The allure of investing in aviation

By Richard Hakes, Partner, and Ashleigh Standen, Associate, from Reed Smith's aviation finance team in London.

We always try to keep an eye on the markets and bond spreads, and on how these might be affecting the current positions and future strategies of our clients.

We say "keep an eye on" the markets because lately they seem to have been deliberately eluding the usual analysis – can anyone really understand them at the moment? Repeated record highs for S&P, and record lows for VIX volatility. Diminishing oil price risks and a flattening yield curve as a by-product of quantitative easing. Interest rates are still very low. Most major economies are now in recovery with positive output gaps and declining deficits, and are moving back to full employment. We saw a strong Q3 2017 in most parts, together with signs of wage inflation. These all offer good indications of strengthening global growth.

All of these factors mean that the bulls amongst you may very well be in "buy mode". However if you have a slightly more cautious outlook, but think that given the current readings on the barometer you can't afford to sit this half

out, our message to you is don't worry about a thing!

THE APPEAL OF ALTERNATIVE INVESTMENTS

In a sustained low-yield environment and with a demanding regulatory framework to navigate (particularly for highly-regulated investors such as insurance companies and pension schemes), the last few years have seen many investors looking at less liquid alternative investments that offer a higher risk adjusted return. The uncorrelated alternative of aviation investments in particular may offer a safe harbour of strong returns, somewhat independent from the madness of markets.

The latest stats are encouraging. Global revenue passenger kilometres (RPKs) grew by 7.4% in 2016, and again by 7.9% in the first half of 2017 which, according to IATA, is the fastest H1 seen since 2005. The average passenger load factor reached a record high of over 80%. The International Monetary Fund estimates that the world's GDP rose by 3.1% in 2016. At the time of writing, it looks like GDP for 2017 is going to exceed this and will be in the region of 3.5%. So, RPKs beat GDP by more than double and there are no obvious outward signs that cyclical factors are constraining the medium to longer term prospects for growth in the industry.

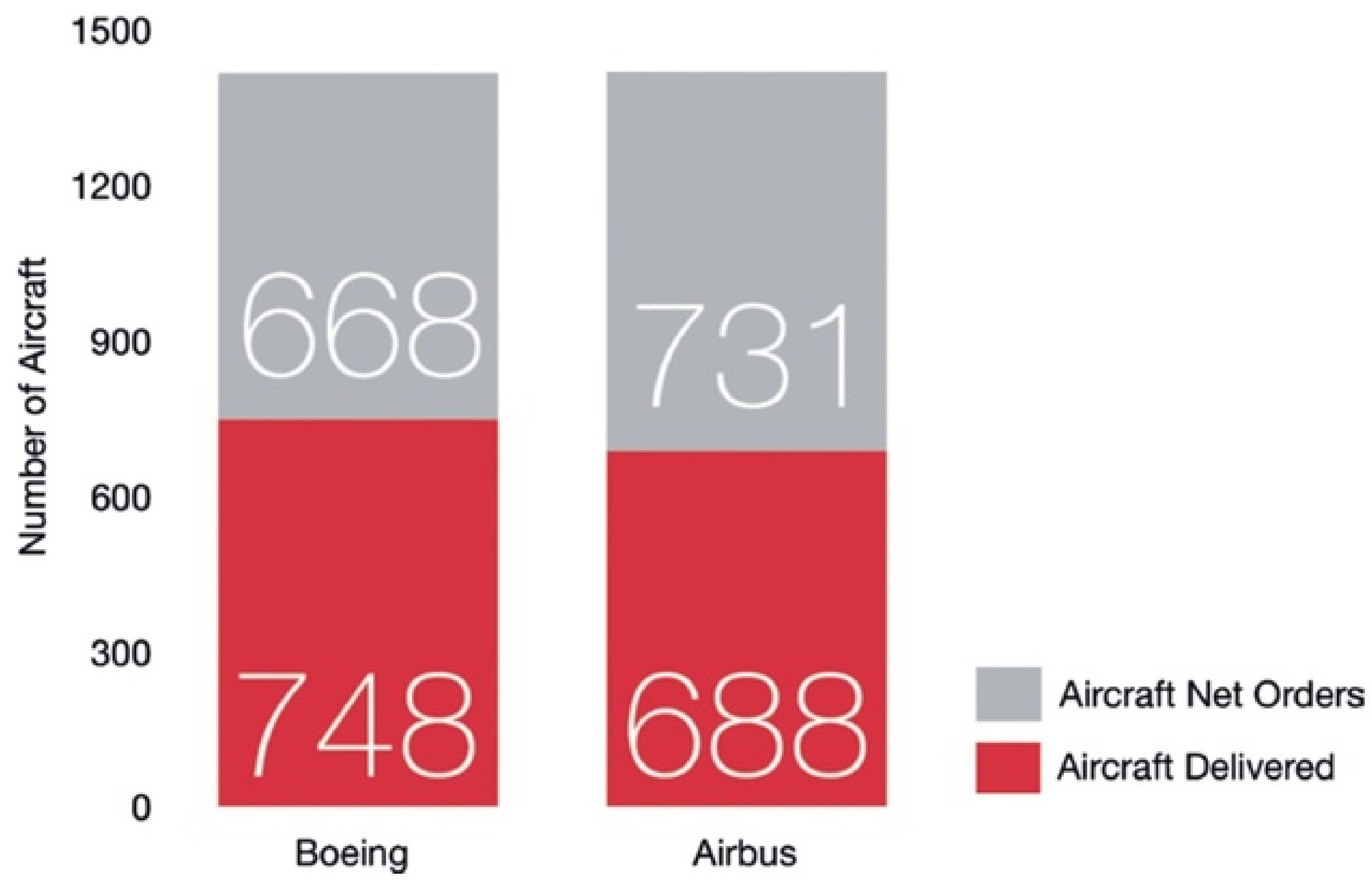
Aircraft typically have an economic life of 25 to 30 years, but the push for ever more fuel-efficient options has only served to increase the demand for new aircraft. The upcoming introductions of 'next generation' aircraft will have an appreciable market impact in terms of fleet composition – they account for somewhere in the region of 80% of the current order book, with the A320neo and the Boeing 737 leading the pack.

As new technology becomes increasingly important, the pace of change is accelerating. Air traffic has historically doubled every 15 years and is, according to research by The Airline Monitor, projected to have an average annual growth rate of close to 5% percent for the next 20 years. This will double traffic again over the next 15 years. The latest Airbus and Boeing forecasts show that the commercial fleet (currently around 20,000 aircraft) is expected to more than double over the next two decades.

Boeing's announcement in November 2017 of a $37 billion, 300 aircraft order for the Chinese is worth noting. On the one hand, this was key to President Trump's plans to develop $200 billion of new business during his trip to Asia. The numbers look big! But actually, Boeing is forecasting that China will require more than 7,000 aircraft over the next 20 years – or to put it another way, more than Trump's order every single year. Record breaking orders were also placed at the 2017 Dubai Airshow, including Indigo Partners' $49.5 billion Airbus order and Flydubai's $27 billion Boeing order.

It's not hard to see why: globalisation, the success of the low cost model and growing urban, "middle class", populations have all led to many more people flying much more often, which translates into rising demand for aircraft capacity. The financing of new deliveries is already estimated to be worth in excess of $100 billion a year. This is before we even factor in the secondary market, corporate jets or spare engine transactions. This expansion requires a pool of financing both wide and deep to sustain it, which will inevitably require tapping into new sources of capital and innovative structures.

At this point I should add that because of print-deadlines, we have written this article in November 2017; so if the markets have experienced a bump in the road between then and now, this only serves to underline the importance of investing in real assets (and to demonstrate the power of the Reed Smith aviation team's newly-purchased crystal ball). And if this hasn't yet come to pass, just watch this space.



HATCHES AND MATCHES: THE ROLE OF FUNDS AND PRIVATE EQUITY

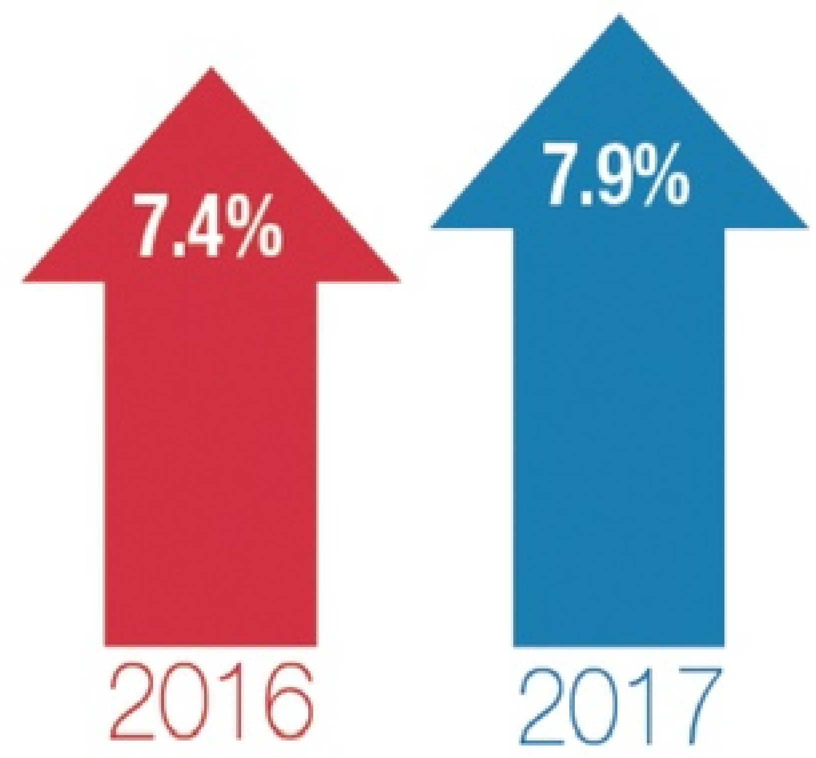
As the financing requirements grow, the role of fund finance and private equity in the aviation sector is also becoming more prominent.

This is not a new phenomenon. Private equity players have been excited by operating lessors for years. Aircastle was founded by Fortress in 2004. Cerberus Capital had an investment in AerCap until its exit in 2012, by which time AerCap had grown to be one of the largest lessors in the world. Falko was formed in July 2011 when funds managed by Fortress purchased the BAE Systems aircraft portfolio. Terra Firma acquired AWAS from Morgan Stanley in 2006 and Pegasus from Oaktree Capital, combining the two to create the new and enlarged AWAS (at the time, the third largest lessor in the world). AWAS hit the news again earlier in 2017 after it was bought by DAE, so the movement continues. Avolon was founded in 2010 with private equity backing, and bought CIT's aircraft leasing business last year for $10 billion.

In addition to these corporate-level acquisitions, many investors are looking at asset-specific plays. For example, the last 12 months have seen Doric partner with Floreat to launch an ABS transaction for A330s, and World Star Aviation establish a joint venture with Oaktree Capital to issue series of notes for 21 aircraft. Castlelake ran its fourth ABS programme in August for in excess of 40 aircraft and Aergo recently established its first ABS programme worth $585 million.

There is a relatively high bar to entry for investors looking to become aircraft financiers (which is why so many of these transactions arise as the result of partnerships and ad hoc joint ventures). While the opportunity to access investment grade debt secured against a long-term asset with a stable cash flow profile is of course attractive, these businesses are very capital intensive and acceptable returns can usually only be generated on a highly levered basis.

Perhaps contrary to expectation, the high capital requirements are attractive for investors rather than daunting. The expensive nature of aircraft is a great fit for the private equity world. Investors benefit from the economies of scale. Capital can be deployed quickly and efficiently, which enables tried and tested investment strategies to be imported from other sectors, such as real estate. In contrast to real estate, however, aircraft afford the added comfort of not being bound to a particular city or jurisdiction in an enforcement scenario and can be relatively easily repossessed, relocated and refurbished, whether in scheduled or unscheduled circumstances.



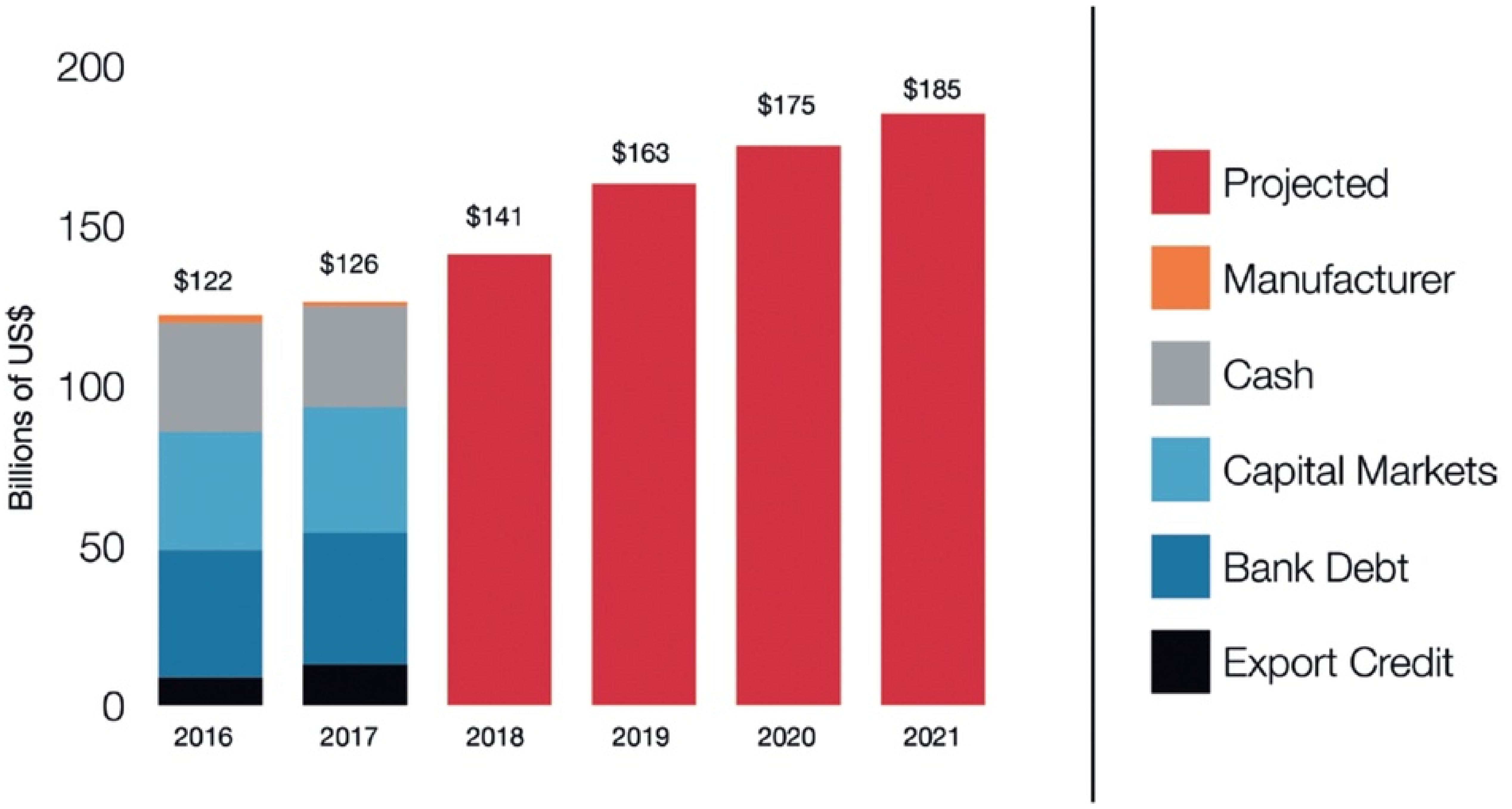
Global revenue passenger kilometres

There are also operational challenges for investors to overcome, whether in terms of sector-specific experience (such as aircraft valuations) or the various applicable regulatory regimes. And whilst aircraft are highly fungible, they do have finite economic lives. The extent of the operational challenges varies – for example, in default management for an ABS structure, the leasing company will have to manage repossession and resale upon a default, whereas in an EETC structure, this is the investor's responsibility. This might entail obtaining asset valuations, renegotiating the underlying debt or taking enforcement action.

However, the happiness of the marriage between private equity and funds with aviation is only emphasised by their existing familiarity with structured products, different leverage plays and diversified funding options. Many of our fund clients tell us they

	2011	2012	2013	2014	2015	2016	2017F
Cash	25%	26%	25%	24%	23%	28%	25%
Capital Markets	15%	18%	19%	28%	34%	30%	30%
Bank Debt	27%	23%	30%	33%	30%	33%	33%
Export Credit	33%	33%	26%	15%	13%	8%	10%
Manufacturer	0%	0%	0%	0%	0%	1%	2%
Total Volume (US$ billions)	$77	$98	$104	$115	$122	$122	$126

Source: Boeing Current Aircraft Finance Market Outlook 2017



Source: Boeing Current Aircraft Finance Market Outlook 2017

have also been drawn to this industry by relatively predictable asset values, supported by solid fundamentals around the supply and demand dynamic and manufacturing output. There are also useful real world mitigating factors against this volatility when pure aircraft value risk is viewed through the lens of lease rentals and residual values.

AN EYE TO THE FUTURE

Increased investor appetite has led to a reduced yield on more traditional loans and a search for new sources of finance – and next year is therefore likely to see a continued diversity of financiers. However, we expect ongoing stable performance from the existing primary investors in the sector. The commercial banks in particular face regulatory obstacles, not least around the Basel IV approach to the asset finance sector. This can be offset against the pace of growth in China (where bank debt is the primary source of finance) which means that it will still be the prevalent method of aviation finance and indeed will probably grow. The continued importance of the capital markets (including in secured structures such as EETCs, and particularly in the growth of non-US investors) should also not be underestimated.

Whilst equity funds attract more interest and will continue to do so, the role of aviation debt funds will increase and some banks will look to partner with funds managers in this space. German investment manager KGAL, which already has several aviation funds established, is expected to set up more in 2018.

We also expect that the high levels of interest in ABS structures (and in particular in e-note dispositions) will continue. Lessors will increasingly construct their portfolios with tradability and future access to sources of funding in mind, as demonstrated by the growing trend for owner-trust structures enabling faster lease novations. We also expect the lessors to carry on with their rapid portfolio trading, allowing for fleet growth and for portfolios to be refreshed.

All of these factors combine to create a sustained competitive pricing environment, particularly when relatively new funding sources such as the Korean institutional investors and the Taiwanese banks are considered. Some of these new sources will inevitably see tailored debt in alternate currencies and a number of borrowers have also indicated a willingness to tailor profiles to fit the investors' needs. However, aviation offers a niche investment opportunity – and prospective financiers will continue to pick and choose their opportunities carefully.