

# Global Aviation Monitor (GAM)

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

September 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 2018: August with 3.5 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 2017 – September 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 September 2018
- September 2018: 3.5 M flights supplied (+3.7 %)
- Airports: Heterogeneous development of no. of flights offered; strong growth e.g. at Denver, Dehli, Houston and Frankfurt (5 % and more)
- Airlines: Heterogeneous development of no. of flights offered; strong growth e.g. of United Airlines, China Southern, Lufthansa, IndiGo and LATAM (LATAM: merger LAN Chile and TAM)

#### World Regions, Europe

- In Europe, 4.2 % traffic increase; in Asia continued growth around 5 %
- Airports: Heterogeneous developments of no. of flights offered; strong increase e.g. at Moskau Sherem, and Palma, 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 went to Lufthansa/Eurowings: LGW; Easyjet acquired parts of Air Berlin. Some airlines, e.g. SAS 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: October 2018 – December 2018

#### Global

- For the next few months, a traffic growth of around 3 % is expected

#### World Regions, Europe

- For the next few months, a traffic growth between 4 % and 5 % is expected

#### Germany

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

Rank	Airport	09/2018	Growth rate
1	Chicago O'Hare International	37.803	4,3
2	Atlanta Hartsfield-Jackson Intl	34.977	1,7
3	Los Angeles International	26.892	1,1
4	Dallas/Fort Worth Intl	26.094	2,0
5	Beijing Capital	24.699	-4,6
6	Denver Intl	23.933	5,3
7	Frankfurt International	22.678	7,1
8	Shanghai Pudong International	21.612	0,7
9	Amsterdam	21.580	-0,7
10	Charlotte	21.578	3,5
11	Jakarta Soekarno-Hatta	20.886	2,8
12	Paris Charles de Gaulle	20.242	2,4
13	London Heathrow	20.222	-0,5
14	Guangzhou	19.884	1,8
15	Istanbul Ataturk	19.207	-2,1
16	Delhi	18.906	6,3
17	Toronto Lester B Pearson Intl	18.779	1,0
18	Tokyo Haneda	18.681	1,7
19	New York J F Kennedy International	18.494	2,5
20	Munich International	17.942	2,2
21	San Francisco International	17.878	-2,8
22	Houston George Bush Intercontinental	17.642	5,9
23	Seattle/Tacoma International	17.616	3,8
24	Newark Liberty International	17.154	3,7
25	Hong Kong International	17.040	1,0

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

Rank	Airport	09/2018	Growth rate
1	Frankfurt International	22.678	7,1
2	Munich International	17.942	2,2
3	Dusseldorf International	9.654	-3,5
4	Berlin Tegel	8.841	7,9
5	Hamburg	6.180	-6,2
6	Stuttgart	5.297	9,3
7	Cologne/Bonn K.A.	4.932	5,1
8	Berlin Schoenefeld	3.712	2,3
9	Hanover	2.701	8,4
10	Nuremberg	2.044	-1,8
11	Leipzig/Halle	1.172	16,0
12	Bremen	1.132	4,2
13	Dresden	890	12,2
14	Dortmund	693	13,1
15	Frankfurt Hahn	641	-16,6
16	Munster	618	15,5
17	Dusseldorf Niederrhein	461	-25,8
18	Karlsruhe/Baden Baden	440	-11,3
19	Memmingen	406	7,7
20	Paderborn	378	33,1
21	Saarbrücken/Ennsheim	311	-2,8
22	Friedrichshafen	308	14,9
23	Westerland	184	13,6
24	Rostock-Laage	165	22,2
25	Erfurt	120	4,3

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

Rank	Airport	09/2018	Growth rate
1	Frankfurt International	22.678	7,1
2	Amsterdam	21.580	-0,7
3	Paris Charles de Gaulle	20.242	2,4
4	London Heathrow	20.222	-0,5
5	Istanbul Ataturk	19.207	-2,1
6	Munich International	17.942	2,2
7	Madrid Barajas	17.038	6,6
8	Moscow Sheremetyevo International	15.258	22,9
9	Barcelona	15.001	4,1
10	Rome Fiumicino	13.899	1,7
11	London Gatwick	13.138	-1,1
12	Palma Mallorca	12.097	9,0
13	Copenhagen	11.224	2,1
14	Vienna	11.147	8,9
15	Zurich	11.110	4,5
16	Oslo	10.805	3,2
17	Paris Orly	10.568	3,5
18	Stockholm Arlanda	10.176	-4,6
19	Dublin	10.049	4,9
20	Istanbul Sabiha Gokcen	10.001	7,7
21	Moscow Domodedovo	9.755	-8,9
22	Athens Intl Eleftherios Venizelos	9.752	14,9
23	Dusseldorf International	9.654	-3,5
24	Lisbon	9.435	5,4
25	Brussels	9.385	-2,1

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

Source: OAG 2016/17, DLR 2016/17

Rank	Airline	09/2018	Growth rate
1	American Airlines	186.606	2,4
2	Delta Air Lines	154.397	1,0
3	United Airlines	145.237	7,9
4	Southwest Airlines	109.520	1,5
5	Ryanair	68.693	3,9
6	China Southern Airlines	65.434	5,0
7	China Eastern Airlines	62.053	4,6
8	easyJet	55.767	13,7
9	Air Canada	50.527	1,5
10	Lufthansa German Airlines	49.539	7,4
11	Turkish Airlines	43.601	0,5
12	Air China	40.427	-1,7
13	IndiGo Air	37.919	40,8
14	LATAM	37.631	106,7
15	Alaska Airlines	36.902	19,9
16	British Airways	32.233	1,3
17	Aeroflot Russian Airlines	30.890	9,2
18	All Nippon Airways	30.349	-1,0
19	JetBlue Airways Corporation	30.082	3,9
20	Air France	28.888	0,3
21	SAS Scandinavian Airlines	27.002	-1,0
22	Japan Airlines International	24.946	4,2
23	Hainan Airlines	23.889	8,2
24	Eurowings	22.712	94,3
25	Westjet	22.345	9,7

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

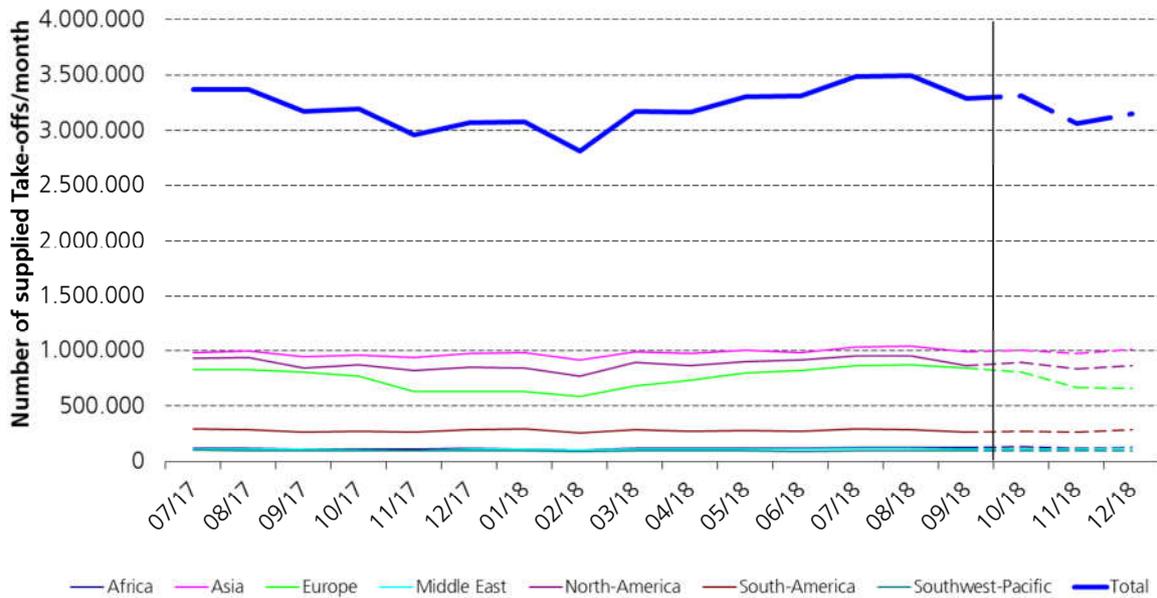
Rank	Airline	09/2018	Growth rate
1	Lufthansa German Airlines	30.421	8,1
2	Eurowings	13.915	119,5
3	easyJet	5.452	118,2
4	Ryanair	5.325	6,7
5	Condor Flugdienst	2.739	27,6
6	Germania	1.782	36,0
7	TUIfly	1.730	11,0
8	SunExpress	1.557	4,5
9	Austrian Airlines AG	1.552	13,0
10	KLM-Royal Dutch Airlines	1.425	3,6
11	Turkish Airlines	1.421	0,1
12	British Airways	1.401	6,2
13	Swiss	1.336	26,9
14	Air France	1.227	3,8
15	Laudamotion	1.159	---
16	Wizz Air	1.121	18,9
17	SAS Scandinavian Airlines	1.020	4,9
18	Aeroflot Russian Airlines	814	3,7
19	British Midland Regional	684	12,9
20	LOT - Polish Airlines	684	42,2
21	Air Dolomiti	673	20,0
22	Pegasus Airlines	664	29,9
23	SunExpress Deutschland	615	32,5
24	TAP Air Portugal	486	6,8
25	Flybe	481	-11,3

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

Rank	Airline	09/2018	Growth rate
1	Ryanair	67.683	3,5
2	easyJet	55.339	13,8
3	Lufthansa German Airlines	45.721	8,1
4	Turkish Airlines	38.315	1,1
5	British Airways	26.884	1,3
6	SAS Scandinavian Airlines	26.593	-1,0
7	Aeroflot Russian Airlines	26.139	9,7
8	Air France	25.357	0,3
9	Eurowings	22.471	94,3
10	Vueling Airlines	20.381	9,0
11	KLM-Royal Dutch Airlines	20.211	0,8
12	Iberia	17.064	6,1
13	Wizz Air	16.887	13,6
14	Alitalia	16.352	-0,2
15	Pegasus Airlines	15.621	6,2
16	Flybe	15.391	-0,7
17	Austrian Airlines AG	12.195	4,5
18	Swiss	12.077	6,2
19	TAP Air Portugal	11.055	6,6
20	LOT - Polish Airlines	10.986	17,0
21	Norwegian Air Shuttle	10.896	5,7
22	Finnair	10.848	10,6
23	Wideroe's Flyveselskap	9.976	-1,4
24	Jet2.com	9.171	22,9
25	Aer Lingus	9.121	0,9

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

Source: OAG 2016/17, DLR 2016/17



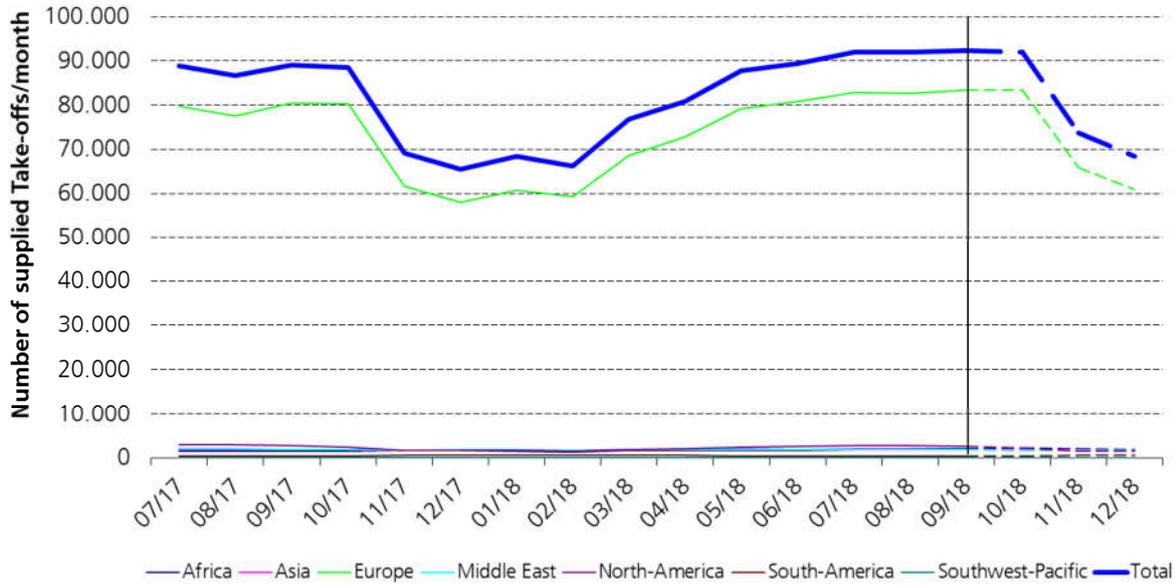
Source: OAG 2017/2018, DLR 2017/2018

Fig. 1: Development of the Global Air Transport Supply



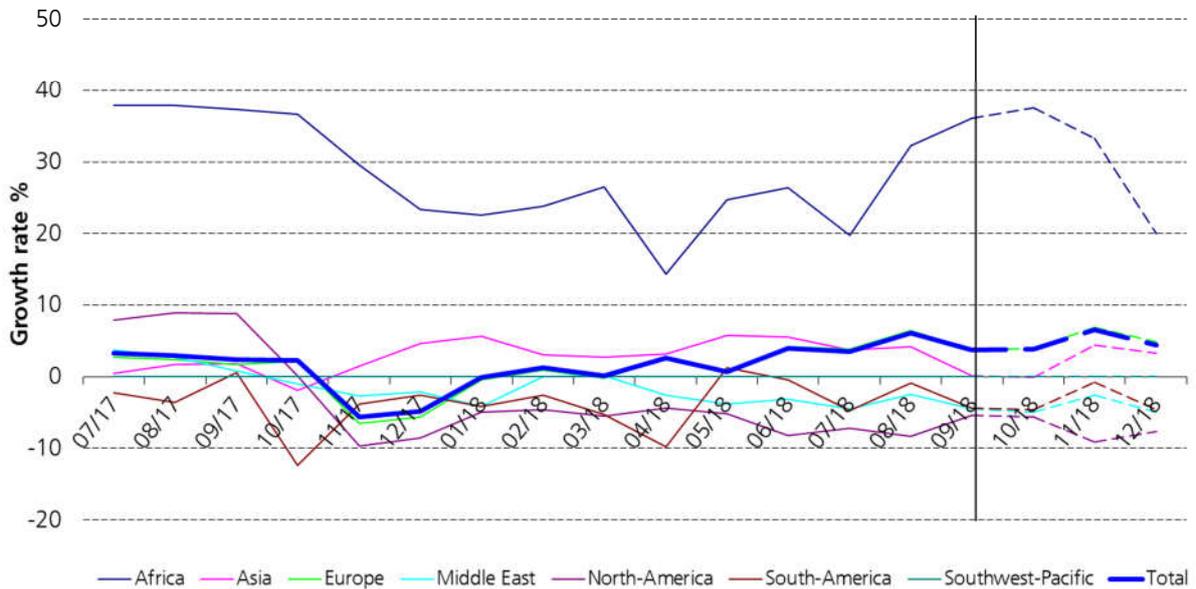
Source: OAG 2017/2018, DLR 2017/2018

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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