

# PRIVATE NEW CAPITAL EXPENDITURE AND EXPECTED EXPENDITURE to June 2002 AUSTRALIA

EMBARGO: 11:30AM (CANBERRA TIME) THURS 6 SEPT 2001

# 

# JUNE QTR KEY FIGURES

#### TREND ESTIMATES (a)

	Jun 2000			•	% change to Jun 2000 to
	\$m	\$m	\$m	Jun 2001	Jun 2001
Total new capital					
expenditure	10 629	9 795	9 659	-1.4	-9.1
Buildings & structures	2 945	2 276	2 324	2.1	-21.1
Equipment, plant &					
machinery	7 686	7 517	7 349	-2.2	-4.4

#### SEASONALLY ADJUSTED(a)

	Jun 2000			% change Mar 2001 to	% change Jun 2000 to	
	\$m	\$m	\$m	Jun 2001	Jun 2001	
Total new capital						
expenditure	10 722	9 630	9 789	1.6	-8.7	
Buildings & structures	3 126	2 056	2 549	24.0	-18.5	
Equipment, plant &						
machinery	7 607	7 574	7 240	-4.4	-4.8	
(a) In volume terms.						

#### JUNE QTR KEY POINTS

#### ACTUAL EXPENDITURE

- The trend estimate for total new capital expenditure (in volume terms) has decreased by 1.4% this quarter following decreases in the previous four quarters.
- The decrease in the trend estimate for total new capital expenditure has been driven by a fall in expenditure by Other selected industries, continuing the decreases reported in the previous three quarters. Expenditure by Manufacturing fell over the past five quarters, while Mining expenditure has increased for the past four quarters.
- In trend terms, expenditure on buildings and structures rose by 2.1% following decreases in the previous four quarters. Expenditure on equipment, plant and machinery fell by 2.2%, after also falling in the previous two quarters.

#### EXPECTED EXPENDITURE

■ Estimate 3 for 2001-2002 is \$38,669m, which is 3.7% higher than the corresponding estimate for 2000-2001. Expected expenditure on buildings and structures is up 13.6%, while expectations for equipment, plant and machinery are virtually unchanged. The expectation for Mining is 49.3% higher, while Manufacturing is down by 16.9%.

■ For further information about these and related statistics, contact Michael Sharpe on 02 9268 4174, or the National Information and Referral Service on 1300 135 070.

# NOTES

#### FORTHCOMING ISSUES

ISSUE (Quarter) RELEASE DATE

September 2001 28 November 2001 December 2001 28 February 2002

CHANGES IN THIS ISSUE

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 Survey of New Capital Expenditure. Refer to paragraphs 8-9 of the explanatory notes for more information.

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. Refer to paragraph 36 of the explanatory notes for more information.

REVISIONS TO TREND

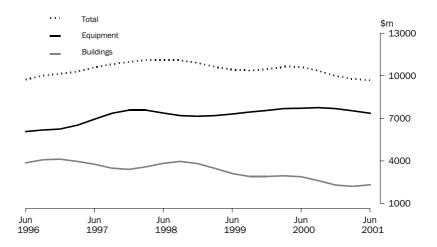
Readers should exercise care in the interpretation of the trend data as the data for the last three quarters in particular are likely to be revised with the addition of subsequent quarters' data. For further information and examples showing the sensitivity of trend data, refer to Trend Estimates in paragraph 37 of the explanatory notes.

R.W. Edwards Acting Australian Statistician

## QUARTERLY TREND ESTIMATES OF CHAIN VOLUME MEASURES

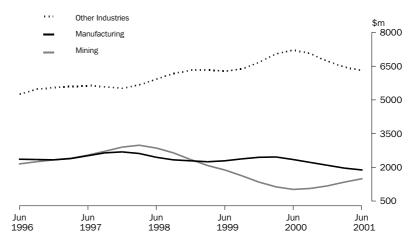
BY ASSET

The trend estimate for expenditure on buildings and structures rose in June quarter 2001 following four quarters of falls. Expenditure on buildings and structures in Mining has increased each quarter since September quarter 2000, while in Manufacturing and in Other selected industries, it has fallen in each of the past four quarters. The trend estimate for equipment, plant and machinery has fallen in the past three quarters following two quarters of little change. For Other selected industries, it has fallen for the past three quarters following eleven consecutive quarters of increase, while for Mining it has increased for the past four quarters, and for Manufacturing it has decreased for the past six quarters.



BY INDUSTRY

The trend estimate for total new capital expenditure by the Mining industry has increased for the fourth consecutive quarter after falling each quarter since June quarter 1998. Expenditure by Manufacturing has been decreasing since June quarter 2000. The trend estimate for Other selected industries has fallen for the past four quarters, after four quarters of increase.

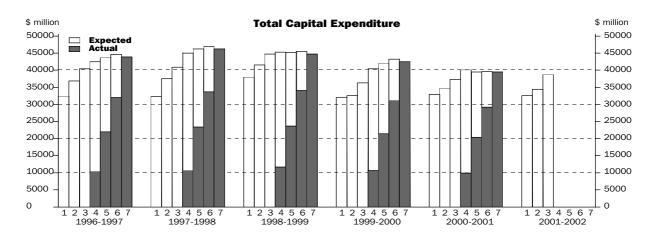


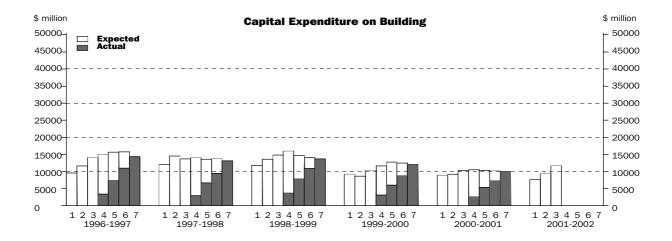
#### ACTUAL AND EXPECTED NEW CAPITAL EXPENDITURE

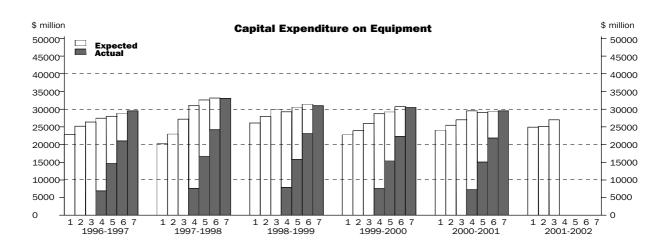
#### FINANCIAL YEARS AT CURRENT PRICES

**EXPENDITURE** 

The estimates of actual and expected expenditure appearing below relate to data contained in table 4. Information about the timing and construction of these estimates are contained on pages 13 and 14 and advice about the usefulness of the realisation ratios is on pages 15 and 16.









	BUILDINGS AND STRUCTURES			EQUIPMENT, PLANT AND MACHINERY			TOTAL CAPITAL EXPENDITURE					
Period	<i>Mining</i> \$m	Manu- facturing \$m	Other selected indus- tries \$m	<i>Total</i> \$m	<i>Mining</i> \$m	Manu- facturing \$m	Other selected indus- tries \$m	Total \$m	<i>Mining</i> \$m	Manu- facturing \$m	Other selected indus- tries \$m	Total \$m
• • • • • • • • • • • • •		• • • • • • •	• • • • • •	• • • • • • • •	• • • • • •	• • • • • •	• • • • • •	• • • • • • • •	• • • • • • •	• • • • • • •	• • • • • •	• • • • •
ORIGINAL (Actual)												
1999–2000 2000–2001	2 534 2 263	1 501 1 236	7 968 6 439	12 003 9 937	2 753 2 985	8 184 7 115	19 507 19 454	30 444 29 554	5 288 5 248	9 685 8 350	27 475 25 893	42 447 39 491
1999–2000												
March	442	349	1 976	2 767	526	1 913	4 501	6 940	967	2 262	6 477	9 706
June <b>2000–2001</b>	544	404	2 280	3 228	696	2 037	5 400	8 133	1 239	2 441	7 681	11 361
September	453	389	1 754	2 596	542	1 804	4 961	7 307	995	2 193	6 715	9 903
December	541	349	1 861	2 752	722	1 897	5 101	7 720	1 264	2 246	6 962	10 472
March	476	233	1 229	1 939	850	1 577	4 408	6 835	1 326	1 810	5 638	8 774
June	792	265	1 594	2 651	871	1 837	4 984	7 692	1 663	2 102	6 578	10 343
2001-2002				0	RIGINAL	(Expected	l)(a)					
6 mths to Dec	1 994	479	3 586	6 060	2 347	3 738	8 046	14 132	4 342	4 218	11 632	20 192
6 mths to Jun	1 706	733	3 193	5 631	2 264	3 297	7 285	12 846	3 969	4 030	10 478	18 477
Total 2001-2002	3 700	1 212	6 779	11 691	4 611	7 035	15 331	26 978	8 311	8 248	22 110	38 669
• • • • • • • • • • • • •	• • • • • •		• • • • • •				• • • • • •	• • • • • • • •			• • • • • • •	
				SEASO	ONALLY A	DJUSTED	(Actual)					
1999–2000	2 554	1 505	7 997	12 055	2 747	8 205	19 525	30 476	5 299	9 710	27 522	42 531
2000-2001	2 249	1 212	6 432	9 893	2 986	7 131	19 465	29 580	5 234	8 342	25 897	39 473
1999–2000												
March	487	373	2 179	3 039	555	2 093	4 984	7 632	1 042	2 466	7 163	10 671
June	511	492	2 263	3 266	667	1 865	5 039	7 571	1 178	2 357	7 302	10 837
<b>2000–2001</b> September	469	328	1 875	2 672	543	1 934	4 965	7 442	1 012	2 262	6 840	10 114
December	509	294	1 613	2 416	715	1 787	4 988	7 490	1 224	2 081	6 601	9 906
March	526	243	1 336	2 105	891	1 725	4 847	7 463	1 417	1 968	6 183	9 568
June	745	347	1 608	2 700	836	1 684	4 665	7 185	1 581	2 031	6 273	9 885
• • • • • • • • • • • • •	• • • • • •	• • • • • • •	• • • • • •	• • • • • • • • •	• • • • • •	• • • • • •	• • • • • •	• • • • • • • •	• • • • • • •	• • • • • • •	• • • • • •	• • • • •
				TRE	END ESTI	MATES (A	ctual)					
1999–2000	2 235	1 143	7 662	11 041	2 642	8 186	19 449	30 277	4 879	9 329	27 110	41 318
2000–2001	2 238	1 155	6 398	9 791	3 037	7 093	19 523	29 654	5 275	8 248	25 922	39 445
1999–2000												
March	489	293	1 999	2 781	603	2 064	4 935	7 602	1 092	2 357	6 934	10 383
June <b>2000–2001</b>	477	302	2 033	2 812	556	1 959	5 005	7 520	1 033	2 261	7 038	10 332
September	479	289	1 846	2 614	607	1 870	5 020	7 497	1 086	2 159	6 866	10 111
December	509	277	1 594	2 380	714	1 802	4 940	7 456	1 223	2 079	6 534	9 836
March	580	280	1 474	2 334	815	1 738	4 835	7 388	1 395	2 018	6 309	9 722
June	670	309	1 484	2 463	901	1 683	4 729	7 313	1 571	1 992	6 213	9 776

<sup>(</sup>a) Not directly comparable with estimates of actual expenditure due to likely over/under realisation

<sup>—</sup> see paragraphs 26 to 29 of the Explanatory Notes.



	MINING	MANUFACTURING									
	Total mining	Food, beverage and tobacco	Textile, clothing, footwear and leather	Wood and paper product	Printing, publishing and recorded media	Petroleum, coal, chemical and assoc. product	Non- metallic mineral product	Metal product	Machinery and equipment	Other manu- facturing	Total manu- facturing
Period	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m
• • • • • • • • • • • • •	• • • • • • • • • •	• • • • • • • •	• • • • • • •		• • • • • • •	• • • • • • •	• • • • • •	• • • • • • •	• • • • • • •		• • • • • •
				ORIGIN	IAL (Actua	1)					
1999-2000	5 288	2 221	196	987	782	1 801	469	1 482	1 524	221	9 685
2000–2001	5 248	2 021	232	578	677	1 379	511	1 072	1 701	179	8 350
1999–2000											
March	967	590	48	177	183	483	101	354	284	42	2 262
June	1 239	584	55	251	169	496	149	330	360	46	2 441
2000–2001											
September December	995	427	54	151	163	327	170	240	612	49	2 193
March	1 264 1 326	549 498	46 38	133 124	208 130	464 297	129 89	333 208	347 375	37 51	2 246 1 810
June	1 663	547	94	171	175	291	124	291	366	43	2 102
• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • •	• • • • • • • •	• • • • • • •		• • • • • • •	• • • • • • •	• • • • • •	• • • • • • •	• • • • • • •		• • • • • •
				ORIGINAL	(Expected	l)(a)					
2001-2002	4.040	4.070	00	004	007	000	000	470	000	70	4.040
6 mths to Dec 6 mths to Jun	4 342 3 969	1 079 957	80 60	281 217	297 188	900 694	228 208	470 952	808 695	76 59	4 218 4 030
Total 2001-2002	8 311	2 036	140	497	484	1 594	436	1 421	1 503	136	8 248
.014. 2002 2002	3 322	2 000	2.0			200.	.00		1000	100	02.0
	• • • • • • • • • • •	• • • • • • • • •	SEAS	ONALLY	ADJUSTED	(Actual)	• • • • • •	• • • • • • • •	• • • • • • • •	• • • • • • •	• • • • • • •
1999–2000	5 299	2 216	197	985	787	1 829	470	1 500	1 506	221	9 710
2000-2001	5 234	2 016	227	580	679	1 367	509	1 067	1 715	180	8 342
1999–2000	1.040	507	50	04.4	100	F 4 F	440	005	040	4.4	0.400
March June	1 042 1 178	597 545	56 49	214 205	199 148	545 518	113 146	385 300	313 402	44 44	2 466 2 357
2000–2001	1176	343	49	203	140	310	140	300	402	44	2 331
September	1 012	478	58	142	192	328	166	260	592	46	2 262
December	1 224	524	42	152	190	400	121	315	298	39	2 081
March	1 417	503	44	148	144	335	101	225	414	54	1 968
June	1 581	512	83	138	154	303	121	267	411	42	2 031
• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • •	• • • • • • • •	TD	FND ESTI	MATES (A	ctual)	• • • • • •	• • • • • • •	• • • • • • •	• • • • • •	• • • • • •
1999–2000	4 879	2 198	205	880	808	1 530	472	1 479	1 537	217	9 329
2000–2001	5 275	2 038	218	597	662	1 398	498	1 073	1 585	179	8 248
1000 0000											
<b>1999–2000</b> March	1 092	571	51	222	197	386	119	352	407	52	2 357
June	1 033	546	51 54	188	182	379	141	313	414	44	2 261
2000–2001		0.0	٥.	_55		0		323		• • •	
September	1 086	513	49	163	175	374	147	287	408	43	2 159
December	1 223	503	48	148	174	359	131	270	401	45	2 079
March	1 395	508	55 66	143	163	341	114	262	386	46	2 018
June	1 571	514	66	143	150	323	106	254	390	46	1 992

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



	Construction	Wholesale trade	Retail trade	Transport and storage	Finance and insurance	Property and business services	Other services etc.	Total other selected industries	Total new capital expenditure
Period	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m
• • • • • • • • • • • • • • • • • • • •	• • • • • • • •	• • • • • • • •	• • • • • • • •	• • • • • • • • •	• • • • • • • • •	• • • • • • • • •	• • • • • • • • •	• • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •
				ORIGIN	AL (Actual)				
1999–2000	1 435	2 599	3 093	3 659	2 925	6 163	7 601	27 475	42 447
2000–2001	1 262	2 066	2 768	3 036	3 193	5 865	7 703	25 893	39 491
1999–2000									
March	337	451	594	809	823	1 491	1 972	6 477	9 706
June	459	614	803	1 095	721	1 726	2 262	7 681	11 361
<b>2000–2001</b> September	333	583	723	600	986	1 550	1.026	6 71 5	9 903
December	333 381	554	843	602 859	986 798	1 552 1 504	1 936 2 022	6 715 6 962	10 472
March	247	420	475	871	566	1 269	1 789	5 638	8 774
June	301	509	727	703	842	1 539	1 956	6 578	10 343
• • • • • • • • • • • • •	• • • • • • • •	• • • • • • • •	• • • • • • • •	• • • • • • • •	• • • • • • • • •	• • • • • • • •	• • • • • • • •		
				ORIGINAL	(Expected)(a	)			
2001-2002									
6 mths to Dec	371	868	1 494	1 500	1 307	2 160	3 931	11 632	20 192
6 mths to Jun	380	877	1 125	1 284	1 456	1 990	3 367	10 478	18 477
Total 2001-2002	751	1 745	2 618	2 784	2 764	4 150	7 298	22 110	38 669
• • • • • • • • • • • • • • • • • • • •	•••••	• • • • • • • •	• • • • • • • •	• • • • • • • • •	• • • • • • • • •	• • • • • • • • •	• • • • • • • •	• • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •
			SE	ASONALLY A	DJUSTED (Ac	tual)			
1999–2000	1 433	2 573	3 107	3 662	2 969	6 178	7 600	27 522	42 531
2000–2001	1 274	2 062	2 755	3 046	3 177	5 866	7 720	25 897	39 473
1999–2000									
March	375	538	784	843	970	1 694	1 959	7 163	10 671
June	391	596	747	1 085	698	1 608	2 177	7 302	10 837
2000-2001									
September	378	552	717	591	969	1 579	2 054	6 840	10 114
December	363	515	724	851	724	1 419	2 005	6 601	9 906
March	276	501	636	901	667	1 434	1 768	6 183	9 568
June	256	493	678	702	816	1 435	1 893	6 273	9 885
• • • • • • • • • • • • • • • • • • • •	• • • • • • • •	• • • • • • • •	• • • • • • • •	• • • • • • • • •	• • • • • • • • •	• • • • • • • • •	• • • • • • • • •	• • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •
				TREND ESTI	MATES (Actua	al)			
1999–2000	1 446	2 553	3 077	3 491	2 833	6 179	7 532	27 110	41 318
2000–2001	1 280	2 062	2 758	3 235	2 960	5 868	7 758	25 922	39 445
1999–2000									
March	357	612	772	906	735	1 605	1 947	6 934	10 383
June	385	567	751	865	764	1 625	2 081	7 038	10 332
2000-2001									
September	383	544	727	823	748	1 555	2 086	6 866	10 111
December	343	526	696	801	731	1 471	1 966	6 534	9 836
March	297	502	673	801	734	1 431	1 871	6 309	9 722
June	257	491	662	809	748	1 412	1 834	6 213	9 776

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

	ASSET			INDUSTRY	RY			
	Buildings and structures	Equipment, plant and machinery	Total	Mining	Manufacturing	Other selected industries	Total	
Period	\$m	\$m	\$m	\$m	\$m	\$m	\$m	
• • • • • • • • • • • •	• • • • • • • • • • • • •	• • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • •	• • • • • • • • • • • • •	• • • • • • • • • •	• • • • • • • • • • • •	
			ORIGINA	L				
1999–2000	12 003	30 444	42 447	5 288	9 685	27 475	42 447	
2000-2001	9 679	30 233	39 912	5 066	8 173	26 673	39 912	
1999–2000								
March	2 758	7 025	9 780	969	2 276	6 522	9 780	
June	3 183	8 178	11 358	1 225	2 434	7 690	11 358	
2000–2001								
September December	2 546	7 620	10 166	977	2 186	7 002	10 166	
March	2 683 1 881	7 910 6 942	10 593 8 824	1 225 1 278	2 202 1 765	7 166 5 780	10 593 8 824	
June	2 569	7 761	10 330	1 586	2 020	6 724	10 330	
• • • • • • • • • • • •	••••••	• • • • • • • • • • •	SEASONALLY AD	JUSTED		• • • • • • • • • •	• • • • • • • • • • • •	
1999–2000	12 003	30 444	42 447	5 288	9 685	27 475	42 447	
2000–2001	9 679	30 233	39 912	5 066	8 173	26 673	39 912	
1999–2000								
March	3 026	7 721	10 746	1 041	2 486	7 204	10 746	
June	3 126	7 607	10 722	1 163	2 247	7 303	10 722	
2000–2001								
September	2 701	7 748	10 449	995	2 321	7 133	10 449	
December	2 374	7 670	10 044	1 190	2 060	6 795	10 044	
March June	2 056	7 574	9 630	1 370	1 925	6 336	9 630	
Julie	2 549	7 240	9 789	1 512	1 867	6 410	9 789	
• • • • • • • • • • •	• • • • • • • • • • • •	• • • • • • • • • •	TREND ESTIM	ATES	• • • • • • • • • • • • •	• • • • • • • • •	• • • • • • • • • • • •	
1000 0000	44.707	20.270	40.000	F 400	0.020	07.220	40.000	
1999–2000 2000–2001	11 707 9 732	30 372 30 231	42 098 39 951	5 123 5 113	9 632 8 137	27 339 26 714	42 098 39 951	
1999–2000								
March	2 960	7 673	10 637	1 124	2 453	7 051	10 637	
June	2 945	7 686	10 629	1 029	2 347	7 243	10 629	
2000-2001								
September	2 730	7 714	10 438	1 083	2 226	7 126	10 438	
December	2 403	7 651	10 059	1 194	2 086	6 776	10 059	
March	2 276	7 517	9 795	1 343	1 957	6 495	9 795	
June	2 324	7 349	9 659	1 493	1 867	6 318	9 659	

<sup>(</sup>a) Reference year for chain volume measures is 1999–2000.



# ACTUAL & EXPECTED CAPITAL EXPENDITURE, By Type of Asset—Current prices

	12 months	12 months					
	expectation as	expectation as		3 months actual	6 months actual	9 months actual	
	reported	reported	12 months	and 9 months	and 6 months	and 3 months	
	in Jan–Feb	in Apr–May	expectation as	expectation as	expectation as	expectation as	
	of previous financial year	of previous financial year	reported in Jul–Aug	reported in Oct–Nov	reported in Jan–Feb	reported in Apr–May	12 months actual
Financial year	(Estimate 1)	(Estimate 2)	(Estimate 3)	(Estimate 4)	(Estimate 5)	(Estimate 6)	(Estimate 7)
• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • •	RIII	LDINGS AND STF	DIICTURES (\$ mil	lion)	• • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •
1997-1998	12 085	14 505	13 668	14 014	13 593	13 740	13 150
1998–1999 1999–2000	11 812 9 258	13 587 8 655	14 789 10 287	15 978 11 663	14 711 12 731	14 081 12 488	13 709 12 003
2000-2001	9 238 8 877	9 198	10 297	10 539	10 353	10 183	9 937
2001–2002	7 623	9 329	11 691	n.y.a.	n.y.a.	n.y.a.	n.y.a.
• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • •					• • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •
			S AND STRUCTU	•			
1998-1999	1.16	1.01	0.93	0.86	0.93	0.97	1.00
1999-2000	1.30 1.12	1.39 1.08	1.17 0.97	1.03 0.94	0.94 0.96	0.96 0.98	1.00 1.00
2000–2001	1.23	1.12	1.01	0.94	0.94	0.96	1.00
5 year average	1.25	1.12	1.01	0.94	0.94	0.90	1.00
• • • • • • • • • • • •	•••••	FOLUDA	45NT DIANT AND			• • • • • • • • • • • •	• • • • • • • • • • • • •
1007 1000	00.000		1ENT, PLANT AND			22.454	22.000
1997–1998 1998–1999	20 229 26 104	22 974 27 905	27 193 29 948	30 974 29 276	32 637 30 467	33 151 31 386	33 060 30 973
1999–2000	22 787	23 912	25 977	28 713	29 203	30 728	30 444
2000-2001	24 046	25 439	26 996	29 522	29 091	29 402	29 554
2001–2002	24 886	25 064	26 978	n.y.a.	n.y.a.	n.y.a.	n.y.a.
• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • •	• • • • • • • • • • • •	• • • • • • • • • • • •	• • • • • • • • • • •	• • • • • • • • • • • •	• • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •
		EQUIPMENT,	PLANT AND MAC	CHINERY (Realisa	ition Ratio)(a)		
1998–1999	1.19	1.11	1.03	1.06	1.02	0.99	1.00
1999-2000	1.34	1.27	1.17	1.06	1.04	0.99	1.00
<b>2000–2001</b> 5 year average	1.23 1.34	1.16 1.23	1.09 1.13	1.00 1.05	1.02 1.03	1.01 1.00	1.00 1.00
5 year average	1.54	1.23	1.13	1.05	1.03	1.00	1.00
			TOTAL (S	million)			
1997–1998	32 321	37 479	40 861	44 988	46 229	46 892	46 210
1998–1999	37 916	41 492	44 737	45 253	45 178	45 467	44 682
1999-2000	32 045	32 568	36 264	40 375	41 934	43 216	42 447
2000-2001	32 923	34 638	37 291	40 061	39 444	39 584	39 491
2001–2002	32 509	34 393	38 669	n.y.a.	n.y.a.	n.y.a.	n.y.a.
• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • •	TOTAL (Poolis	ation Ratio)(a)	• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •
1998-1999	1.18	1.08	1.00	0.99	0.99	0.98	1.00
1999-2000	1.32	1.30	1.17	1.05	1.01	0.98	1.00
2000-2001	1.20	1.14	1.06	0.99	1.00	1.00	1.00
5 year average	1.30	1.19	1.09	1.02	1.00	0.99	1.00
• • • • • • • • • • • • •	• • • • • • • • • • • •	• • • • • • • • • • • •	• • • • • • • • • • • •	• • • • • • • • • • •	• • • • • • • • • • • •	• • • • • • • • • • • •	• • • • • • • • • • • • •
	TOTA	AL (Percentage c		ous estimate for	same financial	year)	
1997-1998	n.a.	16.0	9.0	10.1	2.8	1.4	-1.5
1998–1999	n.a.	9.4	7.8	1.2	-0.2	0.6	-1.7 1.8
1999–2000 2000–2001	n.a. n.a.	1.6 5.2	11.4 7.7	11.3 7.4	3.9 -1.5	3.1 0.4	-1.8 -0.2
2000-2001	n.a.	5.2 5.8	12.4	7.4 n.y.a.	–1.5 n.y.a.	n.y.a.	–0.2 n.y.a.
				•	-	•	,
• • • • • • • • • • • • • • • • • • • •					or provious finan		• • • • • • • • • • • • •
1000 1000				· ·	or previous finan	•	2.2
1998–1999 1999–2000	17.3 –15.5	10.7 -21.5	9.5 –18.9	0.6 -10.8	−2.3 −7.2	–3.0 –5.0	–3.3 –5.0
2000-2001	-15.5 2.7	-21.5 6.4	-16.9 2.8	-10.8 -0.8	-7.2 -5.9	-8.4	-5.0 -7.0
		<b></b>		0.0	0.0	J	

<sup>(</sup>a) Ratio of actual expenditure for the financial year to each progressive estimate for the financial year. For more information see paragraphs 26 to 29 of the Explanatory Notes.

Financial year  1997–1998 1998–1999 1999–2000 2000–2001 2001–2002	12 months expectation as reported in Jan–Feb of previous financial year (Estimate 1)  7 727 8 679 8 735 8 909 8 297	12 months expectation as reported in Apr–May of previous financial year (Estimate 2)  8 826 10 412 8 587 9 528 8 204	12 months expectation as reported in Jul–Aug (Estimate 3)  MANUFACTUI  10 108 11 257 9 015 9 923 8 248	3 months actual and 9 months expectation as reported in Oct–Nov (Estimate 4)  RING (\$ million)  10 936 10 456 9 594 9 383 n.y.a.	6 months actual and 6 months expectation as reported in Jan–Feb (Estimate 5)  11 066 10 371 9 837 9 387 n.y.a.	9 months actual and 3 months expectation as reported in Apr–May (Estimate 6)  11 451 9 963 9 987 8 787 n.y.a.	12 months actual (Estimate 7) 10 996 9 435 9 685 8 350 n.y.a.	
• • • • • • • • • • •	• • • • • • • • • • • •	• • • • • • • • • • • •	• • • • • • • • • • • •	• • • • • • • • • • • •	• • • • • • • • • • • •	• • • • • • • • • • • •	• • • • • • • • • • • • •	
		M	ANUFACTURING	(Realisation Ratio	o)(a)			
1998-1999	1.09	0.91	0.84	0.90	0.91	0.95	1.00	
1999–2000	1.11	1.13	1.07	1.01	0.98	0.97	1.00	
2000–2001	0.94	0.88	0.84	0.89	0.89	0.95	1.00	
5 year average	1.12	1.03	0.96	0.95	0.95	0.96	1.00	
MINING (\$ million)								
1997–1998	8 592	9 588	11 027	11 908	12 090	11 551	11 029	
1998–1999	9 404	10 088	9 245	9 633	9 354	9 049	8 725	
1999–2000	6 510	5 524	5 991	6 334	5 598	5 556	5 288	
2000-2001	5 183 5 673	5 378 7 137	5 567	5 988	5 452	5 712	5 248	
2001–2002	5015	1 131	8 311	n.y.a.	n.y.a.	n.y.a.	n.y.a.	
			MINING (Real	isation Ratio)(a)				
1998–1999	0.93	0.86	0.94	0.91	0.93	0.96	1.00	
1999–2000	0.81	0.96	0.88	0.83	0.94	0.95	1.00	
2000–2001	1.01	0.98	0.94	0.88	0.96	0.92	1.00	
5 year average	1.03	0.97	0.93	0.89	0.94	0.95	1.00	
, ,								
• • • • • • • • • • •	• • • • • • • • • • •	• • • • • • • • • • •	• • • • • • • • • • •	• • • • • • • • • • • •	• • • • • • • • • • • •	• • • • • • • • • • •	• • • • • • • • • • • • •	
		ОТІ	HER SELECTED II	NDUSTRIES (\$ mi	llion)			
1997-1998	16 002	19 065	19 726	22 144	23 074	23 889	24 185	
1998–1999	19 833	20 992	24 235	25 165	25 453	26 455	26 522	
1999-2000	16 800	18 457	21 259	24 447	26 499	27 673	27 475 25 893	
2000–2001 2001–2002	18 830 18 530	19 732 19 052	21 801	24 690	24 605	25 085		
∠UU1-∠UU2	18 539	19 052	22 110	n.y.a.	n.y.a.	n.y.a.	n.y.a.	
• • • • • • • • • • • •	• • • • • • • • • • • • •	OTHER S	ELECTED INDUS	TRIES (Realisatio	n Ratio)(a)	• • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •	
1998–1999	1.34	1.26	1.09	1.05	1.04	1.00	1.00	
1999–2000	1.64	1.49	1.29	1.12	1.04	0.99	1.00	
2000-2001	1.38	1.31	1.19	1.05	1.05	1.03	1.00	
5 year average	1.51	1.36	1.21	1.10	1.04	1.01	1.00	

<sup>(</sup>a) Ratio of actual expenditure for the financial year to each progressive estimate for the financial year. For more information see paragraphs 26 to 29 of the Explanatory Notes.

# RATIOS OF ACTUAL TO SHORT TERM EXPECTATION FOR SAME PERIOD(a)—Current prices

	3 MONTHS ENDING		6 MONTHS ENDING			
Financial year	31 December (collected in September Survey)	30 June (collected in March Survey)	31 December (collected in June Survey)	30 June (collected in December Survey)		
• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •	TVDE 05 4005T	• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •		
Duildings and Church		TYPE OF ASSET				
Buildings and Struc		0.88	0.00	0.05		
1998-1999	0.87	0.88	0.90	0.85		
1999-2000	0.98	0.87	1.05	0.89		
2000–2001	0.94	0.92	1.03	0.92		
5 year average		0.85	0.98	0.89		
Equipment, Plant a		• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •			
1998–1999	1.00	0.95	0.95	1.03		
1999–2000	0.96	0.97	1.11	1.09		
2000-2001	0.92	1.02	1.04	1.03		
5 year average	0.98	1.00	1.06	1.07		
o year arerage						
Total						
1998–1999	0.95	0.93	0.93	0.98		
1999-2000	0.97	0.94	1.09	1.02		
2000-2001	0.93	0.99	1.03	1.00		
5 year average	0.96	0.95	1.04	1.01		
Mining		TYPE OF INDUSTI	RY			
1998-1999	0.91	0.85	0.97	0.86		
1999–2000	0.75	0.82	0.92	0.88		
2000-2001	0.79	0.78	0.84	0.94		
5 year average	0.85	0.84	0.93	0.88		
Manufacturing	• • • • • • • • • • • • • • • • • • •	••••••	••••••	• • • • • • • • • • • • • • • • • • • •		
1998–1999	0.85	0.81	0.80	0.83		
1999–2000	0.93	0.89	0.98	0.97		
2000-2001	0.86	0.83	0.84	0.79		
5 year average	0.87	0.87	0.91	0.93		
Other Selected Ind		• • • • • • • • • • • • • • • • • • • •	•••••	• • • • • • • • • • • • • • • • • • • •		
1998–1999	1.01	1.01	0.97	1.09		
1999–2000	1.04	0.97	1.19	1.07		
2000–2001	0.98	1.14	1.16	1.12		
5 year average	1.04	1.03	1.13	1.11		
Total	• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •	••••••	• • • • • • • • • • • • • • • • • • • •		
1998–1999	0.95	0.93	0.93	0.98		
1999–2000	0.97	0.94	1.09	1.02		
2000-2001	0.93	0.99	1.03	1.00		
5 year average	0.96	0.95	1.04	1.01		
. ,						

<sup>(</sup>a) For more information on Realisation Ratios see paragraphs 26 to 29 of the 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, 1993:

Mining (Division B)

Manufacturing (Division C)

Food, beverages and tobacco (21)

Textiles, clothing, footwear and leather (22)

Wood and paper products (23)

Printing, publishing and recorded media (24)

Petroleum, coal, chemical and associated products (25)

Non-metallic mineral products (26)

Metal products (27)

Machinery and equipment (28)

Other manufacturing (29)

Other Selected Industries

Construction (Division E)

Wholesale trade (Division F)

Retail trade (Division G)

Transport & storage (Division I)

Finance and insurance (Division K)

Property & business services (Division L)

Other selected services (including electricity & gas; communication; accommodation, cafes & restaurants; cultural & recreational services; and personal services (36, 37, 57, 71, 91–93, 95)

**3** The survey excludes the following industries

Agriculture, forestry and fishing

Government administration & defence

Education

Health and community services

Other services (96)

- **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 the ABS Business Register which is primarily based on registrations to the Australian Taxation Office's Pay As You Go Witholding (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.
- **6** 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.

SCOPE OF THE SURVEY continued

**7** 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.

CHANGES TO ABS BUSINESS REGISTER

SURVEY METHODOLOGY

- **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 New Capital Expenditure series so that the 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 6,800 units which is stratified by industry, state/territory and number of employees. The figures obtained from the selected businesses are supplemented by data from units which have large capital expenditure and/or large employment and which 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 particular business unit does not respond in a given survey period, an estimate is substituted. Revisions may be made to these estimates if data are provided subsequently from those businesses. 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 in the 8 or 9 week period after the end of the quarter to which the survey data relate (e.g. March quarter survey returns are completed during April and May). Full details of the reporting cycle are shown below.

TIMING AND CONSTRUCTION OF SURVEY CYCLE

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

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

#### Period to which reported data relates 1999-2000 2000-2001 2001-2002 Survey quarter Sep Mar Jun Sep Dec Mar Jun Dec Mar E2 December 2000 Act E1 E2 Act Act E1 March 2001 Act Act Act E1 June 2001 E2 September 20001 Act E1 E2 E1 E2 December 2001 Act F2 March 2002 June 2002 E1

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). For example, as the table above shows, the first estimate for 2001–2002 was available from the December 2000 survey as a longer term expectation (E2). It was subsequently revised in the March 2001 survey (again as a longer term expectation) and in the June 2001 survey as the sum of two expectations (E1 + E2). In the September and subsequent surveys the estimate is derived as the sum of actual expenditure (for that part of the year completed) and expected expenditure (for the remainder of the year). The final (or seventh) estimate from the June quarter 2002 survey, will be derived by summing the actual expenditure for each of the four quarters.

EXPLANATION OF TIMING
OF ESTIMATES

**15** The graphs on page 4 and tables 4 and 5 of this publication contain 7 estimates of expenditure for each financial year.

#### COMPOSITION OF ESTIMATE.....

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

SAMPLE REVISION

- **16** 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.
- **17** 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.
- **18** 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 June quarter 2001 they represented about 3.1% of the total estimate of new capital expenditure.

STATISTICAL UNIT

19 The 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, 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.

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. It replaces the Australian Standard Industrial Classification (ASIC) and the New Zealand Standard Industrial Classification (NZSIC).
- **21** For more information, users are referred to *Australian and New Zealand Standard Industrial Classification (ANZSIC)*, 1993 (Cat. no. 1292.0).

CLASSIFICATION BY INDUSTRY continued

CHAIN VOLUME MEASURES

- **22** In order to classify new capital expenditure by industry, each statistical unit (as defined above) is classified to the Australian and New Zealand Standard Industrial Classification (ANZSIC) industry in which it *mainly* operates.
- 23 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 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 quarterly estimates for a financial year sum to the corresponding annual estimate.
- **24** 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 few years.
- 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 industry groups 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 the *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 6 estimates of expenditure for that financial year and the actual expenditure (see paragraphs 13–15 above for an explanation of the derivation of the 7 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 3 or 6 month expectations as well as the 12 month E2 estimates or combinations of estimates containing at least some expectation components (e.g. 6 months actual and 6 months expected expenditure).

DERIVATION AND USEFULNESS OF REALISATION RATIOS continued

- 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 2001–2002 based on the June 2001 survey results and compare this with 2000–2001 expenditure, it is necessary to apply the relevant realisation factors to the expectation 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 4 and 5.
- 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.

RELIABILITY OF THE ESTIMATES

- **30** Estimates provided in this publication are subject to non-sampling and sampling errors. Details of sampling errors are on pages 20 and 21 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, 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.

SEASONAL ADJUSTMENT

- **33** The quarterly actual new capital expenditure 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** Seasonal adjustment does not remove from the series the effect of irregular or non-seasonal influences (e.g. a change in interest rates) and reflect 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. It should be noted that the seasonally adjusted figures necessarily reflect the sampling and other errors to which the original figures are subject.

SEASONAL ADJUSTMENT continued

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

TREND ESTIMATES

- **37** 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.
- **38** For further information, see *Information Paper: A Guide to Interpreting Time Series Monitoring Trends, an Overview* (Cat. no. 1348.0) or contact the Assistant Director, Time Series Analysis on Canberra 02 6242 6345.

**DESCRIPTION OF TERMS** 

- **39** A description of the terms used in this publication is given below:
- **40** *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.
- **41** 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.

**42** A list of all members of the target population for a survey. The frame for this survey is a list of all businesses in the ANZSIC divisions, subdivisions and groups listed in paragraph 2. This is extracted from the ABS Business Register, which is a list of all employing Australian businesses, as described in paragraph 5.

FRAME

COMPARISON WITH OTHER ABS STATISTICS

- **43** 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 dwelling and other building and structures items respectively.
  - 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.
  - For machinery and equipment, the National Accounts estimates relate to acquisitions less disposals of all fixed tangible assets whereas the survey figures are acquisitions of new fixed tangible assets only.
- **44** 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).

RELATED PUBLICATIONS

- **45** Users may also wish to refer the following publications:
- Australian Business Expectations (Cat. no. 5250.0)
- 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 Operations and Industry Performance, Australia (Cat. no. 8140.0)
- Company Profits, Australia (Cat. no. 5651.0)
- Directory of Capital Expenditure Data Sources and Related Statistics (Cat. no. 5653.0)
- Engineering Construction Activity, Australia (Cat. no. 8762.0)
- Information Paper: Experimental Estimates: Australian Industry, A State Perspective, Australia 1998–99 (Cat. no. 8156.0)
- Information Paper: Improvements to Australian Bureau of Statistics Business Indicators (Cat. no. 5677.0)
- Information Paper: Australian National Accounts, Introduction of Chain Volume and Price Indexes (Cat. no. 5248.0)
- Inventories and Sales, Selected Industries, Australia (Cat. no. 5629.0)
- Private New Capital Expenditure, State Estimates (Cat. no. 5646.0).

RELATED PUBLICATIONS continued

**46** Current publications produced by the ABS are listed in the *Catalogue of Publications and Products, Australia* (Cat. no. 1101.0). The ABS also issues, on Tuesdays and Fridays, a *Release Advice* (Cat. no. 1105.0) which lists publications to be released in the next few days. The Catalogue and Release Advice are available from any ABS office.

ABS DATA AVAILABLE ON REQUEST

**47** In addition to the data contained in this publication, more detailed industry 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 group (3 digit) level.

SYMBOLS AND OTHER USAGES

ANZSIC Australian and New Zealand Standard Industrial Classification

n.y.a. not yet available

#### STANDARD ERRORS

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.

LEVEL ESTIMATES

To illustrate, let us say that the published level estimate for total capital expenditure is \$10,500m and the calculated standard error in this case is \$173m. The standard error is then used to interpret the level estimate of \$10,500m.

For instance, the standard error of \$173m indicates that:

- There are approximately two chances in three that the real value falls within the range \$10,327m to \$10,673m ( $$10,500m \pm $173m$ )
- There are approximately 19 chances in 20 that the real value falls within the ranges \$10,154m and \$10,846m (\$10,500m  $\pm$  \$346m)

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 national quarterly level estimates. These standard errors are based on a smoothed average of capital expenditure estimates

	Building and structures \$m	Equipment, plant and machinery \$m	Total \$m
Mining	11	16	36
Manufacturing	16	51	62
Construction	7	35	40
Wholesale trade	5	57	65
Retail trade	7	22	34
Transport and storage	10	40	45
Finance and insurance	3	29	31
Property and business services	52	62	84
Other services	69	36	89
Total	90	124	173

#### STANDARD ERRORS

#### MOVEMENT ESTIMATES

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 capital expenditure is \$10,500m, and the next quarter the published level estimate is \$11,100m. In this example the calculated standard error for the movement estimate is \$221m. The standard error is then used to interpret the published movement estimate of +\$600m.

For instance, the standard error of \$221m indicates that:

- There are approximately two chances in three that the real movement over the two quarter period falls within the range \$379m to 821m ( $600m \pm 221m$ )
- There are approximately nineteen chances in twenty that the real movement falls within the range \$158m to 1.042m ( $600m \pm 442m$ )

The following table shows the standard errors for national quarterly movement estimates. These standard errors are based on a smoothed average of capital expenditure estimates.

	Building and structures	Equipment, plant and machinery	Total
	\$m	\$m	\$m
Mining	15	23	49
Manufacturing	22	64	78
Construction	10	48	55
Wholesale trade	7	51	66
Retail trade	11	25	45
Transport and storage	12	49	53
Finance and insurance	5	40	32
Property and business services	74	84	114
Other services	98	46	119
Total	127	153	221

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

Each time new seasonally adjusted estimates become available, trend estimates are revised (see paragraphs 33 to 38 of the Explanatory Notes).

## TREND REVISIONS

The examples in the tables below show two scenarios and the consequent revisions to previous trend estimates of capital expenditure by private businesses.

- **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 approximately the long term average movement, without regard to sign, in the seasonally adjusted series.

#### **BUILDINGS AND STRUCTURES** TREND AS **PUBLISHED** WHAT IF NEXT QUARTER'S SEASONALLY ADJUSTED ESTIMATE: 2 \$m г 4100 1 rises by 6.7% on Jun 2001 falls by 6.7% on Jun 2001 \$m % change % change % change \$m \$m Published trend 3600 2000 2 December 2 403 -12.02 3 7 6 -13.02 389 -12.53100 2001 2600 March 2 2 7 6 -5.3 2 2 9 0 -3.62 285 -4.35.5 2 3 5 4 3.0 June 2 3 2 4 2.1 2 4 1 7 2100 September 2 601 7.6 2 459 4.5 1600 M 2001 M 2000

EQUIPMENT, PLANT AN	ID	TREND AS					
MACHINERY		PUBLISHED	)	WHAT IF NE	EXT QUARTER'S SE	ASONALLY AD	JUSTED ESTIMATE:
	6m 10500			<b>1</b> rises by 4.9	9% on Jun 2001	<b>2</b> falls by 4.9	% on Jun 2001
Published trend		\$m	% change	\$m	% change	\$m	% change
2	9500 2000						
2	December	7 651	-0.8	7 637	-1.0	7 679	-0.4
- 8	8500 2001						
	March	7 517	-1.8	7 523	-1.5	7 508	-2.2
· · · · · · · · · · · · · · · · · · ·	<sup>7500</sup> June	7 349	-2.2	7 442	-1.1	7 241	-3.6
	September 6500	_	_	7 432	-0.1	6 970	-3.7
S M S M S 1999 2000 2001	0300						

TOTAL CAPITAL EXPE	NDITUR	E	TREND AS	)	WHAT IF NI	EXT QUARTER'S SE	ASONALLY AD.	JUSTED ESTIMATE:
<b>– 1</b>	\$m 14000				,	4% on Jun 2001	,	% on Jun 2001
<ul> <li>Published trend</li> </ul>			\$m	% change	\$m	% change	\$m	% change
2	12500	2000						
_		December	10 059	-3.6	10 002	-4.2	10 079	-3.4
_	11000	2001						
		March	9 796	-2.6	9 820	-1.8	9 793	-2.8
	9500	June	9 659	-1.4	9 913	0.9	9 542	-2.6
		September	_	_	10 174	2.6	9 295	-2.6
S M S M S	18000							

# FOR MORE INFORMATION...

INTERNET www.abs.gov.au the ABS web site is the best place to

start for access to summary data from our latest publications, information about the ABS, advice about upcoming releases, our catalogue, and Australia Now—a

statistical profile.

LIBRARY A range of ABS publications is available from public and

tertiary libraries Australia-wide. Contact your nearest library to determine whether it has the ABS statistics you require, or visit our web site for a list of libraries.

CPI INFOLINE For current and historical Consumer Price Index data,

call 1902 981 074 (call cost 77c per minute).

DIAL-A-STATISTIC For the latest figures for National Accounts, Balance of

Payments, Labour Force, Average Weekly Earnings, Estimated Resident Population and the Consumer Price Index call 1900 986 400 (call cost 77c per minute).

#### INFORMATION SERVICE

Data which have been published and can be provided within five minutes are free of charge. Our information consultants can also help you to access the full range of ABS information—ABS user-pays services can be tailored to your needs, time frame and budget. Publications may be purchased. Specialists are on hand to help you with analytical or methodological advice.

PHONE **1300 135 070** 

EMAIL client.services@abs.gov.au

FAX 1300 135 211

POST Client Services, ABS, GPO Box 796, Sydney 1041

# WHY NOT SUBSCRIBE?

ABS subscription services provide regular, convenient and prompt deliveries of ABS publications and products as they are released. Email delivery of monthly and quarterly publications is available.

PHONE 1300 366 323

EMAIL subscriptions@abs.gov.au

FAX 03 9615 7848

POST Subscription Services, ABS, GPO Box 2796Y, Melbourne 3001

© Commonwealth of Australia 2001



RRP \$18.00