AUSTRALIAN BUREAU OF STATISTICS
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CAPITAL EXPENDITURE BY PRIVATE BUSINESSES IN AUSTRALIA SEPTEMBER QUARTER 1974

This bulletin contains estimates of new capital expenditure based on returns obtained from a sample of businesses subject to payroll 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. These estimates replace the preliminary figures published on 15 November 1974.

2. 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 the non-manufacturing industries. 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 September quarter 1974 revised estimate of total capital expenditure is $913 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 $899 million to $927 million, and 19 chances in 20 that the estimate would be within the range of $885 million to $941 million.

3. The revised estimates differ to some extent from the corresponding preliminary estimates published on 15 November 1974 due to sampling variability between the two estimates. Also the receipt, after publication of the preliminary estimates, of additional returns from businesses not subject to pay-roll tax (see paragraph 1 above) may result in the revised estimates being higher than the preliminary 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 2, the revised estimates, being based on returns from the full sample, have a lower sampling error.

4. 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 indicated by the results of comparable complete collections, is given by the standard error of the estimate of movement. This may be expressed as a percentage of the level of the current quarterly estimate. For example the revised estimates show a decrease of $23 million between the June 1974 and September 1974 quarters. If the standard error of movement were 1.5 per cent, then there would be 2 chances in 3 that the decrease would be between $9 million and $37 million, and 19 chances in 20 that the change will be between a $51 million fall and a $5 million rise. However, the standard errors of estimates of quarter to quarter movement in the value of capital expenditure have not yet been calculated. 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.

5. Seasonally adjusted estimates of new capital expenditure are shown in Table 1. Details of the methods used in seasonally adjusting these series together with selected measures of variability are shown in *Seasonally Adjusted Indicators 1974* (Reference No. 1.10).

Industrial field covered

6. 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 industries.

(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 manufacturing and distribution.

7. 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.

Description of terms

8. '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.

9. 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.

10. 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.

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

TABLE 1. – NEW CAPITAL EXPENDITURE BY SELECTED INDUSTRY GROUP AND TYPE OF ASSET
ACTUAL EXPENDITURE JUNE QUARTER 1972 TO SEPTEMBER QUARTER 1974
ORIGINAL AND SEASONALLY ADJUSTED SERIES AND PERCENTAGE CHANGE IN SEASONALLY ADJUSTED SERIES (a)

Quarter	*New buildings and structures*				*Other new capital equipment*				*Total new capital expenditure*			
	Manufacturing	*Mining*	*Other industries*	*All industries*	*Manufacturing*	*Mining*	*Other industries*	*All industries*	*Manufacturing*	*Mining*	*Other industries*	*All industries*
ORIGINAL SERIES ($ million)												
1971-72 – June	56.0	74.7	168.0	298.7	223.3	117.3	159.6	500.2	279.3	192.0	327.6	798.9
1972-73 – September	50.0	50.4	178.4	278.8	195.0	64.3	150.9	410.2	245.0	114.7	329.3	689.0
December	58.2	63.0	190.6	311.8	216.4	64.7	138.4	419.5	274.6	127.7	329.0	731.3
March	44.9	41.2	143.1	229.2	179.8	50.9	111.1	341.8	224.7	92.1	254.2	571.0
June	58.8	55.8	189.2	303.8	222.1	65.0	146.0	433.1	280.9	120.8	335.2	736.9
1973-74 – September	53.2	51.7	200.4	305.3	200.7	56.6	182.3	439.6	253.9	108.3	382.7	744.9
December	79.6	66.0	226.8	372.4	254.2	85.2	195.6	535.0	333.8	151.2	422.4	907.4
March	66.9	42.5	176.4	285.8	211.2	56.3	173.4	440.9	278.1	98.8	349.8	726.7
June	73.7	72.7	224.0	370.4	261.1	93.6	210.8	565.5	334.8	166.3	434.8	935.9
1974-75 – September	73.9	68.4	223.0	365.3	266.9	84.4	196.5	547.8	340.8	152.8	419.5	913.1
SEASONALLY ADJUSTED SERIES ($ million)												
1971-72 – June	52.6	70.7	161.5	283.5	207.4	105.6	155.6	470.0	260.7	176.4	316.7	750.3
1972-73 – September	53.1	52.9	172.6	280.2	205.8	71.8	142.4	420.3	257.3	124.8	315.0	699.4
December	50.6	55.3	171.2	277.2	197.7	60.3	129.8	388.0	249.0	115.1	301.2	666.8
March	53.3	48.0	175.8	276.2	203.6	55.7	131.1	388.9	256.7	104.2	307.4	668.5
June	55.1	53.3	182.5	289.8	206.8	57.7	142.9	407.2	262.7	110.6	324.4	693.1
1973-74 – September	56.6	54.3	193.1	305.9	212.2	63.9	171.0	450.5	266.9	118.7	364.7	755.4
December	69.3	57.7	204.4	331.6	231.3	79.4	183.6	493.9	302.2	136.0	387.4	827.2
March	79.3	49.3	216.1	343.1	239.1	61.8	204.9	502.1	317.4	111.6	423.5	850.4
June	69.0	69.7	216.4	354.3	243.4	82.5	206.7	531.9	313.3	152.0	421.0	880.9
1974-75 – September	78.7	71.8	214.4	365.5	282.4	95.9	183.8	561.5	358.4	168.0	399.0	925.5
PERCENTAGE CHANGE (Seasonally adjusted series)												
1971-72 – June	−10	−26	+4	−9	−1	−15	+24	+2	−3	−21	+13	−3
1972-73 – September	+1	−25	+7	−1	−1	−32	−8	−11	−1	−29	−1	−7
December	−5	+5	−1	−1	−4	−16	−9	−8	−3	−8	−4	−5
March	+5	−13	+3	..	+3	−8	+1	..	+3	−9	+2	..
June	+3	+11	+4	+5	+2	+4	+9	+5	+2	+6	+6	+4
1973-74 – September	+3	+2	+6	+6	+3	+11	+20	+11	+2	+7	+12	+9
December	+22	+6	+6	+8	+9	+24	+7	+10	+13	+15	+6	+10
March	+14	−15	+6	+3	+3	−22	+12	+2	+5	−18	+9	+3
June	−13	+41	..	+3	+2	+33	+1	+6	−1	+36	−1	+4
1974-75 – September	+14	+3	−1	+3	+16	+16	−11	+6	+14	+11	−5	+5

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

TABLE 2. – NEW CAPITAL EXPENDITURE BY INDUSTRY, JUNE QUARTER 1972 TO SEPTEMBER QUARTER 1974

Quarter	*Manufacturing*									*Non-manufacturing*					Total Manufacturing and non-manufacturing
	Extracting refining founding	Engineering (a)	Vehicles (b)	Chemicals (c)	Textiles and clothing	Food, drink, and tobacco	Paper and printing	Other manufacturing (d)	Total manufacturing	Wholesale and retail trade	Mining	Transport (e)	Other non-manufacturing (f)	Total non-manufacturing	
							$ million								
1971-72 –															
June	66.8	46.4	16.6	23.5	12.3	50.2	26.6	36.9	279.3	103.0	192.0	58.3	166.3	519.6	798.9
1972-73 –															
September	52.3	34.6	17.2	24.6	11.8	45.6	24.4	34.5	245.0	112.3	114.7	52.9	164.1	444.0	689.0
December	51.7	40.0	22.1	33.1	12.7	60.6	16.6	37.8	274.6	110.0	127.7	42.9	176.1	456.7	731.3
March	37.0	32.0	22.1	20.3	8.8	51.7	17.1	35.7	224.7	90.5	92.1	23.6	140.1	346.3	571.0
June	42.1	50.1	27.2	26.7	11.1	60.4	15.8	47.5	280.9	111.8	120.8	47.0	176.4	456.0	736.9
1973-74 –															
September	38.0	39.0	22.4	27.1	11.1	50.9	19.5	45.9	253.9	109.9	108.3	80.8	192.0	491.0	744.9
December	43.2	52.6	26.6	39.7	17.2	69.2	26.5	58.8	333.8	153.6	151.2	59.3	209.5	573.6	907.4
March	37.0	51.8	20.9	26.6	10.3	56.4	17.4	57.7	278.1	104.3	98.8	60.4	185.1	448.6	726.7
June	49.7	64.6	23.7	33.2	11.5	60.7	24.3	67.1	334.8	133.7	166.3	80.4	220.7	601.1	935.9
1974-75 –															
September	56.1	58.2	29.7	37.1	10.7	65.5	26.2	57.3	340.8	128.9	152.9	62.8	227.7	572.3	913.1

(a) Engineering, metalworking, electrical equipment. (b) Vehicles, aircraft and ships, parts and accessories. Includes assembly and repairs. (c) Chemicals, fertilisers, paints, explosives, cosmetics and oil refining. (d) Sawmilling, furniture, plastics, leather, rubber etc. (e) Road, rail and air transport, shipping and stevedoring. (f) Building, construction, banking, insurance, other finance and property, amusements, hotels, cafes, personal services, etc.

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NOTE. Inquiries concerning these statistics may be made in Canberra by telephoning Mr W.A. Pattinson on 49 0211 extension 523 or, in each State capital by telephoning the office of the Australian Bureau of Statistics.