

Global Aviation Monitor (GAM)

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

June 2018



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 2017: More than 37 M flights (non-stop) worldwide, new record value
- Busiest month so far in 2018: June with 3.3 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: July 2017 – June 2018

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 June 2018
- March 2018: 3.3 M flights supplied (+5.1 %)
- Airports: Heterogeneous development of no. of flights offered; strong growth e.g. at Jakarta and Frankfurt (10 % and more)
- Airlines: Heterogeneous development of no. of flights offered; strong growth e.g. of Lufthansa, IndiGo and LATAM (LATAM: merger LAN Chile and TAM);

World Regions, Europe

- In Europe, 4.6 % traffic increase; in Asia continued growth around 8 %
- Airports: Heterogeneous developments of no. of flights offered; strong increase e.g. at Palma and Lisbon, however, decline at some airports, e.g. Dusseldorf and Stockholm
- Airlines: Heterogeneous developments of flights, some airlines, e.g. Lufthansa, TAP and LOT with strong growth, strong growth in the low cost segment, e.g. Wizz; new: Eurowings (former Lufthansa and germanwings flights in Germany and Europe are now operated by Eurowings except at Frankfurt; long-haul low cost flights from Cologne and Dusseldorf). Air Berlin: insolvency: parts of Air Berlin were acquired by Lufthansa/Eurowings (LGW) and Easyjet. Some airlines, e.g. Alitalia with decreasing supply; Some additional flights of Ryanair with Laudamotion Flightnumber

Germany

- Airports: Some bigger airports, e.g. Frankfurt with strong growth, some small airports e.g. Memmingen, 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. Easyjet and Ryanair; flybe with decreasing traffic

Outlook: July 2018 – September 2018

Global

- For the next few months, a traffic growth of around 5 % is expected

World Regions, Europe

- For the next few months, a traffic growth between 4 % and 6 % is expected

Germany

- For the next few months, a traffic growth between 1 % and 4 % is expected

Rank	Airport	06/2018	Growth rate
1	Chicago O'Hare International	39.611	8,5
2	Atlanta Hartsfield-Jackson Intl	37.956	2,6
3	Los Angeles International	28.822	4,3
4	Dallas/Fort Worth Intl	28.421	6,9
5	Beijing Capital	25.610	1,3
6	Denver Intl	25.326	7,9
7	Frankfurt International	22.617	12,4
8	Charlotte	21.994	1,7
9	Shanghai Pudong International	21.509	3,4
10	Jakarta Soekarno-Hatta	21.294	14,1
11	Amsterdam	21.197	-0,5
12	London Heathrow	20.250	0,6
13	Paris Charles de Gaulle	20.041	2,2
14	Guangzhou	19.520	2,9
15	New York J F Kennedy International	19.393	2,2
16	Toronto Lester B Pearson Intl	19.241	3,3
17	Delhi	19.098	5,8
18	San Francisco International	19.088	4,9
19	Seattle/Tacoma International	19.071	7,2
20	Houston George Bush Intercontinental	18.909	2,9
21	Istanbul Ataturk	18.711	0,8
22	Tokyo Haneda	18.430	1,3
23	Newark Liberty International	18.235	5,9
24	Munich International	17.613	3,9
25	Boston Logan International	17.600	7,1

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

Rank	Airport	06/2018	Growth rate
1	Frankfurt International	22.617	12,4
2	Munich International	17.613	3,9
3	Dusseldorf International	9.350	-4,6
4	Berlin Tegel	8.013	-1,9
5	Hamburg	6.175	-3,4
6	Stuttgart	5.143	9,4
7	Cologne/Bonn K.A.	4.555	2,8
8	Berlin Schoenefeld	3.570	-1,9
9	Hanover	2.564	8,7
10	Nuremberg	1.940	0,3
11	Bremen	1.101	6,5
12	Leipzig/Halle	1.071	9,1
13	Dresden	849	0,0
14	Frankfurt Hahn	677	-7,1
15	Dortmund	675	15,0
16	Munster	532	8,1
17	Dusseldorf Niederrhein	517	-12,8
18	Karlsruhe/Baden Baden	422	-17,1
19	Memmingen	404	37,9
20	Saarbrücken Ensheim	318	-1,5
21	Friedrichshafen	301	21,4
22	Paderborn	281	2,2
23	Rostock-Laage	189	35,0
24	Westerland	146	-8,2
25	Erfurt	117	-10,0

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

Rank	Airport	06/2018	Growth rate
1	Frankfurt International	22.617	12,4
2	Amsterdam	21.197	-0,5
3	London Heathrow	20.250	0,6
4	Paris Charles de Gaulle	20.041	2,2
5	Istanbul Ataturk	18.711	0,8
6	Munich International	17.613	3,9
7	Madrid Barajas	16.840	4,0
8	Barcelona	14.973	2,7
9	Moscow Sheremetyevo International	14.054	15,0
10	Rome Fiumicino	13.519	1,9
11	London Gatwick	13.009	-1,1
12	Palma Mallorca	12.418	12,5
13	Copenhagen	11.063	1,4
14	Zurich	10.944	6,4
15	Vienna	10.664	6,7
16	Oslo	10.487	4,5
17	Paris Orly	10.422	2,5
18	Dublin	10.309	6,1
19	Moscow Domodedovo	9.622	-7,7
20	Athens Intl Eleftherios Venizelos	9.598	15,0
21	Stockholm Arlanda	9.568	-4,9
22	Istanbul Sabiha Gokcen	9.467	4,9
23	Lisbon	9.458	10,1
24	Dusseldorf International	9.350	-4,6
25	Brussels	9.001	-4,5

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

Source: OAG 2016/17, DLR 2016/17

Rank	Airline	06/2018	Growth rate
1	American Airlines	198.528	4,7
2	Delta Air Lines	168.785	1,7
3	United Airlines	153.229	10,0
4	Southwest Airlines	119.494	4,3
5	Ryanair	65.559	0,5
6	China Southern Airlines	62.906	3,7
7	China Eastern Airlines	60.465	7,1
8	easyJet	53.068	9,3
9	Air Canada	51.748	3,3
10	Lufthansa German Airlines	49.040	10,9
11	Turkish Airlines	43.284	8,3
12	Air China	40.929	8,0
13	Alaska Airlines	40.371	28,1
14	Lan Airlines	35.881	118,1
15	IndiGo Air	34.195	21,2
16	British Airways	32.573	2,6
17	JetBlue Airways Corporation	31.649	3,0
18	All Nippon Airways	30.828	2,0
19	Air France	29.343	0,1
20	Aeroflot Russian Airlines	29.293	4,7
21	SAS Scandinavian Airlines	26.115	2,9
22	Japan Airlines International	24.722	4,8
23	Hainan Airlines	23.484	11,2
24	Eurowings	22.290	104,8
25	Westjet	22.216	10,1

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

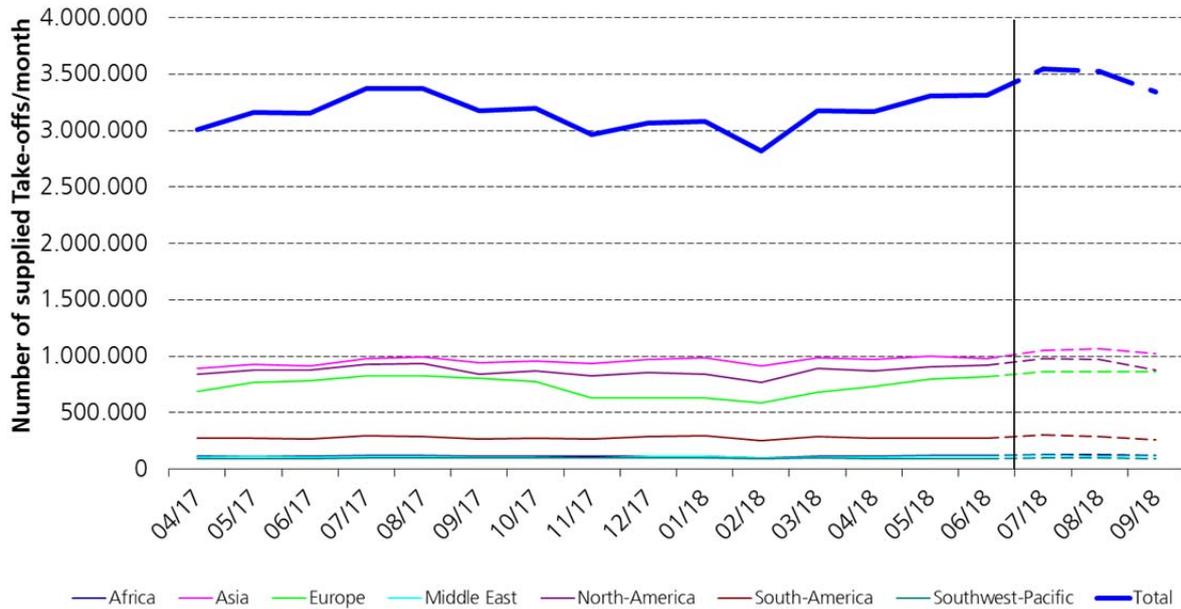
Rank	Airline	06/2018	Growth rate
1	Lufthansa German Airlines	30.064	12,3
2	Eurowings	13.735	135,5
3	Ryanair	5.435	19,0
4	easyJet	4.407	76,6
5	Condor Flugdienst	2.740	35,3
6	TUIfly	1.696	9,6
7	Germania	1.625	33,1
8	Austrian Airlines AG	1.553	15,8
9	Laudamotion	1.432	---
10	British Airways	1.408	7,5
11	KLM-Royal Dutch Airlines	1.372	0,1
12	Turkish Airlines	1.368	5,9
13	SunExpress	1.356	11,4
14	Swiss	1.327	28,5
15	Air France	1.243	5,1
16	Wizz Air	1.033	19,6
17	SAS Scandinavian Airlines	960	16,4
18	Aeroflot Russian Airlines	815	4,4
19	British Midland Regional	702	8,5
20	Air Dolomiti	673	20,4
21	LOT - Polish Airlines	658	38,8
22	SunExpress Deutschland	584	23,7
23	Flybe	492	-13,1
24	TAP Air Portugal	480	27,0
25	Pegasus Airlines	466	2,4

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

Rank	Airline	06/2018	Growth rate
1	Ryanair	64.583	0,1
2	easyJet	52.641	9,3
3	Lufthansa German Airlines	45.241	11,8
4	Turkish Airlines	38.040	8,9
5	British Airways	27.218	2,6
6	Air France	25.710	-0,4
7	SAS Scandinavian Airlines	25.705	3,1
8	Aeroflot Russian Airlines	24.736	4,8
9	Eurowings	22.077	104,5
10	Vueling Airlines	20.589	13,4
11	KLM-Royal Dutch Airlines	19.964	1,1
12	Iberia	16.975	2,3
13	Wizz Air	16.404	18,3
14	Alitalia	15.973	-2,4
15	Flybe	15.955	-13,9
16	Pegasus Airlines	14.635	6,6
17	Austrian Airlines AG	12.138	6,4
18	Swiss	11.888	6,3
19	TAP Air Portugal	11.071	13,2
20	LOT - Polish Airlines	10.515	22,2
21	Norwegian Air Shuttle	10.405	7,0
22	Finnair	10.268	12,1
23	Wideroe's Flyveselskap	9.816	-3,7
24	Aer Lingus	9.304	-0,4
25	Jet2.com	9.226	23,5

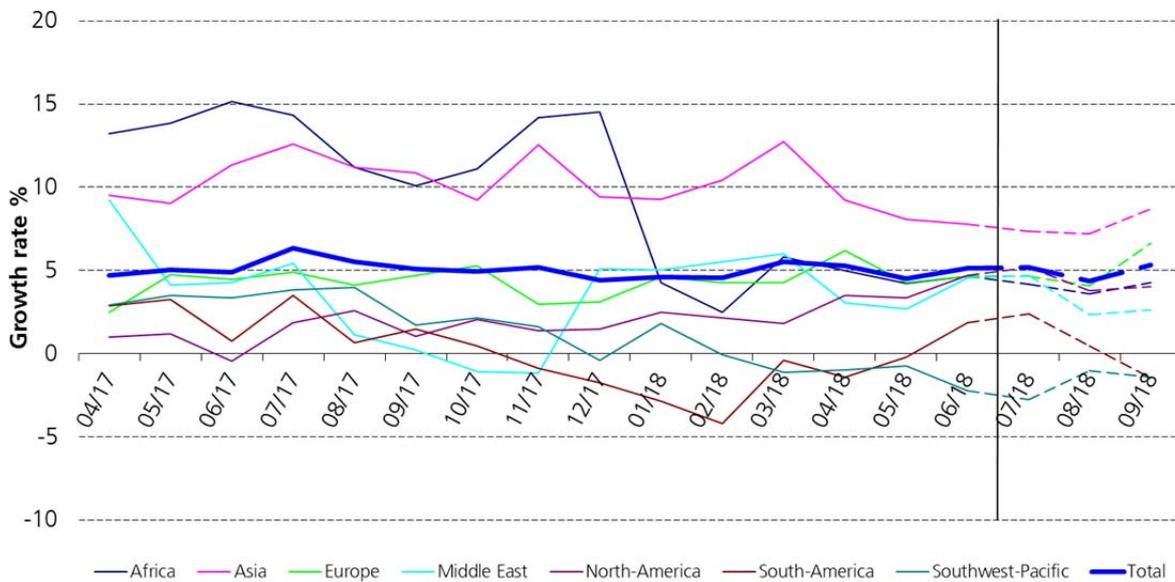
Tab. 5: Number of monthly Take-offs by the largest Airlines in Europe from European airports

Source: OAG 2016/17, DLR 2016/17



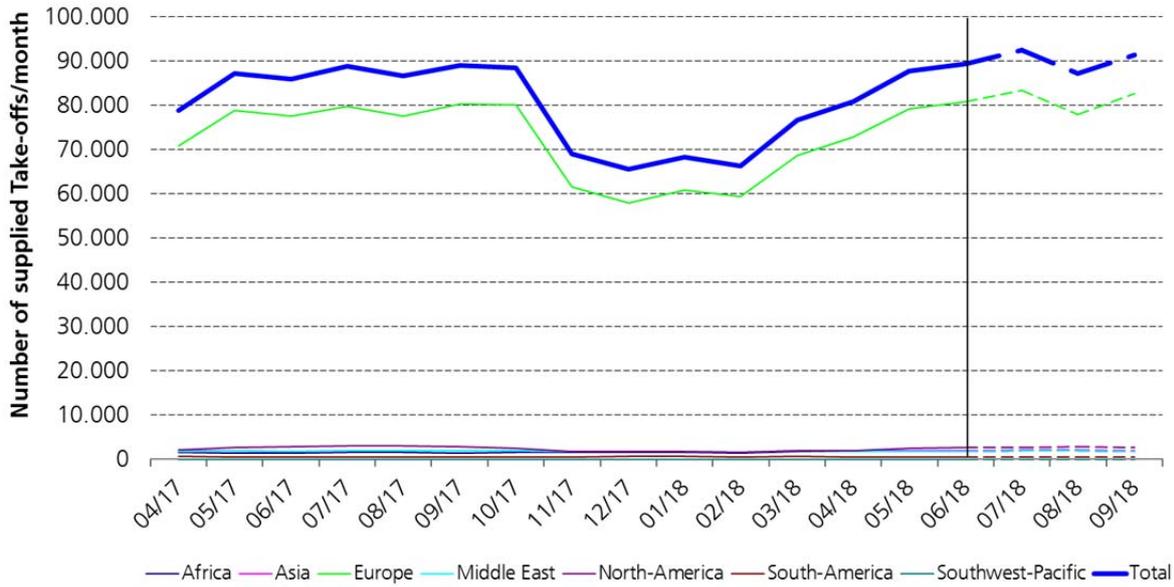
Source: OAG 2017/2018, DLR 2017/2018

Fig. 1: Development of the Global Air Transport Supply



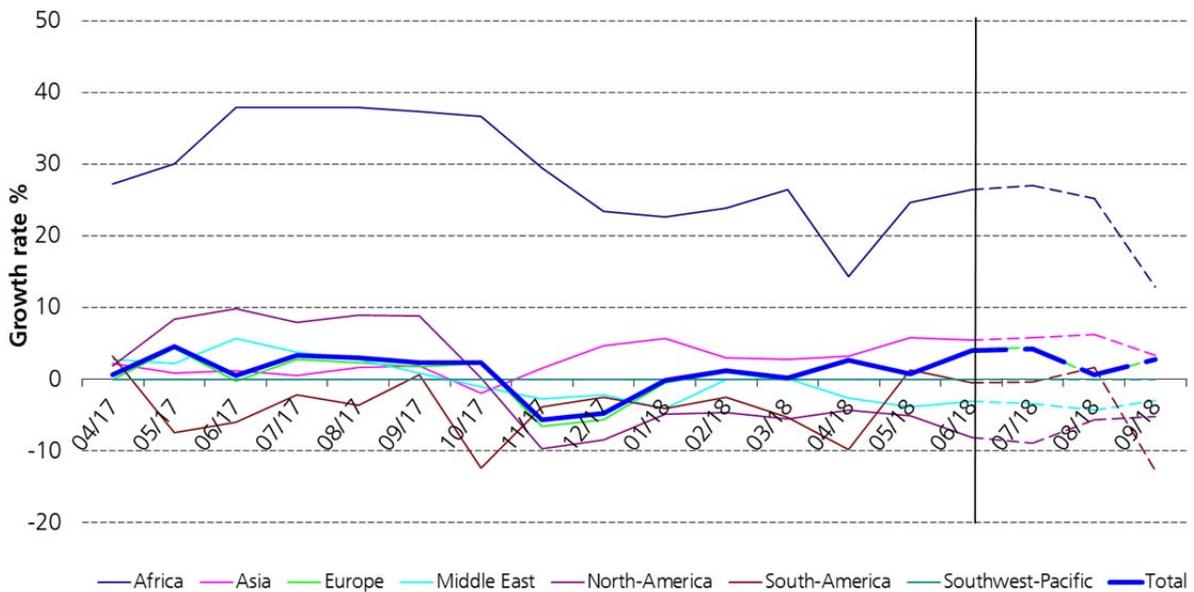
Source: OAG 2017/2018, DLR 2017/2018

Fig. 2: Changes in the Global Air Transport Supply



Source: OAG 2017/2018, DLR 2017/2018

Fig. 3: Development of the German Air Transport Supply



Source: OAG 2017/2018, DLR 2017/2018

Fig. 4: Changes in the German Air Transport Supply

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