

Global Aviation Monitor (GAM)

Analysis and Short Term
Outlook of Global, European
and German Air Transport

September 2019



Main Results of Global Air Transport Supply Analysis and Outlook

Background:

- Covers about 3,500 airports worldwide
- Covers about 850 airlines worldwide
- Air transport supply of 2018: More than 38 M flights (non-stop) worldwide, new record value
- Busiest month 2019: August with 3.6 M flights
- Air traffic increases slowly since April 2013
- Forecasting methodology: Time series analysis
- The mean absolute forecast error over a twelve month period typically lies in a range of between 0.5 and 1.5 percentage points for a forecast horizon of 1, 2 & 3 months.

Analysis: October 2018 – September 2019

Global

- History: About 5 % growth per year before financial crisis 2008/2009, then a rapid decline of more than 9 % between February 2008 and February 2009, followed by a rather slow recovery until 2011 (7.2 % increase between February 2009 and February 2011). Since 2011, the number of flights grows only very slowly; stagnation between September 2012 and March 2013, small growth rates since April 2013; growth rates of around 3 % since March 2015, 3.0 %- 6.3 % between December 2015 and February 2019; only 1.7 % in September 2019
- September 2019: 3.6 M flights supplied (+1.7 %)
- Airports: Heterogeneous development of no. of flights offered; strong growth e.g. at Dallas/Fort Worth and Denver (5 % and more)
- Airlines: Heterogeneous development of no. of flights offered; strong growth e.g. of ANA, Azul and IndiGo

World Regions, Europe

- In Europe, 0.2 % traffic increase; in Asia growth around 3 %
- Airports: Heterogeneous developments of no. of flights offered; strong increase e.g. at Moskau Sheremetyevo, however, decline at some airports, e.g. Palma
- Airlines: Heterogeneous developments of flights, some airlines, e.g. Air France with strong growth, strong growth in the low cost segment, e.g. Ryanair and Wizz; Some airlines, e.g. Alitalia with decreasing supply; Some additional flights of Ryanair with Lauda flight number

Germany

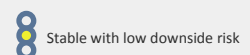
- Airports: Some bigger airports, e.g. Dusseldorf and Stuttgart with growth, some small airports e.g. Friedrichshafen, with traffic growth; some German airports with downward trend, e.g. Hahn
- Airlines: Heterogeneous developments of number of flights offered; strong growth of e.g. Wizz; Lauda and Ryanair with decreasing traffic

Outlook: October 2019 – December 2019

Global

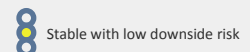
- For the next few months, a traffic growth of around 1-2 % is expected

Trend for the next month



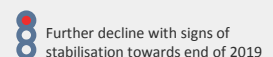
World Regions, Europe

- For the next few months, a stagnation of traffic growth is expected



Germany

- For the next few months, a traffic decline of 2-3 % is expected



Rank	Airport	09/2019	Growth rate
1	Chicago O'Hare International	39.181	3,6
2	Atlanta Hartsfield-Jackson Intl	35.334	1,0
3	Dallas/Fort Worth Intl	29.303	12,3
4	Denver Intl	26.395	10,3
5	Los Angeles International	26.168	-2,7
6	Beijing Capital	25.335	2,6
7	Frankfurt International	22.643	-0,2
8	Charlotte	22.385	3,7
9	Amsterdam	21.645	0,3
10	Shanghai Pudong International	21.296	-1,5
11	Paris Charles de Gaulle	21.140	4,4
12	London Heathrow	20.494	1,3
13	Guangzhou	20.229	1,7
14	Tokyo Haneda	19.412	3,9
15	Istanbul Ataturk	19.332	0,7
16	Delhi	18.975	0,4
17	Seattle/Tacoma International	18.372	4,3
18	Houston George Bush Intercontinental	18.285	3,6
19	Munich International	18.069	0,7
20	Jakarta Soekarno-Hatta	17.839	-14,6
21	New York J F Kennedy International	17.753	-4,0
22	Toronto Lester B Pearson Intl	17.651	-6,0
23	Madrid Barajas	17.538	2,9
24	Newark Liberty International	17.270	0,7
25	Mexico City Juarez International	17.114	1,5

Tab. 1: Number of monthly Take-offs at the largest Airports in the World

Rank	Airport	09/2019	Growth rate
1	Frankfurt International	22.643	-0,2
2	Munich International	18.069	0,7
3	Dusseldorf International	9.884	2,4
4	Berlin Tegel	8.449	-4,4
5	Hamburg	6.290	1,8
6	Stuttgart	5.608	5,9
7	Cologne/Bonn K.A.	4.709	-4,5
8	Berlin Schoenefeld	3.017	-18,7
9	Hanover	2.637	-2,4
10	Nuremberg	1.797	-12,1
11	Leipzig/Halle	1.160	-1,0
12	Bremen	989	-12,6
13	Dortmund	809	16,7
14	Dresden	699	-21,5
15	Munster	548	-11,3
16	Karlsruhe/Baden Baden	476	8,2
17	Frankfurt Hahn	472	-26,4
18	Friedrichshafen	439	42,5
19	Paderborn	378	0,0
20	Dusseldorf Niederrhein	374	-18,9
21	Saarbrücken Ensheim	289	-7,1
22	Memmingen	280	-31,0
23	Westerland	193	4,9
24	Mannheim	177	56,6
25	Rostock-Laage	66	-60,0

Tab. 3: Number of monthly Take-offs at the largest Airports in Germany

Rank	Airport	09/2019	Growth rate
1	Frankfurt International	22.643	-0,2
2	Amsterdam	21.645	0,3
3	Paris Charles de Gaulle	21.140	4,4
4	London Heathrow	20.494	1,3
5	Istanbul Ataturk	19.332	0,7
6	Munich International	18.069	0,7
7	Madrid Barajas	17.538	2,9
8	Moscow Sheremetyevo International	16.490	8,1
9	Barcelona	15.446	3,0
10	Rome Fiumicino	14.038	1,0
11	London Gatwick	13.016	-0,9
12	Milan Malpensa	12.391	46,1
13	Vienna	11.946	7,2
14	Palma Mallorca	11.586	-4,2
15	Copenhagen	11.349	1,1
16	Zurich	10.885	-2,0
17	Oslo	10.616	-1,7
18	Dublin	10.293	2,4
19	Athens Intl Eleftherios Venizelos	10.183	4,4
20	Istanbul Sabiha Gokcen	10.175	1,7
21	Stockholm Arlanda	10.093	-0,8
22	Dusseldorf International	9.884	2,4
23	Lisbon	9.650	2,3
24	Paris Orly	9.561	-9,5
25	Brussels	9.532	1,6

Tab. 2: Number of monthly Take-offs on the largest Airports in Europe

Source: OAG 2018/19, DLR 2018/19

Rank	Airline	09/2019	Growth rate
1	American Airlines	192.317	3,1
2	Delta Air Lines	158.957	3,0
3	United Airlines	149.178	2,7
4	Southwest Airlines	111.014	1,4
5	Ryanair	72.917	6,1
6	China Eastern Airlines	67.699	9,1
7	China Southern Airlines	67.679	3,4
8	easyJet	56.633	1,6
9	Lufthansa German Airlines	48.842	-1,4
10	Air Canada	47.346	-6,3
11	Turkish Airlines	43.776	0,4
12	IndiGo Air	43.657	15,1
13	Air China	42.199	4,4
14	LATAM	41.417	10,1
15	Alaska Airlines	38.841	5,3
16	All Nippon Airways	34.992	15,3
17	Air France	34.219	18,5
18	British Airways	32.228	-0,0
19	Aeroflot Russian Airlines	31.270	1,2
20	JetBlue Airways Corporation	29.802	-0,9
21	SAS Scandinavian Airlines	27.676	2,5
22	Azul	25.584	20,6
23	Japan Airlines International	24.779	-0,7
24	Hainan Airlines	23.956	0,3
25	Qantas Airways	23.418	5,3

Tab. 4: Number of monthly Take-offs by the largest Airlines in the World

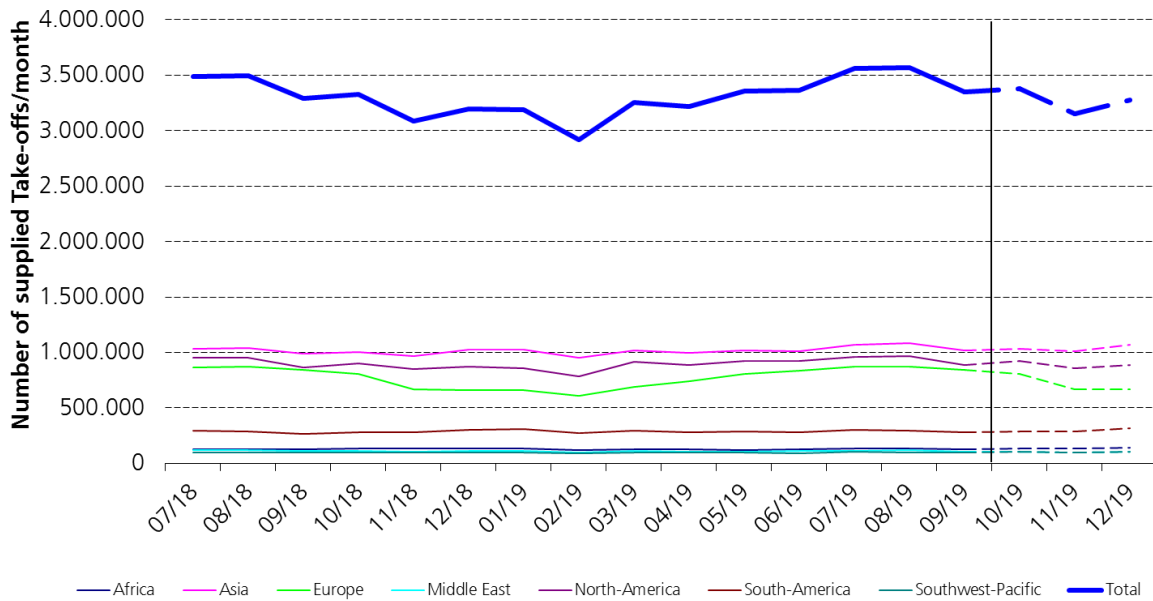
Rank	Airline	09/2019	Growth rate
1	Lufthansa German Airlines	30.237	-0,6
2	Eurowings	13.947	0,2
3	Ryanair	5.237	-1,7
4	easyJet	5.207	-4,5
5	Condor Flugdienst	2.632	-3,9
6	SunExpress	1.858	19,3
7	TUIfly	1.833	6,0
8	Austrian Airlines AG	1.744	12,4
9	Swiss	1.590	19,0
10	British Airways	1.521	8,6
11	Turkish Airlines	1.492	5,0
12	Wizz Air	1.437	28,2
13	KLM-Royal Dutch Airlines	1.407	-1,3
14	Air France	1.286	4,8
15	Air Dolomiti	1.170	73,8
16	Lauda	1.084	-6,5
17	SAS Scandinavian Airlines	1.065	4,4
18	Aeroflot Russian Airlines	862	5,9
19	Pegasus Airlines	844	27,1
20	SunExpress Deutschland	603	-2,0
21	LOT - Polish Airlines	583	-14,8
22	Corendon Airlines	540	237,5
23	TAP Air Portugal	513	5,6
24	Aegean Airlines	454	8,6
25	United Airlines	450	0,0

Tab. 6: Number of monthly Take-offs by the largest Airlines in Germany from German airports

Rank	Airline	09/2019	Growth rate
1	Ryanair	71.528	5,7
2	easyJet	56.098	1,4
3	Lufthansa German Airlines	45.085	-1,4
4	Turkish Airlines	37.988	-0,9
5	Air France	30.752	21,3
6	SAS Scandinavian Airlines	27.267	2,5
7	British Airways	26.638	-0,9
8	Aeroflot Russian Airlines	26.545	1,6
9	Eurowings	22.287	-0,8
10	Vueling Airlines	21.304	4,5
11	KLM-Royal Dutch Airlines	20.684	2,3
12	Wizz Air	18.219	7,9
13	Iberia	17.518	2,7
14	Alitalia	15.693	-4,0
15	Pegasus Airlines	15.203	-2,7
16	Flybe	14.008	-9,0
17	Swiss	12.859	6,5
18	Austrian Airlines AG	12.654	3,8
19	TAP Air Portugal	11.307	2,3
20	LOT - Polish Airlines	10.957	-0,3
21	Finnair	10.921	0,7
22	Wideroe's Flyveselskap	10.488	5,1
23	Norwegian Air Shuttle	10.287	-5,6
24	Jet2.com	10.098	10,1
25	Aer Lingus	9.390	2,9

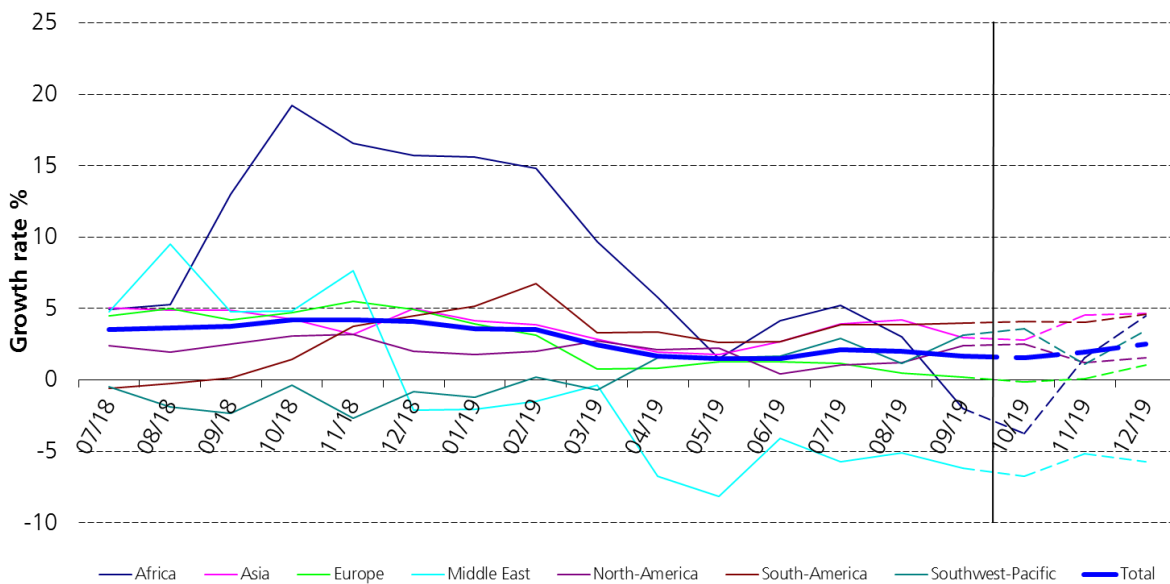
Tab. 5: Number of monthly Take-offs by the largest Airlines in Europe from European airports

Source: OAG 2018/19, DLR 2018/19



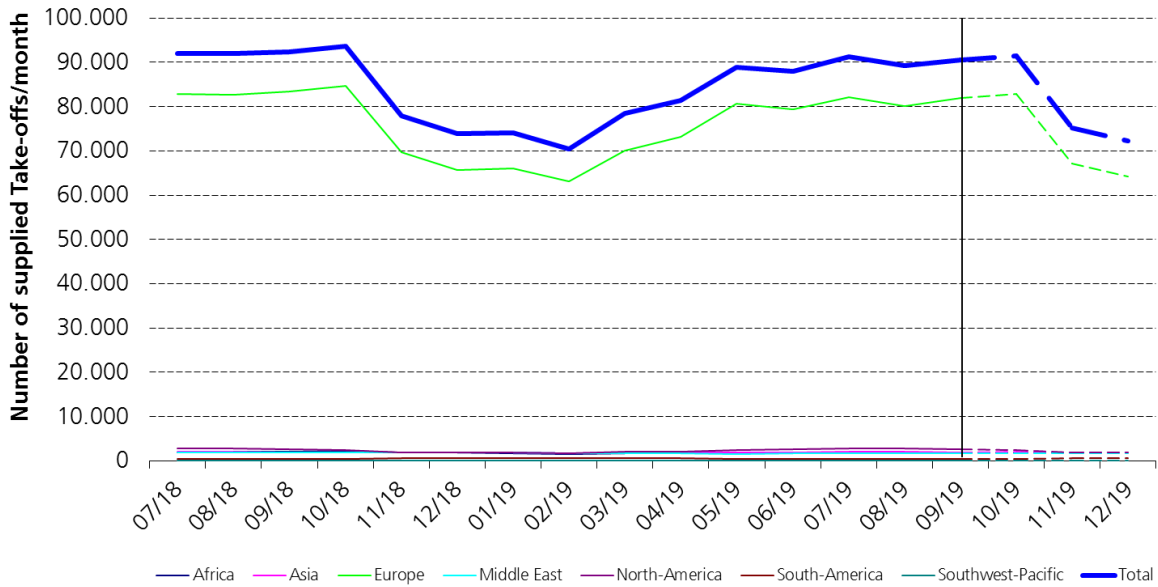
Source: OAG 2018/2019, DLR 2018/2019

Fig. 1: Development of the Global Air Transport Supply



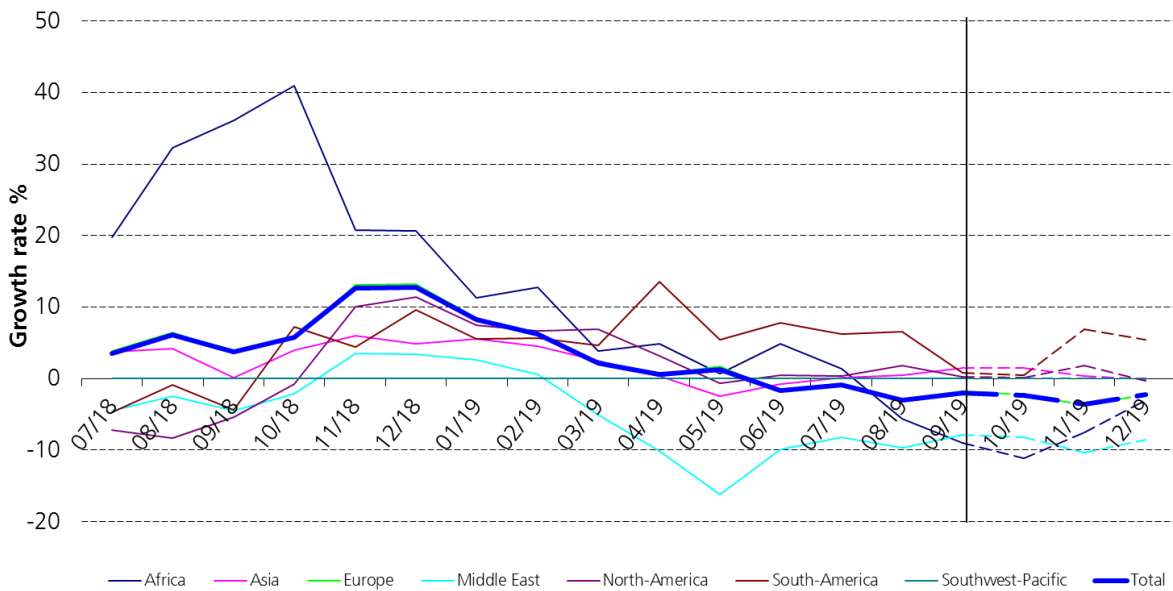
Source: OAG 2018/2019, DLR 2018/2019

Fig. 2: Changes in the Global Air Transport Supply



Source: OAG 2018/2019, DLR 2018/2019

Fig. 3: Development of the German Air Transport Supply



Source: OAG 2018/2019, DLR 2018/2019

Fig. 4: Changes in the German Air Transport Supply

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