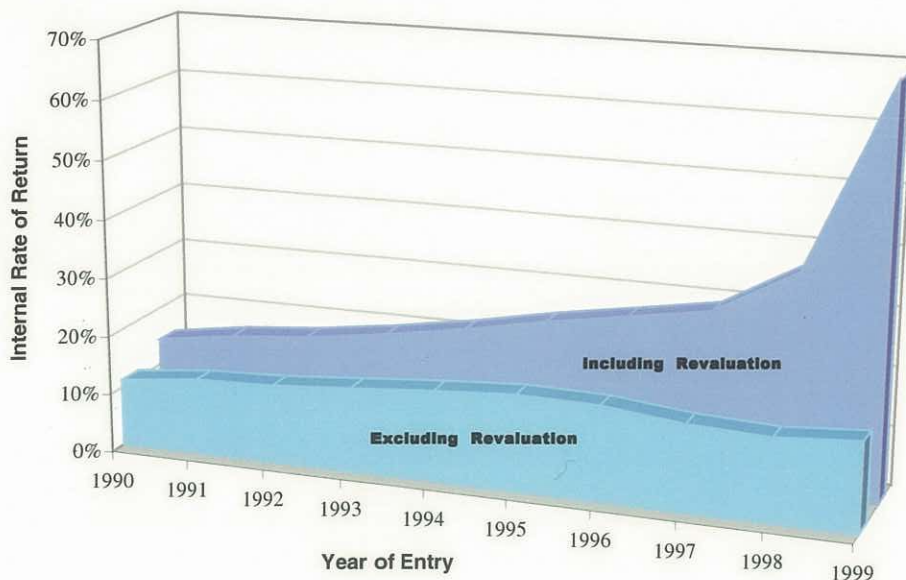

Rates of Return

at

Auckland International Airport



Prepared for

Air New Zealand

by

Simon Terry Associates

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1 August 2000

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1. Introduction

Air New Zealand is engaged in a consultation process with Auckland International Airport Limited (AIAL) as required by the Airport Authorities Amendment Act 1997. As an input to the consultation process, Air New Zealand has asked Simon Terry Associates Ltd (STA) to review the financial performance of AIAL with respect to the rates of return achieved under various assumptions.

The purpose of the report is to identify, from first principles, the returns that have been and are being achieved by AIAL. In assessing those returns it will be necessary to examine the denominator of the rate of return calculation, i.e. there will be a focus on the constituents of book value as recorded in AIAL's accounts. In particular, given AIAL's natural monopoly position, it is essential to distinguish actual expenditure on assets from notional adjustments to book value that arise simply from an ability by AIAL to exercise its market power.

2. Data and Methodology

All base data relied on for this report has been obtained from public sources. Figures for AIAL operations 1989-1999 have been taken from the Annual Reports of AIAL and from data published by the Commerce Commission.¹

The airport company changed its financial reporting period from a March year-end to a June year-end in 1993, with the 1993 accounts covering a fifteen-month period. For the purposes of our analysis we have adjusted the revenue and cost figures up to 1993 onto an estimated June-year basis by a pro-rata allocation.² We have, however, left the figures for book value of fixed assets unchanged, implicitly assuming that the book value as at March 31 in each of the years 1989-1992 remained unchanged at June 30 of the same year. The adjusted revenue, cost, and book value data are set out in Appendix 1.

In order to adjust for inflation over the decade covered by our analysis we have converted all values to 1999 dollars using the PPI (Inputs) index as the deflator. The PPI series used, and the resulting real estimates for revenues, costs and book values, are set out in Appendix 2.

Investment properties owned by AIAL (accounting for \$50.5 million of the \$815.5 million total book value of non-current assets) should ideally be excluded from analysis of the core airport operation. However, because income from those properties is not separately identified in the accounts, we have had no option but to include them in our operating surplus and book value figures. We have excluded from our book value figures the value of AIAL's shares in associated companies, with profits received from that source correspondingly excluded from the income data used.

¹ Commerce Commission, *Price Control Study of Airfield Activities: Critical Issues Paper J2773 A99/1*, 2 July 1999, Appendix 1.

² Thus, for example, our 1993 figures are four-fifths of the Annual Report figures for the fifteen months (five quarters) to June 1993; the remaining one-fifth has been allocated back to our estimate for the 1992 June year.

3. Accounting Rates of Return

The table below shows various rates of return on book value for the total airport operation. The two measures used are “Gross operating surplus” and “Net operating surplus”. Gross operating surplus is defined as the surplus remaining after charging operating expenses but before charging depreciation, interest, and tax, a measure similar to EBDIT. Net operating surplus also charges depreciation and, therefore, approximates EBIT.

In order to be able to make valid comparisons across the eleven year period, the figures have been converted to 1999 dollars as explained in the previous section.³

Table 1
Pre-Tax Accounting Rate of Return on Opening Book Value

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Real gross operating surplus \$m	50	60	62	64	69	74	83	92	99	108	113
Real net operating surplus \$m	36	45	45	46	49	56	64	70	71	76	83
Real book value at year end \$m	416	393	400	389	386	372	383	453	514	531	813
Ratio of gross surplus to opening book value %		14.4	15.7	16.1	17.7	19.1	22.4	23.9	21.8	20.9	21.2
Ratio of net surplus to opening book value %		10.9	11.4	11.6	12.5	14.6	17.1	18.2	15.6	14.7	15.6

The above table shows that operating surpluses have more than doubled in real dollar terms over the period. The table also shows almost a doubling in book value between the start and end of the decade. The accounting rate of return on book value has grown by almost 50% over the period. This picture, however, fails to distinguish between capital actually invested and increases in book value not matched by capital injections. The accounting returns shown in Table 1 only consider the returns represented by earnings of the company. For an asset owner, returns comprise two components: profits and increases in asset value. The next section examines the effect of increases in asset value.

4. The Effect of Revaluation

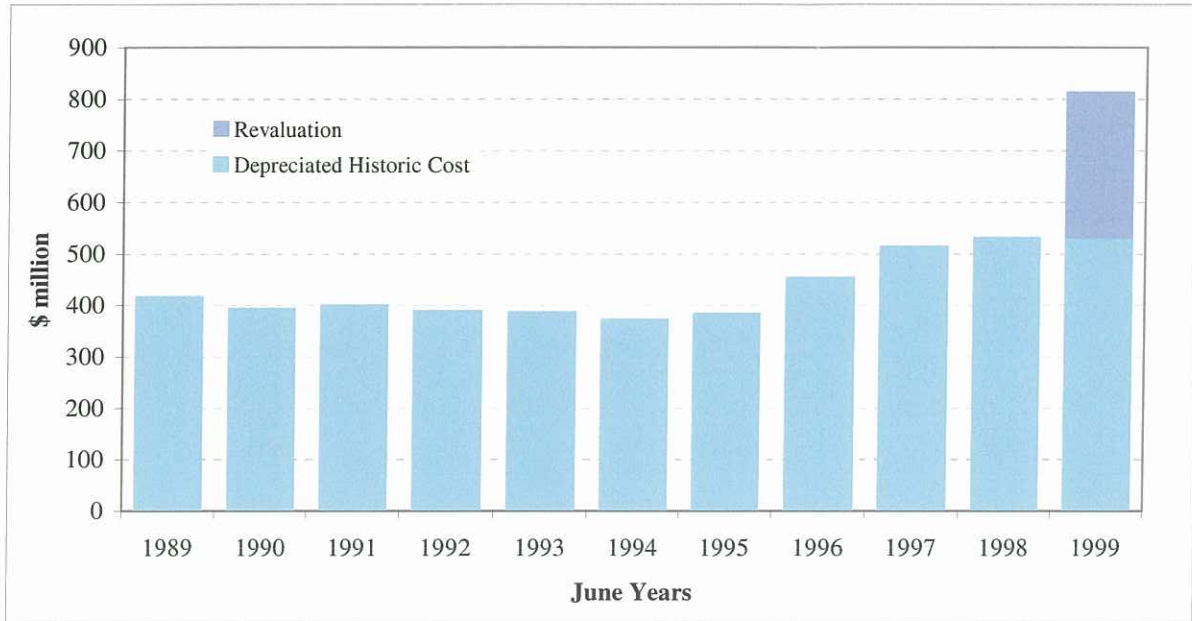
The near doubling in AIAL’s book value is in part the result of a significant expansion programme which commenced in 1995. However, the single biggest increase in book value appears in 1999, the year that the company revalued land, buildings and infrastructure, thereby creating a \$281.32 million revaluation reserve.

The asset revaluation is discussed on pp.7-10 of the 1999 AIAL Annual Report. Revaluation was decided on at a shareholders’ meeting on 22 May 1998, to be undertaken within a year of public listing.

³ This table, and those following, contain numbers which have been rounded from our spreadsheet calculations, and thus figures may not sum exactly.

“The revaluation adopted is on an Optimised Depreciated Replacement Cost (ODRC) basis for all assets other than investment properties, which have been revalued to market, and plant and machinery and motor vehicles, which continue to be carried at cost less depreciation.”⁴

Figure 1
Real Book Value of AIAL 1989 – 1999



Capital gains obtained from revaluing assets are a source of income. They increase the wealth of a company just as rising house prices increase the wealth of home owners.

For a natural monopoly which prices its services directly from the value of its assets, the treatment of that capital gain is of great importance. If prices are raised in line with the increased asset value without any offsetting adjustment, the owner reaps windfall gains which are far more than just a one-off boost.

An increased asset value supports both increased depreciation charges (the notional annualised cost of replacing the assets) and increased charges to “compensate” the owner for use of capital employed (return on capital). Thus, from the windfall increase in asset value, the owner receives expanded returns in terms of both return *on* and return *of* capital.

If there is no compensating adjustment, the owner effectively earns a return on and of capital that it has never actually invested in the business. Customers pay for these increased earnings through higher charges while receiving no improvement in the scope or level of service. Such earnings are pure monopoly rents.

⁴ Annual Report 1999, Auckland International Airport Ltd, p7.

To properly account for windfall gains (also known as holding gains) and avoid this problem, gains from revaluations must be treated as income.⁵ It is a well established principle in the economic and current-cost-accounting literature that real holding gains, whether or not realised as immediate cashflows, represent real income to the asset owners in the period when those gains accrue.⁶

If the rate of return calculations set out in Table 1 are repeated with the revaluation gains included in the operating surplus, then the rates of return for 1999 rise from a range of 16 - 21% up to 69 - 74%, as set out in Table 2.

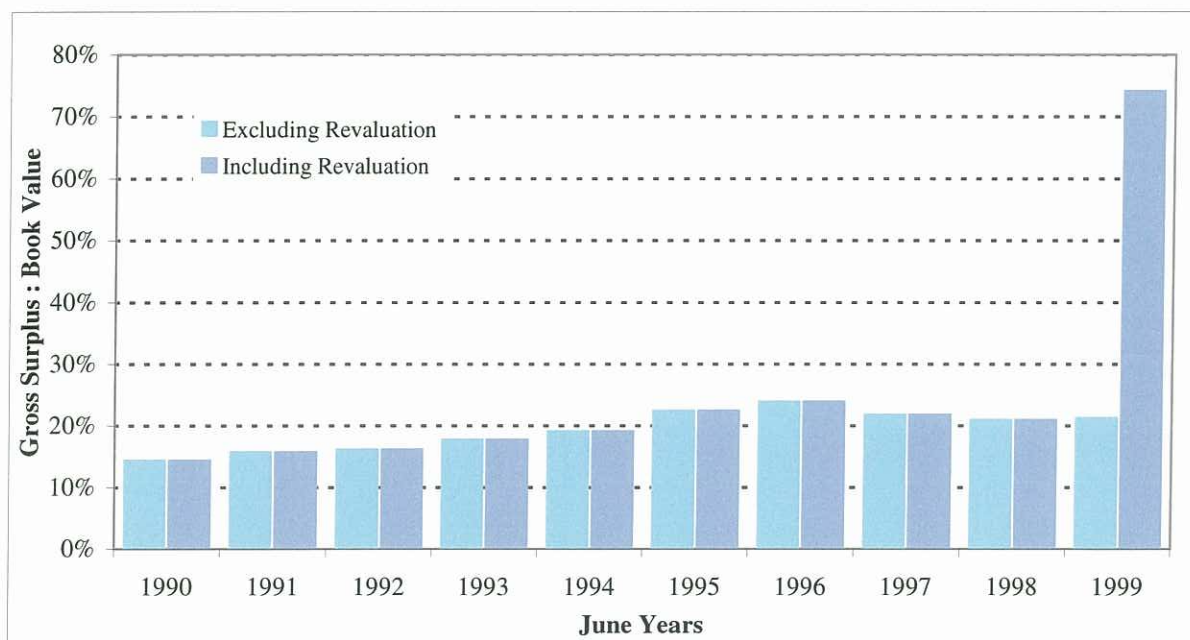
Table 2
Rate of Return Calculations Including Revaluation Gains as Income

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Real gross operating surplus \$m	50	60	62	64	69	74	83	92	99	108	394
Real net operating surplus \$m	36	45	45	46	49	56	64	70	71	76	364
Real book value at year end \$m	416	393	400	389	386	372	383	453	514	531	813
Ratio of gross surplus including revaluation to opening book value %		14.4	15.7	16.1	17.7	19.1	22.4	23.9	21.8	20.9	74.2
Ratio of net surplus including revaluation to opening book value %		10.9	11.4	11.6	12.5	14.6	17.1	18.2	15.6	14.7	68.5

⁵ For discussion on international legal and regulatory precedent, see *Lining Up the Charges*, STA, July 2000, p 13-15.

⁶ Hicks, J.R., *Value and Capital*, Clarendon Press, second edition 1941, pp.171-181; Edwards, E.O. and Bell, P.W., *The Theory and Measurement of Business Income*, University of California Press, 1961; Bell, P.W., "On Current Replacement Costs and Business Income", in Sterling, R.R. (ed.) *Asset Valuation and Income Determination: A Consideration of the Alternatives - Papers Given at a Symposium Held at the School of Business, University of Kansas, May 1970*, Scholars Book Co, Lawrence Ka, 1971, p.26; Solomons, D., "Economic and Accounting Concepts of Income", in Harcourt, G.C. and Parker, R.H. (eds) *Readings in the Concept and Measurement of Income*, Cambridge University Press, 1969, pp.154-160; Baxter, W.T., *Depreciating Assets: An Introduction*, Institute of Chartered Accountants of Scotland, 1981, Chapter 5; Tweedie, D.P. and Whittington, G., *The Debate on Inflation Accounting*, Cambridge University Press 1984; Scott, M. Fg, "Some Economic Principles of Accounting: A Constructive Critique of the Sandilands Report", in Parker, R.H., Harcourt, G.C. and Whittington, G., *Readings in the Concept and Measurement on Income* second edition, Philip Allan, 1986, p.225; *Accounting for Economic Costs and Changing Prices: A Report to HM Treasury by an Advisory Group* (the "Byatt Report"), HMSO, London, 1986, Vol.1 paragraphs 83, 101-102, 130 and 131 and Table C on p.34; Baxter, W.T., *Accounting Theory*, Garland Publishing, New York, 1996, pp.277-282; Whitted, G., Zimmer, I. and Taylor, S., *Financial Accounting: Incentive Effects and Economic Consequences*, Harcourt Brace, Sydney, 4th ed 1997, pp.254 - 257.

Figure 2
Ratio of Gross Surplus to Book Value
Effect of Revaluation



5. Assessment of Market Power

The consequence of the revaluation has been to increase the wealth of the airport's owners. The new book value will be sustainable on the basis of the revenues the company expects to secure from airport users. Those revenues, however, have been boosted to an unknown extent by the market power enjoyed by the airport.

One way to assess the value of the airport's monopoly position is to calculate and compare the internal rate of return (IRR) that an investor could have secured by:

- buying the airport company for book value at a point in time,
- thereafter collecting, year by year until 1999, AIAL's actual gross operating surplus,
- undertaking, in each year, AIAL's actual cash outlays on new fixed assets⁷, and
- selling out at the book value recorded for June 1999.

The IRR is defined as the discount rate that makes the net present value of the stream of cash flows equate to zero. The IRR can be compared with costs of capital elsewhere in the economy in order to assess the appropriateness of the rates of return achieved by AIAL.

⁷ Note that with actual capital spending included, no depreciation allowance is deducted, since to do so would involve double counting.

This exercise is conducted in Table 3, which shows the pre-tax IRR to such an investor for entry in each year 1990-1998, assuming that the hypothetical investor's position is liquidated in each case at June 1999. The IRRs set out in the table are real rates of return by virtue of the data having all been converted to 1999 dollars.

The 1999 revaluation significantly influences the IRR calculations. As it occurred at the end of the time period considered, the later an investor bought in to the company, the better the IRR. For example, the table shows that an investor who purchased the airport assets at the end of June 1993 for \$386 million, then received an annual cash flow of the operating surpluses less the capital expenditure, and finally sold out at the end of June 1999 for a book value of \$813 million, would achieve an IRR of 21.8%. That is equivalent to depositing \$386 million in the bank and then receiving \$84.1 million (a 21.8% interest rate) each and every year for six years and then recouping the original \$386 million investment. By way of comparison, the IRR for an investor entering in June 1996 is 29.1%. For entry in 1989 the IRR is 14.5%.

(Our procedure of deducting actual capital expenditure from free cashflow in this modelling exercise tends to understate the IRRs in Table 3, because of the large scale of capital works undertaken by AIAL during the second half of the 1990s. An actual investor entering at June 1998 and intending to sell out at June 1999 would have been highly unlikely to have undertaken \$33 million of capital expenditure in the interim, and would therefore have been able to secure a higher return than the 68% shown in Table 3 for that period. Similar comments apply to the IRRs for entry in 1997 and 1996.)

Table 3
Return on Funds for a Hypothetical Investor Selling-Out of
the Airport at Book Value in June 1999 (Data in 1999 Dollars)

June years (\$ million)	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Buy-in price	416	393	400	389	386	372	383	453	514	531	
Gross operating surplus excl interest		60	62	64	69	74	83	92	99	108	113
Capital spend annualised		24	28	19	28	13	31	84	88	58	33
Sell price at June 1999											813
Cash stream for entry at end of:											
June 1989	-416	36	34	45	41	60	52	8	11	50	893
June 1990		-393	34	45	41	60	52	8	11	50	893
June 1991			-400	45	41	60	52	8	11	50	893
June 1992				-389	41	60	52	8	11	50	893
June 1993					-386	60	52	8	11	50	893
June 1994						-372	52	8	11	50	893
June 1995							-383	8	11	50	893
June 1996								-453	11	50	893
June 1997									-514	50	893
June 1998										-531	893
Pre-tax IRR %, entering in June:	14.5	16.5	17.6	19.5	21.8	24.5	26.7	29.1	36.8	68.1	

In order to examine the underlying rates of return, Table 4 repeats the same exercise but ignores the 1999 revaluation. Removing the one-off revaluation considerably reduces the returns: from a typical IRR of 25% including revaluation to 14% excluding revaluation.⁸

Table 4
Return on Funds for a Hypothetical Investor Selling-Out of
the Airport at June 1999 Book Value – Excluding Revaluations
(Data in 1999 Dollars)

June years (\$ million)	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Buy-in price at year end	416	393	400	389	386	372	383	453	514	531	
Gross operating surplus excl interest		60	62	64	69	74	83	92	99	108	113
Capital spend annualised		24	28	19	28	13	31	84	88	58	33
Book value at end of period											813
Fixed assets revaluation reserve											281
Sell price excluding revaluation											532
Cash stream for entry at end of:											
June 1989	-416	36	34	45	41	60	52	8	11	50	612
June 1990		-393	34	45	41	60	52	8	11	50	612
June 1991			-400	45	41	60	52	8	11	50	612
June 1992				-389	41	60	52	8	11	50	612
June 1993					-386	60	52	8	11	50	612
June 1994						-372	52	8	11	50	612
June 1995							-383	8	11	50	612
June 1996								-453	11	50	612
June 1997									-514	50	612
June 1998										-531	612
Pre-tax IRR%, entering in June:	11.4	12.8	13.3	14.3	15.4	16.3	16.1	14.6	14.1	15.1	

⁸ Note that the returns calculated are particular to the time period over which the investment is held so each calculation is under a unique set of parameters and the series is not readily averaged.

Figure 3
Effect of Revaluation on IRR

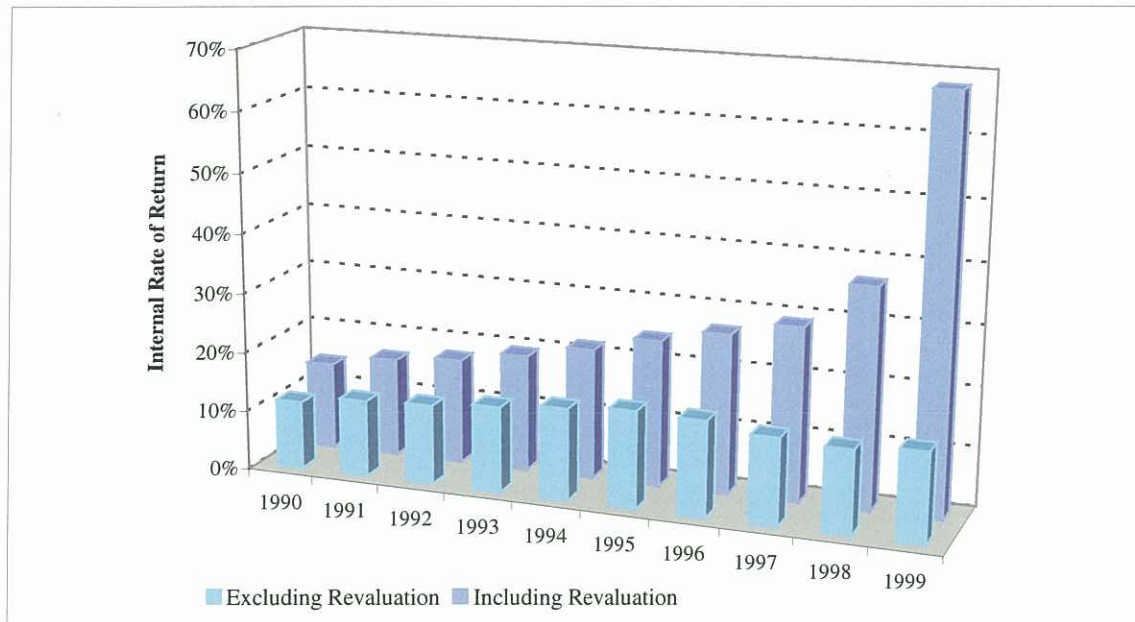


Table 4 indicates a typical pre-tax IRR for AIAL over the period of 14%. Using this figure, we can estimate the additional revenue AIAL would need to obtain from customers in future to sustain the 1999 one-off \$281.3 million revaluation, assuming that AIAL continued to seek returns in line with those achieved historically. To yield a 14% return on that additional book value will require additional charges totalling around \$40 million a year. Note that this is effectively a permanent annual charge, simply as a result of the accounting procedure adopted by AIAL.

For comparative purposes it is also useful to assess the post-tax rates of return achieved by AIAL. This yields figures that may be compared with returns achieved in other network utilities. Table 5 repeats the exercise undertaken in Table 3 but deducts from the annual cash flow an amount equal to the cash tax paid by AIAL in that year. The effect of tax varies, depending on the year in question. For an investor entering in June 1994 we would estimate the post-tax return at 20.1%, while the post-tax return over the ten-year period becomes 11.3%.

The calculations represent the aggregate (post-tax) return available to debt and equity providers. Therefore, when looking for benchmarks against which to compare the above IRRs it is appropriate to think in terms of weighted average cost of capital (WACC).

AIAL has a strong network utility character across most business lines.⁹ In particular, it is a comparatively low risk investment. It is, therefore, instructive to compare the post-tax returns against those considered acceptable by the Ministry of Economic Development (MED) in

⁹ Income from concessions makes up a quarter of AIAL's revenue and this business line is not an infrastructure monopoly. As with investment properties, we have not been able to disaggregate this component of the overall airport operation.

respect of electricity lines charges. The Ministry states that for this sector the estimated WACC is 7.5% to 10% post-tax.¹⁰

The post-tax IRRs set out in Table 5 below exceed this range for each of the past ten years, often quite significantly. Table 6 provides comparable calculations with the revaluation excluded.

Table 5
Post-tax Return on Funds for a Hypothetical Investor
Selling-Out of the Airport at June 1999 Book Value
(Data in 1999 Dollars)

June years (\$ million)	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Buy-in price at year end	416	393	400	389	386	372	383	453	514	531	
Gross operating surplus excl interest		60	62	64	69	74	83	92	99	108	113
Capital spend annualised		24	28	19	28	13	31	84	88	58	33
Cash tax paid		12	11	15	16	19	21	23	21	20	22
Sell price											813
Cash stream for entry at end of:											
June 1989	-416	24	23	30	24	41	31	-16	-11	30	871
June 1990		-393	23	30	24	41	31	-16	-11	30	871
June 1991			-400	30	24	41	31	-16	-11	30	871
June 1992				-389	24	41	31	-16	-11	30	871
June 1993					-386	41	31	-16	-11	30	871
June 1994						-372	31	-16	-11	30	871
June 1995							-383	-16	-11	30	871
June 1996								-453	-11	30	871
June 1997									-514	30	871
										-531	871
Post-tax IRR % entering at June:	11.3	12.9	13.8	15.5	17.5	20.1	22.5	25.3	33.2	64.0	

¹⁰ *Inquiry into The Electricity Industry*, June 2000, Report to the Minister of Energy, paragraph 73.

Table 6
Post-tax Return on Funds for a Hypothetical Investor
Selling-Out of the Airport at June 1999 Book Value – Excluding Revaluations
(Data in 1999 Dollars)

June years (\$ million)	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Buy-in price at year end	416	393	400	389	386	372	383	453	514	531	
Gross operating surplus excl interest		60	62	64	69	74	83	92	99	108	113
Capital spend annualised		24	28	19	28	13	31	84	88	58	33
Cash tax paid		12	11	15	16	19	21	23	21	20	22
Book value at end of period											813
Fixed assets revaluation reserve											281
Sell price excluding revaluation											532
Cash stream for entry at end of											
June 1989	-416	24	23	30	24	41	31	-16	-11	30	590
June 1990		-393	23	30	24	41	31	-16	-11	30	590
June 1991			-400	30	24	41	31	-16	-11	30	590
June 1992				-389	24	41	31	-16	-11	30	590
June 1993					-386	41	31	-16	-11	30	590
June 1994						-372	31	-16	-11	30	590
June 1995							-383	-16	-11	30	590
June 1996								-453	-11	30	590
June 1997									-514	30	590
										-531	590
Post-tax IRR % entering at June:	7.6	8.7	8.9	9.7	10.5	11.3	11.3	10.4	10.1	11.0	

6. Listed Company Returns

As a means of providing a comparison for the previous exercise, it is instructive to consider the returns that would be achieved by investing in other sectors of the New Zealand economy. Because of the requirements to report regularly to the public, the listed company sector provides a readily accessible source of data. In addition, because these stocks are traded on a reasonably regular basis we can track the market's view of value over time.

It is convenient to use a basket of the top forty stocks as a proxy for returns achieved by listed companies. The stocks comprising the basket are given weightings according to their weights in the NZSE40 index.

The companies comprising the NZSE40 cross a number of sectors but could be described as generally existing in competitive markets. Telecom dominates the index and that company's revenue is made up of a mix of contestable and non-contestable sources. However, Telecom's ability to exercise its monopoly power regarding the local loop is curtailed by the existence of the Kiwi Share that limits price increases to be no more than the rate of inflation. Thus it is

reasonable to conclude that the NZSE40 returns are reflective of returns available from elsewhere in the New Zealand capital markets.

A similar calculation to that undertaken in Section 5 is outlined below for an investor taking up an NZSE40 portfolio at different times and disposing of the holding in 1999.

Table 7
Return on Funds for a Hypothetical Investor Purchasing NZSE40 and Selling-Out at December 1999

	1991	1992	1993	1994	1995	1996	1997	1998	1999
Buy in price	100.0	104.1	145.4	127.2	142.9	156.8	153.8	137.2	
Dividend		6.7	9.1	8.8	11.9	13.8	13.3	14.2	13.8
Sell price at end 1999									146.6
Cash stream for 1992 entry (\$)	-100.0	6.7	9.1	8.8	11.9	13.8	13.3	14.2	160.4
Cash stream for 1993 entry (\$)		-104.1	9.1	8.8	11.9	13.8	13.3	14.2	160.4
Cash stream for 1994 entry (\$)			-145.4	8.8	11.9	13.8	13.3	14.2	160.4
Cash stream for 1995 entry (\$)				-127.2	11.9	13.8	13.3	14.2	160.4
Cash stream for 1996 entry (\$)					-142.9	13.8	13.3	14.2	160.4
Cash stream for 1997 entry (\$)						-156.8	13.3	14.2	160.4
Cash stream for 1998 entry (\$)							-153.8	14.2	160.4
Post-tax IRR (%) entering in:		14.2	14.8	8.6	12.8	10.2	6.8	6.9	

The above table shows returns ranging from just under 15% to less than 7% depending on the year of entry. Given that these are the returns achieved by investors in stocks facing a variety of risks, one would expect that these should out-perform the returns from an enterprise exhibiting the monopoly characteristics of AIAL.

7. Conclusion

The \$281 million revaluation entered into AIAL's books in 1999 is a significant source of income to the company and has boosted its true rate of return well above the levels generally achieved elsewhere in the economy. The post-tax IRRs for the past ten years shown in Table 5 exceed those available from investing in the New Zealand share market during the same period.

Further underlining the contrast is AIAL's position as a network utility with relatively low business risk. Its core activities are comparable in character to those of electricity lines companies. MED considers that the acceptable rate of return (WACC) for the lines businesses is between 7.5% and 10%. The figures in Table 5 all exceed this range.

The 1999 revaluation is likely to result in a higher level of ongoing charges to the airport company's customers than is necessary to provide an acceptable rate of return to AIAL investors. The question this naturally raises is whether it is legitimate for the airport's shareholders to appropriate for their own benefit a windfall of roughly \$281 million by means

of a notional revaluation of existing assets (mostly affecting land), the costs of which were sunk? In January of this year, the US Supreme Court ruled in support of a US Department of Transportation position that Los Angeles International Airport must base its landing charges on the actual costs incurred to acquire land for the airfield, and not a higher value subsequently assigned to the land.¹¹

It needs to be emphasized that revaluation of this sort can be sustainable only if the Economic Value of the enterprise (that is, the present value of expected future cash surpluses) increases correspondingly – which means that airport users would need to pay charges which are permanently higher by the amount required to provide a return on and of the new capital base arising from the revaluation. If AIAL were to seek a rate of return on the \$281 million revaluation in line with that achieved historically, this would result in recurring charges totalling around \$40 million a year.

Revaluation is literally a windfall, and in declaring a revaluation the airport is, in effect, announcing its intention to hold its charges higher than is strictly required by its actually committed costs (financial commitments plus ongoing resource requirements to operate the existing installations, plus a margin to give a return on capital actually committed by shareholders). The increased level of charges relative to those genuinely required represents the degree to which the airport's management feels able to exercise the market power arising from the status of their operation.

¹¹ The ruling on 10 January 2000 followed a trebling of charges at LAX in 1993 and extensive litigation through US courts since that time. (See *City of Los Angeles, et al. v. US Department of Transportation et al.*, (DC Cir. 1999), No 98-1071, and "Supreme Court Rules Against LAX; Landing Fee Diversion May Cost it \$100 Million", *Aviation Daily*, 11 January, 2000.)

Appendix 1
Data on Auckland International Airport for June years 1989-1999
\$'000

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Operating Revenue:											
Airfield income (=landing charges)	26,746	30,910	31,807	31,393	32,767	33,477	37,551	41,318	41,697	42,644	44,500
Development charge	11,052	11,938	12,323	13,968	17,629	19,297	20,674	22,478	24,534	23,176	24,300
Terminal services charge	5,248	6,887	5,205	5,580	6,274	7,676	7,822	8,965	11,977	13,751	14,000
Retail income (=concession income)	12,159	16,266	17,106	19,382	23,505	25,375	30,999	34,042	34,634	41,563	46,900
Rental income	4,441	6,309	7,919	8,243	8,366	8,316	8,366	9,225	11,378	14,833	16,100
Carpark income	4,396	4,660	4,671	4,556	4,582	5,224	5,850	6,237	7,027	8,343	9,000
Utilities and general	5,707	7,447	9,942	8,639	6,474	6,203	6,184	7,666	8,827	10,198	5,600
Total Revenue excluding interest	69,749	84,418	88,973	91,761	99,597	105,568	117,446	129,930	140,074	154,509	160,366
Operating costs excluding interest & depreciation	28,102	30,439	32,148	31,909	33,933	34,086	35,488	39,455	42,296	47,082	47,495
Gross pre-tax operating surplus	41,648	53,979	56,825	59,852	65,664	71,482	81,958	90,475	97,778	107,427	112,871
Depreciation	11,206	13,101	15,664	16,862	19,350	16,874	19,415	21,712	27,859	31,857	30,094
Net pre-tax operating surplus	30,442	40,878	41,161	42,989	46,314	54,608	62,543	68,763	69,919	75,570	82,777
Cash tax paid	3,849	10,577	10,189	13,750	15,710	18,946	20,828	23,046	21,012	19,834	21,683
Cash interest paid	16,308	8,756	9,916	16,066	9,103	9,299	7,536	9,242	10,741	8,664	20,115
Total book value of fixed assets	350,305	353,934	367,638	360,925	367,437	361,568	376,239	447,879	508,931	530,886	813,083

Source: AIAL Annual Report 1999 and Commerce Commission, Price Control Study of Airfield Activities: Critical Issues Paper J2773 A99/1, 2 July 1999, Appendix 1.

Appendix 2
Real Data in 1999 \$000, Using PPI (Inputs) as Deflator

June years	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
PPI Inputs	865	926	946	955	980	1000	1010	1017	1019	1027	1028
Operating Revenue:											
Airfield income (=landing charges)	31,792	34,340	34,581	33,800	34,397	34,448	38,257	41,805	42,095	42,685	44,500
Development charge	13,137	13,263	13,397	15,039	18,506	19,857	21,063	22,743	24,768	23,198	24,300
Terminal services charge	6,238	7,651	5,659	6,008	6,587	7,899	7,969	9,071	12,091	13,764	14,000
Retail income (=concession income)	14,453	18,071	18,597	20,868	24,674	26,111	31,582	34,443	34,965	41,603	46,900
Rental income	5,279	7,009	8,609	8,875	8,783	8,557	8,523	9,334	11,487	14,847	16,100
Carpark income	5,226	5,177	5,078	4,905	4,810	5,375	5,960	6,311	7,094	8,351	9,000
Utilities and general	6,783	8,274	10,809	9,301	6,796	6,383	6,300	7,756	8,911	10,208	5,600
Total Revenue	82,908	93,786	96,731	98,796	104,551	108,629	119,655	131,462	141,413	154,658	160,366
Operating costs excluding interest & depreciation	33,403	33,817	34,951	34,356	35,621	35,074	36,155	39,920	42,700	47,127	47,495
Gross pre-tax operating surplus	49,505	59,969	61,780	64,440	68,930	73,555	83,499	91,542	98,712	107,531	112,871
Depreciation	13,320	14,555	17,030	18,155	20,312	17,363	19,780	21,968	28,125	31,888	30,094
Net pre-tax operating surplus	36,185	45,414	44,750	46,285	48,618	56,192	63,719	69,574	70,587	75,643	82,777
Real cash tax	4,575	11,751	11,077	14,804	16,492	19,495	21,220	23,318	21,213	19,853	21,683
Real cash interest	16,390	8,796	9,956	16,123	9,131	9,322	7,551	9,256	10,752	8,668	20,115
Total book value of fixed assets	416,393	393,212	399,694	388,596	385,714	372,053	383,315	453,160	513,795	531,399	813,083

Source: Calculated from Appendix 1.

Appendix 3
Breakdown of 30 June 1999 Revaluation of Fixed Assets

	Book Value Prior To Revaluation \$000's	Revaluation Increase \$000's	Book Value Post Revaluation \$000's
Land	168,789	145,207	313,996
Infrastructure assets	56,181	49,443	105,624
Runways, aprons and taxiways	55,072	5,913	60,985
Buildings	215,020	56,607	271,627
Investment properties	26,448	24,152	50,600
Total fixed assets revalued	521,510	281,322	802,832
Other fixed assets	10,251	-	10,251
Total fixed assets	531,761	-	813,083

Sources: Annual Report 1999, Auckland International Airport Ltd.