FORSYTH BARR

NEW ZEALAND EQUITY RESEARCH

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Transport Sector
Two Ports, Too Expensive

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The two listed ports under our coverage, Port of Tauranga (POT) and Napier Port (NPH), provide investors with exposure to two very different infrastructure players, given the disparity in their respective return on capital profiles, and strategic and competitive positioning. Port of Tauranga (POT) is the standard-bearer for the industry. It defines itself as New Zealand's hub port. It generates an attractive return on capital, has delivered industry leading cargo growth over the longer term and has a history of rational capital allocation. Investors can afford to pay a premium for POT, yet despite its high quality attributes the current premium is elevated, in our opinion, particularly given the recent rise in bond rates. We retain an UNDERPERFORM rating on POT. In contrast, NPH has a very different profile. It trades at a significant discount to POT, justifiably so, given its lower return on capital, lower growth track record, and greater cargo concentration. In particular, NPH's reliance on pip-fruit and forestry exports leave it exposed to short term fluctuations in supply. The current labour shortages for seasonal workers may dampen near term earnings expectations. Moreover, over the medium term we anticipate its 6 Wharf investment will significantly dent NPH's return on capital. We downgrade our rating on NPH to UNDERPERFORM from NEUTRAL.

Near term port industry headwinds

Ports are long term infrastructure players that ordinarily shouldn't be overly impacted by short term 'noise'. However, this isn't always the case. Near term cargo and shipping service wins and losses tend to get priced into perpetuity. The current congestion issues in global shipping and at Ports of Auckland (POAL) have both positive and negative implications for POT and NPH. Congestion generally adds cost as berthing windows are missed, container yard inefficiencies arise, and crane productivity suffers. Moreover, equipment (empties) becomes scarce for exporters, which impacts port demand. POT is benefitting from POAL's woes but is short of capacity and not able to fully leverage the situation. Should POAL's problems be resolved POT would have some at-risk cargo.

Return on capital

POT generates around double the pre-tax return on capital employed (ROCE) of NPH. This reflects its scale, operating efficiencies and strict capex discipline. NPH's ROCE is currently in excess of its WACC, but is in decline due to the significant increase in capital allocated to its 6 Wharf investment. Further afield the wider New Zealand port industry has historically been synonymous with sub-optimal capital allocation, particularly among container ports that contest container trade with other ports. This has led to depressed sub-WACC returns across a number of ports that all have container operations. More rational, industry-wide, decision making in future may assist both POT and NPH in their quest for improved profitability and higher returns.

Downgrade NPH to UNDERPERFORM

We downgrade Napier Port (NPH) to UNDERPERFORM from NEUTRAL to reflect (1) near term trading headwinds given pip-fruit harvest constraints as a result of labour shortages, (2) shipping industry congestion that is impacting the availability of empty containers, (3) the deteriorating returns outlook as a result of the 6 Wharf investment, and (4) the recent rise in bond yields, which has had little impact on port share prices to-date. NPH is due to release its 1H21 results on 25 May 2021.

Figure 1. Port company valuation comparative (NZ$m, valuation multiples reflect one year forward earnings/dividends)

	Ticker	Rating	Share price	Target price	Cash div yld	Gross div yld	PE	EV/EBITDA
Port of Tauranga	POT	UNDERPERFORM	7.43	6.00	2.3%	3.2%	48.4x	30.0x
Napier Port	NPH	UNDERPERFORM	3.51	3.00	2.0%	2.7%	36.0x	18.3x

Source: Refinitiv consensus, Barr analysis

Value creation = return on capital + growth

We like to revert to first principles when thinking about value creation where possible. In short, value creation is simplistically a function of (1) return on capital, and (2) growth. These are sensible measures to consider the attractiveness of most businesses, and in particular long term infrastructure assets. Our analysis of Port of Tauranga (POT) and Napier Port (NPH) highlight some fundamental differences between the two in terms of returns generation, capital efficiency, use of the pricing lever, competitive position and growth track-record.

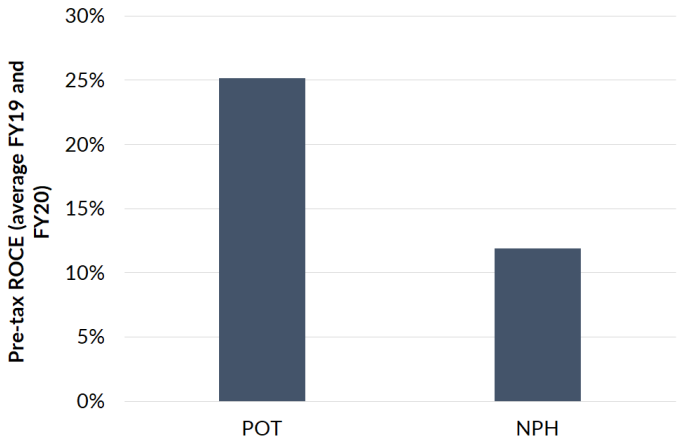
POT leads the industry; the hub port strategy is delivering

POT generates attractive returns on capital, as do the two ports it has 50% stakes in (Northport and PrimePort Timaru). Its returns profile has been steady over the long term. Economies of scale appear to be hard fought as natural operating leverage benefits appear to be eroded by lower margin incremental cargo and at best CPI type pricing. The longer term outlook for POT appears very similar to the longer term history. That is (1) an attractive ROCE profile that supports incremental port investment, (2) above average industry cargo growth, and (3) limited operating leverage, which will cap the rate of earnings growth.

Looking forward rather than back for NPH

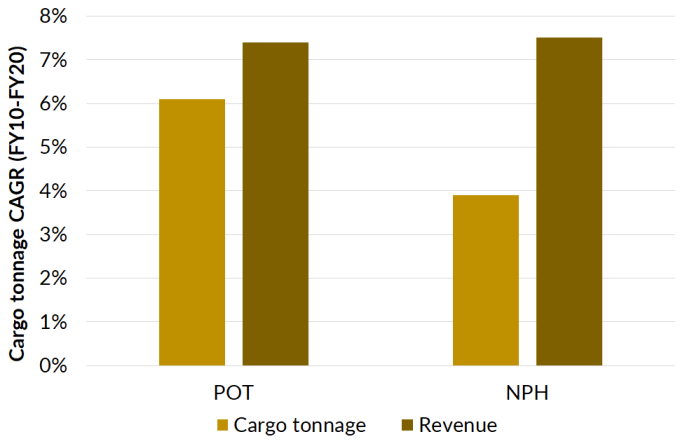
NPH is less capital efficient but has a more favourable captive market in Hawke's Bay that has allowed an aggressive (positive) pricing strategy. Over the past 10 years NPH has seen enhanced capital turns (sales divided by capital employed) given its pursuit of growth, but this has come at the expense of margins, given the additional costs that have been necessary to facilitate this growth. NPH's future is dominated by its major investment in 6 Wharf, which will future proof the port, but the investment will significantly dampen ROCE over the next several years, and potentially longer term. In order to mitigate the pressure on returns, we expect management to target a combination of (1) targeted price increases, (2) new volume opportunities, and (3) operating cost savings that should accrue as a result of the additional wharf space. However, these will only begin to be realised once the wharf is completed later next year.

Figure 2. Return on capital employed: POT vs NPH



Source: Company reports, Forsyth Barr analysis

Figure 3. Growth track record: POT vs NPH



Source: Company reports, Forsyth Barr analysis

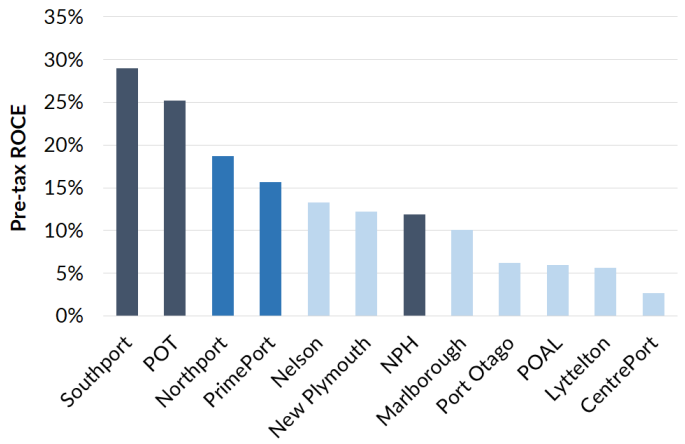
Ports sector returns highlight the disparity between listed company and alternative governance models

Our pre-tax return on capital employed framework excludes revaluation to ensure consistency from port to port. Of the 12 ports shown in Figure 4, seven revalue their asset bases periodically. With the exception of Southport and POT, that both generate attractive returns, the remainder are split between those that (1) exceed anticipated cost of capital (PrimePort Timaru, Port Nelson, New Plymouth, NPH and Marlborough) and (2) those that don't (Port Otago, Ports of Auckland, Lyttelton, and CentrePort).

Every port in New Zealand has a local captive market that should generate adequate returns — if this wasn't the case there should be little reason for the port to exist. Yet the majority of ports don't generate attractive returns. The ports industry is synonymous with questionable capital decision making. Ports that are either listed or part owned by listed companies tend to generate substantially better returns than those that aren't. This is an observation rather than a rule.

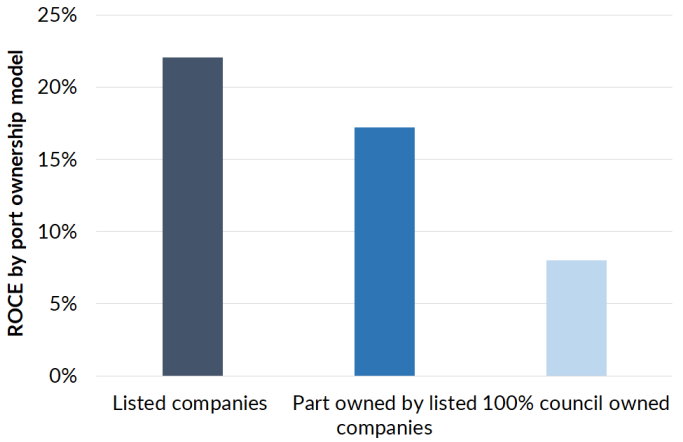
Why is this important? Because both POT and NPH could benefit if capital discipline and more rational behaviour became standard practice across the ports industry.

Figure 4. ROCE of New Zealand ports



Source: Deloitte Port Studies, Company reports, Forsyth Barr analysis NOTE: ROCE based on EBIT including associate/JV income and capital employed ex-revaluations averaged over FY20 and FY19.

Figure 5. ROCE by ownership model

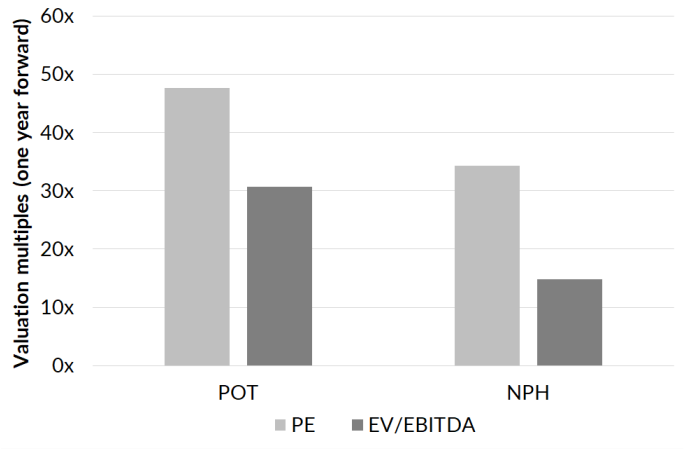


Source: Deloitte Port Studies, Company reports, Forsyth Barr analysis NOTE: ROCE based on EBIT including associate/JV income and capital employed ex-revaluations averaged over FY20 and FY19.

Valuation disparity

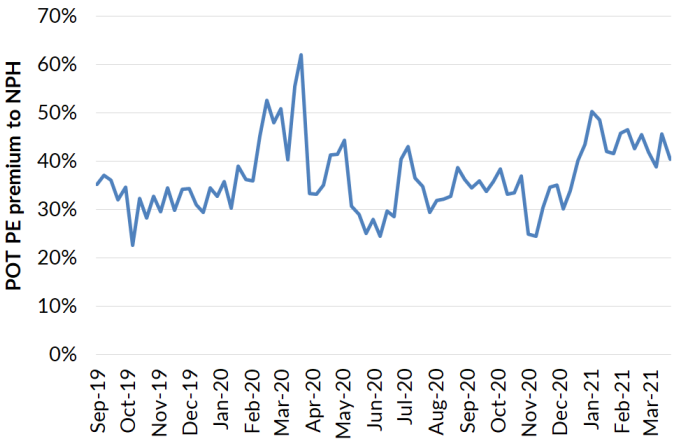
POT trades at a significantly higher valuation than NPH. Its one year forward PE premium is +39%, and on an EV/EBITDA basis it's +108% (based on consensus estimates). While we may argue that both multiples are elevated, the premium that POT trades at relative to NPH is justified in light of its superior return on capital and growth track record. The current PE premium is consistent with the average since NPH listed in 2019.

Figure 6. Premium business; premium valuation. POT's premium to NPH on different valuation metrics justifiable



Source: Refinitiv, Forsyth Barr analysis

Figure 7. POT premium to NPH (average = 37%)



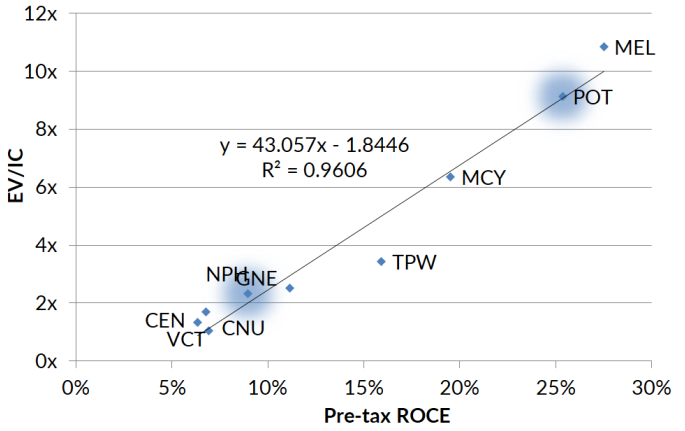
Source: Refinitiv, Forsyth Barr analysis

Yield offers limited support to elevated valuations

Higher return on capital outcomes demand higher valuations, as demonstrated in Figure 8. This analysis helps in part to justify POT's elevated multiples. However, we recognise the imperfect nature of this analysis, not least given our approach of (1) excluding revaluations from each company's capital, and (2) not adjusting for the additional depreciation burden these companies endure when assets are revalued. Therefore, the analysis is a useful tool in analysing relative valuations but shouldn't be used as a definitive measure when determining whether a particular company is over or under-valued.

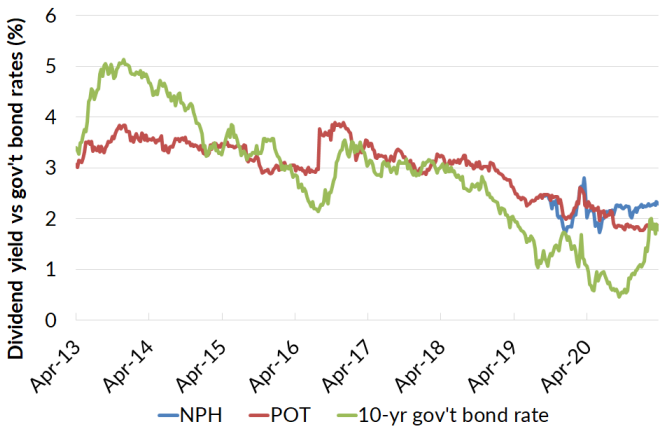
The share prices of both POT and NPH have had little reaction to the recent rise in bond yields. Historically, POT's dividend yield has shown a directional relationship with bond yield changes. The 10 year government bond rate now offers a similar yield to POT, albeit POT's yield has traded below that of the government bonds for reasonable periods of time, historically (most notably 2013–2015).

Figure 8. Relationship between return on capital and valuation among infrastructure players



Source: Refinitiv, Forsyth Barr analysis

Figure 9. Delinkage from bond yields: unattractive dividend yield given recovery in bond yields



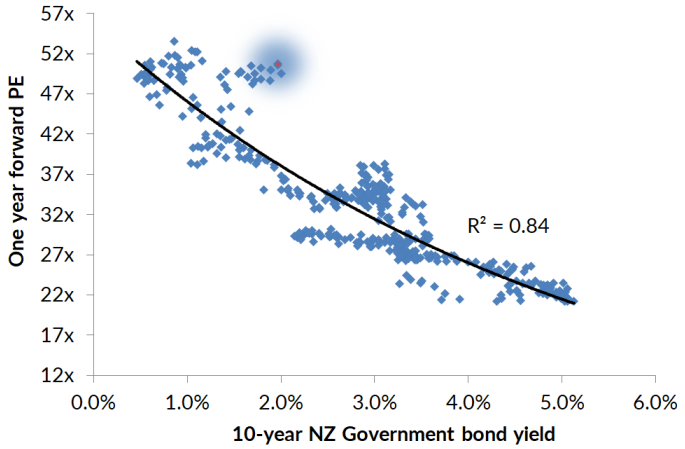
Source: Refinitiv, Forsyth Barr analysis

POT's current premium defies historic relationship between bond yields and growth

The historic bond rate relationship is better demonstrated in Figure 10. This supports the assertion that POT's share price has historically been driven by (1) its underlying profitability, (2) bond yields, and (3) growth. The latter, at least in the short term, has historically been a driver of the dispersion in Figure 10 between each weekly data point and the best fit line as shown in Figure 11, albeit we accept that the relationship has wavered over the past two years, particularly since the onset of COVID-19. However, we believe the analysis is still useful in deciphering POT's relative value given its historic trading relationship to bond yields. Unfortunately the relatively short listing history of NPH means we are unable to do the same analysis at this stage.

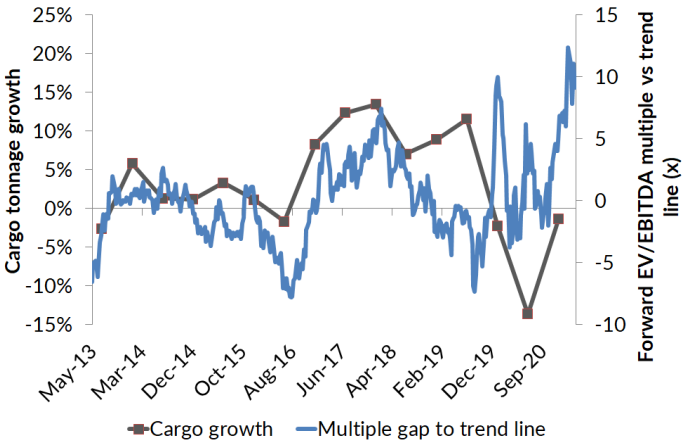
We acknowledge that the temporary loss of cruise income should ordinarily inflate both POT and NPH's valuation multiples, yet cruise only contributed ~4% of POT's port related earnings in pre COVID-19 times.

Figure 10. Current POT PE relative to bond yield suggests market optimistic on strong cargo growth recovery



Source: Refinitiv, Forsyth Barr analysis NOTE: weekly data points over past eight years

Figure 11. Multiple gap from Figure 10 plotted against half yearly cargo tonnage growth



Source: Refinitiv, Forsyth Barr analysis

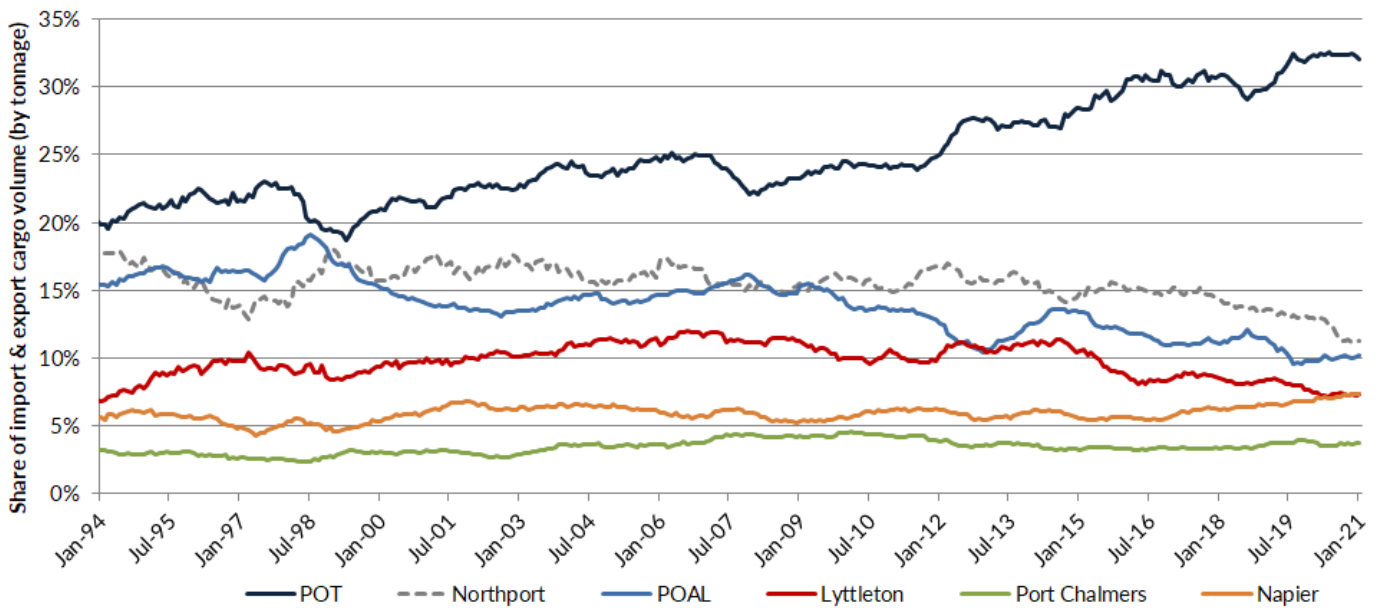
Port of Tauranga (POT) — UNDERPERFORM

Port of Tauranga is the largest port in New Zealand, it has the highest long term growth rate (of all New Zealand ports, helped by survivor bias) and generates superior return on capital. With POT's ROCE already at elevated levels the key to it delivering value creation is generating higher growth, in our opinion. A +1% lift in average growth will deliver substantially more value for POT than a +1% lift in ROCE. However, while we're confident that POT's positioning will allow it to continue to grow over the longer term, we believe at best it will be able to generate average through-the-cycle growth similar to historic levels. In the short term POT's growth could be disrupted by a resurgent POAL assuming it is able to get through the automation integration and staffing challenges that have impacted it in recent times.

Growth is the real value opportunity

POT has taken ~11% share of total import-export cargo from other ports over the past 20 years and is now by far the largest port in New Zealand. It has generated ~5% cargo volume growth annually over the past 20 years, partly at the expense of other ports, in particular POAL. Analysis of NZ Stats data suggests that this growth has been driven by a combination of industry growth (~+3% pa) and market share gains (~+2% pa).

Figure 12. An industry defining chart



Source: Stats NZ, Forsyth Barr analysis

POT's growth outlook has positive and negative drivers

We believe POT is exposed to a number of positive drivers of growth, which will continue to deliver above average industry growth and therefore apparent market share gains over the longer term:

- **Transhipments:** The industry shift to bigger ships will mean greater use of the shipping hub and spoke model in future, in our opinion. POT is well paced to benefit from higher growth transhipments. Over the past eight years POT's transhipments have grown at a CAGR of +10%. It would benefit significantly should Kotahi find a coastal shipping solution for transhipping its South Island exports via POT as intended in the initial 2014 volume commitment.
- **Ruakura:** POT's JV with Tainui in developing the inland port at Ruakura offers substantial long term growth prospects as the centre of gravity of Auckland's distribution centres migrates south, given land price and availability issues in Auckland.
- **Car imports:** Given the investment by POAL in its new multi-storey import car facility, it appears less likely (than several years ago) that POT could take material share from the existing supply chain. However, car imports are under-represented at the port and therefore continue to present a longer term opportunity.
- **Bottled water exports:** Bay of Plenty bottled water schemes represent a significant upside opportunity but are low probability, in our opinion, not least given the environmental/political issues involved.

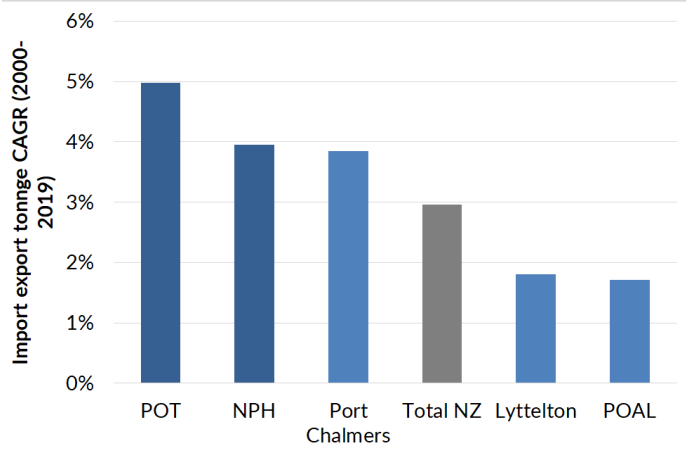
- **M&A to support cargo aggregation:** We expect POT to continue to be acquisitive or enter into new industry shaping JVs to drive future volume growth and security. We don't expect further port acquisitions (in full or in part) though we see scope for POT's JV with Tainui to include further capital to expand POT's interest.

However, we also accept that there will have been some growth headwinds:

- **POAL recovery:** We expect POAL will eventually resolve its staffing and automation challenges and will seek to rebuild its container shipping calls and volume throughput. This may place competitive pressure on POT with both pricing and volume risk. We acknowledge that the future of POAL remains in doubt, however, we also believe that it will take significant political action to change the current status quo. The most realistic course, in our opinion, is that many more independent reports will be compiled before any firm decisions are made over its future.
- **Wall of wood:** Growth in high margin log exports will slow over the medium term once peak harvesting occurs, reflecting the maturing of trees planted 25–30 years ago. Peak planting for the Central North Island forestry took place in 1996. Prime harvesting typically takes place 28 years (+/- two years) after planting.

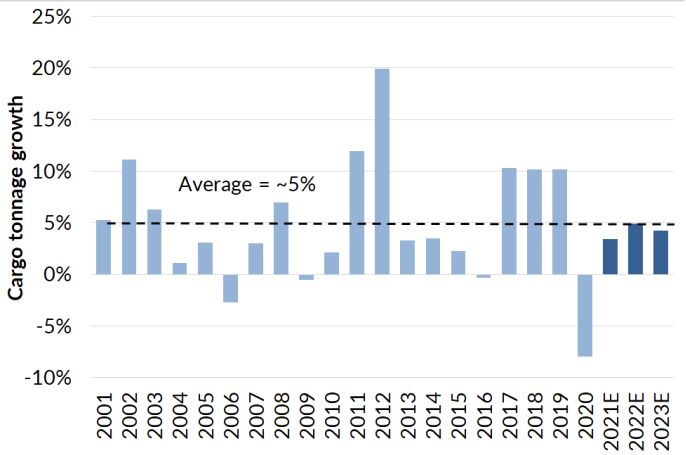
In summary, while we expect POT to continue to grow at a pace in excess of the industry growth rate over the longer term, we don't believe it can accelerate its growth rate from historic levels. Our modelling assumes ~+5% p.a growth over the next 15 years.

Figure 13. Ports industry growth has been led by POT over past 20 years



Source: Stats NZ, Forsyth Barr analysis

Figure 14. POT's historic cargo tonnage growth has been lumpy; average=+5.4%

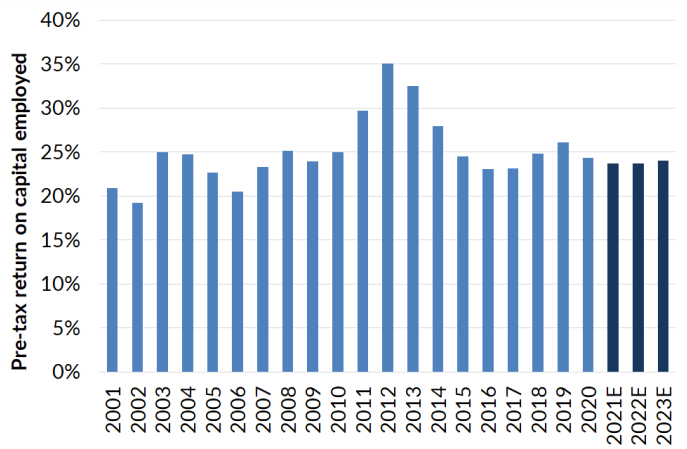


Source: POT, Forsyth Barr analysis

Return on capital drivers

POT's return on capital profile historically has been relatively stable on a historic cost basis, albeit with one break-up cycle when it benefitted temporarily from the Ports of Auckland (POAL) industrial action during 2011–2013. Its current pre-tax return on capital of ~24% is marginally lower than the 20 year average, as shown in Figure 15. Note: we exclude revaluations from our assessment of POT's capital. We don't adjust for the depreciation uplift that revaluations of buildings and other depreciable assets given the complexities of doing so, and therefore accept that our ROCE approach may understate true historic cost returns.

Figure 15. POT's pre-tax ROCE 20-year history (average = 25.1%)



Source: POT, Forsyth Barr analysis NOTE: Capital employed excludes revaluations

Figure 16. What is return on capital?

$$\text{ROCE} = \frac{\text{EBIT}}{\text{Capital employed}}$$

$$= \frac{\text{EBIT}}{\text{Revenue}} \times \frac{\text{Revenue}}{\text{Capital employed}}$$

$$\text{ROCE} = \text{Margins} \times \text{Capital turns}$$

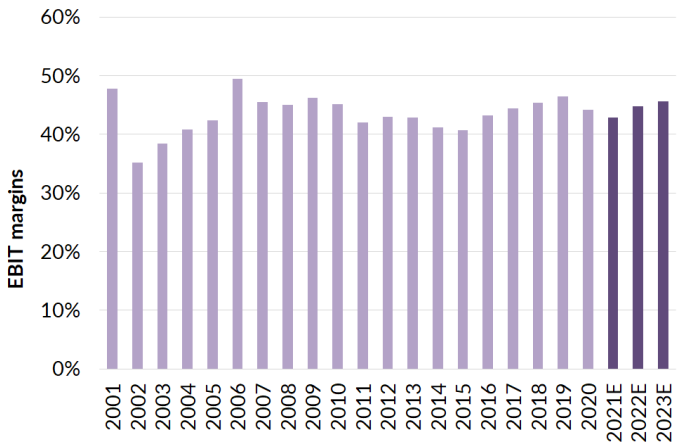
Source: Forsyth Barr analysis

Constituent parts of ROCE

We break-down return on capital as illustrated in Figure 16 into two terms that reflect POT's profitability (margins) and its capital intensity (capital turns):

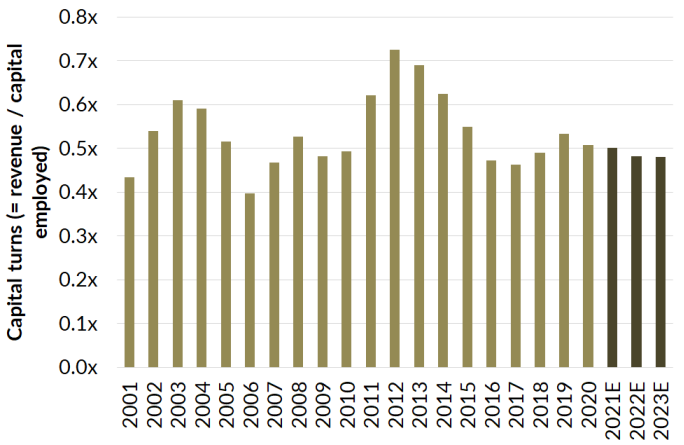
- **Margins:** Relatively stable for a long period of time. The company has been unable to generate operating leverage. Why not? Because the incremental margin for each additional unit of cargo is lower than existing margins.
- **Capital turns:** For each dollar of capital employed at POT it generates it ~NZ$0.50 of revenue. Through several cycles the average capital turn for POT has been ~0.54x, marginally above its current capital turn despite being at the front of a new capex cycle.

Figure 17. Margins have been stable for past 15 years... consistent like a good 'Riflemans'



Source: POT, Forsyth Barr analysis

Figure 18. ...but capital turns have been more variable... like a lower quality chardonnay

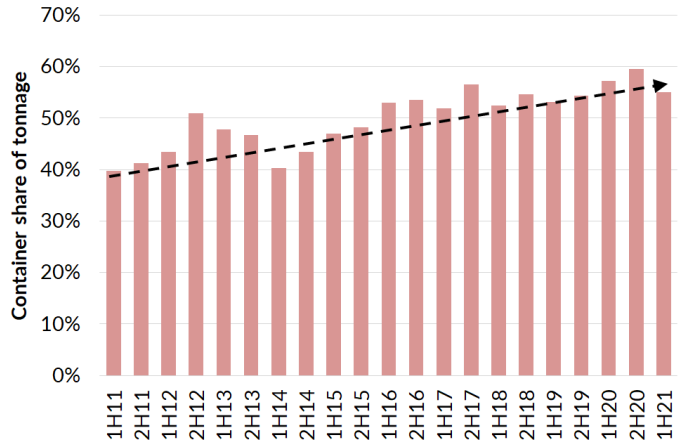


Source: POT, Forsyth Barr analysis

Can POT structurally raise margins and/or capital returns in the future?

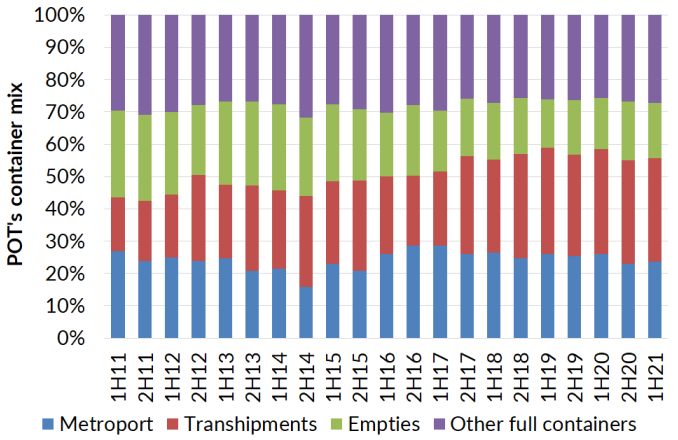
POT's apparent lack of operating leverage (relatively stable margins over the long term despite robust volume growth) reflects three factors. First, its adverse cargo mix with through-the-cycle growth being generated by lower margin cargo (i.e. containers). Second, the cost of cargo aggregation as POT has to venture beyond its hinterland to attract incremental cargo. Third, its pricing historically has been undertaken on a <CPI basis.

Figure 19. Container share of tonnage is growing



Source: POT, Forsyth Barr analysis

Figure 20. POT's container mix



Source: POT, Forsyth Barr analysis

ROCE uplift opportunities

We believe there are two potential future drivers of higher returns on capital for POT:

- **Automation:** POT has outlined its automation plans in conjunction with its southern berth extension. The automated yard would provide additional capacity and complement existing yard capacity. Automation coud provide a lower unit cost for container movements and more efficient use of port land.
- **Pricing:** POT could become more aggressive on pricing over time. The latter will ultimately be a function of the structural outcomes and behaviour of POAL.

We explore both of these drivers in more detail below. In conclusion, we believe it is prudent to assume that POT's ROCE remains at, or around, current levels for the foreseeable future.

Automation opportunity

Automation could be a catalyst for POT 's margins. However, the benefits will likely accrue over a lengthy period of time and the history of automation projects at other ports hasn't created the anticipated productivity upside or cost savings (including the recent experience at POAL).

Automating POT

The initial phase will cost NZ$30m and include two automated straddle carrier (ASC) modules and upfront costs (rails etc.). Further phases in future years will be NZ$20m, NZ$20m, and NZ$30m. POT will build the automation on a modular basis to mitigate operational risk and match capacity with volumes.

POT does not expect to replace existing capacity with automation. It is positioning its automation to operate in tandem with its traditional wharf-side operations. Each ASC module will cost ~NZ$10m, significantly more than a traditional straddle carrier (~NZ$1.5m). The economics of automation suggest both greater capital efficiency and operating cost savings:

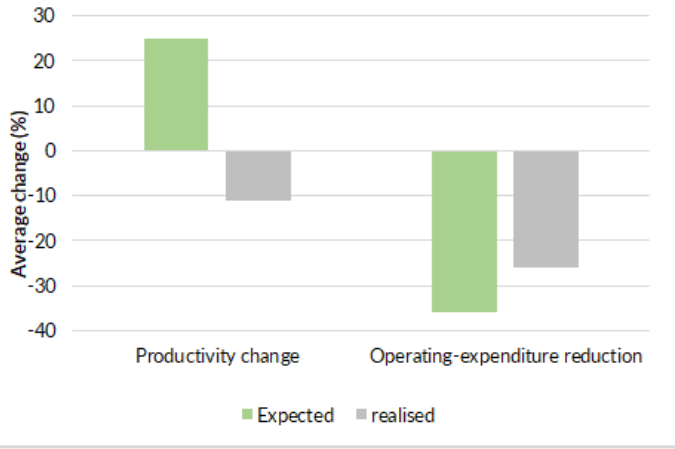
- **More productive straddles.** An ASC module can undertake 110k TEU moves each year. In contrast a traditional straddle carrier will do 35k TEU moves per year. However, we understand that conventional straddles will still be required in order to transfer containers between the berth and ASC modules.
- **Longer useful economic life.** Each ASC should operate for at least 20 years vs a conventional straddle that will typically operate for 12 years.
- **Lower running costs.** A key cost of conventional straddle carriers is the necessary labour required to operate them. Moreover, ASCs run off electricity powered batteries in contrast to diesel (electricity vs labour and diesel), which will also enhance POT's ESG footprint.
- **Higher storage density.** Currently, full containers on wharf will be stacked 2–3 high. ASCs will allow for stacking of containers 6–7 high. Moreover, ensuing access to containers from conventional stacks means that each stack is typically only two containers deep. Automation will allow stacks to be 9–10 containers deep. This means that to generate the same level of capacity an automated yard will need less area than a conventional yard.

History highlights the risks

The history of port automation suggests anticipated productivity or cost savings aren't realised, as shown by a 2017 McKinsey study in Figure 21. The McKinsey study indicated that while operating expenses declined, so did productivity, and consequently return on capital declined. However, successful automated ports show that careful planning and management can mitigate common difficulties and generate 25%–55% reductions in operating expenses, and also lift productivity by 10%–35%.

Assuming POT's automation goes to plan, our analysis suggests that automation may provide annual pre-tax operating costs benefits in the order of ~NZ$1m per 100k TEU when compared to expanding capacity using the conventional straddle carrier yard approach. The capital cost of automation equipment may be higher than conventional straddles but less land will be required for the same capacity.

Figure 21. Automation historically hasn't gone to plan at ports



Source: McKinsey, Forsyth Barr analysis

Figure 22. Estimated opex cost benefit of automation at POT

	ASC	SC	Difference
Additional capacity (k TEU)	**1,000.0**	**1,000.0**	
Straddle productivity (k TEU pa)	50.0	25.0	
Straddle carriers (# of units)	20.0	40.0	
Straddle cost per unit (NZ$m)	1.5	1.5	
Straddle useful economic life (years)	12.0	12.0	
ASC productivity (k TEU pa)	110.0		
ASC modules (# of units)	9.1		
ASC modele cost per unit (NZ$m)	12.0		
ASC useful economic life (years)	20.0		
Straddle/ASC cost (NZ$m)	**139.1**	**60.0**	
Equipment depreciation pa (NZ$m)	**8.0**	**5.0**	
Unit labour cost (NZ$/TEU)	12.0	24.0	
Labour pa (NZ$m)	**12.0**	**24.0**	
Unit energy cost (NZ$/TEU)	1.0	2.5	
Energy cost pa (NZ$m)	**1.0**	**2.5**	
Total operating costs pa (NZ$m)	**21.0**	**31.5**	**10.5**
Total cost savings per 100k TEU			1.1

Source: Forsyth Barr analysis Note: SC = straddle carrier; ASC = automated straddle carrier

Pricing lever hamstrung by competitive environment

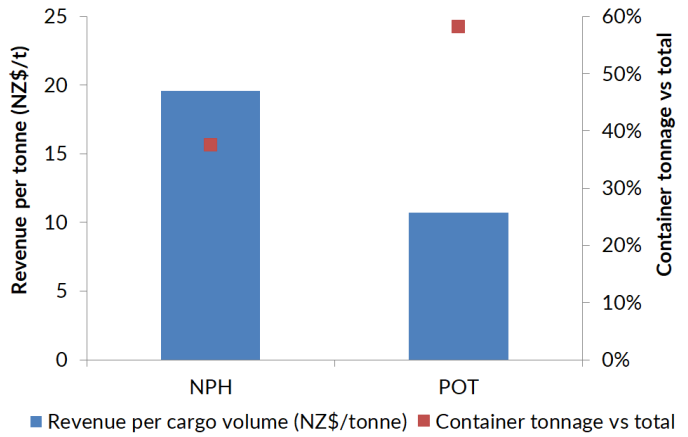
POT's pricing has lagged other ports, both in absolute and relative terms. Its current average revenue per tonne is lower than that achieved at other ports, and the growth in this metric has lagged other ports and CPI historically. This may have been detrimental to margin progression, but given already high ROCE, the growth generated from more competitive pricing may have created greater value than a >CPI pricing strategy.

Current pricing lower than other ports

POT generates substantially less revenue per tonne than its listed peer NPH, and substantially lower than Lyttelton and Port Chalmers. Its lower average pricing reflects a number of factors including cargo mix, corporate strategy and regional competition.

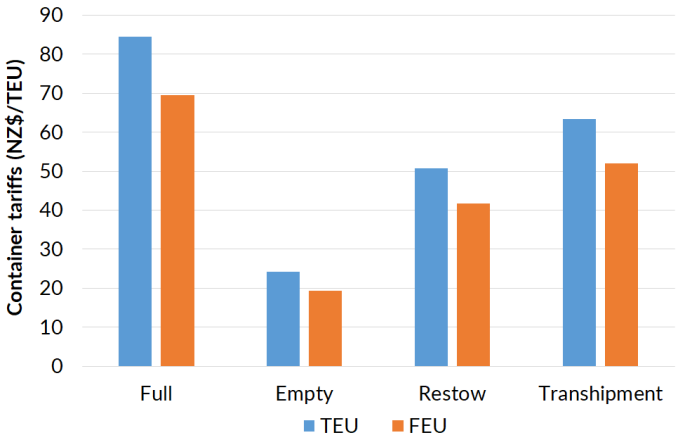
- **Cargo mix:** We estimate that containers typically generate 2x the revenue per tonne relative to bulk cargo. The higher price reflects the related services that the port typically provides. A port with a higher proportion of containers will typically generate a higher average revenue per tonne.
- **Corporate strategy and regional competition:** Ports exposed to contestable cargo like POT and POAL may be subject to price competition. POT competes with POAL for Auckland destined/originated containers via its Metroport facility. POAL's presence will likely continue to cap POT's ability to increase prices at rates undertaken by other ports, particularly once it manages to complete its automation programme, which will materially lift its capacity.

Figure 23. Pricing comparison: POT vs NPH — containers typically generate higher unit revenue than bulk cargo



Source: Forsyth Barr analysis

Figure 24. POT's container tariffs — empties are the least attractive containers for ports, yet a supply chain necessity

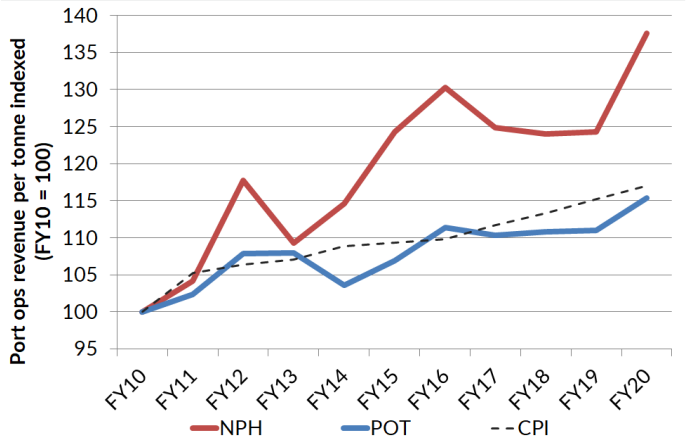


Source: Forsyth Barr analysis

Price growth has lagged

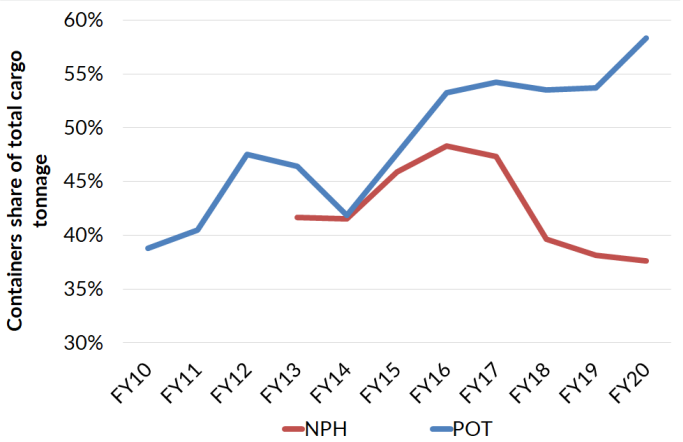
For example, over the past 10 years NPH has lifted its average revenue per tonne by almost +40%. In contrast, POT's average has risen by +15%, below CPI at +17%. While we recognise that average revenue per tonne is a crude measure as it doesn't account for mix changes we show in Figure 26, POT's average pricing has lagged NPH's despite its increasing exposure to higher value containers.

Figure 25. NPH has been more aggressive than POT on pricing



Source: Company reports, RBNZ, Forsyth Barr analysis

Figure 26. Historical cargo mix compared to NPH



Source: Company reports, Forsyth Barr analysis

Capex and capital intensity

POT's historic track of capital development (wharf extensions, pavement, cranes, straddle carriers, property etc) has seen capital turns swinging in a cyclical manner either side of the 20 year average ~0.55x. This reflects a number of capex cycles, which lift capacity and lower asset turns before utilisation catches up. The majority of POT's capex relates to expansion (or growth) capex, and a material amount has been allocated to cargo aggregation strategies, rather than the port.

Over the past 20 years POT's capex to revenue ratio has averaged ~17%. Its capex to assets, or the net book value (NBV) of fixed assets excluding revaluations, has averaged ~11%. These provide useful proxies for POT's longer term capex profile, assuming that POT's capital intensity remains at a similar level to that seen historically. There have been no apparent economies of scale benefits over time.

New capex cycle starting

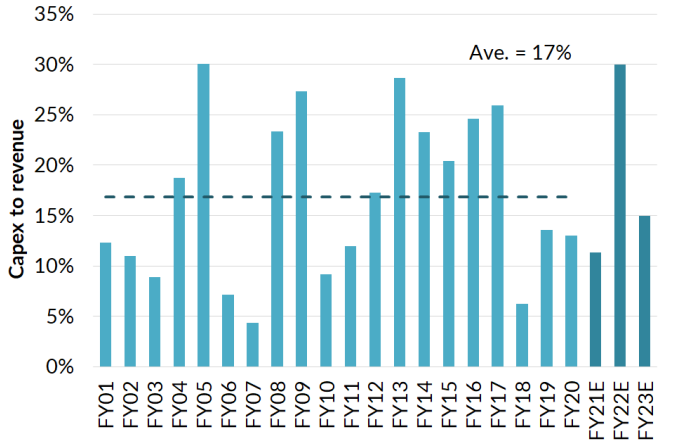
POT is about to embark on a new capex cycle in order to lift its container terminal capacity. The project will be phased over a number years but will be front loaded given the necessary southern wharf extension. The new wharf will cost ~NZ$70m, which includes dredging but excludes additional cranes and the automation programme. The timing of this expansion is unknown given the delays

already relating to POT obtaining resource consent. In the meantime, the port lacks capacity for growth, which means it is unable to fully capitalise on POAL's current problems.

Automation may lower capital intensity

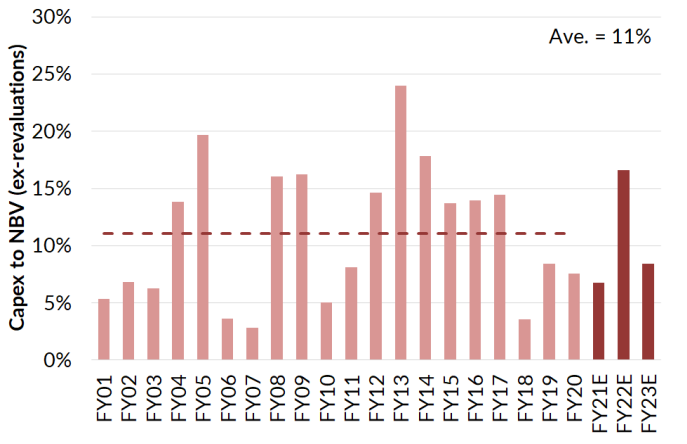
The enhanced productivity that automation provides could allow for lower capital intensity at POT in future, however, we anticipate a higher initial equipment cost for ASCs as outlined above.

Figure 27. Capex to sales



Source: Forsyth Barr analysis

Figure 28. Capex to fixed assets at NBV ex revaluations



Source: Forsyth Barr analysis

Napier Port (NPH) — UNDERPERFORM

The value creation backdrop for NPH is very different to that of POT. NPH generates substantially lower returns on capital and while its growth track record has been robust, it has been at a lower level than POT. Moreover, the outlook for NPH is dominated by its investment in 6 Wharf, which will materially reduce ROCE over the next few years. We expect this to act as a valuation headwind, which supports our rating downgrade to UNDERPERFORM.

Growth historically boosted by logs

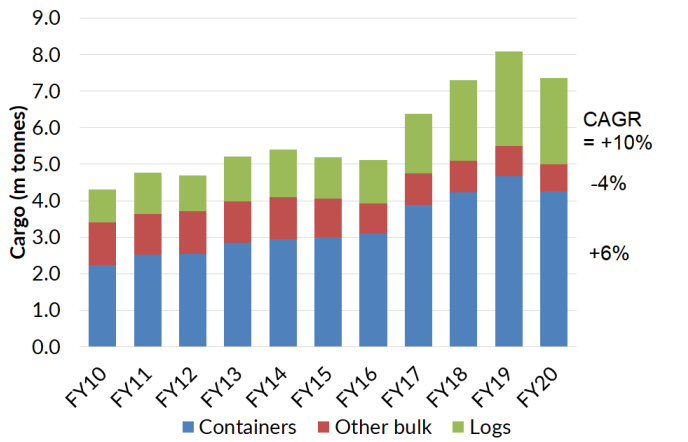
We typically think about port volumes as cargo tonnage or number of TEUs. Yet, as ports increasingly find ways of generating greater income from cruise (which have historically been a service for the public good), as NPH has done so in recent years, these traditional measures of growth may understate the true position.

Over the longer term, NPH has generated cargo tonnage growth in excess of the average New Zealand port (refer back to Figure 13). In combination with more aggressive approaches to (1) pricing, and (2) generating income from cruise, NPH's overall revenue growth has averaged +7% CAGR over the past 10 years. This reflects ~+4% cargo tonnage growth and ~+3% price and mix growth.

Cargo growth has been boosted by log exports over the past 10 years. These have grown at a compound annual average rate of +10%. This growth will soon slow as the peak in the wall of wood arrives. We anticipate peak exports will by 3.0mT from FY22 with a wide tolerance plus/minus to reflect the pricing cyclicality that can influence forestry block owners harvesting plans.

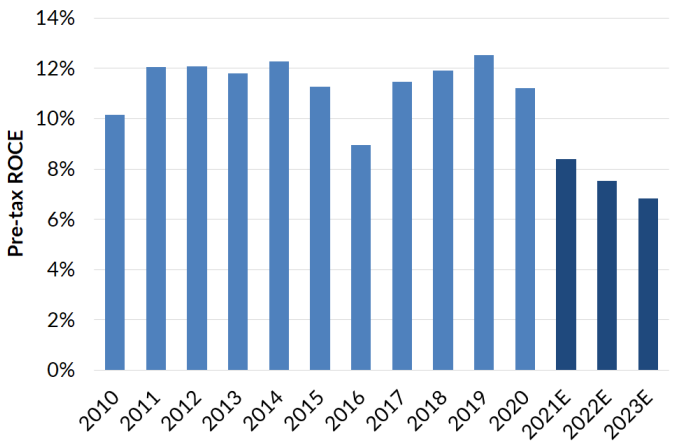
NPH strategically wants to continue to attract international shipping calls. It doesn't want to just be a feeder port to POT or POAL. According to the Ministry for Transport's FIGS data ~10%–15% of its export containers are currently transhipped onto other services at New Zealand ports, predominantly POT. NPH currently has six regular shipping services calling on a weekly or bi-weekly basis.

Figure 29. Cargo has grown at +4% CAGR over past 10 years



Source: Forsyth Barr analysis

Figure 30. ROCE under pressure due to 6 Wharf



Source: Forsyth Barr analysis

ROCE under pressure from 6 Wharf investment

NPH's pre-tax ROCE has oscillated between 9%–12% over the past 10 years as shown in Figure 30. In contrast, we expect it to fall to ~7%, below its effective cost of capital (we estimate its post-tax cost of capital is currently ~5.6%). Below we analyse NPH's historic ROCE profile, in a similar fashion as we did for POT, by breaking it down into margins and capital turns. When compared to POT we find that NPH has both inferior margins and inferior capital turns to POT.

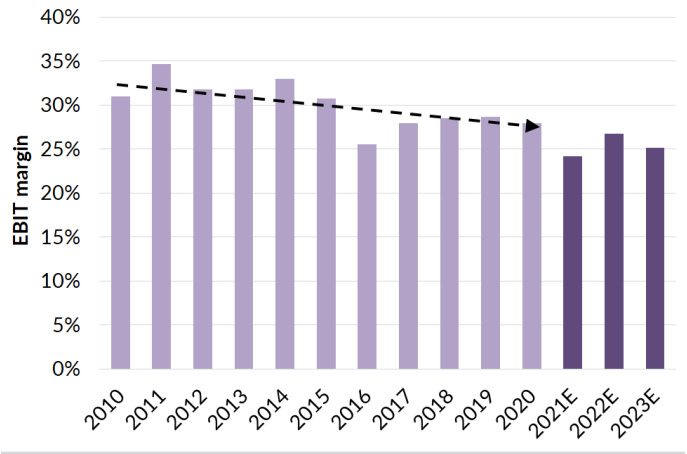
Margins have declined

NPH's operating margins have declined over the past 10 years from >30% 10 years ago to ~28% in FY20. The decline has been exacerbated since the IPO in 2019 given the additional listing and corporatisation related costs absorbed by the company. We expect margins to fall further in FY21 given the temporary loss of cruise and lower container volumes. We expect both to bounce back in FY22 and FY23. However, when 6 Wharf is commissioned the additional depreciation burden will limit margin recovery.

The margin decline over the past 10 years reflects (1) higher depreciation, and (2) our view that NPH's growth has been achieved at a lower incremental margin. The latter may reflect in part higher port operating costs given increasing (in port) congestion, which will

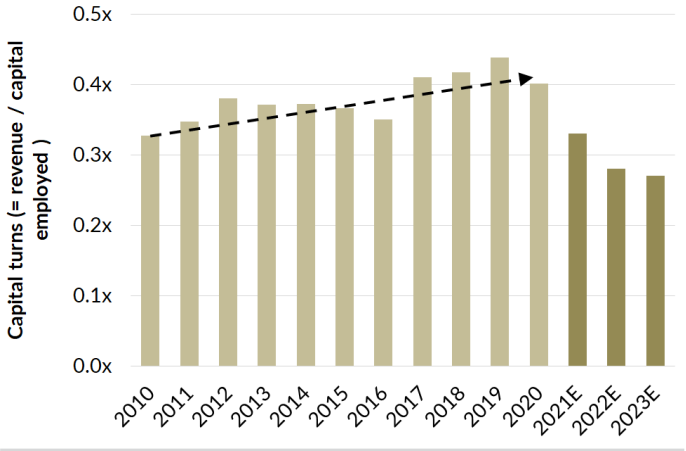
ultimately be addressed on completion of 6 Wharf. The margin decline has been a feature despite NPH's more aggressive approach to pricing as identified above.

Figure 31. Margins have endured a downward trend over the past 10 years



Source: NPH, Forsyth Barr analysis

Figure 32. Capital turns to be impacted by 6 Wharf investment



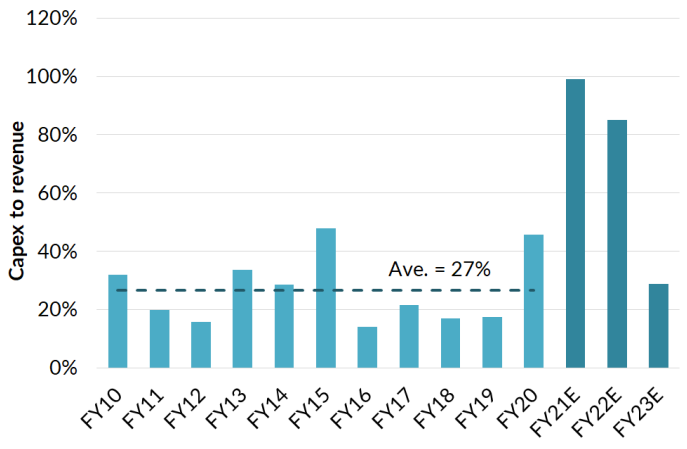
Source: NPH, Forsyth Barr analysis

Margin contraction can often be attributed to cargo mix changes, but not in NPH's case. Its tonnage split between containers and bulk products was similar in FY20 to FY10 as shown in Appendix 1.

Capital turns have been increasing but will be materially impacted by 6 Wharf

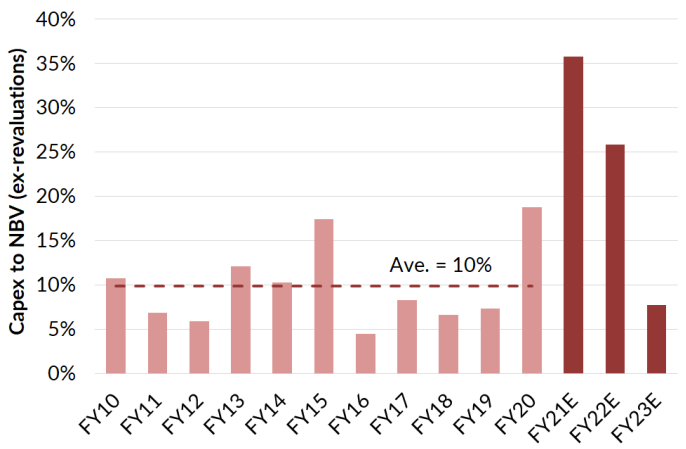
NPH has done well over the past decade to increase its capital turns. However, 6 Wharf will have a material impact over the next few years. We estimate that capital turns in FY23 will be below the FY10 level. While average capex to revenue is significantly higher than POT's ~17% longer term average, this largely reflects the scale differential between the two. In short, POT is a more capital efficient business, which contributes to its superior returns profile.

Figure 33. Capex to sales at NPH



Source: NPH, Forsyth Barr analysis

Figure 34. Capex to assets at NBV ex-revaluations

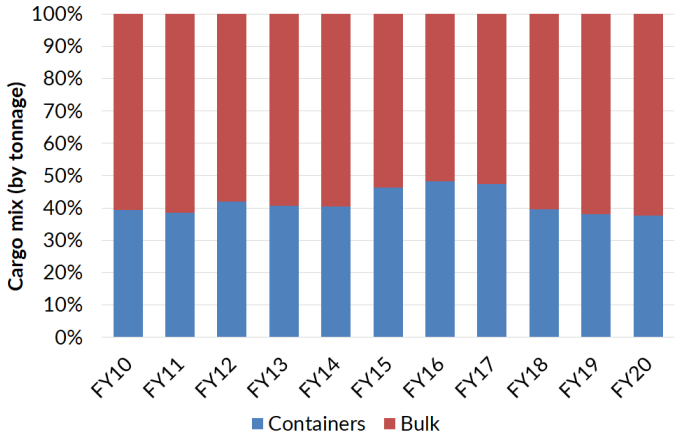


Source: NPH, Forsyth Barr analysis

Appendices

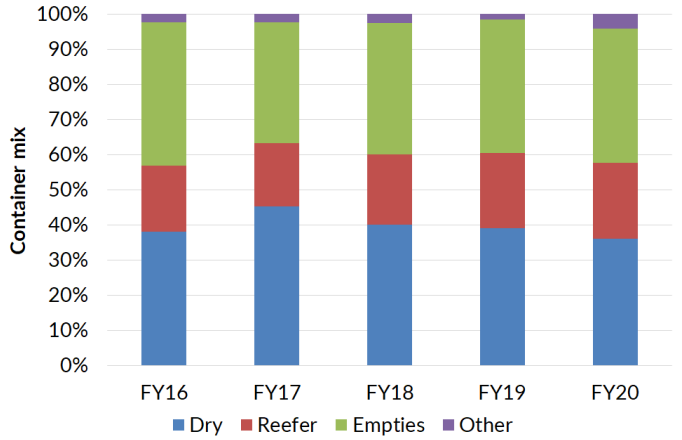
Appendix 1: NPH's cargo mix

Figure 35. NPH's cargo mix has been relatively stable notwithstanding container step-up in FY15–FY17



Source: NPH, Forsyth Barr analysis

Figure 36. Container mix at NPH hasn't materially changed over the past five years



Source: NPH, Forsyth Barr analysis NOTE: Other containers include domestic only containers

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