



PRIVATE NEW CAPITAL EXPENDITURE AND EXPECTED EXPENDITURE to June 1999 AUSTRALIA

EMBARGO: 11:30AM (CANBERRA TIME) THURS 26 NOV 1998

New Capital Expenditure



SEPTEMBER QTR KEY FIGURES

TREND ESTIMATES (a)

	Sep 97	Jun 98	Sep 98	% change	% change Sen 97 to	
	\$m	\$ <i>m</i>	\$m	Sep 98	Sep 98	
Total new capital						
expenditure	11 457	11 888	12 177	2.4	6.3	
Buildings and structures	3 171	3 461	3 642	5.2	14.8	
Equipment, plant and						
machinery	8 276	8 424	8 478	0.6	2.4	

SEASONALLY ADJUSTED(a)

	Sep 97	Jun 98	Sep 98	% change Jun 98 to	% change Sep 97 to
	\$ <i>m</i>	\$ <i>m</i>	\$ <i>m</i>	Sep 98	Sep 98
Total new capital					
expenditure	11 239	11 573	12 542	8.4	11.6
Buildings and structures	3 014	3 547	3 738	5.4	24.0
Equipment, plant and					
machinery	8 216	8 032	8 773	9.2	6.8

(a) In volume terms.

SEPTEMBER QTR KEY POINTS

ACTUAL EXPENDITURE

- Trend estimates of total new capital expenditure (in volume terms) have been increasing steadily since late 1995. The current estimate of \$12,177m is 6.3% higher than for the September quarter 1997.
- Following four quarters of negative growth, expenditure on buildings and structures has been between 5% and 7% for the past three quarters, while growth in equipment has been flat for the past three quarters.
- While both Mining and Manufacturing have experienced negative growth over the past few quarters, growth in Other Selected Industries has been between 3% and 7% since March 1998.

EXPECTED EXPENDITURE

• The fourth estimate of total expenditure for 1998-99 is \$45,454m. This is 1.0% higher than the corresponding estimate for 1997-98 and 0.4% higher than the third estimate for 1998-99.

 For further information about these and related statistics, contact John Blanchette on 02 9268 4280, or any ABS office shown on the back cover of this publication.

NOTES

ISSUE (Quarter)	RELEASE DATE					
December 1998	25 February 1999					
March 1998	27 May 1999					
•••••	• • • • • • • • • • • • • • • • • • • •					
As foreshadowed last issue, constant price data have been replaced with chain volume measures, using a reference year of 1996-97. The methodology used to derive the deflators underlying the volume measures has also changed. For further information refer to paragraphs 15 to 25 of the explanatory notes or the information paper <i>Introduction of Chain Volume Measures in the Australian National Accounts</i> (5248.0).						
Additionally, the method used the Manufacturing industry dif price estimates. Previously, th was derived by aggregating sea Subdivision. The Manufacturin	to seasonally adjust chain volume measures for fers from that used to seasonally adjust constant re seasonally adjusted estimate for Manufacturing asonally adjusted estimates for each Manufacturing ng Division is now directly seasonally adjusted.					
Readers should exercise care i three observations, in particul subsequent quarters' data. For Estimates on page 22.	n the interpretation of the trend data as the last ar, are likely to be revised with the addition of further information, refer to Revisions to Trend					
	ISSUE (Quarter) December 1998 March 1998 As foreshadowed last issue, co volume measures, using a refe derive the deflators underlying further information refer to pa information paper <i>Introductic</i> <i>National Accounts</i> (5248.0). Additionally, the method used the Manufacturing industry dif price estimates. Previously, th was derived by aggregating sea Subdivision. The Manufacturia Readers should exercise care i three observations, in particul subsequent quarters' data. For Estimates on page 22.					

W. McLennan Australian Statistician

QUARTERLY TREND ESTIMATES OF CHAIN VOLUME MEASURES

BY ASSET

Following relatively stronger growth over 1995-96, growth in total capital expenditure has been steady over the past two years, with growth rates of between 0.5% and 3%. Following a period of negative growth between March and December quarters 1997, expenditure on buildings has been between 5% and 7% over the past three quarters. Conversely, expenditure on equipment has been flat over the past three quarters after strong growth during 1997.



BY INDUSTRY

Following consistent growth from September quarter 1995, growth rates for the Mining industry have eased over the past five quarters, with negative growth in the most recent two quarters. Growth rates for Manufacturing have been relatively flat over the same period, with negative growth experienced over the past three quarters. Following a period of flat or negative growth over 1997, expenditure by Other Selected industries has grown strongly over the past three quarters.



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FINANCIAL YEARS AT CURRENT PRICES

EXPENDITURE

The seven estimates of actual and expected expenditure for each financial year which appear in the graph below relate to data contained in Table 4. Care should be taken when using these series and the associated realisation ratios.



EXPLANATION OF TIMING OF ESTIMATES used in construction of graph above

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



ACTUAL & EXPECTED EXPENDITURE, By Type of Asset and Industry—Current prices

	BUILDI STRUC	NGS AND TURES			EQUIP MACHI	MENT, PL NERY	ANT AND		TOTAL CAPITAL EXPENDITURE			
	Mining	Manu- facturing	Other selected indus- tries	Total	Mining	Manu- facturing	Other selected indus- tries	Total	Mining	Manu- facturing	Other selected indus- tries	Total
Period	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m
• • • • • • • • • • • • •	• • • • • • •	• • • • • • •	• • • • • • •	• • • • • • • •			• • • • • • •		• • • • • • • •			• • • • • • •
					ORIGI	NAL (Actu	ial)					
1996–97 1997–98	4 296 4 408	1 686 2 022	8 348 6 722	14 330 13 151	4 485 6 622	8 511 8 976	16 511 17 532	29 507 33 129	8 781 11 029	10 198 10 997	24 859 24 253	43 837 46 280
1996–97												
June 1997_98	1 097	547	1 735	3 378	1 227	2 281	5 007	8 516	2 324	2 828	6 742	11 894
September	956	523	1 442	2 921	1 535	2 005	4 102	7 642	2 491	2 528	5 544	10 563
December	1 153	728	1 847	3 728	1 867	2 459	4 751	9 078	3 020	3 188	6 598	12 806
March	936	357	1 540	2 833	1 630	2 020	3 817	7 468	2 566	2 378	5 357	10 301
June	1 363	413	1 893	3 669	1 589	2 491	4 862	8 941	2 952	2 904	6 754	12 610
1998–99 September	1 109	354	2 185	3 648	1 279	2 238	4 980	8 497	2 388	2 592	7 164	12 144
		••••	• • • • • • •	•••••	ORIGINA	L (Expecte	ed)(a)		••••			• • • • • • •
1998-99												
3 mths to Dec	1 031	627	2 559	4 216	1 326	2 741	4 366	8 434	2 357	3 368	6 924	12 650
6 mths to Jun	1 888	794	4 229	6 910	2 127	4 783	6 839	13 750	4 015	5 576	11 069	20 660
Total 1998-99	4 027	1 774	8 972	14 774	4 733	9 762	16 185	30 680	8 760	11 537	25 157	45 454
• • • • • • • • • • • • •	• • • • • • •	••••	• • • • • • •	SE	ASONALLY	ADJUSTE	D (Actual)	• • • • • • • •		•••••	• • • • • • •
								,				
1996-97	4 309	1 658	8 418	14 385	4 486	8 526 8 065	16 444	29 456	8 794	10 184	24 863	43 841
1997-98	4 412	2 011	6762	13 185	6 645	8 965	17 520	33 130	11 057	10 976	24 282	46 315
1996–97												
June	1 101	588	1 767	3 457	1 172	2 042	4 515	7 729	2 273	2 630	6 282	11 185
1997-98	1.001	407	4 457	2 005	4 5 40	0.405	4.240	0.040	0.000	0.050	F 707	11 000
December	1 001	487	1 457	3 005	1 542	2 105	4 310	8 0 1 8	2 602	2 653	5 /6/	11 022
March	961	405	1 755	3 3 3 5 0	1 847	2 313	4 300 4 458	0 430 8 565	2 7 3 6	3 004 2 664	6 213	11 685
June	1 370	428	1 906	3 704	1 519	2 2 2 3 3	4 363	8 1 1 0	2 888	2 656	6 269	11 813
1998-99	1010	120	1 000	0101	1 010	2 220	1000	0 110	2 000	2 000	0 200	11 010
September	1 230	318	2 293	3 841	1 283	2 417	5 249	8 948	2 513	2 735	7 541	12 789
					TREND ES	TIMATES	(Actual)					
1996–97	4 339	1 743	8 267	14 349	4 573	8 564	16 458	29 595	8 911	10 307	24 725	43 944
1997–98	4 366	2 033	6 906	13 305	6 523	8 985	17 830	33 337	10 889	11 017	24 736	46 642
1996-97												
June	1 122	547	1 798	3 468	1 269	2 093	4 323	7 686	2 392	2 640	6 122	11 153
Sentembor	1 051	500	1 506	2 007	1 511	9 1 7 9	1 107	Q 000	0 560	0 750	6 000	11 317
December	1 016	560	1 574	3 151	1 728	2 2 2 2 0	4 407	8 3 2 8	2 302 2 744	2 102	5 921	11 479
March	1 095	189	1 758	3 342	1 723	2 2 3 3	4 417	8 414	2 818	2 763	6 1 7 5	11 756
June	1 203	403	1 978	3 585	1 561	2 2 9 9	4 646	8 507	2 764	2 703	6 624	12 091
1998-99	00		_ 0.0		7 001	00		0.001		2.00	0.021	001
September	1 286	329	2 1 4 2	3 756	1 357	2 337	4 944	8 638	2 643	2 665	7 086	12 394

(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 & EXPECTED CAPITAL EXPENDITURE, Detailed Industries—Current prices

	MINING	MANUFA	MANUFACTURING									
	Total mining \$m	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	
•••••	• • • • • • • • • • • •	• • • • • • • • • •		ORIGI	NAL (Actu	al)	• • • • • • •	• • • • • • • •	•••••	• • • • • • •	• • • • • • • • • •	
					(,						
1996-97	8 781	1 997	251	920	587	1 664	1071	1 501	2 007	199	10 198	
1997–98	11 029	2 446	289	906	795	1 594	870	1 666	2 130	301	10 997	
1996–97												
June	2 324	610	75	236	190	362	290	462	542	61	2 828	
1997-98												
September	2 491	558	55	162	139	361	265	375	551	63	2 528	
December	3 020	600	95 51	242	206	478	264 175	464 251	170	/ 5 91	3 188	
June	2 952	734	88	343	252	386	165	476	378	82	2 904	
1998-99	2 002		00	0.10	202	000	200		0.0	02	2001	
September	2 388	468	75	315	190	425	114	631	311	62	2 592	
•••••		• • • • • • • • • •			••••••	•••••	• • • • • • •	•••••		• • • • • • •	•••••	
1008-00				ORIGINA	L (Expecte	ed)(a)						
3 mths to Dec	2 357	767	73	196	206	629	129	860	458	51	3 368	
6 mths to Jun	4 015	1 407	132	333	374	1 016	233	1 313	648	120	5 576	
Total 1998-99	8 760	2 642	280	845	771	2 070	476	2 804	1 418	232	11 537	
•••••		• • • • • • • • • •	SEA	SONALLY	ADJUSTEI	D (Actual)	• • • • • • •	• • • • • • • •	• • • • • • • • •	• • • • • • •	• • • • • • • • • •	
1996-97	8 794	1 986	248	919	585	1 652	1 068	1 512	2 015	197	10 184	
1997–98	11 057	2 438	284	893	789	1 600	876	1 688	2 101	307	10 976	
1996–97												
June	2 273	549	71	219	151	376	308	348	555	53	2 630	
1997-98												
September	2 602	596	60 70	165	168	344	288	415	560	57	2 653	
March	2 758	588 596	78 64	228 180	201	423 431	249 162	480 429	002 491	89 90	3 004	
June	2 888	658	82	320	199	402	176	358	388	71	2 656	
1998–99												
September	2 513	501	81	322	230	406	125	699	316	56	2 735	
•••••	•••••	• • • • • • • • • •				• • • • • • • • •	••••	••••	•••••	• • • • • • •	• • • • • • • • • •	
4000 07	0.011	0.400	0.40	REND ES	TIMATES (Actual)	4.075	4 004	1 000	100	10.007	
1996–97 1997–98	8 911 10 889	2 103 2 384	246 286	900 899	578 795	1 612	873	1 763	1 993 2 102	198 305	10 307 11 017	
1996–97												
June	2 392	561	65	205	150	358	309	385	553	55	2 640	
1997-98						_						
September	2 562	578	67	190	173	375	286	420	597	67	2 752	
March	∠ /44 2 818	602 610	69 73	190 190	200 190	402 417	238 192	420 435	589 510	80 83	2 (99 2 763	
June	2 764	594	77	281	216	416	157	481	407	74	2 703	
1998-99				-	-	-	-	-				
September	2 643	560	81	321	219	406	131	562	323	63	2 665	

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

---see paragraphs 26 to 29 of the Explanatory Notes.

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ACTUAL & EXPECTED CAPITAL EXPENDITURE, Detailed Industries—Current prices *continued*

				Transport		Property and		Total other	Total new
	Construction	Wholesale trade	Retail trade	and storage	Finance and insurance	business services	Other services etc.	selected industries	capital expenditure
Period	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m
• • • • • • • • • • • • •					•••••	•••••			• • • • • • • • • • • • • • •
				ORIGI	NAL (Actual)				
1996–97	1 145	2 545	2 253	3 303	2 464	6 269	6 880	24 859	43 837
1997–98	1 572	2 864	2 815	3 331	2 504	6 149	5 018	24 253	46 280
1996–97									
June 1997–98	356	765	687	908	594	1 575	1 857	6 742	11 894
September	305	713	655	720	646	1 303	1 203	5 544	10 563
December	450	776	875	808	674	1 534	1 482	6 598	12 806
March	377	637	488	817	549	1 296	1 193	5 357	10 301
June	440	739	796	986	635	2 017	1 141	6 754	12 610
1998-99									
September	430	707	877	1 167	643	1 632	1 709	7 164	12 144
• • • • • • • • • • • • •			• • • • • • • • •		•••••	•••••		•••••	• • • • • • • • • • • • • • •
				ORIGINA	L (Expected)(a)			
1998-99									
3 mths to Dec	372	797	919	853	604	1 694	1 686	6 924	12 650
6 mths to Jun	583	1 475	1 084	1 490	1 047	2 324	3 066	11 069	20 660
Total 1998-99	1 385	2 979	2 880	3 510	2 293	5 650	6 461	25 157	45 454
•••••	• • • • • • • • • •	• • • • • • • • •	•••••			•••••	• • • • • • • • • •	••••	• • • • • • • • • • • • • • • •
				SEASONALLY	ADJUSTED (A	(ctual)			
1996–97	1 149	2 551	2 229	3 295	2 447	6 295	6 896	24 863	43 841
1997–98	1 576	2 877	2 785	3 344	2 513	6 140	5 047	24 282	46 315
1996–97									
June	306	774	610	876	555	1 462	1 699	6 282	11 185
1997-98									
September	310	673	691	791	604	1 311	1 387	5 767	11 022
December	464	697	766	704	661	1 388	1 352	6 032	11 794
March	428	758	622	911	655	1 572	1 267	6 213	11 685
June	375	749	705	937	592	1870	1 040	6 269	11 813
1998–99 September	440	665	928	1 290	599	1 643	1 977	7 541	12 789
•••••			•••••	TREND EST	IMATES (Act	ual)			
1996–97	1 269	2 500	2 295	3 302	2 218	6 233	6 908	24 725	43 944
1997–98	1 602	2 893	2 823	3 448	2 508	6 082	5 380	24 736	46 642
1996–97									
June	332	687	616	807	564	1 501	1 614	6 122	11 153
1997-98									
September	361	712	681	788	608	1 365	1 488	6 003	11 317
December	401	723	694	776	644	1 416	1 280	5 934	11 478
March	422	730	699	861	640	1 587	1 237	6 175	11 756
June	418	728	749	1 022	617	1 714	1 376	6 624	12 091
1998-99	44.5	700		4 4 7 9	500	4 774	1.010	7.000	40.00
September	410	703	823	1 176	593	1//1	1 610	1 086	12 394

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

-see paragraphs 26 to 29 of the Explanatory Notes.

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ACTUAL EXPENDITURE, By Type of Asset and Industry—Chain volume measures(a)

	ASSET			INDUSTRY				
	Buildings and structures	Equipment, plant and machinery	Total	Mining	Manfacturing	Other selected industries	Total	
Period	\$m	\$m	\$m	\$m	\$m	\$m	\$m	
• • • • • • • • • • • • •		• • • • • • • • • • • •	ORIGINA	L	• • • • • • • • • • • • • •		• • • • • • • • • • • • • • •	
1996–97 1997–98	14 330 12 830	29 507 33 324	43 837 46 201	8 781 10 717	10 198 10 917	24 858 24 576	43 837 46 201	
1996–97 June 1997–98	3 361	8 722	12 123	2 324	2 863	6 936	12 123	
September December March June	2 878 3 645 2 770 3 536	7 815 9 191 7 463 8 855	10 718 12 853 10 238 12 393	2 474 2 958 2 477 2 808	2 553 3 182 2 348 2 834	5 691 6 715 5 415 6 754	10 718 12 853 10 238 12 393	
1998–99 September	3 489	8 321	11 866	2 240	2 482	7 142	11 866	
•••••			SEASONALLY AI	DJUSTED	• • • • • • • • • • • • • •		• • • • • • • • • • • • • • •	
1996–97 1997–98	14 330 12 830	29 507 33 371	43 837 46 201	8 781 10 721	10 198 10 917	24 858 24 576	43 837 46 201	
1996–97 June 1997–98	3 365	7 931	11 317	2 268	2 596	6 456	11 317	
September December March	3 014 3 222 3 046 3 547	8 216 8 554 8 569 8 032	11 239 11 777 11 611 11 573	2 579 2 696 2 704 2 743	2 754 2 953 2 636 2 573	5 908 6 132 6 275 6 260	11 239 11 777 11 611 11 573	
1998–99 September	3 738	8 773	12 542	2 355	2 675	7 512	12 542	
• • • • • • • • • • • • •			TREND ESTIN	IATES	• • • • • • • • • • • • • •		• • • • • • • • • • • • • • •	
1996–97 1997–98	14 384 12 935	29 630 33 577	44 005 46 520	8 898 10 556	10 271 10 928	24 834 25 050	44 005 46 520	
1996–97 June 1997–98	3 407	7 861	11 277	2 384	2 665	6 233	11 277	
September December March	3 171 3 069 3 234 3 461	8 276 8 448 8 428 8 424	11 457 11 519 11 657 11 888	2 534 2 682 2 715 2 626	2 777 2 795 2 721 2 636	6 149 6 045 6 226 6 629	11 457 11 519 11 657 11 888	
1998–99 September	3 642	8 478	12 177	2 508	2 605	7 068	12 177	

(a) Reference year for chain volume measures is 1996–97.



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	of previous	reported	reported	reported	reported	
	financial vear	financial vear	in Iul_Aug	in Oct-Nov	in Jan-Feb	in Anr-May	12 months actual
Financial vear	(Estimate 1)	(Estimate 2)	(Estimate 3)	(Estimate 4)	(Estimate 5)	(Estimate 6)	(Estimate 7)
r manolar year	(Loumato 1)	(Lounded 2)	(Eddiniate o)	(Louinato I)	(Loundre o)	(Lounder o)	(Lotinato I)
•••••	• • • • • • • • • • • • • •		• • • • • • • • • • • • •	• • • • • • • • • • • • •	• • • • • • • • • • • • • •	• • • • • • • • • • • • • •	• • • • • • • • • • • • • • •
		BL	IILDINGS AND ST	RUCTURES (\$ mi	llion)		
1994-95	7 840	9 155	9 650	9 012	10 016	9 798	9 093
1005_06	8 700	9 528	10 479	11 878	12 861	12 373	12 348
1006 07	0 550	11 642	14 017	15.056	15 622	15 760	14 220
1990-97	9 JJ9 10 OPE	14 505	14 017	13 030	13 033	12 740	12 151
1997-98	12 085	14 505	13 008	14 014	13 293	13 740	13 151
1998–99	11 812	13 587	14 768	14 //4	n.y.a.	n.y.a.	n.y.a.
• • • • • • • • • • • • •	• • • • • • • • • • • • •	BUII DIN	GS AND STRUCT	URES (Realisatio	n Ratio)(a)	• • • • • • • • • • • • •	• • • • • • • • • • • • • •
4005 00	4.40	4.20	4.40			1.00	1.00
1995-96	1.42	1.30	1.18	1.04	0.96	1.00	1.00
1996–97	1.50	1.23	1.02	0.95	0.92	0.91	1.00
1997–98	1.09	0.91	0.96	0.94	0.97	0.96	1.00
5 year average	1.25	1.09	1.04	0.99	0.94	0.95	1.00
•••••	• • • • • • • • • • • • •		• • • • • • • • • • • • •	• • • • • • • • • • • • •			• • • • • • • • • • • • • • •
		EQUIP	MENT, PLANT AN	ID MACHINERY (\$	6 million)		
1994–95	18 176	20 814	22 085	24 832	25 072	26 027	26 467
1995–96	19 069	22 634	24 605	25 437	26 742	28 077	28 124
1996-97	22 841	25 174	26 384	27 428	27 996	28 845	29 507
1997-98	20 229	22 974	27 193	30 974	32 637	33 151	33 129
1998-99	26 104	27 905	30 497	30 680	n.v.a.	n.v.a.	n.v.a.
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•••••	• • • • • • • • • • • • • • •					• • • • • • • • • • • • • •	• • • • • • • • • • • • • • • •
		EQUIPMENT	, PLANT AND MA	CHINERY (Realls	ation Ratio)(a)		
1995–96	1.47	1.24	1.14	1.11	1.05	1.00	1.00
1996–97	1.29	1.17	1.12	1.08	1.05	1.02	1.00
1997–98	1.64	1.44	1.22	1.07	1.02	1.00	1.00
5 year average	1.45	1.29	1.18	1.09	1.04	1.01	1.00
			TOTAL	(\$ million)			
100/ 05	25 997	30 167	31 736	33 8//	35.087	35 825	35 561
1994-95	23 331	30 107	31 730 3E 094	27 215	30 602	35 825 40 4E0	40 472
1992-90	21 109	32 101	33 064	37 313	39 003	40 450	40 473
1996-97	32 400	36 817	40 401	42 484	43 629	44 614	43 837
1997-98	32 321	37 479	40 860	44 988	46 229	46 892	46 280
1998–99	37 916	41 492	45 265	45 454	n.y.a.	n.y.a.	n.y.a.
•••••	•••••	• • • • • • • • • • • • •	• • • • • • • • • • • • •	•••••	• • • • • • • • • • • • • •	• • • • • • • • • • • • •	•••••
			TOTAL (Reali	sation Ratio)(a)			
1995–96	1.46	1.26	1.15	1.08	1.02	1.00	1.00
1996–97	1.35	1.19	1.09	1.03	1.00	0.98	1.00
1997–98	1.43	1.23	1.13	1.03	1.00	0.99	1.00
5 year average	1.38	1.21	1.13	1.06	1.01	0.99	1.00
•••••	TOT	[A] (Porcontago	abanda ovor prov	vique ostimato fo	r camo financial	voor)	•••••
4004.05	101					year)	0.7
1994-95	n.a.	10.0	5.2	0.0	3.1	2.1	-0.7
1995-96	n.a.	15.8	9.1	6.4	6.1	2.1	0.1
1996–97	n.a.	13.6	9.7	5.2	2.7	2.3	-1.7
1997–98	n.a.	16.0	9.0	10.1	2.8	1.4	-1.3
1998–99	n.a.	9.4	9.1	0.4	n.y.a.	n.y.a.	n.y.a.
	τοται (Percentage char		anding estimato f	for previous fina	ncial year)	
4005 00							10.0
1992-96	6.8 10 -	6.6	10.6	10.3	12.9	12.9	13.8
1996-97	16.7	14.5	15.2	13.9	10.2	10.3	8.3
1997–98	-0.2	1.8	1.1	5.9	6.0	5.1	5.6

(a) Ratio of actual expenditure for the financial year to each progressive estimate for the

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financial year. For more information see paragraphs 26 to 29 of the Explanatory Notes.



ACTUAL & EXPECTED CAPITAL EXPENDITURE, By Industry—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	of previous	reported	reported	reported	reported	
	financial year	financial year	in Jul–Aug	in Oct–Nov	in Jan–Feb	in Apr–May	12 months actual
Financial year	(Estimate 1)	(Estimate 2)	(Estimate 3)	(Estimate 4)	(Estimate 5)	(Estimate 6)	(Estimate 7)
• • • • • • • • • • • • • •					• • • • • • • • • • • • • •	• • • • • • • • • • • • • •	• • • • • • • • • • • • • • •
			MANUFACIU	RING (\$ million)			
1994_95	7 700	8 839	9 445	10 255	10.309	10 474	10.352
1005-06	8 975	9 964	10 721	11 185	11 160	10 978	10 457
1006 07	0 711	10 027	10 652	11 001	10 250	10 250	10 109
1007 00	7 707	10 001	10 002	10.026	11 066	10 333	10 190
1997-98	1 121	0 020	10 100	10 950	11 000	11 431	10 997
1998-99	8679	10 412	11 177	11 537	n.y.a.	n.y.a.	n.y.a.
• • • • • • • • • • • • •				(Declination Dati		• • • • • • • • • • • • • •	• • • • • • • • • • • • • • • •
	4.47	IM.	ANUFACIURING	(Realisation Ratio	5)(a)	0.05	1.00
1995-96	1.17	1.05	0.98	0.93	0.94	0.95	1.00
1996–97	1.05	1.02	0.96	0.92	0.99	0.98	1.00
1997–98	1.42	1.25	1.09	1.01	0.99	0.96	1.00
5 year average	1.25	1.13	1.04	0.97	0.98	0.97	1.00
• • • • • • • • • • • • • •		• • • • • • • • • • • • • •		• • • • • • • • • • • • •	• • • • • • • • • • • • • • •		• • • • • • • • • • • • • • •
			MINING	(\$ million)			
1994–95	5 370	6 013	6 666	6 897	6 976	6 951	6 351
1995-96	5 541	6 720	7 472	7 627	7 764	7 788	7 525
1996-97	7 789	9 913	10 113	9 932	9 452	9 354	8 781
1997-98	8 592	9 588	11 026	11 908	12 090	11 551	11 029
1998-99	9 404	10 088	9 239	8 760	n.y.a.	n.y.a.	n.y.a.
						, ,	2
			MINING (Real	lisation Ratio)(a)			
1995-96	1.36	1.12	1.01	0.99	0.97	0.97	1.00
1006 07	1 13	0.89	0.87	0.88	0.93	0.94	1.00
1007 00	1.10	1 15	1.00	0.00	0.95	0.94	1.00
1997-90	1.20	1.15	1.00	0.93	0.91	0.95	1.00
5 year average	1.15	1.00	0.93	0.92	0.93	0.94	1.00
• • • • • • • • • • • • •					•••••	• • • • • • • • • • • • • •	• • • • • • • • • • • • • • •
		011	HER SELECTED I	NDUSTRIES (\$ m)	illion)		
1994-95	12 947	15 116	15 624	16 692	17 803	18 400	18 857
1995_96	13 253	15 478	16 890	18 503	20.679	21 683	22 491
1006_07	14 900	16 867	19 636	21 470	23 827	24 901	24 859
1007 00	16 002	10.065	10 706	21 410	22 021	27 001	24 000
1997-98	10 002	19 005	19720	22 144	23 074	23 009	24 205
1998-99	19 833	20 992	24 849	25 157	n.y.a.	n.y.a.	n.y.a.
••••						• • • • • • • • • • • • • •	• • • • • • • • • • • • • • •
1005 00	1 70			IRIES (Realisatio	1.00	1.04	1.00
T332-30	1.70	1.40	1.33	1.22	1.09	1.04	1.00
1996-97	1.67	1.47	1.27	1.16	1.04	1.00	1.00
1997–98	1.52	1.27	1.23	1.10	1.05	1.02	1.00
5 year average	1.60	1.39	1.30	1.17	1.06	1.02	1.00

(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.



Mining

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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)
• • • • • • • • • • • • • •		TYPE OF ASSET	• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • •
Buildings and Struc	tures			
1995-96	0.95	0.99	1.05	0.93
1996-97	0.94	0.70	1.02	0.84
1997-98	0.91	0.86	0.92	0.94
5 year average	0.96	0.82	1.00	0.89
Equipment, Plant ar	nd Machinery	• • • • • • • • • • • • • • • • • • • •	••••••••••••••••	
1995–96	1.00	1.01	1.02	1.10
1996–97	0.97	1.08	1.06	1.11
1997–98	1.02	1.00	1.15	1.03
5 year average	0.99	1.02	1.09	1.08
Total		• • • • • • • • • • • • • • • • • • • •	•••••••	• • • • • • • • • • • • • • • • • •
1995–96	0.98	1.00	1.03	1.04
1996-97	0.96	0.94	1.04	1.01
1997–98	0.99	0.95	1.08	1.00
5 year average	0.98	0.96	1.06	1.02

TYPE OF INDUSTRY

1995–96	0.93	0.89	0.89	0.94
1996–97	0.84	0.80	0.87	0.87
1997–98	0.92	0.85	1.02	0.84
5 year average	0.88	0.80	0.91	0.88
Manufacturing			• • • • • • • • • • • • • • • • • • • •	
1995–96	0.85	0.85	0.91	0.88
1996–97	0.74	0.95	0.91	0.97
1997–98	0.96	0.86	1.03	0.99
5 year average	0.85	0.90	0.96	0.95
Other Selected Indus	stries		• • • • • • • • • • • • • • • • • • • •	
1995–96	1.08	1.13	1.16	1.18
1996–97	1.15	0.99	1.20	1.09
1997–98	1.04	1.06	1.13	1.11
5 year average	1.10	1.06	1.20	1.12
Total	• • • • • • • • • • • • • • • • • • • •		• • • • • • • • • • • • • • • • • • • •	
1995–96	0.98	1.00	1.03	1.04
1996-97	0.96	0.94	1.04	1.01
1997–98	0.99	0.95	1.08	1.00
		0.00	4.00	1.00

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

ABS \cdot private new capital expenditure \cdot 5625.0 \cdot september quarter 1998 11

INTRODUCTION	1 This publication contains estimates of actual and expected new capital expenditure by private businesses in Australia. The series contained in this publication have been compiled from data collected in a quarterly survey of privat businesses.				
SCOPE OF THE SURVEY	2 This survey aims to measure the value of new capital expenditure by private businesses in Australia. Private households and public sector businesses (i.e. all departments, authorities and other organisations owned or controlled by Commonwealth, State or Local Government) are outside the scope of the survey.				
	3 The scope of the survey:				
	 includes the following Australian and New Zealand Standard Industrial Classification (ANZSIC) industries 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 F) Retail trade (Division F) Retail trade (Division F) Retail trade (Division G) Transport & storage (Division I) Finance and insurance (Division I, Other selected services (including electricity & gas; communication; accommodation, cafes & restaurants; cultural & recreational services; and personal services (36,37,57,71,91–93,95) excludes the following industries Agriculture, forestry and fishing Government administration & defence Education Health and community services 				
SURVEY METHODOLOGY	4 This quarterly survey is based on a stratified random sample of private business				

4 This quarterly survey is based on a stratified random sample of private business units recorded on the ABS register of businesses. The sample consists of approximately 7,700 units. 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.

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SURVEY METHODOLOGY continued

5 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 business register. The majority of business affected and to which the adjustments apply are small in size. The adjustments contribute 3.8% to the current quarter's estimate of reported capital expenditure. These adjustments were introduced in the June quarter 1997 publication and have been made back to the June quarter 1987. For further information, see the June quarter 1997 publication or the Information Paper, Improvements to ABS Economic Statistics, 1997 (Cat. No. 1357.0), issued on 22 August 1997.

6 Respondents are asked to provide data on the same basis as their own management accounts. Where a selected business unit does not respond in a given survey, an estimate is substituted. Revisions may be made to these estimate adjustments if data are provided subsequently from those businesses. Aggregates are calculated from original data using the 'number raised' estimation technique. Data are edited at both individual unit level and at aggregate level.

7 The survey cycle facilitates the formation of estimates of expenditure for financial years (12 months ending 30 June). For example, as the table below shows, the first estimate for 1998–1999 was available from the December 1997 survey as a longer term expectation (E2). It was subsequently revised in the March 1998 survey (again as a longer term expectation) and in the June 1998 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 1999 survey, will be derived by summing the actual expenditure for each of the four quarters.



8 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).

TIMING AND CONSTRUCTION OF SURVEY CYCLE

•••••	• • • • • • • • • • • • • • • • • • • •
SAMPLE REVISION	9 Prior to the June quarter 1996 survey, the survey frames and samples were revised annually to ensure that they remained representative of the survey population. Adjustments were made to the survey estimates each quarter to reflect changes in the size of the survey frame throughout the year. From the June quarter 1996 survey, the survey frames and samples are being revised each quarter. The aim is to further improve the quality of the survey estimates by selecting a sample which will be more representative of the survey population. Additionally, the timing of sample selection will now be consistent with other ABS surveys. This will lead to greater consistency when comparing data across these surveys.
	10 With these revisions to the sample, some of the business units are rotated out of the survey and are replaced by other to spread the reporting workload equitably. The rate of rotation under quarterly sample selection is slightly higher than one quarter of the previous annual rate of rotation.
	11 When the frames and samples were updated annually prior to the June quarter 1996, some data would be revised as a consequence. No data revisions of this nature will be needed given quarterly updates to frames and samples. Data may be revised, however, on the basis of further processing.
STATISTICAL UNIT	12 This survey uses the Management Unit as the statistical unit. The management unit is the highest level accounting unit within a business, having regard to industry homogeneity, for which accounts are maintained. In nearly all cases it coincides with the legal entity owning the business (i.e. company, partnership, trust, sole operator, etc). In the case of large diversified businesses, however, there may be more than one management unit, each coincides with a 'division' or 'line of business'. A division or line of business is defined when separate and comprehensive accounts are compiled for it. Prior to 1989, the survey was on a different business unit basis. Further details are available on request.
CLASSIFICATION BY INDUSTRY	13 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 replaced the Australian Standard Industrial Classification (ASIC) and the New Zealand Standard Industrial Classification (NZSIC).
	14 For more information, users are referred to <i>Australian & New Zealand Standard Industrial Classification, 1993, ANZSIC,</i> (1292.0) and <i>Statistics New Zealand</i> (19.005.0092).
INTRODUCTION OF CHAIN VOLUME MEASURES	15 Constant price estimates have been replaced with chain volume measures from September quarter 1998. This change will also be introduced in other ABS series. The reason for the change and some of the properties of chain volume measures are described below.
	16 Both constant price estimates and chain volume measures have the objective of removing price influences from capital expenditure series. Each method achieves this objective in different ways and so the differences between the constant price estimates to chain volume measures varies considerably from statistic to statistic. The impact largely depends on the extent of differences in growth rates between the prices and volumes of the components of particular series.
	17 Chain volume measures have been introduced because they provide a better measure of growth in volume than the previously used constant price estimates. To understand this it is necessary to briefly explain how constant price estimates are derived.

INTRODUCTION OF CHAIN VOLUME MEASURES continued While current price estimates of capital expenditure reflect both price and volume changes, constant price estimates eliminate the direct effect of price changes and therefore only reflect volume changes. This is achieved by replacing the unit price of each type of new capital expenditure in the current period with the corresponding unit price in the chosen base year. The base year unit prices used to derive constant price estimates are effectively the weights used to combine quantities of different assets.

The prices of different assets tend to grow at different rates - some at dramatically different rates. For example, the prices of computer equipment are estimated to have declined by about 75% between 1989–90 and June quarter 1998, while the prices of most other assets have increased. Thus, over time, the relative prices of some assets change appreciably.

Changes in relative prices adversely affect the usefulness of constant price estimates, particularly for periods distant from the base year, and consequently the base year used to derive constant price estimates needs to be changed from time to time. It has been ABS practice to change the base year every five years, but it has been found that better estimates of growth in volume can be obtained by rebasing every year and linking the resulting indexes to form annually reweighted chain volume measures.

The chain volume measures appearing in this publication are annually reweighted chain Laspeyres indexes referenced to the current price values in a chosen reference year (currently 1996–97). They can be thought of as current price values re-expressed in (i.e. based on) the prices of the previous year and linked together to form continuous time series. They are formed in a multi-stage process of which the major steps are described in Section 15 of the information paper, *Introduction of Chain Volume Measures in the Australian National Accounts* (5248.0).

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 new capital expenditure this means that neither the original chain volume estimates for industry groups nor the original chain volume estimates for type of asset will add to total capital expenditure for Australia. However, in order to minimise the impact of this property, the ABS is using data for the previous financial year as the reference year. By adopting this approach, non-additivity does not exist for the quarters following the reference year (currently 1996–97) and is relatively small for the quarters in the reference year and the quarters immediately preceding it.

Each year's data in the chain volume series are based on the prices of the previous year, except for the quarters of the latest incomplete year (i.e. for the 1998–99 financial year) which are based upon the 1996–97 financial year. With each release of the June quarter issue of this publication, the reference year will be advanced one year. This means that from June next year, chain volume measures for 1998–99 will have 1997–98 as the reference year rather than 1996–97. Some revision to recent growth rates can be expected because of the introduction of a more recent reference year and, if they occur, revisions to the current price estimates underlying the chain volume measures. In addition, 1997–98 will become the reference year for the entire chain volume series. A change in reference year changes levels but not growth rates.

INTRODUCTION OF CHAIN VOLUME MEASURES continued

24 In addition to replacing constant price estimates with chain volume measures, changes have been made to the model used to derive the deflators for new capital expenditure on equipment. Among the changes to the model is the incorporation of the asset dissection of equipment collected in this survey from September quarter 1996. The changes to the model have tended to increase the growth in the chain volume measure of capital expenditure on equipment. Thus, the lower growth in recent years of the chain volume estimates relative to the constant price estimates has been offset to some extent by the adoption of the new deflators.

25 Improved equipment deflators will also be used to compile the chain volume measures in the September quarter 1998 issue of *Australian National Accounts: National Income, Expenditure and Product* (Cat. no. 5206.0).

DERIVATION AND USEFULNESS OF
REALISATION RATIOS26 Once actual expe
the relationship betwee
resultant realisation ratio

26 Once actual expenditure for a financial year is known, it is useful to investigate the relationship between each of the prior 6 estimates and that actual. 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).

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. For example, if one wished to predict actual expenditure for 1998–99 based on the June 1998 survey results and compare this with 1997–98 expenditure, it is necessary to apply relevant realisation factors to the expectation to put both estimates on the same basis. Once this has been done the predictions can be validly compared with each other and with previously derived estimates of actual expenditure for earlier years.

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 in the application of realisation ratios. This is particularly the case with the twelve month expectations collected in the December and March surveys.

NEW BUSINESS INVESTIGATION **30** The ABS Business Register should ideally record all employing businesses as soon as they commence operations. However, the ability to achieve this is limited by the time it takes to obtain and process information from the ATO, and other sources, and the requirement to extract survey frames prior to the end of the reference period to which they relate. Adjustments to survey estimates for capital expenditure are made to account for this. These are discussed in paragraph 5.

NEW BUSINESS INVESTIGATION continued

31 This method of adjustment assumes that the level of capital expenditure of those units not yet on the Business Register at the time of selection is of similar extent and nature to those already represented in the survey. Because it could be reasonably expected that economic characteristics of new businesses could vary from that of established businesses, the ABS conducted the Survey of Business Performance to establish the nature and extent of any bias in the methodology used for estimating the contribution of missing businesses. The population source for the survey was the new ATO Group Employer registrations that were not on the capital expenditure survey frame for the March 1997 quarter, due to the timing problems explained above.

32 The survey, which was conducted over two quarters in December quarter 1996 and March quarter 1997, found that only an estimated 36% of newly registered businesses were truly new, with remaining businesses equally divided between existing businesses that had expanded and begun to employ staff and existing businesses that had been purchased or taken over by other businesses. However, the proportion of truly new businesses was not constant over all the ANZSIC divisions. As the following table demonstrates, the rate of occurrence of truly new businesses was relatively low in Retail trade and Accommodation, cafes and restaurants with the low rate of truly new businesses in both cases being offset by the relatively high percentage of purchased businesses. These results indicate a relatively strong connection between certain activities and the particular location of businesses in these industries.

NEWLY REGISTERED BUSINESSES

Industry Division	New businesses	Purchased businesses	Previously non-employing businesses
	%	%	%
Mining	54	27	19
Manufacturing	36	38	26
Construction	34	29	37
Wholesale	41	32	27
Retail	23	55	22
Accommodation, cafes			
and restaurants	20	68	12
Transport and storage	38	31	31
Communication	34	43	23
Finance and insurance	50	18	32
Property and business services	52	21	27

Source: ABS Survey of Business Performance

33 The survey results also show that truly new businesses appear in higher proportions for Mining, Finance and insurance, and Property and business services than in other industries. With the exception of Mining and Accommodation, cafes and restaurants, the proportion of new businesses where the registrant had previously operated as a non-employing business did not vary noticeably across industries. Construction reported the highest rate of businesses which had previously operated as non-employing businesses (37%), while Accommodation, cafes and restaurants had the lowest rate (12%).

NEW BUSINESS INVESTIGATION continued

34 Given the high proportion of businesses already operating among new registrants, it is not surprising that the pattern of capital expenditure among these businesses was found to be very similar to businesses included in the capital expenditure survey. In other words, the Survey of Businesses Performance found no evidence to support any variation to the method employed for estimating missing businesses outlined in paragraph 5.

DESCRIPTION OF TERMS **35** 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.

36 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.

37 Since the estimates are based on data obtained from a sample rather than a complete enumeration, the data and the movements derived from them are subject to sampling variability; that is, they may differ from the figures that would have been obtained if all units had been included in the survey. One measure of the likely difference is given by the standard error, which indicates the extent to which an estimate might have varied by chance because only a sample of units was included. There are about two chances in three that a sample estimate will differ by less than one standard error from the figure that would have been obtained if all units had been included in the survey.

RELIABILITY OF THE ESTIMATES **38** Another measure of sampling variability is the relative standard error which is obtained by expressing the standard error as a percentage of the estimate to which it refers. The relative standard error is a useful measure in that it provides an immediate indication of the percentage errors likely to have occurred due to sampling. The sample estimates of quarter to quarter movement in the value of new capital expenditure are also subject to sampling variability. The relative standard error of the estimate of movement is expressed as a percentage of the quarterly estimate of the level of capital expenditure.

RELIABILITY OF THE ESTIMATES continued

	RELATIVE STANDARD
	ERROR
Total new capital expenditure:	
Mining	7.3%
Manufacturing	2.8%
Other Selected Industries	3.4%
Buildings & Structures	4.8%
Equipment, Plant & Machinery	2.7%
Total Selected Industries	2.6%

39 The imprecision due to sampling, which is measured by the standard error, is not the only type of inaccuracy to which the estimates are subject. Other inaccuracies, referred to collectively as non-sample error, may occur for a number of reasons, for example misreporting of data by respondents or imputation for missing respondents.

40 In the design of questionnaires and in the processing of survey data every effort is made to reduce the non-sample error to a minimum.

SEASONAL ADJUSTMENT 41 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.

42 Seasonal adjustment may be carried out by various methods and the results may vary slightly depending on the procedure adopted. Accordingly, seasonally adjusted statistics are in fact only indicative and should not be regarded as in any way definitive. In interpreting seasonally adjusted data it is important therefore to bear in mind the methods by which they have been derived and the limitations to which the methods used are subject.

43 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 1998 survey. Data for periods after March 1998 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. Care should be exercised when interpreting quarter to quarter movements in the seasonally adjusted series in the publication, particularly for recent quarters.

44 It should be noted that the seasonally adjusted figures necessarily reflect the sampling and other errors to which the original figures are subject.

45 Details of the seasonal adjustment methods used together with selected measures of variability for these series are available on request.

TREND ESTIMATES

46 The trend estimates are derived by applying a 7–term Henderson moving average to the seasonally adjusted series. The 7–term Henderson average (like all Henderson averages) is symmetric, but as the end of a time series is approached, asymmetric forms of the average are applied. Unlike the weights of the standard 7-term Henderson moving average, the weights employed here have been tailored to suit the particular characteristics of individual series. While the asymmetric weights enable trend estimates for recent quarters to be produced, it does result in revisions to the estimates for the most recent three quarters as additional observations become available. There may also be revisions because of changes in the original data and as a result of the re-estimation of the seasonal factors. For further information, see *A Guide to Interpreting Time Series—Monitoring 'Trends': an Overview* (Cat. no. 1348.0) or contact the Assistant Director, Time Series Analysis on (02) 6252 6345.

COMPARABILITY WITH NATIONAL ACCOUNTS ESTIMATES

47 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 capital expenditure survey. For example, estimates for capital expenditure on 'equipment' are based on annual statistics of depreciable assets available from the Taxation Commissioner. Quarterly estimates are interpolated between and extrapolated from the annual taxation based 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 non-dwelling construction items respectively.
- National Accounts estimates include capital expenditure by all private businesses including units classified to agriculture, forestry, fishing and hunting 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 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.

48 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* (5216.0).

RELATED PUBLICATIONS	49 Users may also wish to refer the following publications:
	 Australian Business Expectations (5250.0)
	 Australian National Accounts. National Income, Expenditure and Product
	(5206.0)
	 Building Activity, Australia (8752.0)
	 Business Operations and Industry Performance, Australia (8140.0)
	 Company Profits, Australia (5651.0)
	 Directory of Capital Expenditure Data Sources and Related Statistics (5653.0)
	 Engineering Construction Activity, Australia (8762.0)
	 Introduction of Chain Volume Measures in the Australian National Accounts

- State Estimates of Private New Capital Expenditure, (5646.0)
- Stocks and Sales, Selected Industries, Australia (5629.0).

(5248.0)

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RELATED PUBLICATIONS continued	50 Curren <i>Publicatio</i> and Friday next few d	nt publications produced by the ABS are listed in the <i>Catalogue of</i> <i>ns and Products, Australia</i> (1101.0). The ABS also issues, on Tuesdays s, a <i>Release Advice</i> (1105.0) which lists publications to be released in the ays. The Catalogue and Release Advice are available from any ABS office.		
UNPUBLISHED DATA	51 In addition to the data contained in this publication, more detailed industry information may be made available on request. For example, data are generally available at the ANZSIC group (3 digit) level.			
SYMBOLS AND OTHER USAGES	ANZSIC n.y.a.	Australian and New Zealand Standard Industrial Classification not yet available		

EFFECT OF NEW SEASONALLY ADJUSTED ESTIMATES ON TREND ESTIMATES

Each time new seasonally adjusted estimates become available, trend estimates are revised (see paragraphs 41 and 46 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 December quarter seasonally adjusted estimate of chain volume measures is higher than the September quarter estimate by the percentage shown.

2 The December quarter seasonally adjusted estimate of chain volume measures is lower than the September 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



PUBLISHED

TREND AS

			1		2	
			rises by 6.	7% on Sep 1998	falls by 6.7	% on Sep 1998
	\$ <i>m</i>	% change	\$ <i>m</i>	% change	\$ <i>m</i>	% change
1998						
March	3 234	5.4	3 215	4.7	3 234	5.4
June	3 461	7.0	3 463	7.7	3 456	6.8
September	3 642	5.2	3 710	7.1	3 617	4.7
December	—	—	3 916	5.6	3 708	2.5



MACHINERY



TREND AS PUBLISHED

W/HAT	IF NFXT	OUARTER'S	SEASONALLY	ADJUSTED	ESTIMATE:

WHAT IF NEXT QUARTER'S SEASONALLY ADJUSTED ESTIMATE:

-	1	\$m ∫10500				1 rises by 4.	9% on Sep 1998	2 falls by 4.9	1% on Sep 1998
•	Published trend			\$ <i>m</i>	% change	\$ <i>m</i>	% change	\$ <i>m</i>	% change
	2	9500	1998						
	/		March	8 428	-0.2	8 398	-0.6	8 449	0.0
		8500	June	8 424	-0.1	8 437	0.5	8 419	-0.4
		.7500	September	8 478	0.6	8 675	2.8	8 431	0.1
	•		December	—	—	9 027	4.1	8 467	0.4
		1							

TOTAL CAPITAL EXPENDITURE



TREND AS

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WHAT IF NEXT QUARTER'S SEASONALLY ADJUSTED ESTIMATE:

m L4000				▲ rises by 4.4	4% on Sep 1998	4 falls by 4.4% on Sep 1998		
		\$ <i>m</i>	% change	\$m	, % change	\$ <i>m</i>	, % change	
L2500	1998							
	March	11 657	1.2	11 595	0.7	11 694	1.5	
L1000	June	11 888	2.0	11 907	2.7	11 872	1.5	
9500	September	12 177	2.4	12 472	4.7	11 997	1.0	
	December	_		13 195	5.8	12 068	0.6	

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