COMMONWEALTH BUREAU OF CENSUS AND
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CAPITAL AND MAINTENANCE EXPENDITURE BY PRIVATE BUSINESSES IN AUSTRALIA
JUNE QUARTER 1971 (ACTUAL)
JULY TO DECEMBER 1971 (ANTICIPATED)

Reference No. 5.8

EXPLANATORY NOTES

This bulletin contains estimates of capital and maintenance expenditure based on returns obtained from a sample of businesses subject to pay-roll tax (i.e., businesses paying more than $400 a week in wages), supplemented by returns from other businesses not subject to pay-roll tax which are known to be undertaking capital expenditure projects entailing expenditure of $500,000 or more in a six-monthly period.

2. This bulletin contains estimates of actual and anticipated new capital expenditure by type of asset for selected industry groups (see Tables 1 and 2). Preliminary estimates of actual capital expenditure for the June quarter 1971, previously published in bulletin (Reference No. 5.7) of 13 August 1971 are revised in this bulletin.

3. As the estimates are derived from returns received from a sample of businesses, they may differ from the results which would have been obtained by a comparable complete collection. A measure of the likely difference is given by the standard error of the estimates. The standard error of the revised quarterly estimates of actual capital expenditure is approximately 1.5 per cent for the total value for Australia and 2 per cent for the totals of the manufacturing and non-manufacturing industries. The standard error for the individual industry groups varies between 2 and 7 per cent for the manufacturing industries and between 1 and 4 per cent for non-manufacturing. There are about 2 chances in 3 that a sample estimate will differ from results which would be obtained from a comparable complete collection by less than 1 standard error, and 19 chances in 20 that the difference would be less than 2 standard errors. For example, the June quarter 1971 revised estimate of total capital expenditure is $870 million with a standard error of approximately 1.5 per cent, which means that there are 2 chances in 3 that a complete collection would give an estimate within the range of approximately $857 million to $883 million, and 19 chances in 20 that the estimate would be within the range of $844 million to $896 million.

4. The revised estimates differ to some extent from the corresponding preliminary estimates published on 13 August 1971 due to sampling variability between the two estimates. The standard errors of the preliminary estimates, which are based on returns from 70-75 per cent of the businesses included in the sample, vary from quarter to quarter but are approximately 2 per cent for "Total All Industries" and 2.5 per cent for "Total Manufacturing" and "Total Non-Manufacturing". As can be seen by reference to paragraph 3, the revised estimates, being based on returns from the full sample, have a lower sampling error.

5. The standard errors of the estimates, quoted above, relate to the level of the estimates of capital expenditure. The sample estimates of quarter to quarter movement in the value of capital expenditure (i.e. the difference between the estimates for the current quarter and those for the preceding quarter) are, likewise, subject to sampling variability. A measure of the likely difference between the sample estimate of movement, and the movement which would be indicated by the results of comparable complete collections, is given by the standard error of the estimates of movement. This is expressed as a percentage of the level of the current quarterly estimate. For example the revised estimates show an increase of $175 million between the March and June quarters of 1971. If the standard error of movement were 1.5 per cent, then there would be 2 chances in 3 that the increase would be between $162 million and $188 million, and 19 chances in 20 that the increase would be between $149 million and $201 million. The standard errors of estimates of quarter to quarter movement in the value of capital expenditure have not yet been calculated, but these errors can in most cases be taken to be slightly less than the standard errors of the estimates of the level of capital expenditure.

6. Seasonally adjusted estimates of new capital expenditure are shown in Tables 1 and 2. Details of the methods used in seasonally adjusting these series together with selected measures of variability are shown in "Seasonally Adjusted Indicators 1971" (Reference No. 1.10) issued on 2 July 1971.

Industrial field covered

7. This survey is designed primarily to measure trends in expenditure by private businesses on the tangible assets specified. With current statistical resources it is not practicable to include all private industry in the survey. The fields of private industry excluded are:

(a) Businesses whose pay-roll is below the exemption limit for pay-roll tax (unless included in the supplementary collection from businesses known to be undertaking capital expenditure projects involving expenditure of $500,000 or more in a six-monthly period).

(b) Organisations "exempted" from pay-roll tax such as religious or benevolent institutions.

(c) Rural.

(d) Certain businesses such as accountants, trade associations, consultant engineers, etc. Capital expenditure by these businesses is considered too small to affect trends.

(e) Gas and electricity.

8. Although governmental undertakings in general are excluded from the survey, government airlines and banks are included for the sake of completeness in these industrial fields.

9. Since the pay-roll tax exemption limit is fixed in money terms, the coverage of the pay-roll tax field in terms of employment may vary in accordance with changes in wage-rates, etc. At the head of each column in Tables 3 and 4 herein, employment in the field of business for which estimates of capital and maintenance expenditure are shown is expressed as a percentage of total private employment (other than rural and private domestic) plus employment in government airlines and banks. In relation to the measurement of capital and maintenance expenditure, these employment percentages are shown merely as a broad indication of the extent of the field surveyed and of changes in coverage.

Industrial dissection

10. Returns are obtained on a State basis and, in general, businesses are classified according to their predominant activity in each State. Certain large organisations having extensive operations in more than one industry supply information for their separate industries.

Description of terms

11. "New capital expenditure" is defined as being the total payments met from any source (including receipts from insurance claims, from the sale of existing assets, and trade-in allowances) by businesses, during the period specified, for the purchase and/or installation of new buildings and structures and other capital equipment whether or not the assets were acquired during the period in which payment is made. New capital expenditure also includes the value of large items of capital equipment imported for the purpose of leasing (e.g. ships, oil drilling rigs, etc.) to a business in Australia for a period expected to exceed one year, irrespective of whether any payment is made for such equipment by the importer.

12. The component "Buildings and structures" covers assets such as buildings, wharves, railway and harbour constructions, roads and also lifts, heating and ventilation equipment and the like forming an integral part of the structure.

13. The component "Other capital equipment" covers all machinery and equipment, including vehicles, aircraft and ships, and such items as new motors, lathes, office equipment and fixtures.

14. The estimates exclude expenditure on the purchase of land, existing buildings and other structures, and second-hand equipment (unless bought from overseas suppliers).

15. "Anticipated expenditure" represents the total of new capital expenditure anticipated by individual businesses at the beginning of the half-year. Subsequent changes in economic conditions may cause revision of plans and affect the timing of construction or the deliveries of equipment, or their cost. On occasions individual plans may prove to be collectively beyond the capacity of the economy. For comparison, Table 2 includes a series showing actual expenditure and expenditure anticipated by businesses at the beginning of each period.

16. "Repairs and maintenance expenditure" relates to payments, during the period specified, for the repair and maintenance of capital equipment, irrespective of when the repairs, etc. were made. Expenditure on alterations and additions to existing buildings and structures is treated as "New capital expenditure".

TABLE 1. - NEW CAPITAL EXPENDITURE BY SELECTED INDUSTRY GROUP AND TYPE OF ASSET
ACTUAL EXPENDITURE MARCH QUARTER 1969 TO JUNE QUARTER 1971
ORIGINAL AND SEASONALLY ADJUSTED SERIES AND PERCENTAGE CHANGE IN SEASONALLY ADJUSTED SERIES (a)

Industry Group	ORIGINAL SERIES										SEASONALLY ADJUSTED SERIES																			
	$ million																				percentage change (a)									
	1968-69		1969-70				1970-71				1968-69		1969-70				1970-71				1968-69		1969-70				1970-71			
	March Qtr	June Qtr	Sept. Qtr	Dec. Qtr	March Qtr	June Qtr	Sept. Qtr	Dec. Qtr	March Qtr	June Qtr	March Qtr	June Qtr	Sept. Qtr	Dec. Qtr	March Qtr	June Qtr	Sept. Qtr	Dec. Qtr	March Qtr	June Qtr	March Qtr	June Qtr	Sept. Qtr	Dec. Qtr	March Qtr	June Qtr	Sept. Qtr	Dec. Qtr	March Qtr	June Qtr
NEW BUILDINGS AND STRUCTURES																														
Manufacturing	41.0	54.0	53.8	66.1	41.2	58.5	55.0	77.3	61.1	79.4	51.6	51.3	55.0	56.0	52.2	55.8	56.3	65.0	77.6	75.8	+11	- 1	+ 7	+ 2	- 7	+ 7	+ 1	+15	+19	- 2
Mining	51.2	75.6	67.6	72.4	50.4	88.8	67.4	85.9	83.3	104.9	62.2	69.0	71.4	63.4	61.7	81.7	70.6	74.9	102.4	97.0	- 7	+11	+ 3	-11	- 3	+32	-14	+ 6	+37	- 5
Other industries	68.5	109.3	98.6	124.8	87.5	121.9	132.2	153.7	130.3	167.9	84.9	107.1	96.3	106.3	108.5	119.5	130.1	132.3	161.5	164.6	- 8	+26	-10	+12	..	+10	+ 9	+ 2	+22	+ 2
ALL INDUSTRIES	160.7	238.9	220.0	263.3	179.1	269.2	254.6	316.9	274.7	352.2	201.0	227.7	221.6	226.2	225.5	256.6	257.5	270.3	347.0	335.7	- 1	+13	- 3	+ 2	..	+14	..	+ 5	+28	- 3
OTHER NEW CAPITAL EQUIPMENT																														
Manufacturing	141.5	184.6	169.7	191.5	172.5	214.9	188.6	219.5	196.1	226.5	165.0	169.6	174.4	177.2	201.2	197.2	194.0	203.1	228.8	207.8	..	+ 3	+ 3	+ 2	+14	- 2	- 2	+ 5	+13	- 9
Mining	48.8	46.6	55.1	61.7	57.1	80.1	83.3	117.7	104.5	137.8	54.5	45.5	58.9	53.7	63.9	78.6	88.3	103.6	116.9	135.4	+34	-17	+29	- 9	+19	+23	+12	+17	+13	+16
Other industries	88.8	122.1	114.9	128.6	118.9	127.5	133.4	145.1	120.2	153.9	99.3	116.5	118.4	118.3	133.4	121.0	137.7	133.8	135.1	145.6	- 7	+17	- 2	..	+13	- 9	+14	- 3	+ 1	+ 8
ALL INDUSTRIES	279.1	353.3	339.7	381.8	348.5	422.5	405.3	482.3	420.8	518.2	316.0	329.6	351.6	354.6	394.9	393.9	418.8	447.8	477.0	483.0	..	+ 4	+ 6	+ 1	+11	..	+ 6	+ 7	+ 7	+ 1
TOTAL NEW CAPITAL EXPENDITURE																														
Manufacturing	182.5	238.6	223.5	257.6	213.7	273.4	243.6	296.8	257.2	305.9	214.9	220.7	225.1	235.2	251.9	252.9	249.9	270.9	303.3	282.9	+ 1	+ 3	+ 4	+ 3	+ 7	..	- 1	+ 8	+12	- 7
Mining	100.0	122.2	122.7	134.1	107.5	168.9	150.7	203.6	187.8	242.7	117.2	117.6	128.9	115.6	126.4	163.2	157.4	176.2	221.2	235.0	+11	..	+10	-10	+ 9	+29	- 4	+12	+26	+ 6
Other industries	157.3	231.4	213.5	253.4	206.4	249.4	265.6	298.8	250.5	321.8	180.1	225.2	215.9	227.8	237.0	242.0	269.9	267.5	288.1	311.8	-10	+25	- 4	+ 6	+ 4	+ 2	+11	- 1	+ 8	+ 8
ALL INDUSTRIES	439.8	592.2	559.7	645.1	527.6	691.7	659.9	799.2	695.5	870.4	516.5	559.2	572.8	578.6	622.2	652.0	677.1	714.9	821.9	819.6	..	+ 8	+ 2	+ 1	+ 8	+ 5	+ 4	+ 6	+15	..

(a) Change from seasonally adjusted actual expenditure in preceding period.

TABLE 2. - NEW CAPITAL EXPENDITURE BY SELECTED INDUSTRY GROUP AND TYPE OF ASSET
ACTUAL AND ANTICIPATED, (a) EXPENDITURE 1968-69 TO 1971-72
ORIGINAL AND SEASONALLY ADJUSTED SERIES AND PERCENTAGE CHANGE IN SEASONALLY ADJUSTED SERIES (b)

Industry Group	ORIGINAL SERIES											SEASONALLY ADJUSTED SERIES																					
	$ million																						percentage change (b)										
	1968-69		1969-70				1970-71				1971-72	1968-69		1969-70				1970-71				1971-72	1968-69		1969-70				1970-71				1971-72
	Jan. to June		July to Dec.		Jan. to June		July to Dec.		Jan to June		July to Dec.	Jan. to June		July to Dec.		Jan. to June		July to Dec.		Jan. to June		July to Dec.	Jan. to June		July to Dec.		Jan. to June		July to Dec.		Jan. to June		July to Dec.
	Antic.	Actual	Antic.	Actual	Antic.	Actual	Antic.	Actual	Antic.	Actual	Antic.	Antic.	Actual	Antic.	Actual	Antic.	Actual	Antic.	Actual	Antic.	Actual	Antic.	Antic.	Actual	Antic.	Actual	Antic.	Actual	Antic.	Actual	Antic.	Actual	Antic.
NEW BUILDINGS AND STRUCTURES																																	
Manufacturing	112.1	95.0	139.2	119.9	129.0	99.7	134.1	132.3	146.1	140.5	152.2	116.8	102.9	133.9	111.3	134.3	108.0	129.1	121.3	152.1	153.4	146.5	+25	+10	+30	+ 8	+21	- 3	+20	+12	+25	+26	- 4
Mining (c)	167.9	126.8	153.5	140.0	144.0	139.2	197.2	153.3	180.0	188.2	238.6	173.8	131.2	149.0	134.3	149.6	143.4	190.5	145.5	186.9	199.4	230.0	+37	+ 3	+14	+ 3	+11	+ 6	+33	+ 1	+28	+37	+15
Other industries	194.2	177.8	239.4	223.4	245.9	209.4	298.4	285.9	348.0	298.2	363.9	201.2	192.0	233.0	204.5	254.1	228.0	290.8	262.4	358.9	326.1	354.8	+19	+14	+21	+ 7	+24	+11	+28	+15	+37	+24	+ 9
ALL INDUSTRIES	474.2	399.6	532.1	483.3	518.9	448.3	629.7	571.5	674.1	626.9	754.7	491.2	428.7	514.4	447.3	536.8	482.1	508.9	527.8	696.4	682.7	729.8	+27	+11	+20	+ 4	+20	+ 8	+25	+ 9	+32	+29	+ 7
OTHER NEW CAPITAL EQUIPMENT																																	
Manufacturing	338.7	326.1	361.1	361.2	423.6	387.4	427.6	408.1	461.2	422.6	457.7	342.9	334.5	357.1	351.6	437.6	398.4	423.8	397.1	464.5	436.6	454.1	+ 3	+ 1	+ 7	+ 5	+22	+13	+ 6	..	+17	+10	+ 4
Mining (c)	97.0	95.4	113.9	116.8	144.8	137.2	199.3	201.0	315.4	242.3	275.6	95.9	100.0	116.9	112.6	142.9	142.5	204.6	191.9	311.1	252.3	283.0	+24	+29	+17	+13	+27	+27	+44	+35	+62	+31	+12
Other industries	178.3	210.9	211.5	243.5	203.6	246.4	227.5	278.5	246.4	274.1	307.7	181.8	215.8	206.8	236.7	203.1	254.4	222.0	271.5	252.4	280.7	300.0	-16	..	- 4	+10	-12	+ 7	-13	+ 7	- 7	+ 3	+ 7
ALL INDUSTRIES	614.0	632.4	686.5	721.5	772.0	771.0	854.4	887.6	1023.0	939.0	1041.0	623.9	645.6	676.9	705.2	781.5	788.8	843.2	866.6	1035.4	960.0	1027.7	- 1	+ 3	+ 5	+ 9	+11	+12	+ 7	+10	+19	+11	+ 7
TOTAL NEW CAPITAL EXPENDITURE																																	
Manufacturing	450.8	421.1	500.3	481.1	552.6	487.1	561.7	540.4	607.3	563.1	609.9	461.0	435.6	489.5	464.[illegible]	563.6	504.8	550.4	520.8	618.2	586.2	598.1	+ 8	+ 2	+12	+ 7	+21	+ 9	+ 9	+ 3	+19	+13	+ 2
Mining (c)	264.9	222.2	267.4	256.8	288.8	276.4	396.5	354.3	495.4	430.5	514.2	267.8	234.8	265.2	244.[illegible]	291.4	289.6	393.2	333.6	499.1	456.2	509.8	+33	+16	+13	+ 4	+19	+18	+36	+15	+50	+37	+12
Other industries	372.5	388.7	450.9	466.9	449.5	455.8	525.9	564.4	594.4	572.3	671.6	384.3	405.3	438.4	443.[illegible]	463.8	479.0	511.4	537.4	613.5	599.9	653.1	..	+ 5	+ 8	+ 9	+ 5	+ 8	+ 7	+12	+14	+12	+ 9
ALL INDUSTRIES	1088.2	1032.0	1218.6	1204.8	1290.9	1219.3	1484.1	1459.1	1697.1	1565.9	1795.7	1114.5	1075.7	1194.7	1151.[illegible]	1320.0	1274.2	1455.4	1392.0	1732.9	1641.5	1761.3	+10	+ 6	+11	+ 7	+15	+11	+14	+ 9	+24	+18	+ 7

(a) Anticipated by businesses at the beginning of the period. See Explanatory Notes, paragraph 15, page 3. (b) Change from seasonally adjusted actual expenditure in preceding period. (c) The Seasonal analysis of the series "Anticipated new capital expenditure by the mining industry" shows only an insignificant seasonal pattern.

TABLE 3. NEW CAPITAL EXPENDITURE BY INDUSTRY GROUP - ACTUAL AND ANTICIPATED

Particulars	1968-69 March qtr	1968-69 June qtr	1969-70 Sept. qtr	1969-70 Dec. qtr	1969-70 March qtr	1969-70 June qtr	1970-71 Sept. qtr	1970-71 Dec. qtr	1970-71 March qtr	1970-71 June qtr	1970 July to December	1971 January to June	1971 July to December
Business field covered (a)	77%		78%				78%				73%	78%	78%
Industry Group	$ million												
	Actual expenditure												Anticipated (b)
Manufacturing -													
Extracting, refining, founding	28.5	36.4	40.2	46.9	39.6	58.5	59.2	76.5	74.6	90.3	135.7	164.9	174.7
Engineering (c)	29.3	43.3	40.3	40.8	33.1	48.5	38.6	38.7	33.5	44.8	77.3	78.3	84.6
Vehicles (d)	11.2	15.7	13.9	14.0	12.0	15.7	16.0	27.7	17.5	19.2	43.7	36.7	37.7
Chemicals (e)	27.9	39.3	34.5	36.9	34.1	33.9	33.3	35.9	20.5	24.9	69.2	45.4	68.6
Textiles and clothing	8.8	13.8	12.3	16.2	14.6	17.1	11.7	13.6	12.6	14.0	25.3	26.6	24.1
Food, drink and tobacco	30.6	32.3	34.8	41.4	27.5	36.9	32.3	39.0	35.3	44.4	71.3	79.7	92.8
Paper and printing	14.9	19.3	18.5	18.4	17.8	21.1	17.2	28.2	21.5	29.2	45.4	50.7	54.2
Other manufacturing (f)	31.3	38.5	29.0	43.0	35.0	41.7	35.3	37.2	41.7	39.1	72.5	80.8	73.2
Total manufacturing	182.5	238.6	223.5	257.6	213.7	273.4	243.6	296.8	257.2	305.9	540.4	563.1	609.9
Non-manufacturing -													
Wholesale and retail trade	55.3	83.5	82.6	103.1	66.2	99.8	92.1	102.5	77.1	98.3	194.6	175.4	192.1
Mining	100.0	122.2	122.7	134.1	107.5	168.9	150.7	203.6	187.8	242.7	354.3	430.5	514.2
Transport (g)	27.8	47.8	45.7	50.6	56.9	42.5	56.6	60.0	51.9	75.0	116.6	126.9	183.7
Other non-manufacturing (h)	74.2	100.1	85.2	99.7	83.3	107.1	116.9	136.3	121.5	148.5	253.2	270.0	295.8
Total non-manufacturing	257.3	353.6	336.2	387.5	313.9	418.3	416.3	502.4	438.3	564.5	918.7	1,002.8	1,185.8
ALL INDUSTRIES	439.8	592.2	559.7	645.1	527.6	691.7	659.9	799.2	695.5	870.4	1,459.1	1,565.9	1,795.7

(a) See explanatory notes, paragraph 9, page 2. (b) Anticipated by businesses at the beginning of the period. See explanatory notes, paragraph 15, page 3. (c) Engineering, metalworking, electrical equipment. (d) Vehicles, aircraft and ships, parts and accessories. Includes assembly and repairs. (e) Chemicals, fertilisers, paints, explosives, cosmetics and oil refining. (f) Sawmilling, furniture, plastics, leather, rubber etc. (g) Road, rail and air transport, shipping and stevedoring. (h) Building, construction, banking, insurance, other finance and property, amusements, hotels, cafes, personal services, etc.