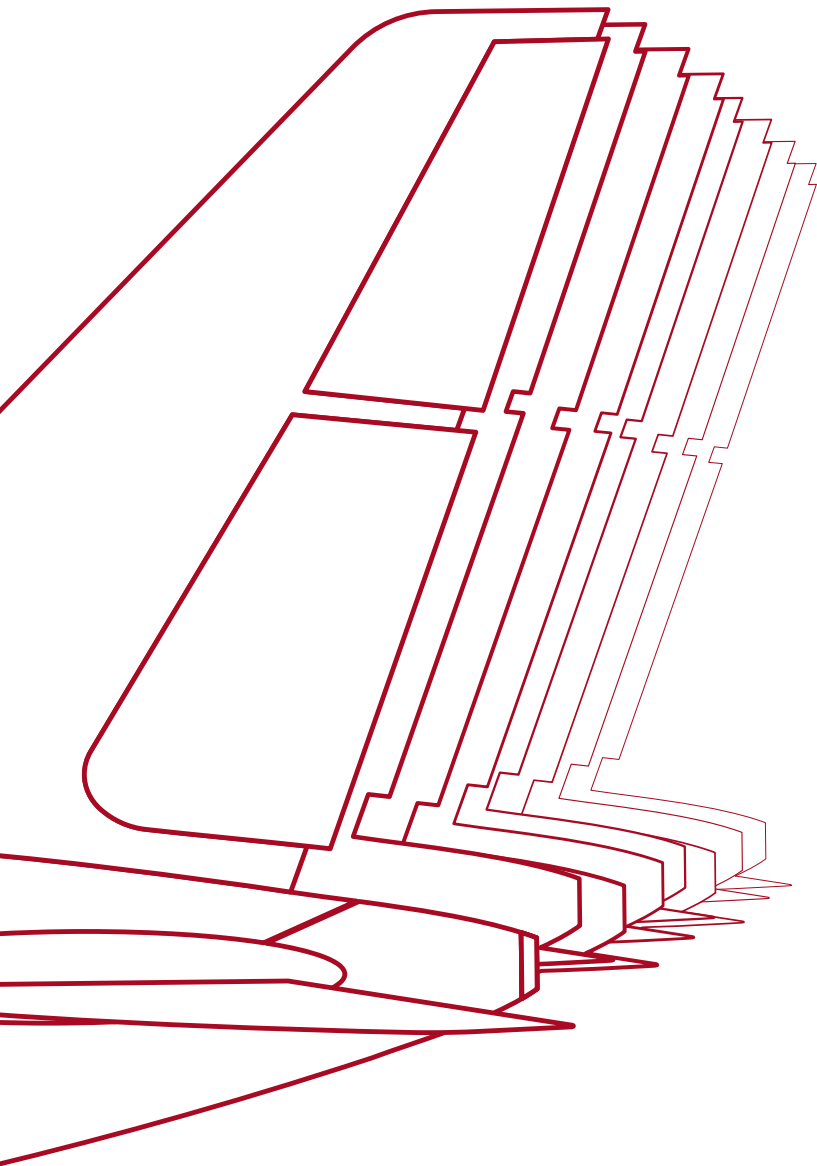


NO. 01/2020

# PERSPECTIVE AVIATION MARKETS





**The aviation industry was frequently in the headlines in 2019. The end of the year brought a mood that was worse than the economic situation such that fundamentally positive long-term growth forecasts receded into the background. The industry will make good use of this new year to resolve outstanding issues and move forward.**

A new year is a turning point that brings a spurt of energy and the promise of new ideas. Of the aviation issues that arose in 2019, the Boeing 737 MAX and climate protection stood out. A new start can make change easier. The aviation industry is no stranger to difficult situations, it is robust and ready to change; those are the strengths of the industry, and will define how things go in 2020.

The Boeing 737 MAX is being carefully checked by the regulators – the Federal Aviation Administration (FAA) in the US, and the European Union Aviation Safety Agency (EASA) in Europe. Boeing has forwarded the necessary information to them, and the technical problems have been identified and it looks as though all the requirements have been met for the 737 MAX to get back its licence to fly in the medium term. The 737 family still makes up the core of the Boeing fleet, and no other commercial aircraft worldwide has been produced in greater numbers.



**JOCHEN HÖRGER**  
**MANAGING DIRECTOR FOR AVIATION**  
**KGAL INVESTMENT MANAGEMENT**

# FULLY AWARE OF OUR RESPONSIBILITY WITH RESPECT TO GROWTH

The climate protection debate became particularly loud and heated last year. This is no bad thing as it highlights the urgency of the issue. With the Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA), aviation has set up its own climate protection agreement. From this year on, the aviation industry will be offsetting CO<sub>2</sub> emissions from international flights to ensure that growth is climate-neutral. Moreover, aircraft manufacturers are constantly working on reducing fuel consumption, and between 2005 and 2017 they succeeded in taking consumption down by a quarter, to 3.4 litres per 100 passenger kilometres. The industry is fully aware of its responsibilities.

KGAL has been operating in the aviation industry for over 40 years, and designing aircraft funds throughout that time. The branch assumes that aviation will continue growing over the long term as is currently most evident in Asia and the developing world. Our mission is

to promote full awareness of our responsibility as regards growth. That's why, for example, we invest in modern aircraft types on behalf of our investors, and why our aircraft funds are analysed by an independent provider to ensure compliance with ESG criteria (Environmental, Social and Governance). We are taking significant measures in the aviation sector, under-pinned by KGAL Group's ESG strategy.

It is important that we talk about the 737 MAX and climate protection but this should not mean aviation itself is called into question: Differentiating and developing solutions is in everyone's interest. As asset managers we want to help responsibly manage the global population's current and growing demand for air travel – after all, that's a productive step towards better efficiency.



» *THE CLIMATE PROTECTION DISCUSSION IS IMPORTANT.*

» *AVIATION IS A GROWTH INDUSTRY.*

London-Heathrow

**HR**

FLIGHT	DATE
367A	21/10/16

234-539-098-34

**LAX**

LOS ANGELES / USA

FLIGHT	DATE
245B	01/02/15

**BAGGAGE**

234-539-098-34



**BOG**

FLIGHT	DATE
26B	21/04/15

234-539-098-34



# THE EXCEPTIONAL TRANSACTION IS THE RULE!

We all know who the aircraft manufacturers and airlines are, but aircraft funds and aircraft leasing companies are less high-profile. KGAL has been active in this area of business for 40 years now. Christian Schloemann is the Managing Director of GOAL and Head of Aviation Transaction Management at KGAL, which puts him and his colleagues at the interface between airlines and funds.

AIRLINE BAGGAGE

**FRA**

FRANKFURT

FLIGHT	DATE
AD	03/07/18

**DEL**

NEW-DELHI

FLIGHT	DATE
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CHARLES DE GAULLE

**CDG**

PARIS

234-539-098-34





**CHRISTIAN SCHLOEMANN**  
**HEAD OF AVIATION TRANSACTION MANAGEMENT**  
**KGAL**

*Mr Schloemann, there's nothing to stop aviation companies from financing an aircraft themselves. At what point do you and your colleagues come into play?*

Although that's true in principle, not every airline has the required capital, and some may wish to use their liquidity for other investments. Also, companies prefer to keep their fleet size flexible. We support these companies by providing financing and lease agreements of various durations depending on their capacity planning.

*How widely is this support used?*

Worldwide, approximately 50% of aircraft are leased; which amounts to more than 11,000 planes. Many lessors first order aircraft equipped with a standard configuration, and then look for a customer. However, the delivery time for these standard types is up to five years. We take a different path, and only get involved where an airline has itself placed an order with the manufacturer, and requires financing.

*Why is that?*

Because that means we only buy aircraft that have a leasing agreement in place, thereby limiting the risk to investors.

*Which airlines conclude leasing agreements?*

Basically, it could be any. The question for them is: how should a fleet be financed? The price for just four short- and medium-haul aircraft already exceeds the US\$250 million mark.

*How do you hedge against such big numbers?*

Firstly, for us the aircraft is hugely important. We are very well positioned in this respect, in terms of the technical management and marketing expertise that we have. In addition, we don't just buy aircraft and lease them; we also structure financing in such a way that we optimise returns, while at the same time reducing risk by means of various structuring elements.



**»A LONG-HAUL AIRCRAFT SUCH AS THE AIRBUS A380 COSTS AROUND \$200 MILLION, WHILE SHORT- AND MEDIUM-HAUL AIRCRAFT SUCH AS THE A320neo COST AROUND \$50 MILLION.**



»GOAL GERMAN OPERATING AIRCRAFT LEASING GMBH & CO. KG IS A JOINT VENTURE BETWEEN KGAL AND LUFTHANSA.

»KGAL HAS A STRONG PARTNER IN LUFTHANSA.

### *Can you give us an example of how this works?*

One of our customers is an airline that has a relatively low credit rating, but an owner with good financial standing. However, the owner doesn't want to provide a guarantee. We have brought a subordinate co-investor on board in order to make this transaction compatible with our core fund. On this basis, the investors have financed three aircraft, but with five as collateral.

### *Overall, a lot of analysis and calculation seems to go into it.*

A high degree of expertise is needed to take appropriate action between the priorities of risk and return, particularly given the current market environment.

### *How can you achieve attractive performance if the leasing rate is fixed?*

That begins with sourcing the transaction and using realistic assumptions for our calculations, and goes right through to aircraft marketing, either at the end of the term or even earlier. The markets are cyclical, which means it is even possible to outperform them – it all comes down to getting the timing right.

### *How is the market for aircraft and financing structured?*

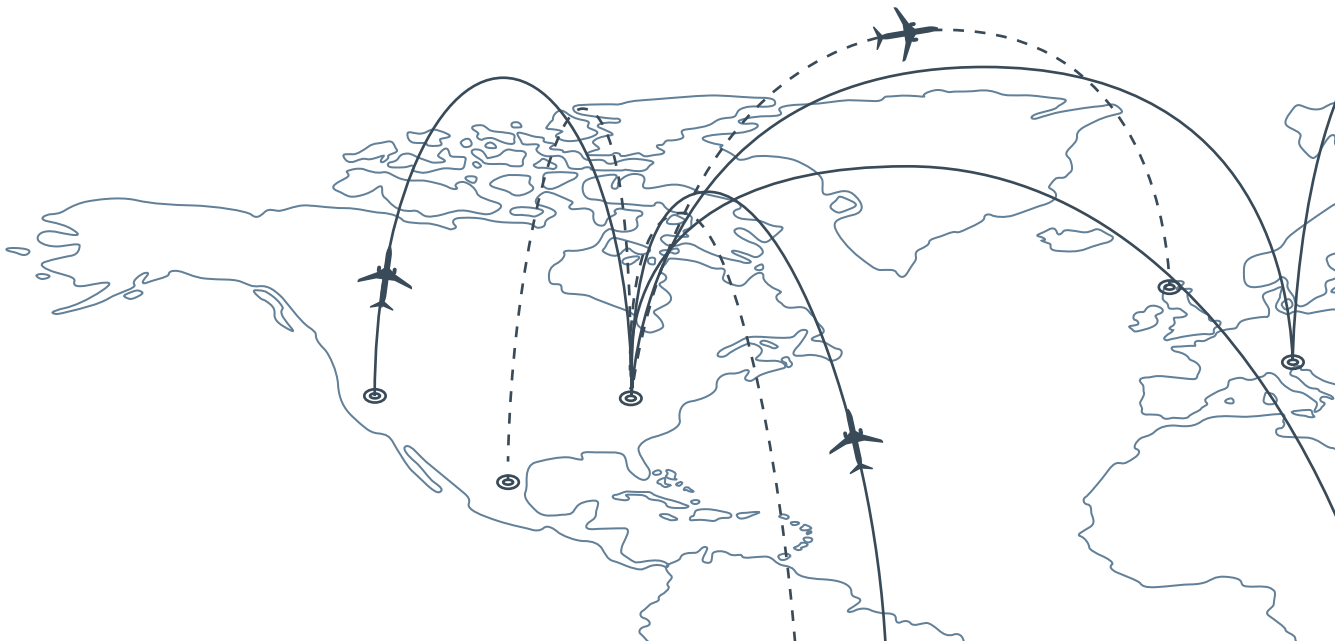
Building aircraft is complex and cost-intensive. There are two major manufacturers in the segment: Airbus and Boeing. The model range is straightforward and the configurations are often standardised, so the investor doesn't need to worry about entirely new products coming to market in five years. That means a reliable residual value and stability of investment.

### *What's the situation in terms of leasing companies?*

There are two major companies in this segment worldwide, namely AerCap and GECAS. They each have fleets of more than 1,000 aircraft, but do not generally launch funds. Below them, there are around 25 lessors that manage 100 to 500 aircraft.

### *How many aircraft does KGAL manage?*

At year-end 2019, GOAL and KGAL had 66 aircraft, with an investment volume of \$2 billion. That puts us among the top 50, and I expect the fleet to grow significantly.



***You've mentioned that personal contacts are very important. Isn't the price of financing the crucial factor?***

We fly to Bogota or New Delhi in order to get a better idea of specific requirements, and this is what our customers have come to expect from us. As well as price, transaction security is also important – in other words, the likelihood that the lessor will finally provide the financing. Because it is not unheard-of for lessors to bail out unexpectedly. In one instance, we had come in at second place, then weeks later we were asked to step in because the first choice was not able to deliver.

***Airline and investor have conflicting interests: the airline wants a low lease rate, but the investor wants a high return.***

We tend to conclude transactions that require an idea – with us, the exception is the rule. That is where the added value offered by KGAL and GOAL is really apparent. We have been structuring financing for four decades; we think “outside the box” and have the right technical expertise.

***Transactions are the foundation for filling a fund with aircraft. What approach do you take?***

Each fund has an investment memorandum, stating framework data such as the risk profile, aircraft type, and term. We select transactions in line with these specifications. Here investors benefit from the high number of transactions already successfully completed, including on our books: we have a good track record that speaks for itself.

***Aircraft funds are still considered a niche investment in Germany. Do you understand why this should be?***

Not entirely. At the international level, we are seeing a very high number of investors wanting to enter the market because the risk/opportunity profile is attractive and the risks can be successfully managed.

Which is why I am quite sure that aircraft should be part of a balanced portfolio.

***What makes the aviation industry so appealing?***

Apart from the thrill of flying, I still find aircraft very interesting as investment objects. I also like the international character of this business sector. That, combined with the KGAL and GOAL environment, suits me perfectly – even after 25 years in this job.



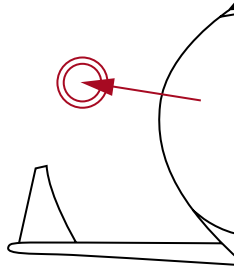
»WE CONCENTRATE ON THE AIRCRAFT BECAUSE WE HAVE THE TECHNICAL EXPERTISE.

»TRANSACTIONS ALSO DEVELOP DURING CONVERSATIONS IN PERSON.

»THE LEASING RATE FLOWS EVEN IF THE AIRCRAFT DOESN'T FLY.

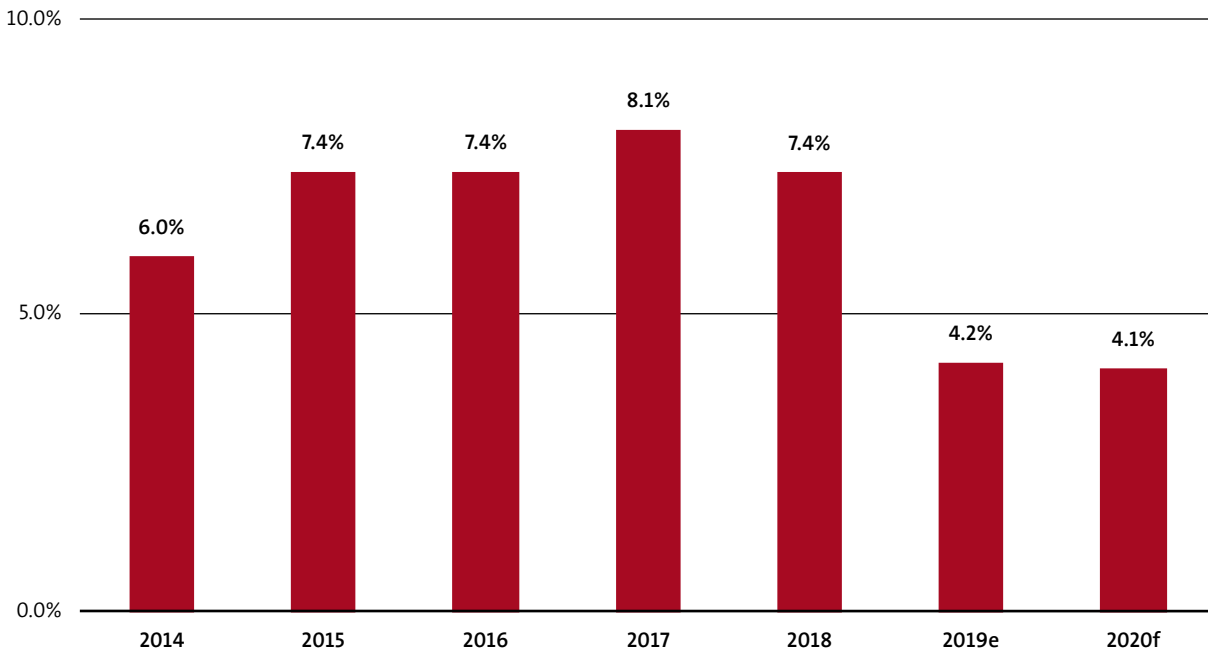


“EVERY TIME WE REPLACE AN OLD AEROPLANE WITH A NEW ONE, IT MAKES A 25 PERCENT CO<sub>2</sub> SAVING.”



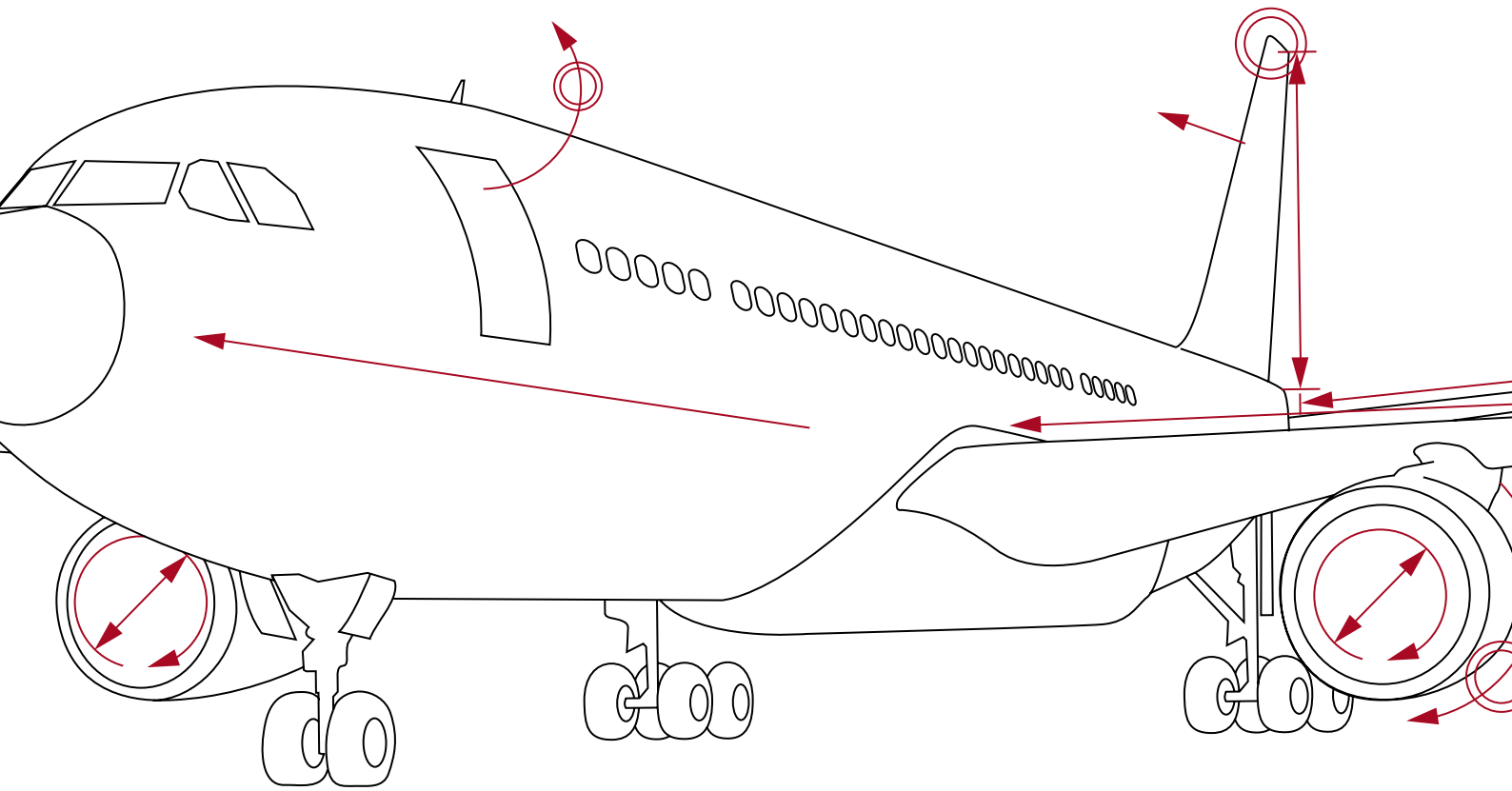
CARSTEN SPOHR, DEUTSCHE LUFTHANSA AG, CEO<sup>1</sup>

## GROWTH IN PASSENGER FIGURES

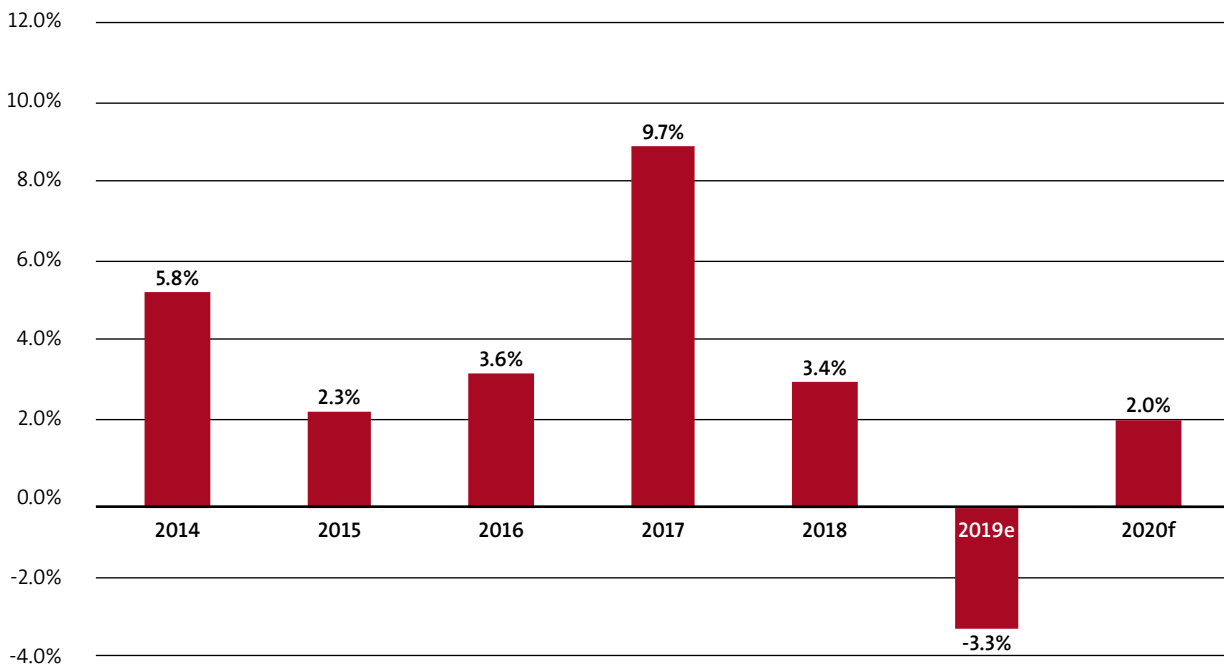


Settled at a high level: between 2014 and 2018, passenger figures grew at an above-average rate. For 2019 and 2020, the IATA predicts more moderate growth that is closer to the long-term average.<sup>2</sup>





## GROWTH IN FREIGHT VOLUMES



**Bottomed out:** freight business recorded a significant drop in 2019. The reason behind the slump was weaker world trade due in no small part to the dispute between the US and China.<sup>2</sup>

# A FASCINATION FOR ENGINEERING “I’M CRAZY ABOUT AIRCRAFT”



Bettina Berger holds a Master degree in Aeronautical Engineering. She has been working for GOAL German Operating Aircraft Leasing for more than 10 years, in a technical and male-dominated environment. She tells us how her experience overturns the traditional clichés about women and engineering:

## LITTLE GIRLS AREN’T INTERESTED IN ENGINEERING

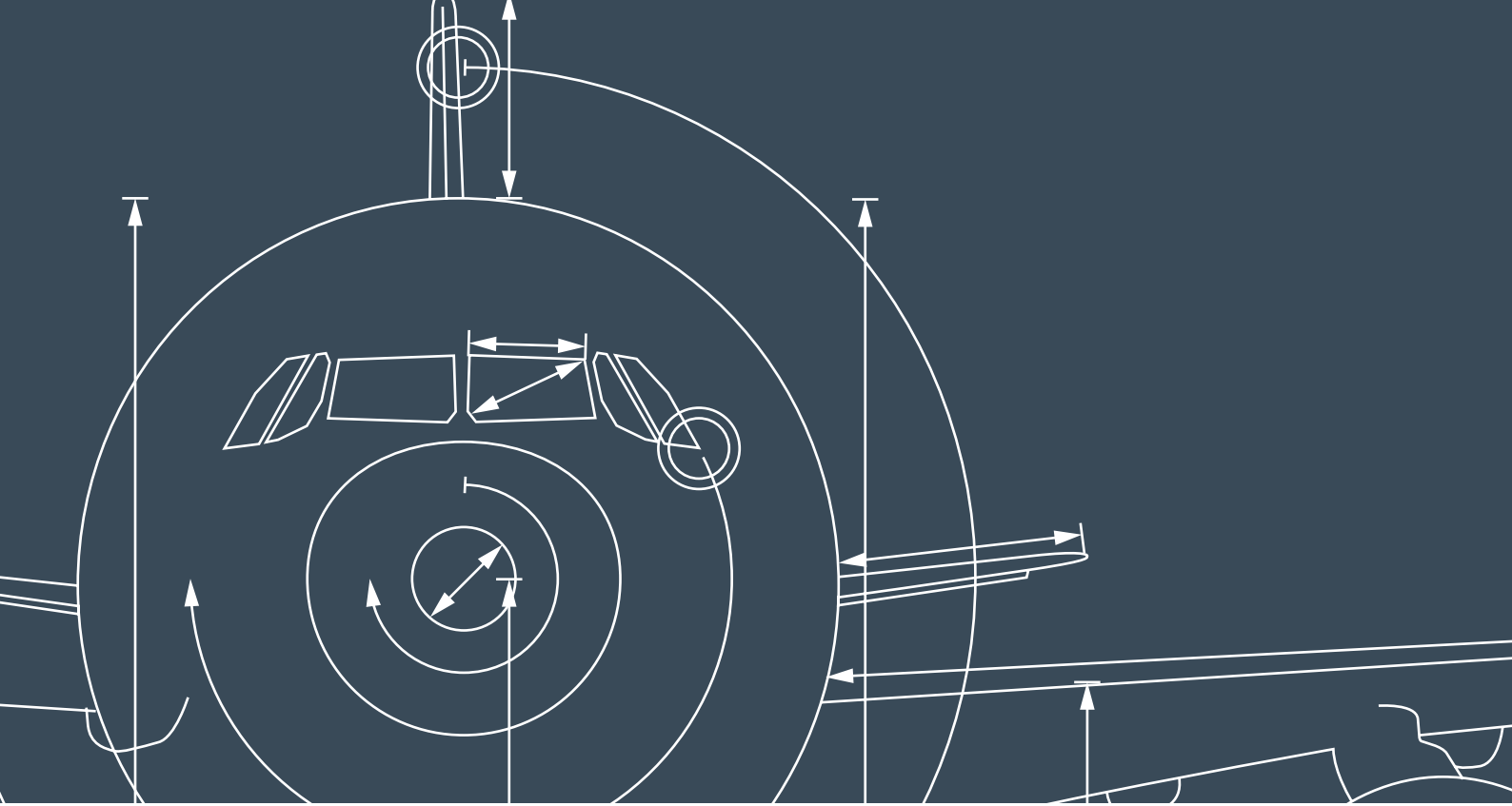
That’s a terrible stereotype – and simply not true! When I was a child, I asked my father how trains work and I was interested in aeroplanes. I really found Lego, logic-based tasks and science magazines for children so exciting. I certainly had a predisposition there, at least to some extent. Engineering is logical and I’ve always enjoyed logic.

## IT’S DIFFICULT TO WORK IN A MALE-DOMI- NATED INDUSTRY

This has never been an issue for me, although people often mention it in conversation. Only ten percent of the students on my degree course were women, and it’s similar in this job. But I don’t feel like an exception. The only thing that has ever mattered is whether I am competent.

## ENGINEERING IS COMPLICATED AND DIFFICULT TO UNDERSTAND

This is a statement you can hide behind to say, “Oh, I don’t get it.” Then you don’t have to even try to understand it. Or you can say: “I want to understand it.” Everyone can do and learn everything, just as long as they want to.



### **WOMEN ARE (OFTEN) REDUCED TO THEIR APPEARANCE**

True, that does happen; but for me it is an advantage that I'm spotted and recognised more quickly at conferences, among 2,000 male counterparts wearing suits. But of course beyond that point – and it's the same for men – it's about being understood as an equal when talking about technical subject matter. In this respect, I absolutely always find it helpful to say that I'm an engineering graduate and have worked in the System Engineering department of an airline.

### **A MECHANICAL ENGINEERING DEGREE IS REALLY HARD**

Yes that's true, and I was also aware of that fact. In the first four semesters we had to pass exams in higher mathematics, thermodynamics and technical mechanics. Of course I was initially unsure about whether I was as good as the men, and whether I could do it. But I just gave it a go and worked hard at it because I really wanted it. By the time I had passed more exams than most of my fellow students after the first two semesters, I knew that I could do it. For me, it's still the right choice to this day.

### **WE MUST PROMOTE AN INTEREST IN EN- GINEERING AMONG YOUNG WOMEN**

I believe that they are either interested or not. What is needed is to encourage girls and young women to break stereotypes. Girls just have to dare to do it!

## Contact

### Jochen Hörger

Aviation Asset Class Managing Director

Email: [jochen.hoerger@kgal.de](mailto:jochen.hoerger@kgal.de)

KGAL Investment Management GmbH & Co. KG

Tölzer Straße 15, 82031 Grünwald, Germany

## KGAL Group

To date, the aircraft fund investment volume realised by KGAL Group totals more than €7.4 billion. Since the initial aircraft fund in 1979, KGAL has concluded transactions for more than 800 aircraft, among others 81 private placements and other investment models, as well as 58 mutual and three institutional funds. KGAL Group is a leading, independent investment and asset manager with an investment volume of €20.5 billion. The investments focus on long-term capital investments for institutional investors in the real estate, infrastructure and aircraft asset classes.

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### Source information:

Cover image: ATR 72-600, KGAL

Carsten Spohr Quote: <sup>1</sup> *Süddeutsche Zeitung*, 21th of August 2019

Charts: <sup>2</sup> IATA Airline Industry Economic Performance December 2019

<https://www.klimaschutz-portal.aero/>

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