



NEW ZEALAND



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NZ Rail Corporation (KiwiRail)

Performance evaluation

KiwiRail equity valuation

Macquarie Securities' discounted cashflow based equity valuation for New Zealand Rail Corporation (KiwiRail Group or "KiwiRail") is -\$343m (nominal post tax WACC 9.4%, asset beta 0.74, TGR 3.0%).

Forecast financial model

A detailed financial model with explicit forecasts out to 2031 has been completed and is summarised through this report.

12 month and 24 month target valuation

The 12 month (-\$115m) target valuation for the company has been derived by rolling forward the discounted cashflow model 12 months and deducting from this value the forecast 12 month dividend to the Crown (nil).

Financial model assumptions and commentary

We have assessed the sensitivity of our equity valuation to a range of inputs. Broadly, the sensitivities are divided into five categories: freight volume, Turnaround Plan (TAP) capital expenditure, modal market share, yield and operating costs.

Turnaround Plan

Following a sustained period of underinvestment, KiwiRail has developed a strategic plan (Turnaround Plan or TAP) with the objective to build, over 10 years, a sustainable freight business capable of funding its ongoing operating and capital expenditure from customer revenue

Based on Macquarie Securities forecasts, we estimate that the company's underlying EBITDA following the TAP programme will be approximately \$358m (FY21) – above stay-in-business capital expenditure of \$300m (FY21).

Consistent with KiwiRail's 2012-14 Statement of Corporate Intent, Macquarie has assumed that the Crown invests \$1.1bn to support the 10-year TAP programme. Note, the Government has announced its in-principle commitment to \$750m only of equity funding over the first three years of the plan. Macquarie has therefore assumed a further \$350m of equity injections.

Additionally, we have assumed that Metro renewals and project capital expenditure is met through ongoing Crown capital grants and therefore have no impact on our discounted cashflow equity valuation for the business.

Relative disclosure levels

We include a summary of our assessment of the relative disclosure levels for KiwiRail and listed comparable companies.

This bespoke research is provided for the sole use of the New Zealand Treasury.

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1 November 2011
Macquarie Securities (NZ) Limited

Performance evaluation

KiwiRail equity valuation

Macquarie Securities' discounted cashflow based equity valuation for KiwiRail is -\$343m (nominal post tax WACC 9.4%, asset beta 0.74, TGR 3.0%).

Forecast financial model

A detailed financial model with explicit forecasts out to 2031 has been completed and is discussed and summarised through this report.

12 month target valuation

The 12 month (-\$115m) target valuation for the company has been derived by rolling forward the discounted cashflow model 12 months and deducting from this value the forecast 12 month dividend to the Crown (nil).

Sensitivity analysis of main valuation drivers

We have assessed the sensitivity of our equity valuation to a range of inputs. Broadly, the sensitivities are divided into five categories: freight volume, Turnaround Plan (TAP) capital expenditure, modal market share, yield and operating costs.

Financial model assumptions and commentary

We highlight and discuss a number of key model input assumptions in the report:

- NZ freight volume growth forecasts;
- TAP programme outcomes (including capex, delivery time improvement, modal share improvement, rail to road yield improvement, non-price and share efficiency gains)
- Rail modal share;
- Yield change,
- Operating cost inflation.

WACC analysis

Macquarie Securities' DCF-based equity valuation for KiwiRail is based on a 9.4% post-tax nominal discount rate and terminal growth assumption of 3.0%. We have included our estimate of KiwiRail's tax losses (\$61m PV) in our equity valuation.

Turnaround Plan and Crown equity position

Following a sustained period of underinvestment, KiwiRail has developed a strategic plan (Turnaround Plan or TAP) with the objective to build, over 10 years, a sustainable freight business capable of funding its ongoing operating and capital expenditure from customer revenue

Based on Macquarie Securities forecasts, we estimate that the company's underlying EBITDA following the TAP programme will be approximately \$358m (FY21) – above stay-in-business capital expenditure of \$300m (FY21).

Consistent with KiwiRail's 2012-14 Statement of Corporate Intent (SCI), Macquarie has assumed that the Crown invests \$1.1bn to support the 10-year TAP programme. This assumption does not impact on discounted cashflow equity valuation for the business but is reflected in our discount rate assumptions.

Note, the Government has announced its in-principle commitment to \$750m only of equity funding over the first three years of the plan. Macquarie has therefore assumed a further \$350m of equity injections.

Additionally, we have assumed that Metro renewals and project capital expenditure is met through ongoing Crown capital grants and therefore have no impact on our discounted cashflow equity valuation for the business.

Alternative valuation methodologies

We have assessed a comparable multiple based equity valuation range for KiwiRail. The equity value range assessed is \$583m-\$1138m compared to the DCF-based equity valuation of -\$343m.

This band is based on the forward EV/EBITDA capitalisation multiple range for the closest comparable companies excluding outliers. The range lies above our primary valuation.

This is primarily due to the negative equity value associated with the significant catch-up capital expenditure which is required to address significant underinvestment in KiwiRail assets. This contrasts with the comparable companies which operate comparatively well maintained assets. More minor differences will also be due, inter alia, to differing earnings risk and growth profiles and variations in the regulatory regime which applies to the non-contestable assets within KiwiRail and the comparable companies.

Relative disclosure levels

We summarise our assessment of the relative disclosure levels for KiwiRail and listed comparable companies in respect of key valuation inputs. We consider that the company's disclosure levels are broadly comparable with listed comparable companies with only a few exceptions.

Fig 1 KiwiRail summary financials (KRG -\$1.21)

					Profit & Loss										
						FY11A	FY12E	FY13E	FY14E						
					Operating Revenue (excl grants)	\$m	667.4	732.8	783.9	833.3					
					Government grants	\$m	344.6	241.0	113.0	63.0					
					EBITDA	\$m	444.9	391.0	287.3	254.3					
					EBITDA (excl grants)	\$m	100.3	150.0	174.3	191.3					
					EBITDA - recurring	\$m	106.2	150.0	174.3	191.3					
					Depreciation	\$m	277.4	298.7	323.2	345.5					
					Amortisation	\$m	5.7	3.7	3.7	3.7					
					EBIT	\$m	161.8	88.7	(39.5)	(94.8)					
					EBIT - Recurring	\$m	(176.9)	(152.3)	(152.5)	(157.8)					
					Other non-recurring expenses	\$m	123.5	-	-	-					
					Net Interest Expense	\$m	(32.2)	(32.1)	(38.6)	(45.2)					
					Pre-Taxation Profit	\$m	6.1	56.6	(78.1)	(140.1)					
					Taxation Expense/ (Credit)	\$m	27.9	-	-	-					
					Profit after Taxation	\$m	34.0	56.6	(78.1)	(140.1)					
					Minorities	\$m	-	-	-	-					
					Reported Profit after taxation	\$m	34.0	56.6	(78.1)	(140.1)					
					Key Assumptions										
					Freight volume growth:										
					National demand growth	%		2.2	2.2	2.3					
					Improved market share	%		1.4	1.4	1.4					
					Freight yield	c/NTK		8.3	8.6	8.8					
					Long distance passenger growth	%		6.0	3.0	3.0					
					Restructuring cost savings	\$NZm		1.7	1.9	2.2					
Discounted Cashflow Valuation					Profit and Loss Ratios										
					PER	x	(20.7)	(12.5)	9.0	5.0					
PV FCFs Available to Owners					\$m	108.9									
Less Net Debt (inc Assoc debt share)					\$m	451.6									
Equity Value					\$m	(342.7)									
Shares Outstanding					m	282.5									
Equity Value per Share					\$ps	(1.21)									
					Revenue Growth	%	2.6	9.8	7.0	6.3					
					EBIT Growth (including grants)	%	(35.8)	(45.2)	(144.6)	139.9					
					EBITDA/Sales	%	66.7	53.4	36.7	30.5					
					EBIT/Sales	%	24.2	12.1	(5.0)	(11.4)					
					Effective tax rate	%	(457.4)	-	-	-					
					Payout ratio	%	-	-	-	-					
Assumptions					EV/EBIT	%	0.7	1.2	(2.8)	(1.1)					
Risk Free Rate					%	5.5									
Asset Beta						0.74									
Market Risk Premium					%	7.0									
Target Debt/Venture					%	25.0									
Nominal Post-Tax WACC					%	9.4									
Perpetuity Growth Rate					%	3									
					EV/EBITDA	x	0.2	0.3	0.4	0.4					
					EV/Sales	x	0.2	0.2	0.1	0.1					
					Balance Sheet Ratios										
					ROE	%	0.3	0.4	(0.6)	(1.1)					
					ROA	%	1.2	0.6	(0.3)	(0.7)					
					ROFE	%	0.0	0.4	(0.6)	(1.0)					
					Net Debt	\$m	452	507	562	740					
					Net Debt/Equity	%	3.6	3.9	4.3	5.6					
					Net Interest Cover (EBIT)	x	5.0	2.8	(1.0)	(2.1)					
					Price/NTA	%	(2.7)	(2.6)	(2.6)	(2.6)					
					NTA per share	cps	12,62	12,93	13,10	13,09					
Cashflow Analysis					Balance Sheet										
Receipts from customers					\$m	657.6	714.3	769.4	819.3	Cash	\$m	81.1	81.1	81.1	81.1
Payments to suppliers & employees					\$m	(585.4)	(576.3)	(598.6)	(628.6)	Receivables	\$m	115.5	126.8	135.7	144.2
Other					\$m	(24.6)	(32.1)	(38.6)	(45.2)	Inventories	\$m	73.4	80.6	86.2	91.6
Operating cash flow					\$m	47.6	105.8	132.3	145.5	Investments	\$m	-	-	-	-
									Property, Plant & Equipment	\$m	13,284.3	13,638.0	13,864.9	14,022.3	
Purchase property, plant & equipment					\$m	(653.2)	(652.4)	(550.1)	(503.0)	Intangibles	\$m	14.6	11.0	7.3	3.7
Capital grants					\$m	344.6	241.0	113.0	63.0	Other Assets	\$m	1.2	1.2	1.2	1.2
Other					\$m	7.0	-	-	-	Total Assets	\$m	13,570.1	13,938.6	14,176.4	14,344.1
Investing cash flow					\$m	(301.6)	(411.4)	(437.1)	(440.0)	Payables	\$m	233.6	240.1	251.1	264.4
									Short Term Debt	\$m	252.2	252.2	252.2	252.2	
Drawdown / (paydown) of debt						89.1	55.5	54.8	177.8	Long Term Debt	\$m	280.5	336.0	390.8	568.7
Equity injection					\$m	250.0	250.0	250.0	116.7	Other Liabilities	\$m	165.5	165.5	165.5	165.5
Other					\$m	(36.0)	-	-	-	Total Liabilities	\$m	931.8	993.8	1,059.6	1,250.8
Financing cash flow					\$m	303.1	305.5	304.8	294.5	Shareholders' Funds	\$m	12,638.3	12,944.9	13,116.7	13,093.3
									Minority Interests	\$m	-	-	-	-	
Net change in cash					\$m	49.0	-	-	-	Total Shareholders' Equity	\$m	12,638.3	12,944.9	13,116.7	13,093.3
									Total Funds Employed	\$m	13,089.9	13,452.0	13,678.7	13,833.1	

Source: Company data, Macquarie Research, November 2011

Valuation summary

KiwiRail equity valuation and 12-month target

Fig 2 KiwiRail DCF equity valuation summary

Perpetuity growth rate (pa)	3.0%
Perpetuity Value (\$m)	3,373
PV (FY12-30) (\$m)	(449)
PV of perpetuity (\$m)	558
PV FCF Available to Owners (\$m)	109
Less Net Debt (inc Associate debt share) (\$m)	452
Equity Value (\$m)	(343)
- includes PV tax losses (\$m)	61
Equity Value – 12 month target valuation (\$m)	(115)
Shares Outstanding (m)	283
DCF Equity Value per share (\$)	(1.21)
Corporate Tax Rate	28%
Risk free rate	5.5%
Asset beta	0.74
Equity beta	0.99
Market Risk Premium	7.0%
Target Debt/Venture	25%
Target Equity/Venture	75%
Cost of Debt	7.0%
Tax-adjusted Cost of Debt	5.0%
Ungeared Cost of Equity	10.9%
Cost of Equity	
Nominal WACC	9.4%

Source: Macquarie Research, November 2011

We have summarised our DCF based equity valuation (-\$343m) for KiwiRail above. The summary includes the discount rate and terminal growth assumptions.

Risk free rate. We have estimated the risk free rate using the yield of the 10-year New Zealand Government Bond rate as an approximation. A six-month average yield was used to prevent any distortion arising from shocks in the spot rate. The risk free rate estimated as at 31st October 2011 was 5.5%.

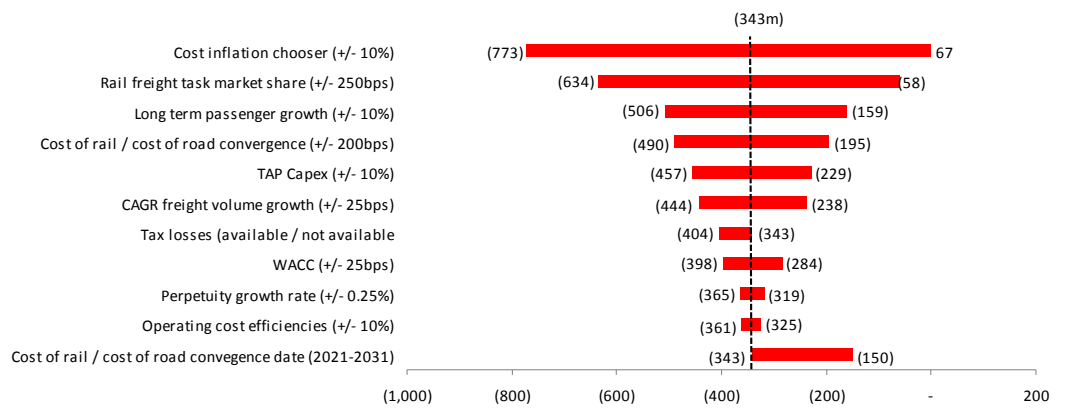
Selection of MRP. We have used a post investor tax market risk premium of 7%, consistent with the estimation Macquarie Research uses for other New Zealand-listed companies.

Long term gearing. We have assumed a conservative long-term gearing level (25% debt/enterprise value) for the calculation of a discount rate. There is no company target gearing that we are aware of.

Asset beta. We have estimated the asset beta of the company through comparable company analysis (after removing outliers). The asset beta approximation was calculated by taking an average of the unlevered asset betas of appropriate listed companies with similar business operations. The companies used are Mainfreight, Freightways, Port of Tauranga, Toll Holdings, QR National, Asciano, Kansas City Southern Railway, Norfolk Southern Railway and Rail America.

Tax losses. We have included our estimate of KiwiRail's tax losses (\$61m PV) in our equity valuation. We have assumed that the company is full cash tax paying by the model terminal year.

Fig 3 Sensitivity analysis – DCF equity valuation



Source: Macquarie Research, November 2011

Overview of business

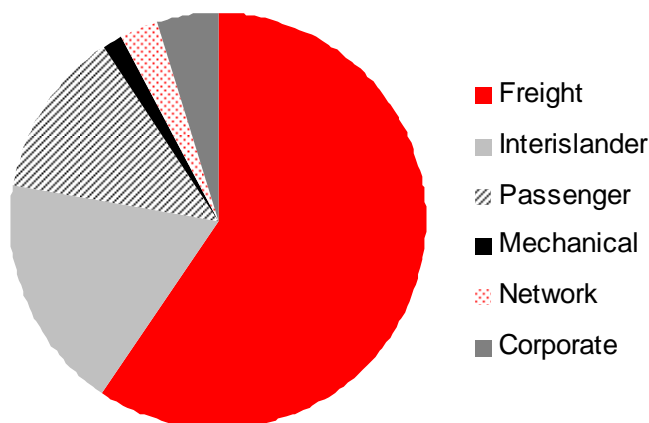
KiwiRail is a State Owned Enterprise (SOE) and was formed in 2008 when the Crown purchased the rail and ferry operations from Toll NZ and the mechanical services operations from United Group in 2009, and combined these assets with the Crown-owned rail network ONTRACK.

The resulting entity was a vertically integrated, state-owned rail and ferry business similar in nature to that in place in the early 1990s.

Under the State Owned Enterprises Act 1986, the principal objective of every SOE is to operate as a successful business as profitable and efficient as a comparable business that is not owned by the Crown, as well as exhibiting a sense of social responsibility and being a good employer.

The Shareholding Ministers are the Minister for State-Owned Enterprises and the Minister of Finance. KiwiRail also works closely with the Minister of Transport. Directors of the KiwiRail Group are appointed by the shareholder Ministers.

Fig 4 KiwiRail revenue composition (FY11)



Source: Company data, Macquarie Research, November 2011

The primary operations of the KiwiRail Group are as follows:

- *Network* (formerly ONTRACK): maintains rail network and controls train movements on the network;
- *KiwiRail Freight*: provides rail freight services (comprising bulk and containerised freight movements and locomotives for passenger services (including Auckland Metro Maintenance, which provides locomotive engineers and maintenance services through KiwiRail Mechanical) for Veolia Auckland Transport);
- *KiwiRail Passenger*: provides urban passenger services in Wellington (through Tranz Metro) and long distance passenger rail services (through Tranz Scenic);
- *KiwiRail Mechanical*: includes the Hillside and Hutt Workshops for heavy engineering maintenance and specialised manufacturing;
- *Interislander*: operates the ferry passenger and freight services ;
- *KiwiRail Corporate*: provides support services to all business units and manages the Group's operational and commercial property holdings.

Financial viability and reporting

KiwiRail has been designated a public benefit entity for the purposes of financial reporting. The effect of this is that while it reported a surplus of \$34.1m for FY11, there is an underlying loss after allowing for \$344.6m of grant income (and non-recurring items including a \$107.6m loss on the transfer of assets).

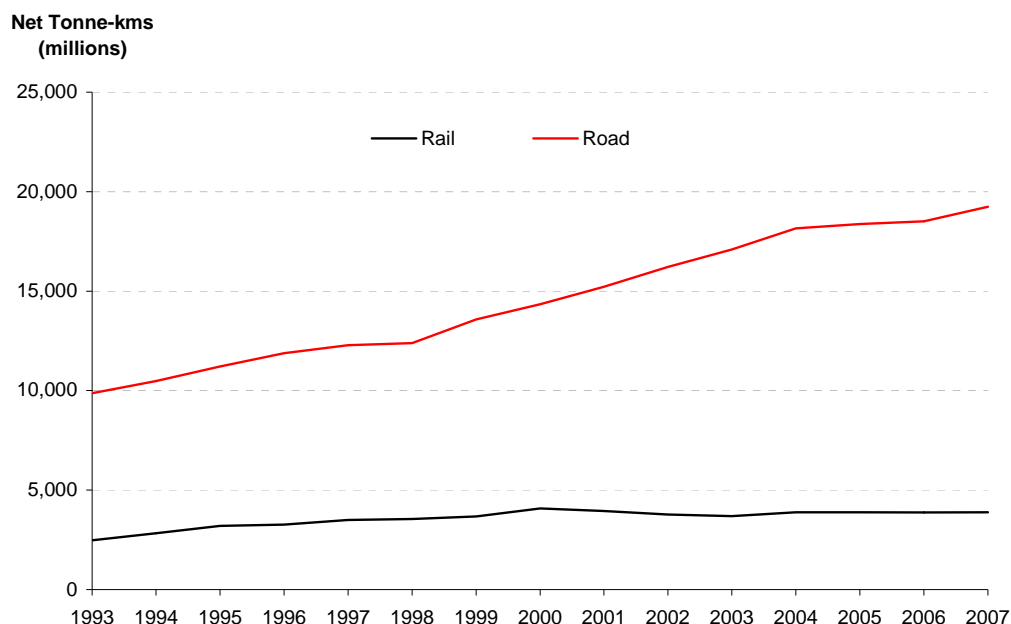
Capital (and historically, operating) grant receipts from the Crown are recorded as earnings and capital expenditure recorded as an asset on the balance sheet.

Related capital expenditure (Metro Project capital expenditure) is matched by capital grant receipts (\$344.6m in FY11). Macquarie Securities has assumed these amounts are equal over the forecast period.

Network and services under-investment

The ownership status of the rail business has changed four times in sixteen years; the most recent change occurred in mid-2008 when then Government purchased Toll's rail business for \$690m and renamed it KiwiRail. Additional debt was taken on to meet the costs of the purchase.

Fig 5 Rail-Road share of freight task – rail share slips from 19% to 15%



Source: National Freight Demand Study; Richard Paling Consulting, September 2008

Prior to 2004, investment in the rail network and associated rail services was minimal, leading to deterioration in the network and decline in service quality. According to the company, the condition of the below-track infrastructure and rolling stock continues to present material fit-for-purpose issues.

The combined effect of ownership discontinuity and low reinvestment is that rail has lost relevance as a time-dependent freight option and has seen its share of the total freight task decline from around 19% (on a NTK basis) in 1993 to around 15% in 2007. We discuss Macquarie's forecast market share in Freight Demand – see later.

Turnaround Plan (TAP)

KiwiRail has developed a strategic plan (Turnaround Plan or TAP) with the objective to build, over 10 years, a sustainable freight business capable of funding its ongoing operating and capital expenditure from customer revenue (i.e. underlying EBITDAF > stay-in-business capital expenditure by 2020)

The TAP envisages total capital expenditure over 10 years of approximately \$3.6bn (excluding Metro capital expenditure). The TAP assumes that the Crown invests approximately \$1.1bn to support the capital programme. The Government has announced its in-principle commitment to \$750m of equity funding over the first three years of the plan.

The Crown has formally appropriated the first \$500m of this funding (\$250m in each of FY11 and FY12). Beyond this, final decisions on funding will be subject to individual business cases.

Adjacent to the above financial objective, the Government is concerned to see more efficient transport modes in order to meet a projected doubling of freight by 2040 (see later section on Freight Demand).

Growth in the Rail Freight business is seen as a primary objective of the TAP; the delivery of cost-effective, time reliable rail services that meet customer gate and transit time expectations in each of the key freight segments will be key to achieving this growth.

Investment in the network and new rolling stock will be a critical plank to the TAP and in total will represent around 75% of total TAP expenditure in the first four years of the programme. Note, a reasonable material proportion of the TAP capital expenditure (excluding Metro capital expenditure) is assumed to be stay-in-business capital expenditure (approximately 72%). We summarise our profiling of the TAP capital expenditure later.

Key elements of TAP

We summarise the key elements of the TAP below. Our related assumptions are included in the model assumptions section later.

(i) Growth in freight volume and revenue

The freight business is the key to the success of the TAP, given the majority of revenue (60% FY11) and growth opportunities are in this division.

KiwiRail has indicated that it plans to regain lost market share in key market segments by improving on service delivery and reliability.

We think that the segments that are likely to be targeted are coal, dairy and forestry, with growth in horticulture, minerals and retail targets also. The company's focus, in our view, is likely to be in bulk and long distance markets – segments more suited to rail over road.

For many of these goods, transport costs can represent a high proportion of the delivered costs, and minimising the transport costs is therefore an essential part of keeping the overall costs low, and for items which are converted into exports ensuring that these are competitive on world markets.

The TAP references the freight traffic forecasts detailed in the Government-sponsored National Freight Demands Study (NFDS) (2008 Richard Paling Consulting).

We summarise the NFDS freight demand forecasts later in this report. KiwiRail has not provided its own forecasts but has a similar 75% 20-year freight growth baseline. This study assumes no change in rail's modal share of the total freight task.

The Government has released KiwiRail's forecast market share (by volume). Market share is forecast to increase by 33% as a result of the TAP. We assume this is a 2021 target share. We have adopted a similar assumption in our forecasts but have assumed a 2030 achieved date.

KiwiRail is targeting freight revenue (external) growth of around 11% pa on average between FY10-FY15. These forecasts are based on a mix of volume and yield initiatives underpinned by improved service delivery.

KiwiRail's forecast yield improvement has not been disclosed; we outline our yield assumptions in the following section.

(ii) Maintenance of a sustainable, connected network

The company is in the process of completing a review of three minor lines on its network to determine, primarily, their commercial viability.

The future of these lines relies on the emergence or identification of significant new traffic. A decision on their future is expected by June 2012.

To date, reviews have advanced to community consultation level in the case of the North Auckland, Stratford-Ohakura (SOL) and Napier Gisborne lines. The SOL was moth-balled for two years in June 2010 following a consultation process that extended from November 2009 to April 2010.

Macquarie Securities' assumptions relating to the review are summarised in the next section.

(iii) Investment in rolling stock, infrastructure and ferry capacity to improve service deliverability

(a) Investment in network renewals and upgrades are aimed at improving reliability and speed on the core network:

As part of this investment, KiwiRail plans to invest over the next few years in the Main Trunk and rail deck capacity in the Interislander to support freight growth on this route.

Rail currently carries approximately 18% of domestic traffic between Auckland and Christchurch, compared to 1995 when it carried approximately 60%.

The company's investments are aimed at removing Auckland and Wellington metropolitan bottlenecks and making the North Island Main Trunk more robust.

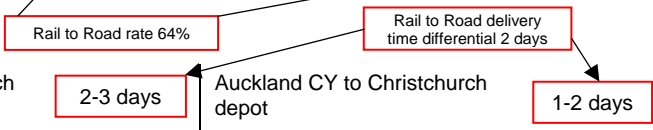
Over the next two years, the company plans to improve transit times by two hours and reliability of premium rail services between Auckland and Wellington.

Fig 6 Costs by mode of freight transport between Christchurch and Auckland

Via Sea freight (NZ Coastal vessel ex Auckland)		Via Rail		Via Road (1,054km)	
Items	NZ\$	Items	NZ\$	Items	NZ\$
Cartage ex AKL CY to Auckland	\$110.00		\$1,655.30		\$2,800.00
Transshipment fee	\$56.00				
Vehicle booking system fee	\$5.00	Auckland CY to Christchurch rail head (including Fuel Adjustment Factor (FAF) of +19%)		Auckland CY to door Christchurch warehouse (including MT return to depot)	
NZ Coastal vessel Ocean Freight - Auckland to Christchurch CY	\$770.00				
Christchurch wharfage	\$75.00				
Christchurch demurrage	na				
Container cartage ex Christchurch port to Christchurch warehouse (including MT return* to depot)	\$180.00	Container cartage ex CHCH rail head to a Christchurch warehouse (including MT return to depot)	\$150.00		
Total (Excluding GST) (Rounded)	\$1,200.00	Total (Excluding GST) (Rounded)	\$1,800.00	Total (Excluding GST)	\$2,800.00

Delivery time

Auckland CY to Christchurch depot	4 days	Auckland CY to Christchurch depot	2-3 days	Auckland CY to Christchurch depot	1-2 days
Singapore to Christchurch depot (providing timely connection)	17-18 days	Singapore to Christchurch depot	15-16 days	Singapore to Christchurch depot	14 days



* When a container has been unloaded or emptied (and under the Terms of the Carriage and the Shipping Company's bill of lading), it is the cargo owner's responsibility to return the empty unit back to a pre-arranged container depot as specified by the shipping line concerned.

Source: Ministry of Transport, May 2008

Progress in this respect will be critical to growing rail's existing share of total freight movements and improving yield. According to Ministry of Transport data (see above), the rail to road freight rate is approximately 64% (i.e. 36% discount) for a container move from Auckland depot to Christchurch depot but rail customers suffer from an average two-day delivery differential. Macquarie Securities' overall yield and delivery differential assumptions are detailed in the next section.

The May 2011 announcement by the Government that it is investigating the use of **Clifford Bay** as a new sea terminal may meaningfully contribute towards lower transit times between Auckland and Christchurch. The Minister of Transport has recently indicated that a new terminal could reduce ferry-crossing times by 30 minutes, and would further reduce the travel time to Christchurch by 50 minutes for road and 80 minutes for rail.

- (b) According to the company, adding new locomotives, wagons and containers to the fleet is critical to improving transit times and reliability, realising productivity gains and ultimately growing Freight revenue.

(iv) Development of new commercial models to improve passenger business returns

Future growth in long distance passenger rail travel will be dependent in part on improved service delivery. The company expects new rail carriages (manufactured by KiwiRail's workshops) for the TranzAlpine and Coastal Pacific services will increase volumes (full delivery by end of FY12 expected).

The company has also referenced the establishment of a strategic partnership to assist the further modernisation of its passenger fleet and strengthening of its operations.

Our passenger and yield forecasts are summarised in the next section.

(v) Full recovery of Metro Rail network costs

The TAP capital expenditure programme as disclosed by the company is inclusive of capital requirements for the metro option of the network. Excluding these amounts, the TAP programme is expected to total \$3.6b as per Figure 10.

As background, the Auckland and Wellington track network is used for both metro and freight purposes. The Government is keen to see network costs apportioned fairly between these users.

According to the Government, this has not been achieved under the previous ownership arrangements, in part, due to the difficulty of reaching agreement with Toll Holdings on the issue.

The Ministry of Transport lead a working group on network access charges in order to facilitate new agreements between KiwiRail and regional councils. It is not clear whether these agreements have been finalised to date.

The Government has indicated that the estimated shortfall and consequent appropriation to run the metro networks was \$21.1m for FY11. We have allowed for this uplift in our Metro capital expenditure recoveries forecasts.

(vi) Other productivity gains

Productivity gains over and above those captured in the market share and rail to road rate differential are also targeted over the TAP period.

Over FY11, improvements were targeted predominantly in procurement functions (electricity, sleepers and Container flat top wagon supply).

Further out, labour, fuel and maintenance cost gains may be possible as the TAP capital expenditure plan progresses.

Our assumptions in this respect are detailed in the next section.

(vii) Better utilisation of commercial property holdings

KiwiRail has been created through the integration of a number of businesses (ex Toll, United Group and ONTRACK). The company plans to review the group's corporate functions over FY12 (IS, HR, finance, property and legal) to determine possible cost savings.

Additionally, KiwiRail has commenced a review of its property portfolio (\$280.8m buildings book value at June 2011) with a view to identifying surplus land for sale and development opportunities.

By way of example, the company concluded a heads of agreement for the lease of land to allow Mainfreight to develop freight transfer facilities in Wellington, Palmerston North and Invercargill. A development agreement has also been concluded with Peter Baker Transport in Dunedin.

Capital and operating expenditure associated with these developments are included in the TAP. Macquarie Securities' assumptions in this regard are outlined later.

Financial model assumptions and commentary

(i) Freight volume growth and modal share

The financial model incorporates Macquarie Securities freight volume growth assumptions on a product basis as summarised below.

Fig 7 Forecast rail freight LT volume growth

(FY12-31 CAGR)				
NTK volume growth		Underlying	Modal share gain	Total
Dairy	%	2.6%	1.4%	4.1%
Coal	%	2.6%	1.4%	4.1%
Wood and Timber	%	0.9%	1.4%	2.4%
Manufactured Goods	%	2.3%	1.4%	3.7%
Freight forwarding	%	2.7%	1.4%	4.2%
Iron and steel	%	-%	1.4%	1.5%
Meat	%	0.5%	1.4%	2.0%
Paper and pulp	%	0.9%	1.4%	2.4%
Other	%	2.3%	1.4%	3.7%
Total	%	2.3%	1.4%	3.7%

Source: Macquarie Research, November 2011

Our underlying freight volume growth forecasts track relatively closely those set out in the 2008 NFDS with some minor variances (overall Macquarie Securities NZ freight growth of 2.3% CAGR).

Macquarie Securities forecasts growth in coal, dairy and freight forwarding volumes above system freight growth.

Growth in iron/steel, meat and pulp and paper volumes are expected to be at a rate somewhat lower than system growth.

Interisland freight volumes are forecast to grow in line with the national freight market growth.

Total freight volume growth has been apportioned to Bulk, Import and Export (IMEX), Domestic, Auckland Metro Maintenance (AMM) and Other divisions based on Macquarie estimates.

As noted earlier, bulk commodities are well suited to rail where there is an ability to carry large consignments and make use of the benefits of scale. KiwiRail has indicated that there are opportunities for greater use of rail in coal, dairy (50% share overall but lower in liquid milk) and forestry in particular.

These opportunities are expected to be captured as the TAP plan is rolled out and service outcomes improve. Macquarie Securities forecasts a 33% increase in market share by 2031 (i.e. from 15% modal share to 20% over the forecast period).

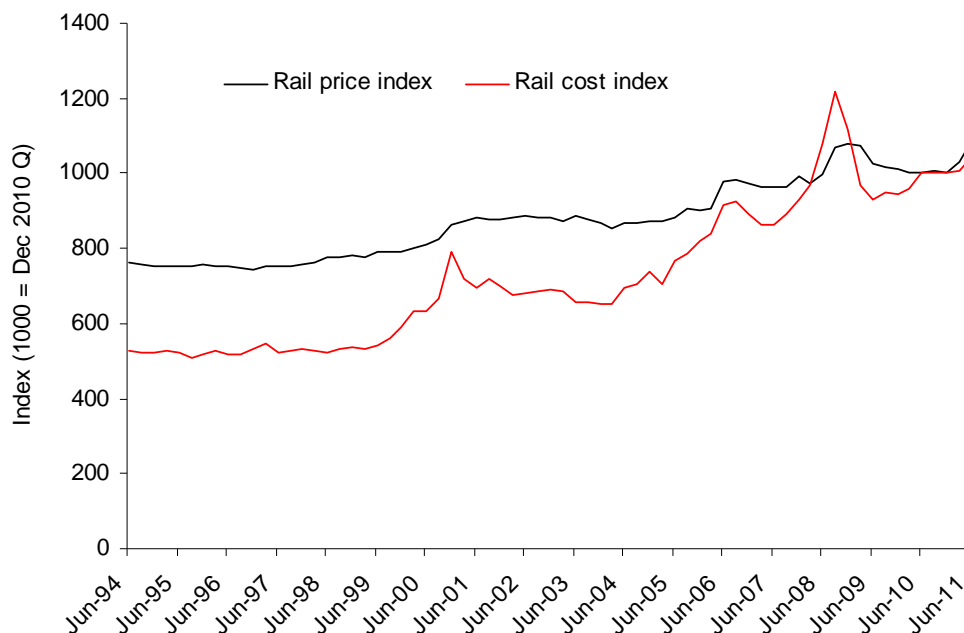
In respect of forestry volumes, the Ministry of Agriculture and Forestry is forecasting an approximate 1.7% average increase in export forestry volumes between 2011 and 2015. Note, this increase would follow an approximate 14% increase in volumes over the past four years, with export log volumes (particularly to China) growing by around 19% pa over this time.

(ii) Long distance passenger growth

We assume LT long distance passenger growth of 4% with growth varying between 3-6% over the FY12-15 period.

(iii) Freight yield

An average freight AVG yield is calculated across all freight volume and is forecast on this basis.

Fig 8 Rail PPI price and cost index – LT real pricing fallen by average 0.9% pa

Note Index includes rail, water, air and other transport modes ex road

Source: Statistics NZ, Macquarie Research, October 2011

Macquarie Securities has assumed that the yield increases slightly lower than PPI (-10%) plus a 'percentage of road rate' improvement of around 10% over the TAP period. (i.e. from 64% to 70%).

Overall, we forecast real freight charges to increase broadly in line with inflation.

Based on Statistics NZ PPI data (above), rail freight rates have failed to match rising cost inflation in the sector with real rates falling by around 0.9% pa on average over the past decade and a half. By contrast, the road transport sector has increased its pricing at a slower rate over the same period but these increases have more than met that mode's cost inflation (real pricing has increased by around 0.2% pa on average).

Fig 9 KiwiRail freight yield forecast growth

Period	FY11A	FY12E	FY13E	FY14E	FY15E	FY16E	FY17E	FY18E	FY19E
Yield/NTK (NZ\$)	0.08	0.08	0.09	0.09	0.09	0.09	0.10	0.10	0.11
Growth	3.0%	3.8%	3.5%	3.4%	3.4%	3.5%	3.5%	3.5%	3.5%

Source: Company data, Macquarie Research, November 2011

The latter yield component captures the expected improvement in yield arising from the TAP capital investment and efficiency programme.

(iv) TAP operating cost efficiencies

We forecast that KiwiRail will generate a number of costs savings (totalling around \$25m pa by FY20) from the TAP programme. These will come from three key areas:

- ⇒ Reductions in rolling stock maintenance expenditure as the fleet is modernised (currently approximately \$46m FY11; Macquarie Securities forecasts this to decline by around 33% by 2021);
- ⇒ Reductions in fuel burn as the locomotive and wagon fleet is modernised and scaled up (Macquarie Securities forecasts unit fuel costs to decline by around 10% by 2021);
- ⇒ Staff cost efficiencies, primarily in Corporate and Mechanical.

(v) Operating cost inflation

Macquarie Securities has assumed that underlying cost inflation for KiwiRail varies between PPI (e.g. network and rolling stock underlying maintenance costs) and LCI (e.g. underlying staff costs) over our forecast period. We provide a sensitivity to these assumptions.

Fixed costs are estimated to comprise approximately 45% of total FY12 costs (excluding depreciation).

Unusual costs of approximately \$15m related to the 2010/11 Canterbury earthquakes, the cessation of trading by PRC and other restructuring costs impacted FY11 costs. Macquarie Securities has treated approximately \$6m of costs (largely restructuring) as non-recurring for reporting purposes.

(vi) Surplus land

We assume that KiwiRail will be able to secure commercial leases (7% yield assumed) over \$50m of unutilised or under-utilised land. In FY11, the company generated around \$22m of lease revenue on approximately \$350m of commercial land holdings.

(vii) Mechanical and Network

We assume that Mechanical and Network revenues grow at approximately PPI LT.

(viii) TAP capital expenditure assumption

We summarise our TAP capital expenditure forecasts below.

Fig 10 TAP capital expenditure assumptions

\$m	FY11A	FY12E	FY13E	FY14E	FY15E	FY16E	FY17E	FY18E	FY19E	FY20E
Freight	102.7	121.9	157.0	155.7	122.7	97.6	90.8	133.6	153.0	96.8
Interislander	23.0	30.1	35.8	13.9	10.9	8.7	8.1	11.9	13.7	8.6
Passenger	26.1	20.8	0.5	3.2	2.5	2.0	1.9	2.7	3.1	2.0
Mechanical	2.1	3.6	8.8	9.0	7.1	5.6	5.3	7.7	8.8	5.6
Network	197.2	207.1	214.5	239.5	188.7	150.1	139.7	205.5	235.4	149.0
Corporate	26.8	27.6	18.8	19.2	15.1	12.0	11.2	16.5	18.9	11.9
Total	377.9	411.1	435.4	440.5	347.0	276.0	257.0	378.0	433.0	274.0

Source: Company data, Macquarie Securities November 2011

Note the 1067mm New Zealand railway gauge is reasonably unique (common with, inter alia,). However, the company has not had material issues securing rolling stock on competitive terms.

Importantly the gauge size is not a constraint on efficiency or speed with other 1,067mm networks such as South Africa, Queensland, Japan and Western Australia operating efficient heavy haul railways, for both freight and passenger traffic, at reasonable speeds (i.e. up to 160 kph). The key constraints on average speed across the NZ network are, according to the company, the curves of the track, tunnel clearances, grades, and bridge standards.

Stay-in-business capital expenditure from FY21 (i.e. following the TAP period) is assumed to be \$300m.

Relative disclosure levels

We summarise our assessment of the relative disclosure levels for KiwiRail and listed comparable companies in respect of key valuation inputs below.

We consider that the company's disclosure levels are broadly comparable with listed comparable companies with only a few exceptions.

Fig 11 KiwiRail relative disclosure

		KiwiRail	QR National	Asciano
Revenue	By commodity group			✓
	By market segment/division	✓	✓	✓
	By customer			✓
Tonnage	Total	✓	✓	✓
NTK	Total	✓	✓	✓
	By market segment/division	✓	✓	✓
	By commodity group	✓		
Price/NTK	Total	✓	✓	✓
	By commodity group			
Fuel consumption	Per GTK			✓
Capital expenditure	By division	✓	✓	✓
	Maintenance capital expenditure		✓	✓
	Forecast	✓	✓	✓
Maintenance costs		✓	✓	
Rolling stock		✓	✓	✓
Track kms		✓	✓	✓
Capacity			✓	
Market share information			✓	✓

Source: Company data, Macquarie Research, November 2011

Financial statements summary

Fig 12 KiwiRail income statement (NZ\$m)

Period	FY11A	FY12E	FY13E	FY14E	FY15E	FY16E	FY17E	FY18E	FY19E	FY20E	FY21E	FY22E	FY23E	FY24E	FY25E
Period End	30/06/11	30/06/12	30/06/13	30/06/14	30/06/15	30/06/16	30/06/17	30/06/18	30/06/19	30/06/20	30/06/21	30/06/22	30/06/23	30/06/24	30/06/25
Revenue (excl. Grants)	667.4	732.8	783.9	833.3	886.2	943.1	1,003.1	1,067.1	1,135.5	1,208.5	1,286.4	1,369.5	1,458.3	1,553.1	1,654.3
Grants	344.6	241.0	113.0	63.0	-	-	-	-	-	-	-	-	-	-	-
Operating Expenses	567.1	582.8	609.6	642.0	676.3	711.7	749.3	789.1	831.3	875.9	927.9	983.2	1,042.0	1,104.7	1,171.4
EBITDA	444.9	391.0	287.3	254.3	209.9	231.4	253.8	278.0	304.2	332.6	358.5	386.3	416.3	448.4	482.9
EBITDA (excl grant income)	100.3	150.0	174.3	191.3	209.9	231.4	253.8	278.0	304.2	332.6	358.5	386.3	416.3	448.4	482.9
EBITDA - recurring	106.2	150.0	174.3	191.3	209.9	231.4	253.8	278.0	304.2	332.6	358.5	386.3	416.3	448.4	482.9
Depreciation	277.4	298.7	323.2	345.5	364.0	377.9	389.7	393.5	396.5	372.4	384.4	393.6	400.0	406.2	410.3
Amortisation	5.7	3.7	3.7	3.7	3.7	-	-	-	-	-	-	-	-	-	-
EBIT	161.8	88.7	(39.5)	(94.8)	(157.7)	(146.5)	(135.9)	(115.4)	(92.3)	(39.8)	(25.9)	(7.3)	16.3	42.2	72.6
EBIT - recurring	(176.9)	(152.3)	(152.5)	(157.8)	(157.7)	(146.5)	(135.9)	(115.4)	(92.3)	(39.8)	(25.9)	(7.3)	16.3	42.2	72.6
Foreign exchange and commodity net gains and losses	15.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Loss on transfer of assets to GWRC	107.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Net Interest Expense	32.2	32.1	38.6	45.2	61.7	70.2	71.2	78.1	93.3	111.5	114.8	117.5	118.7	118.2	116.0
Pre-Taxation Profit	6.1	56.6	(78.1)	(140.1)	(219.4)	(216.7)	(207.1)	(193.6)	(185.6)	(151.3)	(140.7)	(124.7)	(102.4)	(76.0)	(43.3)
Taxation Expense/ (Credit)	(27.9)	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Profit after Taxation	34.0	56.6	(78.1)	(140.1)	(219.4)	(216.7)	(207.1)	(193.6)	(185.6)	(151.3)	(140.7)	(124.7)	(102.4)	(76.0)	(43.3)
Minority Interests	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Reported Profit after Taxation	34.0	56.6	(78.1)	(140.1)	(219.4)	(216.7)	(207.1)	(193.6)	(185.6)	(151.3)	(140.7)	(124.7)	(102.4)	(76.0)	(43.3)
EFPO and Ratios															
EPS	0.12	0.20	(0.28)	(0.50)	(0.78)	(0.77)	(0.73)	(0.69)	(0.66)	(0.54)	(0.50)	(0.44)	(0.36)	(0.27)	(0.15)
EBITDA - recurring	106.2	150.0	174.3	191.3	209.9	231.4	253.8	278.0	304.2	332.6	358.5	386.3	416.3	448.4	482.9
EBIT - Recurring	(176.9)	(152.3)	(152.5)	(157.8)	(157.7)	(146.5)	(135.9)	(115.4)	(92.3)	(39.8)	(25.9)	(7.3)	16.3	42.2	72.6
Net Debt	451.6	507.1	561.9	739.8	822.3	821.6	897.2	1,076.6	1,300.2	1,355.1	1,411.7	1,453.4	1,477.1	1,479.2	1,455.9
EV/Sales	16.3%	14.9%	13.9%	13.1%	12.3%	11.5%	10.9%	10.2%	9.6%	9.0%	8.5%	8.0%	7.5%	7.0%	6.6%
CFPS	0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Price / CF	(7.0)	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DPS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Payout ratio	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Yield	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Imputation (% inc DWP)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NTA per share	44.7	45.8	46.4	46.3	46.0	45.6	44.9	44.2	43.5	43.0	42.5	42.1	41.7	41.4	41.3
Pr / NTA	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)
EPS (reported NPAT)	0.12	0.20	(0.28)	(0.50)	(0.78)	(0.77)	(0.73)	(0.69)	(0.66)	(0.54)	(0.50)	(0.44)	(0.36)	(0.27)	(0.15)
Debt / equity	4.2%	4.5%	4.9%	6.3%	7.0%	7.0%	7.7%	9.3%	11.2%	11.8%	12.4%	12.9%	13.2%	13.3%	13.2%
Net debt / equity	3.6%	3.9%	4.3%	5.6%	6.3%	6.4%	7.1%	8.6%	10.6%	11.2%	11.8%	12.2%	12.5%	12.6%	12.5%
Net debt / debt + equity	3.4%	3.7%	4.1%	5.3%	5.9%	6.0%	6.6%	7.9%	9.5%	10.0%	10.5%	10.8%	11.1%	11.1%	11.0%
Net Interest	32.2	32.1	38.6	45.2	61.7	70.2	71.2	78.1	93.3	111.5	114.8	117.5	118.7	118.2	116.0
Capitalised interest	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Interest	32.2	32.1	38.6	45.2	61.7	70.2	71.2	78.1	93.3	111.5	114.8	117.5	118.7	118.2	116.0
Net interest cover (EBIT)	5.0	2.8	(1.0)	(2.1)	(2.6)	(2.1)	(1.9)	(1.5)	(1.0)	(0.4)	(0.2)	(0.1)	0.1	0.4	0.6
Return on assets	1.2%	0.6%	(0.3%)	(0.7%)	(1.1%)	(1.0%)	(1.0%)	(0.8%)	(0.6%)	(0.3%)	(0.2%)	(0.1%)	0.1%	0.3%	0.5%
Return on equity	0.3%	0.4%	(0.6%)	(1.1%)	(1.7%)	(1.7%)	(1.6%)	(1.5%)	(1.5%)	(1.2%)	(1.2%)	(1.0%)	(0.9%)	(0.6%)	(0.4%)
Return on funds employed	0.0%	0.4%	(0.6%)	(1.0%)	(1.6%)	(1.6%)	(1.5%)	(1.4%)	(1.4%)	(1.1%)	(1.0%)	(0.9%)	(0.8%)	(0.6%)	(0.3%)

Source: Company data, Macquarie Research, November 2011

Fig 13 KiwiRail balance sheet (NZ\$m)

Period	FY11A	FY12E	FY13E	FY14E	FY15E	FY16E	FY17E	FY18E	FY19E	FY20E	FY21E	FY22E	FY23E	FY24E	FY25E
Period End	30/06/11	30/06/12	30/06/13	30/06/14	30/06/15	30/06/16	30/06/17	30/06/18	30/06/19	30/06/20	30/06/21	30/06/22	30/06/23	30/06/24	30/06/25
Current Assets															
Cash and cash equivalents	81.1	81.1	81.1	81.1	81.1	81.1	81.1	81.1	81.1	81.1	81.1	81.1	81.1	81.1	81.1
Trade and other receivables	115.5	126.8	135.7	144.2	153.4	163.2	173.6	184.7	196.5	209.1	222.6	237.0	252.4	268.8	286.3
Inventories	73.4	80.6	86.2	91.6	97.5	103.7	110.3	117.4	124.9	132.9	141.5	150.6	160.4	170.8	181.9
Financial assets	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
Total current assets	271.2	289.7	304.2	318.2	333.1	349.2	366.2	384.3	403.7	424.3	446.4	469.9	495.0	521.9	550.5
Non-current assets															
Property, plant and equipment	13,284.3	13,638.0	13,864.9	14,022.3	14,004.9	13,902.7	13,769.7	13,753.8	13,789.8	13,691.0	13,606.3	13,522.5	13,442.8	13,367.9	13,300.1
Intangible assets	14.6	11.0	7.3	3.7	-	-	-	-	-	-	-	-	-	-	-
Financial assets	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Trade and other receivables	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Investment in subsidiary	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Non-current Assets	13,298.9	13,648.9	13,872.2	14,026.0	14,004.9	13,902.7	13,769.7	13,753.8	13,789.8	13,691.0	13,606.3	13,522.5	13,442.8	13,367.9	13,300.1
Total Assets	13,570.1	13,938.6	14,176.4	14,344.1	14,338.0	14,251.9	14,135.9	14,138.1	14,193.4	14,115.4	14,052.7	13,992.4	13,937.9	13,889.8	13,850.7
Current liabilities															
Trade and other liabilities	198.1	203.6	212.9	224.3	236.2	248.6	261.8	275.7	290.4	306.0	324.1	343.4	364.0	385.9	409.2
Unsecured loans	252.2	252.2	252.2	252.2	252.2	251.5	251.5	251.5	251.5	251.5	251.5	251.5	251.5	251.5	228.3
Finance leases	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Financial derivative liabilities	76.9	76.9	76.9	76.9	76.9	76.9	76.9	76.9	76.9	76.9	76.9	76.9	76.9	76.9	76.9
Income taxes payable	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Provisions	12.7	12.7	12.7	12.7	12.7	12.7	12.7	12.7	12.7	12.7	12.7	12.7	12.7	12.7	12.7
Total current liabilities	539.9	545.4	554.7	566.1	578.0	589.7	602.9	616.8	631.5	647.1	665.2	684.5	705.1	727.0	727.1
Non-current liabilities															
Trade and other liabilities	35.5	36.5	38.2	40.2	42.3	44.6	46.9	49.4	52.0	54.8	58.1	61.5	65.2	69.2	73.3
Unsecured loans	280.5	336.0	390.8	568.7	651.2	651.2	726.8	906.2	1,129.8	1,184.7	1,241.3	1,283.0	1,306.7	1,308.8	1,308.8
Finance leases	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Financial derivative liabilities	11.7	11.7	11.7	11.7	11.7	11.7	11.7	11.7	11.7	11.7	11.7	11.7	11.7	11.7	11.7
Provisions	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Deferred taxation	60.2	60.2	60.2	60.2	60.2	60.2	60.2	60.2	60.2	60.2	60.2	60.2	60.2	60.2	60.2
Total non-current liabilities	391.9	448.4	504.9	684.7	769.4	771.7	849.6	1,031.5	1,257.7	1,315.4	1,375.3	1,420.4	1,447.8	1,453.8	1,458.0
Total liabilities	931.8	993.8	1,059.6	1,250.8	1,347.5	1,361.4	1,452.5	1,648.3	1,889.2	1,962.5	2,040.5	2,105.0	2,152.9	2,180.8	2,185.1
Net Assets	12,638.3	12,944.9	13,116.7	13,093.3	12,990.6	12,890.5	12,683.4	12,489.8	12,304.2	12,152.9	12,012.2	11,887.4	11,785.0	11,709.0	11,665.6
Equity															
Equity Capital	796.9	1,046.9	1,296.9	1,413.6	1,530.2	1,646.9	1,646.9	1,646.9	1,646.9	1,646.9	1,646.9	1,646.9	1,646.9	1,646.9	1,646.9
Retained Earnings	1,364.2	1,420.8	1,342.6	1,202.6	983.1	766.4	559.3	365.7	180.1	28.8	(111.9)	(236.7)	(339.1)	(415.1)	(458.5)
Asset Revaluation reserve	10,540.5	10,540.5	10,540.5	10,540.5	10,540.5	10,540.5	10,540.5	10,540.5	10,540.5	10,540.5	10,540.5	10,540.5	10,540.5	10,540.5	10,540.5
Cash flow hedge reserve	(63.3)	(63.3)	(63.3)	(63.3)	(63.3)	(63.3)	(63.3)	(63.3)	(63.3)	(63.3)	(63.3)	(63.3)	(63.3)	(63.3)	(63.3)
Total equity	12,638.3	12,944.9	13,116.7	13,093.3	12,990.6	12,890.5	12,683.4	12,489.8	12,304.2	12,152.9	12,012.2	11,887.4	11,785.0	11,709.0	11,665.6
Gross Debt	533	588	643	821	903	903	978	1,158	1,381	1,436	1,493	1,534	1,558	1,560	1,537
Net Debt	452	507	562	740	822	822	897	1,077	1,300	1,355	1,412	1,453	1,477	1,479	1,456
Working Capital Investment	(45)	(33)	(29)	(29)	(28)	(26)	(25)	(23)	(21)	(19)	(18)	(17)	(16)	(15)	(14)
Decrease (increase) in Working Capital Investment	(3)	(12)	(3)	(1)	(1)	(1)	(1)	(2)	(2)	(2)	(1)	(1)	(1)	(1)	(1)
Depreciation/average property, plant and equipment	2.11%	2.22%	2.35%	2.48%	2.60%	2.71%	2.82%	2.86%	2.88%	2.71%	2.82%	2.90%	2.97%	3.03%	3.08%

Source: Company data, Macquarie Research, November 2011

Fig 14 KiwiRail cashflow statement (NZ\$m)

Period	FY11A	FY12E	FY13E	FY14E	FY15E	FY16E	FY17E	FY18E	FY19E	FY20E	FY21E	FY22E	FY23E	FY24E	FY25E
Period End	30/06/11	30/06/12	30/06/13	30/06/14	30/06/15	30/06/16	30/06/17	30/06/18	30/06/19	30/06/20	30/06/21	30/06/22	30/06/23	30/06/24	30/06/25
Operating activities															
Receipts from customers	657.6	714.3	769.4	819.3	871.2	927.0	986.1	1,049.0	1,116.2	1,187.8	1,264.3	1,346.0	1,433.2	1,526.2	1,625.7
Interest received	4.3	1.7	2.1	2.7	3.2	3.5	3.7	3.8	3.9	4.0	4.0	3.9	3.9	3.7	3.6
Operating grant	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Payments to suppliers and employees	(585.4)	(576.3)	(598.6)	(628.6)	(662.1)	(697.1)	(733.8)	(772.7)	(813.9)	(857.5)	(906.5)	(960.4)	(1,017.8)	(1,078.9)	(1,143.9)
Interest expense	(28.9)	(33.9)	(40.7)	(47.9)	(64.9)	(73.7)	(74.9)	(81.9)	(97.2)	(115.5)	(118.9)	(121.4)	(122.6)	(121.9)	(119.6)
Income tax paid	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Operating cashflow	47.6	105.8	132.3	145.5	147.4	159.7	181.1	198.1	208.9	218.8	243.0	268.1	296.7	329.2	365.8
Investing activities															
Sale of property, plant and equipment	14.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Capital grant receipts	344.6	241.0	113.0	63.0	-	-	-	-	-	-	-	-	-	-	-
Purchase of property, plant and equipment	(653.2)	(652.4)	(550.1)	(503.0)	(346.6)	(275.7)	(256.7)	(377.5)	(432.5)	(273.7)	(299.6)	(309.8)	(320.4)	(331.3)	(342.5)
Purchase of intangibles	(7.4)	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Loan to subsidiaries	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Investment in subsidiary (KiwiRail Holdings Limited)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Investment in subsidiary (United Group (NZ) Limited)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Investing Cashflow	(301.6)	(411.4)	(437.1)	(440.0)	(346.6)	(275.7)	(256.7)	(377.5)	(432.5)	(273.7)	(299.6)	(309.8)	(320.4)	(331.3)	(342.5)
Financing activities															
Drawdown / (paydown) of debt	89.1	55.5	54.8	177.8	82.5	(0.7)	75.6	179.4	223.6	54.9	56.6	41.7	23.7	2.1	(23.2)
Equity injection	250.0	250.0	250.0	116.7	116.7	116.7	-	-	-	-	-	-	-	-	-
Dividends paid	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Payment of finance lease liabilities	(36.0)	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Finance Cashflow -	303.1	305.5	304.8	294.5	199.2	116.0	75.6	179.4	223.6	54.9	56.6	41.7	23.7	2.1	(23.2)
Inc / (dec) in net cash held	49.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Opening cash balance	32.1	81.1	81.1	81.1	81.1	81.1	81.1	81.1	81.1	81.1	81.1	81.1	81.1	81.1	81.1
Closing cash balance	81.1	81.1	81.1	81.1	81.1	81.1	81.1	81.1	81.1	81.1	81.1	81.1	81.1	81.1	81.1

Source: Company data, Macquarie Research, November 2011

Post TAP earnings and equity position

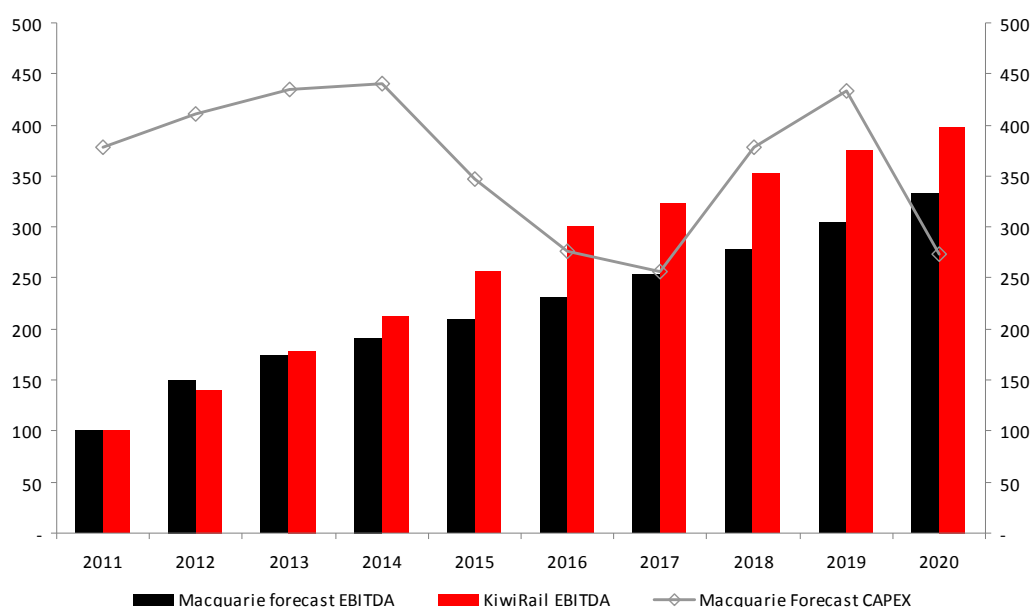
The value of the Crown's investment in KiwiRail at 30 June 2010 was reported at \$12.4bn book value of shareholder equity.

That value reflected the application of existing accounting methodologies to determine asset values. Importantly, these included the group being designated a Public Benefit Entity (PBE) for financial reporting purposes.

The current balance sheet and financial metrics of the company are not typical of a SOE due to its heavy reliance on shareholder investment support through the TAP before underlying earnings become positive.

It is possible that KiwiRail may receive compensation as per section 7 of the State Owned Enterprises Act 1986 for public policy work and projects undertaken by the corporation which have a public good element or purpose and would not be undertaken on purely commercial grounds. To date, instances of compensation across all SOEs under this provision are relatively rare and, in the case of KiwiRail, are currently immaterial to the equity valuation.

Fig 15 Forecast underlying earnings and SIB capital expenditure



Source: Company data, Macquarie Research, November 2011

Based on Macquarie Securities forecasts, we estimate that the company's underlying EBITDA following the TAP programme will be approximately \$358m (FY21) – above stay-in-business capital expenditure of \$300m (FY21).

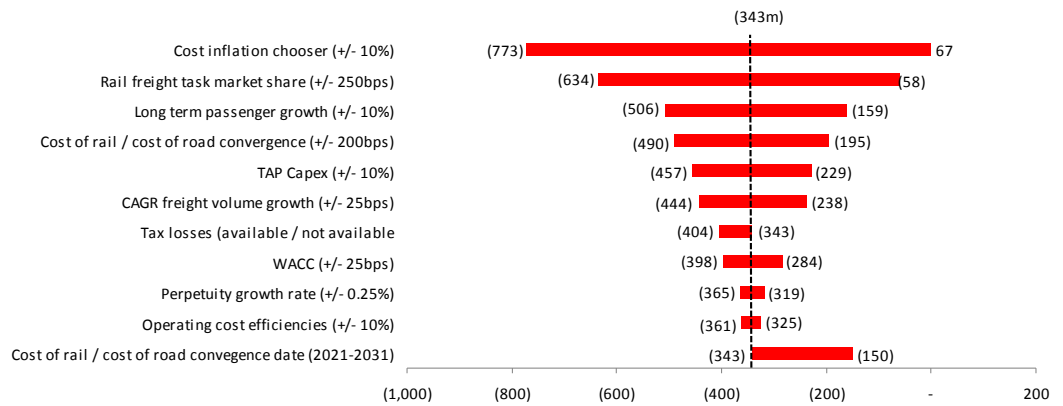
Consistent with the 2012-14 SCI, Macquarie has assumed that the Crown invests \$1.1bn of equity to support the 10-year TAP programme. This assumption does not impact on discounted cashflow equity valuation for the business and is reflected in our discount rate assumptions.

Additionally, we have assumed that Metro renewals and project capital expenditure is met through ongoing Crown capital grants and therefore have no impact on our discounted cashflow equity valuation for the business. The Metro capital expenditure has been excluded from the above chart.

Equity valuation sensitivities

We have assessed the sensitivity of our equity valuation to a range of inputs. Broadly, the sensitivities are divided into four categories: freight volume, modal market share, yield and operating costs.

Fig 16 Sensitivity analysis – DCF equity valuation



Source: Macquarie Research, November 2011

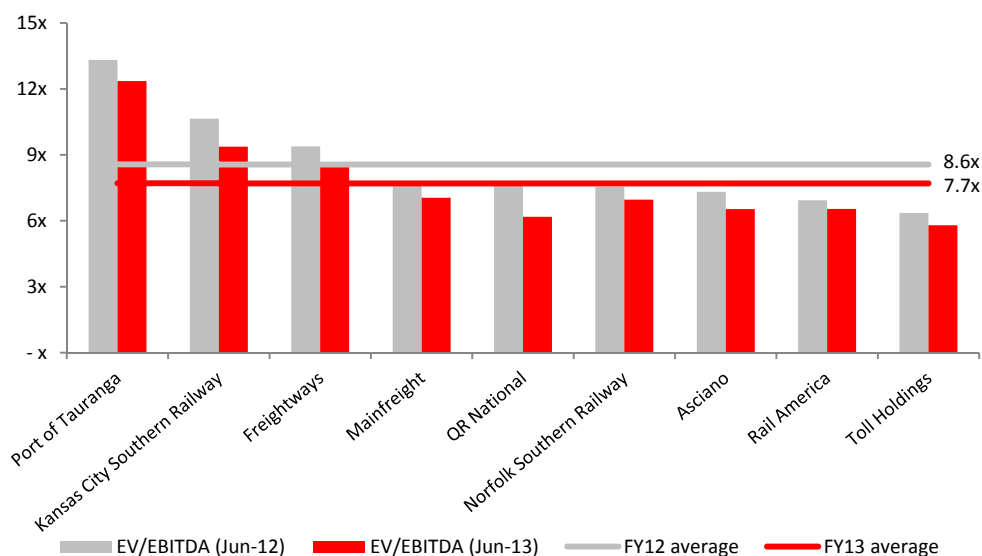
Alternative valuation methodologies

We have assessed a comparable multiple based equity valuation range for KiwiRail. The equity value range assessed is \$583m-\$1138m compared to the DCF based equity valuation of -\$343m.

This band is based on the forward EV/EBITDA capitalisation multiple range for the closest comparable companies excluding outliers (see below).

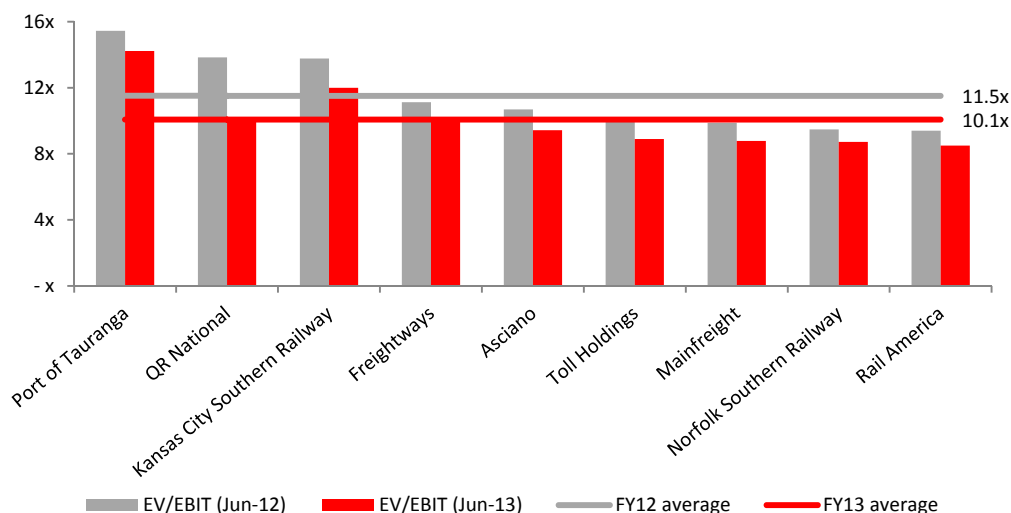
It provides a cross-check of our estimated equity valuation based on our primary methodology, discounted cashflow. The range lies above our primary valuation. This is primarily due to the negative present value associated with the significant catch-up capital expenditure which is required to address significant underinvestment in KiwiRail assets. This contrasts with the comparable companies which operate comparatively well maintained assets. More minor differences will also be due, inter alia, to differing earnings risk and growth profiles and variations in the regulatory regime which applies to the non-contestable assets within KiwiRail and the comparable companies.

Fig 17 Comparable company EV/EBITDA multiples



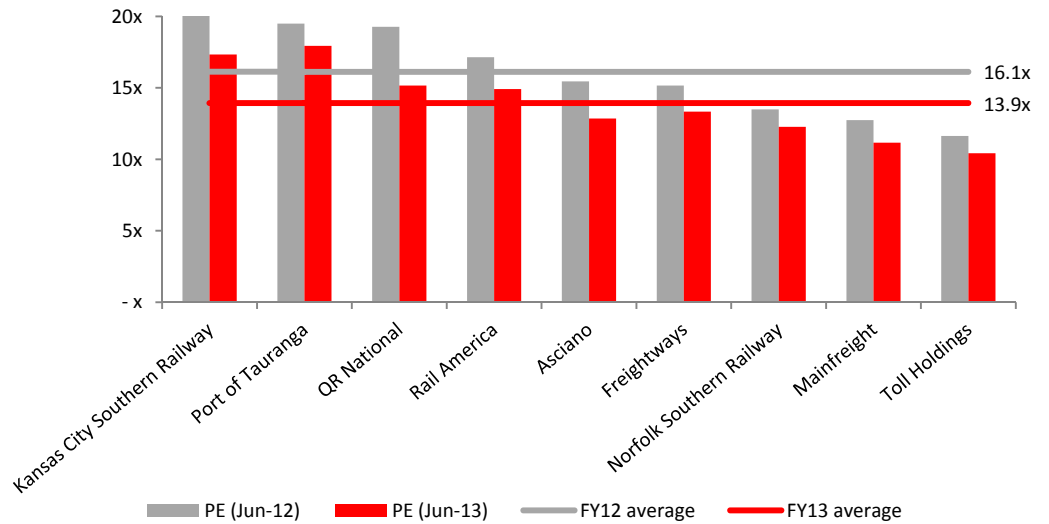
Source: Bloomberg consensus data, Macquarie Research, November 2011

Fig 18 Comparable company EV/EBIT multiples



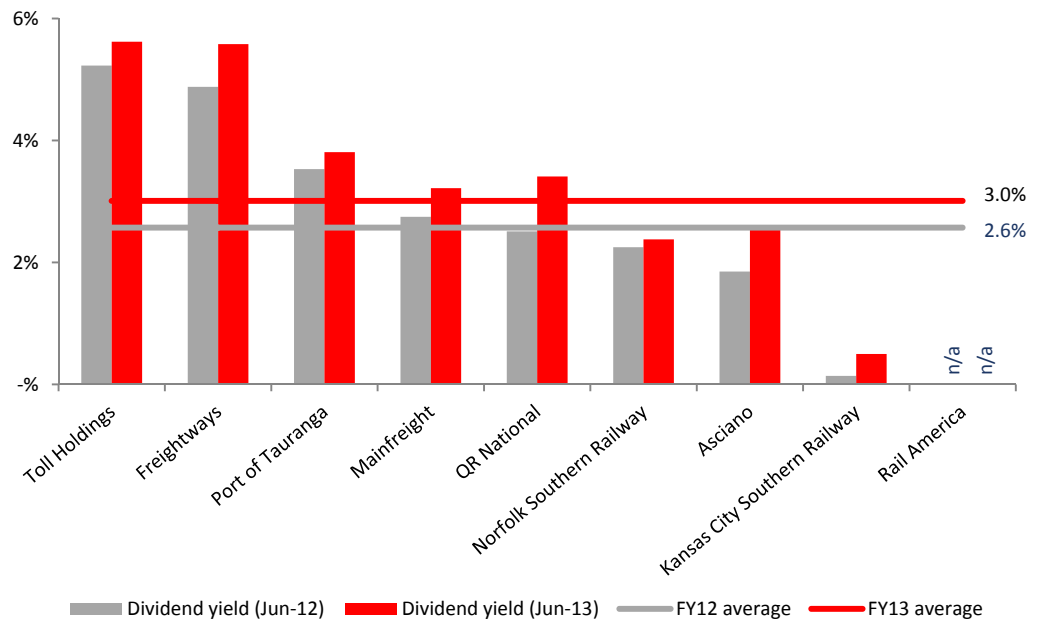
Source: Bloomberg consensus data, Macquarie Research, November 2011

Fig 19 Comparable company P/E multiples



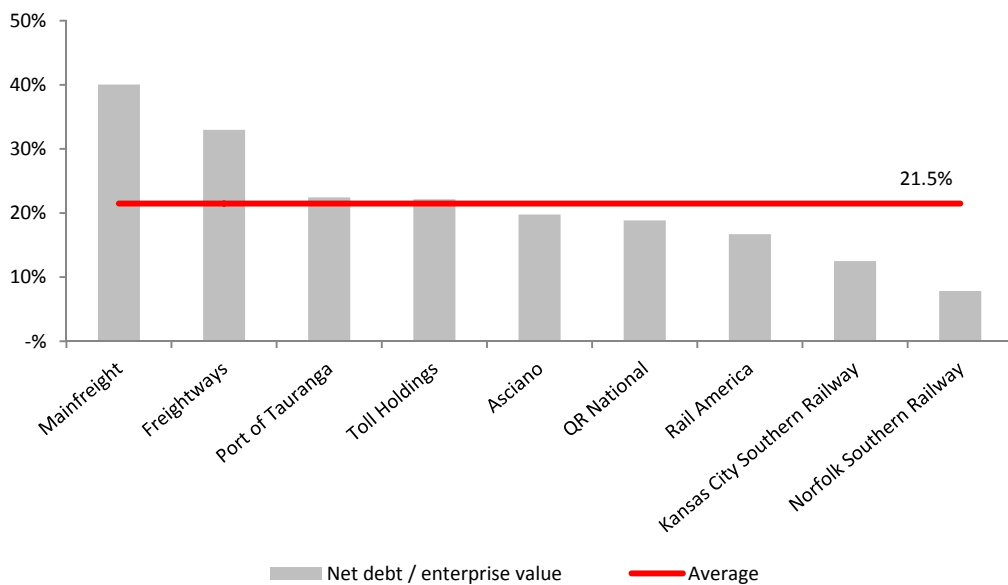
Source: Bloomberg consensus data, Macquarie Research, November 2011

Fig 20 Comparable company dividend yield multiples



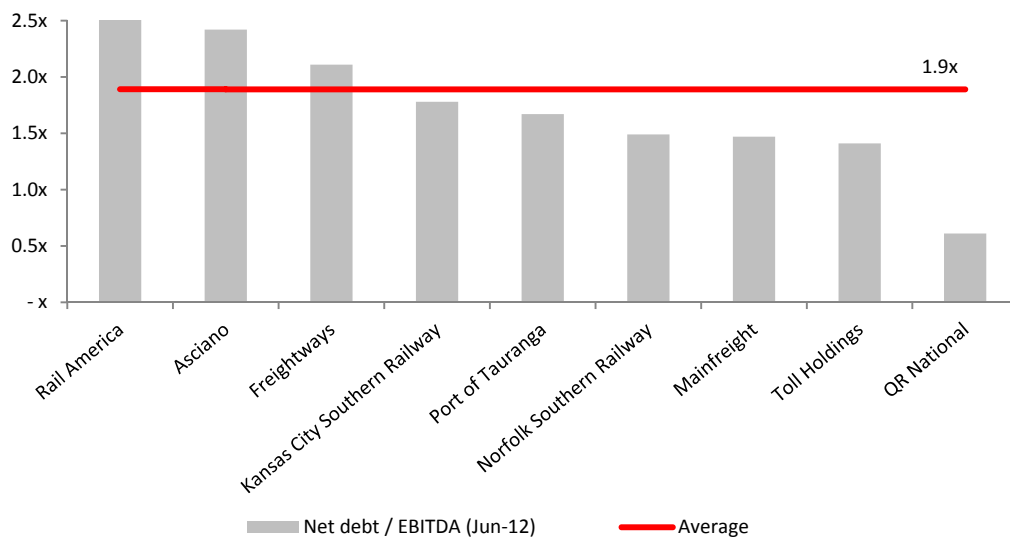
Source: Bloomberg consensus data, Macquarie Research, November 2011

Fig 21 Comparable company net debt/enterprise value multiples



Source: Bloomberg consensus data, Macquarie Research, November 2011

Fig 22 Comparable company net debt/EBITDA multiples



Source: Bloomberg consensus data, Macquarie Research, November 2011

Important disclosures:

Recommendation definitions

Macquarie - Australia/New Zealand

Outperform – return >3% in excess of benchmark return
 Neutral – return within 3% of benchmark return
 Underperform – return >3% below benchmark return

Benchmark return is determined by long term nominal GDP growth plus 12 month forward market dividend yield

Macquarie – Asia/Europe

Outperform – expected return >+10%
 Neutral – expected return from -10% to +10%
 Underperform – expected return <-10%

Macquarie First South - South Africa

Outperform – expected return >+10%
 Neutral – expected return from -10% to +10%
 Underperform – expected return <-10%

Macquarie - Canada

Outperform – return >5% in excess of benchmark return
 Neutral – return within 5% of benchmark return
 Underperform – return >5% below benchmark return

Macquarie - USA

Outperform (Buy) – return >5% in excess of Russell 3000 index return
 Neutral (Hold) – return within 5% of Russell 3000 index return
 Underperform (Sell) – return >5% below Russell 3000 index return

Volatility index definition*

This is calculated from the volatility of historical price movements.

Very high-highest risk – Stock should be expected to move up or down 60–100% in a year – investors should be aware this stock is highly speculative.

High – stock should be expected to move up or down at least 40–60% in a year – investors should be aware this stock could be speculative.

Medium – stock should be expected to move up or down at least 30–40% in a year.

Low-medium – stock should be expected to move up or down at least 25–30% in a year.

Low – stock should be expected to move up or down at least 15–25% in a year.

* Applicable to Australian/NZ/Canada stocks only

Recommendations – 12 months

Note: Quant recommendations may differ from Fundamental Analyst recommendations

Financial definitions

All "Adjusted" data items have had the following adjustments made:

Added back: goodwill amortisation, provision for catastrophe reserves, IFRS derivatives & hedging, IFRS impairments & IFRS interest expense
 Excluded: non recurring items, asset revals, property revals, appraisal value uplift, preference dividends & minority interests

EPS = adjusted net profit / epowa*

ROA = adjusted ebit / average total assets

ROA Banks/Insurance = adjusted net profit / average total assets

ROE = adjusted net profit / average shareholders funds

Gross cashflow = adjusted net profit + depreciation

*equivalent fully paid ordinary weighted average number of shares

All Reported numbers for Australian/NZ listed stocks are modelled under IFRS (International Financial Reporting Standards).

Recommendation proportions – For quarter ending 30 September 2011

	AU/NZ	Asia	RSA	USA	CA	EUR	
Outperform	57.35%	65.88%	56.94%	46.54%	74.68%	47.85%	(for US coverage by MCUSA, 11.63% of stocks covered are investment banking clients)
Neutral	31.99%	20.68%	31.94%	50.00%	23.42%	34.66%	(for US coverage by MCUSA, 9.30% of stocks covered are investment banking clients)
Underperform	10.66%	13.45%	11.11%	3.46%	1.90%	17.49%	(for US coverage by MCUSA, 0.47% of stocks covered are investment banking clients)

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