Company Name: AerCap Holdings
Company Ticker: AER US
Date: 2019-11-11
Event Description: Capital Markets Day

Market Cap: 8238.52608566
Current PX: 60.31
YTD Change($): 20.71
YTD Change(%): 52.298

Bloomberg Estimates - EPS
Current Quarter: 1.845
Current Year: 7.785
Bloomberg Estimates - Sales
Current Quarter: 1224.333
Current Year: 4915

Capital Markets Day

Company Participants

- Joseph McGinley, Head of Investor Relations
- Aengus Kelly, Chief Executive Officer and Executive Director
- Philip Scruggs, President and Chief Commercial Officer
- Bart Ligthart, Head of Trading and Portfolio Management
- Joe Venuto, Chief Technical Officer
- Anton Joiner, Chief Risk Officer
- Brian Canniffe, Group Treasurer
- Peter Juhas, Chief Financial Officer

Other Participants

- Michael Linenberg
- Analyst
- Helane R. Becker
- Catherine Maureen O'Brien
- Ross Harvey
- Moshe Ari Orenbuch
- Jamie Baker

Presentation

Joseph McGinley, Head of Investor Relations

Hello. Good morning, everyone. My name is Joseph McGinley the Head of Investor Relations at AerCap and I'd like to welcome you all here today to our 2019 Capital Markets Day. We have a great lineup of speaker's here today, the point of which is to show you the breadth and experience of the AerCap management team.

Our first speaker today will be our CEO, Aengus Kelly, who will talk us through our fleet strategy and capital allocation decisions, he will be followed by our President and Chief Commercial Officer, Philip Scruggs, who will discuss the current demand for aircraft and how AerCap's platform is a competitive advantage, then follows our Head of Trading and Portfolio Management, Bart Ligthart whose team have sold over $11 billion of aircraft since 2015.

And just before the break, our Chief Technical Officer Joe Venuto, he's going to bring us through the extraordinary amount of data that AerCap collects in its aircraft, and how we use that to our advantage. We'll have a short break and then our Chief Risk Officer, Anton Joiner will walk us through a couple of real life case studies, which show how our culture of action ensures that we're always first to take our aircraft out in the event of distress. Brian Canniffe will update us on the liquidity and funding environment, and how that's changed in the last 10 years. And finally our CFO, Pete Juhas will give a financial update, and make the case for why we feel AerCap remains an attractive proposition for long-term holders.

But before, I'd like to note that some statement today that are historical facts may be forward-looking statements, forward looking statements involve risks and uncertainties that may cause actual results or events to differ materially from those expressed or implied through such statements. AerCap undertakes no obligation other than that imposed by law, to publicly update or revise any forward-looking statements to reflect future events, information or circumstances that arise after today's presentation. And the presentation will be available as well the webcast after the event finishes at 11:30.

So with that I'd like to introduce our CEO, Aengus Kelly.

Aengus Kelly, Chief Executive Officer and Executive Director

Thanks, Joe, and thank you all for joining us here today on Veterans Day. It's very much appreciated, you all extremely welcome to our 2019 Capital Markets Day. So there are several topics that I would like to speak about today.

First of them is growth. This industry is a growth industry. Every 15 years, the amount of people traveling by air doubles. In that growing industry, AerCap is the global leader in aircraft leasing. Our platform has demonstrably produced superior results to anyone else in the business over a 15-year period in terms of shareholder value creation, and that has been done without the benefits of a large financial institution as a parent or a large industrial conglomerate. The portfolio we have, we believe is by some distance, the most attractive portfolio in the industry in terms of risk-reward and I will spend some time explaining why that is the case, and why it has been the case for so long, which is underpinned our superior returns.

There's a culture of action in this company and everybody says they act quickly. Now, of course any fool can act quickly and toss a coin and get a result. But to be able to act quickly, you have to work for years in advance; have structure, process, procedure, to analyze your information in order to be able to take the quick decision when the time comes and that is something we will talk about. The track record that this company, as I said, is unrivaled in the business and as we look to the future what you will see today is the support for what's going to come it will be more of the same.

So, turning to growth, what's driving the growth in this business? Every year 100 million people board in airplane for the first time in their lives. That is not going to change. That is driven by emerging middle classes and when we think about emerging middle class as we often think of China, India, Brazil, but one of the largest emerging middle classes and fastest growing in the world is in Eastern Europe in countries like Poland.

Furthermore, in developed markets, the advent of low-cost travel has meant that people in developed markets are taking three or four flights a year instead of one or two. So, what does that mean for you as investors? What does it mean in terms of quantum of airplanes that are going to be required to satisfy this demand? So you'll hear these forecasts from Boeing and Airbus. 44,000 airplanes are required, that seems like a fantastic number. It's approximately $4 trillion, and you wondered yourself. How can I believe that level of growth? How can I understand that?

So to break that down a little bit.

Today, there are approximately 20,000 large commercial aircraft in service, there is theoretically 27,000, but that includes turboprop smaller airplanes, airplanes beyond 25 years, the actual in-service fleets about 20,000. The average age of those aircraft is over eight years. So over the course of the next 15, 20 years, all of those airplanes are going to be replaced, that's 20,000 there. Over the course of the next 15 years, the amount of people traveling is going to double, that takes you to 40,000 aircraft, and then because the forecast here's for 20 years, as opposed to the 15-year doubling, that's takes you get to 44,000 airplanes. So, those numbers are real, they will occur. Within this growing industry, there has been a significant uptick in the demand for operating leasing. So while, air travel as a whole is growing at 5%, 6% a year, the demand for operating leasing is growing at twice that rate. Why is that?

Well, this is a traditional reason which is the huge capital intensive nature of this business. That's one, but over the last decade airlines have started to realize that the airline industry can produce steady, stable, long-term profits. But in order to do that, it's absolutely vital that they manage capacity, managing capacity means the ability to reduce capacity, when times are tough and to increase capacity at short notice when there is opportunity, there is no other vehicle better than operating leasing for doing that, and we have seen all the major airlines in the world increase their share of operating leasing airplanes both new, but particularly used airplanes. Particularly here in the US, we've seen the leadership of United, Southwest taking large blocks of used airplanes because they see the benefits of it. That is something that wasn't there before. So that's the growth for the basis that's ahead of us.

Now, as I said, where do we sit? We're number one in the business, by far the largest now, our two nearest competitors about 30% smaller than us at this stage, what does that mean? Being big doesn't guarantee you're going to be the best that's for sure. But it's certainly gives you tools that no one else has. Primarily data, and if you can harness that information because you have more of it than anyone else, you get it before anyone else. And if you can harness it correctly, you should do better than anyone else. It's like in your business, if you're buying and selling stock and you know information about the stock before anyone else, you should be able to create a superior return and that's what happens to us because we see the trends before anyone else. People often ask about consolidation, when you look at look at this chart particularly on the right-hand quadrant there of the smaller players I do think consolidation will occur, it has been occurring, I do think it will be a positive for the industry as has been demonstrated in the airline business. But it'll take time.

Now, here's a snapshot just to give you the huge scale of what AerCap has. No one in the world has bought more airplanes than this company, no one. Not even close, Airline or lessor. So what does this give us? An enormous repository of information about the demand for different engines, auxiliary power units, interiors of airplanes, the size of aircraft, where airplanes are going, the price of airplanes, but above all the value of airplanes. Now, you have to harness this information to use and use it to act on it.

And if we look at what we've done over the last five years, this company has bought, sold or leased 2,000 aircraft, that's an enormous number, that's almost 2.5 times Delta Airlines' entire fleet, to have done that in the last five years. No one has come close to this, it shows the enormous efficiency of the platform and capability. And those 2,000 transactions have translated into $15 billion of cash flow, which is then $5 billion dollars of net income. AerCap is a high quality company that has always rapidly translated GAAP net income into hard cash.

Whenever someone who says to you made $1 billion last year and then said I'm surprised we're writing off $1 billion the next year. That's never happened with this company. And with the cash flow that we generate, we've paid down debt of $10 billion. That was the priority six years to go to ensure the balance sheet got rapidly back to investment grade, and it got back well ahead of schedule. We spent $23 billion buying the most advanced aircraft in the world. No airline, no leasing company has spent more money buying the most advanced and in-demand aircraft in the world and we've returned $4 billion to you, the shareholders. All of this is being done while the credit rating of the company has continued to improve.

Now what drives that platform and why are we confident about the future? Like any good business, it starts with information. We spent tens of millions of dollars every year, collating information, analyzing the information, building proprietary systems for the information, that information is translated into knowledge. With that knowledge, then the policies, procedures and structure enable the knowledge to turn into decisions that are executed on a consistent basis and there's a ruthless focus on consistent execution in this company.

Start to find the right airplanes, this is absolutely vital, you cannot buy what Boeing and Airbus want to sell you, so many airlines and leasing companies fall for their siren song and they pay a very big bill for it. You have to be so disciplined about it, but these are long-lived assets. They are 25-year assets. It's not a short cycle asset like an iPhone that's disposable after six months. So in that timeframe trends change, demand changes and you have to see the trend before anyone else and ideally influence the trend.

And as you'll hear from Bart later on, we've sold 860 airplanes in the last 14 years, more than anyone else and we've done so at a consistent margin of a 130% of book value. So, you have to be able to see those trends. When you have that the leasing business becomes that little bit easier, you of course, you have a massive global platform, global presence. You have to have world-class technical teams, legal teams, insurance teams, contracts teams, engineering teams, materiel teams that are buying the interiors of airplanes. But when you put all that together, you get the result we have, a $40 billion of contracted revenue.

In this business, where you can never run out of liquidity, we carry $10 billion of liquidity at all times. Many think that being owned by a AAA financial institution can guarantee success, that was proven to be incorrect on several occasions in the last downturn. This was the one company that was able to thrive and grow like no one ever else grown before in the financial crisis. So you can trust us when we say our liquidity structure and our capital structure will stand up to the most severe stresses. No one else has been able to do that.

Capital Management, that's the output, when it comes to investing the profits of the business. You have to be nimble. You cannot be wedded to one way of deploying capital. At different times in the cycle certain investments are appropriate and certain are inappropriate and you have to understand all of the opportunities that come with each one and risks.

Now the culture of action, there are many examples and you'll hear some of them today, but I'm just going to pick up three, because the competitive advantage is not a competitive advantage unless it translates into a superior economic return for you, our capital providers otherwise, it's just noise.

So here's the first example, on the 787s. For years we've been studying which is the best small wide-body to own. Give you an example, we alone just ourselves we have sold or leased 259 A330s and 777s. So, no one else has that repository of knowledge. And what we determined was that the 787-9 was the leading small wide-body, not the 787-10, not the A330neo 800, not the A330neo 900. So, from our information, our analysis we saw that. What do we do with it. Well, first of all we immediately -- this was several years-ago, we put all our backlog, converted all our backlog of 78s into -9s and then we worked at -- we understood the value of this asset to our customers. It takes a long time to do this and then a couple of years ago, Boeing came to us for various reasons and said we urgently need a transaction on the 78s, we need you to do it in four weeks.

That was the easy part because we'd worked for years to be able to make the overnight decision and the Board as well understood exactly what type of asset this company wanted so we are able to act quickly. And that shows how we move very quickly. We saw the trend, we influenced the trend before anyone else did it and we closed on 37, 787 -9s. Many followed since.

Air Berlin last year bankruptcy in Europe. We had a package of A330s and there, six of them A330-200s prat powered engines. All of our competitors have finally hold strategy of sticking their head in the sand and hoping, that Lufthansa would take over the airline, that doesn't work for us. I called the Boss of Lufthansa. I said Carsten look, do you want these A330-200s. He said they're tough assets. I'm not sure; it's going to take time. I said no, if you are taking them in 48 hours, we're taking them out and we did. No one else took an airplane out of Air Berlin before us, and we took out some of -- people would proceed to be that much more difficult assets, because we knew more about the A330 market than anyone else.

We knew that in Kuala Lumpur Malaysian Airlines had an opportunity to hand back 737NGs to Japanese operating lessors. They wanted to do it but they could only do it if they could get replacement capacity rapidly, because it couldn't afford to lose the prime time slots out of Kuala Lumpur. So, I went down to KL, met with the CEO and I said look, you can hand the airplanes back, we have a solution for you.

The wide-body airplanes, you need bigger airplanes, because you're spilling traffic at the prime time slots. He said that's true, that's great. They brand new? I said no, they're used. He said look come on Malaysian Airlines; we have never taken a used airplane. In this part of the world, hardly anyone takes them. I said come to Dublin, meet our technical team, and see the capabilities we have. We will get you those airplanes, you can hand the ones you have back, and we won't let you down. And we did, the planes were delivered.

That's a superior return for you the shareholders because we were the first out, the capability of the platform delivered the aircraft before anyone else did. That's an example of a competitive advantage translated into superior returns for you. Jet Airways, the same, we were the first out before many of the others are even thinking of sending default notices. India is a fine country to do business in, you just need to know how to do business and have the capabilities.

Now over the course of the last 15-odd years as a public company, every time we meet and there is a concern about an issue in the global economy. Your questions tend to revolve around three areas, credit risk, airline bankruptcy.
Now, airline bankruptcies definitely make lots of headlines, but they don't have a big impact on AerCap's bottom line. Over the course of last 15 years, our credit costs have been less than 1% of lease revenue. Going through the worst

downturn we've ever seen aviation with fuel at a $146, with the financial crisis, the Eurozone crisis, and Anton will speak to that later on.

Funding, you can't run out of money in this business and as I mentioned earlier, being owned by a large financial institution is no guarantee that that won't occur. And many will talk about having lines of credit and long-dated debt structures, but it takes years and years of experience to understand how to put together a debt structure that will not crack under extreme duress, and the only company that's been able to do it so far in this industry, as an independent business was this company AerCap in 2008, 2009, '10, '11. That's why we grew faster than anyone has ever grown in this business, because we understood how to put together debt structures, where you don't have material adverse change clauses, you don't have residual value test that can get tripped. That's what you really need to understand if you're concerned about funding. It's the stability of the structure and the capability of the company to put together resilient debt structures.

Now residual value is the third one and that is the trickiest one. And this is the one I want to spend some time on and as I said at the start that AerCap has the most attractive portfolio in the industry and has had for some time -for a long time I would say. Why is that and what is the strategy behind? So what is residual value risk? Well, it's the risk that, if we have an airplane on our balance sheet at a certain number, there's not worth that amount, or that the remaining useful life of the -- economic life of that airplane is too short for us to consume our carrying value.

Let me give you an example. Many people think that age is a proxy for risk. It is but it could be a young fleet could be the most risky thing you could possibly own or an old fleet for that matter, but I am going to drill down on this a little bit. So let's say we have a 12-year old A330 or 14-year old 777. Is that a good airplane to own? It's a fine airplane, because what is happening, is that for the next decade or so, those two airplanes are going to make up the backbone of large-scale, long-haul travel. But the customer base, the sun will set on that customer base, there is no question about that.

So, if you have economic exposure to that aircraft type after 10 years or so you're going to have a problem. So, if you have new 777s as an example, three-, four-year old ones or brand new ones. You have a big problem, because the customer base won't be there for that assets and you'll have it on your books for a huge number. That's where real risk lies and I'm going to talk about this, now and give some examples.

So with us our strategy for many years has been to have a barbell approach to a portfolio. We want the new tech assets obviously to be as young as possible focused on the ones that are in demand, not all new techs are created equal. And on the current older tech, we wanted to be as old as possible, because the real risk in those assets is a younger variance because they're going to be replaced. So with that mind, let's see how we got on. So this was our portfolio in 2014 and no surprise the vast majority was in the current tech assets, the 320 the 73 the 330 the 777. And there you can see that we are about 38% in 330s and 777s. So the objective of the strategy was very clear, we wanted to make those blue bubbles move out to the right and get smaller.

So that was going to be achieved by the passage of time of course with depreciation is obvious, but also with asset sales, but above all never, never buy variance of those assets from Boeing and Airbus over the course of the last six years. That's where the real discipline comes in because they were desperate to sell those assets for the last six years to fill poles in their production line, that was the key. So they're the three things that you need: the passage of time is given, sell assets and don't fall for the temptations of Boeing and Airbus.

So that was 2014, we move to 2015 and you start to see the 78s come in, a couple of 350s, we're moving slightly to the right now, on the blues. 2016, you see moving further at the 777s are now ten years, A330s are over 9. 2017 is continuing the 777s are at 12, 330s at 10. 2018, you can see it really materializing here is the 320neos, becomes the big, big component with 350s and then where we are today, there's the output, that's the result.

That's why the book values and the residual value concerns for the AerCap portfolio are very different. You can see it here, 777 are 14 years old 5% of our book, A330s just over 5%, 12 years old. No one in the world has moved as many wide bodies as us. And we have the smallest exposure to them in terms of book value. That is a result of a relentless focus and discipline and execution of our portfolio strategy.

So, how does that compare, because many people in the room think a young portfolio is a metric for risk and as I said, it is a metric for risk definitely, but a young portfolio could be the most risky portfolio in the world, if I bought a big bunch of 777 and 330s out of a young portfolio growing revenue, but the future will be dark. How do we get on and how do we compare to the rest of the industry?

So, the objective is to have as little as possible in current tech and to have it as old as possible. No one has achieved that we have. No one has an older component of current tech, and no one has a bigger component of new tech, and no one has an older component of current technology assets. And that's why, we feel so confident about the carrying values and that's been proved demonstrably true by the fact that we've sold 860 airplanes over 14 years at a gain of 130%, unrivaled in the business.

Now with those profits, what do we do with them? You have to be nimble as I said; you can't be wedded to one way of deploying capital. There are different points in the cycle where certain investments are appropriate and inappropriate. So five, six years ago, we had to pay down debt, no one has paid down more debt in this company. We paid down $10 billion. Purchase airplanes, you can buy airplanes from the manufacturers, you can do them sell leasebacks. No one has done more. We've done $23 billion of buys in the last five years from the OEMs. We've also done the two biggest ever sale leasebacks with American Airlines and with LATAM.

M&A no one has done more M&A at different points in the cycle. Be it ILFC, Genesis, Indigo, AeroTurbine, no one has done more of it and return capital. We've returned $4 billion. No one has returned more capital, but the key point is that at different points in the cycle there are opportunities, but you have to have the experience to understand the risk and reward and opportunity that each one brings. Now as part of that, what's very important in the business today is ESG.

As I said, we have bought more fuel efficient airplanes than any airline or any leasing company in the world That significantly reduces the fuel burn of our portfolio and the emissions.

On the social side, we are very focused on promoting education in emerging markets and helping where we can with certain health issues. Orbis is a flying hospital that we support and its very focused on curing blindness in Central Africa. On the education side, we do support various programs in local markets, but we also are the founder and sponsor of the postgraduate degree, the master's program in aviation finance and law in University College Dublin, but the vast majority of the students in that program come from emerging markets.

And on governance, I can tell you that our board has been a competitive advantage for AerCap for the last 15 years. The board understands this business when it's appropriate, to take risk; when it's not appropriate to take risk, management is held to very exacting standards over long periods of time. And I can assure you that without our board enabling us to act quickly, AerCap would not be where it is today.

So as we look to the future, what do I see for you the capital providers? Well, I see more of the same.

AerCap is the leader in the business and that's going to be the steps, how it's going to continue, and you can see that, because of what's the building blocks of it now. More new tech than anyone, the least exposure to the current technology assets and in particular none of the young ones, $40 billion of contracted revenue, and average lease that expires in 2027.

So you have tremendous visibility into the future cash flows. You know that our default costs have been less than 1% a year ago and through the worst downturns we've seen.You have a good idea what our cost of capital in terms of debts going to be, you know what our SG&A and our tax rates going to be. So, there is a lot of visibility into the future. And now, I'm going to hand it over to Phil to talk it through the leasing side of the business.

Thank you very much.

Philip Scruggs, President and Chief Commercial Officer

Good morning. My name is Philip Scruggs, and I'm President and Chief Commercial Officer of AerCap. I want to address three points today.

First, AerCap is positioned in a growing industry with strong demand for aircraft. Second, our platform represents a competitive advantage and third, our business generates stable and predictable revenue. Aengus mentioned earlier that we are a growth business and positioned in a growth industry. That's a growth industry that will keep our planes in demand and flying a public whose appetite for air travel is growing. Now, if the increasing demand for air travel is the backbone of industry's growth. Let's take a look at how that translates into demand for AerCap's aircraft.

The increased range of the products coming out of Toulouse and Seattle and Brazil, allow airlines to open new routes and develop new business opportunities. Now A321 entered into service in 1994, it was not even a transcontinental aircraft at least not a true transcontinental aircraft.

Today the A321LR is not only a transcontinental aircraft, it is a transatlantic aircraft. Today the A321LR, with that we delivered to Air Transat earlier this year, is flying passengers from Air Transat's hub in Montreal, deep into Europe. Likewise, the range of the 787 has opened up markets and connected city pairs that were unachievable with the 767. Since its debut in 2011, the 787 has opened up 235 new point-to-point routes.

For example, Perth to London, Tel Aviv to Santiago and Iguazu Falls to Madrid, for airlines, these new planes open up new city pairs, new business models and new revenue potential and this stimulates demand. A new technology offers airlines a competitive cost advantage. The lowering operating costs of new technology aircraft make the switch to the new technology airplanes attractive that's obvious.

For Airlines that becomes a competitive advantage that then drives the replacement cycle of the older technology aircraft. And in addition, to the extent that some of the savings from the new technology aircraft flows all the way down to the passengers, this then stimulates the underlying passenger demand for air travel. The greater range and operating efficiency of new technology aircraft drive demand.

Vision, reach and scale, this is the AerCap advantage and I love to talk about it, because our vision comes from the intelligence that is born out of our relationships with the airlines around the world. We have some 200 airlines that are our customers today, another 150 airlines that are either former customers that we no longer have an airplane with or customers that we're in active discussions with prospects.

Our intelligence comes from those airline relationships. Our reach is the ability to touch those customers, we don't need to initiate a relationship and explain who we are, we are already doing business with the airlines of the world. We have regional offices that operate in and are located in the same time zones as our customers.

Our scale, gives us greater vision and reach than others and it also allows us, to do transactions in size that others cannot do. AerCap conducted over 416 aircraft transactions over the past year. That is we buy, sell or lease more than one aircraft every day. This represents tremendous volume, but behind those 416 aircraft transactions are 1,000s of pricing runs, trip reports, market intelligence submissions, NPV runs and proposals. You understand the value of information in an opaque business. Well, there are few businesses that are as opaque as aircraft leasing.

At AerCap, we've developed the systems and processes to aggregate and distribute the wealth of information that comes through our doors. This information and the visibility into the market that it provides, allows us to make better decisions. It also makes us a trusted advisor to our customers.

So let's look at vision, reach and scale and practice. Aircraft leasing is the mechanism really by which the market efficiently distributes capacity around the world, this slide shows how that distribution works in practice. It's a Vueling A320 moving to United. It's a 737-800 moving from Andes in Argentina to ASL in Ireland. It's a 777-300ER moving from Emirates to Azur Air in Moscow. It's an A320 moving from Shenzhen to Ryanair's new subsidiary, Laudamotion. It's A330s moving from the bankrupt Air Berlin to MAS in Malaysia, and it's A330s moving from Aeroflot to Corsair.

Now, we've been working with Corsair for three decades. Due to that long relationship, when INTRO Aviation, a German investor purchased 53% share in Corsair earlier this year, we knew it was the right time to approach Corsair about a renewal of their long-haul fleet of 747s. Earlier this year, we concluded that deal. And in that deal the airline will take A330-300s that we have coming back from Aeroflot in 2020. Vision Reach and Scale that is the AerCap advantage.

Now the previous slide highlighted the AerCap platform, working through used aircraft. This slide shows how we can use our order book of new aircraft to optimize our placement of aircraft and meet the demands of our customers. In this example, we had an airline that sought the deferral of three new aircraft to later delivery positions and another airline that wanted to adjust its delivery stream in order to better manage its pilot training requirements. With a third airline that was interested in a large transaction, but needed delivery slots that we simply did not have.

Finally, we had an OEM partner that had timing production issues with its engine supply chain. Now, we worked with the two customers looking for deferrals and we moved those positions, those aircraft into later positions. Thereby, allowing us to offer the third airline early 2018 slots that were vacated by the deferring airlines.

And through this movement positions within our skyline, we closed a large deal for 15 new aircraft and satisfied the needs of three airline customers. This was a win for our airline customers it was also a win for our OEM partner, that needed to switch the engines on the early units, in order to relieve the pressure on their engine supply chain.

In the end, we secured new business for our customers and our OEM partners and satisfied the needs of three Airlines.

The AerCap platform facilitates it's the development and maintenance of strong relationships with airline customers. We cherished our long and important relationships with the leading airlines of the world, but we're also proud of the relationships that we are building or enhancing today. Those relationships drive stability in the business.

As I was preparing this presentation, I received a call from a medium-sized -- CEO of a medium-sized airline in Europe. This was a guy that I know for about 15 years; I leased him his first airplane, 15 years ago. He called, because he wanted to discuss his wide-body strategy, he knows that he needs to roll over his old 767s and 777-200ERs, and we talked for about a half an hour.

And then he said we'll look Phil, can we schedule a date the when I can come over to Dublin and we can sit down and talk with greater detail and no time pressure about the wide-body strategy. Of course I said yes, but the importance is he knows, that AerCap is not beholden to either of the OEM's, that we can speak independently. He also knows that we've been a partner to that Airline and good times and in bad. He knows that we will be there with him to supply airplanes in the future and all of this makes us a trusted advisor to him and to his airline.

Now, scale is the foundation upon which our vision and reach is built. It also allows us to do transactions in size that others simply cannot do. When EgyptAir decided to renew its fleet for 787s and A320s, we were there. Well, in fact, we had been there for years. This is a relationship that began long before the signing of a letter of intent, was long before any request for proposal was given to our competitors.

For years, we had worked with the airline to evaluate options. When management needed an independent advisor to present to their board, as an independent voice on Boeing and Airbus and as an independent voice on the mix -- the optimal mix of leased and owned aircraft, they called us. I went down to Cairo with the executive who handles EgyptAir for us and we presented our views to their board. No other leasing company was present. This is the power of the relationships and the power of our scale.

Scale and vision were also key to the movement of 25, A319s from China Southern to United Airlines. No other leasing company had 25 sister ships to meet United's requirements, and no other leasing company, had the technical capabilities to make a transaction of this size a success. Now, these are aircraft and deals that are delivering today for which we had no meaningful competition, due to the size of the transactions.

And another example of scale and of relationships, last month the CFO of one of our large customers called to ask, if we could step into a sale leaseback transaction on two new A359, that are delivering out of Toulouse. These aircraft were not in our fleet plans for 2019; they were not in our funding plans for 2019. But due to the size and scale of the AerCap business, it's a deal that we are able to do and the relationship is important to us.

The CEO and the CFO had just been to Dublin the month before and had dinner with Aengus and myself. And we wanted to say yes, and we did say yes. Our scale allowed us to say yes and complete the documentation for the transaction within 14 days and on the 15th day, we purchased the aircraft. Very few if any platforms could achieve this. Quite simply, we have more products, more customers, and more balance sheet than our competitors.

This makes our platform a competitive advantage. And our business offers stable and predictable revenue to our shareholders. We have leased over 466 aircraft over the past two years and in the next two years need to lease only a 100 airplanes. Our platform is built for this volume; the forward leasing requirements of today are a modest task. And our early placements of the aircraft ensure a stable revenue stream.

Long lease terms, enhance the predictability of our revenue stream. We leased out our aircraft -- our new aircraft for 12 years. So what does that mean means if we had a fleet of only four-year-old aircraft, we would have an average remaining lease term on our fleet of eight years. The sum of our average fleet age and the remaining lease term would equal 12. Now we also seek, long lease terms, when we release our aircraft after they return from the first 12-year term, and we have one of the longest weighted average lease terms in the business. And the sum of our average age and average lease term remains exceeds that of all of our competitors. This makes top-line revenue more predictable into the future.

The AerCap vision extends to our own revenue line; we know what our revenue looks like over the next three years, because it is already contracted. Approximately 100% of the revenue in 2020, 98% in 2021, and 93% in 2022 is already contracted. This gives us unmatched visibility into top-line revenue.

The AerCap business case is simple; we are positioned in a growth industry with strong demand for our aircraft. Our platform is a competitive advantage and our business delivers stable and predictable revenue to our stakeholders. Thank you.

Bart Ligthart

Good morning, everybody. My name is Bart Ligthart and I'm the Head of Trading and Portfolio Management at AerCap. Today I will talk about our proven track record of aircraft sales and why that is sustainable for the future. I will touch upon the market for aircraft sales, our proven selection process and focus on execution, our buyer base and how we develop demand from new buyers.

Let's start with a track record. AerCap has been the most active trader of midlife aircraft in the last five years. We've sold 521 aircraft and an average age of 15 years with a value of $11 billion. 44% of the sales were wide-body aircraft. We have achieved an average gain on sale of 9% and obviously we try to maximize sales revenue, with each sale. But this really demonstrates that our book values have been consistently in the money.

Lastly, our ability to continuously tap into the sales market shows the liquidity of our over overall book. And you can say those are great results, but we've been in a bull market for the last five years. Well, if we go back 13 years, we have sold $16.5 billion worth of aircraft and an average gain of 8% that translates into a 30% premium over our book value equity, so really consistent and long-term repeatable sales performance.

So what has been the driver behind our successful sales program, and the answer really is our platform. Through our platform we buy the right aircraft at the right price. We put them on long-term leases and make sure those leases are robust and up to market standard. We make sure that, our aircraft are maintained in the best way, and that we have accurate and up-to-date information available for our buyers, and we make sure that we have the right teams in place across departments to facilitated the sales.

The combinations of these factors have resulted in optimal execution and have enabled us to sell 860 aircraft since 2006. To put that in perspective, that is almost the entire fleet of aircraft that Delta operates today. So why are we better at selecting the right aircraft for sale and executing on those sales, there are four reasons for this. The first one is better market intelligence. Phil already discussed this, but through our platform. We have the benefits, of an enormous amount of data points that come in every single day. As a result, we know where aircraft lease rates, values and residuals are trending which gives us an advantage in determining what to sell and what pricing we can expect.

Second point is experience, Joe will go into more detail about this, but we do more technical transitions than any other lessors in the business. As a result, we know what it cost to overall an engine to put a landing gear to the shop, to have to put new seats in an aircraft, or to have to modify an aircraft to move it from one jurisdiction to another. These are direct inputs in the pricing that we run to determine if we should hold on or sell an aircraft.

The third point is discipline. Every time before we go to market, we spend a significant amount of time selecting the right aircraft for sale. In over a decade of trading we have developed a very systematic and thorough approach that involves the inputs of a lot of departments within AerCap, such as leasing, risk, technical. We then run a very detailed pricing on each of the selected aircraft, to evaluate economics we can expect and the office that we receive from the market that we have a long-term focus and we will only sell when it makes economic sense to the company.

The final point is our buyer base because we've been such an active trader; we've developed deep relationships with almost all the buyers out there. We've traded with over 15 non-airline and 40 airline buyers in the last five years alone. And as a result, we know what buyers are looking for and how to adjust for that. This gives us an edge over competition in determining what to sell to who and when. Aengus has taken you through our portfolio transformation over the last years and our disciplined approach to what we have sold is really an extension of that.

Our objective of the sales program is to improve the quality of our portfolio and our future earnings. An example here on the narrow body-side is the fact that we sold 77, A319s and Boeing 737-700s. Currently there is still large installed fleet of these aircrafts and demand is holding up fine, but we know that airlines are moving towards a larger aircraft types within aircraft families to cater for traffic growth and we want to make sure we positioned ourselves well for the next decade.

I would also like to underline the fact, that we sold $4.5 billion worth of wide-bodies. There's been a lot of discussion in recent years about wide-body values holding up. Well, we've sold a 133 of them at a profit to book. The other bar includes mostly out of production aircraft that were sold at the end of the useful life. So again, a very disciplined approach to what we've sold, and as a result we've been able to significantly improve the credit mix or the asset mix of our portfolio.

So on the trading side, we can argue that our depth, scale and diversification, is second to none in Industry. We've sold more aircraft in the last five years alone, than all of our competitors, bar none. Financial investors have been a larger buyer group, which is a result of the sales volume we've done and the composition of the portfolio's that we've brought to market.

Traditionally, the demand here is come from North America, but we've also seen new entrance coming in from other areas of which I will give an example a bit later on. The geographical spread of our sales is a direct result of our focus on midlife sales. Obviously, they've been large aircraft sales into the Asia-pacific region but this has predominantly been focused on younger aircraft. So tremendous scale and experience in aircraft trading.

So why is there so much capital flowing into our industry and who are the buyers? Well. First of all, the fundamentals of the industry are very strong and the debt has been available to support a transaction. But for every investor, there's a different rationale. For example, we have seen large investments coming from the Asia region. These investors are focused on growing skill, without necessarily having a global leasing platform in place. They're willing to accept a little bit low returns for longer-dated cash flows and growth.

We've seen a lot of appetites, coming from institutional investors, and focus on midlife aircraft. These investors are focused on the US dollar denominated assets, the high growing deals and stable cash flows. More and more of these investors, are looking at investing in aviation, as an infrastructure-like investments, which means that larger pockets of capital are opening up within their funds.

Lastly, we've seen more niche buyers focused on older aircraft. They would invest in short lease, part-outaircraft, the same as they would in short duration high yield bonds. So, really the different investment flavors explain the large amount of capital that's flowing into our business.

The final point I would like to make on this slide, is that there's about $140 billion of new aircraft delivered in our industry every year. About 40% of these aircraft end up with lessors, who are on average levered three to one. This means that there's $14 billion of equity deployed by informed investors every year, while our equity is trading at a discount to book.

I mentioned earlier, that there are still new entrance coming into our industry and AerCap is always looking to broaden its buyer base, and a good example of this is a deal we did in 2018 with company called NCB. We did an $800 million deal here with them and we got them comfortable with investing in our industry, we guided them through the whole process from selecting a portfolio, to raising the funding, to execution. We also offered to service the portfolio post-closing to really provide them with a complete and ready-made investment proposal.

Now NCB did speak to other parties in our industry, but they were only really comfortable doing their first deal with the largest player in the market who has a history of similar large transactions with other financial buyers such as KKR, Guggenheim and Magnetar, because NCB was very pleased with the results on the first deal. We were able to sign up a second $600 million deal with them this year, bringing the total up to $1.4 billion. So really a good example of how we stimulate demand from new buyers.

In conclusion, we have had a long and successful track record of aircraft sales, which is sustainable for the future, because there's now a liquid market with strong demand of which we will continue to take advantage by applying our concentrated and focused selection process and execution, and because, we have a large and stable buyer base, which is still expanding with new entrants.

Thank you.

Joe Venuto, Chief Technical Officer

Good morning. My name is Joe Venuto. I'm the Chief Technical Officer here at AerCap. I've been with the AerCap group of companies now for 15 years and I've been in my current role for the last seven.

This morning, I'm going to speak to you about, the technical group's role in AerCap's continuing success and its position as the number one aircraft lessor in the world. We're going to have a look at the team's, depth and experience, our unmatched proprietary IT technical system, how and why the technical team is involved in every decision, that the company makes regarding its assets, and how we use our capabilities, to enhance the company's bottom line whenever possible.

The technical team is regionally-based with offices in Dublin, Singapore and Los Angeles. We also have new aircraft delivery team members in Seattle, Toulouse, Homburg and San Paulo

Now, the average technical employee has 27 years of experience and we have right around 100 technical team members. If you think about that number, that's actually larger, than most of the lessors have on their entire staff across the entire organization. Of course, there's good reason for that, given the size of our fleet dwarfs most of our competitors, but you might ask so what gives the technical team any advantage here surely, these other lessors must have some older guys with gray hair or no hair running around that know lot about airplanes and engines, right? Well sure, of course they do, but I'll tell you something they don't have, what they absolutely do not have, is all of the data, the vast amount of data and information, that we have that's coming from the over 1,250 maintenance reserve events, and the 600 aircraft transitions that have occurred over the last five years alone. That gives us a distinct critical information advantage.

Our KBS system, our knowledge based system, has been in place since 2006, 13 years now. We've been collecting and analyzing this information and we use it to optimize various things primarily, the decisions on what we're doing with our assets, we're transactionally base. So for the leasing team to have the advantage in a placement campaign to know exactly what all of these various modifications that might be required on an aircraft they trying to place, what the cost and the lead time are there is a tremendous value a tremendous competitive advantage for us. But, we're also using all of this data that's in our KBS system to effectively manage our $1 billion technical budget, that's a lot of money flowing through the P&L. Now to be fair, most of that money our maintenance reserve receipts that we've already taken in in previous time and now paying back out, as these major events occur on the aircraft.

So most leases either pay maintenance reserves or they pay end of lease compensation, that simply means a lessee that pays maintenance reserves is paying monthly for time used on these five major events and the end of lease compensation payer, pays at the end of the lease term for the time used since that event occurred last, right. So these five major events are the air-frame heavy check, the landing gear overhaul, the APU, the auxiliary power unit overhaul and the engines. The engines have two elements to it, one is the overhaul and the other is the life limited parts replacement, right. Life limited parts are the rotating discs within the engine and like the name suggests they have a finite life. So they reach a certain number of cycles, they cannot be reused. Now the engines are by far, the most expensive technical spend on the aircraft, when you look at these five major portions of that. That brings us to the portfolio optimization, right.

So Bart spoke about the portfolio how we buy, sell, trade aircraft, this is different. What I'm talking about is our ability to move things around within the portfolio and you'll see that most of the -- three of these four examples here involve engines because that's where the money is, right. The most important thing on this slide is that number in the middle $70 million, right. So, over the last two years we've been able to enhance the company's bottom line by $70 million. We would have had to earn around $600 million in revenue to create $70 million benefit. Now the first one, these were you heard Phil mentioned, the deal we did with China Southern on the A319s that went to United.

We also had a similar deal that we did with Southwest on 737s, also mostly coming out of Asia and between those two groups of airplanes, there was a specific number of airplanes about 30 between them, that we knew when these engines returned there wouldn't be a large amount of end of lease compensation being paid, because the engines coming back will going to be fresh from overhaul, so they didn't owe us anything on those engines, right. We also knew that we wouldn't see the money that we would get from United or Southwest till 12 years away. Right. So 2030, 2032 before they would pay us the end of lease compensation on those very same engines.

Now because these were such large sub fleets of aircraft, that we were moving, the delivery stream is over three-, four-year period. So we suggested to the returning airlines that look, you guys instead of handing us back these freshly overhauled engines. Maybe you should hang on to them, keep them in the fleet, put them on our other aircraft and then in three or four years' time, then we'll get them. Take those Half-Life engines that are on these other aircraft that are not coming back for three or four years and give them to us now and pay the end of lease compensation now.

Now of course, we got so they agreed to do that any airline would prefer to keep a freshly overhauled engine in their own fleet, right. So they agreed to do that. So the money we got at that point in time over the last two years. Sure, that's not the benefit to the company, because we would have gotten that money anyway in 12 years' time. The benefit is simply an NPV exercise, over 12 years 4%. It's a pretty significant number of benefits to the company's bottom line. The next example is an EL AL 767 that had a unfortunate tale strike incident with another aircraft on the ground. It was an older asset, large insurance payout. Nobody really wanted to repair the airplane; we certainly didn't want to repair, because the insurance payout would more than cover the book value of the asset. EL AL of course, was going to lose the utilization of the aircraft for the remaining lease term and they were looking for a payout in order to agree to do that, otherwise, they were going to repair the airplane, right. They had the right to do that.

Now, you heard Phil mentioned our relationships with our lessees allows a good customer. We had a 787 delivery stream coming in to them, we want to keep them happy, so technically looked at it and we realize we had good value in the engines on this aircraft because they were only half life, there was nothing wrong with them. We had another lessee who had a 20-year-old 767, that will have approached us about extending it, right. We weren't willing to do that he was a maintenance reserve payer. So, we were holding large maintenance reserve funds for both of those engines. Those engines would have had to have been overhauled in the beginning of that extension term. We didn't want to let that happen that wasn't economically viable for the company.

Now, we have an opportunity to give them these two half-life engines, we got the three year extension, we gave El AL some money, to get them happy with losing the value of the airplane over the lease term, the utilization. So they were happy with it. The other lessee was happy; he got to extend the airplane by three years. We were happy. We got three years at lease revenue. We got pay for the maintenance reserves on those two engines, and we sold off the removed engines and that benefited to the company's bottom line.

The third example is an Aeromexico 777-200ER. This aircraft was approaching 18 years of age, when it was scheduled to return, the leasing team was evaluating it on the placement what they were going to do with it. We knew that wherever it went. We would likely have a fairly large cabin reconfiguration bill. And anything else we might have to do to it for the next lessee. Technical also knew, that the engines -- again it's the engines will going to come back freshly overhauled. These are GE94B engines, wide-body engines are very expensive to overhaul, right.

We have another lessee in the fleet, which had two engines scheduled for overhaul within the following year. There was enough money and maintenance reserve payer, there was enough funds in their maintenance reserve fund accounts, to more than cover the book value on this Aeromexico 777. So we approach the Aeromexico and we offer them the opportunity to buy out of all of their return conditions. They would have had to do a heavy check on the airplane; they would have had to paint it. There's a lot of money being spent by the airline, in the return process. So instead they were more than happy to do it. They didn't have to bother it. So they wrote us a check. We got out of the asset. We've sold off the air-frame and we got added the asset. We didn't have to worry about, what we might have spent on it, putting it in with another lessee, enhancing the company's bottom line.

Last example involved 11, 777-300ERs that were transitioning from Emirates. So, we've actually since transition those aircraft over the last two years. But when we started looking at these assets, we knew there was a problem with the Galleys. The Emirates Galley configuration is unique, the standard trolley cart, right, the cart that the flight attendants push up and down the aisles. Across the globe, everybody else is pretty much using a standard trolley cart; they will not fit in these galleys. So, we knew there was a problem with these three years -- three and a half years ago. We started looking at it. No airline was going to take these airplanes with those galleys in them, because it screws up their operation, right. It's an operational problem.

So, it's simple solutions, $1.8 million per aircraft is my new galleys it's right. Six of them on each airplane, $11 million, $20 million, we weren't having that right. So the engineering team came up with a very unique solution to this, had never been tried before, had never been done. But we were able to do it; we wound up spending $450,000 an airplane instead, so net benefit to the company's bottom line.

That brings us to transitions. Transitions are by far the most challenging aspect for any technical team. There’s a lot that goes on there. If you don't have a technical team, that's got all of the appropriate subgroups within it such as engineering, dedicated engine managers, material and logistics team, you're going to have problems. We've done over 600 of them in the last five years. We call a normal transition the tricky triangle, right. You have a lessee on one side returning the airplane, the lessee on the other side that's taking the airplane and you're in the middle as the owner, the lessor.

The lessee, that's returning this aircraft, he knows that any money spent on this aircraft, during this transition process is not coming out of its -- he's paying for it and he's not getting any benefit for it. Because, he's handing the airplane back, the lessee getting the airplane, he knows, that any money spent on the transition process is not coming out of his pocket. It's coming out of mine or the returning lessees. So he wants to get a new airplane out of this. So you can see you have all of this natural conflict going on. You need to know what you're doing.

Repossessions, you'll hear Anton Joiner who heads up our risk group, he'll talk in a bit more detail about the repossessions and the whole process there. Technical is very involved in the process. There're two points I'll make here. One, you know if you look out at some of the other technical teams that are out there with the lessors, it kind of skimpy pretty small, yes the reasoning is, yeah, we got a new fleet, right? We don't need a whole bunch of technical guys. These are planes are out there for 12 years, they're not coming back anytime soon. Well I’ve got news for you. In the repossession, they're coming back and a lot sooner than you might think and you're going to have to figure out what you're going to do with them. If you're not prepared to deal with repossession, you're going to have big problems.

The other issue that comes up is the fact that, when the repossession occurs, it's a bankrupt airline. Right? So, typically you're not going to be the only lessor in there, there's going to be other lessors involved. The issue is that everybody's going to be looking for MRO slots, maintenance repair and overhaul slots. Because now these aircraft, have to be brought back up to a stranded, where they can be delivered on to the next lessee. Problem is, MRO slots are booked a year in advance. So there’s no slot booked to these aircraft. Everybody's scrambling for these same limited MRO slots. So I'll ask you a rhetorical question. Who do you think is going to get preference looking for these slots, the guys spending$1 billion year across the MRO universe or some small lessor who maybe doesn't even have a relationship with these MROs. Of course, it's going to be AerCap. That's a distinct advantage for us.

And then lastly we have our early returns, so, in early return for whatever reason the company's made the decision, that we're going to take an asset back before the end of its contracted leased term. And that normally involves the aircraft not meeting its re-delivery conditions. So, we just ensure that internally, everybody has a complete and full understanding what we expect the technical cost expenditures to be during that process so that we don't have a gap, because there normally is compensation being paid by that returning airline.

So in conclusion, it's not just the technical team's depth and experience that gives us a competitive advantage here. It's all of this institutional knowledge that we have, all of this data that's out there, that we analyze and utilize through our proprietary unmatched data system.

The fact that we're involved in every decision that the company makes regarding its assets, that's a huge benefit to the company. I can tell you this, not every technical team has a seat at the table, like we do. And then lastly, any technical team has a wide range of responsibilities. But the ability to be forward-thinking and look at how you can enhance the company's bottom line at the same time is a great benefit.

So that concludes my presentation. We're going to have a 10-minute break and during that break, we're going to show you a time-lapse video of a 777-300ER that transitioned earlier this year to Azure and it will show you the cabin re configuration and the painting of the aircraft.

Thank you.

(Audio-Video Presentation)

Joseph McGinley, Head of Investor Relations

Okay. We're just going to kick off again now if you would like to take your seats, please? So we've three more presenters for this evening -- this morning I should say. And the first of which is our Chief Risk Officer, Anton Joiner. Thank you.

Anton Joiner, Chief Risk Officer

Good morning everyone. I'd like to take a few minutes to talk about the key constituents of what makes AerCap risk management, the very best in class. How it is that we keep our credit costs routinely below 1%, and how we use our scale and our experience to create a genuine competitive advantage. Key in achieving this are the hundreds of decisions we're taking every week, decisions aimed at keeping the portfolio credit quality high and decisions that keep the breadth and diversity of the portfolio.

We have unparalleled intelligence and we have unparalleled coverage and we're using this constantly to make sure that we're rapidly responding to changing market circumstances. And above all, we have the culture of action. You may see credit events occasionally through the industry, but it's important to note that your losses here are only ever proportional to the speed that you react, your preparedness to react and your willingness to react.

We don't think we do risk like most other people in the industry. We're a very hands on team. This isn't a back office function, our team are out there every day speaking to the airline's, making sure we're getting paid, making sure we're dealing with problems and making sure that we get our aircraft back rapidly if necessary. But understanding your customer is obviously a prime importance. Over the last four years, we have analyzed and diligence in excess of 1,300 customers, that gives us a unique vision on the market. It gives us the ability to respond rapidly when allocating risk.

In the portfolio of our size, there's always going to be three or four names on our watch list, but it's very important, that when we're talking about our watch list, we're adopting a forensic-like focus. We want to make sure, particularly when it comes to technical, we want to make sure that it's our engines that are always installed on our aircraft. It's our landing gear on the plane, it's our auxiliary power unit. There's no good turning up after an insolvency event to find your aircraft unworthy and there are parts missing. You've already lost the war at that point.

And of course through the watch list phase, we're also building up our legal intelligence. We're making sure we understand where our aircraft is flying, we want to make sure that we understand which jurisdictions are sympathetic -- the most sympathetic to our cause.

And lastly we understand what the catalysts are; we're drawing the red lines. When is it that we have to react, when is it that we have to take aircraft back if necessary or work with the airline to turn around the business.

Let's talk about the key performance indicators of the strength and diversity of the portfolio. Clearly. It's very important, that we get paid and we do get paid largely because of the underlying strength of the portfolio. You can see here, that our receivables are the key metric here; our receivables are trending towards a historic low. On average, it takes us under four days to have our invoices paid. This is very important, because the amount of money that you're owed at the point of default will determine your credit costs.

Let's talk about the underlying strength of the portfolio. You can see here the stability and resilience of the credit score on a weighted average basis by net book value. There have been many credit events over the last five years, but our portfolio credit by weighted average net book value, our portfolio credit has remained unwaveringly stable. If you put all our customer financial statements through the Moody's credit scoring model, you find out they come out at Ba or BB.

Diversity is obviously our principal credit tool. Our top five airlines are the very best names that you can find in the business and we're leasing to over 80 different jurisdictions, and within the top five jurisdictions, we're leasing to 55 separate airlines.

The AerCap lease has been evolving over four decades. It's evolved through numerous credit cycles; it's a 300-page document. It's a very potent tool. But our strength doesn't just derive from the lease. It derives from our unique willingness to use the provisions of the lease. We talked earlier about Jet Airways. Now at the beginning of the year, we could see very early on how Jet Airways was going to work out. We are very experienced in India. We'd seen a similar version of what was happening there occur years previously with Kingfisher Airlines. So we knew at that point, it was imperative that we act quickly. We are the first, to ground our aircraft, then first to deregister our aircraft and move our aircraft.

In the same to with Thomas Cook, it wasn't just our diligence that led us to believe, that maybe the UK wasn't the right place to be putting our aircraft, had we done that we have had many aircraft on the ground when Thomas Cook failed. It was in Thomas Cook our unique decision to use our MAC Clause to make sure that there'll be zero credit loss on Thomas Cook. We still have 6 aircraft there and they're still flying. So, it's our ability to tailor the lease and our willingness to use the lease that keeps the credit cost down.

Now the ability to process your aircraft, take control of your aircraft and process your aircraft and put it back on lease in the minimum time possible is obviously a very key determinant in the caliber of your platform. We're not taking aircraft back every day, that as you can see from this slide; we've taken back a 125 aircraft from over 40 airlines in the last five years. We're able to do this because we have skills, which are unique to the platform. It's important to point out though that we're not just taking back aircraft. We're not just there when airlines are failing. There will be times in the portfolio, where we need to support our customers. We have to use our skills and our experience to understand who are those airlines that might need our help to get through a temporary problem. We will take additional risk in those instances, where they're warranted and that again is another key determinant in minimizing your default cost.

I'd like to use a work example here, Shaheen Airlines was one of the biggest airline failures, if not, the biggest airline failure in 2018. You wouldn't have heard too much about it. It was in Pakistan. It didn't generate too many headlines, but it was very real. In 2016, we had in excess of $400 million of net book value at Shaheen and we didn't get to that position unless we were supremely confident in our ability to syndicate some of that risk. So as we were writing, wide-body leases we were selling them down. In 2016 we sold down four wide-bodies, equivalent to over a third of our Shaheen exposure. But we're there through 2017, we're very close to the customer, we understand it's a challenging environment so with that through 2017 and 2018, we can see the problems that depreciating currency, is causing, we can see the political issues and the effect that that's having on the airline, and we're also seeing some operational issues at the airline as well.

So while we're examining this, we're spooling up our trading team, defined trading options for the aircraft and with spooling up leasing team to find leasing options for these aircraft and as we get into 2018, we have to activate that we sell approximately half of that narrow body exposure to a US major and we lease the remaining half to a BBB-rated European airlines. The key point here is that you cannot do this, unless you're looking after your airplanes, making sure that your records in pristine working order your aircraft are being exceptionally well maintained. So between 2016 and 2018 we've taken down $400 million of exposure with 0 credit cost.

Not all airline failures are as gradual as this -- as this some are much more rapid and they require a different set of skills and responses. You would be aware in 2018 of the failure of Primera. We had in 2018, three aircraft on lease and we had the obligation to deliver two new aircraft in early 2019. But because we're there all the time talking to our customer and understanding and assessing the financial information that they're giving us, we can see problems emerging. So we look forward and we execute on the opportunity to move those 2019 positions out by a couple of years and putting with another airline. And that is crucial, because it saves us many millions of dollars by not having new aircraft on the ground when Primera fails.

But we still have equipment there and by maintaining a round the clock presence we get four hours' notice of a bankruptcy filing. We immediately terminate our leases, because that's important. It allows us to avoid the UK Civil Aviation Authority fleet lien, again saving as many millions of dollars. We are immediately on site and we have recovered at end of the first business day of the bankruptcy, we've recovered all our technical record. That's important, because at the end of that day, a big padlock gets put on the HQ doors, and if you haven't got your records out, your airplanes going nowhere, again hundreds of thousands if not millions of dollars saved. And by the end of the midnight on the first night of the bankruptcy, locally registered aircraft, the first aircraft has left the Baltics and is in a safe jurisdiction.

And that's important, because on that midnight the airline lose all of its maintenance approvals, if you haven't got your aircraft out, it could be on the ground for weeks, if not months again, hundreds of thousands, if not millions of dollars of default costs avoided. And then by the end of the following day we've moved out, we've been in front of the bankruptcy petitioner in Copenhagen. We've moved our aircraft out of Denmark. We've removed our aircraft out of the UK; they're all safe and sound. And that's important, because we're the first out, the last personnel out always has to pick up additional bills.

So, in summary, with a first to locate the problem we're the first to act on the problem, we're the first to move our aircraft, transition our aircraft, release the aircraft, maintaining as the minimum possible ground time because that's where the default cost is, and this all aggregates to less than 1% of credit costs on average over the last 10 years. You can't hit that number, unless there is a risk management philosophy permeating the entire organization.

Thank you.

Brian Canniffe

Good morning. My name is Brian Canniffe, Group Treasurer of AerCap. Anton has talked about the importance of being diversified from a lessee and country perspective, as a way to mitigate credit risks. This theme of diversification is also central, to how we manage our funding and capital structure, and how we mitigate funding risk. The three key messages, I'd like to leave with you today is how developed the financing markets has become for aviation assets, how diversified our funding and capital structure is and that we're on an upwards ratings trajectory.

So what you can see from this slide is how the financing market for aviation assets has developed over the past 10 years.

The dollar amount of Aviation assets finance per year has doubled in size and now stands at over a $150 billion or $140 billion per annum. The main drivers of that growth are the bank and credit markets. These markets no longer view aviation as a niche or esoteric asset class. On the contrary, they see it as a market with stable asset values, supported by a large investor base. They see it as a very investable asset class. In the past 10 years in the aircraft lessor space alone, we've gone from 0 to 10 investment-grade issuers. It assures. 10 years ago, there was no market for unsecured bond issuance. Now there is approximately $15 billion of unsecured issuance per annum with an appetite for more.

We see a similar trend on the securitization side, with zero issuance 10 years ago, and now approximately $9 billion of value annual issuance with a growing investor base for both the debt and equity tranches. It's clear, that the capital markets have achieved critical mass, and have further room to grow. As investors who historically focused on more traditional asset classes, now accept that the market for aviation debt is both deep and liquid, supported by stable asset values and a regular pipeline of issuance.

Overall, we take a conservative approach to the liquidity and funding and we are committed to maintaining a strong balance sheet. It's critical to remain disciplined in this area. You have to make sure you always have plenty of liquidity. You have access to diverse sources of funding. You have a suitable capital structure and you're appropriately hedged. That's why we set public targets in all these key areas. In fact, I believe we're the only lessor with such a comprehensive policy that publicly articulates and updates our stakeholders on a regular basis. All together, we believe this represents a conservative and prudent approach to managing our liquidity and funding.

We believe it's critical to tap a diverse set of sources for our funding both on the secured and unsecured size. That's because we always want to have flexibility and don't want to be overly dependent on any one source. Back in 2009, all of our funding was secured. Today as you can see, we are funding in size from a wide variety of sources, both on the unsecured and secured side. Now we've not been active in the ABS market as late, as Bart has mentioned, to date we have chosen to sell our portfolios via trade sales.

However, we remain open to the idea of executing the ABS, if the economics compared favorably. This is a more diversified, strong funding structure than any other leasing company, at it's a competitive advantage of AerCap, that we can source funding in size in all of these ways. I'll give you two quick examples of how we approach funding. We did a small export credit agency deal last year for a Boeing 787 delivery. Now given our investment grade rating and the ample liquidity available in the market, we didn't need to do that transaction. However, we always want to make sure that our documentation is up-to-date with all our lenders. So, we did the small deal to make sure that we were prepared in case we needed to tap this source of funding in the future.

Similarly, during Q4 of last year, we had plans to access the investment-grade unsecured bond market. However, if you cast your mind back at the time the market experienced a period of turbines with the risk-off sentiment pervading and spreads widening. So we decided to pivot and bring forward an unsecured term loan transaction we were discussing with a syndicate of Japanese Banks. We executed that transaction at normalized terms and spreads. Both of these examples highlight the importance we place on diversification and the thoughtful approach, we take to funding in general.

The focus on diversification can also be seen in the composition of our banking group. Now this chart here compares our banking group in 2009 versus to-date. Back in '09, European Banks account for the vast majority of our landing exposure. In fact, the top three accounted for nearly 50 %. We had $6.7 billion in funding from 30 banks. Today, we have $18 billion from over 120 banks. Now what you would expect amount we borrowed today would be bigger, because we are a much bigger company, what's more important to see is that our exposures are much more diversified from a geographical perspective.

Roughly a third, a third, a third, I've said it before, aviation is a much more investable asset class and this is reflective in the size of our banking group participation. We have now for example, over 20 active banking relationships in both Taiwan and Japan. Diversifying on a geographical basis has been a deliberate strategy of ours as we've seen over the years that the demand from landing on a regional basis is not necessarily correlated.

For example, there have been times, when the demand for new lending from European banks has been dampened as they were digesting regulatory and capital changes. However, our Asian banking group was very much open for business and vice versa. By maintaining and growing this diversified banking group, we believe, we are well placed to have consistent access to funding despite any temporary headwinds in a specific region. We believe that one of the key competitive advantages and risk mitigants of AerCap is the breadth and depth of our funding relationships.

Secured debt as a percentage of total assets is currently at 24% and we see that number trending down towards 20% over the next 12 to 18 months. Now, why do we use secured funding and what benefits does it bring to AerCap. Well first and foremost, it diversifies our funding sources. As you've heard me say already, diversification is a key strategic priority for a capital-intensive business like AerCap. There are those that say whilst their focus is on the unsecured bond market, they can always access the secure funding the markets if necessary. However, from our experience we believe this is the naive statement. You must be active in order to get competitive term -- like in most markets, you must be active in order to get competitive terms and to be known to your counterparts.

We spent many years developing and growing our secured lending group. We don't think, it's realistic to assume that you could access this pool of capital for the first time in a meaningful way, when there's a general dislocation in the funding markets. Relationships count and AerCap has those relationships. Secure funding is also competitive from a pricing perspective. Especially when you are looking at longer tenants out to 12 years, there's a lot of flexibility in secured funding deals. You can choose fixed versus floating, you can select a wide variety of aircraft types and ages for the collateral pool. You have full substitution rights and you can prepay the facilities early with no penalties. It also amortizes over the term of the transaction to a final bullet payments and this discipline allows you to manage and de-risk your maturity towers more effectively.

We ended the quarter with strong available liquidity of just over $9 billion that includes our cash, revolvers, other undrawn facilities and our contracted sales. Carrying this amount of liquidity is not cheap; it cost us around $60 million a year. We carry a lot more than our peers as well, but we know that in a business like ours with a large balance sheet and the need to do a lot of funding each year. It's the right thing to do. We target a minimum of 1.2 times sources to uses over the next 12 months. And this is a conservative measure, because it assumes that no funding whatsoever is available during that time period.

You can see from the chart that are actual sources uses, is 2 times at the end of Q3, with excess cash coverage of approximately $6 billion. This was higher than normal due to the lack of near term debt maturities. As you can see, we've exceeded this target every quarter, for the last two years. In fact, we've always exceeded this target, since we put it in place. So this conservative approach to liquidity married with our focus on diversification of funding sources, our reduction in our leverage targets, our large percentage of new technology aircraft in our fleet and our industry leading position in the sector has resulted in upwards ratings trajectory. In fact many of you will have heard us say regularly about how we believe many of our credit metrics have improved materially over the past two to three years.

In conjunction with the revision on our leverage target from 2.8 to 2.7 times and our recent hybrid transaction, we received an upgrade to BBB from S&P. In August this year Moody's places a positive outlook, acknowledging the platform's consistent execution, residual value management and conservative focus on liquidity as key drivers in the decision. And as you can see from the chart, we believe we are achieving many of the criteria Fitch list as necessary for an upgrade to be considered. The benefits of these upgrades will be access to a deeper pool of investment-grade liquidity, more competitive pricing and new debt financings, and less volatility in our credit spreads.

So to wrap up it should be clear how develops the financing market for Aviation assets, has become with further room for growth. As investors now except that Aviation is a mainstream asset class. It should also be clear how important it is to have a diversified funding and capital structure.

And finally through consistent financial performance of the platform, and the way we mitigate risk. We are on an upwards ratings trajectory.

I will hand it over to Pete now. Thank you.

Peter Juhas, Chief Financial Officer

Thanks, Brian. Good morning, everyone. I'm Pete Juhas, CFO of AerCap, and I'm going to take you through -- today you've heard a lot from various parts of the business about our competitive strengths across the company, but what I'm going to do is take you through how those translate into our financial performance and also talk about our financial outlook.

There are four key points I'd like to come across today to focus on. First, this business produces steady, consistent, predictable earnings and cash flows. Second, we've got a strong track record of effectively deploying capital to create value for our investors. Third, the actions we've taken to transition to a new technology fleet and the sale aircraft, as Gus and Bart have mentioned, and to redeploy the proceeds from those sales in to share repurchases leave us well positioned for the future. And fourth aircraft stock currently represents an attractive entry point for investors who are looking for long-term value creation.

So I'll start with lease rents. As Phil mentioned 97% of our expected least rents are already contracted through 2022. You can see the numbers there for each year. And the reason for that is because we're putting aircraft out on long-term leases, our typical new aircraft are going on a 12-year lease, our average of main lease term across the fleet is 7.5 years. They don't expire until 2027. That's a very long time. We're also leasing aircraft well in advance of their expected delivery dates for new aircraft and the lease expiry dates for used aircraft, and the result of that, is that we have a lot of insight into our future revenues, earnings and cash flows, because of that over the next several years.

Now as we mentioned throughout the day, we're running this business for the long term and we have long-lived assets, long-lived liabilities and as Gus mentioned, there aren't a lot of things on the income statement that move around a lot from quarter-to-quarter. The only things that really fluctuate are due to sales transactions, so aircraft sales and also the timing of maintenance events. So we see that coming through in terms of gain on sale and other things related to that, we see the maintenance events coming through in terms of maintenance revenues and leasing expenses. Those are the only things that really move it around from quarter-to-quarter. Otherwise, you can see, we generally produce around $265 million of earnings a quarter, a little over $1 billion a year, $3.1 billion of operating cash flow per year.

And so if you look at the quarters here, you see they're pretty consistent. Some of them will be higher, you can see in the second quarter of this year, we had $331 million of net income, and that's because we had $78 million of gain on sale in that quarter. In the first quarter of this year was a little lower the $234 million that was because we had lower maintenance revenue. But overall, we know that overtime these are going to come through and that they're going to be very predictable and give us a lot of insight into the future.

So as you heard from Bart, we've been selling aircraft for a long time at consistent values above our carrying values. You can see that from over, this is a chart over the last eight quarters of our sales and you can see that the volumes move around from quarter-to-quarter, the margins move around, but generally they're in the range of 7% to 10% above our book value, that's on an asset basis. And this shows us a couple of things. It shows us - obviously - it shows the power of the portfolio management team to sell the aircraft at a premium around the world, but also importantly it gives us a huge number of data points to look at where we're seeing concrete actual sales transactions that are being executed in the market.

We're doing about a -- we've been selling about 100 aircraft every year and we represent a significant portion of the market for midlife and older aircraft sales. And so when we look at that and we say we can see that consistently we're selling above our book values. That gives us a lot of confidence about our book values of aircraft, about the prudence of our depreciation policies.

Now as I mentioned, this business generates a lot of capital every year. Gus talked earlier about the various ways we can deploy capital. If we look at how we actually deployed it over the last five years, you can see that we take a dynamic approach. We start with the balance sheet and look at our leverage ratio. And so in from mid-2014, at the time of the ILFC acquisition, until the end of 2016, our primary use of excess capital, was to delever. We paid down $10 billion worth of debt, during that period to get to our target leverage ratio. Of course, the main use of capital for the last five years has been aircraft purchases. During that time, we've bought $23 billion worth of new technology aircraft.

Now, we also look at sale-leaseback opportunities and there have been a lot of those that have come around over that period. But, we haven't executed on any of those and that's because the returns available for all of those deals didn't meet our return thresholds, we saw more attractive ways to deploy our capital in other means.

Now, of course M&A is another way to deploy capital, we look at all the opportunities that come around and we have historically done as Gus mentioned, that ILFC transaction, the Genesis transaction, we've been very successful with M&A. However, over the last several years there haven't been any targets that we've looked at, that would be a better investment than reinvesting in ourselves through our share buybacks. And so that leaves us with return of capital and we look at return of capital, how do we do that most effectively? And when we think of return of capital, we look at our other alternatives for deploying capital. We look at our stock price. We look at our valuation. And in the current environment and over the last few years, we haven't seen any better way to deploy capital than investing in our own platform in our own company.

So, we've talked a lot today about aircraft sales. We've talked about capital allocation. What this shows you here on this page is how these two things come together. So, over the last 13 years as Bart mentioned, we've sold aircraft an average gain on sale of around 8% on an asset basis, that's about a 130% of our equity book value for those aircraft, if we look at just the periods since 2016. That's about a 132% -- 32% premium to book value that we've sold at.

Now during that period, we have bought back our own stock at a significant discount of 16% to book value. And we've been selling these portfolios to sophisticated parties; you saw the chart that Bart put up. These are sophisticated private investors. they are airlines; they are other leasing companies and they are paying a premium, consistently for these assets. And they're not the only ones when we see this also in terms of the ABS market, ABS equity; people are paying a premium for that. There have been over a dozen ABS deals done this year; it's going to be a record year for the aviation ABS market.

We see it in the sales of private platforms, most of those have been selling or other aircraft leasing platforms, where they're selling on average for between 1.1 and 1.2 times book. You saw it last week with the Aircastle being sold at 1.17 times book. So there is significant demand in the private market, at a premium to book value. What we're doing here is capturing that valuation differential. And over the last three years that has been a differential of 48%, and as long as that persist, as long as this difference between the private market and the public market persist, we are going to continue to take advantage of it.

So effectively what we're doing is recycling our capital away from older current technology aircraft, towards new technology aircraft, towards in reinvesting in our fleet. And effectively that's what we do when we buy back stock. Now the impact of this recycling is higher EPS, because of these are accretive transactions. It's also a demonstrably better quality portfolio of more in-demand, new-technology aircraft. It also has an effect, obviously, on our lease assets. It lowers our lease assets, because we are selling assets. And it lowers our lease revenues.

And as a result, because new aircraft tend to have a lower yield than older aircraft simply because, they haven't been depreciated; they're new. What we're seeing is that has an impact on our overall lease yield for our portfolio. But, as we look at that and we say, does this make sense to deploy our capital in this way, we see that we're doing that but we are getting a positive impact on our EPS, a positive impact on our book value per share. That makes sense. All in all, we believe this leads to a stronger and more valuable business.

So in summary, since 2015 we've bought back 87 million shares, for about $4 billion, to put that in context that's a little over 41% of the company, that we bought back over that period and to compare that to companies - other companies - in the S&P 500, so across all of those, we would be in the 99th percentile of all S&P 500 companies over the last few years in terms of our return of capital.

Now, let's take a look at our outlook for the rest of 2019, full year 2019, and some of our 2020 performance metrics. So for full year 2019 we expect a EPS of between $6.80 and $7 excluding gain on sale, and for 2020 we expect our EPS to be between $7 and $7.40 yet again excluding gain on sale. The main things that are affecting all of these numbers are new aircraft deliveries, our aircraft sales and our capital redeployment. So in terms of CapEx for this year, we expect to have CapEx around $4.7 billion. For next year, we expect it to be around $4.2 billion and that reflects, the delays that we anticipate for the MAX, as well as for the A320 and A321neo program.

Obviously, these numbers are heavily dependent upon the actual date of return of service of the MAX and the delays with the Airbus aircraft. On aircraft sales, we expect to end this year with $2.2 billion -- around $2.2 billion of sales. That's our current estimate, there are a few that might slip into next year, but it will be somewhere between $2.1 billion and $2.2 billion. And we're currently estimating around $1 billion of aircraft sales next year.

In terms of excess capital, we expect to deploy around $500 million of excess capital this year and next year around $1 billion of excess capital. And as we look at some of our key metrics. So our average age should be around 6.2 years, by the end of this year. By the end of 2020, it will be around six years. So, we'll stay in the low sixes there and then after that it should level off. As I mentioned, the sales of the older aircraft and deliveries of new aircraft will naturally result in a little bit lower lease yield that will be 11.3% for this year and just under 11% for 2020.

Our average interest rate should be about 4.3% this year and a little lower at 4.2% next year. And the combined impact of all this on our net spread is that we expected to be around 8% this year and around 7.7% for 2020. And it's worth noting if you're comparing these numbers to some others in the industry that our interest cost, when we calculate this, includes all of our debt issuance cost. It includes other fees. It includes the impact of finance leases and straight line rentals. And when we look at how much those represent, it's around 50 basis points on number. This also includes the coupon on our subordinated debt that we just issued. So that subordinated debt gets significant equity credit 50% from S&P and Moody's, and 100% from Fitch, but the interest expense does run through this line and is embedded in this number.

And the other factor that's push this down is somewhat is the higher than expected sales that we've done this year, as well as some long-term extensions on our used aircraft, which affect our lease yields. But again, we see the benefit of the strategy coming through in our EPS growth, in our book value per share growth.

Our depreciation rate will be around 4.7% for the full year 2019 and about the same in 2020, as our average age is staying just around in the low sixes. And so when we look at net spread less depreciation, it should be around 3.3% this year, about 3% next year. This year was a little higher than normal because we had lower expected maintenance rights amortization, so lower depreciation expense, so that was what drove that this year.

So we had previously guided to EPS excluding gain on sale of $6.60 to $6.80 for this year. As I said based on our current forecast, we expect to be above that between $6.80 and $7. At $6.80 that would represent 20% growth of EPS over our core EPS in 2018 at $5.65. For the first three quarters of this year, we've had $0.90 of gain on sale, so overall we expect to have a record level of EPS in 2019. For 2020, again we expect $7 to $7.40 of EPS excluding gain on sale, so we have a positive outlook for continued growth in EPS in 2020 and beyond.

Now despite the recent increase in our stock price. At today's valuation, we continue to believe that AerCap represents an attractive entry point for investors. What we show on this slide is return on equity divided by price-to-book value. So effectively, what this means is what your implied return on current market value is. We show it here for AerCap as well as a number of North American financial institutions. And the point here is when you look at that AerCap has a higher return on current market value than any of these companies, which many of you are familiar and the reason for that is that we have a return that is either equal to or higher than those but a valuation that significantly lower. And so we think this illustrates the fact that AerCap currently represents a strong - there's a compelling - entry point for new investors, or existing investors who want to increase their stakes.

Now another point that we wanted to mention is the change the transition in ownership that's occurred in our stock, because we believe this is positive for our investment case. So there are a couple of factors, which have led to higher volatility in the stock over the last few years and put downward pressure on it during certain times.

So we had two legacy investors AIG and Waha, which between the two of them sold 130 million shares from 2015 onwards, these shares created volatility. Some of that was driven by the hedging around those Waha collars and they place downward pressure on AerCap stock price. And we saw this particularly in certain periods, like the fourth quarter of last year in November and December, when there was a huge volume in our stock. Obviously, the overall market was selling off, but we were much more affected we think because of this.

Now the positive news about this is that the exit of these investors. AIG obviously is long gone. Waha almost out currently and so the exit of these investors, we believe, removes a substantial overhang on our stock, and just to put that in context I forgot to mention to put that in context the 120 million shares that they sold is almost equal to our current share account of a 133 million shares.

So to bring it all together, perhaps the best metric to show the consistent and repeatable financial performance of our business is to look at our book value per share growth and if you look at that, you can see that over the last five years we've grown our book value per share, at roughly 15% a year. We expect it to be around $72 at the end of this year, that is basically doubling from where it was in 2014. As we look further ahead we expect to have our book value per share around $100 by 2023.

So you've heard a lot today about AerCap, about our leadership in the aircraft leasing sector, about our competitive advantages, our informational advantages, our culture of action, our strong balance sheet and funding profile, our consistent and predictable earnings, our aircraft sales and our capital allocation. Most importantly I think hopefully, from your perspective you heard how this company consistently produces value for investors and how we will continue to do so in the future.

With that, I'll invite Gus up and we're happy to take your questions.

(Question and Answer)

Aengus Kelly, Chief Executive Officer and Executive Director

Great. Thanks Pete. So we're delighted to take as many questions as possible here today. So there is microphone going around if you put up your hand. Gillian there’s one beside you.

Michael Linenberg

Oh, hey Gus, good morning. Mike Linenberg with Deutsche Bank. Historically the way you've written your lease agreements, you've been protected from interest rate volatility. As we move into the possibility of tariffs entering into purchase prices, what I look at the amount, 97% of your lease rents contracted out over the next few years. Do you have that type of protection underlying those agreements? And if not is it, does the OEM eat this? Does the Lessee eat the tariff? Thoughts on that? Thank you.

Aengus Kelly, Chief Executive Officer and Executive Director

In the leases, it is the obligation of the customer. However, in reality the OEMs will have to deal with this. Now, we're all hopeful of course that we will see resolution to at least the Europeans and the Americans, whatever about the Americans and the Chinese. But hopefully we will see resolution there and there are certainly work going on towards that at the moment, but ultimately it is not us who have to bear and I do believe the OEMs will have to deal with it in practice.

Analyst

My question concerns the MAXs when they come back into service, if you could provide some insight into that? It's going to be quite a logistical exercise as to who gets what and when. And I'm starting to have some concerns that maybe when they are delivered, that maybe it'll be some overcapacity in areas so, maybe you could address that?

Aengus Kelly, Chief Executive Officer and Executive Director

Sure. Well, we have seen load factors at all-time record still, so that shows you that the demand is there. ow we Now we do have, the best part of 650 parked airplanes between what Boeing have produced on their ramp in Seattle, and what was delivered prior to the tragedies.

Now, I do believe that the airplanes will gradually come into service, they will not be activated overnight. It will take a long period of time, for Boeing to deliver those aircraft that have been delivered, while at the same time trying to produce airplanes. If just think the logistical difficulties of it's one thing to produce airplanes in the factory. It's another thing then to take engineering expertise out of the factory, bring it to field all over the world to activate airplanes.

So, I think that it will be a drawn-out process, I think that the traffic is therefore, as evidence by load factors. If I saw declining load factors, then that would be a different concern. But we haven't seen that. We continue to see load factors at all-time records. And look as the biggest supplier of marginal capacity in the world, we are sold out. That's probably the best metric I can give you and we're sold out pretty much for the next couple of years.

So there is strong demand and I think on the MAX, the MAX8 will return. I do think the MAX 8 in particular will be a very good airplane. You know, we were weighted heavily towards the NEO a long time ago, because of the A321 capabilities, but we do believe the MAX 8 will come back and we think it'll be a very good airplane when it comes back.

Helane R. Becker

Thanks very much it's Helane Becker with Cowen. I don't know if Interjet is still a customer of yours. But at one point they were. And I know you don't like to talk about specific customers. But they're behind in aircraft, in landing fees to the Mexican airport and I'm just kind of wondering when you were talking about risk management and we are talking about risk management before, is that the kind of thing you're looking for and then would you move to try to get your aircraft out or to be more aggressive in managing your exposure there given that usually landing fee non-payment and fuel-bill non-payment is concern for I guess what survival?

Aengus Kelly, Chief Executive Officer and Executive Director

Sure, Helane we're always looking at each customer and Interjet is a customer. And we work with them very closely. We generally don't rely on public data, to inform us of our decisions what we're going to do, but it is just like every quarter there's some customer, that has some issues to deal with.

We're working with Interjet and if there are problems there, we're very confident we'll be able to move those airplanes around, it's what we do. I don't have an issue as I said look over 15 years, going through the worst downturn we've ever seen aviation. You've seen the track record of this business. So one airline or another airline will not make a material impact on the business. We went over there.

Analyst

Eric Gregg, Four Tree Island Advisory. I've got 3 quick questions. The first one is on the sales and trading platform, with it being so differentiated
-- and premiere versus competitors out there. Have you considered opening that up to your customers and letting them sell through the platform for a fee?

Aengus Kelly, Chief Executive Officer and Executive Director

Short answer to that is no. Because, I'm not renting at the platform, the fee that I would have to charge it be so big to get to use this platform. This is the best in the business and I'm not renting it out and that's why we generally don't manage airplanes, but only for very strategic investors or deals. We have to think about the information we have.

So when we sell an airplane we do so much analysis of the aircraft. We will know more about the LLPs of a 16 yearold engine than anyone in the world. We will know more about the overhaul cost of an airframe of a 737, a 777, an A320, an A330, be it a 20-year-old airplane, a 15-year-old airplane than anyone in the world. So it'd be huge informational advantage. That's just a fact of who we are and we will not share that with anyone else.

Analyst

The second is in terms of the 737 MAX grounding, clearly that's a frustration to a lot of your customers, but and in market that's going through secular growth where your long aircraft and longest independent longer than anyone else for an independent company. Why isn't the grounding just an unvarnished positive for AerCap for the foreseeable future?

Aengus Kelly, Chief Executive Officer and Executive Director

Well, if you remember of course that look if we had hundreds of airplanes sitting on the ground when the issue occurred, then you would have demand. But you would have been running an enormous risk for that to occur. So you have to have capacity available. no one saw the issues happening but certainly of course look when we lease airplanes there is an impact from the MAX but the vast majority of our portfolio is leased years in advance, so it doesn't have an immediate impact on the revenue stream of the business, because we're as you saw were 98% contracted for the next several years.

Analyst

It's great. And the last one is in 2017 for the first three quarters, you did about 300 million a quarter in share purchase, 2018 that was about 200 million per quarter, this year it's less than 150 million per quarter. Your excess liquidity looks greater than it's been in the long time, you're hitting record earnings. The outlook looks very strong. Why isn't share repurchase picking up here? And why is it going in a downward trend in terms of quarterly share repurchase activity?

Aengus Kelly, Chief Executive Officer and Executive Director

Well, you would have seen that we announced an increased $200 million to share repurchase last week, but you also will have seen, the upward ratings trajectory of the company and the two points. We wanted to get to the 2.7 debt-equity ratio, to ensure the upgrades from the rating agencies. That's absolutely vital to the long-term stability the business.

The share buy-backs we will continue to do, but it was absolutely vital that we got there after all the hard work we had done. We wanted to make sure we took we took down the leverage to the point where the rating agencies felt very comfortable with the upgrade. Once we're very stable around that rate, that level, then of course that's when we announced the increase in the share buyback program last week.

Catherine Maureen O'Brien

Hi Catherine O'Brien with Goldman Sachs. So you outlined some interesting examples today, where AerCap won business either because of your fleet planning process or fleet solutions process for your customers. Can you just talk about, what percentage of the deals that you're transacting on are not even seen by some of your competitors, because either generated by you or customer comes to you for help? Maybe how that's trended since the business has grown so much of the last five years? Thank you.

Aengus Kelly, Chief Executive Officer and Executive Director

There's a mix of course, but look, it does start a successful business starts at the bottom. It's with -- what's your strategy? What are the assets you want to own? That's key if you have your assets that your customers want, life does get a lot easier. If you've been falling for Boeing and Airbus's tricks, it gets just much more difficult over time, it just does. So that's where it starts, and then I would say there was a mentioned there of United transaction today.

United never taken used airplanes ever, and frankly they never really take Airbus airplanes because it was Continental management which was Boeing all the way. And so they came to us and said look we are looking at the possibility of used airplanes. We said look, we can get it done for you, we will manage it, and we will take care of it. But we've never taken and used airplanes, are we sure we can do it. We said no one has more experience than us. So we will do it, we will do the initial transaction in size.

It's a bit like in a bond dealer and equity offering, you're going to go to the biggest players and say, okay, where is price there? You guys are going to take the big piece of I;, you're going to be influencing the price of the transaction. It's the same in our position here. So they need a batch of airplanes. We can supply the biggest number; we have vitally the technical capability to get it there on time, on spec and efficiently at the right cost to them.

So they'll go to us first, we'll get a premium for that. Then they'll go out to the other people say, okay, right. We've done the big trade with these guys now, there's more that we need to do, maybe another 10, 15 airplanes. And they came to me and said look, Gus you know we know you did the initial trade. If you want to follow up and do the rest, we're going to go with you first. But of course look just full disclosure, we're going to tell these guys you have to do exactly what AerCap did, here are the MRO providers to go, this is how it's to be done and you're not going to get paid as much as AerCap.

So we say that's fine, you go off you do your deal with someone else and you'll pay them less. But that's an example of the capability of the platform generating a huge new customer, bringing them into used airplanes for the first time. Same with Southwest Airlines and us getting superior economics to what the follow-on competitors get. And there are many examples of that. I mentioned Malaysian Airlines today as well. That was another one where that occurred.

So it's a combination of all these factors, but it's consistently thinking about your strategy around the portfolio, the global presence and contact with the airlines and the capabilities of the business to understand what it takes to move airplanes from a jurisdiction to another. Over the long term in this business, airplanes have to get moved.

And someone can say I took an airplane back from such and such a customer good, but how much did you have to pay the liens on the airports. Did you get all the records back? Do you have to make massive contributions to the next lessee for engine top-ups for the next overhaul? That's where the real -- I would say -- secret sauce in the business isand that's what enables you to be very efficient and effective moving assets as well as having the global presence and relationships. Just a couple of here, sorry, go ahead. Doug, I'll take afterwards. Gillian you want to just get the mic here, and then there’s another just behind there.

Ross Harvey

Ross Harvey from Davy. First questions in relation to aircraft sales, I see that you're guiding for around $1 billion next year, just wondering why you would have reverted to that level given that level, given level that's being post the ILFC deal. And what is your outlook for the secondary market. And I'll give the other two now if that's okay. On core EPS. Just wondering what's baked in for some of the cost items like SG&A. Should we expect more operating leverage, as we've seen over the last 12 months. On a final question, maybe for Gus.

On the airline consolidation topic which is topical in Europe – it’s topic particularly in Europe. What's your general view on -- improve lessee credit risk above and beyond? You've been able to price it a little better for more distressed customers. What's the net impact of what we're seeing.

Aengus Kelly, Chief Executive Officer and Executive Director

Do you want to take the first two Pete?

Peter Juhas, Chief Financial Officer

Yes, so in terms of in terms of aircraft sales Ross, yes. I mean we assume $1 billion dollars next year and in historically most years, we've assumed $1 billion, or $1.5 billion last year and we've, you can see, we've substantially exceeded that, if the market stays the way it is today, then I expect we will exceed that, right? Because, as we hopefully proved out here, it is an attractive transaction for us to do that, to sell aircraft. But as we're forecasting we tend to be conservative looking at aircraft sales and that's really how we come up with the $1 billion number.

In terms of our SG&A, yes, we will have some more operating leverage, the SG&A number should stay pretty much where it is on a quarterly basis, that's like $65 million to $70 million, somewhere in that ballpark, I expect over the next year. Obviously the fleet is going to grow, so there is some additional leverage there.

Aengus Kelly, Chief Executive Officer and Executive Director

On the airline consolidation, this is a global phenomenon, of course, and we've seen the benefits of that, most starkly here in the United States. I mean up until consolidation, whenever you did a deal with the US carrier, it was a question of when you go into the courtroom not if you're going. And that has changed dramatically, because of consolidation and I do believe that the US airline business, is now far more investable business than it's ever been before.

Now in Europe, we still have a plethora of small or sub-scale carriers. I do believe that we will continue to see consolidation. There's plenty of room for consolidation all over Europe. I think it's a positive for the industry overall and when we get to Asia Pacific, that's less. So, I think it will take much longer out there for consolidation to occur. But obviously, in Europe we've seen IAG and Lufthansa lead the way. But consolidation is tough, M&A is tough to get it right It is really hard and it does take several years at a minimum for all the efficiencies of consolidation into the airline to materialize, but what is for sure, is that you just have less management teams willing to add capacity and that is the huge difference.

Historically, the worst thing an airline investor can see is fare sale now on because when one guy starts selling, the other guy follows, the other guy follows. And so, when you've less of them, there's just less capacity for those mistakes to happen.

Analyst

With your recent upgrades and potentially one coming you've moved further away from the IG high-yield line, which is a more comfortable place to be. Is that where you're most comfortable being with long-term. What are the costs and benefits of potentially striving for another notch to high-BBB, if not even a whole ratings category? Where do you expect to be long-term? Not your metrics, but the actual ratings?

Peter Juhas, Chief Financial Officer

Yes. Thanks Doug. So I mean look right now, we're targeting being BBB-flat, we think with all three rating agencies. So, we're hopeful that the other two will follow where S&P has gone. And so, the reason for that is really as we looked at it, right the BBB-minus space was getting pretty crowded. We saw a number of upgrades into that and if you look across BBB generally as a segment of bonds as many of you know that has exploded enormously both in terms of volume, but also in terms of percentage of overall bonds. And so as we looked at that, we thought, look in a downturn - because we all know downturns come sooner or later they come. In a downturn you want to be, you don't want to be at the bottom rung of that, we would like to be in the middle.

That being thing said, there are costs associated with doing that, right? In terms of what you have to do, in terms of the leverage that you run at. We think this is a prudent leverage to run at, irrespective of the rating. We think it's a prudent level of leverage to run at. If we were to try and go significantly higher, I think that at the moment, when you look at the cost that would be from for equity holders. I think that would be more challenging, because it would probably require significant delevering.

Analyst

Kevin Tang TIAA bank. Just given your exposure in China overall right now and just the opaqueness of the courts and the potential interference with the government, what are your thoughts on the enforcement of the leases and potential repossession?

Aengus Kelly, Chief Executive Officer and Executive Director

Don't have any concern with this, in fact we were able to enforce the court jurisdiction in China, court decision in China just a couple of weeks ago. It's not a problem. You know, I think that we have had just in 30 years a couple of bankruptcies in China, which is in stark contrast to most of the other markets.

In fact, the toughest jurisdiction in the world to operate is in here in the United States. There is no other jurisdiction that favors the bankrupting airline so much as here; there is no ability for self-help here. There is 60 days with the airline can do whatever they want to your asset. Generally, in advance of that, they stay current on your lease, but the assets that they want to target to return, they utilize them as much as possible to burn off, as much time on the engines in the airframe. You can see it happening but there's nothing you can do. It's not the case in China, it's not the case in Pakistan, and it's not the case in Russia.

So, this is historically being by far the most difficult and costly jurisdiction to operate in. Now, with the change in credit metrics here, that has changed a lot. But, I would say that we have we have not had difficulty in China so far and that's not something I can say elsewhere.

Aengus Kelly, Chief Executive Officer and Executive Director There's a question over here. Gillian, just there at the end.

Analyst

Mark Kehoe, MacKay Shields. Just wondering whether there are any lessons do you learn from the whole WeWork debacles, in the sense that this kind of gap between the private market andthe public markets, particularly given that the recent M&A activity within the aircraft leasing space.

Aengus Kelly, Chief Executive Officer and Executive Director

Well, I'd like to think there’s not a whole lot of similarity between AerCap and WeWork. But, look, what’s patently obvious is that the vast majority of equity, in the aviation sector - The aircraft ownership sector - is not in the aircraft leasing public space, it is in other parts of the market, in private forms.

Pete mentioned the ABS, other lessors, airlines buying airplanes, M&A. And if you look at our track record for 14 years, you see this consistently being at a 130% premium and every year we have about 15 billion of fresh equity flows in to the aircraft ownership sector in order to buy the 40% of aircraft that lessors owned. So that equity is coming in all the time from other sources. None of it has come in from the public equity. There hasn't been a public equity issuance in many, many years.

So, I supposed to be candid about it. There is a big discrepancy between where the vast, vast majority of aircraft ownership equity trades and where the public market trades. And we will try to exploit that to the fullest extent we can by continuing to sell assets at significant gains, but only the assets that make the company better after they leave the balance sheet.

It would be a fool's gold for us to sell our best assets and then go out and buy stock. I guess at some price it would work but, generally speaking, to go off and sell our best assets, to free up capital. We then buy stock in the business. It's probably not as good as it was before that asset left.

So when you sell assets, you got to make sure that the residual business, is at least the same, if not better off without those assets. And that's why there's so much work goes into selecting the assets, selecting the engines we sell, and I think that, look as long as that gap persists, we will take advantage of it. Thank you.

Peter Juhas, Chief Financial Officer

I would just add the other another from an investor standpoint. I think one lesson learned from the WeWork debacle is that if the company doesn't -- we report GAAP net income, right? If you've got a company that's reporting adjusted earnings, adjusted every which way and loses money year-after-year and doesn't carry enough liquidity to get through a few months, then you've got a question, ultimately, what are those valuations predicated on? And that's why we show you the GAAP numbers, we show you the liquidity we have and we have set targets for all of those things. And I think fads may come and go right, but ultimately those are the things that you can count on as an investor.

Aengus Kelly, Chief Executive Officer and Executive Director

In the long run accounting GAAP income and cash have to be the same. They cannot be different in the long run. The two will equate. There can be timing in differences, but the two always equate in the end.

Analyst

Two questions, one, I didn't see anything about return on equities. And I was just curious, if you think about that or you have targets in the medium term for that metric? And my second question I think you've made a convincing argument over long periods of time you sell the assets for premiums over the book value. Does it not -- I'm curious to hear your view on this does it not argue that your depreciation rate in effect is somewhat overstated. The way you're handling it and then your underlying core earnings are actually higher, if you used a somewhat higher depreciation rate, that would lead to this lower gains on --

Aengus Kelly, Chief Executive Officer and Executive Director

Pete?

Peter Juhas, Chief Financial Officer

Yes. So, as we look at ROE it tends to be longer term in the range of 10% to 12% and I think it will continue there. And as far as the depreciation policy goes, so as I said, we're glad to see that we're able to sell at a premium to book value. Could you say well you didn't need to accelerate depreciation on those older aircraft; you would have gotten less of a gain on sale. So yes, that's probably true, right. And you could argue, well that shows that maybe we didn't need to depreciate them at those levels. But realistically, we followed these policies for the last 13 years and we're not going to change our depreciation policy in order to boost near term earnings. I mean that's fundamentally not what this company's about. We're positioning it for the long term. And so, if that results in relatively conservatively valued book, that's the way it's going to be.

Analyst

(Technical Difficulty)

Aengus Kelly, Chief Executive Officer and Executive Director

Okay, thanks. I know what you mean. I mean as we've said often and we do try and target say about 800 to 1,000 over the risk-free rate. So in Pete's 10 to 12, it's based on the five-year treasury today. What you've seen historically when treasury rates have been higher the ROE has been significantly higher.

Analyst

Hi guys, when we think about wide-body demand over the next five years to ten years, as some Airlines begin to transition away from A380s, which aircraft families do you think are best positioned? Is it something do you see this generating demand for the 777X or is this potentially, an opportunity for a second or third lease on some of the 777-300ERs coming off their first leases?

Aengus Kelly, Chief Executive Officer and Executive Director

I think it's a combination. As I said earlier on, the 777-300ER, the demand is there now when we believe it's going to be solid there for the best part of the next 10 years or so. So if you're into 777-300ER that are 10, 12, 14 years of age, I don't think you have any problems. I think when you get past that you'll just see the 350will just supplant the 777X and to some extent the 787-10 and the demise of the 380. I mean it'll be a long time, before those seats actually come out there.

These are big airplanes, Airbus are still producing this, still delivering them. Yes, the line will be discontinued and they'll certainly be opportunity. I think what it's shown, is that the airplane was ahead of its time. You just didn't have enough slot-constrained airports around the world. The one customer has been able to make it work profitably on a consistent basis, was BA when they were using it out of Heathrow to LAX, two extremely high yield markets. And what they were able to do, because Heathrow's the most slot-constrained airport in the world, the most valuable slots in the world are in Heathrow.

They were able to take three 747s a day and put in two 380s. Customers always prefer the 380 product. It's just -- as we've all flown on it. It's just a nicer product. That's a fact; it's just not a very efficient airplane. And the demand for it, really you need to have real slot constrained airports on both sides. So, in the BA case they're able to free up the slot in Heathrow and send a 747 over to New York at Heathrow. So it worked there. But I think in the longer term, I think the large, large airplanes will struggle, very large airplanes like the 380. Boeing just need to do something on the 777X. Saw the Lufthansa issued last week, with the, putting them into options instead of being firm on the 777Xs.
So I think we'll see that the core of the wide-body market will be around 787-9 and the A350-900. They are the two airplanes I think that we will see generate significant customer gains over the next 10 years or so. The 330neo-900 may have its day. The problem with that airplane. And again this goes back to why we just we see so much more than anyone else in the market.

We peaked at 130 A330ceos. It was by far the most popular current technology wide-body six years ago by far, by far. It was a very good airplane, but the missteps of bowling on the 787 for six years meant that customers had no choice, but to use the airplane. The A330s of the customer base grew significantly.

Airbus produced loads of them and they're extremely reliable airplane. So what happened what we could see happening in the used market was that airlines like this airplane an awful lot, particularly the 300 variant powered by Rolls-Royce engines. And so when and the guy who ran Airbus John Lee at the time came to us, to launch the 330Neo. We said look John, may will be successful at some point in the future but not now, because the airplane you're trying to replace his too young and too good an airplane.

We can see the demand that's happening in the used market, which no one else could see. So the average age of that plane, at the time was less than eight years. It's too young to try and replace a very good airplane. Over the longer term may be in the mid-2020s, as the 330 fleet is much older that airplane may come into vogue but it struggled for a long time because of that fact.

Moshe Ari Orenbuch

Gus when you think about industry developments over the last few months and what's kind of on the come in the next few months. What do you think are going to be the most significant ones in terms of things that AerCap could take advantage of, that might be additive to kind of what you've laid out here, then I've got two quick follow-ups.

Aengus Kelly, Chief Executive Officer and Executive Director

I mean like we're always looking Moshe, at the different opportunities that are there every day in terms of what are the assets that can be acquired through one way or another? What are the alternatives in terms of returning capital to shareholders? What are the alternatives to dispose of airplanes or build up your capacity on your balance sheet and what you have to be looking at all the time is an ability to act rapidly if the opportunity comes. And you can only act rapidly, if you've been working for years on all the different potential scenarios.

So we're looking at each individual airplane type, we're looking at lots of different things but it has to be right. And at the moment I'm not going to spend too much on what the potential opportunities are because we don't know which one will materialize. But in the event that they do, you can rest assured that this company will act and if the opportunity is right we will be aggressive. But if it's not right, we won't and that's been the hallmark of the success of this company. You have couple of follow-ups?

Moshe Ari Orenbuch

On the financial side, Peter the ROE targets. I mean, does, it feels like given the amount of buyback that you've got going into 2020, should we be seeing that ROE showing an approving trend from the last several quarters. I mean is that something that…? And also I would have thought that perhaps, given where interest rates are, that you might see a little more improvement to the cost of funds, 2020 over 2019. Is there something else going on there?

Peter Juhas, Chief Financial Officer

Yes, I'll take the second one first. So on the cost of funds, no, not really. I mean, we will see some improvement but it takes a long time for these to come through because our debt complex is $29 billion and change right. So for that to really see an effect on the average interest expense, it doesn't happen very quickly. Obviously if we do see, we are seeing lower rates today. And so when we put those in place going forward, when we raise funding at those rates, you are going to see, if those persisted, we would see a lower cost for sure in the future, we continue to run down, but it takes a lot to move it in any one year.

And then in terms of the ROE look, I mean one of the things that, as I mentioned, one of the drivers of this forecast and the kind of swing factors is the capital redeployment and at what rate you can do that. And if you look at one of the reasons why we were able to outperform this year in 2019, is we were able to buy stock at a huge discount, frankly, much more than I mean unfortunately in some ways, right because the stock was lower. But fortunately in the sense that we were able to take advantage of that we had capital available. We did a lot like in the fourth quarter of last year, first quarter of this year for example at very low prices.

And so, when you're able to do that, that's certainly positive. It doesn't help your ROE when you do that when you because you're growing, your book value per share, so in the future that's actually a headwind to ROE. So that's why when we think about ROEs I give you that general range. It's not as though we have a specific target where we say. Oh, well, we need to be at 10% or 11%, because it would be foolish to say, well gee, I don't really want to buy that cheap because that would have an adverse effect on my ROE. So that's kind of the best I can give you on that.

Analyst

Hey thanks. So two questions. First, Thanks for all the information about the arbitrage, so buying back 40% of stock see the 50% spread. I think at this rate you'll be private by 2025, but hopefully we can change that. But I guess assuming you have that spread, are you comfortable continuing to sell planes from when you shrink the portfolio. Top-line revenue is going to shrink to buy back stock or is there something else maybe if you think five or 10 years down the line where there might be an opportunity; not now, but down the line?

And then second question is I think in past Investor Day you had a mark-to-market book value. So it's nice to see 1.3 times book value on selling the planes presumably the portfolio your left with now the company should be worth more than 1.3 times book, because the portfolios better now. Any thoughts to what you could mark-to-market the portfolio?

Aengus Kelly, Chief Executive Officer and Executive Director Look, I think what we're trying to get across today was, forget about the mark-to-markets. Look at the capability of a platform to keep creating value over 14 years. We became number one in the industry without a large parent, without a big financial institution behind us. There has to be something different about us and the competitive advantages we have. As we're continually for a very long period of time, through many different issues, that the global economy has faced, consistently generating GAAP net income, consistently generating gains, consistently moving airplanes around the world. And so that's what we're trying to rather than just say, yes, of course, there's a mark-to-market gain on the portfolio. I suppose that's, we would say somewhat, self-evident given the track record of what we've been doing in terms of selling assets, but what more important is what do you as investors know going forward?

If you look back 14, 13 years, and you see the consistent generation of profits, the consistent generation of gain on sale, what we're trying to get across today is what makes us different, because no one else in the world has been able to do this. And particularly given the fact that there's no industrial apparent, there's no financial giant behind us to make that happen. And so look we will continue -- the platform will continue to create that value.

To the extent we monetize that through just net income, which is the main generator of our excess capital and to a lesser extent that asset sales, we will continue to buyback the stock down the road. If opportunities come though, it could be that there can be tremendous opportunities on buying airplanes or buying other companies as we've done in the past or paying down debt.

We've done more of everything than anyone in the world, and so we're always looking at these opportunities, looking at the risks and rewards of each one for the long-term as well. As I said, you just have to be nimble and dynamic and understand all the opportunities and risks that come with them.

Jamie Baker

Hey guys, Jamie Baker with JP Morgan. In your prepared remarks, you said it about 20,000 mainline aircraft in service, global traffic doubling every 15 years and net need for 40,000 aircraft. Aside from the OEMs producing those aircraft and AerCap purchasing its fair share, what else needs to happen?

Does your analysis make any specific assumptions in terms of gating factors, airport infrastructure, air traffic reform, pilot shortages? I mean what are some of the external metrics we should be looking for in terms of legitimizing the analysis that you gave us?

Aengus Kelly, Chief Executive Officer and Executive Director

So I would say Jamie, the biggest what's really driven Global trade of which obviously aviation follows is free trade. That's it. I mean, jurisdictions will figure out, how to train more pilots. They will figure out, how to get airport. Airports are tough to build; runways are tough to build, for sure. But they'll get done if the demand is there. But what really triggers demand, if you just look at what OpenSkies has done in Europe. The advent of Ryanair. Ryanair is in a country of 3.5 million people, 3 million people when it started, that was the population of Ireland.

So, if it wasn't for OpenSkies you'll be stuck flying around turboprops up and from the west coast of Ireland to Dublin, that will be it. And it became the biggest airline in Europe. So that's an example. The same with AirAsia, the same with Southwest Airlines as well. It's, that is the driver of it. And I think so long as over the long term, we do have free trade, we have OpenSkies are continuing, OpenSkies and more freedoms the better. I think that's really the key thing is. I think those physical issues that governments may not -- sometimes be the most efficient, but they'll get there in the end or private enterprise will get there. Your dead right about pilots are an issue at any given time.

Airport infrastructure is an issue. I mean, you just look at it here in the, East Coast United States, if there's a rainstorm, lights out. We're all sitting in JFK for a couple of hours. So there's a lot that can be done. But I do think they'll get there and the biggest issue, I would say as overall is trade. Anything else from anyone at all?

One more here, hold on.

Analyst

I'm just curious. I mean it sounds like, this is sort of related to my prior question, but it sounds like the gain on sales you expect to be persistent I mean, they're not one-offs. I mean you based on how you value your book you expect to have gains on sale in the future. So why but what you sort of though speaking terms you encourage us to look at core earnings and gain on sale. I mean aren't they really both core earnings the way you run the business.

Aengus Kelly, Chief Executive Officer and Executive Director

You could say they are, but I mean look, what I would say to you about it is that it comes down to the business. You don’t sell every airplane, because you're much better off holding onto the majority of your aircraft if you believe in the long-term value and demand of the airplane.

Gain on sale generates a small minority of, obviously, profitability it's the vast, vast majority comes from the operating business. But what generates gain on sale and what generates operating profit are the same things. It's how the business operates and how all the information we have is utilized. So to give you an example when we pick an airplane to purchase, we know more about the trends of the demands than anyone else.

We've been very specific in the airplanes we've bought over the course of the last 10 years or so. You look at the airplanes that we’re selling, it's very specific as well. So, we will use that information, the capabilities of the platform. How we monetize the platform, it could be gain on sale or it could be selling the, or just holding onto the asset.

That's just a decision at the end. But what really generates it is the platform itself.

Aengus Kelly, Chief Executive Officer and Executive Director

Great.

Well, thank you very much everybody for coming today. It's much appreciated.