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Signed by
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30th September 2022

Qantas Airways Limited (ASX:QAN)

'Emerging from turbulence, Australia's Phoenix soars to new heights'

SYDNEY UNIVERSITY RESEARCH GROUP

QANTAS Spirit of Australia

GICS Sector: Industrials
GICS Industry: Transportation
Australian Securities Exchange (ASX)

RECOMMENDATION: BUY

Exhibit 1: QAN.ASX Overview

First Trading Date	Aug-95
Target Price	A$6.41
Current Price*	A$5.24
Upside	22.3%
Dividend yield	0.0%
Market capitalisation* (A$m)	9,958
Shares outstanding* (m)	1,886
Free Float	99%
1 Month VWAP*	A$5.20
52 Week High	A$5.97
52 Week Low	A$4.21

*All prices as of close 29 Sep 2022

Source: Refinitiv Eikon, SURG Analysis

Exhibit 2: 5-Year Share Price Rebased

— QAN
— ASX200 rebased
— ASX200 Industrials rebased
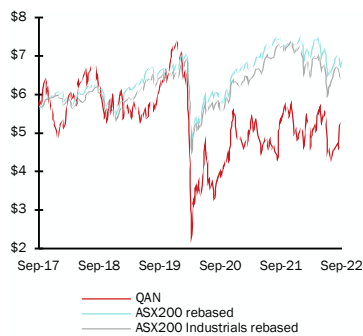
Source: S&P Capital IQ

Exhibit 3: Financial Ratios

Ratios	FY23e
Net Debt / EBITDA	1.6x
Interest Coverage Ratio	4.6x
EBITDA Margin	16.6%
NPAT Margin	4.9%
ROE*	n.m.

*Book equity distorted due to FY20-FY22 statutory losses

Source: Refinitiv Eikon, SURG Analysis

Exhibit 4: Share Price Catalysts

Date	Event	Catalyst
Oct-22	HK/ Japan/ Taiwan removing hotel quarantine	SE Asia travel demand driving further international recovery
4-Nov 22	QAN AGM	Positive update on RASK uplift through capacity discipline
7-Dec 22	ACCC Quarterly Airline Competition report	Better than expected airfare price index reflecting rational competitive behaviour
Feb-23	1H23 earnings announcement	Market appreciation for QAN's ability to preserve unit profitability in spite of cost inflation concerns
Aug-23	FY23 results released	QAN's FY23 ROIC and EBIT margins add further credibility to FY24 Management targets

Source: SURG Analysis

EXECUTIVE SUMMARY

We initiate coverage on Qantas Airways Limited (ASX:QAN) with a **BUY** Recommendation based on a 12-month target price of $6.41, implying a 22.3% upside to the last close of $5.24 as at 29 September 2022. This blended target price represents a weighted mix of our discounted cash flow and relative valuation models.

QAN is Australia's enduring and globally recognised flagship carrier with dominant market share in an oligopolistic domestic airline industry. Over the past two years, QAN battled through the grounding of its fleet from COVID-related border closures which cost the company almost A$20b in foregone revenue. Yet, QAN is rising from the ashes and emerging from the pandemic with greater earnings power and operational efficiency. Australia's red kangaroo has discovered a renewed runway to create shareholder value.

Our proprietary analysis suggests that QAN's post-COVID rebirth has been materially mispriced as the market has underappreciated (1) the robustness of QAN's demand outlook, (2) QAN's operational agility to recover cost headwinds and (3) QAN's resilient, diverse portfolio with a Loyalty flywheel complemented by Freight growth. Consequently, we expect positive earnings announcements to catalyse a re-rating of QAN's share price over the next 12 months as it continues to exemplify the 'Spirit of Australia': an Australian icon known as a quality, agile business.

1. Clear skies ahead: the market has underestimated the strength and resilience of QAN's demand profile

The market has not accurately assessed the forward passenger demand profile of QAN, underappreciating the robustness of near-term pent-up demand release and overstating the medium-term demand tapering. Our estimates diverge from market consensus on two key metrics: load factors and yields across the short and medium term. Our differentiated view is materialised in a FY23 Group RASK uplift of 18.4% and sustained medium term load factors regressing to historically averages. Additionally:

- QAN's demand recovery has been severely discounted comparative to European and North American peers, with QAN priced ~2 standard deviations below historical trading patterns across key peer sets;
- QAN's share price has remained depressed due to transitory operational challenges, notwithstanding all underlying performance metrics indicating a recovery; and
- Despite leading indicators supporting a reasonably sustained demand environment post FY23, QAN's market price implies a significant 6.2% FY24/25 load factor drawdown below long-term averages.

2. The sky's the limit: a renewed cost base and accretive CAPEX enhance QAN's post-COVID profitability

QAN has emerged from the pandemic a fundamentally more agile carrier with a reduced fixed cost base and underappreciated unit profitability. Although it is flying into an inflationary environment characterised by high fuel prices, QAN has significant operational flexibility to recover elevated costs by adjusting capacity settings. Together with its focus on inflation-offsetting cost initiatives as well as margin-accretive CAPEX, the market has undervalued the strength of QAN's post-COVID earnings power. Our FY24e EBIT margin is 42bps above consensus, reflecting:

- Industry-wide capacity discipline coupled with greater cost variabilisation allowing QAN to optimise Available Seat Kilometres (ASKs) and recoup higher fuel prices;
- An overlooked target to offset inflation, key to ensuring that QAN's cost-reducing Recovery Plan translates into sustainable earnings uplift; and
- Domestic fleet renewal Project Winton to bring unit revenue benefits from route optionality and seat upgauging, whilst realising unit cost savings from higher aircraft utilisation and lower fuel consumption.

3. QAN's portfolio flies under the radar: quality revenue diversification reduces cash flow risk

QAN's diverse portfolio mitigates cash flow risk through providing multiple quality and cash-generative revenue streams uncorrelated to the oil cycle. Its Loyalty business model holds a competitive moat through a cash-generative earn and burn point flywheel which increases customer switching costs and stickiness. Further, QAN has fundamentally changed gears to bolster its ability to capture Australia's long term structural shift in e-commerce. We expect that:

- QAN's Loyalty flywheel holds underappreciated scope to encourage members to match their Points Earned with Points Burnt, fuelling unrivalled customer participation and satisfaction in its ecosystem;
- Exclusive contracts and arrangements with Australia Post (A$1.4b), Toll Group and Amazon, alongside 6 A321 freighter plane purchases, will allow QAN to accommodate Australia's e-commerce growth by materially increasing serviceable Available Freight Tonne Kilometres (AFTK); and
- QAN will capture further international freight demand given its valuable import and export route catchment footprint, resulting in increased freight yields and volumes.
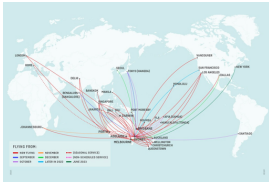
KEY FINANCIALS

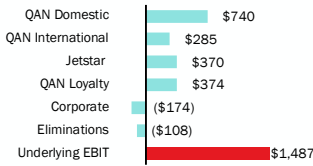| Fiscal Year Ending 30 June	Historical (Statutory)							SURG Forecast					
	FY16a	FY17a	FY18a	FY19a	FY20a	FY21a	FY22a	FY23f	FY24f	FY25f	FY26f	FY27f	FY28f
Revenue	16,200	16,057	17,128	17,966	14,257	5,934	9,108	18,162	19,419	20,094	20,894	21,684	22,445
Growth		(0.9%)	6.7%	4.9%	(20.6%)	(58.4%)	53.5%	99.4%	6.9%	3.5%	4.0%	3.8%	3.5%
EBITDA (underlying)	3,328	3,108	3,334	3,206	1,057	123	254	3,023	4,011	4,458	4,929	5,192	5,368
Growth		(6.6%)	7.3%	(3.8%)	(67.0%)	(88.4%)	106.5%	1,090%	32.7%	11.2%	10.6%	5.3%	3.4%
Margin	20.5%	19.4%	19.5%	17.8%	7.4%	2.1%	2.8%	16.6%	20.7%	22.2%	23.6%	23.9%	23.9%
EBIT (statutory)	1,643	1,370	1,534	1,474	(2,437)	(2,050)	(890)	1,532	2,162	2,464	2,813	2,949	2,999
PBT	1,424	1,181	1,352	1,192	(2,708)	(2,351)	(1,191)	1,279	1,786	2,048	2,366	2,494	2,600
NPAT	1,029	853	953	840	(1,964)	(1,728)	(860)	896	1,250	1,434	1,657	1,746	1,820
FCF		469	322	242	(940)	(410)	2,344	(2,205)	643	959	1,228	1,328	1,366
DPS (cents)	0.07 0.14	0.17		0.25	0.00	0.00	0.00	0.00	0.36	0.41	0.47	0.50	0.52

Source: Company filings

Exhibit 5b: QAN International route network

Source: Company filings

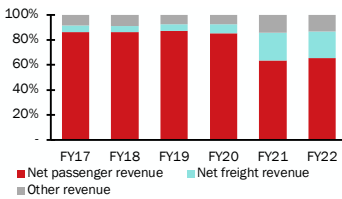### Exhibit 6: FY19 Underlying EBIT Breakdown (A$m)

QAN Domestic	$740
QAN International	$285
Jetstar	$370
QAN Loyalty	$374
Corporate	($174)
Eliminations	($108)
Underlying EBIT	$1,487

Source: S&P Capital IQ, SURG Analysis

Exhibit 7: No. of QAN Loyalty Members (m)

FY17: 11.8, FY18: 12.3, FY19: 12.9, FY20: 13.4, FY21: 13.6, FY22: 14.1
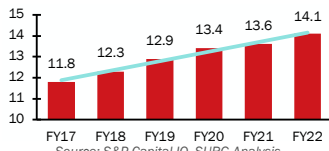
Source: S&P Capital IQ, SURG Analysis

Exhibit 8: Historical Revenue Mix

Net passenger revenue ■ Net freight revenue ■
Other revenue ■

Source: S&P Capital IQ, SURG Analysis

Exhibit 9: Domestic PAX Volumes
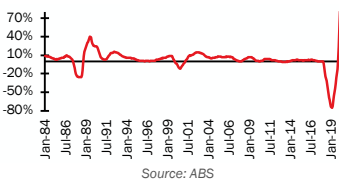
Source: ABS

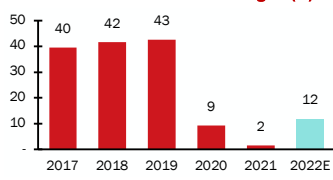### Exhibit 10: Jet Fuel (US$/gallon)

— Jet Fuel — Crude Oil (Brent)
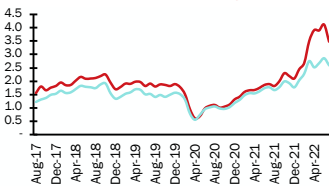
Source: Index Mundi

Exhibit 11: Domestic Passengers (m)

2017: 119, 2018: 121, 2019: 122, 2020: 39, 2021: 47, 2022E: 79
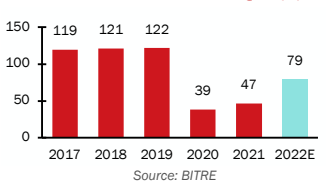
Source: BITRE

Exhibit 12: International Passengers (m)

2017: 40, 2018: 42, 2019: 43, 2020: 9, 2021: 2, 2022E: 12

Source: BITRE

BUSINESS DESCRIPTION

Overview

QAN enjoys a history spanning more than 100 years, servicing Australia's largest number of domestic and international flights and destinations. The QAN Group has grown to a fleet of 311 aircrafts with 132 domestic routes and 55 international destinations to serve 21m+ customers in FY22 and an annual 50m+ historically. As a historically reliable Australian brand, QAN saw strong cash flows and top-line growth after the early 2010s capacity wars and prior to COVID-19 border closures. **Strategy:** QAN aims to build brand equity as the 'international carrier of choice' and curate customer stickiness through its Loyalty program. QAN has strategic focus on operational efficiencies, with the domestic fleet renewal program Project Winton and ultra-long-haul Project Sunrise (providing Australian-first Sydney to London/New York non-stop flights). Notably, QAN is in the third phase of its A$1b cost recovery transformation plan, having undergone balance sheet repair and planning to return to 'normal' levels of operation as benchmarked against FY19. This will further allow QAN to capitalise on the lower domestic competitive intensity and remain ahead of international airlines slower to re-enter the Australian market.

Business Model

Segments: QAN provides a four-pronged offering to business and leisure customers: premium airline services, a low-cost carrier (LCC), a world-leading loyalty program and growing freight services. Accordingly, QAN operates across four segments: its premium QAN Domestic (49.8% of FY19 EBIT) and QAN International flight services (19.2% of FY19 EBIT); budget airline Jetstar Group (24.9% of FY19 EBIT), and QAN Loyalty (25.2% of FY19 EBIT) (**Exhibit 6**). **(1)** QAN Domestic includes passenger flights between major cities and tourist destinations. Regional routes are operated via its QantasLink flights, with aircraft availability recently bolstered through QAN's 2019 acquisition of a 19.9% interest in airline charter Alliance Aviation. Pending approval to acquire the remaining share of Alliance (A$831m implied enterprise value), this would establish QAN as a quasi-monopoly player in regional routes. **(2)** QAN's International segment covers QAN's flights outbound to its main North American, Asian and European markets, as well as core international freight operations through its newly converted passenger fleet. QAN Domestic and International are both full-service carriers (FSCs) that operate within a hub-and-spoke network, with offerings including lounge services. **(3)** Additionally, Jetstar Group offers consistently low-fare domestic and international routes, while it also includes interests in Jetstar Asia (Singapore) and Jetstar Japan. This low-cost model works on a point-to-point network with a lower number of outbound planes to maximise utilisation. **(4)** QAN Loyalty operates in two capacities for the accumulation and redemption of points: the Frequent Flyer program for individuals and the Business Rewards program for businesses. Its diverse portfolio consists of more than 600 program partners providing redeemable rewards. The Frequent Flyer program alone boasts a 14.1m member base (**Exhibit 7**), with QAN Loyalty accumulating a record high NPS in FY22.

Flight revenue drivers: QAN's flight revenue is recorded as either net passenger revenue or net freight revenue (**Exhibit 8**). Three levers drive the majority of QAN's passenger revenue – **(1)** capacity, measured by available seat kilometres (ASKs); **(2)** load factors, the number of seats which generate revenue; and **(3)** yield, the return on each of these revenue-generating seats. Revenue per passenger kilometre (RPK) further measures the number of paying passengers multiplied by distance flown in kilometres. Further, freight revenue is measured according to available freight tonne kilometres (AFTKs), the capacity for cargo in tonnes multiplied by kilometres flown.

Loyalty revenue drivers: Loyalty revenue is generated through marketing revenue and redemption margins. **(1)** Marketing revenue is generated as the difference between the total cost at which QAN points are sold to partners, and the fair value of points at the time of their issuance (Appendix 16). QAN also generates **(2)** Redemption Margin when the value of points redeemed exceeds the cost that QAN can provide the product or service for.

INDUSTRY OVERVIEW & COMPETITIVE LANDSCAPE

## Market Dynamics | Resilience in tough macroeconomic conditions

A rising rate environment threatens consumer balance sheets, however demand for travel remains strong. Qantas faces macroeconomic headwinds, amidst the Reserve Bank of Australia's continuing monetary policy tightening through hawkish cash rate hikes (+50bps monthly through Jun-22 to Sep-22). The cash rate is expected to climb above 3% in mid-2023 in attempts to curb 6.1% inflation (Q2 CY22), leading to recessionary concerns if the central bank overshoots. Lower consumer confidence (-27% YoY) and a projected softening of discretionary spending could prima facie result in demand pullback and falling airline yields. However, we note that Australian passenger volumes have remained relatively resilient in previous economic downturns. In the 1990-91 recession, Domestic PAX volumes fell 25.6% (rolling 12-month basis) and returned to growth within 14 months (**Exhibit 9**) whilst international PAX volumes retained a positive YoY growth. Notably, current conditions are differentiated by 10-year record low domestic unemployment (3.5%) elevated household savings ratio (8.7%) and strong wage growth (2.4%), a stark contrast to the 1990s recession characterised by 10.8% unemployment. It is also an unprecedented period of pent-up demand after COVID-19 disrupted PAX volumes by 75%. Travel remains high priority and more resilient than other areas of discretionary spending, with an Aug-22 ANZ Bank study showing that 43% of Australians are still saving money to travel. Hence, we believe that QAN's aviation activity is somewhat hedged from a slowing economy, particularly as key SE Asian markets further ease restrictions.

Sustained inflation detrimental to industry operators, but asymmetrically affects smaller competitors: QAN faces threats of cost-base expansion as surging domestic inflation is forecasted to reach 7.8% by Q4 CY22. Furthermore, the supply shortage catalysed by the Russian-Ukraine conflict is expected to persist over the short-term, resulting in elevated fuel prices (**Exhibit 10**). A significant cost is also the aircraft, which is rising in price from Boeing and Airbus manufacturers (+20% YoY), while lease costs are up 10%-20% from Apr-20. Higher costs are unfavourable for all operators, however it is harder for LCCs such as Bonza to pass on costs through fares. Smaller players with tighter margins do not possess QAN and Jetstar's scale advantage that reduces the impact of cost uplifts.

## Airline Industry Dynamics | Playing to trends for future benefits

Travel demand remains pent-up post-COVID: Pent-up demand will drive QAN's yields and RASK in the short to medium term. Demand has picked up significantly as countries emerge from lockdown (**Exhibit 11**). Jun-22 saw 4.7m domestic passengers, the highest air travel volume since CY19. Global total passenger traffic stands at 74.6% of 2019 levels (as at Jul-22) and is expected to resume to 100% by mid-late CY23. However, staff shortages in pilots, cabin crew and baggage handling, as well as COVID sick leave, constrain Australian airlines in meeting the higher than expected surges in demand. Nonetheless, air fare prices reaching 2-year peaks in Aug-22 with resilient demand suggests strong price inelasticity and reflects QAN's ability to successfully pass on costs. **Geopolitical tensions rocking fuel costs**: Hedging cannot alone curb all costs arising from a 42% rise in jet fuel prices since Jan-22 as commodity prices surged +140% YTD. Airline unit revenue has a positive relationship with fuel prices (Bouwer
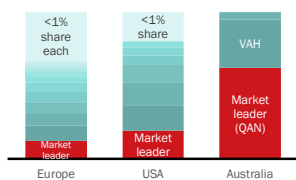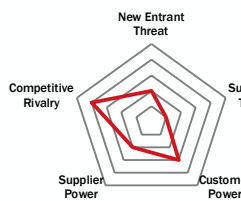
Source: ACCC

Exhibit 14: Australian International Airline Market Share (Major Players)
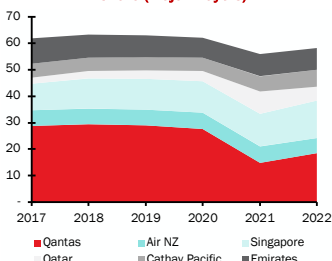
Source: IBIS World

Exhibit 15: Porter's Five Forces

Source: SURG Analysis

Exhibit 16: ESG Scorecard

|	Avg.	Enviro.	Social	Gov.
FactSet	Avg.	61%	48%	43%
MSCII	A	Average	Laggard	Leader
Refinitiv	B+	B+	B	A
Morning-star	Medium Risk (57.4%)	N/A	N/A	N/A

Source: Factset, MSCII, Refinitiv, Morningstar

Exhibit 17: STIP Scorecard

STIP Scorecard Category	Weighting
Financial Performance - UPBT	50%
Customer	20%
Market Leadership	15%
Workplace and Operational Safety	10%
Decarbonisation	5%
Total	100%

Source: Factset, MSCII, Refinitiv, Morningstar

Exhibit 18: Historical Scope 1 and 2 Emissions

CO2-e emissions - Scope 2 (million tonnes of CO2)
CO2-e emissions - Scope 1 (million tonnes of CO2)
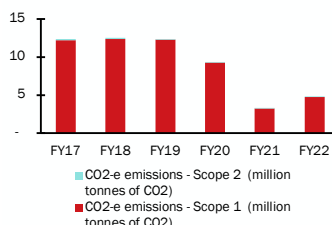
Source: Factset, MSCII, Refinitiv, Morningstar

Exhibit 19: Peer Total Scope 1 & 2 CO2 emissions (m)
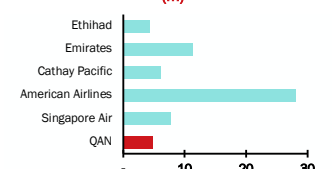
Source: Company filings

et al., 2022), where cost increases must be passed on through airfares (jet fuel constitutes a substantial 25.7% of QAN's FY22 OPEX). Rather, we have accounted for QAN's exposure to top-of-cycle prices from FY23-24 which will likely normalise through FY28 as the supply/demand balance returns and prices accordingly taper.

Competitive Positioning | The one-stop shop for all travel needs

Dominance through dual segment targeting: QAN Group is an established industry incumbent with a dominant 62% market share (QAN Domestic/International 39%, Jetstar 23%) **(Exhibit 13)** in an oligopolistic market structure, followed by Virgin with 33% and Rex at 4%. However, QAN has strategically placed itself at two ends of the service offering spectrum: QAN Domestic/International dominating as a premium FSC, with Jetstar the only LCC before Bonza's entrance. Bain Capital's purchase of Virgin post-voluntary administration has seen Virgin move to a domestic middle-market service shifting away from international offerings, providing QAN room to take some of Virgin's 6.7% international market share. This is furthered by Virgin's preparation towards an early 2023 IPO, pivoting towards price rationalism to boost profitability. As such, we forecast QAN's Domestic segment to grow to 40.6% market share by FY28 from 37% in FY22. Despite Tiger Air's LCC exit (formerly holding 7% market share), we conservatively forecast that new entrants Rex and Bonza threaten some of QAN's routes, reducing Jetstar Domestic's market share from 28.0% in FY22 to 23.2% in FY28.

Well positioned to capture capacity shortage internationally: QAN operates international flights in its 3 international segments: Qantas International, Jetstar International and Jetstar Asia. The group held a consistent market-leading international share of 25.3%-25.8% through CY14-19 (vs Singapore Air ~8%, Emirates ~8% & Virgin ~7%). Following a highly disrupted CY20-21, QAN has retained a 25.1% share of seats across 1H CY22. The capacity of QAN's international competition is forecasted to be 62% of FY19 throughout FY23. 25% of pre-COVID international carriers have yet to return to Australia (in Jun-22), and the lack of global engineering capacity including delayed deliveries of Boeing 787s has caused US airlines to focus on transatlantic as well as domestic routes. With intent to travel internationally nonetheless ~60% higher than pre-COVID, QAN International has guided to reinstall 75% of capacity, taking advantage of a capacity shortage amidst robust demand.

Australia's unique geographic (dis)advantages: QAN and players in the Australian market have an irreplaceable offering stemming from the absence of an Australian interstate high-rail network. 66% of Australia's population is concentrated in its 8 capital cities, and consequently domestic airlines provide high-density routes between 11 airports. The unfeasibility of construction plans manifesting in the short-medium term (requiring a 15+ year project timeline) solidifies air travel as the primary means of leisure and business transportation. QAN's dominance on the Australian Golden SYD/BNE/MELB Triangle routes (SYD/MELB being the second busiest flight route in the world) and connecting East-West capital cities positions it to best capture air travel demand.

A consumer-centric business driving the customer experience: QAN's Frequent Flyer Program is world-class, with ~35% of Australian credit card transactions and 14.1m members, competing against Virgin's Velocity program with 10.7m. Its longstanding consumer staples partnership with Everyday Rewards (12.6m members) provides more scope for customer loyalty than competitor Velocity's Flybuys partnership (Flybuys having 8.1m members). QAN's competitive advantage lies in unique data-driven analytics in creating bespoke customer experiences through its 2015 Taylor Fry data analytics acquisition and the creation of its Red Planet data arm, enhancing customer behaviour analytics, loyalty design analytics and predictive modelling.

ENVIRONMENTAL, SOCIAL & GOVERNANCE

Increasing social and regulatory focus on aviation's environmental impact and airline product quality necessitates an examination of QAN's ESG profile. ESG is quantitatively incorporated into QAN's Financial Framework, weighted 20-30% in its Short-Term Incentive Plan (STIP) Scorecard and benchmarked against the UN Sustainable Development Goals. Currently, QAN is rated 'average' against industry peers **(Exhibit 16)**, notably lagging in social aspects. QAN's ESG score has improved from its BB MSCI rating across FY19-21 to A at FY22, where we have strong belief QAN will improve shareholder confidence in its brand beyond the balance sheet.

Environmental | A renewed green mindset for the Red Kangaroo

QAN strives to be a market leader in sustainability, with all climate objectives set out in its 2022 Climate Action Plan. We see QAN's efforts to transform its carbon emissions profile as a significant priority: QAN's alignment with global environmental standards is weighted 19% during initial investment screening (MSCI).

Accountability: Our analysis indicates that QAN will hold itself accountable in meeting climate-related targets. QAN is a proactive leader in decarbonising the global airline industry, as a founding member of the Oneworld alliance and co-leading its 2050 carbon neutrality strategy. Domestically, QAN's position as the national flagship airline means it must align itself with the Sep-22 Climate Change Bill, mandating net-zero emissions by 2050. QAN's accountability is also seen in its market-first mechanism linking annual executive bonuses with climate targets, weighted 5% to its STIP Plan Scorecard unlike any other peers **(Exhibit 17)**. This tangibly ensures climate progress, with its Sustainability Team and a corporate-first Chief Sustainability Officer providing checks and measures.
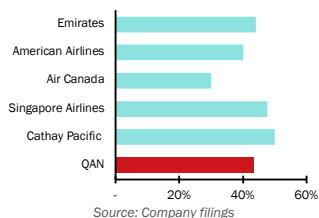
Commitment: QAN has structurally incorporated environmental considerations across all business operations. QAN was one of the first airlines to commit to net-zero by 2050 in 2019 – 2 years before most IATA members. Accordingly, QAN has implemented Interim Targets for 2030 to reduce net Scope 1, 2 and 3 greenhouse gas (GHG) emissions by 25% from 2019 levels. Core operations emissions (Scope 1) contribute to 95% of QAN's emissions profile, with electricity (Scope 2) and indirect supply chain (Scope 3) contributing the remainder. We expect QAN's market leadership on sustainable aviation fuel (SAF) usage and new fleet renewal projects to materially improve its environmental score ('B+' Refinitiv, 61% FactSet – **Exhibit 16**. QAN's use of aviation fuel contributes to majority of Scope 1 emissions (~87.6% of total CO2 emissions during FY17-19). However, QAN now aims to use 10% SAF in overall fuel mix by 2030 and ~50% by 2050, which can reduce GHG emissions by up to 80%. Transitioning away from traditional kerosene, QAN is the driving force behind Australian SAF use given its **(1)** sourcing of SAF from London/California (the first domestic airline to do so); **(2)** A$50m R&D FY22 investment to establish Australia's own SAF industry, and **(3)** market-first US$200m co-investment partnership with Airbus announced Jun-22. The market has underappreciated QAN's industry-leading transformation: QAN's share price fell 0.6% on the day of the first announcement, rising only 0.1% on the second. In addition, QAN's fleet renewals in Projects Winton and Sunrise will use 50% SAF, with the new fleet reducing fuel consumption up to 25% and carbon neutrality targeted 'from day one'. QAN's market-leading digital competencies to meet climate goals is also underappreciated. QAN is the only domestic airline, and one of few international airlines, to introduce flight planning and fuel efficiency planning technologies FlightPulse and Constellation. This will save $40m in fuel costs and in turn lower carbon emissions. Cumulatively, these initiatives will target an annual YoY increase of 1.5% in fuel efficiency until 2030. For Scope 2 emissions, QAN has committed to using 100% renewable energy in place of electricity in on-the-ground buildings (11.2% of CO2 emissions). QAN is also responsible for Scope 3 emissions, which comprise its remaining emissions within secondary operations and the supply chain. **Exhibit 19** reveals the comparison between QAN's

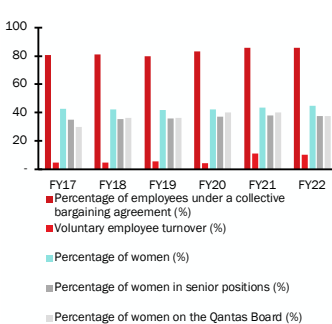Exhibit 20: July 2022 Domestic Peer On-Time Performance
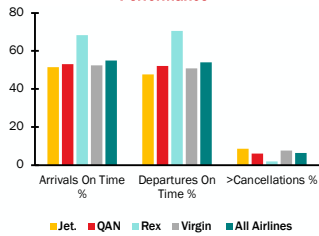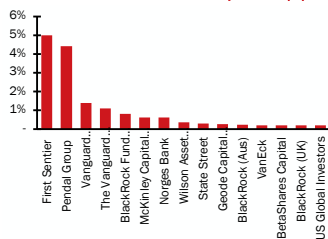
Source: BITRE

Exhibit 21: Peer Female Staff Ratio

Source: Company filings

Exhibit 22: QAN Staff Statistics

- Percentage of employees under a collective bargaining agreement (%)
- Voluntary employee turnover (%)
- Percentage of women (%)
- Percentage of women in senior positions (%)
- Percentage of women on the Qantas Board (%)

Source: Company filings

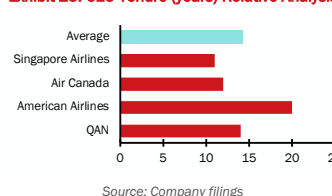Exhibit 23: Public Ownership Share (%)

Source: FactSet, Company filings

Exhibit 24: Inside Ownership Share (%)

Source: FactSet, Company filings

Exhibit 25: CEO Tenure (years) Relative Analysis

Source: Company filings

Exhibit 26: Reverse DCF Analysis

	FY16-19	FY24/25
	Average LF	Projected LF
QAN Dom.	76.8%	76.8%
JSTR Dom.	84.9%	84.9%
QAN Intl.	83.2%	83.2%
JSTR Intl.	84.0%	84.0%
JSTR Asia	82.4%	82.4%

Scope 1, 2 and 3 emissions vs competitors as at FY21. Beyond carbon neutrality, QAN has announced a zero-plastic target across its supply chain by 2027, and zero waste to go to landfill by 2030 – in line with peers. **Influencing green consumer choices:** We posit that QAN's world class Loyalty program of 14.1m members – over half the size of the Australian population – has unprecedented scope to incentivise uptake of sustainable flight options. The airline's successful customer offsetting program 'Fly Carbon Neutral' has seen ~10% of passengers choosing an environmentally friendly alternative. Customers can gain QAN Points by contributing to carbon offset programs, which works together with QAN Loyalty's newly introduced Green Tier status. This is unmatched by domestic competitors, demonstrating QAN's genuine effort to realign ESG values with its member base.

Social | Connecting the QAN team with its neighbouring communities

A premium product and service? Whilst QAN's reputation has recently been tarnished by flight delays, lost baggage and customer service inadequacies, management guidance for the return to 75% on-time performance will catalyse QAN's rebirth to a renowned quality airline. QAN has faced extensive media scrutiny for its low on-time arrival and departure rates, with a Group on-time arrival rate of 53% in Jul-22 **(Exhibit 20)**. However, we note that this is in line with the Australian domestic (~55%) and American average (~50%). Its FY22 overall on-time rate of 73.9% is only slightly below its FY19 'normal' average of 79.2% and has recovered from July lows to 71% in Sep-22. Domestic performance is recovering as staff shortages have lowered across Q1 FY23. Further, QAN has a history of no fatal crashes (alike its premium player peers) and a 68% brand preference (QAN, 2022) which only improve, as brand equity is being rebuilt from a record high FY22 NPS score and QAN's $50 one-off payment to customers as an apology for its operational shortcomings.

A team as diverse as its international reach: QAN integrates diversity of opinion from various sociocultural backgrounds. Across FY16-22, QAN has seen a 2.2% increase in women across its workforce, now 44.8% of total employees and 37.4% of senior positions. QAN has also set targets for senior management to have 42% women by 2024. Its gender diversity is line with peers **(Exhibit 21)**. QAN surpasses domestic competitors in First Nations strategies with regular renewal of its Reconciliation Action Plans (RAPs). Whilst Virgin just launched an equivalent RAP in 2022, QAN has long considered First Nations employment with a target 1.5% Aboriginal and Torres Strait Islander (ATSI) participation in business units by FY24 (FY22 1.0%), and 49.2% of FY22 community investment allocated to ATSI initiatives. Inclusion also includes support networks (Illuminate) and partnerships (Sydney Mardi Gras) for LGBTQ+ employees. QAN holds itself via its Group Head of Inclusion and Diversity.

Labour standards: QAN renewed its Modern Slavery Statement in FY22, reviewing labour standards throughout its supply chain and upgrading training programs. Safety beyond flights is also highly valued with the Safety, Health, Environment and Security Committee overseeing accountable risks. Consequently, QAN's FY22 Total Recordable Injury Frequency Rate was 12.9% - down from 16.7%/17.0% in FY20/FY21 respectively. Its Lost Work Case Frequency Rate (6.5%) is in line with the air transport industry average (6.6%).

Employee sentiment at an all-time low: We see well publicised employee dissatisfaction as QAN's largest source of ESG risk (46% human capital score on FactSet), with material impact. QAN's RepTrack ranking fell from the No. 5 most trusted company reputation in FY21 to No 16 in FY22. **(1)** Industrial action is not new to QAN, where the 2011 industrial disputes led to management grounding the QAN fleet for 48 hours. This caused a $194m loss from the balance sheet. **(2)** In Aug-22, QAN's engineers participated in a 1-minute strike for a 12% wage rise over four years, rejecting the Group's current Enterprise Bargaining Agreement offer (2-year wage freeze followed by a 2% annual wage rise). QAN's attempted negotiation of a $5,000 bonus has been labelled a 'bribe' by the engineers' union and has garnered significant negative coverage. **(3)** QAN also faces a future High Court appeal for the illegal outsourcing of ~1,680 ground-handlers. if the appeal is lost, significant court fees, potential compensation and a large penalty may follow. QAN's voluntary employee turnover rate of 10.4% in FY22 is significantly worse than the FY18-21 4.9% average, requiring immediate rectification (albeit slightly decreasing from 11.2% in FY21). Therefore, QAN's reputation as an employer is well-soiled and requires both significant time and effort to recover. However, we believe QAN will again emulate their quick recovery from brand damage in the 2011 industrial strikes, where its 2011 73rd Global RepTrack ranking increased by ten places within one year.

Governance | A well-versed management team leading Australia's trusted and loved airline

QAN's management team have provided prudent stewardship through the challenges of COVID and will continue to do so, although succession risk could manifest.

Executive Remuneration: QAN's director rights are held under successive Long Term Incentive Plans (LTIP), the most recent 2021-23 LTIP aiming to maximise Total Shareholder Returns to be within the 'top quartile of the ASX100'. This solidifies QAN's position as an ESG market leader in corporate governance (MSCI).

Board of Directors: <u>Tenure</u>: Alan Joyce has remained at the helm of QAN as CEO for the past 14 years, above the average airline chief executive tenure of 6.7 years. Whilst QAN has a pool of divisional executives willing and able to assume his role, there is some uncertainty surrounding the succession plan which could affect the Group's governance rating. For instance, Andrew Pike (CEO of QAN Domestic/International) is no longer in the running due to his role in the ground-handling outsourcing decision, whilst Group Chief Customer Officer Stephanie will replace Jetstar CEO Gareth Evans at the end of CY23 upon completion of the A320neo fleet renewal and Jetstar Asia/Japan ramp-up. All existing Board members have a 4-9 year tenure range (avg. 5.3 years) and thus guided QAN's COVID challenges, with this consistency indicative of a strong management board ready to take QAN to new heights. <u>Independence</u>: All Board directors are independent non-executives to act in the best interests of shareholders. <u>Gender Diversity</u>: 37.5% of the FY22 Board are women, down from 40% in FY20-21.

Public and Inside Ownership: Public ownership of QAN is outlined in **Exhibit 23**. Material inside ownership by QAN Board and management is outlined in **Exhibit 24,** positively aligning the interests of shareholders with agents of the business. Our confidence in the QAN team is further affirmed share purchases by non-executive director Mark L'Estrange in June 2022– an increase of 15.3% of his individual ownership. QAN's $400m buyback in FY22 also provides a positive asymmetric signal of management's conviction in QAN's outlook.

INVESTMENT SUMMARY

Thesis 1 | QAN's demand environment to provide earnings upthrust

We believe the market has not accurately assessed QAN's forward passenger demand profile. It is the team's view that the market has mispriced **(1)** QAN's comparatively stronger domestic recovery vs European and US peers; **(2)** the resilience of QAN's demand to transitory operational challenges and **(3)** the step-down of QAN load factors following an FY23 release of pent-up demand.

1.1 Stronger domestic arena recovery: We believe the comparative strength of Australia's domestic recovery, on both a volume and price basis, has been underappreciated by the market. QAN stands to be the primary beneficiary of these domestic tailwinds, owing to uniquely dominant market positioning. QAN's domestic market has recovered flight volumes (96.9% of PC in Jun-22) more strongly and rapidly than similar intra-Europe (84.9% of PC) and

	FY24/25	FY24/25
	VWAP implied LF	Difference from min. historical LF
QAN Dom.	70.7%	(4.6%)
JSTR Dom.	78.8%	(4.4%)
QAN Intl.	77.1%	(3.9%)
JSTR Intl.	77.9%	(2.3%)
JSTR Asia	76.2%	(4.5%)

Source: S&P Capital IQ, SURG Analysis

Exhibit 27: Google Australian Travel Booking demand
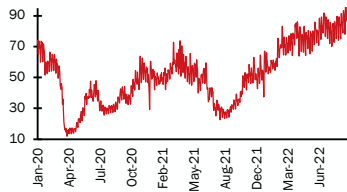
Source: Google Destination Insights

Exhibit 28: 2022 On-time Performance (% of flights within 15 min of schedule)

Source: BITRE, Eurostat

Exhibit 29: % of flights cancelled (2022)

Source: BITRE

Exhibit 30: QAN ASK and Unit Profitability Growth

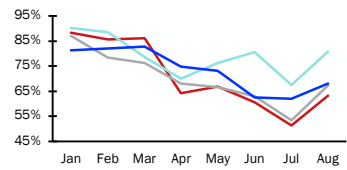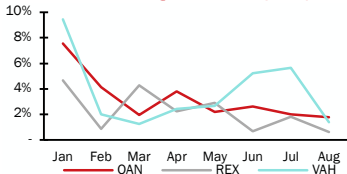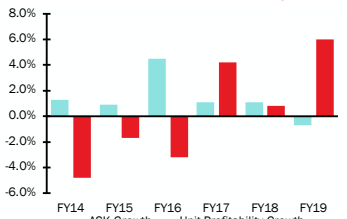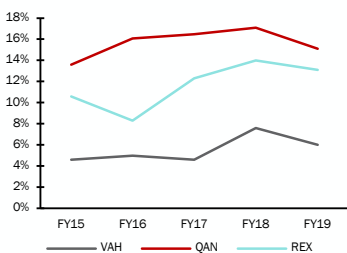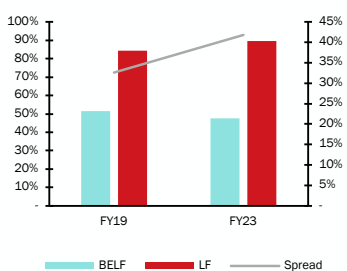*Source: Company filings, SURG Analysis*

Exhibit 31: QAN vs VAH vs REX EBITDA Margins

Source: S&P Capital IQ, SURG Analysis

Exhibit 32: Projected Load Factor Spread

Source: S&P Capital IQ, SURG Analysis

domestic USA (85.7% of PC), as analysed in **Appendix 21**. Guided by adjacent indicators, we expect this recovery to sustain: Tourism Australia forecasts FY23 domestic overnight trips as 108% of pre-COVID levels. In addition to volumes, QAN's domestic market, in which they have a 65% share, has seen the strongest recovery in price - airfares have restored more quickly in Australia (92.1% of pre-COVID by 3Q FY22), than in the US (83.4% of pre-COVID by 3Q FY22) and Europe (52% of pre-COVID by 3Q FY22 for UK – European flights). Upwards price and volume pressure, a product of strong demand and dominant market positioning, contributes to uplifted FY23 RASKs (+18.4%) and FY23/24 load factors (+5%) vs FY19. In addition to stronger demand recovery, QAN is benefited by a concentrated industry position **(Exhibit 13)** and comparatively low LCC penetration (effects of which are discussed in *Competitive Positioning*). A relative valuation analysis was conducted, comparing the relative trading multiples of QAN with European, North American and APAC peer sets, shown in **Appendix 9**. QAN is currently trading greater than 2 standard deviations below its FY15-19 average premium or discount to each geographic peer set. The mismatch of QAN's concentrated industry position, comparatively low LCC penetration and stronger passenger volume recovery, compared to current trading relative to other geographies, suggests QAN's demand environment is underappreciated by the market.

1.2 The Joe Aston effect: The market has priced QAN as if demand has not been resilient to transitory operational issues. QAN's operational challenges have been excruciatingly well-covered on slower news days at the Australian Financial Review (AFR), where it boasted 13x the coverage of Virgin throughout Sep-22. We believe the market outlook has overestimated the impact on demand of QAN's well-publicised challenges (baggage handling, on-time performance (OTP) and flight cancellations). Illustrated in **Exhibit 28**, QAN's OTP has trended in line with key competitor Virgin (95.2% correlation) and all flights across Europe (93.4% correlation). QAN's most recent data shows a strong trend back to pre-COVID levels: OTP has increased to 71% in Sep-22 (vs pre-COVID 80%), further seen in **Exhibit 28**. Our valuation expects a one-off cost-in of A$240m in FY23 ($150m in employee pay, $35m in operational disruption, $65m COVID-related), indicative of QAN's efforts to resolve these operational issues. RPKs have proved robust in spite of operational challenges, increasing from 63.2% to 96.9% of CY19 levels across Q4 FY22. While demand has remained robust, QAN's trading price has not. Following the onset of widely covered operational and customer support challenges in June, QAN's 1-month VWAP fell from $5.80 to $4.54 and has yet to fully recover. We posit this lagged share price response as a key indication of market mispricing.

1.3 Market mispricing demand drawdown: While we anticipate a significant pull-forward of demand (FY23 divisional load factor +5% vs corresponding FY16-19 maximum LF), we believe the market has overstated the magnitude of subsequent drawdown of passenger volumes following an FY23 release of pent-up demand. **(1)** Results from Google's Destination Insights platform measuring travel booking interest, a core leading indicator of travel demand, are illustrated in **Exhibit 27**. Flight booking trends, with long lead times (2-3 months domestically and 6-7 months internationally), have continued to trend upwards, supporting sustained interest in air travel. **(2)** Tourism Australia expects sustained uplift in domestic tourist nights in FY24 (+5.7% vs FY19) and FY25 (+4.3% vs FY19). **(3)** Finally, a reverse DCF analysis was conducted to quantify current market expectations of demand pull-through **(Exhibit 26)**. The current 1-month VWAP implied a group wide load factor drawdown in FY24/25 of 6.2% from current projections, notably 2.3%-4.6% below the minimum historic load factor. We believe the market is overstating the demand moderation that QAN faces, reinforced by supportive leading indicators.

Thesis 2 | QAN possesses the earnings power to beat consensus unit profitability

QAN has emerged from the pandemic a fundamentally more agile, cost-efficient airline, operating within a disciplined industry that allows it to prioritise profitability. Our FY24e EBIT margin is 42bps above consensus, reflecting our view that the market is underappreciating post-COVID unit profitability strength. Earnings power will be driven by **(1)** greater flexibility to adjust capacity due to rational competitors and a lower proportion of fixed costs **(2)** a meaningfully reduced cost base with an underappreciated focus on offsetting inflation and **(3)** medium-term unit profitability benefits from Project Winton.

2.1. QAN has more operational flexibility than ever to adjust capacity and recoup higher fuel prices. Bain Capital owned Virgin will not be pursuing a 'win at all costs' market share strategy as its intentions to IPO necessitates a track record of profits. Particularly as its publicly stated target market share of 33% was reached in Jul-22, irrational capacity expansions prior to listing are unlikely. This points to a disciplined industry with limited overcapacity driving down yields, allowing QAN to focus on recovering costs. Furthermore, QAN has variabilised its cost base, heading into a 40%+ variability vs 30% pre-COVID. Lower fixed costs alleviate pressure to spread expenses by increasing capacity. With capacity discipline positively correlated to unit profitability **(Exhibit 30)**, we expect FY23 RASK growth (+18.4% Group vs FY19) to adequately recover elevated fuel costs (+15.8% uplift in Group RASK needed), and investors to mimic Wall Street's current love for capacity discipline (Forbes, 2022). QAN's operational flexibility to weather a high-fuel cost environment materialises in forecasted FY23/FY24 EBIT margins +60bps/+42bps above FY23/24 consensus. There is further upside as our forecasts remain below FY24 Management EBIT margin targets (18% QAN Dom; 22% Jetstar Dom), with FY23 results expected to add confidence to QAN earnings potential.

2.2. QAN's dual focus on cost restructuring and inflation offsetting ensures its Recovery Plan will translate to sustainable earnings uplift. QAN has completed >90% of its Recovery Plan initiatives, making it well-placed to deliver the targeted A$1b annualised cost benefits by FY23. The Transformation playbook is tried and tested, with QAN notably surpassing its FY14-17 A$2b cost-reduction plan, and exceeding minimum pre-COVID annual targets of A$400m to offset inflation. The market is pricing in ~A$285m of cost inflation such that A$715m of Restructuring Plan benefits fall to bottom line, which we think is overlooking QAN's parallel BAU cost saving initiatives to offset inflation. Whilst we acknowledge the higher cost environment and remain conservative in our valuation by forecasting A$172m of structural cost benefit to be eroded, QAN can partially offset FY23e inflation of A$200m after having successfully renegotiated the cost of A380 engines and through cost-saving initiatives such as digitally delivering newspapers. QAN's economies of scale vs domestic peers have historically given rise to margin benefits **(Exhibit 31)**, and we think it will continue to be an outsized beneficiary of returning capacity. Our FY23e CASK (ex-fuel) of A$7.80c is 3.2% below consensus. On lower CASKs (-9.9% vs FY20), break-even load factor (BELF) has reduced from 51.6% in FY20 to 47.7% in FY23. A 100bps reduction in BELF lifts share price by +12cps, while the spread between BELF and realised load factor is 28.2% higher in FY23 vs FY19 **(Exhibit 32)**. This cements our conviction of QAN's stronger earnings power post-COVID due to structural cost savings, with an A$1.43c increase in FY23 RASK/CASK (ex-fuel) differentials vs FY19 translating into a 4.5% EBIT margin uplift.

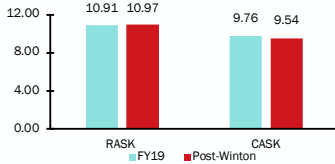**2.3 Project Winton will provide medium term unit profitability upsides.** Whilst market commentators have cast doubt on QAN's significant CAPEX profile, we believe that QAN possesses sufficient balance sheet strength to invest

5

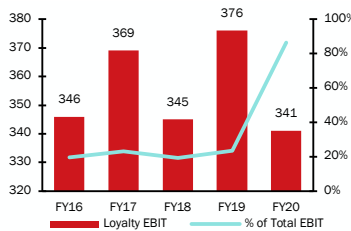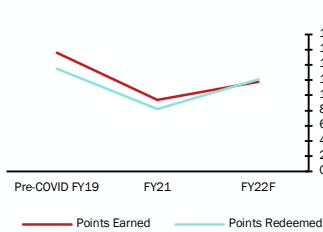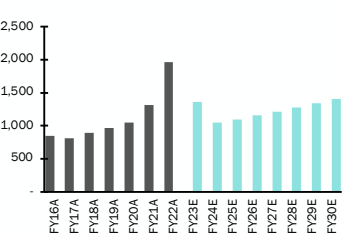in its domestic fleet renewal Project Winton: a margin-accretive investment that enhances post-COVID profitability. Whilst United Airlines, Delta Airlines and American Airlines have a comparable average fleet age of 15 years (vs QAN 14.7 years), they have significantly less net debt to EBITDA covenant headroom than QAN (FY23e 4.0x/2.8x vs QAN 1.5x). We view A$400m buyback as further signalling management confidence, with QAN emerging from COVID-19 with above-peer financial strength to revolutionise unit metrics with new narrowbodies. The A321XLR and A220-300's greater seat capacity (+15% vs B737-800 and +25% vs B717s respectively) means QAN can lower unit maintenance and airport costs whilst maximising the usage of Sydney airport peak slots. The new models bring underappreciated route optionality. QAN can entrench its competitive advantage over Virgin as A321XLRs has a 2,400km greater range than Virgin's new B737 MAX, critical for today's demand for direct flights. New 'thin' routes including Sydney-Siem Reap or Perth-Dhaka can be captured **(Exhibit 33)** where there is insufficient demand for a widebody. QAN can also increase aircraft utilisation, for instance flying domestically during the day and adding a 'back-of the-clock' night flight to South-East Asia and Bali to reach 15 utilisation hours vs 10 hours on existing B737s. Operational costs are further expected to be reduced by fuel efficiencies (A220-300 -28%; A321 -17% fuel burn per seat). With new aircrafts to deliver a 13% CASK benefit/3% RASK benefit and assuming 17% of capacity replaced **(Exhibit 34)**, Project Winton will allow QAN Group to realise a 6.9% EBITDA margin uplift vs FY19.

Thesis 3 | QAN's multiple quality revenue streams reduce cash flow risk

QAN has crafted a resilient portfolio of diverse revenue streams which provides positive cash-generative earnings to offset underperforming segments, with a combination of Loyalty attributing 14.6% and Freight 21.6% of FY22 revenue. This is characterised by **(1)** an underappreciated customer flywheel expanding its competitive moat; **(2)** increased capacity to accommodate for a permanent Australian e-commerce shift; and **(3)** elevated air freight yields from import/export activity bolstered by QAN's prime freight routes and terminal infrastructure. This has allowed QAN's 5Y beta of 1.36 to sit well below the global aviation industry average beta of 1.58. Pro forma cash flow risk is viewed to be further reduced as its Loyalty and Freight revenue composition solidifies through FY23-28.

3.1 QAN's world-class Loyalty program has a distinct competitive moat fuelled by an 'earn' and 'burn' flywheel, curating customer stickiness via a 600+ partner network. The business' diversification benefits were exemplified through the pandemic, bringing in three consecutive years of AU$1b+ gross cash revenue. Loyalty remains the only segment with positive Underlying EBIT in FY22. The flywheel operates by increasing switching costs, providing unmatched brand ecosystem engagement and driving QAN's marketing revenue from Points Earned and a greater redemption margin from more Points Redeemed ('Points Burnt'). Notably, QAN uses its attractive offerings to induce members to Burn as many Points as they Earn, where strong convergence between Points Earnt/Burnt reflects QAN's unrivalled customer participation and retention whilst not posing any working capital headwinds. QAN's focus on improving non-flight point redemption has resulted in strong FY22 alignment between 118m Points Earned and 121m Points Burnt. We forecast customers will continue to engage in a self-sustaining earn and burn cycle, fuelled by underappreciated uptake of QAN's new TripADeal offering – exemplified via a -2.2% QAN share price fall on the announcement of the earnings-accretive acquisition (24-May-22), despite it catalysing ~50% YoY run-rate growth of the QAN Holidays brand. QAN's competitive moat will be continually expanded through its Tier Accelerator program, allowing premium point tier members from competitor airlines to be fast-tracked into the 'sweet spot' Gold Status upon request, hence increasing Loyalty market share. Whilst our forecasted loyalty CAGR is conservatively below guidance across FY18-24 period (5.4% vs 7%-10% guidance), we see the flywheel accelerating at a 7.6% CAGR through FY23-30 due to increased customer stickiness. We pre-empt that QAN Loyalty will expand its member base to 14.7m members by FY24 ahead of QAN's 14.3m target, to reach 15.9m by FY28.

3.2 QAN has increased freight capacity to accommodate a domestic structural retail e-commerce shift. The market has underappreciated QAN's strategic positioning for a second e-commerce wave which we forecast will grow available freight kilometres by a 2.5% CAGR through FY24-30, increasing market share from its leading 16.4% as of FY22. QAN is positioned at the forefront of Australian e-commerce as the only airline/freighter service with domestic parcels contract with Australia Post (A$1.4b value)/Toll Group (won from Virgin in 2015) and an exclusive aircraft arrangement with Amazon. Australia's e-commerce penetration lags international peers in online spend volumes (19.3% of FY21 retail spend) and online shopping frequency (25% of Australians online shop weekly vs Korea/US at ~45% average). The COVID-accelerated 39% increase in Australian uptake of online shopping from FY19-FY22 is a bellwether for future growth as QAN continues market dominance. With Australia Post's 75% market share in B2C parcel delivery services and Amazon forecasted to reach 20% of all Australian online sales by CY26, QAN is well-placed to capture the expected doubling of online spend by FY27. QAN has also prepared its fleet, adding 3 A321PNF aircrafts (FY22) and 6 A321 freighters (+9 tonnes vs current B747-8Fs) in FY24. Despite QAN's share price rising 0.9% upon the 6 freighters' announcement, this was due to broader market movements (+0.46% ASX-200). Whilst FY22 expiry of $300m government freight assistance will reduce FY23 AFTKs by 16.2%, QAN will reach 20.1% domestic freight market share by FY28 at 1.3x FY16 AFTK levels **(Exhibit 38)**.

3.3 QAN will sustain post-pandemic freight revenue uplifts through valuable freight routes capturing Australian trade and its optimal terminal infrastructure which captures time-sensitive freight movements. Alongside 50+ international cargo destinations serviced by passenger flight belly space, dedicated 747-freighter flights create a high-value chain between the ANZ/SE Asia/North America (Appendix 24), forming its own hub-and-spoke network. Daily routes predominantly to Chinese business hubs and USA capitalise on Australia's strong agricultural export destinations (~25% of 2021 exports to China, ~28.5% to USA). With Western Sydney Airport forecasted to handle ~220,000 tonnes of freight annually, QAN's freight capacity will likely accelerate in the medium-term. QAN's ability to align itself with international trade flows will be further consolidated by longer-term importer/exporter preference for air freight over sea freight. Elevated sea freight rates will persist through FY23 (+117% Australian container shipping costs across FY20-22), but this will likely normalise by FY24. However, air freight will have increased uptake compared with pre-COVID levels where weaker sea freight reliability (port delays and congestions) and faster air freight times (-5 weeks) meet a consumer next-day delivery mindset and pent-up import/export surges as supply chain constraints ease. As such, QAN's optimal terminal infrastructure is primed to adapt to an industry-wide renewed focus on import/export timeliness and urgency. We forecast 5.1% CAGR in QAN's freight revenue across FY24-28 **(Exhibit 39)** as Australia returns to pre-COVID levels of 82% of exports carried through air freight.

FINANCIAL ANALYSIS

Profitability | QAN exits challenging periods with enhanced earnings power

Flying revenue RASKs: QAN's pre-pandemic passenger revenue 3Y CAGR of 3.6% (FY16-FY19) was underpinned by **(1)** domestic and international load factors rising from 78.0% to 81.1% and 81.3% to 85.8% **(Exhibit 40)**, respectively, stimulated by a then record-low 1.5% cash rate and buoyant household wealth; **(2)** modest domestic capacity discipline with a compressed Australian market leading to a 3Y ASK CAGR of -0.6%; and **(3)** robust
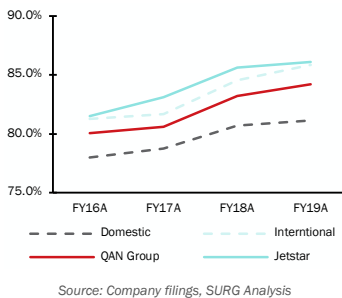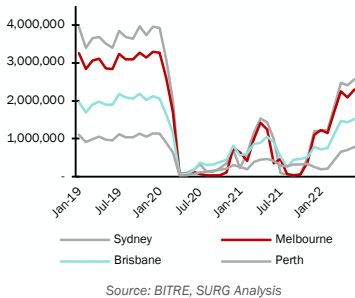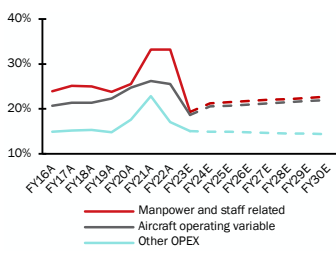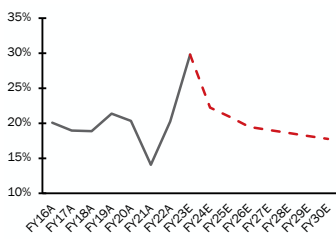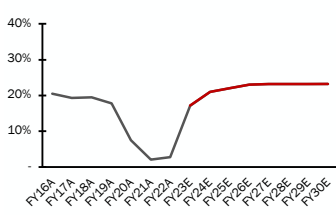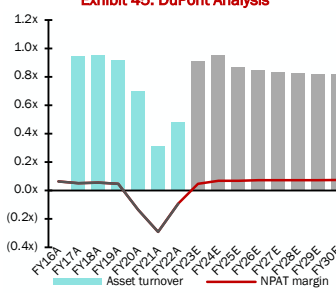
domestic 3Y CAGR yield growth of 3.4%. COVID halted flying operations with international revenue falling by -94.4% and domestic falling -42.9% in FY21 **(Exhibit 41)**. We project FY23-FY24 ASKs as a percentage of FY19 (normalised flying market benchmark) in line with IATA data on air passenger number predictions. We forecast FY23 and FY24 domestic capacity at 100.7% (QAN: 100%/Jetstar: 102%), international at 74.4% in FY23 and 100.0% in FY24 as international markets reopen. Near term load factor and yield forecasts reflect pent-up demand, with FY23 RASK uplift of 18.4% exceeding management's break-even fuel offset benchmark to preserve unit profitability against higher expected fuel costs. These factors and yields are expected to moderate across the horizon as pent-up demand normalises. Into steady state, flying revenue tapers down from 3.9% growth in FY26 and converges towards 1.4% domestically and 1.6% internationally. Forecasted RASK growth balances the underlying commoditisation of the airline industry and assumption that QAN's monopolistic position on FSC/LCC markets notches long-term share up from 61.0% in FY19 to 63.8% in FY28 following Tigerair's exit (see *Industry Analysis*).

OPEX driving CASKs and unit profitability: QAN's OPEX is comprised of labour (manpower), aircraft operating variable expenses, fuel and other overheads (S&M, technology, property etc.). Whilst QAN experienced statutory EBITDA margin expansion from 17.7% (FY16) to 19.3% (FY19) prior to COVID, this was significantly confounded by one-off gains of asset disposals and impairment reversals. A look through underlying EBITDA margin contracted by 270bps in this period due to a 16.4% uplift in fuel costs per barrel (post hedging). QAN has exited COVID with greater earnings power; including cost reductions of A$600m and A$900m realised in FY21 and FY22 which demonstrate a significant rationalisation of their cost base. These cost outs were comprised of manpower (59%), sales and marketing (10%), aircraft operating variable OPEX (6%) and other overheads (26%). On a relative basis, QAN's cumbersome cost base has seen them historically lag unit profitability of international peers, with QAN's FY12-FY19 average of 15.5c a 9.6% discount to a weighted European peer set (17.4c), 8.5% discount to US peers and 2.6% discount to APAC peers (16.0c). Unit profitability (spreads between RASK and CASK) preservation into steady state is underpinned by **(1)** a rationalised fixed cost base, down A$828m relative to FY19; **(2)** underpriced operating leverage recognised in 50bps and 80bps above consensus EBITDA margins in FY25 and FY26 driven by RASK and CASK (ex. fuel) differentials expanding by 160bps in FY24 **(Exhibit 42)**; and **(3)** steady state CASK savings of 23% derived from project Winton fleet renewal (See *Thesis 2*). Whilst the benefits of the cost reduction program largely hold, we assume some of this is lost to inflation (2.5% p.a.). QAN will also incur A$300m in one-off reopening and COVID related costs in FY23 ($150m in employee pay, $35m in operational disruption, $65m COVID-related, $60m in fleet start up), which is forecasted to be 5.1% ROE accretive as it tapers off entirely into FY25. FY23 and FY24 working capital headwinds of A$1.2b of COVID credits are on the balance sheet (15.1% of total revenue received in advance (RRIA)). This is mitigated by FY23 operating cash flows exceeding RRIA by 67.5% and an A$80m management guided credit burn run rate driving credits to A$240m in FY23 and 0 by FY24. A rationalised cost base positions QAN to reach a steady state NPAT margin of 8.0%, 350bps above FY16-FY19 averages.

Financial impact of hedging policies: QAN proactively hedges fuel exposure via a declining wedge strategy using two-year forward options and collars to provide significant near-term and tapered protection over a 24-month horizon. As at Mar-22, QAN was hedged for 100% FY22, 40% of 1H23, 30% for 2HY23 and limited hedging for FY24, which grants ample headroom to flex future capacity and pricing ahead of fuel cost increases. Due to limited liquidity in jet fuel forward markets, QAN hedges Brent and, alongside airline peers, remains exposed to a refining spread. Refining spreads rose from a 10Y historical average of A$10 to A$80 per barrel in Apr-22, driving fuel cost per ASK increases of 28.4% in FY22 to A$3.65c/ASK. This is markedly higher than the FY16-FY19 average of A$2.22c/ASK. Despite the uplift, QAN benefitted from its hedging – unit fuel costs only rose 24.8% vs a 71.4% uplift in per barrel fuel costs in FY22. Delineating these financial benefits further, US carriers such as American Airlines and Delta Airlines do not hedge any fuel exposure, and consequently absorbed 72.7% and 76.2% fuel expense increases into their cost base respectively in FY22. QAN's hedging has also contributed to less operating margin volatility (120-270bps movements) relative to North American airliners (320-610bps movements) across FY15-FY19. Looking forward, hedging benefits are expected to taper due to the declining profile of the Brent futures curve, jet fuel spreads falling (albeit elevated against historical) from A$80 in April to A$49 in Aug-22 and QAN's target 1.5% fuel efficiency targets starting in FY24 with Project Winton coming live **(Exhibit 43)**. Crucially, each marginal 10bp fuel efficiency gain annually results in a 1.8% share price impact.

Tilt towards accretive Loyalty earnings: Loyalty's operating model is underpinned by a marketing and redemption margin, through the sale and redemption of points. With unredeemed Frequent Flyer revenue contributing 42.3% of RRIA between FY17-FY19, Loyalty has bolstered QAN's liquidity position by providing a negative net working capital source of cash flow before it is recognised as revenue. Moreover, QAN's earnings mix has tilted towards Loyalty by +200bps from FY16 to FY19 which presents a continued source of QAN group margin accretion. Loyalty EBIT margins pre-COVID averaged 24.0% (FY16-FY19) **(Exhibit 44)**, markedly above group average of 9.1%. Potential 150bps run-rate margin uplift in FY24 is reinforced by managerial confidence in a 10% future loyalty EBIT CAGR. Loyalty's shift to a larger portion of revenue mix is supported by management targets of a 10-20% uplift on points earnt (marketing rev.) and 25-35% on points redeemed (redemption rev.) as leisure travel markets reopen.

Capital efficiency: QAN's ROE fell from 25.1% (FY17) to 24.1% (FY19), whilst historical ROIC declined from 20.9% (FY17) to 13.7% (FOY19). Assessing QAN's DuPont composition, these declines were underpinned by NPAT margin compression of 80bps (driven by fuel price increases) and heightened leverage demonstrated via a 1.9x asset to equity turn expansion across the period **(Exhibit 45)**. Pre-COVID ROIC (ranging from 13.7%-20.9%) remained above QAN's WACC of c.10%, implying consistent shareholder value creation. However, significant equity destruction was observed during COVID with QAN printing operating losses of A$5.4bn (19.3% statutory asset impairment) between FY20-FY22. Despite this, we view QAN's A$1bn cost reduction program (90% completed in FY22) as a source of greater earnings power post-COVID and driver of unit profitability. The A$400m buy back affirms management's conviction in future capital efficiency, supporting sustained ROIC > WACC value creation across the forecasts.

Capital management | Management have proven to be prudent stewards of capital

Sources of financing and terms: COVID tested the liquidity and credit position of airline operators; QAN passed with 'flying colours' as one of only six airlines to retain an investment grade credit rating. To bolster liquidity and refinance bonds reaching maturity, QAN conducted two AUD denominated and bank underwritten A$500m bond issuances in Sep-20 and Sep-21 respectively. Both issuances were oversubscribed, resulting in competitive pricing rates of 5.25% (BBSW+490bps) and 3.15% (BBSW+310bps), notably below the 7.5% (BBSW+490bps) cost of funding they refinanced. Oversubscription within a COVID period, characterised by an anxiety ridden lender zeitgeist, reflects the long-term durability of QAN's cash flows and low refinancing risks. 21.1% of QAN's A$2,067m term loans are unsecured, with secured loans predominantly held over aircraft and engine assets, with no financial
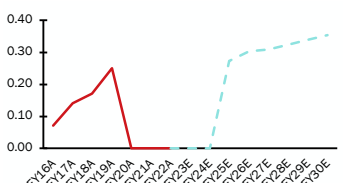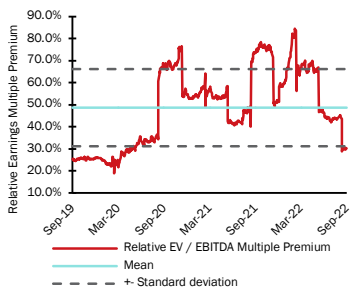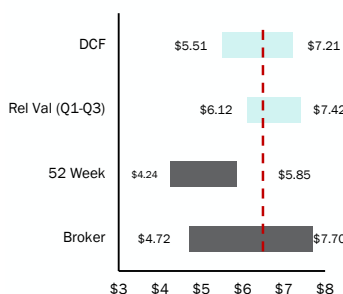
covenants on QAN's debt. QAN also holds A$1,975m in bonds with a staggered maturity profile, weighted average maturity of ~5.8 years and limited covenants. 63.5% of QAN's revolving credit facilities mature in CY22, with the remaining A$575m facility maturing in Dec-24. Recent debt market activity, particularly in the US, has displayed fervent appetite for airline financing securitised against loyalty subsidiary cash flows. In 2021, American Airlines raised US$7.5b via bonds and leveraged loans backstopped by its AAdvantage loyalty program cash flows and was priced ~500bps above LIBOR, while United Airways pledged its own loyalty cash flows within a US$5b loan underwritten in Jun-20. Hence, despite pricing risks associated with a steepened yield curve, market precedents and recent oversubscriptions demonstrate QAN's options in sourcing and pricing future debt capital competitively in existing and US debt capital markets.

Debt serviceability and credit policy framework: QAN's credit profile reflects the company's well-publicised capital management framework. QAN sets a floating net debt target in a range of 2.0x-2.5x adjusted EBIT (where 10% x ROIC = adjusted EBIT) with excess returns distributed to shareholders via buybacks and dividends. Investors have commended the centralisation of QAN's cost of capital in their framework via their "10% ROIC EBIT" benchmarking, as it explicitly pegs capital management decision making to shareholder return hurdles. QAN's net debt/EBITDA multiple compressed from 1.1x (FY17) to 0.9x (FY19), from a 36% reduction in net debt from FY14 to FY19. However, these credit levels remained above the upper bound floating leverage targeted for their respective years (0.8x/0.6x), implied by ROIC EBIT when ROIC is fixed at 10%. Gross debt/EBITDA also compressed from 1.7x (FY16) to 1.5x (FY19), whilst DSCR increased from 5.8x (FY16) to 4.5x (FY19) and ICR fell from 5.8x to 4.5x across the same period **(Exhibit 46)**. FFO/net debt, (derived from Standard and Poor's credit rating ratio), increased from 58% in FY17 to 67% in FY18. This reaffirmed QAN's BB+ S&P credit rating at the time. QAN's serviceability has been restored post COVID and confirmed with an upgrade to its Baa2 rating from Moody's Investor Services, moving from a 'negative' to 'stable' outlook. FY22 de-leveraging and credit restoration has helped QAN's net debt fall below the bottom end of its optimal debt range (of A$4.2bn-A$5.2bn). Looking forward, projects Sunrise and Winton will generate a ramped up pro-forma CAPEX profile requiring increased invested capital. Whilst gearing increases, strong unit revenue and cost benefits support higher gearing and facilitate a 1.6x FY23 Net debt/EBITDA multiple falling to 1.1x by FY25 and 0.5x in steady state, within the midpoint of QAN's 10% ROIC EBIT framework **(Exhibit 47)**.

Dividends and payout: Asymmetric balance sheet strength signals can be drawn from QAN's A$400m on market buyback announcement at FY22 results. It represents a rolling back of the A$1.4b institutional equity placement in Aug-20 that increased shares outstanding by 25%. QAN has distributed excess returns to shareholders historically - averaging a 36.7% payout ratio (FY16-FY19) and buying back 27% of SOI between FY16-FY20. Management have been effective agents of QAN, committed to their capital management framework and the distribution of excess returns when ROIC exceeds WACC. In line with their capital management framework, we forecast a convergence of QAN's payout ratio towards the FY15-FY19 blended average of Air New Zealand and Singapore Airlines (51.8%), coming online from FY24 onwards which is 10% above QAN's FY19 level. Elevated payout arises from a 200bps unlevered free cash flow margin uplift in FY25 to 4.2%, rising to 6.5% into terminal.

VALUATION

Our price target of $6.41 (22.3% premium to last close and 23.3% to 1M VWAP of $5.20) was calculated via a weighted average (70%/30%) of intrinsic valuation (DCF) and relative valuation (EV/EBITDA) methodologies. Our weighting mix reflects a balanced consideration between consensus expectations priced into the airline sector by public market investors and the idiosyncratic drivers of QAN's value.

1. Consolidated Discounted Cash Flow Model

1.1 Structure: Our two-stage free cash flow to firm (FCFF) DCF computed an intrinsic valuation of $6.07 per share, 15.8% and 16.7% premium to the last close of $5.24 and 1M VWAP of $5.20 respectively. We calculated a forecast WACC of 9.5% and terminal WACC of 8.9%, as well as triangulated a terminal growth rate of 2.5% from the median between Australia's long term GDP growth rate and 2% lower bound of the RBA's inflation target. The 6-year time horizon, through to FY28, balanced forecast accuracy with a runway to reach steady state, given **(1)** the significant impact of COVID on QAN's financial position; **(2)** decade long fleet renewal CAPEX ramp-up profile; **(3)** unlevered free cash flow converging to terminal growth rate; and **4)** ROIC and ROE converging to WACC and COE respectively. Intrinsic terminal value was calculated via a perpetuity growth methodology **(Exhibit 54)**.

1.2.1 Revenue: QAN's revenue is comprised of three segments; passenger revenue, freight revenue and loyalty revenue. Flying revenue (passenger and freight) is a function of ASKs *x* RASK (RASK = Load factor *x* Yield), whilst loyalty revenue is driven by marketing revenue + redemption revenue derived at different stages of the ~2 year weighted average earn and burn lifecycle of loyalty points. A portion of QAN's revenue is comprised of intersegment sales and is netted out as a portion of divisional revenue.

1.2.2 Passenger revenue [81% of terminal mix]: Passenger revenue is comprised of QAN and Jetstar branded domestic and international divisions. FY23 and FY24 capacity has been scheduled by QAN and explicitly guided by management as a % of FY19. Guidance denotes domestic pre-COVID capacity to be restored in FY23, implying 59.1% YoY domestic ASK growth, whilst international ASKs are to remain at 74.4%. QAN's International capacity is expected to normalize in FY24, in line with management guidance, implying ASK growth of 34.5% to restore capacity to pre-COVID levels. Specifically, capacity discipline is expected to be a key lever utilised to drive higher load factors (buoyed by pent-up demand) and in turn preserve ceteris paribus unit profitability despite heightened fuel costs elevating CASKs. FY23 RASK growth is expected to meet the 10% domestic and 20% international break-even growth required to cover rising fuel costs and widened refining margin spreads. Into the horizon, ASKs are expected to normalise to the FY16-FY19 average (post capacity war levels) and nominal revenue of A$19,073m.

1.2.3 Freight revenue [7% of terminal mix]: Freight revenue is derived primarily from the belly space of passenger planes, with a small mix recently generated from freight only planes. QAN has announced an expansion to freight only planes via the acquisition of six A321 freighters which will arrive in 2024 and 2026 to meet Australia's uplift in e-Commerce and service their A$1.4bn contract with Australia Post. We forecast 2.5% CAGR in AFTKs and index RAFTK (revenue per available freight tone kilometre) to CPI across the forecast, reaching A$1,274m in FY28.

1.2.4 Loyalty revenue [11% of terminal mix]: Loyalty revenue is recognized as two sources; marketing and redemption. Historical mix analysis implies that approximately 43% of loyalty revenue is booked as marketing (tied to points earned) and 57% as redemption (when points are redeemed/burnt). Although loyalty earnings have grown at 10% CAGR from FY12-FY19, COVID has had an impact on earn and burn dynamics that are correlated with leisure and aggregate discretionary demand. As leisure and corporate travel reopens, we utilise the midpoint of management targets to set our FY24 expectations, with 15% and 30% uplift in earn and burn growth relative to FY19 respectively. These projections are supported by a record breaking 1.2 billion points being burnt in 48 hours in August 2022 on the back of QAN releasing 50% more Classic Reward seats across its network. Into steady state,

Input	Figure
Weight Av. YTM	5.79%
Index Spreads	4.45%
P&L interest	3.91%
Cost Debt	4.44%

Source: SURG Analysis

Exhibit 53: Cost of Equity Assumptions

Input	Figure
Risk free rate	2.80%
Beta	1.36
EMRP	5.98%
Cost of Equity	10.95%

Source: SURG Analysis

Exhibit 54: DCF Output

Base Case (A$m)	
Terminal value	23,830
PV of Terminal Value	11,629
PV of Forecast Period	2,411
Enterprise Value	**14,040**
Less: Gross Debt	(5,960)
Add: Cash	3,343
Equity Value	**11,423**
Shares Outstanding	1,886
Implied Share Price	**$6.07**
Premium to Last Close	14.5%

Source: SURG Analysis

Exhibit 55: EV/EBITDA Premium Relative Valuation

	Europe	North America	Asia Pacific
Current Premium / (Discount)	(6%)	(36%)	(52%)
FY15-19 Avg. Premium / (Discount)	**23%**	**(19%)**	**(32%)**
Standard Deviation	17%	12%	5%
Comp Set Multiple	5.1x	6.6x	7.1x
Implied EV/EBITDA	**6.3x**	**5.3x**	**4.8x**
Implied Price	**$8.65**	**$7.06**	**$6.24**
Weight	30%	30%	40%

Source: Capital IQ, SURG Analysis

Exhibit 56: Risk Matrix
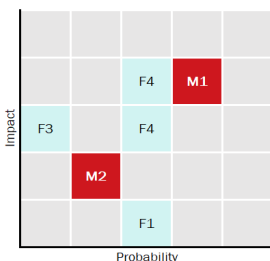
Source: SURG Analysis

Exhibit 58: RPK Sensitivity

RPK	Share price
-10%	$4.62
-5%	$5.34
0%	$6.07
+5%	$6.82
+10%	$7.57

Source: SURG Analysis

conservatism is demonstrated through forecasted yield on earned and burned points to increase with inflation and the number of members to increase with population, resulting in A$2,099m FY28 revenue.

1.3 OPEX: OPEX is comprised of Manpower, Aircraft Operating Variables, Fuel and Other SG&M. QAN's historic OPEX fluctuations have centered around oil price fluctuations. QAN's A$1bn cost reduction program (90% realized in FY22) has increased the mix of variabilisation in QAN's cost base, pegging CASK with RASK. Whilst QAN's cost reduction program has been coined "structural" by management, we recognise that these costs (e.g. manpower) will partially re-enter the business as capacity is being restored. Accordingly, our forecast indexes the variable component of each OPEX item (ex-fuel) through unit CASKs, which vary with QAN's capacity levels. We forecast fuel costs as A$5.1bn in FY23, in line with guidance, and tapering into the forecast horizon due to the declining profile of the oil forwards curve and the effect of QAN's proactive hedging policies.

1.4 CAPEX: QAN's significant future capital investment profile due to the Sunrise and Winton projects sees CAPEX increasing to ~A$3bn p.a. **Sunrise:** Order of 12x Airbus A350s with unprecedented long-haul capability (flying direct from Australia to LON/NYC), starting in from Sydney in 2025. **Winton:** domestic fleet renewal beginning FY24, with an order of 20x A321XLRs and 20x A220-300s to replace retiring Boeing 737s and 717s. Project Winton includes purchase right options for another 94 aircraft through to mid-2030s. Project IRRs of ~15% are expected via unit revenue and unit cost benefits, where these newer aircraft and engines could reduce emission by 15% and in turn, fuel cost efficiency. Management have guided to a net capital expenditure of A$2.2bn-$2.3bn in FY23 upon the delivery of 4-5x aircraft in the initial Winton order. We elevate this quantum in FY24-FY28 to account for a ramped-up CAPEX profile relative to FY23. This is driven by **(1)** QAN being permitted low upfront payments of 15% and equally staggered CAPEX across the forecast period due to its strong reputation and financial position; **(2)** Sunrise CAPEX beginning in FY24, adding marginal CAPEX commitments due to the high price of the A350-1000s; and **(3)** QAN's initial US$200m commitment to SAF likely to ramp up as 2030 ESG target deadlines come closer.

1.5 Free Cash Flow to Firm (FCFF): FCFFs have been discounted at a WACC of 9.5% in the forecast horizon and 8.9% in the terminal period. In the forecast horizon, cost of debt was calculated to be 5.0%, using a weighted mix of intrinsic existing instrument terms (e.g., weighted YTM) and comparable (credit rating risk spreads) methodologies. Cost of equity was found to be 11.1%, assuming a 3.0% risk free rate, 6.0% market risk premium and 1.4 beta. The terminal values of cost of debt and equity were 4.0% and 10.0% respectively, due to returns to a higher cash rate, average historical risk-free rate, and average historical market risk premiums. Terminal and forecast value were discounted and an implied share price was calculated **(Exhibit 54)**.

2. Relative Valuation

Our relative valuation resulted in an implied share price of $7.21, a 38.7% premium on the 1-month VWAP of $5.20. Our method utilised three geography-based trading multiple peer sets (Europe, North America and Asia Pacific), ascribing a historic premium or discount relative to QAN when comparing the median EV/EBITDA of each peer set. Peer sets were bucketed into geographies to reflect reasonably homogenous industry drivers across the aforementioned regions, including common aviation regulations, end-market demographics and upstream suppliers (airports). We felt these geographies therefore had similar underlying drivers of growth, margin and risk, where geographic dissonances were captured in persistent historic premiums and discounts relative to QAN.

Comparable selection: In the absence of an ASX-listed direct competitor, we sought to capture the risk, growth and margin profiles of QAN with global peers. With limited international peers at QAN's scale, the set consisted of predominantly full-service airline groups with significant LCC holdings, matching the Group's 70/30 split between FSC QAN and LCC Jetstar. As QAN's market position domestically is unparalleled, peers with strong local share were preferred to reflect this market power. Peer selection was quantitatively filtered for peers with low double digit FY23 EBITDA margins, expanding to ~20% FY23-25e EBITDA margins and mid-teens FY23-25e revenue CAGRs.

Historical premium / discount: Owing to a combination of local equity market and airline industry forces, QAN has traded with a consistent multiple difference to global peers. To ensure the validity of comparison, multiples were adjusted to reflect systematic differences in trading conditions between the ASX and global peer sets, by the application of an CY15-19 historic multiple **(Exhibit 55)**. Geographical segmentation best captured similar regulations, flight patterns, market factors and end-market profiles of each region. CY15-19 was deemed to best reflect the forward outlook of the industry by excluding **(1)** the COVID pandemic, **(2)** QAN-Virgin price war (2010-2014), **(3)** Euro-debt crisis (2011-2012) and **(4)** American Airlines Bankruptcy (2011) impacts on multiples. In valuation, we conservatively assume that QAN's growth, profitability or risk profiles have not advanced relative to global peers. As discussed in *Thesis 1.1*, this conservative assumption leaves QAN with further upside.

Multiple selection: EV/EBITDA (1-yr forward) was ascribed a 100% in the relative valuation. Applying adjusted multiples to a forward group EBITDA figure of $2,943m yields an implied share price of $7.21, with 30%/30%/40% weighting towards Europe/North America/Asia Pacific buckets respectively. A forward EV/EBITDA multiple was used for 4 main reasons. **(1)** Upon introduction of AASB-16, operating leases (aircraft leasing expense) and depreciation (aircraft ownership expense) are both reflected below EBITDA. EBITDA therefore is not affected by differing aircraft ownership and leasing patterns, an important characteristic to assess the underlying business quality. **(2)** EBITDA is well-regarded as a cash flow proxy, unaffected by deviations in D&A accounting practices between airlines from 11 countries. **(3)** Forward figures are better aligned with valuation focus on future cash flows. **(4)** COVID responses saw a drastic deviation in capital structure as airlines initially levered up, before engaging in balance sheet repair strategies. We anticipate continued capital structure noise in the medium-term and as such, have utilised EV/EBITDA, as opposed to more sensitive equity multiples. EV values were adjusted to account for operating leases, as per AASB-16. 2-yr and 3-yr forwards were not utilised due to inconsistent data availability.

Relative positioning of QAN: As depicted in Appendix 9, QAN is trading at a discount to peers, between 1 and 2 standard deviations below historical levels. We anticipate QAN's improved domestic positioning, ability to capture international routes, unit profitability advantages and strengthened freight business should have narrowed the discount on APAC and North American peers and strengthened the premium over European peers. This suggests a market underappreciation of QAN's improved business quality and operating conditions relative to its international peers. We expect QAN's comparatively improved earnings power to deliver above-expectation earnings results, catalysing a relative trading readjustment at least to historical levels, and very likely beyond.

RISKS

[V1] Valuation | Sensitivity & Scenario Analysis

A scenario analysis was conducted to assess key drivers of QAN's share price, such as load factors/yield/market share in different macroeconomic climates (Appendix 14). Our bull ($7.32) and bear ($4.84) prices reinforce our BUY recommendation. Further valuation assumptions were flexed in sensitivity and Monte Carlo analyses to test our recommendation's robustness (Appendix 13, Appendix 15), including Brent prices as a key driver of CASK.

Exhibit 59: FY23 Crude Futures/Refining Margin Sensitivity

	Brent Price (US$/bbl)				
Refining Margin	73	82	91	100	109
29	$6.80	$6.54	$6.28	$6.02	$5.76
33	$6.69	$6.43	$6.17	$5.91	$5.65
37	$6.59	$6.33	$6.07	$5.81	$5.55
40	$6.48	$6.22	$5.96	$5.70	$5.44
44	$6.38	$6.12	$5.86	$5.60	$5.34

Source: SURG Analysis

Exhibit 60: FY23/24 Group Capacity Sensitivity (% of 2019)

Group Capacity	Share Price
90%	$5.08
93%	$5.58
95%	$6.07
98%	$6.57
100%	$7.07

Source: SURG Analysis

Exhibit 61: NSW Monthly Case Numbers and SYD Airport Passenger Movements
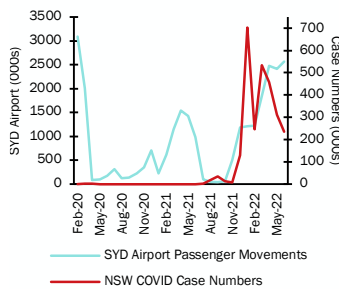
Source: NSW Government. SURG Analysis

Exhibit 62: FY23-25e Manpower Expense Sensitivity

Manpower	Share Price
-10%	$6.77
-5%	$6.42
0%	$6.07
+5%	$5.73
+10%	$5.38

Source: SURG Analysis

Exhibit 63: Forecast Horizon Yield Growth Sensitivity

Yield Growth	Share Price
1.80%	$5.76
1.90%	$5.92
2.00%	$6.07
2.10%	$6.23
2.20%	$6.39

Source: SURG Analysis

Exhibit 64: FY25 Qantas/Jetstar Domestic Market Share Sensitivity

	Qantas Dom FY25				
Jetstar Dom FY25	31%	35%	38%	42%	46%
18%	$4.23	$5.01	$5.79	$6.56	$7.34
20%	$4.38	$5.15	$5.93	$6.71	$7.48
22%	$4.52	$5.30	$6.07	$6.85	$7.63
24%	$4.67	$5.44	$6.22	$7.00	$7.77
26%	$4.81	$5.59	$6.36	$7.14	$7.92

Source: SURG Analysis

Exhibit 65: Marketing Cost Growth vs Qantas Market Share Sensitivity

	Marketing Cost Growth				
Qantas Dom FY25	3.1%	2.9%	2.6%	2.3%	2.1%
31%	$4.04	$4.28	$4.52	$4.76	$4.99
35%	$4.82	$5.06	$5.30	$5.53	$5.77
38%	$5.59	$5.84	$6.07	$6.31	$6.55
42%	$6.37	$6.61	$6.85	$7.09	$7.32
46%	$7.14	$7.39	$7.63	$7.86	$8.10

Source: SURG Analysis

[M1] Market Risk | Turbulence of macroeconomic downturn subduing demand

QAN is a procyclical high beta stock (β = 1.36) that would underperform in a recession scenario. If macroeconomic indicators continue to soften, this could lead to (1) a weaker demand backdrop, particularly for long-haul international flights given the higher cost of overseas leisure trips (1.8x domestic trips) and (2) increased price sensitivity as interest rates cut into household budgets, resulting in preference for mid-market or LCCs. **Valuation Impact:** a 10% reduction in FY23-24 RPK to 79% of FY19 levels (driven by 5% decrease in load factor/capacity) reduces DCF share price by 31.4% to $4.62 **(Exhibit 58). Mitigant: (1)** QAN's passenger volume in previous downturns (i.e., GFC) was relatively resilient with no more than 10% of traffic disrupted for <6 months. Current macroeconomic conditions are differentiated by the low unemployment levels and pent-up demand (*see Industry Overview*). **(2)** With a lower fixed-cost base post-restructuring, strong market positioning and a disciplined Virgin, QAN has greater flexibility to adjust capacity for margin preservation in response to a demand shock. **(3)** QAN's mix of business travel which is 60% skewed to government, fly-in/fly-out and construction workers will be less disrupted by a macroeconomic slowdown. **(4)** In weaker economic climates with unfavourable FX rates, Australians have typically downgraded travel plans as opposed to cancelling altogether. LCCs are hence less cyclical than FSCs, with Jetstar well-placed to capture demand for cheaper flights, especially upon Tiger's exit.

[M2] Market Risk | Persistently elevated fuel prices

Although FY23 Brent Crude price risk is 75% hedged, QAN does not hedge jet fuel exposure and is exposed to higher crack spreads. Global jet fuel prices rose more than 70% during the first 6 months of 2022, with refining margins reaching a record-high of US$80/bbl in Apr-22 (vs historical average of US$10/bbl). This was due to tight supply conditions amidst sanctions on Russian distillates and global underinvestment in refining capacity. Given fuel costs represent 26% of OPEX, high fuel prices that cannot be recouped through fares will hinder profitability. **Valuation Impact:** a 10% increase in FY23 refining margin/crude price reduces share price by 13.3% to $5.34 **(Exhibit 59).** **Mitigant: (1)** The jet fuel supply crunch is easing as refining supply has rebounded globally: the IEA expects Q3 CY22 to be the first quarter in two years where the supply of refinery products surpasses demand. Refining margins have already retreated to $49 in Aug-22, down 39% from Apr-22, whilst jet fuel price also retreated by 28% in early August from its recent peak. **(2)** We assume QAN can offset elevated fuel costs through reducing capacity and increasing airfares (+18.4% Group RASK vs FY19). **(3)** QAN has superior hedging compared to competitors (see *Financial Analysis*), and hence are in a relatively better position compared to other global airline operators.

[F1] Firm Risk | New COVID-19 variant outbreak

A 'Black Swan' event such as a new variant outbreak may lead to deteriorating travel confidence and hinder QAN's ASK recovery to pre-COVID levels, where safety concerns and containment policies would dampen mobility. **Valuation Impact:** 5% reduction in FY23/24 capacity to 90% of FY19 reduces price by 16.3% to $5.08 **(Exhibit 60).** **Mitigant:** one notable shift in the global landscape is that the link between COVID-19 infection rates and air traffic has become less linear **(Exhibit 61)**, particularly given the high level of vaccination in key QAN markets such as Australia (84.8%) and New Zealand (81.3%). With the notable exception of China, countries have largely abandoned a 'Zero-COVID' approach, suggesting that disruptive border closures are unlikely in the future.

[F2] Firm Risk | Disruptive employee disputes

Amidst an industry-wide staff shortage from Mar-22 as capacity ramped up faster than anticipated, QAN is facing backlash from existing employees. Its currently negotiated Enterprise Bargaining Agreement has been protested by labour unions (*see ESG*). QAN's resetting of its cost base reduced FTEs by a third, leading to extensive negative press coverage on a supposedly understaffed, high-pressure work environment. An escalation of employee tensions could **(1)** lead to further industrial action that disrupts the Group's day-to-day operations **(2)** increase labour attrition **(3)** further damage QAN's reputation as an employer, hence making it more difficult to recruit in an already tight labour market and **(4)** force QAN to offer higher incentives to attract and retain employees. **Valuation Impact:** A 10% increase in FY23-25e manpower expenses growth reduces our target price by 11.44% to $5.38 **(Exhibit 62).** **Mitigant: (1)** Unions have given assurance that they will not harm the public; whenever a stoppage occurs, 'alternative labour provisions will be provided.' **(2)** 30 EBAs have already been signed, with 5000 employees agreeing to the terms. A one-off $5000 staff bonus is a further incentive to signing, with terms stipulating that agreement must be made within 9 months. **(3)** Despite negative publicity, QAN received 25,000 job applications for 2,500 recently advertised roles: desire to work for QAN is greater than what the media is portraying.

[F3] Firm Risk | Increased competitive intensity

Australia's aviation policies favour liberal rights of entry. QAN's competitors include government-controlled offshore airlines which increased capacity pre-COVID. Competition may also increase with new entrants Bonza/Rex and the creation of alliances between airlines (e.g., Virgin's codesharing agreement with United Airlines). Rex has expanded its 737 fleet from 6 to 30 in a bid to service the Golden Triangle, whilst Virgin intends to grow its B737 fleet by 50% to 88 in 2023. Aggressive pricing and/or capacity uplift by competitors seeking to gain market share can adversely affect the QAN's yield performance. **Valuation impact:** A 10% reduction in forecast horizon yield growth reduces our share price by 5.10% to $5.76 **(Exhibit 63). Mitigant: (1)** In the short-run, competition will remain rational given labour shortages and high fuel prices. International operators including US airlines are slow to reinstall capacity due to operational constraints and delayed Boeing aircraft deliveries. **(2)** Limited slots of 80 aircraft movements/hr at SYD airport is a structural barrier to entrant expansion given incumbents are entitled to slots from a previous scheduling season. **(3)** Bonza's proposed routes suggests direct competition on just 2.7% of Jetstar's capacity, whilst QAN's deployment flexibility, network and loyalty program are key bulwarks (i.e., Business loyalty program well-entrenched on the Golden Triangle, Rex withdrew from 7 regional routes in May-22 citing competitive pressures from QAN). **(4)** The continuation of a 'light-handed' approach to airport regulation post 2019 Productivity Inquiry suggests that fees of the largest airports will continue to be prohibitive for emerging carriers such as Bonza and Rex, the latter withdrawing from the SYD-CBR route in May-22 partly due to Sydney Airport charges.

[F4] Firm Risk | Further reputational decline

Since Mar-22, QAN has been scrutinised by the media for poor operational performance, including late flights and mishandled bags. The staff cuts and outsourcing of ground-handling have also been criticised as a 'race to the bottom', demoralising workers and raising concerns about safety standards. Reliability and customer service issues are key priorities for QAN as a premium airline, and the loss of brand preference will affect its market share. **Valuation Impact:** A 10% reduction in FY25 QAN Domestic market share and 10% increase in marketing-related expenses to boost brand perception reduces share price by 16.7% to $5.06. **Mitigant: (1)** QAN has hired 1500 more employees in cabin crew, customer service and engineering while baggage handling suppliers have boosted their workforce by 25%. With a doubled contact centre and +10% more employees on reserve in critical workgroups, QAN is well-placed to further improve operational performance to reach 2019 levels by Oct-22. **(2)** The media has overblown safety concerns of outsourcing ground-handling. QAN had outsourced 55 of 65 Australian ports without intense media criticism prior to COVID-19, and the decision made during the pandemic was to outsource the remaining 10 – including to Dnata and Swissport that have already worked for QAN and other airlines.

APPENDIX 1: GLOSSARY

Acronym	Definition	Acronym	Definition
AFTK	Available freight tonne kilometres	LTIP	Long-Term Incentive Plan
ATSI	Aboriginal and Torres Strait Islanders	OTP	On-time performance
BB MSCI	Bloomberg measure of socially responsible investing	RAFTK	Revenue per available freight tonne kilometre
CASK	Cost per available seat kilometre	RASK	Revenue per available seat kilometre
GHG	Greenhouse gas	RAP	Reconciliation Action Plan
IATA	International Air Transport Association	RPK	Revenue passenger kilometres
LCC	Low-cost carrier	STIP	Short-Term Incentive Plan

APPENDIX 2: INCOME STATEMENT

Period / Income Statement (A$m)	FY16A	FY17A	FY18A	FY19A	FY20A	FY21A	FY22A	FY23E	FY24E	FY25E	FY26E	FY27E	FY28E	FY29E	FY30E
Revenue															
Net passenger revenue	13,961	13,857	14,944	15,696	12,183	3,766	5,951	15,338	16,565	17,119	17,792	18,450	19,073	19,655	20,192
Net freight revenue	850	808	895	971	1,045	1,316	1,963	1,355	1,046	1,099	1,154	1,213	1,274	1,339	1,406
Other income	1,389	1,392	1,289	1,299	1,029	852	1,194	1,469	1,808	1,877	1,948	2,022	2,099	2,178	2,261
Total group net revenue	**16,200**	**16,057**	**17,128**	**17,966**	**14,257**	**5,934**	**9,108**	**18,162**	**19,419**	**20,094**	**20,894**	**21,684**	**22,445**	**23,172**	**23,860**
Expenditure															
Manpower and staff related	(3,865)	(4,033)	(4,291)	(4,268)	(3,646)	(1,970)	(3,024)	(3,583)	(4,344)	(4,570)	(4,825)	(5,088)	(5,359)	(5,637)	(5,922)
Aircraft operating variable	(3,346)	(3,436)	(3,653)	(4,010)	(3,520)	(1,555)	(2,328)	(3,916)	(4,286)	(4,429)	(4,585)	(4,744)	(4,906)	(5,072)	(5,240)
Fuel	(3,250)	(3,039)	(3,232)	(3,846)	(2,895)	(835)	(1,848)	(4,941)	(4,247)	(4,111)	(3,958)	(3,990)	(4,069)	(4,144)	(4,214)
Depreciation and amortisation	(1,224)	(1,382)	(1,528)	(1,996)	(2,045)	(1,929)	(1,801)	(1,491)	(1,849)	(1,994)	(2,117)	(2,243)	(2,369)	(2,494)	(2,616)
Share of net profit / loss of investments accounted for under the equity method	0	(7)	15	23	(53)	(129)	(126)	0	0	0	0	0	0	0	0
Impairment / reversal of impairment of assets and related costs	0	0	0	39	(1,456)	(270)	(35)	0	0	0	0	0	0	0	0
Net gain on disposal of assets	0	0	0	225	7	26	692	0	0	0	0	0	0	0	0
Non-cancellable aircraft operating lease rentals	(461)	(356)	(272)	264	(1,449)	(244)	657	0	0	0	0	0	0	0	0
De-designation of fuel and foreign exchange hedges	0	0	0	0	(571)	33	22	0	0	0	0	0	0	0	0
Redundancies and related costs	0	0	0	(65)	(565)	(297)	(5)	0	0	0	0	0	0	0	0
Other excluding impairment of specific assets	0	0	0	(2,594)	(1,950)	(1,058)	(1,545)	0	0	0	0	0	0	0	0
Other	(2,411)	(2,434)	(2,633)	(2,659)	(2,515)	(1,355)	(1,550)	(2,675)	(2,527)	(2,518)	(2,587)	(2,658)	(2,731)	(2,805)	(2,882)
Total expenditure	**(14,557)**	**(14,687)**	**(15,594)**	**(16,492)**	**(16,694)**	**(7,984)**	**(9,998)**	**(16,605)**	**(17,252)**	**(17,622)**	**(18,071)**	**(18,723)**	**(19,434)**	**(20,151)**	**(20,873)**
Statutory EBIT	**1,643**	**1,370**	**1,534**	**1,474**	**(2,437)**	**(2,050)**	**(890)**	**1,558**	**2,167**	**2,472**	**2,822**	**2,961**	**3,011**	**3,021**	**2,987**
Finance costs															
Finance income	65	46	48	47	33	20	17	78	132	87	98	109	109	103	94
Finance costs	(284)	(235)	(230)	(329)	(304)	(321)	(318)	(428)	(537)	(545)	(604)	(645)	(591)	(531)	(470)
Net finance costs	**(219)**	**(189)**	**(182)**	**(282)**	**(271)**	**(301)**	**(301)**	**(350)**	**(405)**	**(458)**	**(506)**	**(536)**	**(483)**	**(429)**	**(376)**
Statutory EBT	**1,424**	**1,181**	**1,352**	**1,192**	**(2,708)**	**(2,351)**	**(1,191)**	**1,208**	**1,762**	**2,014**	**2,316**	**2,425**	**2,528**	**2,592**	**2,611**
Tax															
Tax expense	(395)	(328)	(399)	(352)	744	623	331	(362)	(528)	(604)	(695)	(728)	(758)	(778)	(783)
Statutory NPAT	**1,029**	**853**	**953**	**840**	**(1,964)**	**(1,728)**	**(860)**	**846**	**1,233**	**1,410**	**1,621**	**1,698**	**1,770**	**1,814**	**1,828**

Period Balance Sheet (A$m)	FY16A	FY17A	FY18A	FY19A	FY20A	FY21A	FY22A	FY23E	FY24E	FY25E	FY26E	FY27E	FY28E	FY29E	FY30E
Current assets															
Cash and cash equivalents	1,980	1,775	1,694	2,157	3,520	2,221	3,343	5,646	3,725	4,180	4,689	4,655	4,401	4,041	3,576
Receivables	795	784	840	1,101	522	584	1,111	945	1,011	1,046	1,088	1,129	1,168	1,206	1,242
Other financial assets	229	100	474	334	216	176	641	303	323	335	348	361	374	386	397
Inventories	336	351	351	364	306	279	269	507	542	561	584	606	627	647	666
Assets classified as held for sale	17	12	118	1	58	1	1	0	0	0	0	0	0	0	0
Income tax receivable	0	0	0	0	137	0	0	0	0	0	0	0	0	0	0
	101	97	161	231	193	169	268	157	168	173	180	187	194	200	206
Total current assets	**3,458**	**3,119**	**3,638**	**4,188**	**4,952**	**3,430**	**5,633**	**7,558**	**5,769**	**6,295**	**6,889**	**6,938**	**6,764**	**6,481**	**6,088**
Non-current assets															
Receivables	134	123	110	77	124	101	50	121	129	134	139	144	149	154	159
Other financial assets	46	43	112	184	139	185	199	101	108	112	116	121	125	129	133
Investments accounted for under the equity method	197	214	222	217	59	57	57	57	57	57	57	57	57	57	57
Property, plant and equipment	11,670	12,253	12,851	12,776	11,726	10,787	10,224	11,054	11,929	12,780	13,625	14,462	15,289	16,104	16,904
Right of use assets	0	0	0	1,419	1,440	1,109	957	1,725	1,864	1,949	2,047	2,147	2,244	2,340	2,434
Intangible assets	909	1,025	1,113	1,225	1,050	849	778	1,149	1,229	1,272	1,322	1,372	1,420	1,466	1,510
Deferred tax assets	39	0	0	0	167	675	853	0	0	0	0	0	0	0	0
Other	252	444	601	449	369	687	902	469	501	519	540	560	580	598	616
Total non-current assets	**13,247**	**14,102**	**15,009**	**16,347**	**15,074**	**14,450**	**14,020**	**14,677**	**15,818**	**16,823**	**17,846**	**18,863**	**19,865**	**20,850**	**21,812**
Total assets	**16,705**	**17,221**	**18,647**	**20,535**	**20,026**	**17,880**	**19,653**	**22,235**	**21,587**	**23,118**	**24,735**	**25,801**	**26,629**	**27,330**	**27,900**
Current liabilities															
Payables	1,986	2,008	2,220	2,366	2,351	1,813	2,474	2,311	2,471	2,557	2,658	2,759	2,856	2,948	3,036
Revenue received in advance	3,525	3,744	4,018	4,414	2,784	3,277	5,863	4,417	4,536	4,694	4,880	5,065	5,243	5,413	5,573
Interest-bearing liabilities	441	433	404	610	868	969	669	1,006	799	824	840	810	760	699	630
Lease liabilities	0	0	0	459	524	383	384	432	569	633	700	737	762	781	794
Other financial liabilities	203	69	34	89	238	17	67	108	115	119	124	129	133	138	142
Provisions	873	841	860	1,080	1,539	1,136	1,101	983	1,051	1,088	1,131	1,174	1,215	1,255	1,292
Liabilities classified as held for sale	0	0	64	0	0	0	0	0	0	0	0	0	0	0	0
Total current liabilities	**7,028**	**7,095**	**7,600**	**9,018**	**8,304**	**7,595**	**10,558**	**9,257**	**9,541**	**9,914**	**10,334**	**10,674**	**10,969**	**11,234**	**11,466**
Non-current liabilities															
Payables	0	0	0	0	99	44	0	0	0	0	0	0	0	0	0
Revenue received in advance	1,521	1,424	1,446	1,466	2,256	2,154	2,066	1,656	1,701	1,760	1,830	1,899	1,966	2,030	2,090
Interest-bearing liabilities	4,421	4,405	4,344	4,527	5,825	5,861	5,291	9,475	7,519	7,756	7,908	7,628	7,156	6,586	5,932
Lease liabilities	0	0	0	1,293	1,318	1,016	888	1,107	1,459	1,622	1,794	1,891	1,955	2,003	2,035
Other financial liabilities	61	56	25	48	47	5	246	52	55	57	59	62	64	66	68
Provisions	414	348	367	475	651	689	794	432	462	478	497	516	534	551	567
Deferred tax liabilities	0	353	910	694	0	0	0	0	0	0	0	0	0	0	0
Total non-current liabilities	**6,417**	**6,586**	**7,092**	**8,503**	**10,196**	**9,769**	**9,285**	**12,722**	**11,196**	**11,673**	**12,089**	**11,995**	**11,674**	**11,236**	**10,692**
Equity															
Issued capital	3,625	3,259	2,508	1,871	3,104	3,186	3,186	3,186	3,186	3,186	3,186	3,186	3,186	3,186	3,186
Treasury shares	(50)	(206)	(115)	(152)	(51)	(18)	(8)	(408)	(408)	(408)	(408)	(408)	(408)	(408)	(408)
Reserves	(220)	12	479	(173)	432	649	649	649	649	649	649	649	649	649	649
Accumulated losses / retained earnings	(100)	472	1,080	1,181	(1,357)	(3,087)	(4,024)	(3,178)	(2,584)	(1,904)	(1,122)	(302)	551	1,427	2,308
Equity attributable to the members of Qantas	**3,255**	**3,537**	**3,952**	**3,011**	**1,523**	**513**	**(197)**	**249**	**843**	**1,523**	**2,305**	**3,125**	**3,978**	**4,854**	**5,735**
Non-controlling interests	5	3	3	3	3	3	7	7	7	7	7	7	7	7	7
Total Equity	**3,260**	**3,540**	**3,955**	**3,014**	**1,526**	**516**	**(190)**	**256**	**850**	**1,530**	**2,312**	**3,132**	**3,985**	**4,861**	**5,742**
Total liabilities and equity	**16,705**	**17,221**	**18,647**	**20,535**	**20,026**	**17,880**	**19,653**	**22,235**	**21,587**	**23,118**	**24,735**	**25,801**	**26,629**	**27,330**	**27,900**
Check	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*

Historical flying revenue by brand (A$m)

— Qantas revenue — Jetstar revenue

Historical flying revenue mix by segment (A$m)

— Total domestic — Total International

Historical net revenue mix (A$m)

■ Net passenger revenue ■ Net freight revenue
■ Loyalty/Other revenue

Historical division capacity (ASKs)

■ Total domestic ■ Total International

Historical domestic capacity by brand (ASKs)

■ Qantas Domestic ■ Jetstar Domestic

Historical international capacity by brand (ASKs)

■ Qantas International ■ Jetstar International
■ Jetstar Asia

1. Passenger revenue

Capacity (ASKs)	**Domestic:** Capacity schedules for FY23 and FY24 are guided by management, with FY25-FY28 ASK growth driven by **(1)** QAN and JET exit domestic market share of 42.0% and 24.1% respectively; and **(2)** 0.5% domestic market ASK growth on FY16-FY19 average total domestic market capacity, reflecting a rational ceiling capacity (BITRE, n.d.). **International:** FY23 and FY24 schedules are also guided by management, with market share assumed to remain at long term averages (pre-Covid) with FY25-FY28 ASK growth growing at 3% (as new routes come online via long haul flight adoption – see Projects Winton and Sunrise) and tapers to 1.8% into the terminal period.
Load Factors	**FY23 group** load factors remain elevated 88.9% (JET: 91.4% and QAN: 86.1%), as pent-up demand increases revenue passenger kilometres (RPK) as a % of ASKs. In **FY24**, this decreases by 680bps, accounting for numerous factors including **(1)** macro cycle turning due to higher rates; **(2)** post-pent up demand normalisation; and **(3)** supply returning to >100% of FY19 levels reducing supply and demand gap. This normalises to reach the FY16-FY19 average load factor across into terminal period (Domestic: 79.2% and International: 83.3%).
Yields	**FY23** yields are expected to be elevated as a result of the pass on fuel costs to customers, strength of household balance sheets and pent-up demand/limited supply. This results in RASK uplift on 2019 levels of 8.4% domestically and 18.4% internationally, meeting the break-even uplift requirement to cover fuel costs. Yield normalise across the forecast period and are indexed to inflation into terminal.

2. Other revenue

Freight	**Average freight tonne kilometres** (AFTKs): normalise against FY22 highs where seaborne freight costs elevated over 400% are expected to taper and render air freight less attractive vs sea on a cost front. Expected to grow at 2.5% per annum buoyed by population growth and changing e-commerce behaviours (Thesis 3). **Yields:** Indexed to inflation across the period with conservatism assuming QAN do not exercise pricing power
Loyalty	Appendix 16 outlines the economics of earning and burning points which our forecast assumptions reflect. Two assumptions underpin our granular build up, a two-year weighted average lifecycle of points and implying redemption revenue from the previous year's revenue received in advanced (RRIA) related to loyalty quantum. **Marketing revenue:** booked at earning of points; <u>price</u>: driven by $4.60 in revenue per 1,000 point earnt (based on FY19 one off numbers provided by management) indexed to CPI across forecast; <u>volume</u>: FY24 benchmarked on midpoint of 10%-20% management guidance on FY19 and indexed to population growth into steady state. **Redemption revenue:** booked at burning of points; <u>price</u>: driven by $6.0 in revenue per 1,00 points earnt (FY19 numbers) indexed to CPI across forecast; <u>volume</u>: FY24 benchmarked on midpoint of 25%-35% management guidance growth on FY19 and indexed to Australian population growth into steady state.
Eliminations	**Intersegment sales and corporate** were assumed to remain at FY16-FY19 average levels in **FY23** of 6.1% for flying revenue and 12.9% for loyalty - stepped up by 20bps per annum across period as loyalty mix increases.

3. Operating expenses

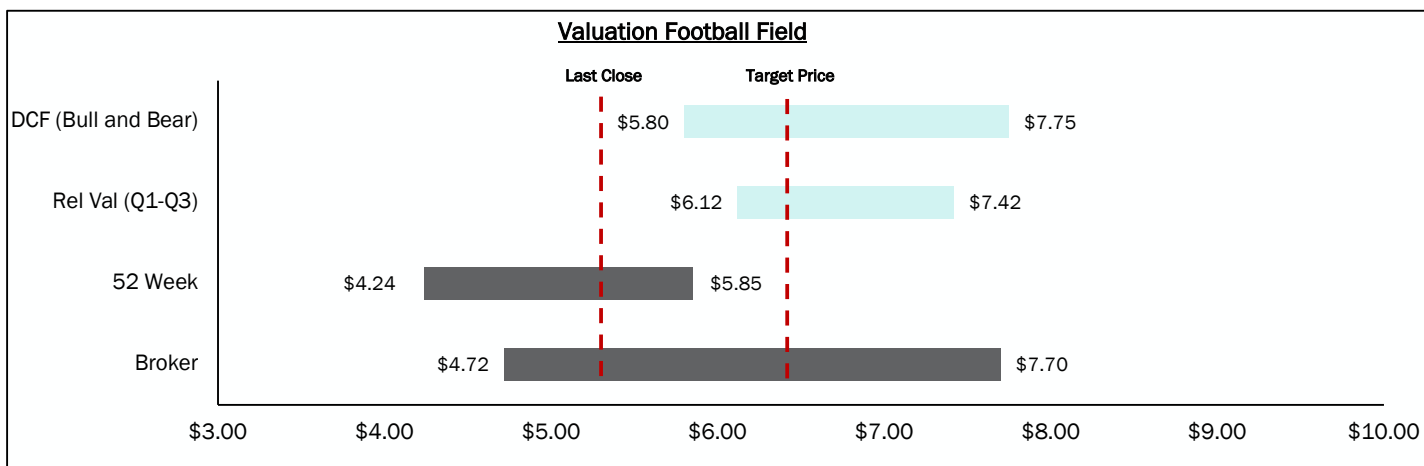|	
Labour, Aircraft Operating Variable (AOV) and Other Costs	**A$1b cost out program** forecasted explicitly with $590m in manpower, $250m in other (IT, marketing, property etc.) and $60m in AOV. We forecast $172m of the structural cost out to be lost to inflation in FY23. **FY24-FY28**: costs are built bottoms up via individual cost item variable CASKs and fixed costs which grow with inflation across the period. Reduced fixed costs result in significant **operating leverage** as capacity comes back online resulting in a forecast 340bps terminal EBIT margin expansion vs FY16 with our FY25 EBITDA margin 40bps above consensus.
Fuel	QAN proactively hedges fuel exposure via a 24-month declining wedge strategy but remains exposed to a refining spread due to illiquidity in jet fuel future markets. **1) Fuel efficiency:** using historical we implied an average ~215 barrels of crude oil per million ASKs, which 1.3% p.a. across the forecast due to increase SAF usage and Winton planes being 30-40% more fuel efficient. **2) Oil prices:** we forecast our unit oil cost for QAN utilising the Brent crude futures markets to imply a forward curve of differing future maturities. **3) Jet fuel spreads:** we assume record high FY22 refining spreads of ~$80 US/bbl revert towards historical spread of $9 US/bbl in FY25. **4) Hedging costs:** net hedging benefits (offsetting premium and into wing

	costs) was implied utilising the implied realised cost, post hedging and FX conversions for fuel which came close to parity. We forecast this to continue with costs netting out benefits (including into wing costs) and utilise forward AUD/USD futures contracts when calculating realised barrel costs. QAN hedges FX exposure through its declining wedge strategy. **5) Forecasts:** FY23 fuel expenses are forecasted to reach $5.0b in line with management guidance, tapering to $4.1b in FY28 on a larger capacity base as a result of the aforementioned drivers.

4. Balance sheet assumptions
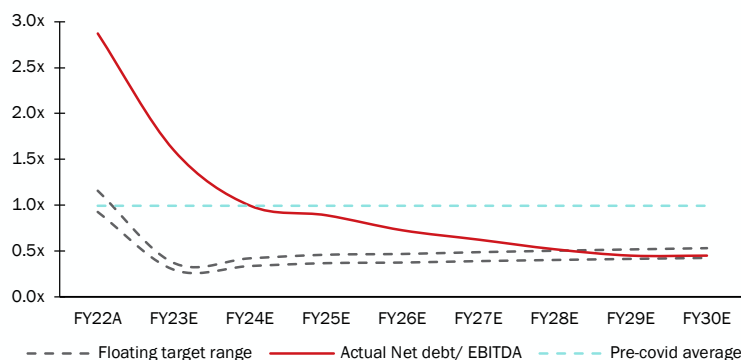
Payout	Assumed to come online in FY24 at ~50%, higher than historical average of ~36% reflecting greater earning power due to cost outs and a convergence towards Air NZ and Singapore Airlines average payout ratios
Interest Bearing Liabilities and Lease Liabilities	Interest-bearing liability assumptions are built in accordance with QAN's capital allocation framework. QAN adopts a 10% ROIC EBITDA floating net debt range. We implied forward net debt leverage ratio ranges based and a convergence towards an FY28 range **of 0.4x and 0.5x implied net debt / EBITDA ratios**. Medium term forecasts (FY23-FY26) are driven by gross debt / EBITDA ratios of 2.0x tapering to 1.4x in FY25. This directly accounts for **(1)** near term $1.2b working capital headwind arising from a drawdown of Covid credits accrued during FY21 and FY22; **(2)** Winton CAPEX coming online with an implied ~US$55m per plane guided from FY23-FY25; and **(3)** restoring impairment of asset base and testing, maintenance and reignition of planes that were grounded during Covid (see **Appendix 7B** for more details). Lease liabilities are forecasted utilising FY16-FY19 average of lease liabilities to EBITDA of 0.5x.
Revenue Received in Advance	**(1) Covid credits:** $1.2b balance as at FY22 forecasted to reduce to $240m in FY23 and $0 in FY24 utilising management guided credit burn run rate of $80m per month. **(2) Unavailed passenger revenue:** assumed to remain at historical average of 17.0% of revenue per annum (reflects tickets paid for but flight date has not passed yet). **(3) Unredeemed frequent flyer revenue:** similarly assumed to hold at 13.7% historical average % of revenue into forecast and relies on ~2 year earn and burn lifecycle length of points assumed above. **(4) Other RRIA:** vouchers and other items held at historical % of revenue.
Capital expenditure	Capital expenditure arises from maintenance and growth sources in areas of Property, Plant and Equipment (PPE) and Intangibles. We have benchmarked assumptions of capital expenditure both bottoms up and to management guidance. **Management guidance** on plane CAPEX of ~US$2.4b through the decade (ex. Sunrise and Intangibles) was converted to AUD and formed the basis for a benchmark of our forecasts. On a bottom-up basis, although explicit terms of new plane purchases are not public, US$55m per plane for the next 3 years was implied from management provided numbers in FY22 supplementary presentation and formed basis for our forecast alongside historical PPE average balance as a % of revenue.

APPENDIX 7A: VALUATION SUMMARY

		DCF	EV/EBITDA	52 Week Range	Broker Range
Blended Valuation $6.41	High	$7.75 (Bull case)	$7.42	$7.70	$7.70
	Base	$6.41	$7.21	$5.30	$6.53 (mean)
	Low	$5.80 (Bear case)	$6.12	$4.72	$4.72
	Weighting	*70%*	*30%*	*0%*	*0%*

Valuation Football Field

APPENDIX 7B: PRO FORMA LEVERAGE

Legend: Floating target range (dashed) — Actual Net debt/ EBITDA (red solid) — Pre-covid average (blue dashed)

QAN's Capital Management Framework

$$Net\ Debt\ Target_t = 10\% * ROIC_t * EBITDA_t$$

QAN's Capital Management Framework outlines a floating net debt target based on ROIC and EBITDA in a given year. This explicitly ties value creation (ROIC > WACC) into the capital management framework. A heightened CAPEX profile, working capital headwinds (due to draw down of A$1.2b in COVID related credits and a recovering EBITDA create elevated leverage ratios into FY23 and FY24, tapering within the target range by FY28.

Comparable Set 1: European Airline Peers	
LSE:IAG	International Consolidated Airlines Group S.A.
XTRA:LHA	Deutsche Lufthansa
ENXTPA:AF	Air France-KLM
LSE:EZJ	easyJet plc
ISE:RYA	Ryanair Holdings

Comparable Set 2: North American Airline Peers	
NasdaqGS:AAL	American Airlines
NYSE:DAL	Delta Air
NasdaqGS:UAL	United Airlines
TSX:AC	Air Canada

Comparable Set 3: Asia / Pacific Airline Peers	
TSE:9202	ANA Holdings Inc.
SGX:C6L	Singapore Airlines Limited
SEHK:293	Cathay Pacific
NZSE:AIR	Air New Zealand Limited
TSE:9201	Japan Airlines

Relative Valuation

	ASX:QAN	Europe	North America	Asia / Pacific
Current EV / EBITDA	4.2x	5.1x	6.6x	7.1x
QAN Current Premium		(17.1%)	(36.1%)	(40.4%)
QAN CY14-19 Average Premium/(Discount)		23.0%	(19.0%)	(32.0%)
Current Premium/(Discount) to Average		40.1%	17.1%	8.4%
Standard Deviation		17.0%	12.0%	5.0%
QAN EV / EBITDA if Trading at 5-Year Premium		6.3x	5.3x	4.8x
Implied Price		$8.65	$7.06	$6.24
Weighting		30.0%	30.0%	40.0%
Price			$7.21	

APPENDIX 9: QAN RELATIVE VALUATION PREMIUMS/(DISCOUNTS) TO GEOGRAPHIC PEER SETS

Note: North American Peer Set affected by data unavailibility between Dec-19 and Dec-21

Source: CapitalIQ
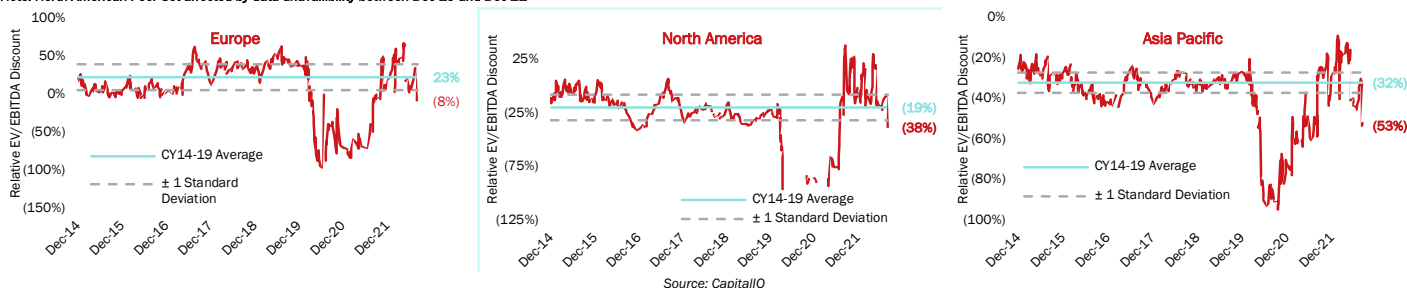
APPENDIX 10: RELATIVE VALUATION REGRESSION

The regression analysis below examines the relationship between ROE and P/B multiples of QAN and peers in a pre-COVID period. Although not a directly linear relationship, a positive coefficient and a 69.3% R^2 provide sufficient evidence that generally, higher trading multiples are assigned to companies with strong return on equity.

	Symbol	ROE	P/B
Qantas Airways Limited	QAN	8%	3.1x
International Consolidated Airlines Group S.A.	IAG	12%	3.2x
Deutsche Lufthansa	LHA	5%	0.9x
Air France-KLM	EZJ	6%	0.9x
easyJet plc	RYN	7%	2.0x
Ryanair Holdings	AAL	13%	4.9x
Delta Air	DAL	9%	2.8x
United Airlines	AC	6%	1.6x
ANA Holdings Inc.	ANA	4%	1.5x
Singapore Airlines Limited	CGL	1%	1.1x
Cathay Pacific	CAT	4%	1.4x
Air New Zealand Limited	AIRNZ	9%	1.5x

Regression Statistics	
Multiple R	0.832
R Square	0.693
Adjusted R Square	0.662
Standard Error	0.706
Observations	12.000

ANOVA				
	df	Regression	Residual	Total
df	1		10	11
SS	11.248		4.983	16.232
MS	11.248		0.498	-
F	22.573		-	-
Significance F	0.001		-	-
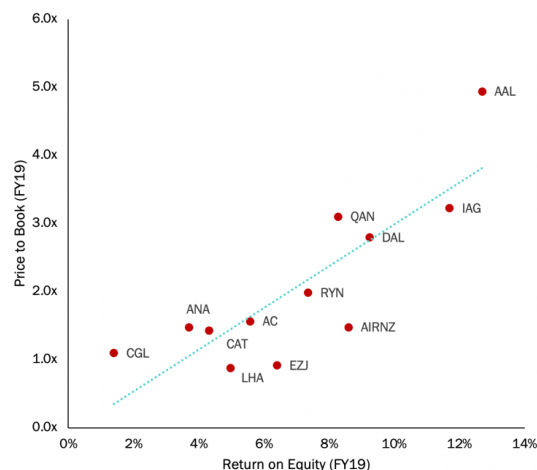
	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	-0.079	0.497	-0.158	0.877	-1.185	1.028	-1.185	1.028
ROE	30.650	6.451	4.751	0.001	16.276	45.025	16.276	45.025

APPENDIX 11: COST OF EQUITY

Forecast Cost of equity

	Rate	Weighting
Capital Asset Pricing Model	11.11%	100%
Dividend Discount Model	5.2%	0%
Fama-French 3-Factor Model	3.08%	0%
Triangulated cost of equity	11.11%	100%

CAPM

	Rate
Risk free rate	2.95%
Equity Market Risk Premium	5.98%
Beta	1.36
Cost of equity (CAPM)	11.11%

Risk free rate	Rate	Weighting
10 year government bond 5 year average	1.87%	30%
10 year government bond spot	3.42%	70%
	2.95%	100%

EMRP	Rate	Weighting
Historical risk premium	6.00%	25%
Surveys	6.30%	50%
Linear regression (10Y)	5.32%	25%
EMRP	5.98%	100%

Beta	Beta	Weighting
Comparable companies	1.48	10%
Linear regression	1.40	70%
FactSet	1.23	10%
Yahoo Finance	1.11	10%
	1.36	100%

Comparable company beta calculation

Company name	Levered Beta	Relevered beta
ANA Holdings Inc.	0.71	1.04
Japan Airlines Co., Ltd.	0.85	1.09
Air Canada	1.44	1.61
Deutsche Lufthansa AG	1.69	1.70
American Airlines Group, Inc.	1.52	3.24
Singapore Airlines	1.37	1.35
Median		1.48

Dividend Discount Model

Current price	5.28
Current annual dividend	0
Dividend growth rate	5.18%
Cost of equity (DDM)	5.2%
ROE	10%
Payout Ratio	52%
Dividend growth rate	5.18%

Fama-French 3-Factor Model

	Factor	Coefficient
Risk free rate	2.95%	
Market beta	3.46%	1.21
SMB beta	-3.39%	1.21
HML beta	0.03%	0.57
Cost of equity (FF)	3.08%	

Terminal Cost of equity

	Rate	Weighting
Capital Asset Pricing Model	10.01%	100%
Dividend Discount Model	15.6%	0%
Fama-French 3-Factor Model	2.46%	0%
Triangulated cost of equity	10.01%	100%

CAPM

	Rate
Risk free rate	2.33%
Equity Market Risk Premium	5.90%
Beta	1.30
Cost of equity (CAPM)	10.01%

Risk free rate	Rate	Weighting
10 year government bond 5 year average	1.87%	70%
10 year government bond spot	3.42%	30%
	2.33%	100%

EMRP	Rate	Weighting
Historical risk premium	6.00%	50%
Surveys	6.30%	25%
Linear regression (10Y)	5.32%	25%
EMRP	5.90%	100%

Beta	Beta	Weighting
Comparable companies	0.86	10%
Linear regression	1.40	70%
FactSet	1.23	10%
Yahoo Finance	1.11	10%
	1.30	100%

Comparable company beta calculation

Company name	Levered Beta	Relevered beta
ANA Holdings Inc.	0.71	0.60
Japan Airlines Co., Ltd.	0.85	0.63
Air Canada	1.44	0.93
Deutsche Lufthansa AG	1.69	0.99
American Airlines Group, Inc.	1.52	1.88
Singapore Airlines	1.37	0.78
Median		0.86

Dividend Discount Model

Current price	5.28
Current annual dividend	0.52
Dividend growth rate	5.18%
Cost of equity (DDM)	15.6%
ROE	10%
Payout Ratio	52%
Dividend growth rate	5.18%

Fama-French 3-Factor Model

	Factor	Coefficient
Risk free rate	2.33%	
Market beta	3.46%	1.21
SMB beta	-3.39%	1.21
HML beta	0.03%	0.57
Cost of equity (FF)	2.46%	

QAN's cost of equity (CoE) for DCF was calculated using the Capital Asset Pricing Model (CAPM), Dividend Discount Model (DDM), and Fama French 3 Factor Model (FF3M), with 100% weighting being placed on the CAPM for both the forecast and terminal periods. The DDM method was rejected due to the lack of dividends issues by QAN as a result of the pandemic, limiting the ability to calculate an accurate growth rate. The FF3M was discarded as 1) the model was derived empirically using US stocks, and 2) the closest available data was derived from the Asia-Pacific region, which varied greatly from Australia and QAN. This was demonstrated in the low R-squared of 35.3%, indicating a low level of explanation for the volatility of QAN's returns. The following CAPM equation was used to triangulate a 11.1% and 10.0% CoE for the forecast and terminal periods of the DCF, respectively.

$$CoE = R_f + \beta\big(E(R_m) - R_f\big)$$

1. Risk Free Rate
Forecast: The spot rate and 5-year average of the 10-year Australian Government Bond were used to determine the risk-free rate. Given the high likelihood of further cash rate rises, greater weighting was placed on the spot rate at 70%, compared to the mean. **Terminal**: Conversely greater weighting was placed on the mean for the terminal period due to normalisation in the long run and low impact from short term fluctuations.

2. Beta
QAN's beta was calculated using 1) Linear regression, 2) Comparable companies, and 3) Research houses. The comparables of ANA Holdings, Japan Airlines, Air Canada, Deutsche Lufthansa, American Airlines and Singapore airlines were picked due them having a similar dominant share of their respective markets. However they still varied largely from QAN due to the type of market structure, and as a result, the 1.48 median of the peer beta (which was unlevered and relevered using Hamada's formula), was only weighted at 10%. The linear regression beta of 1.4 was calculated by regressing QAN's adjusted returns against the returns of the ASX 200. It was weighted at 70% as we were able to account for the variables that affected it, such as time period and which index was used, and thus had greater trust in its output. Research houses FactSet and Yahoo Finance reported betas of 1.23 and 1.11 respectively, and these were weighted at 10% each due to their credibility but lack of input breakdown. The same beta was used for the forecast and terminal periods as they used the same time periods and thus the beta would not tend towards any in particular in the long run.

3. Equity Market Risk Premium.
The EMRP was triangulated using the historical risk premium, surveys, and a linear regression. **Forecast**: The greatest weighting of 50% was put on the forward-looking survey results, as they would be more accurate in the short term, while the historical and linear regression figures were weighted evenly at 25% each. **Terminal**: Under the assumption that in the long term the EMRP will tend towards the average, 50% was given to the historical risk premium and the remainder split among the surveys and linear regression.

APPENDIX 12: COST OF DEBT

Cost of debt (Forecast)

	Rate	Weighting
Interest-bearing liabilities	3.91%	10%
Weighted av. YTM	5.79%	80%
Altman-Z Score	19.38%	0%
Index Spread	4.45%	10%
Triangulated cost of debt	5.02%	100%

Intrinsic cost of debt

Interest-bearing liabilities	FY2022	FY2021
Interest Expense	-251	-246
Short-Term Debt	669	969
Long-Term Debt	5291	5861
Gross Debt	5960	6830
Implied cost of debt	4.22%	3.60%
Cost of debt	3.91%	

Weighted average YTM

Today	28/09/2022
Weighted av. YTM	5.79%
Weighted av. Maturity (yrs)	5.80

Instrument	Weig. av. YTM	Weig. av. Mat.
Instrument 1	0.57%	46.59
Instrument 2	0.80%	222.38
Instrument 3	1.48%	548.18
Instrument 4	1.36%	557.58
Instrument 5	1.58%	742.03
	5.79%	5.80

Comparable cost of debt

Synthetic credit rating (Altman z-score)

Metric	Rate	Coefficient
Working capital / total assets	-0.37	1.2
Retained earnings / total assets	-0.20	1.4
EBIT / total assets	-0.05	3.3
Market value of equity / total liabilities	0.48	0.6
Revenue / total assets	0.46	1
Altman-Z Score	-0.12	
Implied Credit Rating	CCC	
Credit risk spread	16.79%	
3M BBSW	2.59%	
Implied cost of debt	19.38%	

Index spreads

Credit ratings matrux	5-year spread	10-year spread
A/A2	1.32	1.68
BBB/Baa2	1.86	2.43
3M BBSW		2.59
Spread		1.86
Cost of debt		4.45%

Cost of debt (Terminal)

	Rate	Weighting
Interest-bearing liabilities	5.63%	20%
Weighted av. YTM	5.79%	50%
Altman-Z Score	9.83%	0%
Index Spread	4.45%	30%
Triangulated cost of debt	4.02%	100%

Intrinsic cost of debt

Interest-bearing liabilities	FY2030	FY2029
Interest Expense	-185	-253
Short-Term Debt	322	423
Long-Term Debt	3032	3979
Gross Debt	3354	4401
Implied cost of debt	5.51%	5.76%
Cost of debt	5.63%	

Weighted average YTM

Today	28/09/2022
Weighted av. YTM	5.79%
Weighted av. Maturity (yrs)	5.80

Instrument	Weig. av. YTM	Weig. av. Mat.
Instrument 1	0.57%	46.59
Instrument 2	0.80%	222.38
Instrument 3	1.48%	548.18
Instrument 4	1.36%	557.58
Instrument 5	1.58%	742.03
	5.79%	5.80

Comparable cost of debt

Synthetic credit rating (Altman z-score)

Metric	Rate	Coefficient
Working capital / total assets	-0.30	1.2
Retained earnings / total assets	0.10	1.4
EBIT / total assets	0.12	3.3
Market value of equity / total liabilities	0.50	0.6
Revenue / total assets	0.96	1
Altman-Z Score	1.43	
Implied Credit Rating	CCC	
Credit risk spread	7.24%	
3M BBSW	2.59%	
Implied cost of debt	9.83%	

Index spreads

Credit ratings matrux	5-year spread	10-year spread
A/A2	1.32	1.68
BBB/Baa2	1.86	2.43
3M BBSW		2.59
Spread		1.86
Cost of debt		4.45%

QAN's cost of debt (CoD) was calculated using interest bearing liabilities, weighted average yield to maturity (YTM), Altman-Z score, and Index spreads. **Forecast**: Weighted average YTM was weighted at 80% given it was the most current data on its debt financing costs. Index spreads, which were calculated by adding the 3-month bank bill swap rate to the spread of QAN's Baa2 rating, were weighted at 10% given that it was forward looking however failed to reflect the specific qualities of QAN that would affect its borrowing costs. Interest-bearing liabilities were weighted at 10% to account for cash rates lowering towards the historic average at the end of the forecast period, while the Altman-Z was too high to use, at 19.38%. **Terminal**: While the Altman-Z was still excluded due to it having too large a value at 9.83%, 10% more was assigned to interest-bearing liabilities and 20% to index spreads, assuming that the weighted average YTM would be less reflective of the long term. This would also allow the current high cash rate to have less of an influence in the long run, where it would likely return to the lower historical average.

APPENDIX 13: SENSITIVITY ANALYSIS

The **Terminal WACC and Terminal Growth Rate (TGR) are sensitised** as key drivers of our Discounted Cash Flow Model, with 87.8% of the final Enterprise Value derived from the Terminal Value (vs 12.2% from Forecast Value) – driven by FY23 negative FCFs of covid credit burning and CAPEX impairment restorations. A two-way sensitivity analysis is appropriate to assess the robustness of assumptions underpinning both factors and their impact on QAN's share price. The WACC was flexed in +/-0.5% increments to reflect more bearish perceptions of QAN's risk. Conversely, +/-0.25% increments in the TGR reflect noise/fluctuations in economic activity, the 2.5% baseline selected as within the inflation target band (2-3%) to reflect real value created whilst remaining below Australian GDP growth at avg. 3-4%. A 50bps in WACC drives a +9.8%/-8.2% change in implied share price, indicating material sensitivity. 84% of sensitised values affirm a buy/strong buy recommendation. The worst-case scenario of a 9.93% WACC/2% TGR yields a $5.60 share price 7.7% upside to 1M VWAP of $5.20; nonetheless this scenario is unlikely to eventuate given FY22 inflation and thus TGR remaining materially higher greater than 2%. Holding TGR constant sees share price ranging from $5.13-$7.37 (4/5 values a strong buy); holding WACC constant sees a smaller variation from $5.54-$6.71 (all indicative of a strong buy), affirming the robustness of our recommendation.

DCF Sensitivity Analysis - Implied Share Price v Terminal WACC and TGR

	7.9%	8.4%	**8.9%**	9.43%	9.93%
2.00%	$ 6.63	$ 6.04	$ 5.54	$ 5.10	$ 4.72
2.25%	$ 6.98	$ 6.34	$ 5.79	$ 5.32	$ 4.91
2.50%	$ 7.37	$ 6.67	**$ 6.07**	$ 5.57	$ 5.13
2.75%	$ 7.79	$ 7.02	$ 6.38	$ 5.83	$ 5.35
3.00%	$ 8.26	$ 7.41	$ 6.71	$ 6.11	$ 5.60

Brent (US$/bbl)	FY28 NPAT	Share Price	Delta
63	2,236	8.31	29.6%
68	2,056	7.36	14.8%
73	1,876	6.41	0.0%
78	1,696	5.46	-14.8%
83	1,515	4.51	-29.6%

Refining Margin (US$)	FY28 NPAT	Share Price	Delta
7	1,943	6.83	6.5%
9	1,876	6.41	0.0%
11	1,809	5.99	-6.5%
13	1,741	5.58	-13.0%
15	1,674	5.16	-19.5%

Given the significance of fuel expenses (26% of pre-COVID OPEX) and the volatility of oil prices, it was deemed important to run a sensitivity analysis on the impact of **higher unhedged forecast horizon jet fuel refining margins and Brent prices**. FY25-28 Brent Crude price assumptions were flexed to examine the possible impact of future supply shortages, potentially driven by escalating geopolitical tension. A $10 increase in Brent prices drives share price down to $4.51 (-13% discount) and reduces terminal year NPAT by 19.2%. We note that even if, for the duration of the five years, Brent prices remain elevated at US$78 (10% higher than the 10-year historical average of US$71), the share price of $5.46 still represents a 5% premium to the 1-month VWAP. A drastic increase of FY24-28 refining margins to 60% above the historical average (FY24-28 $14.70), reduces terminal year NPAT by 10.74% and results in $5.16 share price (-0.8% discount), supporting the robustness of our BUY thesis.

APPENDIX 14: SCENARIO ANALYSIS
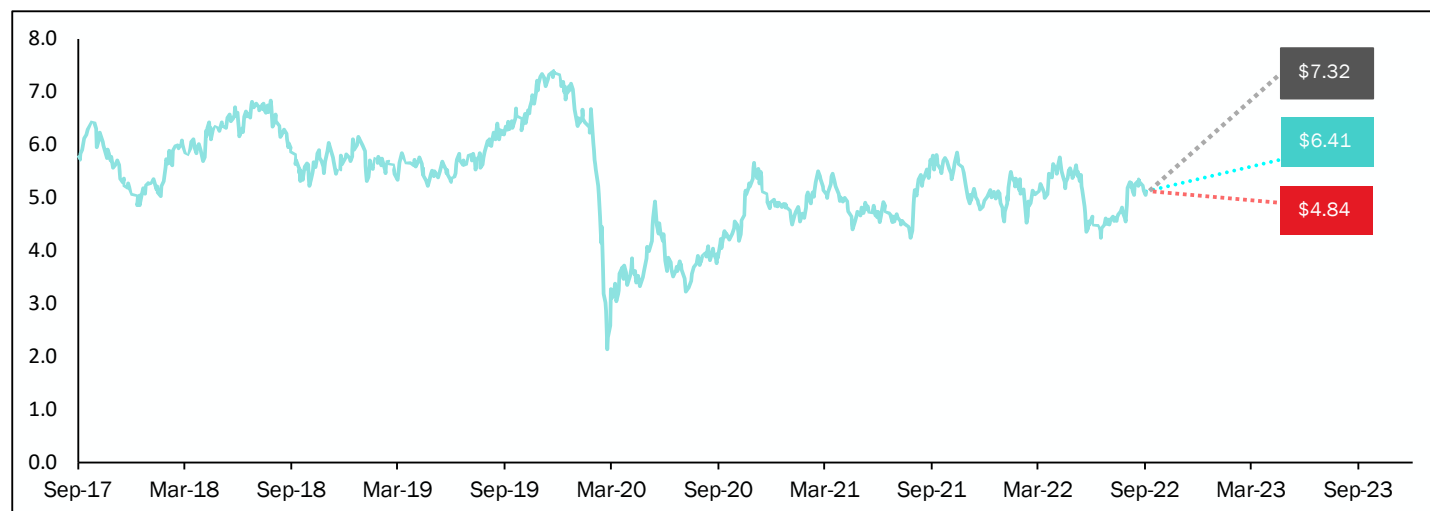
Bear case – A$4.84
Our bear case scenario sees a 'soft landing' macro scenario playing out in Australia, with a more competitive environment and cost inflation weighing on profitability. The assumptions underpinning this are as follows. **(1)** FY23 Domestic capacity falls to 97% pre-COVID levels, as QAN faces ongoing labour shortages, pent-up demand is exhausted, travel becomes a low-priority area for spending and business travel never fully recovers. **(2)** Lower RASK growth of 15.92% insufficient to cover elevated fuel costs (+33.53% vs FY19). This is driven by subdued average ticket fares (yield growth -5% vs base case) as customers become more price sensitive, and lower Group load factors (-1.3%) as QAN attempts to defend its market share from Rex in the Golden Triangle and Virgin's entrenchment in the corporate market. We see lower load factors especially affecting the premium QAN brand (-2%) as consumers turn to cheaper alternatives, and Group International (-3%) when demand for more expensive long-haul holidays subsides. **(3)** QAN faces persistently high Brent crude price of US$93 in FY23 and refining margining of US$40. **(4)** Manpower expenses increase by 3% as QAN must increase staffing levels to improve operational performance, and ongoing labour shortages providing unions with greater bargaining power. **(5)** QAN's reputation spirals due to ongoing employee disputes and concerns about safety and reliability, losing 2.5% of Domestic market share to competitors engaging in disciplined competition. Domestic market share falls to 57.9% in FY25, before stabilising at 66.1% by FY30. We arrive at a bear case valuation of A$4.84, implying a discount of 7.4% on 1-month VWAP.

Bull case – A$7.32
Our bull case scenario assumes a friendly competitive environment, with continued capacity discipline and resilient demand in the medium-term. The assumptions underpinning this are as follows. **(1)** International capacity increases to 74%/83% of pre-COVID for QAN/Jetstar in FY23 as Group International demand normalises faster than anticipated with the reopening of Japan and ongoing easing of restrictions in key APAC markets. **(2)** Group RASK growth of 18.47% vs FY19 in FY23, as QAN realises a higher average Group load factor of 89.8% (+0.5%), driven by demand continuing to outpace supply and ongoing industry capacity discipline. **(3)** QAN's reputation significantly recovers as operational issues resolve and customer service improves, with Domestic market share reaching QAN's 70% target in FY25. QAN through its premium offering is able to claim corporate customers from Virgin, whilst REX fails to crack the domestic duopoly, particularly given QAN's capacity flexibility, loyalty program, flight frequency and brand advantages. **(4)** We assume that refining margins soften to US$36 in FY23, trending down to the historical average of USD$9 by FY24, whilst Brent Crude prices (bbl) fall by US$2 in FY23/24. **(5)** QAN delivers the A$1bn structural cost savings through FY24e, and ongoing transformation programs offset underlying inflation. We arrive at a bull case valuation of $7.32, implying a premium of 40.7% on 1-month VWAP.

APPENDIX 15: MONTE CARLO SIMULATION (DCF)
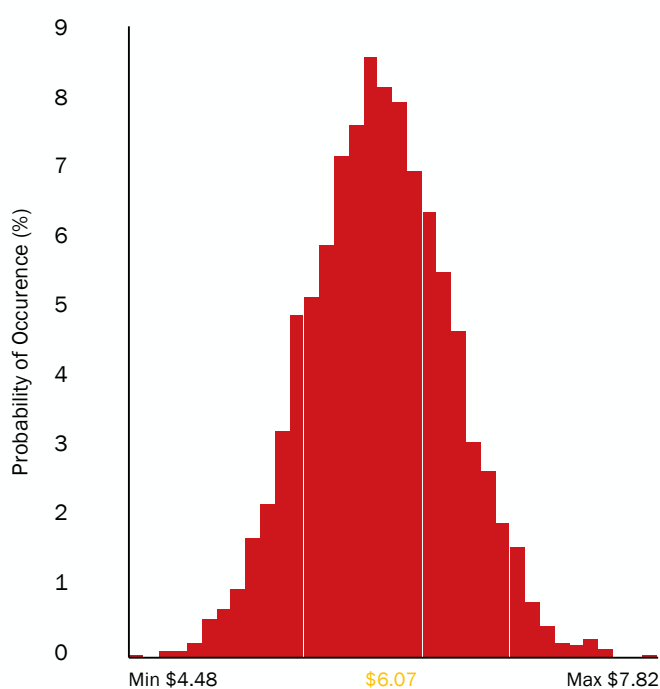
Summary Statistics	
Minimum	4.48
Maximum	7.82
Mean	6.07
Std Dev	0.45
Variance	0.21
Skewness	0.08
Kurtosis	0.06
Iterations	5000

Variable	Distribution	Std Dev
FY28 ASKs	Normal	494kms
FY28 Load factor	Normal	25bps
FY28 Yield	Normal	5bps

Percentile	Output Price ($)
1.0%	4.55
2.5%	4.68
5.0%	4.76
10.0%	4.98
20.0%	5.18
25.0%	5.34
30.0%	5.56
35.0%	5.72
40.0%	5.82
45.0%	5.96
50.0%	6.07
55.0%	6.13
60.0%	6.22
65.0%	6.34
70.0%	6.58
75.0%	6.79
80.0%	6.98
90.0%	7.15
95.0%	7.36
97.5%	7.45
99.0%	7.52

APPENDIX 16: LOYALTY LIFECYCLE AND UNIT ECONOMICS ANALYSIS

Loyalty lifecycle economics
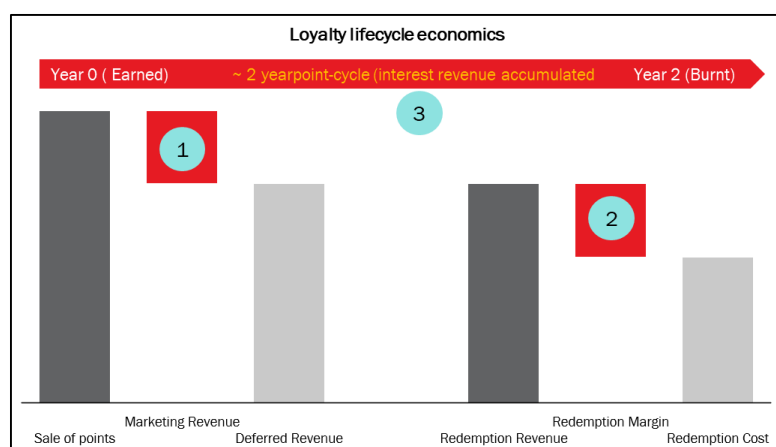
#	Economics
1	Marketing revenue upon the **earning of points** - portion of point sales booked as marketing revenue in current period, with remaining deferred upon redemption
2	Redemption margin upon the **burning of points** - redemption revenue exceeds redemption costs
3	**Interest revenue** - 2-year weighted average point lifecycle, cash inflow upon points earnt generates interest income
4	Share of revenue from **adjacent businesses** such as insurance, money, hotels, wine etc.

APPENDIX 17: AIR CANADA LOYALTY PROGRAM CASE STUDY

Air Canada, a comparable company to QAN, completely sold off its loyalty program, Aeroplan, in 2008. While originally it helped raise cash during a difficult time for the airline, there were a number of flow-on consequences. Customer data was one of the most crucial pieces lost, and this put it at a significant disadvantage to its peers. While Aeroplan had branded credit cards, the lucrative deals associated with them were signed with Aimia, the loyalty brands holding company. Unlike other airlines that took money from the credit card companies directly, Air Canada earned the revenue when Aimia bought significantly discounted seats for point redeeming customers. The separated nature of the airline and the loyalty program meant that many operation issues arose when dealing with items such as reward tickets and how frequent flyer status was updated. This heavily impacted the experience that customers faced, which directly affected the brand image. Air Canada eventually realised their mistake, bought back the program and launched in November 2020. From this we can infer how mutually dependant an airline and its loyalty program are. While QAN' loyalty program is strong and benefits from its many strategic partnerships, it would be foolish to assume that it could operate independently from QAN.

APPENDIX 18: RECENT ANZ LISTED AIRLINE SECTOR BIDS AND ACQUISITIONS

Bid Date	Company	Ticker	Bidder(s)	Bid Price (Premium)	Enterprise Value
16 Sep 2022	Air New Zealand	ASX:AIZ	Virgin Australia	n.a. (press rumours)	NA
24 May 2022	TripADeal	Private	Qantas	51% stake (private)	NA
5 May 2022	Alliance Aviation Services	ASX:AQZ	Qantas	$4.75ps (35%)	A$591m
26 June 2020	Virgin Australia	ASX: VAH	Bain Capital	n.a.(administration bid)	A$1,131m
16 Sept. 2019	Velocity Frequent Flyer	Private	Virgin Australia	35% stake (private)	A$480m

The Australian Competition and Consumer Commission (ACCC) is reviewing QAN's proposed acquisition to require its remaining share of Alliance Aviation, currently holding a 19.9% stake from its first acquisition in 2020. However, the ACCC appears hesitant to go through with the acquisition due to the impact on competitive structures for regional routes. Namely, if QAN were to acquire Alliance Aviation, this would effectively stifle the operation of existing regional charter flight operators. This includes Cobham, Skippers Aviation and Airnorth in Western Australia, national LCC Rex, and Pionair and Hevlift in Queensland. However, QAN has said that it is 'confident' that the ACCC will approve the acquisition in that it would not affect competition; citing that Alliance is currently approximately 2% of the Australian aviation market share and that other players – Rex and Virgin – have similarly acquired smaller charter services. Rather, the objective behind QAN's acquisition would be to wet lease a set of 18 Embraer aircraft for regional routes, combining Alliance and QAN's fleet to add five more years onto each fleet's economic lives. From a financial perspective, the deal will be facilitated via a scheme of arrangement, offering QAN scrip worth $4.75 per each Alliance share they hold. The deal offered Alliance shareholders a 32% premium to the 3M VWAP at an 8.0x NTM EV/EBITDA multiple. QAN intends to raise $614m through the issuance of new shares for the deal which is EPS accretive before synergies.

APPENDIX 20: QAN SHAREHOLDERS STRUCTURE

- Institutional Ownership: 20.1%
- Insider Ownership: 0.8%
- Public: 79.1%
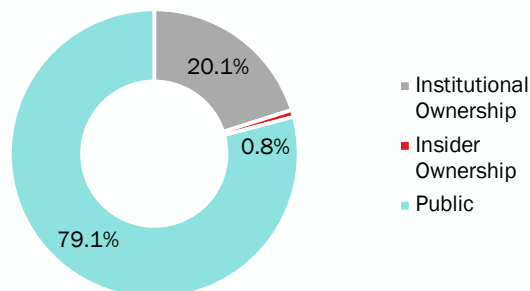
Top 5 Shareholders
First Sentier Investors (Australia): 4.99%
Pendal Group: 4.41%
Vanguard Investments Australia: 1.38%
The Vanguard Group: 1.09%
Blackrock Fund Advisors: 0.79%

Top 10 Shareholders: 15.02% of all shares outstanding

APPENDIX 21: CHANGE IN PASSENGER VOLUMES VS 2019
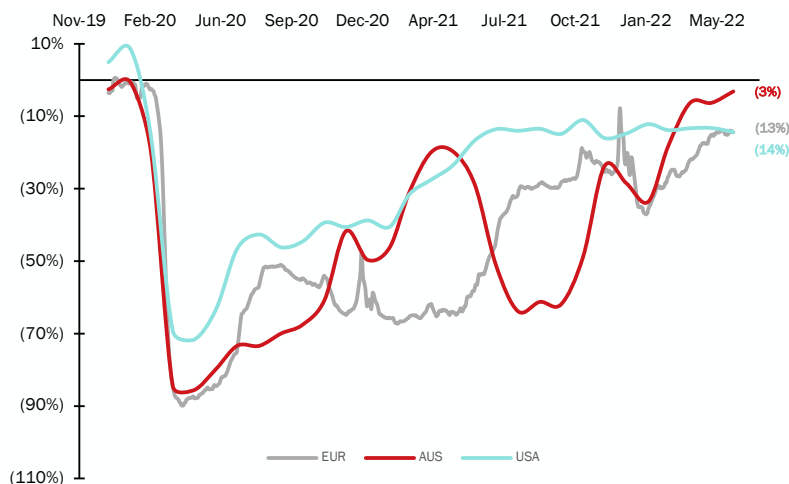
Source: Eurostat, BTS, BITRE

## APPENDIX 22: QANTAS AIRCRAFT AND FLEET (AS AT FY22)

Aircraft Type	Capacity (Seat No./Cargo (cubic metres))	FY22	FY21	Change
A380-800	14 First class, 64 Business, 35 Premium Economy, 371 Economy	10	12	(2)
A330-200	27 Business, 224 Economy	18	18	0
A330-300	28 Business, 269 Economy	10	10	0
737-800	12 Business, 162 Economy	75	75	0
787-9	2 Business, 28 Premium Economy and 166 Economy seats	11	11	0
Total QAN Dom. + Int.	-	124	126	(2)
717-200	12 Business and 98 Economy seats	20	20	0
Q200/300	36/50/74 Economy	19	19	0
E190 (hired from Alliance Aviation)	10 Business, 84 Economy	12	4	8
F100	100 Economy	18	18	0
A320-200	180 Economy	11	10	1
Total QANLink	-	111	102	9
A320-200	180 Economy	59	61	(2)
A321-200	220 Economy	6	6	0
787-8	42 Business, 28 Premium Economy, 166 Economy	11	11	0
Total Jetstar	-	76	78	(2)
737-300F/737-400F	132.9 cubic metres	5	5	0
767-300F	438.5 cubic metres	1	1	0
A321-200F	10.8 cubic metres	3	3	0
747-8F (hired from Atlas Air)	852.0m cubic metres	2	0	2
Total Freight	-	11	9	2
Total Group	-	322	315	7

This does not include 6 x temporary A320-200 Jetstar Japan planes and wet-leases: 1x 737-400F, 1x 747-400F, 7x BAe146 (short-haul airliners) and 2 x Saab 340 freighters.

APPENDIX 23: PROJECT WINTON ROUTES WITH XLR RANGES

APPENDIX 24: QANTAS FREIGHT ROUTES
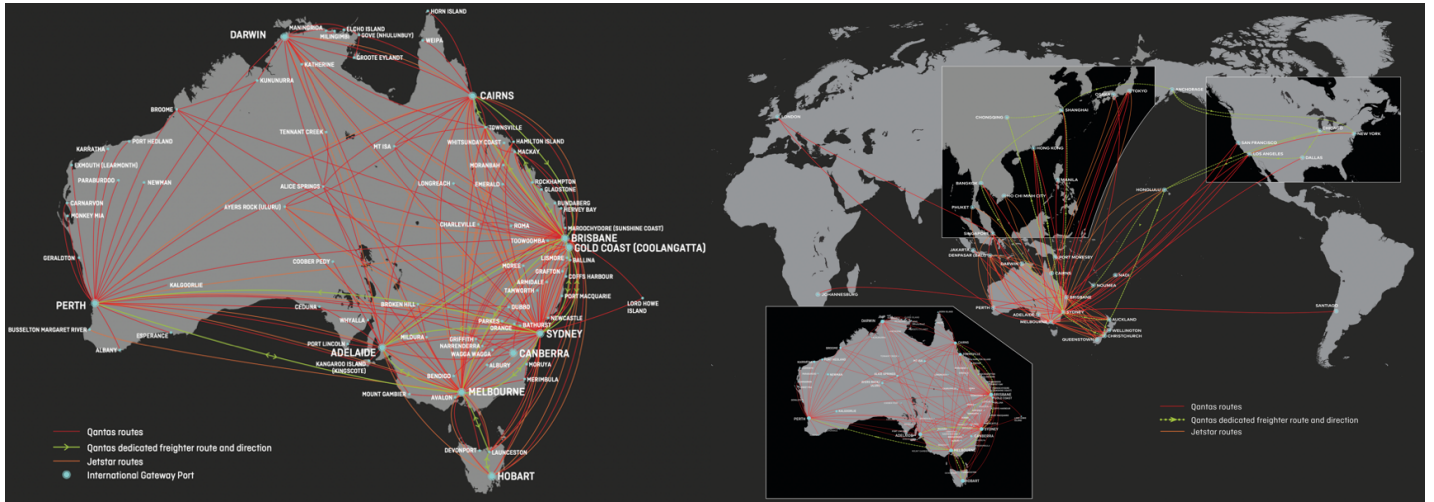
REFERENCES

AusPost. (2022, April 5). *2022 inside Australian online shopping: eCommerce industry report.*
https://auspost.com.au/content/dam/auspost_corp/media/documents/ecommerce-industry-report-2022.pdf

Australian Government. (2022, May). *Sea and air freight snapshot.* https://www.agriculture.gov.au/sites/default/files/documents/may-2022-Sea-and-air-freight-snapshot.pdf

ACCC. (2022, September 7). *Airline competition in Australia - September 2022 report.* https://www.accc.gov.au/publications/serial-publications/airline-competition-monitoring-reports/airline-competition-in-australia-september-2022-report

BITRE. (n.d.). *Aviation Statistics.* https://www.bitre.gov.au/statistics/aviation

Bouwer, J., Dichter, A., Fuchs, G., Hartung, K., Krishnan, V., Rivas, D., & Saxon, S. (2022, July 15). *Why rising fuel prices might not be as bad for the airline sector as it seems.* McKinsey. https://www.mckinsey.com/industries/travel-logistics-and-infrastructure/our-insights/why-rising-fuel-prices-might-not-be-as-bad-for-the-airline-sector-as-it-seems

Capital IQ. (n.d.). *Qantas Airways Limited (ASX:QAN).* Retrieved 29 September, 2022, from: https://www.capitaliq.com

Chun, S. Y., & de Boer, E. (2021, April 2). *How loyalty programs are saving airlines.* HBR. https://hbr.org/2021/04/how-loyalty-programs-are-saving-airlines

Deloitte. (2020, October 21). *Explanatory statement to shareholders and independent expert's report.* https://www2.deloitte.com/content/dam/Deloitte/au/Documents/finance/insolvency/virgin/deloitte-au-fa-virgin-australia-vah-explanatory-statement-dated-21-october-2020-231020.pdf

Euro Control. (2022). *Daily traffic variation – states.* Retrieved 29 September, 2022 from: https://www.eurocontrol.int/Economics/DailyTrafficVariation-States.html

FactSet. (n.d.). *Qantas Airways Limited (QAN-AU).* Retrieved 29 September, 2022, from https://www.factset.com

IATA. (n.d.). *Jet Fuel Price Monitor.* Retrieved 29 September, 2022, from https://www.iata.org/en/publications/economics/fuel-monitor/

IBISWorld (2022, June 30). *Qantas Airways Limited.* https://www.ibisworld.com

Morningstar. (2022, September 28). *Qantas Airways Ltd.* https://www.morningstar.com/stocks/xasx/qan/quote

Qantas. (2020). *Qantas Group data book.* https://investor.qantas.com/FormBuilder/_Resource/_module/doLLG5ufYkCyEPjF1tpgyw/file/data-book/2020qantasdatabook.pdf

Qantas. (2022). *Qantas sustainability report 2022.* https://investor.qantas.com/FormBuilder/_Resource/_module/doLLG5ufYkCyEPjF1tpgyw/file/annual-reports/QAN_2022_Sustainability_Report.pdf

Qantas. (2022, August 25). *Qantas annual report 2022.* https://investor.qantas.com/FormBuilder/_Resource/_module/doLLG5ufYkCyEPjF1tpgyw/file/annual-reports/2022-Annual-Report.pdf

Schroeder, N. (2022, April). *Air freight services in Australia.* IBISWorld. https://www.ibisworld.com

Tobey, J. S. (2021, December 22). *Wall Street's 2022 outlook - new challenges and opportunities.* Forbes https://www.forbes.com/sites/johntobey/2021/12/22/wall-streets-2022-outlooknew-challenges-and-opportunities/