S&P Global Ratings

Can Qantas Or Virgin Australia Afford To Take A Capital Holiday?

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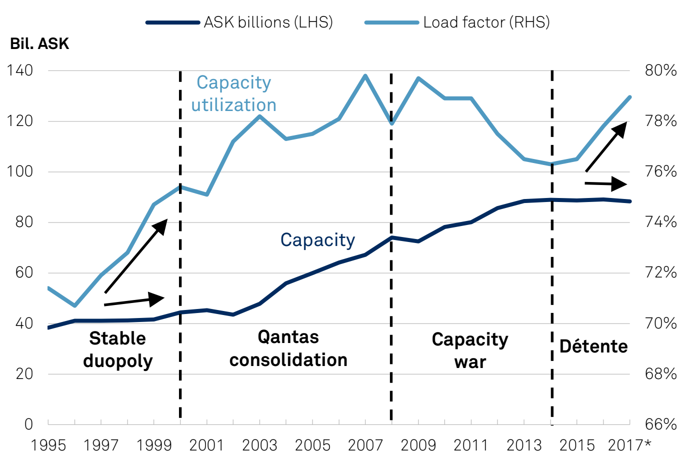
Overview

- The average age of Qantas Airways' aircraft has been steadily rising and the airline has stepped away from its 8 to 10 year target range.
- A sizable funding task potentially looms for Qantas that may coincide with the resumption of company tax payments. The Qantas Sale Act and the airlines' financial framework may restrict funding sources.
- By contrast, we believe Virgin Australia has scope for a capital holiday. Solid cash generation should provide Virgin with much-needed financial headroom.
- Past impairments and reduced aircraft investment provide a temporary boost to financial performance but becomes problematic over the longer-term.

Aircraft investment within the Australian airline industry has been subdued since the bloody and protracted capacity war that ended in May 2014. Lower investment has simultaneously eased funding pressures while improving domestic market fundamentals (see chart 1). This has allowed Qantas Airways Ltd. and Virgin Australia Holdings Ltd. to lick their wounds and restore profitability. Indeed, based on S&P Global Ratings' measure[1], the industry profit pool continues to achieve record highs as excess capacity is slowly flushed through the domestic network (see chart 2).

Chart 1

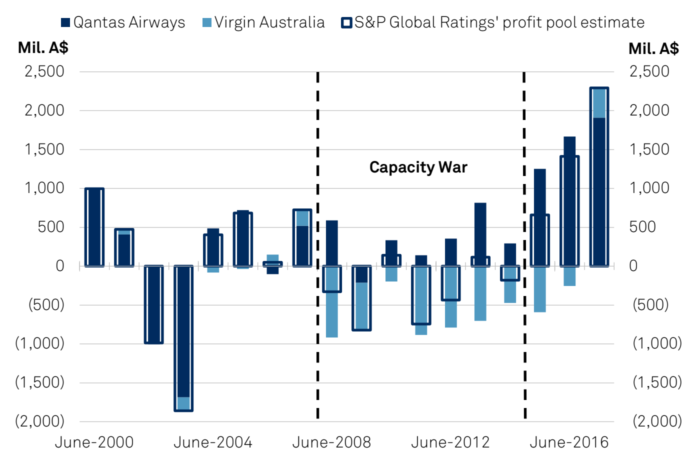
Domestic Capacity Vs. Capacity Utilization



ASK--Available seats per kilometer. *Past 12 months ended October 2017.
Source: Bureau of Infrastructure, Transport and Regional Economics, S&P Global Ratings.

Chart 2

S&P Global Ratings' Estimate Of The Profit Pool



Source: Company reports, S&P Global Ratings.

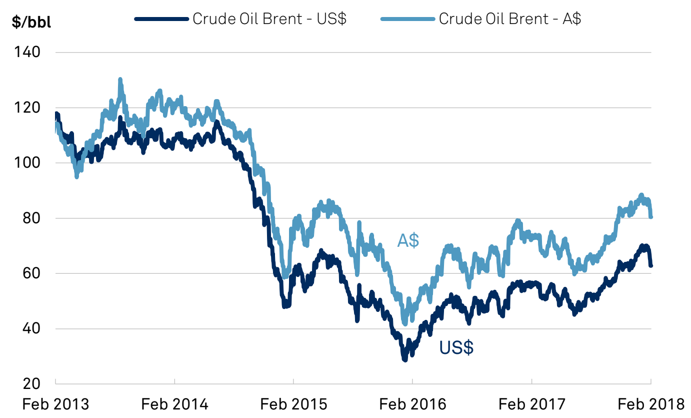
The sector has benefited from disciplined capacity growth, structurally lower fuel prices, less adversarial industrial relations, and a stable macroeconomic environment. (see report titled, "Qantas And Virgin Australia Approach Cruising Altitude But The Seat Belt Sign Remains On", published June 2017). These tailwinds are likely to remain even if Australian dollar-denominated

[1] We calculate the Australian profit pool as S&P Global Ratings'-adjusted EBITDA minus adjusted capital expenditure. See "Qantas And Virgin Australia Approach Cruising Altitude But The Seat Belt Sign Remains On", published June 2017.

fuel prices[2] and strong international competition have the potential to remove some of the earnings gloss (see charts 3 and 4).

Chart 3

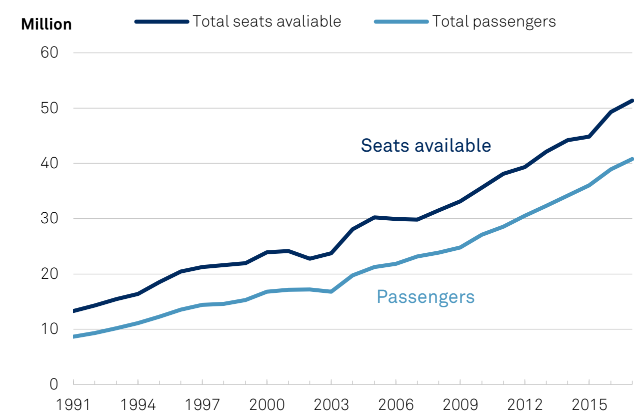
Crude Brent Oil (U.S. vs. Australian Dollars)



Source: S&P Global Market Intelligence, S&P Global Ratings.

Chart 4

International Capacity Growth To Australia



*Past 12 months ended October 2017.
Source: Bureau of Infrastructure, Transport and Regional Economics, S&P Global Ratings.

Neither Qantas nor Virgin Australia appear to be in any hurry to upset the status quo by adding new capacity. Does this create the conditions for a capital holiday? We believe Qantas will inevitably need to increase its aircraft investment but its smaller rival has room to take a breather.

Despite much fanfare surrounding the new Dreamliner, Qantas' aircraft investment has remained subdued over the past few years. The airline's most recent guidance indicates that investment won't grow until at least the year ending June 30, 2020[3], by which point its capital expenditure (capex) will have been constrained for a period of seven years. A sizable funding task potentially looms, which may coincide with the resumption of company tax payments. The Australian national carrier's financial framework limits the extent to which growth investment can be debt-funded, and the Qantas Sale Act adds an additional layer of complexity when raising equity. Depending on the size and timing of its funding task, Qantas may face some difficult decisions balancing the interests of its various stakeholders. These challenges are accommodated within Qantas' investment-grade rating, for now.

Virgin Australia's fleet is young by domestic and global standards and we believe it can afford to take a limited capital holiday without becoming uncompetitive. We believe any cash windfall will help Virgin's financial self-sufficiency. It may also provide Virgin Australia with additional balance sheet capacity to repurchase the 35% economic interest in its Velocity frequent-flyer business sold to private equity in August 2014, should it choose to do so.

Reduced aircraft investment, past writedowns, and past tax losses can provide a temporary boost to financial performance. We believe this is part of Qantas' turnaround story alongside its successful transformation program. Similar benefits are likely to be ahead for Virgin Australia, although it remains to be seen to what extent the airline will capitalize on this opportunity.

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[2] It is possible that there will be a greater than 2-standard deviation move in Brent forward market prices to the assumed correlated AUD/USD rate for the remainder of fiscal 2018.

[3] Qantas expects net capital expenditure is broadly equivalent to depreciation (A$3.0 billion aggregate net capital expenditure for fiscal 2018 and 2019, adjusted for disposals).

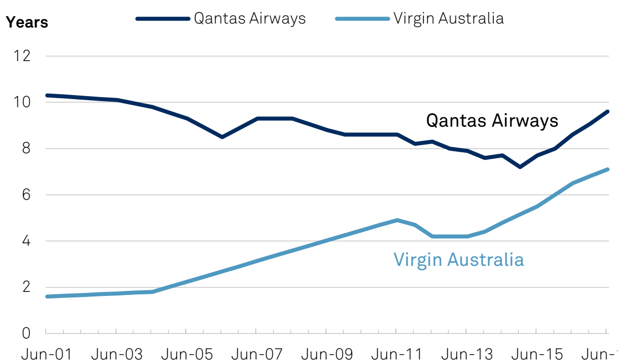
Subdued aircraft investment becomes problematic over the longer-term. We do not consider the Australian aviation industry's current high barriers to entry are impregnable. In our opinion, the appearance of a new low cost carrier becomes more likely should domestic market dynamics and pricing more resemble a traditional duopoly. If an extended capital holiday leaves incumbent carriers with an old and uncompetitive domestic fleet, the door could be left ajar for a new entrant. We are not there yet, not even close, but these longer-term trends are worth monitoring.

Fleet Age Rising

The capacity war that began in 2008, intensified in 2012, and ended in May 2014, resulted in a spike of new aircraft that improved average fleet age (see chart 5). Even though the average age has crept up since, Virgin's fleet remains relatively young by global standards and Qantas' is below many of its legacy airline peers' (see chart 6).

Chart 5

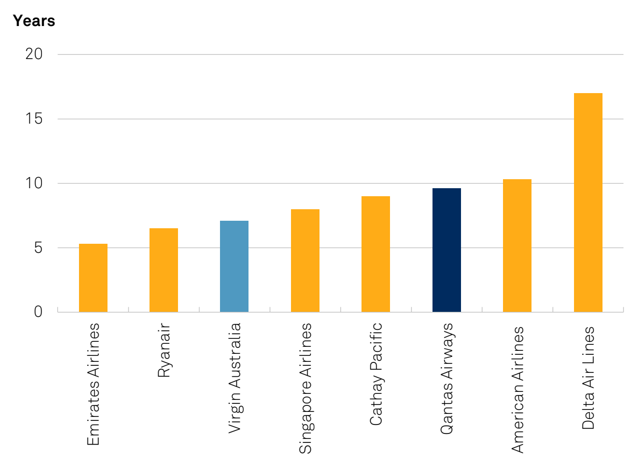
Average Fleet Age[4]



Source: Company reports, S&P Global Ratings estimates.

Chart 6

Average Fleet Age Of Global Airline Peers



At last annual reporting date
Source: Company reports, S&P Global Market Intelligence, S&P Global Ratings estimates.

Qantas previously targeted an average fleet age of between 8 and 10 years. Virgin Australia doesn't disclose such targets. That said, averages and past capex trends provide an incomplete picture. We therefore incorporate detailed fleet analysis to guide future investment needs (see Appendix A).

Qantas: Large Investment Inevitable

We believe increased aircraft investment is inevitable for Qantas given its older fleet and large international exposure. The airline's international strategy emphasizes aircraft that are capable of servicing a new ultra-long haul network that bypasses regional hubs. This is important given Australia's "end-of-the-line" location. The airline will then need to turn its attention to replacing the oldest of its domestic fleet.

[4] We use each carrier's measure of age despite some incompleteness (in particular, both airlines omit their 20+ year-old Fokker fleets and dedicated freight aircraft). The data is patchy, particularly for Virgin Australia, and we have used our own estimates based on the airlines' methodology where data points are unavailable.

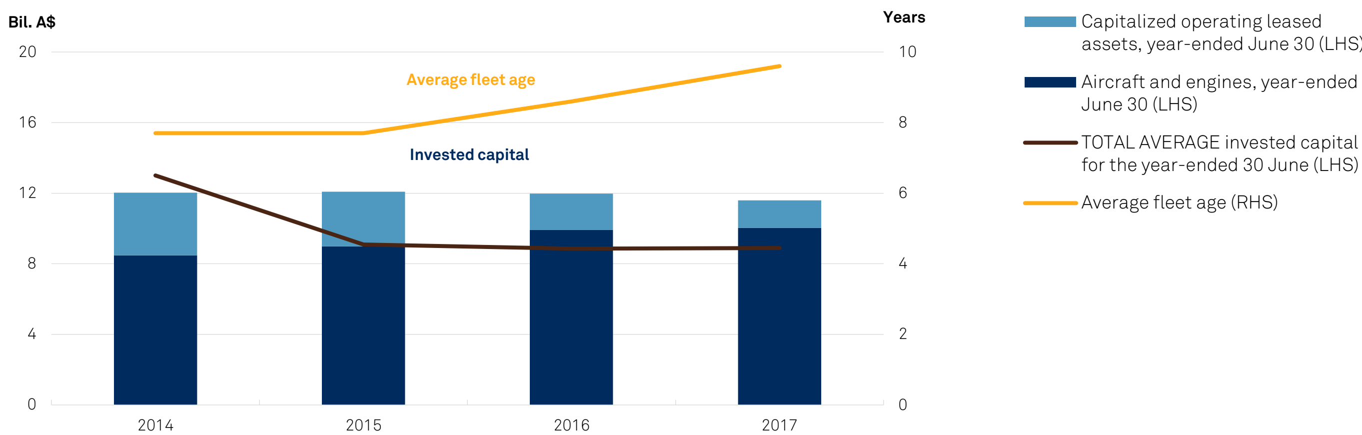
An aging fleet lifts financial performance

Return on invested capital (ROIC) is Qantas' primary financial measure. ROIC tends to increase with fleet age. This is because an aircraft's book value steadily depreciates despite the economic benefits remaining relatively consistent throughout its useful life (see Appendix B).

Over the three years to fiscal 2017, Qantas' average fleet age has increased by two years despite a constant level of invested capital (see chart 7). This implies that depreciation materially understates Qantas' reinvestment needs. It also implies that invested capital will need to grow in order for Qantas to preserve the age and competitiveness of its fleet.

Chart 7

Qantas' Invested Capital Versus Fleet Age



Qantas' broader measure of total invested capital adjusts mostly for working capital requirements and impairments as seen in fiscal 2014.
Source: Company reports, S&P Global Ratings estimates.

Qantas has stepped away from targeting average fleet age within an 8 to 10 year range. A more qualitative approach has instead been adopted.[5]

Our rating accommodates some lengthening of Qantas' average fleet age beyond its former target range. However, an older fleet may affect the carrier's operating efficiency and financial flexibility. That said, we acknowledge that Qantas' transformation program has been successful in increasing the utilization and capacity of its existing fleet.

Potentially sizable funding task from fiscal 2020

Qantas' capex has remained constrained over the past few years (see chart 8). This is particularly true of its fleet investment[6]. Balance sheet repair originally justified Qantas' capex constraint. This was successfully achieved. However, since its financial turnaround in fiscal 2015, Qantas has

[5] Qantas determines optimal fleet age based on a number of factors, including the timing of any new technology, the level of capacity growth required in the markets that it serves, the competitive landscape and whether the investment is earnings accretive.

[6] Additions to the group's fleet include new and second-hand aircraft, financed via the balance sheet or leases:

- During fiscal 2017: 3x F100s (2nd hand), 1x 737-400SF (2nd hand), and 2x A321-200s (new).
- During fiscal 2016: 2x 717-200s (2nd hand), and 3x 787-8s (new)
- During fiscal 2015: 5x B737–800s (new), 4x 787-8s (new), 1x A320-200s, 1x Q400, and 1x Fokker100 (2nd hand)

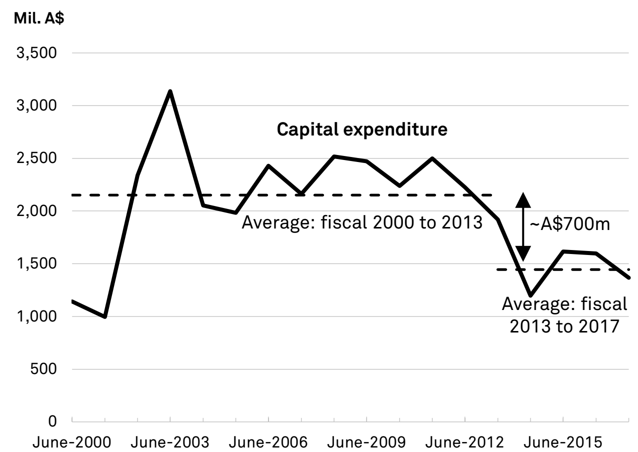
Qantas will take delivery of four Boeing 787-9s during both fiscal 2018 and fiscal 2019, as well as receiving its first delivery of a large order of A320neos on behalf of budget airline subsidiary, Jetstar Airways.

used surplus capital to fund shareholder returns rather than to grow invested capital (see chart 9). We do not view this as sustainable over the longer term.

Qantas has materially deleveraged since the height of the capacity war and its net debt position now sits below the midpoint of its target range. This provides Qantas with some headroom to grow invested capital. Meaningful asset disposal may provide Qantas with additional flexibility to invest.

Chart 8

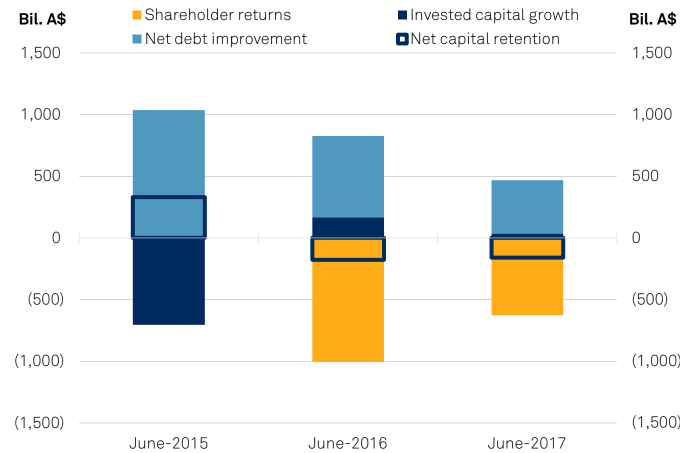
Qantas' Capital Expenditure (S&P Lease Adjusted)



Fiscal 2016 capex adjusted for A$535 million sale-and-leaseback of Sydney Airport T3[7]
Source: Company reports, S&P Global Market Intelligence, S&P Global Ratings estimates.

Chart 9

Qantas' Capital Retention



Company definitions of net debt, invested capital, and shareholder returns.
Source: Company reports, S&P Global Ratings estimates.

A potentially sizable funding task looms from fiscal 2020. That's because Qantas has signaled that it does not intend to grow invested capital over the next two financial years.

Legacy fleet impairment boosted Qantas' financial performance

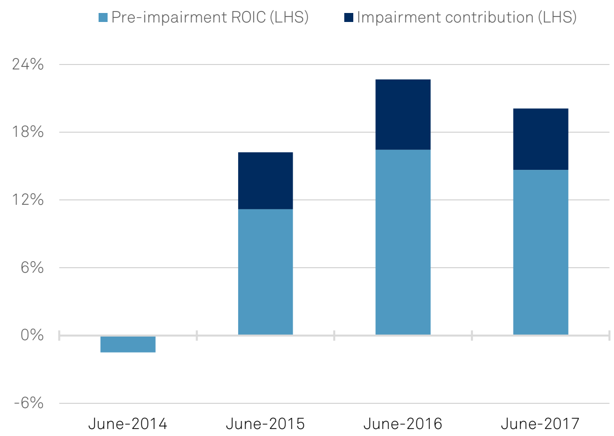
The A$2.6 billion impairment of Qantas' international fleet in fiscal 2014 has benefited the airline's financial performance ever since. Not only has it reduced the level of invested capital, but it has also increased EBIT by about A$200 million per year via a lower depreciation expense. Both continue to provide ROIC uplift (see chart 10).

Qantas has not paid company tax since fiscal 2011 despite record profitability. The remaining A$951 million of tax losses carried forward should offset tax for another year or two (see chart 11). However, the resumption of company tax payments may coincide with a fleet renewal from fiscal 2020.

[7] Leasehold improvements that we would have otherwise recognized as capital expenditure via the increased present value of the group's operating lease commitments.

Chart 10

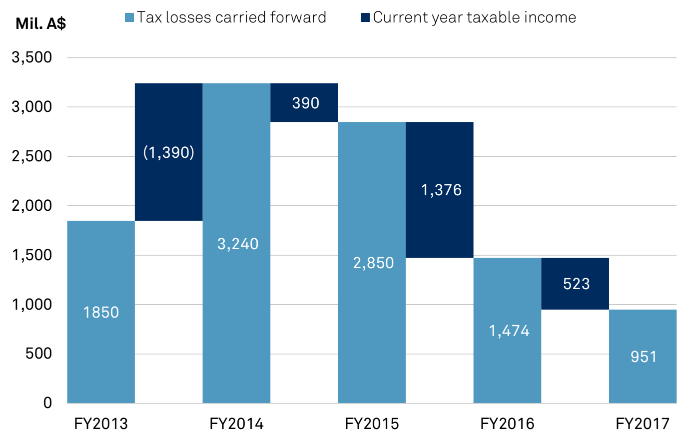
Implied Fiscal 2014 Impairment Contribution To ROIC[8]



Source: Company reports, S&P Global Ratings estimates.

Chart 11

Qantas' Tax Losses Carried Forward



Source: Company reports, S&P Global Ratings estimates.

Supportive financial framework

Qantas introduced its financial framework following its fleet writedown.[9] ROIC is Qantas' primary financial measure. Qantas' targeted debt range is 2x to 2.5x EBITDAR (ROIC EBIT plus depreciation) or A$4.8 billion to A$6.0 billion (A$5.2 billion as of June 30, 2017, company's measure). Surplus cash is the difference between the projected net debt position and the target net debt position while ROIC remains above 10 per cent (see chart 12).

We view the financial framework in tandem with Qantas' broader commitments that ensure the business is sufficiently capitalized:

— Qantas separately commits to maintaining funds from operation (FFO)-to-debt (under S&P Global Ratings' methodology) of more than 45% through the cycle (58.7% as of June 30, 2017). FFO is calculated after current tax expense.
— A key objective of the financial framework is to grow invested capital.

We previously received comfort from Qantas' former targeted average fleet age of 8 to 10 years.

The airline's most recent guidance indicates that investment won't grow until at least the year ending June 30, 2020[10], by which point capex will have been constrained for a period of seven years. While we view Qantas' financial policies favorably against Australian corporate and global industry peers, the practical application of these policies will be a key rating consideration over the medium- to long-term.

We believe the domestic capacity war was equally a balance sheet war. The benign competitive environment that has allowed Qantas to reduce fleet investment has also allowed it to reduce its cash holdings (see Chart 13). Much of the cash was used to purchase operating leases. We continue to assess Qantas' liquidity as strong.

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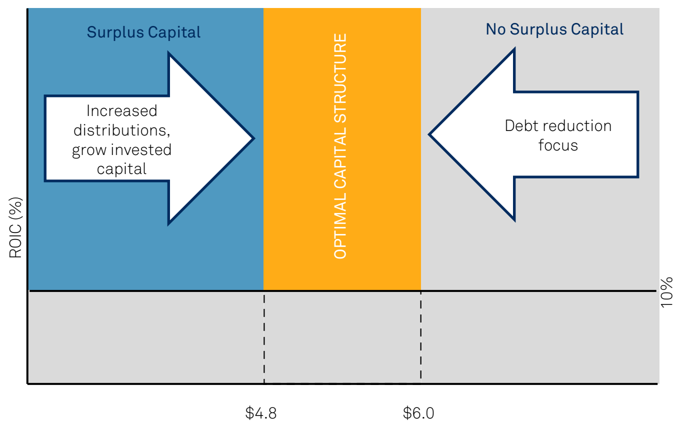
8 Depreciation and amortization expenses due to the fiscal 2014 noncash impairment to Qantas' international fleet were last reported in fiscal 2015 as a A$195 million reduction. Our implied impairment contribution would be lower if impaired cash generating units have since been divested. We believe this would be nonmaterial.

9 Qantas' current financial framework was first outlined at the May 2015 Qantas Investor Day.

10 Qantas expects net capital expenditure is broadly equivalent to depreciation (A$3.0 billion aggregate net capital expenditure for fiscal 2018 and 2019, adjusted for disposals).

Chart 12

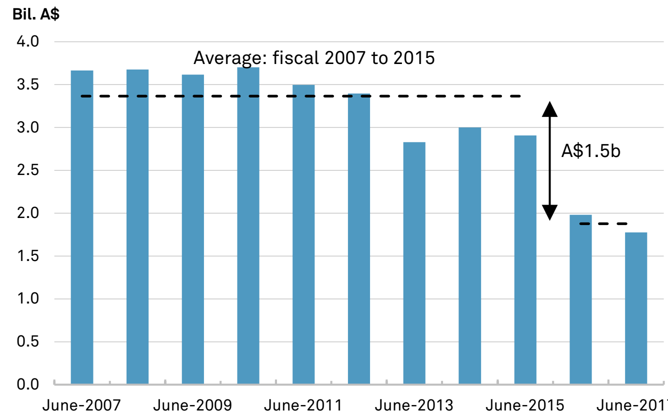
Qantas' Optimal Capital Structure



Source: Qantas Annual Review 2017.

Chart 13

Qantas' Cash And Short-Term Investments



Source: Company reports, S&P Global Ratings.

Qantas Sale Act complicates access to equity

Qantas' financial framework protects creditors from the high upfront expense and lower ROIC implied by investing in a younger fleet. By our calculation, Qantas' target debt range will only rise by about 50 cents for every additional dollar of invested capital.

We believe that Qantas has the means to grow invested capital via headroom within its targeted debt range or retained earnings. This may be insufficient depending on the size of the funding task. Qantas' financial framework also considers the possibility of raising equity under certain circumstances. Such a move would not be unprecedented.[11]

The Qantas Sale Act 1992 limits foreign ownership to 49%--a layer of complexity that we incorporate in the investment-grade rating.[12] This may become more relevant if foreign ownership reaches its statutory limit at a time of increased capital investment and the resumption of company tax payments.

Funding will become more important when Qantas looks to replace its fleet of 12 A380s, the oldest of which is nine years old. We believe these aircraft are less suited to Qantas' ultra-long haul strategy as it develops over the longer term.

We note that Malaysia Airlines has deemed its young fleet of A380s as surplus to its requirements and Singapore Airlines recently handed back its first A380 after only a decade of service. It remains to be seen to what extent a secondary market will exist for these aircraft. That said, Emirates Airlines recently placed an order for up to 36 A380s and it has been reported that British Airways has expressed interest in both new and second-hand models.

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[11] Following the collapse of Ansett, Qantas raised A450 million in October 2002 and A$720 million in September 2002 to support its capital expenditure program. In February 2009, Qantas raised $525 million to support the fleet renewal program, increase diversity of funding, reduce debt, and support its investment-grade credit rating.

[12] As of Dec. 29, 2017, foreign investors potentially held a 43.6% interest, down from 46.7% as of Dec. 4, 2017.

Stable credit quality

Qantas' fiscal 2017 results underscore the airline's turnaround since the debilitating capacity war that ended in May 2014. We restored Qantas' investment-grade credit rating in November 2015. In recognition of further improvements to its earnings quality, we also increased our debt tolerance and reduced our liquidity requirements at the 'BBB-' rating level. In addition, we reduced the amount of restricted cash, which benefits our adjusted debt calculation.

Upside rating pressure is currently limited and would depend on the implementation of a strategy that stabilizes Qantas' fleet age while limiting pressure on its balance sheet. Failure to identify profitable outlets for growth investment could be indicative of the aviation industry's poor fundamentals.

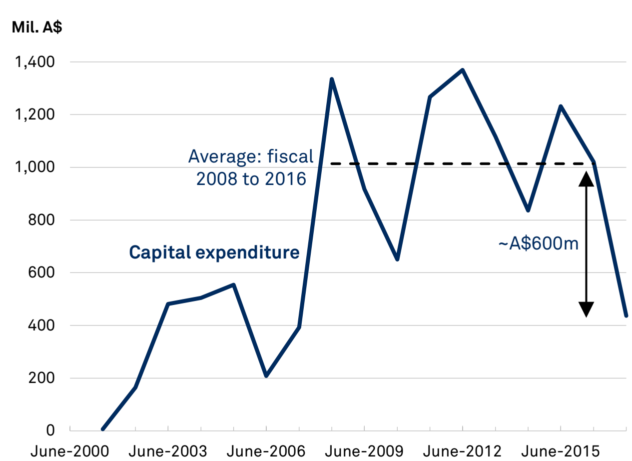
Virgin Australia: Clearer Deleveraging Path

Virgin Australia faces similar issues to Qantas. It too has materially reduced its level of investment, albeit much more recently (see chart 14). We believe there is scope for Virgin to pause aircraft investment for a little while longer (see Appendix A). An aging fleet should act as a tailwind for Virgin Australia's financial performance over the next few years. We view Virgin Australia's recent impairments[13] as less material and characteristically different than Qantas' fiscal 2014 impairment, and therefore, less likely to boost ROIC.

As of June 30, 2017, Virgin's tax losses carried forward have ballooned to A$2,346.3 million (see chart 15). Virgin Australia's low-cost carrier Tigerair Australia has its own tax group. Deferred tax assets have not been recognized for Tigerair because it is not expected to generate future taxable profit. This may be revised if Tigerair is able to establish a track record of profitability.

Chart 14

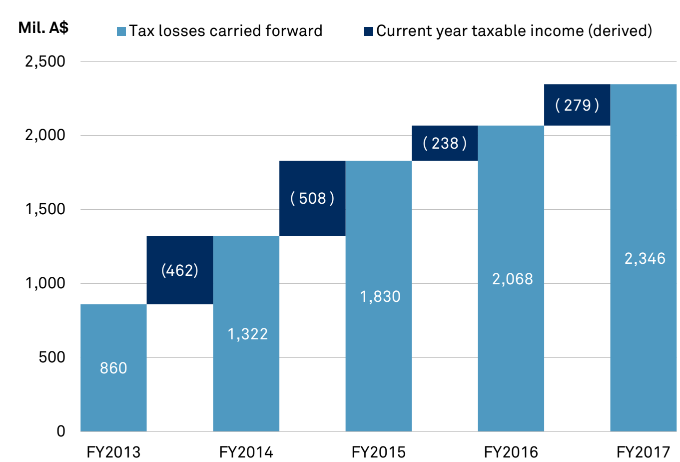
Virgin Australia's Capital Expenditure (S&P Adjusted)



Source: Company reports, S&P Global Ratings.

Chart 15

Virgin Australia's Tax Losses Carried Forward



Source: Company reports, S&P Global Ratings.

13 In fiscals 2016 and 2017, Virgin Australia recognized impairment losses on assets classified as held for sale, impairment losses on other assets, and onerous contract expenses associated with the group's fleet simplification plan. The combined value was A$422.1 million over the two-year period.

Financial headroom likely to improve

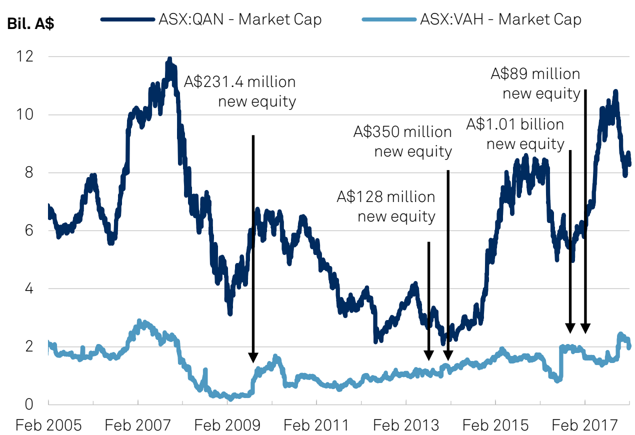
Solid free operating cash flow should also provide Virgin Australia with additional balance sheet capacity. This could arrive at an opportune time. Private equity firm Affinity Equity Partners holds a 35% economic interest in Virgin's Velocity frequent-flyer business through the ownership of convertible notes. It has had the option to exit from October 2017 either via a trade sale or an IPO. Virgin Australia has a right of first offer or to participate in the sale.

Financial self-sufficiency is key

Virgin Australia's ownership structure supports the rating at the 'B+' level. The airline is currently 90%-owned by Etihad Airways, Singapore Airlines, Nanshan Group, HNA Group, and Virgin Group. Under past ownership structures, Virgin Australia has been recapitalized during periods of financial stress (see chart 16). However, we believe it is somewhat less likely that Virgin Australia's current owners would underwrite future operating losses. This reinforces our belief that Virgin Australia will use any potential windfall from a capital holiday to pay down debt and improve its financial self-sufficiency (see chart 17).

Chart 16

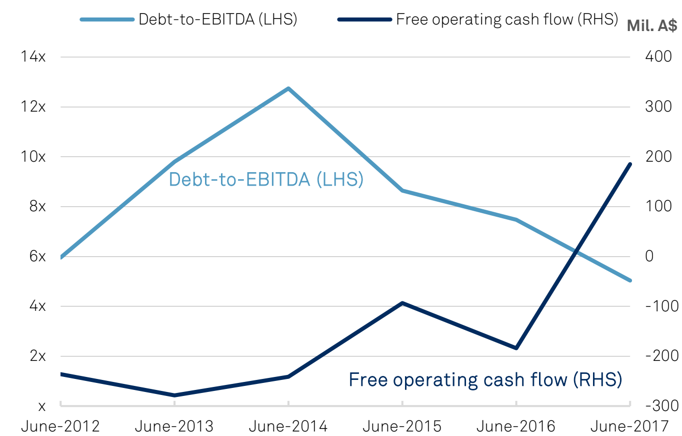
Market capitalization



*Market capitalization as at Jan. 16, 2018
Source S&P Global Market Intelligence, S&P Global Ratings.

Chart 17

Key S&P Global Ratings' Adjusted Credit Metrics



Source: Company reports, S&P Global Ratings.

Stable credit quality

Virgin Australia's fiscal 2017 results were less impressive than Qantas' but nevertheless point toward a sustained earnings improvement. Reduced capex raised the prospect of positive free cash flow for the first time in the carrier's 17-year history. We revised Virgin Australia's rating outlook to stable from negative on June 25, 2017.

Virgin Australia will need to consolidate its position at the 'B+' rating level before we consider upward rating action. Our rating expectations for Virgin Australia at the 'B+' level are less onerous than for Qantas, which is at 'BBB-'. We believe the airline still has some low-hanging fruit regarding its cost position. Financial self-sufficiency is key. We could raise the rating if we expect Virgin to sustain its debt-to-EBITDA below 4x. Upward rating action would require greater clarity over the status of the convertible note issued to Affinity Equity Partners.

Ansett Australia

The collapse of Ansett Australia offers a reminder that sweating an airline's aircraft fleet can prove devastating in the long-run. The appearance of low cost carriers with their small fleets of young aircraft placed significant downward pressure on industry profitability.

Ansett had suffered from years of undercapitalization and was ill-equipped to compete. Moreover, a large number of aircraft types weighed on its operating efficiency. In 2000 and 2001, Ansett grounded its B767 fleet due to the discovery of structural cracks. Ansett entered voluntary administration on Sept. 12, 2001, and was wound up less than six months later. Ansett's average fleet age was 13.8 years[14].

[14] New Zealand Government Treasury Report: Air New Zealand: Assessment of Problems and Options, June 20, 2001, citing Salomon Smith Barney Global Fleet Rollup Model – 2001 Fleet Handbook.

Appendix A – Fleet Age Of Qantas And Virgin Australia

Averages can be misleading if they obscure the lumpiness of aircraft renewals. There are also several limitations in using past capex figures (either reported or adjusted) as a guide. For example, capex is broader than aircraft and airlines have some discretion over what items are expensed or capitalized. Context, such as the competitive landscape, is an important consideration too.

To approximate a like-for-like comparison, we calculate fleet age based on available seats, which adjusts for different aircraft size.[15] It implies that capacity is held constant across each carrier. While capital and operating costs vary between aircraft, it nevertheless provides another useful indicator of the scale and timing of fleet renewal.

Qantas: Manageable older aircraft fleet, for now

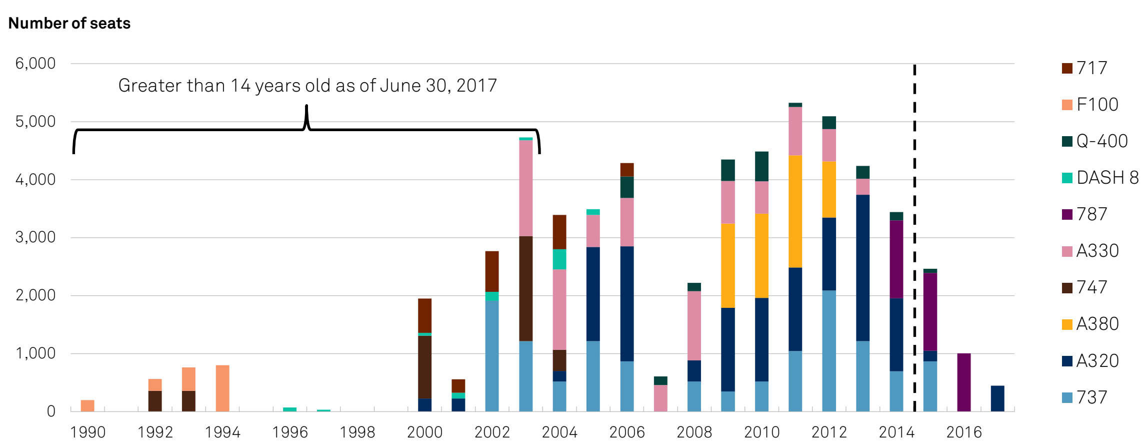
Qantas' fleet includes a larger share of older aircraft. As of June 30, 2017, Qantas had almost 12,500 seats in excess of 14 years old (see chart 18). To put this in perspective, this equates to about 72 B737-800s or 53 B787-9s under Qantas mainline's current configuration. That said, the renewal task does not have to be tackled all at once. The sooner it is commenced, the smoother the funding profile is likely to be. At this stage, we believe Qantas still has some near-term flexibility regarding its renewal program, although this window is narrowing.

Aircraft renewal is currently not keeping pace. In fiscal 2017, Qantas took delivery of only two new A321-200s, as well as four second-hand regional and one second-hand freight aircraft, all in excess of 20 years old.

Qantas has a bulge of older aircraft. Following the collapse of Ansett in September 2001, Qantas moved quickly to entrench its dominant market position and update its aging fleet with a large delivery of B737-800s as well as B747-400ERs, A320s, and A330s, most of which remain in service today.

Chart 18

Qantas Airways' Seat Age Profile, Year Ended June 30



Source: Company reports, S&P Global Ratings estimates.

15 For example, a retiring Airbus A380 can be replaced with either a new A380, two Boeing B787-900s, or three B737 MAX 7s. Seats are estimated using the more recent cabin configurations

Qantas' new international strategy emphasizes aircraft that can profitably service a new ultra-long haul network that bypasses regional hubs. The B787 partially meets this requirement and Qantas is in discussions with manufacturers for a longer-range solution, including variants of the B777X or A350ULR currently under development.

The three remaining B747-400s manufactured before fiscal 2000 are scheduled to be replaced with existing B787-9 orders over the next year, but Qantas will continue to operate its remaining fleet of six B747-400ER, the oldest of which was manufactured in fiscal 2003. Qantas mainline operates a sizable fleet of A330s across its international and domestic businesses, the oldest of which was manufactured in fiscal 2003.

Qantas' fleet of B737-800s forms the backbone of its domestic and trans-Tasman fleet. This includes a cluster of 15 B737-800s manufactured within six months of each other that are now in excess of 15 years old. The origin of these aircraft dates back to delivery slots cancelled by American Airlines following the September 11 attacks and the subsequent downturn in the U.S. market. These will likely be replaced by a combination of B737 MAX or A320neo and new midsize aircraft, although a final decision appears to be some time away.

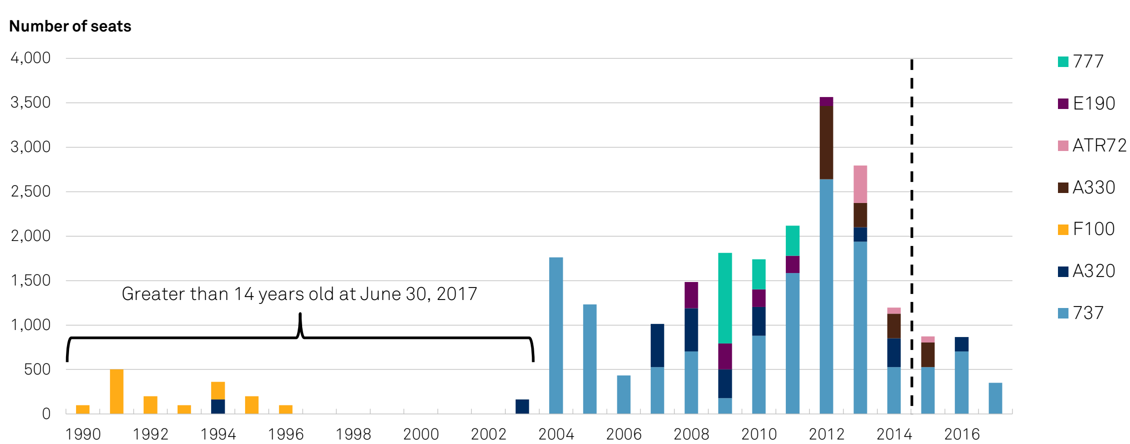
We understand that the renewal of Qantas mainline's domestic fleet is a secondary priority, which suggests that some of these aircraft may see out their useful life with the carrier. Qantas' low cost subsidiary, Jetstar, operates a relatively young fleet and has a sizable order of A320neo that has been deferred to fiscal 2018.

Virgin Australia: A younger, simpler fleet

Virgin Australia's domestic fleet predominantly consists of Boeing 737-800s as well as 16 A320s inherited from its acquisition of Tigerair in 2012 (see chart 19). Virgin's relatively young fleet is largely a function of itself being a relatively young airline: Virgin commenced operations during August 2000 as low-cost carrier Virgin Blue with only a handful of narrow-body jets and has grown its fleet aggressively since. Virgin intends to replace Tiger Airways' fleet of A320s over the next few years and will receive first delivery of its deferred B737 MAX order during fiscal 2020.

Chart 19

Virgin Australia's Seat Age Profile, Year-Ended June 30



Source: Company reports, S&P Global Ratings estimates.

Virgin Australia's international business is proportionately smaller than Qantas' and consists of only five B777-300ERs and six A330-200s as well as B737-800s that it shares with its domestic business. The oldest B777-300ER dates back to fiscal 2009 and the oldest A330-200 to fiscal 2012. Virgin Australia uses a virtual network of partner airlines to serve destinations beyond the direct reach of its existing aircraft.

Aircraft Age: How Old Is Too Old?

The optimal age at which to replace aircraft is difficult to estimate, particularly since no single factor defines an aircraft as old. Aircraft generally have a chronological lifespan of a little over 20 years, but can be kept in service longer depending on flight hours and flight cycles. Both carriers maintain their aircraft in cooperation with regulators, manufacturers, maintainers, and owners.

The benefits of operating a modern fleet are obvious: newer aircraft tend to be more fuel efficient, less demanding to maintain, more reliable, and quieter. Better customer appeal, including reliability, can support a revenue premium. Importantly, supply is better tailored to match evolving demand requirements.

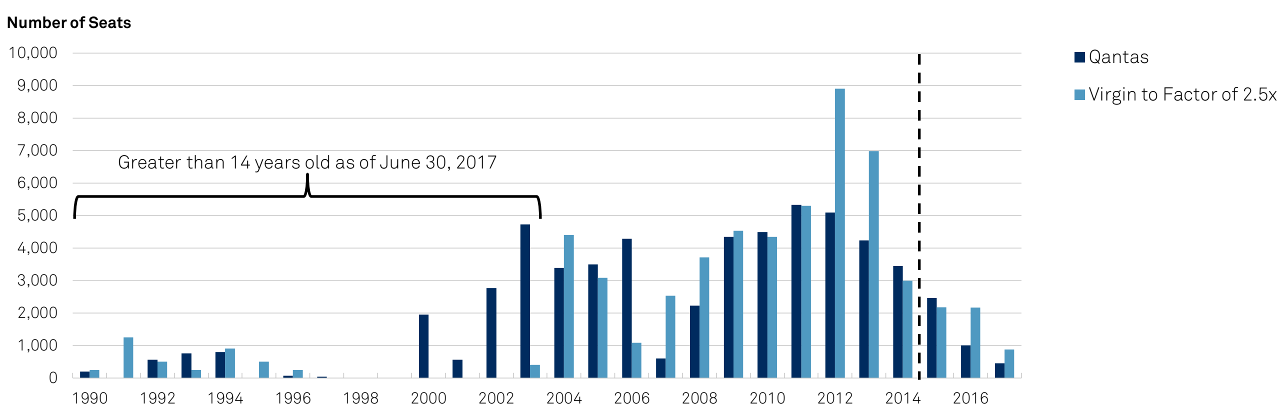
That said, owning older aircraft isn't necessarily problematic. Cabins can be refreshed to the extent that customers would likely be unaware of the aircraft's age. There is less invested capital tied-up in older aircraft, meaning return hurdles can be lower. To this end, flying older aircraft may be the only means of making marginal routes viable and helps explain why Australia's regional networks are dominated by older aircraft.

Virgin Could Take A Capital Holiday And Remain Competitive Against Qantas

We believe Virgin Australia can afford to take a capital holiday. We calculate that Qantas currently has 2.5x as many seats as Virgin Australia despite having only 2.2x as many aircraft (see chart 20, which adjusts for the relatively size of Australia's two airlines). That's because of the relatively larger size of Qantas' aircraft, which itself is largely a function of its proportionately larger international business. Chart 20 is also of interest as it shows the extent to which aircraft deliveries moved in tandem during much of the capacity war.

Chart 20

Australian Airline Sector's Weighted Seat Age Profile, Year Ended June 30



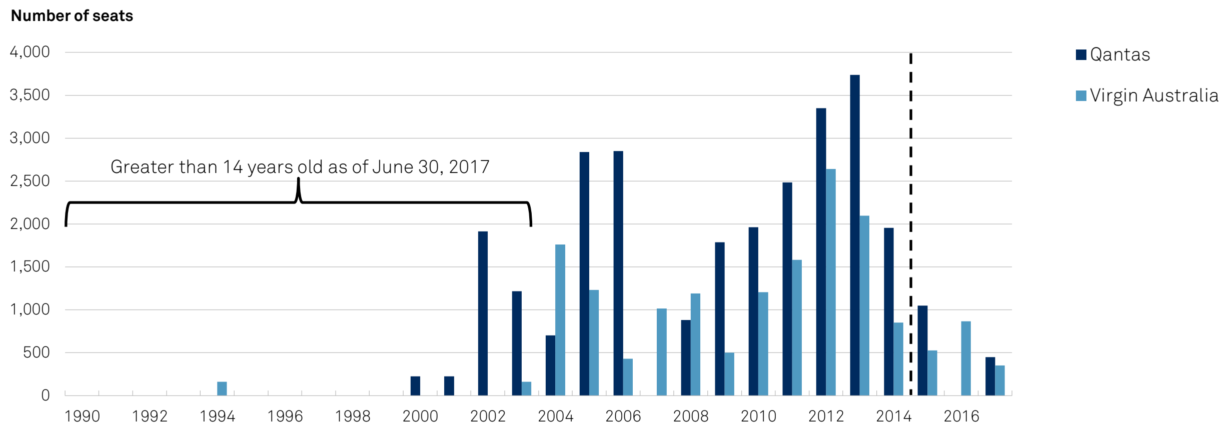
Source: Company reports, S&P Global Ratings estimates.

Both Qantas' and Virgin Australia's regional fleet stand out for their advanced age. That said, we believe the aircraft that make up this fleet are fit for purpose. They are generally operated at a lower tempo with fewer flight cycles and hours compared with their domestic fleet. Many of these aircraft service the fly-in/fly-out resource-related markets.

If we look specifically at the B737s and A320s that dominate Australia's domestic and trans-Tasman networks, it further supports our view that Virgin Australia could defer narrow-body aircraft deliveries without its domestic fleet becoming uncompetitive against Qantas (see chart 21).

Chart 21

Australian Airline Sector's Seat Age Of B737 And A320 Fleets, Year Ended June 30



Source: Company reports, S&P Global Ratings estimates.

We note that fuel efficiency has been less of an issue over the past few years and may have justified keeping older aircraft in service for longer. However, steadily rising Australian-dollar denominated fuel prices could provide further impetus for fleet renewal.

According to Boeing, the latest B737 MAX reduces fuel use and carbon dioxide emissions by 20% compared with the B737 Next-Generation (NG) that have been operated by both Qantas and Virgin Australia over the past two decades.

We also note that ultra-long haul magnifies fuel burn because of the fuel weight at the start of the journey.

Appendix B – Depreciation And Financial Performance

The method of calculating an aircraft's book value is an important determinant of ROIC. The rate of depreciation is key. Observed practice from global airlines is inconsistent and reflects different assumptions regarding aircraft type, useful life, and residual value. That said, the depreciation rate typically ranges between 4% and 7%. The straight-line depreciation method is generally adopted because the pattern of future economic benefits is typically consistent throughout the aircraft's life.

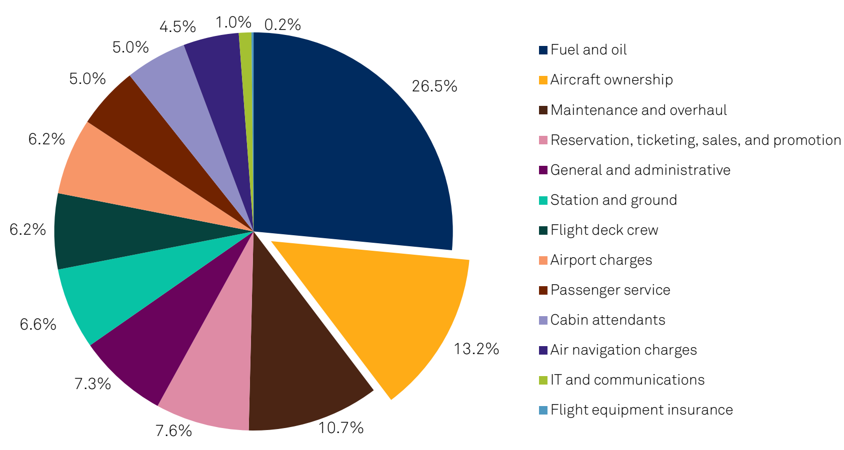
Disclosures from Australian airlines are vague[16], although both adopt the straight-line method. However, if we assume an aircraft has a useful life of 20 years (the upper end of the range for both Qantas and Virgin), residual value of 10% (the upper end of the range for Qantas), then the depreciation rate is 4.5% per year.[17] Australian airline disclosures imply a range of anywhere between 4.5% and 40%. A lower residual value or shorter useful life would boost ROIC measures because the lower asset value outweighs the higher depreciation expense.

Aircraft, like any other asset, can be sweated to temporarily boost financial performance. Depreciation is only a reliable guide to future replacement costs if the age of an airline's fleet is evenly spread across its useful life, residual values are realized, aircraft are replaced like-for-like at the end of their useful life, aircraft values are not impaired, the carrier's needs don't evolve, and the cost of acquiring new aircraft remains unchanged.

We note, however, that ownership costs are only a small part of an airline's cost structure (see chart 20). Savings in maintenance costs will ultimately outweigh the cost of acquiring new aircraft. The airline is then faced with the high upfront cost of replacement and a lower return on invested capital, all else being equal.

Chart 22

Airline Cost Structure



Source: International Air Transport Association, S&P Global Ratings.

16 Qantas estimates the useful life of its passenger aircraft and engines to be between 2.5 and 20 years with a residual value between 0% and 10%. Virgin Australia estimates the useful life of its airframes, engines, and landing gear to be between 4 and 20 years.

17 While there is scope for useful lives and residual values to be reviewed, it is unclear to what extent this occurs in practice. In addition, embedded maintenance and subsequent maintenance expenditure are generally capitalized and then depreciated over the maintenance cycle.

Only a rating committee may determine a rating action and this report does not constitute a rating action.

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