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Air traffic increases, finances in crisis

A comparative analysis of the operating and financial indicators of Russian and foreign airline companies

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— **Growth rates in the Russian air passenger market are ahead of global indicators. However, ACRA expects this trend to slow down in the coming years.** In 2018, the number of transported passengers in the Russian market amounted to 137.4 million, up 10.8% y-o-y. The average annual growth rates of Russian passenger air travel are ahead of global indicators (8.6% compared to 6% in 2012-2017), while the passenger load factor is comparable at 81-83%.

— **The carrying capacity of Russian airline companies continues to grow and demand for regional aircraft should grow in the coming years.** ACRA's assessments show that from 2015 to 2018, the total seating capacity of Russian airline companies increased by 45% to 180 thousand seats, which in general coincides with global trends. The fleets of Russian airline companies are made up mainly of aircraft produced abroad and the average age of these fleets exceeds the global average. The development of regional transport could stimulate the demand for aircraft with a capacity of 70-90 seats.

— **The total revenue of Russian airlines is growing, following operational indicators.** ACRA estimates the size of the Russian air passenger market to be RUB 1.2 trln for 2018, up 11.8% y-o-y. However, revenue growth has fallen behind expense growth; in 2018, CASK¹ increased by 21% while RASK² increased by only 11%.

— **The Russian market's RASK to CASK ratio is behind the global ratio.** In 2018, this ratio was 0.85x for the Russian market, while the global ratio stood at 0.97x. Fuel costs remain the key driver of CASK for all airlines, and Russian carriers spend more on leasing and interest expenses than foreign companies.

— **The debt load of Russian carriers is comparable to that of foreign airline companies, while coverage on debt payments is lower.** The ratio of debt adjusted for operating lease to FFO³ before fixed charges for the Russian air passenger market stands at 4.8x for 2018, while the global ratio amounts to 4.6x. Coverage on interest and leasing payments with FFO before fixed charges for this period was 1.4x and 2.2x, respectively. This indicator approaching 1.0x points to increased risks for creditors.

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¹ CASK — Cost per available seat kilometer.

² RASK — Revenue per available seat kilometer.

³ FFO — Funds from operations.

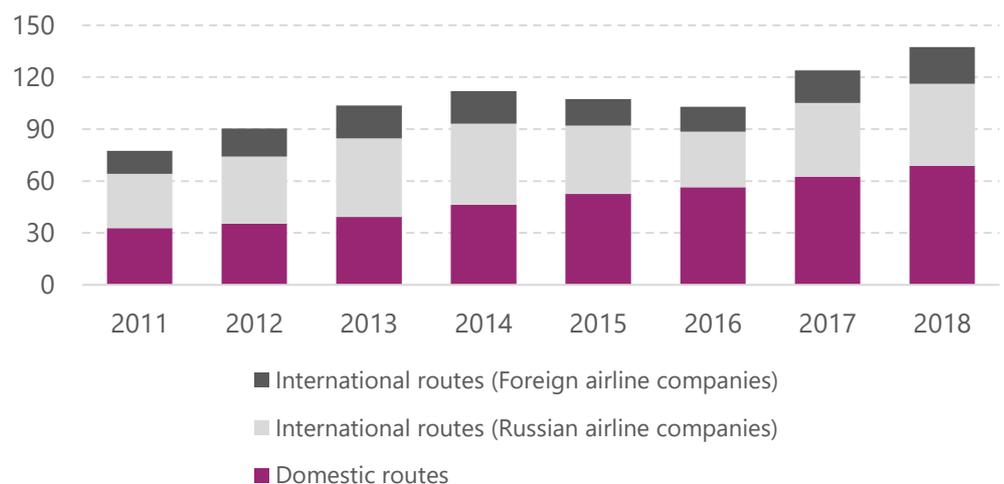
The Russian air passenger market is growing faster than the global market

ACRA's assessments show that in 2018, the number of transported passengers in the Russian market amounted to 137.4 million, up 10.8% y-o-y. A relatively favorable macroeconomic situation and the 2018 FIFA World Cup both had positive effects on the operating indicators of airline companies.

The volume of international air travel in the Russian market is very volatile compared to domestic travel. Reduced travel in 2015 and 2016 was mainly due to a fall in the volume of passengers for international routes (-17% in 2015, -15% in 2016). In post-crisis years, the rapid recovery of air travel was primarily due to the growth of the air transportation segment for international routes (+32% in 2017, +12% in 2018).

The number of passengers on domestic routes grew steadily by an average of 11% a year from 2011 to 2018. Since 2012, the share of domestic routes in the air passenger market has grown. It hit its peak in 2016 at 55%, after which it stabilized at 50% in 2017 and 2018.

Figure 1. The international route segment is more volatile, although shares of international and domestic routes are almost equally distributed



Sources: ACRA estimates, Federal Air Transport Agency

The share of domestic routes in the global air passenger market is stable overall at 60%. Growth rates in the volume of passengers in the Russian market are ahead of global rates. The average annual growth rate of global passenger volume was 6% for 2012-2017, while the Russian figure was 8.6%. According to ACRA, the most important sources for this growth will cease to contribute. Firstly, the effect of the post-crisis recovery has faded. Secondly, airlines are forced to increase the cost of tickets due to significantly increased expenses (fuel, leasing, etc.), which can negatively affect demand. In addition, the government has stated that one of the priorities in developing the Russian aviation market is to stimulate regional travel (especially by bypassing Moscow airports), which could support passenger volume in the domestic route segment. Therefore, ACRA forecasts that over the next 2-3 years the average annual growth rate of the Russian air passenger market will not exceed 5-10% and will gradually slow down.

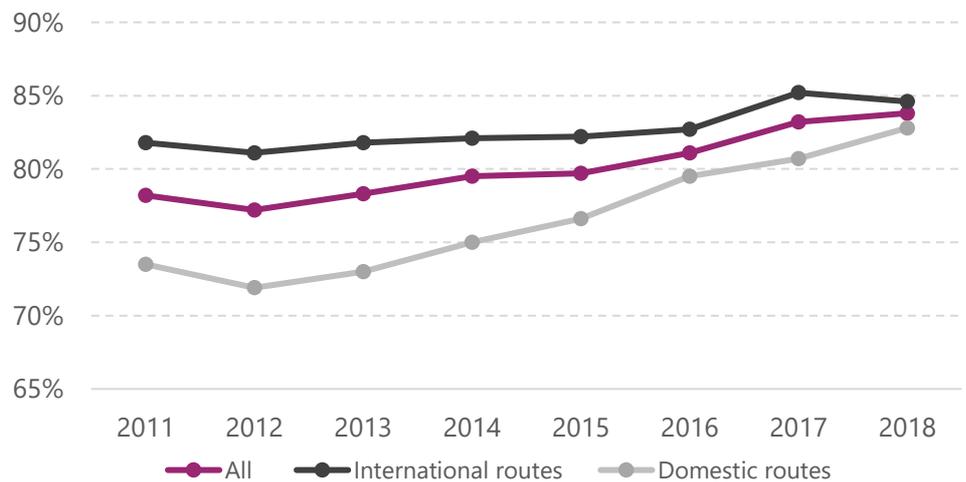
Figure 2. Domestic routes account for close to 60% of global passenger air travel



Sources: ACRA estimates, ICAO

From 2012 to 2018, the passenger load factor for Russian airline companies grew from 77% to 84% because of the domestic routes segment, where this ratio grew significantly and was practically equal to the international routes segment by 2018. In addition, the passenger load factor for international flights decreased in 2018. In ACRA’s opinion, this could indicate that the growth of carrying capacity in the market is outpacing demand. However, it is worth noting that the passenger load factor for Russian carriers is equal to the global average, standing at 81%.

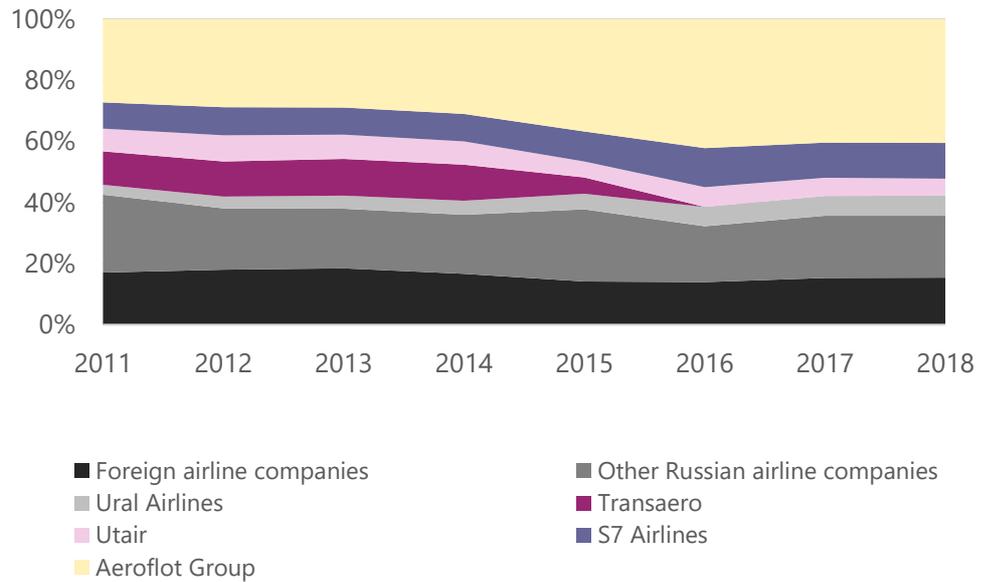
Figure 3. The passenger load factor for Russian airline companies remains high for both international and domestic routes.



Sources: ACRA estimates, Federal Air Transport Agency

Another trend that characterizes the Russian air passenger market is the increase in its consolidation. From 2011 to 2018, the share of the top four airline companies grew from 54% to 64%. This indicator hit its peak after Transaero left the market. At the same time, the potential for increased market concentration in the future remains, as small airlines could leave the market due to the deterioration of their financial condition.

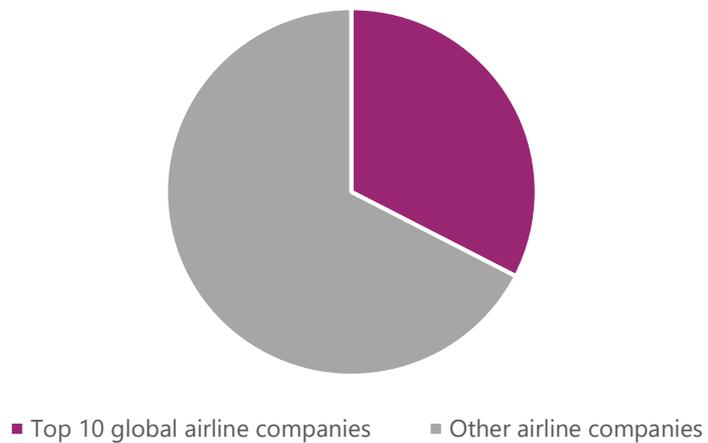
Figure 4. The share of the top four airlines by passenger volume has grown by 10 pp over the past seven years



Sources: ACRA estimates, Federal Air Transport Agency

A certain degree of concentration on the top carriers is typical for the global airline market. In 2017, the share of the top ten airlines accounted for 33% of the global volume of passenger air travel.

Figure 5. The top ten global airlines by passenger volume make up a third of the market



Sources: ACRA estimates, ICAO

Demand for regional aircraft should grow in the coming years

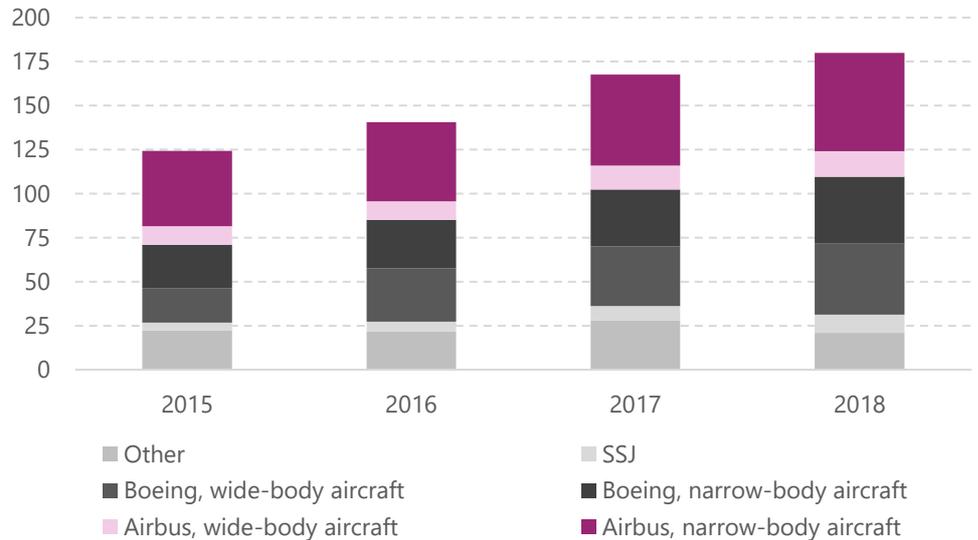
Seeking to boost air traffic, Russian airline companies regularly increase their carrying capacity. According to ACRA estimates, the seating capacity of Russian air carriers rose by 45% to 180,000 seats in 2015–2018. It is noteworthy that this figure maintained an upward trend in 2016 despite a decline in traffic.

Just over half of the seating capacity (52%) of the fleet of Russian airline companies is made up of narrow-body aircraft manufactured by Airbus and

SSJ — Sukhoi Superjet, two types of aircraft manufactured by JSC "SCA" (SuperJet 100-95 and SuperJet 100-95LR).

Boeing with another 31% being wide-body aircraft. The share of SSJ remains low, although it has grown from 4% to 6% over the past three years. In the coming years, Russia's demand for aircraft that are designed for regional transportation and have a capacity of 70–90 seats should grow. However, the Russian aviation industry will not be able to meet this demand, which is why the share of foreign aircraft in the fleet structure will increase.

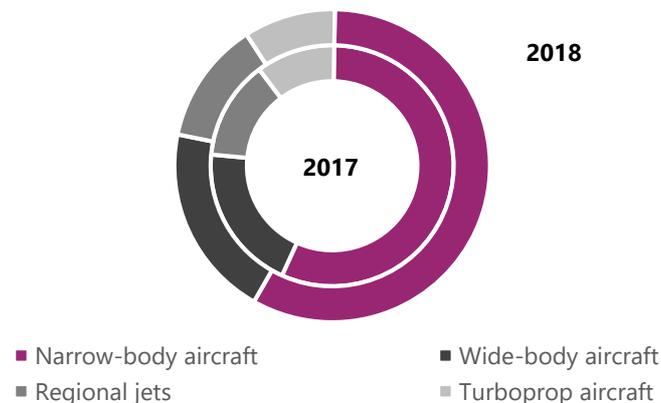
Figure 6. The seating capacity of Russian airline companies grew even despite air traffic decline, thousand seats



Sources: ACRA estimates, Federal Air Transport Agency

According to ACRA, the share of the Russian aircraft fleet stood at 3.8% of the global total at the end of 2017, while the total global seating capacity increased from 3.07 bln seats in 2007 to 4.47 bln seats in 2017, according to Airbus estimates. The global aircraft fleet is also made up mainly of narrow-body aircraft, the share of which was around 60% at the end of 2018. Wide-body aircraft accounted for around 20% of the entire fleet.

Figure 7. Over half of the global aircraft fleet is made up of narrow-body aircraft



Sources: ACRA estimates, Oliver Wyman

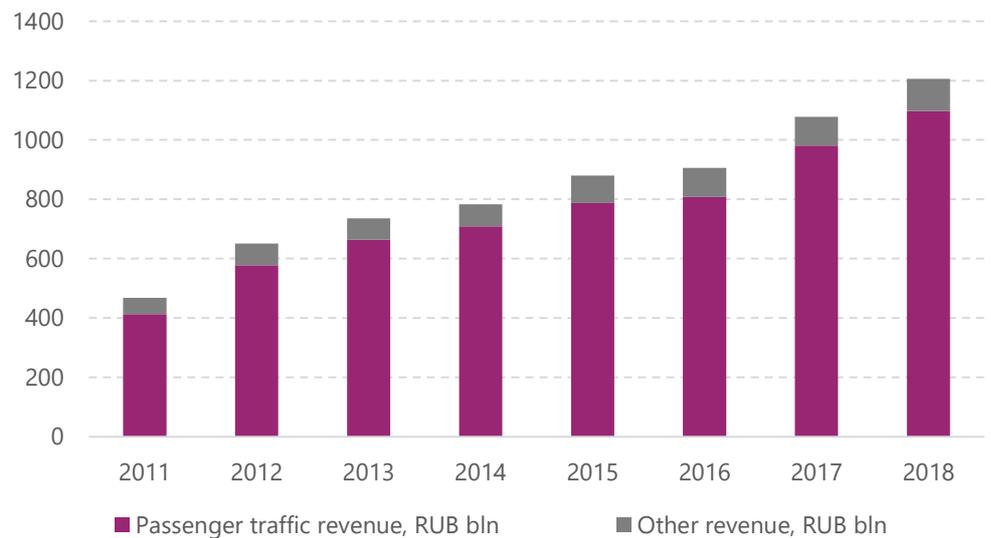
ACRA estimates suggest that the average age of the Russian aircraft fleet was 10.9 years at the end of 2018, which generally coincides with global trends (10.4 years). It is worth noting that Aeroflot group, which owns one of the youngest fleets in the world (the average age is 6.3 years, according to the Company's

estimates), has a significant impact on the above indicator, meaning that many other Russian air carriers operate much older aircraft. According to ACRA estimates, the average age of the Russian aircraft fleet, excluding Aeroflot, is 14.2 years. SSJ also distorts this indicator to a certain degree: the average age of these aircraft is low (3.5 years), but their flying hours are significantly smaller compared to those of the Airbus and Boeing narrow-body aircraft. According to ACRA estimates, the average age of the Russian fleet, excluding SSJ, is around 12 years.

Financial indicators of Russian airline companies are sagging due to expensive leasing and fuel

The growth of passenger volume has a positive impact on the dynamics of the total revenue of Russian airline companies. According to ACRA estimates, this figure amounted to RUB 1.2 trln in 2018, up 11.8% from a year earlier.

Figure 8. The Russian market's revenue is growing along with air traffic



Source: ACRA estimates

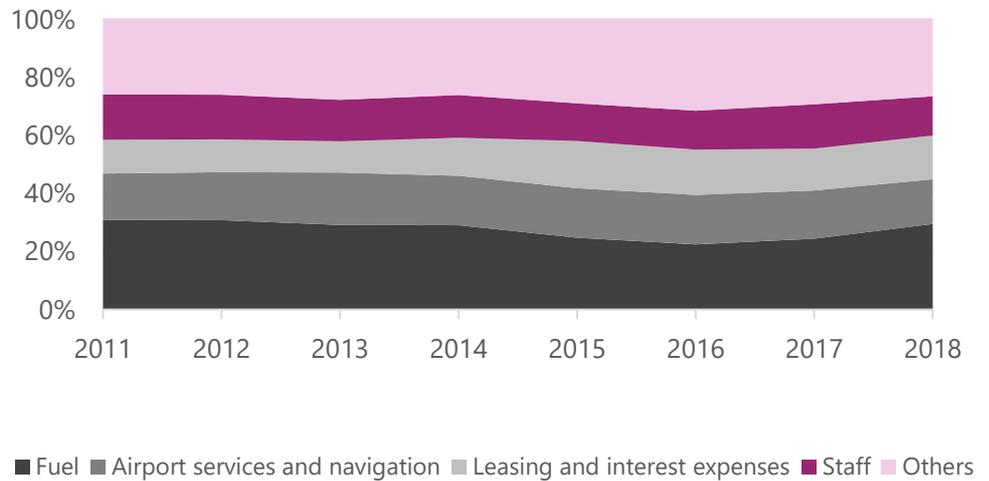
There are two factors that continue to significantly influence the financial results of Russian carriers. The first is strong internal competition between Russian airline companies, as well as with foreign carriers. This affects the pricing policy of airline companies, which have to work on the limit of their operating profitability and even incur operating losses taking into account interest costs. The second factor is a sharp rise in key costs, i.e. leasing and fuel.

The cost of aircraft leasing is primarily denominated in foreign currencies, which has resulted in a sharp increase in the share of this item in the expense structure since 2013 (with a small reduction in 2017). At the end of 2018, the cost of leasing and interest payments of Russian carriers totaled RUB 0.54 per available seat kilometer, which is 2.1 times higher than in 2011. The share of this item in the CASK structure increased from 12% to 15% in 2015–2018.

The rise in fuel prices that started in the second half of 2017 had a much greater effect as it led to the hike in Russian airlines' fuel costs per available seat

kilometer up to RUB 1.06 (+51% compared to 2016). However, it should be noted that low oil prices in 2015–2016 made it possible to restrain the growth in fuel costs over that period. As a result, the share of this expense item in the CASK structure of Russian airlines fell from 31% in 2011 to 22% in 2016. At the end of 2018, this figure rose to 29%, i.e. almost returned to the 2011 level.

Figure 9. CASK structure: Russian airline companies

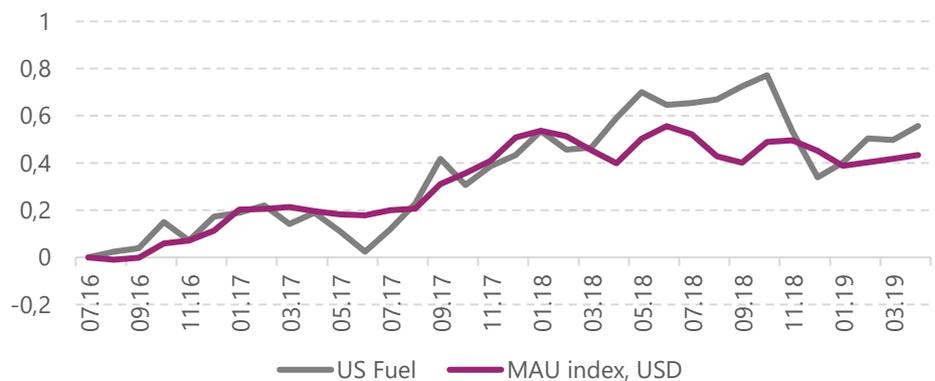


Source: ACRA estimates

Before 2017, the market demonstrated natural hedging of some fuel risks of airline companies, as fuel prices in Russia generally depend on ruble oil prices, which were relatively stable. After the budget rule was amended and the ruble exchange rate fell in 2018, the ruble oil price started to grow and pulled fuel prices up.

The situation regarding the growth of fuel costs is important for everybody in the global air passenger market. The global share of fuel costs in the CASK structure increased from 20% in 2015 to 24.5% in 2018. In 2018, air carriers spent USD 0.076 for fuel per available seat kilometer, which is 27% higher than in 2016.

Figure 10. Russian kerosene prices match the global trend



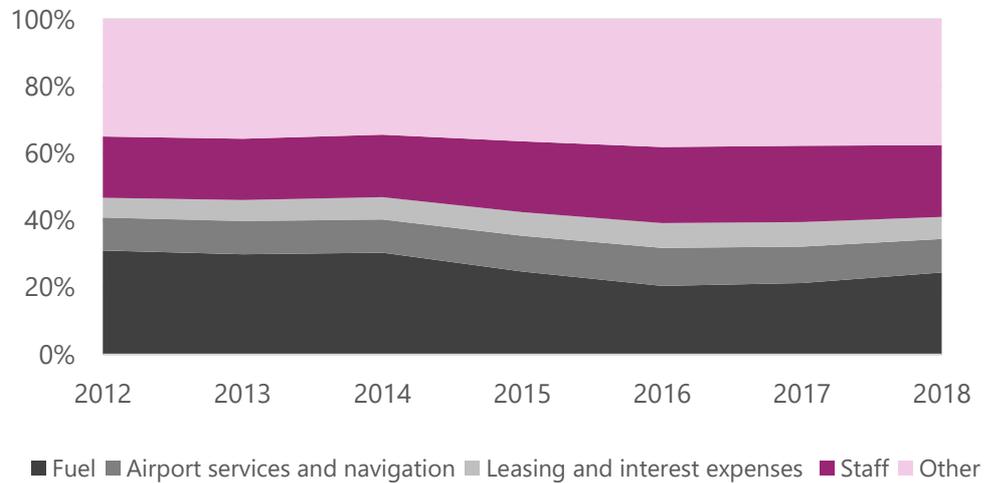
The MAU index is calculated by SPIMEX to reflect the trends in prices for jet fuel across the airports of the Moscow Aviation Hub.

Source: ACRA estimates based on SPIMEX data, fred.stlouisfed.org

Fuel costs are the largest expense for both Russian and foreign airline companies; but in terms of other expenses, their costs structures differ. For example, the staff costs of foreign carriers (21.5%) are comparable to their fuel

costs, while Russian carriers spend much less on staff (13.6%). An important factor that cuts operating costs is foreign air companies' access to funding sources offering lower interest rates. Therefore, the leasing and interest payments for foreign companies are lower than that of Russian companies (6.6% compared to 15%).

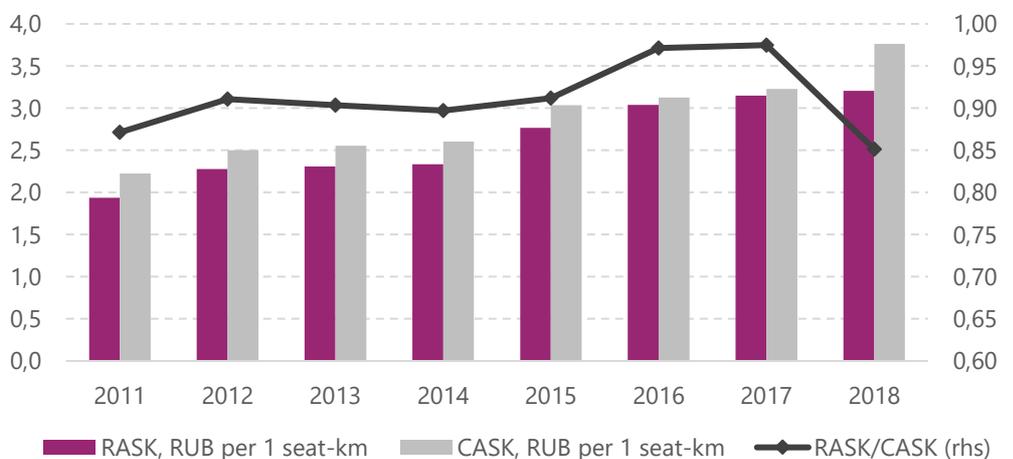
Figure 11. CASK structure: global market



Source: ACRA estimates

The high elasticity of demand and fierce competition in the market, as well as the emergence of a full-fledged low-cost airline have not allowed Russian air companies to shift the rising costs down to passengers. In 2018, CASK grew by 21% while RASK increased by a mere 11%, which significantly worsened the RASK/CASK ratio. In 2016 and 2017, the ratio improved significantly, and the airlines' revenues from transportation almost covered their operating and interest expenses (0.97x). However, in 2018 the ratio dropped back to where it stood in 2011 (0.85x).

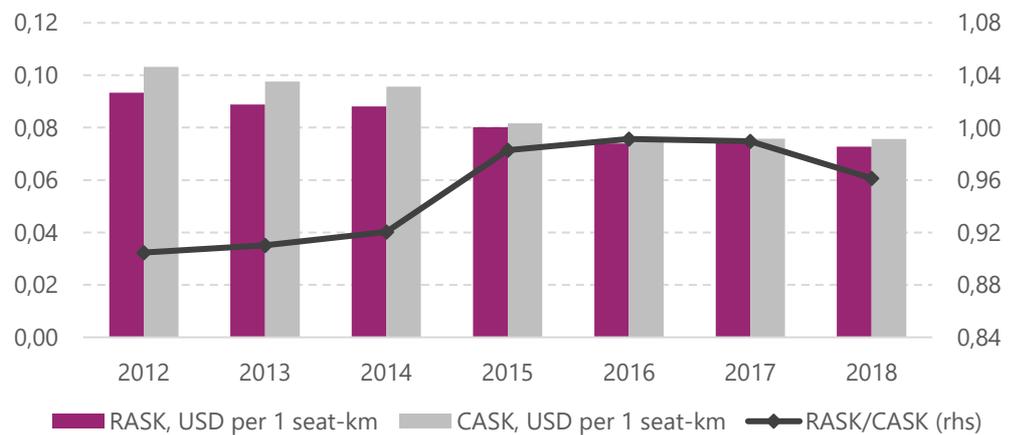
Figure 12. Due to growing leasing and fuel costs, CASK is still higher than RASK in the Russian market



Source: ACRA estimates

Incomplete coverage of operating and interest expenses by transportation revenue is typical for the entire global air transportation market. In 2012–2014, the RASK/CASK ratio fluctuated within 0.90–0.92x and by 2018, it grew to 0.99x. However, in 2018, it decreased slightly. The improvement in the RASK/CASK ratio in 2015 is explained by the trend in fuel prices as the key and most volatile component of CASK.

Figure 13. The difference between RASK and CASK in the global market is not as high as in Russia



Source: ACRA estimates

Table 1. RASK/CASK ratios of Russian and foreign airlines, US cents per available seat kilometer

	RF	World
RASK	5.10	7.27
CASK	5.71	7.58
Fuel	1.68	1.85
Airport services and navigation	0.88	0.76
Leasing + interest expenses	0.86	0.50
Staff	0.78	1.62
Other	1.51	2.84

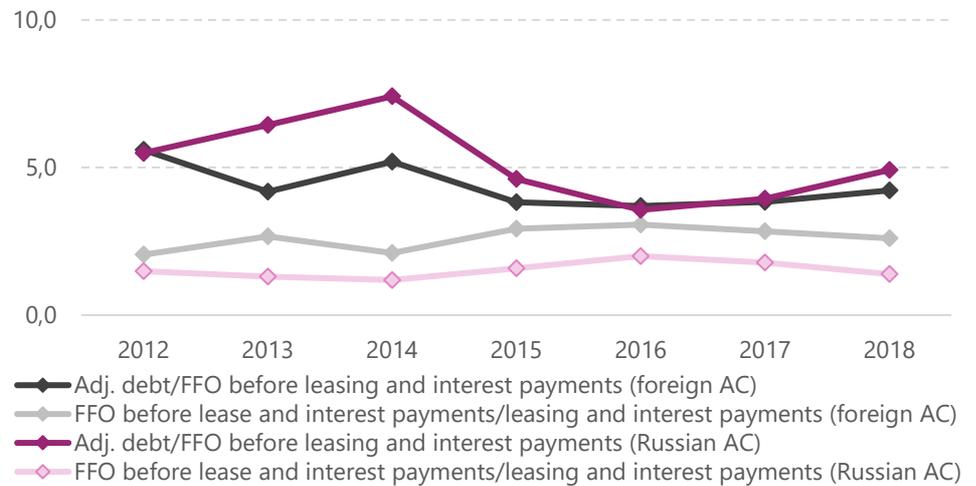
Source: ACRA estimates

Compared to Russian airline companies, foreign carriers benefit from higher margins driven by the higher coverage of operating and interest expenses with transportation revenues and the ability to generate revenue from additional services. Therefore, foreign carriers are less exposed to deteriorating market conditions.

The leverage of Russian carriers is comparable to that of their foreign counterparts. According to ACRA's estimates for 2018, the ratio of debt adjusted for operating lease to FFO before fixed charges for the Russian air passenger market is 4.8x, while the global ratio is 4.6x. At the same time, thanks to lower interest rates, foreign companies are characterized by higher coverage of interest and leasing payments with FFO before fixed charges. In 2018, the coverage amounted to 1.4x and 2.2x for the Russian and global air transportation markets, respectively. The coverage approaching 1.0x indicates increased risks for creditors, as even large companies have small cash flow reserves to cover leasing and interest payments. In such a situation, risks of small

and medium airline companies are higher, which may increase the number of defaults and bankruptcies in the market.

Figure 14. The leverage of Russian carriers is comparable to that of foreign airline companies, while coverage is lower



Source: ACRA estimates based on publicly available financial statements of the largest Russian and foreign airline companies

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