 312	6 869	257	1 451	214	28 275
TREND									
<b>2014-15</b>									
June	6 453	4 775	7 330	1 344	13 009	224	1 574	202	35 034
<b>2015-16</b>									
September	6 437	4 755	6 662	1 284	12 322	226	1 482	204	33 150
December	6 737	4 774	6 039	1 291	11 405	227	1 396	193	32 037
March	7 118	4 832	5 578	1 276	10 179	226	1 308	183	30 768
June	7 292	4 917	5 422	1 219	8 774	226	1 281	192	29 340
<b>2016-17</b>									
September	7 090	5 001	5 511	1 190	7 662	228	1 348	204	28 200
December	6 879	5 095	5 699	1 228	7 177	236	1 434	208	27 934
March	6 786	5 185	5 800	1 291	6 961	249	1 488	208	27 990
June	6 784	5 254	5 841	1 348	6 851	260	1 528	209	28 169

(a) Reference year for chain volume measures is 2014-15.

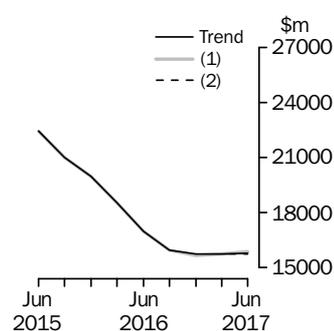
## WHAT IF...? REVISIONS TO TREND ESTIMATES

### EFFECT OF NEW SEASONALLY ADJUSTED ESTIMATES ON TREND ESTIMATES

#### TREND REVISIONS

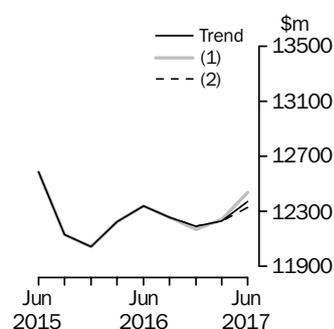
Recent seasonally adjusted and trend estimates are likely to be revised when original estimates for subsequent quarters become available. The approximate effects of possible scenarios on trend estimates for capital expenditure in chain volume terms are presented below by illustrating the impact if next quarter's seasonally adjusted estimate rises or falls by a specified percentage (based on the historical average of movements in seasonally adjusted estimates). For further information, see paragraphs 40 and 41 in the Explanatory Notes.

#### BUILDINGS AND STRUCTURES



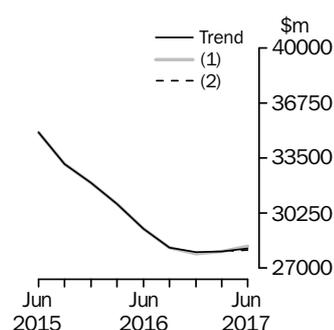
	Trend as published		WHAT IF NEXT QUARTER'S SEASONALLY ADJUSTED ESTIMATE:			
	\$m	%	(1) rises by 2.1% on this quarter		(2) falls by 2.1% on this quarter	
	\$m	%	\$m	%	\$m	%
<b>2016</b>						
September	15 942	-6.2	15 942	-6.2	15 942	-6.2
December	15 741	-1.3	15 674	-1.7	15 699	-1.5
<b>2017</b>						
March	15 758	0.1	15 767	0.6	15 758	0.4
June	15 800	0.3	15 863	0.6	15 739	-0.1

#### EQUIPMENT, PLANT AND MACHINERY



	Trend as published		WHAT IF NEXT QUARTER'S SEASONALLY ADJUSTED ESTIMATE:			
	\$m	%	(1) rises by 1.9% on this quarter		(2) falls by 1.9% on this quarter	
	\$m	%	\$m	%	\$m	%
<b>2016</b>						
September	12 258	-0.7	12 258	-0.7	12 258	-0.7
December	12 190	-0.6	12 168	-0.7	12 191	-0.5
<b>2017</b>						
March	12 232	0.3	12 240	0.6	12 232	0.3
June	12 371	1.1	12 436	1.6	12 329	0.8

#### TOTAL CAPITAL EXPENDITURE



	Trend as published		WHAT IF NEXT QUARTER'S SEASONALLY ADJUSTED ESTIMATE:			
	\$m	%	(1) rises by 2.0% on this quarter		(2) falls by 2.0% on this quarter	
	\$m	%	\$m	%	\$m	%
<b>2016</b>						
September	28 200	-3.9	28 200	-3.9	28 200	-3.9
December	27 934	-0.9	27 842	-1.3	27 890	-1.1
<b>2017</b>						
March	27 990	0.2	28 009	0.6	27 992	0.4
June	28 169	0.6	28 298	1.0	28 069	0.3

## EXPLANATORY NOTES

### INTRODUCTION

**1** This publication contains estimates of actual and expected new capital expenditure by private businesses for selected industries in Australia. The series have been compiled from data collected by the Australian Bureau of Statistics (ABS) in its quarterly Survey of New Capital Expenditure.

### SCOPE OF THE SURVEY

**2** The Survey of New Capital Expenditure includes the following industries classified according to the Australian and New Zealand Standard Industrial Classification, ANZSIC, 2006:

Mining (Division B)

Manufacturing (Division C)

Other selected industries:

Electricity, Gas, Water and Waste Services (Division D)

Construction (Division E)

Wholesale Trade (Division F)

Retail Trade (Division G)

Transport, Postal and Warehousing (Division I)

Information Media and Telecommunications (Division J)

Finance and Insurance (Division K, excluding ANZSIC class 6330, Superannuation Funds)

Rental, Hiring and Real Estate Services (Division L)

Professional, Scientific and Technical Services (Division M)

Other selected services:

Accommodation and Food Services (Division H)

Administrative and Support Services (Division N)

Arts and Recreation Services (Division R)

Other Services (Division S)

**3** The survey excludes the following industries:

Agriculture, Forestry and Fishing (Division A)

Public Administration and Safety (Division O)

Education and Training (Division P)

Health Care and Social Assistance (Division Q)

Superannuation Funds (Class 6330)

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

**5** The Survey of New Capital Expenditure, like most ABS economic collections, takes its frame from Employing and Non-Employing Units on the ABS Business Register which is primarily based on ABN registrations to the Australian Business Register, which is managed by the Australian Taxation Office (ATO). The frame is updated quarterly to take account of new businesses and changes in the characteristics of businesses, such as industry and size.

**6** Businesses which have ceased employing are identified when the Australian Taxation Office (ATO) cancels their Australian Business Number (ABN) registration. In addition, businesses which do not remit for Goods and Services Tax and/or Income Tax Withholding purposes for the previous five quarters, are removed from the frame.

**7** As noted, the Survey frame includes Employing and Non-Employing Units on the ABS Business Register. However, micro non-employing businesses are excluded. These are very small units on the ABS Business Register, by standard measures of size. While 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.

## EXPLANATORY NOTES *continued*

### STATISTICAL UNIT

**8** In the Survey of New Capital Expenditure, the statistical unit used to represent businesses, and for which statistics are reported, is the Australian Business Number (ABN) unit, in most cases. The ABN unit is the business unit which has registered for an ABN, and thus appears on the ATO administered Australian Business Register. This unit is suitable for ABS statistical needs when the business is simple in structure.

**9** For more significant and diverse businesses where the ABN unit is not suitable for ABS statistical needs, the statistical unit used is the Type of Activity Unit (TAU). A TAU is comprised of one or more business entities, sub-entities or branches of a business entity within an Enterprise Group that can report production and employment data for similar economic activities. When a minimum set of data items is available, a TAU is created which covers all the operations within an industry subdivision (and the TAU is classified to the relevant subdivision of the Australian and New Zealand Standard Industrial Classification (ANZSIC)). Where a business cannot supply adequate data for each industry, a TAU is formed which contains activity in more than one industry subdivision and the TAU is classified to the predominant ANZSIC subdivision. Further details about the ABS economic statistical units used in this survey, and in other ABS economic surveys (both sample surveys and censuses), can be found in Chapter 2 of the Standard Economic Sector Classifications of Australia (SESCA) 2008 (cat. no. 1218.0).

### SURVEY METHODOLOGY

**10** The survey is conducted on a quarterly basis. It is based on a random sample of approximately 9,000 units which is stratified by industry, state/territory and derived employment size. The figures obtained from the selected units are supplemented by data from units which have large capital expenditure and are outside the sample framework, or not adequately covered by it.

**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 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.

### TIMING AND CONSTRUCTION OF SURVEY CYCLE

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

**13** Businesses are requested to provide 3 basic figures each survey:

- Actual expenditure incurred during the reference period (*Act*)
- A short term expectation (*E1*) and a longer term expectation (*E2*).

### PERIOD TO WHICH REPORTED DATA RELATES

#### Period to which reported data relates

<u>Survey Quarter</u>	2015-16				2016-17				2017-18			
	Sep	Dec	Mar	Jun	Sep	Dec	Mar	Jun	Sep	Dec	Mar	Jun
December 2015	Act	Act	E1		E2							
March 2016	Act	Act	Act	E1	E2							
June 2016	Act	Act	Act	Act	E1		E2					
September 2016					Act	E1	E2					
December 2016					Act	Act	E1		E2			
March 2017					Act	Act	Act	E1	E2			
June 2017					Act	Act	Act	Act	E1		E2	

## EXPLANATORY NOTES *continued*

### TIMING AND CONSTRUCTION OF SURVEY CYCLE *continued*

**14** This survey cycle facilitates the formation of estimates of expenditure for financial years (12 months ending 30 June) which are presented in tables 5 and 6 of this publication. For example, as the previous table shows for 2016-2017:

- the first estimate was available from the December 2015 survey as a longer term expectation (E2)
- the second estimate was available from the March 2016 survey (again as a longer term expectation)
- the third estimate was available from the June 2016 survey as the sum of two expectations (E1 + E2)
- in the September 2016, December 2016 and March 2017 surveys the fourth, fifth and sixth estimates, respectively, are derived from the sum of actual expenditure (for that part of the year completed) and expected expenditure (for the remainder of the year) as recorded in the current quarter's survey
- the final (or seventh) estimate from the June quarter 2017 survey is derived from the sum of the actual expenditure for each of the four quarters in the 2016-17 financial year.

**15** Businesses are requested to provide actual expenditure data by state/territory each quarter. Prior to 2002, businesses were also asked to provide expected expenditure data by state/territory each December quarter. Since 2002 state/territory expectations data for businesses which operate in more than one state or territory are pro-rated to states/territories based on actual expenditure for the December quarter in each state or territory. Expectations data for businesses operating within a single state/territory are allocated to that state/territory. Expectations for businesses which report no actual expenditure for the December quarter are split equally among the states in which the businesses are known to operate.

**16** These expectations data by state/territory are not included in this publication but are released on the ABS Website.

### SAMPLE REVISION

**17** 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.

**18** 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.

**19** Adjustments are included in the estimates to allow for lags in processing new businesses to the ABS Business Register, and the omission of some businesses from the register. The majority of businesses affected and to which adjustments apply are small in size. As an indication of the size of these adjustments, in the June quarter 2017 they represented about 0.79% of the total estimate of actual new capital expenditure.

### CLASSIFICATION BY INDUSTRY

**20** The Australian and New Zealand Standard Industrial Classification (ANZSIC) 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), 2006* (cat. no. 1292.0).

**21** In order to classify new capital expenditure by industry, each statistical unit (as defined above) is classified to the (ANZSIC) industry in which it mainly operates.

### CHAIN VOLUME MEASURES

**22** 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 2014-15). The current price values may be thought to be 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

## EXPLANATORY NOTES *continued*

### CHAIN VOLUME MEASURES

*continued*

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 for a financial year sum to the corresponding annual estimate.

**23** With each release of the September quarter issue of this publication, a new base year is introduced and the reference year is advanced one year to coincide with it. Since the release of the September quarter 2016 issue of this publication, the chain volume measures currently have 2014-15 as their base year rather than 2013-14.

**24** 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.

**25** 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 capital expenditure data, this means that the original chain volume estimates for the states will not add to total capital expenditure 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, additivity 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 *Information Paper: Introduction of Chain Volume Measures in the Australian National Accounts* (cat. no. 5248.0)

### DERIVATION AND USEFULNESS OF REALISATION RATIOS

**26** Once actual expenditure for a financial year is known, it is useful to investigate the relationship between each of the prior six estimates of expenditure for that financial year and the actual expenditure (see page 7 for an explanation of the derivation of the seven estimates). The resultant realisation ratios (subsequent actual expenditure divided by expected expenditure) then indicate how much expenditure was actually incurred against the amount expected to be incurred at the various times of reporting. Realisation ratios can also be formed separately for three or six month expectations as well as the 12 month E2 estimates or combinations of estimates containing at least some expectation components (e.g. six months actual and six months expected expenditure).

**27** Realisation ratios provide an important tool in understanding and interpreting expectation statistics for future periods. The application of realisation ratios enables the adjustment of expectation data for known under (or over) realisation patterns in the past and hence provides a valid basis for comparison with other expectation data and actual expenditure estimates. Once this has been done the predictions can be more validly compared with each other and with previously derived estimates of actual expenditure for earlier years. For example, if one wished to make a prediction about actual expenditure for 2017-18 based on the forthcoming September 2017 survey results and compare this with 2016-17 expenditure, it is necessary to apply the relevant realisation factors to the expectations to put both estimates on the same basis.

**28** There are many ways in which realisation ratios can be applied to make predictions of actual expenditure for a future period. A range of realisation ratios for both type of asset and industry estimates is provided in tables 5 and 6.

**29** In using realisation ratios to adjust expectations data, attention should be paid to the range of values that has occurred in the past. A wide range of values is indicative of volatility in the realisation patterns and hence greater caution should be exercised regarding the predictive value of the expectation, even after adjustment by application of realisation ratios. This is particularly the case with the early 12 month expectations for the following financial year collected in the December and March surveys.

## EXPLANATORY NOTES *continued*

### RELIABILITY OF THE ESTIMATES

**30** Estimates provided in this publication are subject to non-sampling and sampling errors. The most common way of quantifying sampling error is to calculate the standard error for the published estimate. Details of standard errors are included in the appendix of this publication.

**31** Estimates that have an estimated relative standard error between 10% and 25% are annotated with the symbol '^'. These estimates should be used with caution as they are subject to sampling variability too high for some purposes. Estimates with an RSE between 25% and 50% are annotated with the symbol '\*', indicating that the estimate should be used with caution as it is subject to sampling variability too high for most practical purposes. Estimates with an RSE greater than 50% are annotated with the symbol '\*\*' indicating that the sampling variability causes the estimates to be considered too unreliable for general use. These annotations have only been applied to estimates from the March quarter 2009.

**32** 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.

**33** Estimates for the latest quarter presented in this publication are considered preliminary and revised estimates will be released with the next issue. As discussed in Paragraphs 37 to 42 below, seasonally adjusted and trend estimates are also subject to revision as data are revised and more data become available.

**34** 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. In addition, respondents may have difficulties in allocating to the appropriate state(s) expenditure on some equipment items such as mobile assets (e.g. aircraft, bulk oil carriers, satellites, off-shore drilling platforms and large computer installations supporting a national network). Where such difficulties exist expenditure is allocated to the state of the businesses' head office or, in the case of aircraft, is allocated across states in proportion to the likely use of the asset.

**35** The Australian equivalents to International Financial Reporting Standards (AIFRS) were progressively implemented in Australia from 1 January 2005. As a result, a number of items in the financial accounts of Australian businesses were affected by changed definitions which in turn impacted upon both Income Statements and Balance Sheets. A range of ABS economic collections source data from financial accounts of businesses and use those data to derive economic statistics. There have been no changes in the associated economic definitions.

**36** After monitoring data items in the immediate years following March quarter 2005 it was concluded that most affected published data series were impacted by data breaks but that the magnitude of such breaks could not be determined without imposing disproportionate load upon data providers to ABS surveys and other administratively collected data.

### SEASONAL ADJUSTMENT

**37** The quarterly original actual new capital expenditure series in this publication are affected in varying degrees by seasonal influences. The seasonal adjustment process estimates and removes the effects of normal seasonal variations from the original series so that the effects of other influences can be more easily recognised.

## EXPLANATORY NOTES *continued*

### SEASONAL ADJUSTMENT

*continued*

**38** In the seasonal adjustment process, account has been taken of normal seasonal factors (e.g. increase in June quarter capital expenditure due to the impending end of the financial year) to produce the seasonally adjusted estimates. Particular care should be taken in interpreting quarterly movements in the seasonally adjusted estimates because seasonal adjustment does not remove 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 estimates are subject.

**39** The revision properties of the seasonally adjusted and trend estimates can be improved by the use of Autoregressive Integrated Moving Average (ARIMA) modelling. The Survey of Private New Capital Expenditure uses ARIMA modelling where appropriate for individual time series. ARIMA modelling relies on the characteristics of the series being analysed to project future period data. The projected values are temporary, intermediate values that are only used internally to improve the estimation of the seasonal factors. The projected data do not affect the original estimates and are discarded at the end of the seasonal adjustment process. For more information on the details of ARIMA modelling see Feature article: Use of ARIMA modelling to reduce revisions in the October 2004 issue of *Australian Economic Indicators* (cat. no. 1350.0).

### TREND ESTIMATES

**40** The trend estimates are derived by applying a 7-term Henderson moving average to the seasonally adjusted estimates. The 7-term Henderson moving average is symmetric, but as the end of a time series is approached, asymmetric forms of the moving average are applied. The asymmetric moving average has been tailored to suit the particular characteristics of individual series and enable trend estimates for recent quarters to be produced. Estimates of the trend will be improved at the current end of the time series as additional observations become available. This improvement is due to the application of different asymmetric moving averages for the most recent three quarters. As a result of the improvement, revisions to the trend estimates will generally be observed for the most recent three quarters.

**41** There may also be revisions because of changes in the original estimates. As a result of these revisions, the seasonally adjusted and trend estimates will also be revised. For further information, see *Information Paper: A Guide to Interpreting Time Series - Monitoring Trend, An Overview* (cat. no. 1349.0).

### DESCRIPTION OF TERMS

**42** A description of the terms used in this publication is given below:

**43** *New capital expenditure* refers to the acquisition of new tangible assets either on own account or under a finance lease and includes major improvements, alterations and additions. In general, this is expenditure charged to fixed tangible assets accounts excluding expenditure on second hand assets unless these are imported for the first time.

**44** Some estimates are dissected by type of asset:

- Buildings and structures: Includes industrial and commercial buildings, houses, flats, home units, water and sewerage installations, lifts, heating, ventilating and similar equipment forming an integral part of buildings and structures, land development and construction site development, roads, bridges, wharves, harbours, railway lines, pipelines, power and telephone lines. Also includes mine development (e.g. construction of shafts in underground mines, preparation of mining and quarrying sites for open cut extraction and other developmental operations primarily for commencing or extending production). Excludes purchases of land, previously occupied buildings and speculatively built projects intended for sale before occupation:
- Equipment, plant and machinery: Includes plant, machinery, vehicles, electrical apparatus, office equipment, furniture, fixtures and fittings not forming an integral part of buildings, durable containers, special tooling, etc. Also includes goods imported for the first time whether previously used outside Australia or not.

COMPARISON WITH NATIONAL  
ACCOUNTS AND OTHER ABS  
STATISTICS

**45** The statistics for new capital expenditure shown in this publication differ from estimates of private gross fixed capital expenditure shown in the Australian National Accounts for the following reasons:

- National Accounts estimates incorporate data from other sources as well as information from the new capital expenditure survey. For example, annual estimates for capital expenditure on 'machinery and equipment' are based on the ABS' annual Economic Activity Survey combined with data from the Australian Taxation Office. Quarterly estimates are interpolated between and extrapolated from the annual estimates using a variety of indicators including this survey. The ABS's quarterly Building Activity Survey and Engineering Construction Survey are the main sources for estimating the National Accounts dwellings and other buildings and structures items.
- National Accounts estimates include capital expenditure by all private businesses including units classified to agriculture, forestry and fishing, education, and health and community services industries and capital expenditure on dwellings by households. Data for these sectors are excluded from this publication.
- National Accounts estimates include the value of work done on speculative construction projects as the work is put into place. The statistics in this publication, however, include full value of the speculative projects as new capital expenditure of the purchases (if in scope), when the project is sold.
- National accounts estimates of gross fixed capital formation relate to acquisitions less disposals of new or existing fixed assets, whereas the survey figures are acquisitions of new fixed tangible assets only.

**46** For a more detailed explanation of the concepts and methods used in compiling the National Accounts estimates see *Australian National Accounts: Concepts, Sources and Methods* (cat. no. 5216.0).

**47** The estimates of capital expenditure on buildings and other structures will differ with estimates of Construction activity published in Construction Work Done, Australia, Preliminary (cat. no. 8755.0). The latter publication presents estimates of building and engineering construction work collected by the Building Activity Survey and the Engineering Construction Survey. Estimates of construction activity are based on the value of actual work done during the quarter of individual building or construction jobs by builders, and do not necessarily equate to capitalisation of this work by the builders' eventual clients. Estimates of capital expenditure in this publication are based on data reported by businesses (that is, the builders' clients) from their financial or management accounts for purchases of buildings and structures.

## EXPLANATORY NOTES *continued*

### RELATED PUBLICATIONS

**48** Users may also wish to refer the following publications:

- *Information Paper: Changes to Private New Capital Expenditure and Expected Expenditure statistics, September 2009* (cat. no. 5625.0.55.001)
- *Australian National Accounts: National Income, Expenditure and Product* (cat. no. 5206.0)
- *Australian National Accounts: Concepts, Sources and Methods* (cat. no. 5216.0)
- *Building Activity, Australia* (cat. no. 8752.0)
- *Business Indicators, Australia* (cat. no. 5676.0)
- *Business Operations and Industry Performance, Australia* (cat. no. 8140.0)
- *Construction Work Done, Australia* (cat no 8755.0)
- *Engineering Construction Activity, Australia* (cat. no. 8762.0)
- *Information Paper: Australian National Accounts, Introduction of Chain Volume and Price Indexes* (cat. no. 5248.0)

**49** Current publications and other products released by the ABS are available from the Statistics View. The ABS also issues a daily Release Advice on the web site which details products to be released in the week ahead.

### ABS DATA AVAILABLE ON REQUEST

**50** In addition to the data contained in this publication, more detailed industry and state information may be made available on request, the cost for such a service being dependent upon the amount of data requested. For example, data are generally available at the ANZSIC subdivision (2 digit) level.

### ABS WEBSITE

**51** The ABS website contains most of the data included in this publication but with a longer time series. In addition to the series in this publication, data for Manufacturing Subdivisions and State by Industry data are also available.

### ACKNOWLEDGMENT

**52** ABS publications draw extensively on information provided freely by individuals, businesses, governments and other organisations. Their continued cooperation is very much appreciated; without it, the wide range of statistics published by the ABS would not be available. Information received by the ABS is treated in strict confidence as required by the *Census and Statistics Act 1905*.

**53** The results of these statistics are based, in part, on ABR data supplied by the Registrar to the ABS under A New Tax System (Australian Business Number) Act 1999 which requires that such data is only used for the purpose of carrying out functions of the ABS. No individual information collected under the Census and Statistics Act 1905 is provided back to the Registrar for administrative or regulatory purposes. Any discussion of data limitations or weaknesses is in the context of using the data for statistical purposes, and is not related to the ability of the data to support the ABR's core operational requirements. Legislative requirements to ensure privacy and secrecy of this data have been followed. Only people authorised under the Australian Bureau of Statistics Act 1975 have been allowed to view data about any particular firm in conducting this survey. In accordance with the Census and Statistics Act 1905, results have been confidentialised to ensure that they are not likely to enable identification of a particular person or organisation.

## APPENDIX SAMPLING ERRORS

### LEVEL ESTIMATES

#### INTRODUCTION

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.

#### EXAMPLE OF USE

The following example illustrates how to use the standard error to interpret a level estimate.

Let us say that the published level estimate for total capital expenditure is \$30,549m and the calculated standard error in this case is \$468m. The standard error is then used to interpret the level estimate of \$30,549m.

For instance, the standard error of \$468m indicates that:

- There are approximately two chances in three that the real value falls within the range \$30,081m to \$31,017m ( $\$30,549\text{m} \pm \$468\text{m}$ )
- There are approximately 19 chances in 20 that the real value falls within the range \$29,613m to \$31,485m ( $\$30,549\text{m} \pm \$936\text{m}$ )

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

The following table shows the standard errors for June Quarter 2017 estimates.

	<i>Buildings and Structures</i>	<i>Equipment, Plant and Machinery</i>	<i>Total</i>
	\$m	\$m	\$m
Mining	40	48	72
Manufacturing	49	110	129
Electricity, Gas, Water and Waste Services	19	31	36
Construction	22	218	217
Wholesale Trade	39	81	90
Retail Trade	90	106	155
Transport, Postal and Warehousing	26	164	172
Information Media and Telecommunications	1	33	33
Financial and Insurance Services	14	45	50
Rental, Hiring and Real Estate Services	143	97	149
Professional, Scientific and Technical Services	17	72	77
Other Selected Services	82	108	141
<b>Total</b>	<b>217</b>	<b>405</b>	<b>468</b>
New South Wales	78	236	249
Victoria	95	180	211
Queensland	157	234	300
South Australia	53	87	106
Western Australia	47	86	97
Tasmania	4	24	24
Northern Territory	16	10	19
Australian Capital Territory	5	21	21
<b>Australia</b>	<b>217</b>	<b>405</b>	<b>468</b>

## APPENDIX SAMPLING ERRORS *continued*

### MOVEMENT ESTIMATES

#### EXAMPLE OF USE

The following example illustrates how to use the standard error to interpret a movement estimate.

Let us say one quarter the published level estimate for total capital expenditure is \$25,073m and the next quarter the published level estimate is \$30,549m.

In this example, the calculated standard error for the movement estimate is \$384m. The standard error is then used to interpret the published movement estimate of \$5,476m.

For instance, the standard error of \$384m indicates that:

- There are approximately two chances in three that the real movement over the two-quarter period falls within the range \$5,092m to \$5,860 (\$5,476m ± \$384m)
- There are approximately 19 chances in 20 that the real movement falls within the range \$4,708m to \$6,244m (\$5,476m ± \$768m)

The following table shows the standard errors for June Quarter 2017 movement estimates.

	<i>Buildings and Structures</i>	<i>Equipment, Plant and Machinery</i>	<i>Total</i>
	\$m	\$m	\$m
Mining	38	25	31
Manufacturing	34	84	88
Electricity, Gas, Water and Waste Services	18	40	46
Construction	16	211	212
Wholesale Trade	39	76	90
Retail Trade	84	123	175
Transport, Postal and Warehousing	22	189	192
Information Media and Telecommunications	1	34	34
Financial and Insurance Services	5	65	65
Rental, Hiring and Real Estate Services	110	76	143
Professional, Scientific and Technical Services	36	92	97
Other Selected Services	86	108	130
<b>Total</b>	<b>159</b>	<b>341</b>	<b>384</b>
New South Wales	91	210	255
Victoria	84	178	195
Queensland	91	226	256
South Australia	33	101	108
Western Australia	56	105	115
Tasmania	16	23	28
Northern Territory	26	11	28
Australian Capital Territory	19	16	23
<b>Australia</b>	<b>159</b>	<b>341</b>	<b>384</b>

## FOR MORE INFORMATION . . .

*INTERNET*      **www.abs.gov.au** the ABS website is the best place for data from our publications and information about the ABS.

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