

Global Aviation Monitor (GAM)

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

March 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: March 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: April 2018 – March 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 2.4 % in March 2019
- March 2019: 3.3 M flights supplied (+2.4 %)
- 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 United Airlines, ANA, Aeroflot, IndiGo and LATAM (LATAM: merger LAN Chile and TAM);

World Regions, Europe

- In Europe, 0.8 % traffic increase; in Asia growth around 3 %
- Airports: Heterogeneous developments of no. of flights offered; strong increase e.g. at Moskau Sheremetyevo and Vienna, however, decline at some airports, e.g. Paris Orly
- Airlines: Heterogeneous developments of flights, some airlines, e.g. Aeroflot and LOT with strong growth, strong growth in the low cost segment, e.g. Easyjet; 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, Munich and Dusseldorf). Air Berlin insolvency: parts of Air Berlin went to Lufthansa/Eurowings: LGW; Easyjet acquired parts of Air Berlin. Some airlines, e.g. TAP with decreasing supply; Some additional flights of Ryanair with Laudamotion flightnumber

Germany

- Airports: Some bigger airports, e.g. Dusseldorf 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; flybe with decreasing traffic

Outlook: April 2019 – June 2019

Global

- For the next few months, a traffic growth between 2 % and 3 % is expected

World Regions, Europe

- For the next few months, a traffic growth between 1 % and 2 % is expected

Germany

- For the next few months, a traffic growth between 1 % and 5 % is expected

Rank	Airport	03/2019	Growth rate
1	Atlanta Hartsfield-Jackson Intl	38.516	2,3
2	Chicago O'Hare International	37.632	3,3
3	Los Angeles International	28.383	2,3
4	Dallas/Fort Worth Intl	28.228	5,3
5	Denver Intl	25.229	8,5
6	Beijing Capital	25.178	-3,8
7	Charlotte	22.825	4,6
8	Shanghai Pudong International	21.296	-2,5
9	Guangzhou	20.504	2,9
10	Frankfurt International	20.496	1,3
11	Houston George Bush Intercontinental	19.981	5,1
12	London Heathrow	19.979	-0,9
13	Tokyo Haneda	19.971	3,9
14	Amsterdam	19.890	-1,1
15	Paris Charles de Gaulle	18.923	2,3
16	New York J F Kennedy International	18.783	2,8
17	Delhi	18.198	-6,9
18	Toronto Lester B Pearson Intl	18.096	-5,0
19	San Francisco International	17.882	-2,2
20	Phoenix Sky Harbor Intl .	17.790	1,2
21	Mexico City Juarez International	17.690	1,2
22	Istanbul Ataturk	17.652	-3,5
23	Newark Liberty International	17.606	-0,9
24	Jakarta Soekarno-Hatta	17.523	-15,7
25	Hong Kong International	17.463	0,4

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

Rank	Airport	03/2019	Growth rate
1	Frankfurt International	20.496	1,3
2	Munich International	16.212	1,3
3	Dusseldorf International	8.644	9,7
4	Berlin Tegel	7.915	16,1
5	Hamburg	5.599	3,7
6	Stuttgart	4.263	5,3
7	Cologne/Bonn K.A.	3.447	-3,5
8	Berlin Schoenefeld	3.140	-9,2
9	Hanover	1.871	-2,0
10	Nuremberg	1.414	-6,2
11	Leipzig/Halle	902	14,2
12	Bremen	784	-8,9
13	Dresden	684	-8,7
14	Dortmund	653	11,2
15	Frankfurt Hahn	490	-19,5
16	Memmingen	377	14,6
17	Munster	326	-12,8
18	Karlsruhe/Baden Baden	280	2,2
19	Friedrichshafen	264	25,7
20	Dusseldorf Niederrhein	232	-36,1
21	Paderborn	213	26,8
22	Mannheim	81	-15,6
23	Saarbrücken Ensheim	56	-74,4
24	Westerland	27	-12,9
25	Kassel	19	-29,6

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

Rank	Airport	03/2019	Growth rate
1	Frankfurt International	20.496	1,3
2	London Heathrow	19.979	-0,9
3	Amsterdam	19.890	-1,1
4	Paris Charles de Gaulle	18.923	2,3
5	Istanbul Ataturk	17.652	-3,5
6	Madrid Barajas	16.254	4,1
7	Munich International	16.212	1,3
8	Moscow Sheremetyevo International	15.656	20,3
9	Barcelona	12.410	1,1
10	Rome Fiumicino	11.926	2,3
11	London Gatwick	11.034	1,6
12	Copenhagen	10.608	4,6
13	Vienna	10.194	11,8
14	Oslo	10.044	2,8
15	Zurich	9.813	0,2
16	Stockholm Arlanda	9.732	-1,4
17	Istanbul Sabiha Gokcen	9.231	4,1
18	Paris Orly	9.070	-4,1
19	Dublin	8.670	0,6
20	Dusseldorf International	8.644	9,7
21	Lisbon	8.193	-1,1
22	Brussels	8.012	-3,4
23	Berlin Tegel	7.915	16,1
24	Helsinki	7.768	4,1
25	Milan Malpensa	7.704	9,0

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

Rank	Airline	03/2019	Growth rate
1	American Airlines	199.925	4,1
2	Delta Air Lines	168.304	1,3
3	United Airlines	154.108	5,4
4	Southwest Airlines	122.870	2,5
5	China Southern Airlines	67.555	3,5
6	China Eastern Airlines	65.427	7,5
7	Ryanair	57.543	1,1
8	Air Canada	49.336	-2,7
9	easyJet	47.715	5,5
10	Lufthansa German Airlines	47.234	2,6
11	IndiGo Air	41.575	23,1
12	Air China	41.464	0,3
13	Turkish Airlines	40.672	-0,0
14	Alaska Airlines	39.249	21,3
15	LATAM	38.566	108,3
16	All Nippon Airways	35.760	11,6
17	JetBlue Airways Corporation	32.455	1,5
18	British Airways	30.924	-1,6
19	Aeroflot Russian Airlines	30.064	12,6
20	Air France	27.527	-1,6
21	SAS Scandinavian Airlines	26.624	5,9
22	Japan Airlines International	25.676	2,8
23	Hainan Airlines	23.527	4,6
24	Qantas Airways	23.297	1,8
25	Azul	22.833	6,5

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

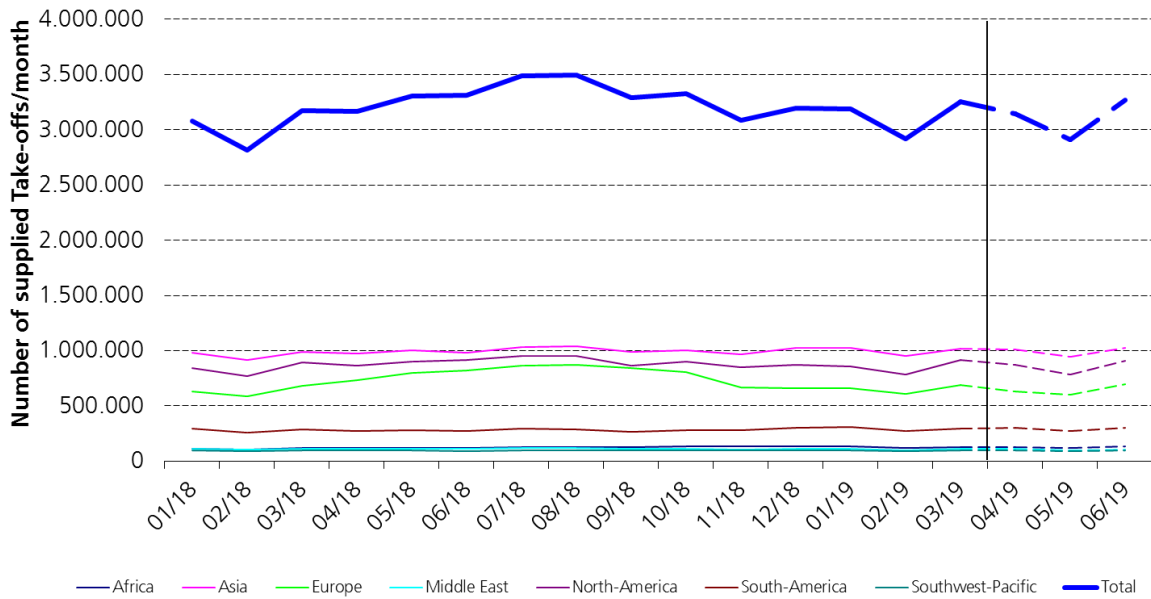
Rank	Airline	03/2019	Growth rate
1	Lufthansa German Airlines	29.344	3,5
2	Eurowings	12.417	0,7
3	easyJet	5.179	18,4
4	Ryanair	4.243	-3,3
5	British Airways	1.719	19,2
6	Austrian Airlines AG	1.524	2,4
7	KLM-Royal Dutch Airlines	1.357	0,7
8	Swiss	1.348	12,5
9	Condor Flugdienst	1.224	10,6
10	Turkish Airlines	1.190	3,8
11	Air France	1.165	-3,8
12	SAS Scandinavian Airlines	1.067	12,9
13	Wizz Air	1.031	15,3
14	Aeroflot Russian Airlines	880	12,5
15	TUIfly	874	-0,5
16	SunExpress	607	5,4
17	LOT - Polish Airlines	604	12,3
18	Air Dolomiti	576	16,6
19	Laudamotion	542	---
20	Pegasus Airlines	519	37,3
21	TAP Air Portugal	464	-3,7
22	Flybe	456	-8,8
23	Iberia	451	7,6
24	United Airlines	404	20,6
25	Finnair	400	14,9

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

Rank	Airline	03/2019	Growth rate
1	Ryanair	56.051	0,4
2	easyJet	47.027	5,3
3	Lufthansa German Airlines	43.569	2,8
4	Turkish Airlines	35.319	-0,5
5	SAS Scandinavian Airlines	26.233	6,0
6	Aeroflot Russian Airlines	25.456	12,5
7	British Airways	25.416	-1,9
8	Air France	23.967	-1,9
9	KLM-Royal Dutch Airlines	18.994	-0,3
10	Eurowings	18.474	-1,2
11	Iberia	16.363	3,9
12	Vueling Airlines	14.988	-0,9
13	Alitalia	14.143	0,6
14	Flybe	13.836	-9,1
15	Pegasus Airlines	13.663	-1,8
16	Wizz Air	13.270	-2,6
17	Swiss	11.153	2,1
18	Finnair	10.555	5,0
19	Austrian Airlines AG	10.413	0,6
20	LOT - Polish Airlines	10.389	10,4
21	Wideroe's Flyveselskap	9.945	3,9
22	TAP Air Portugal	9.560	-4,3
23	Norwegian Air Shuttle	9.452	-1,9
24	Air Europa	7.947	11,0
25	Aer Lingus	7.914	3,1

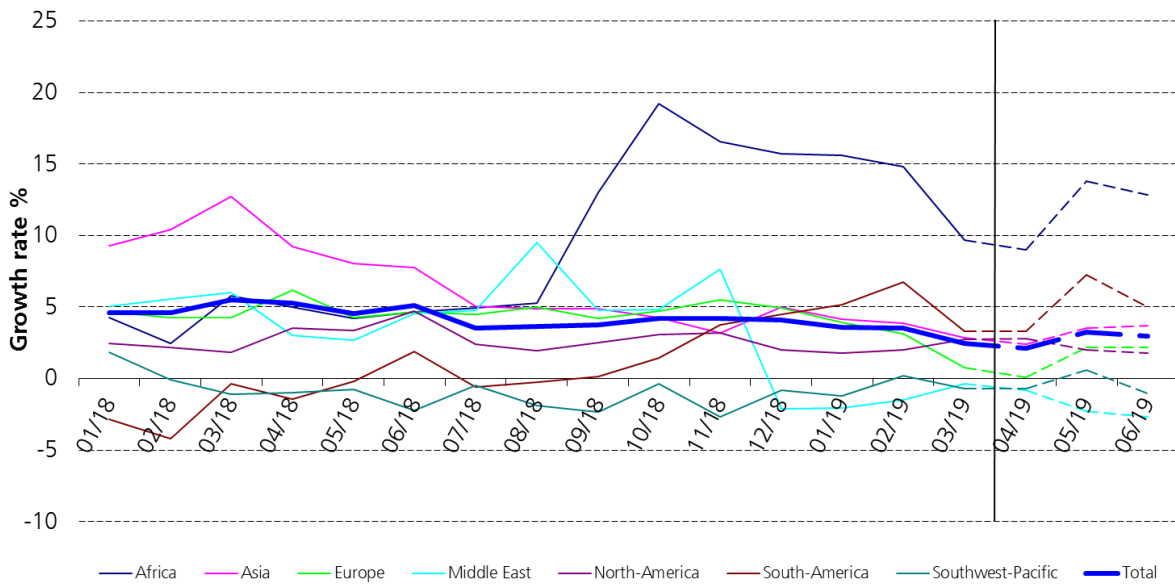
Tab. 5: Number of monthly Take-offs by the largest Airlines in Europe from European airports

Source: OAG 2017/18, DLR 2017/18



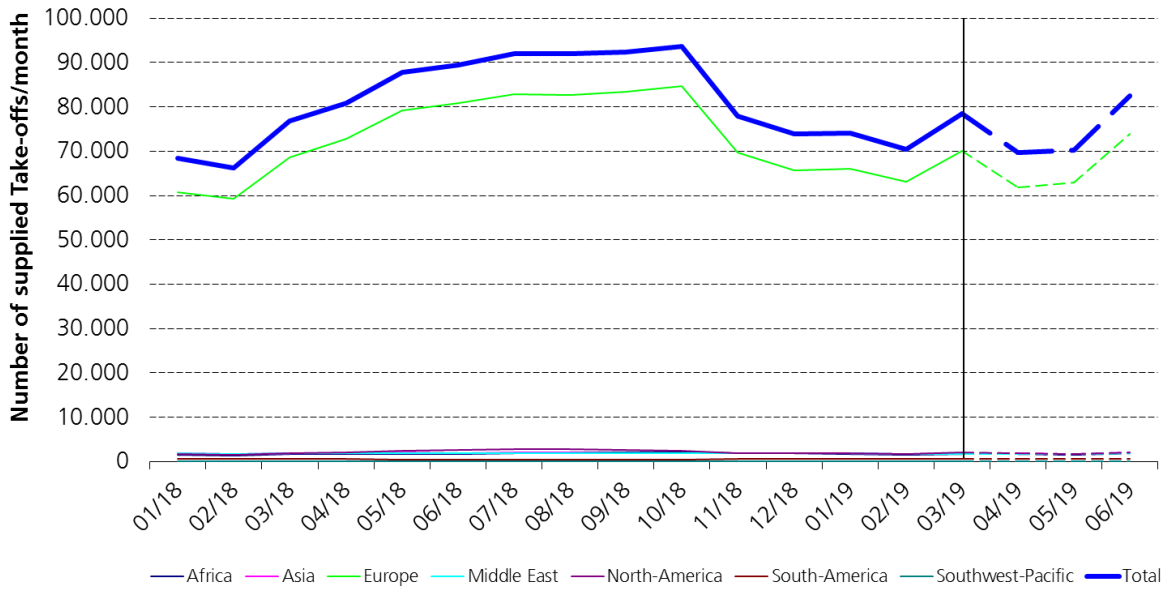
Source: OAG 2018/2019, DLR 2018/2019

Fig. 1: Development of the Global Air Transport Supply



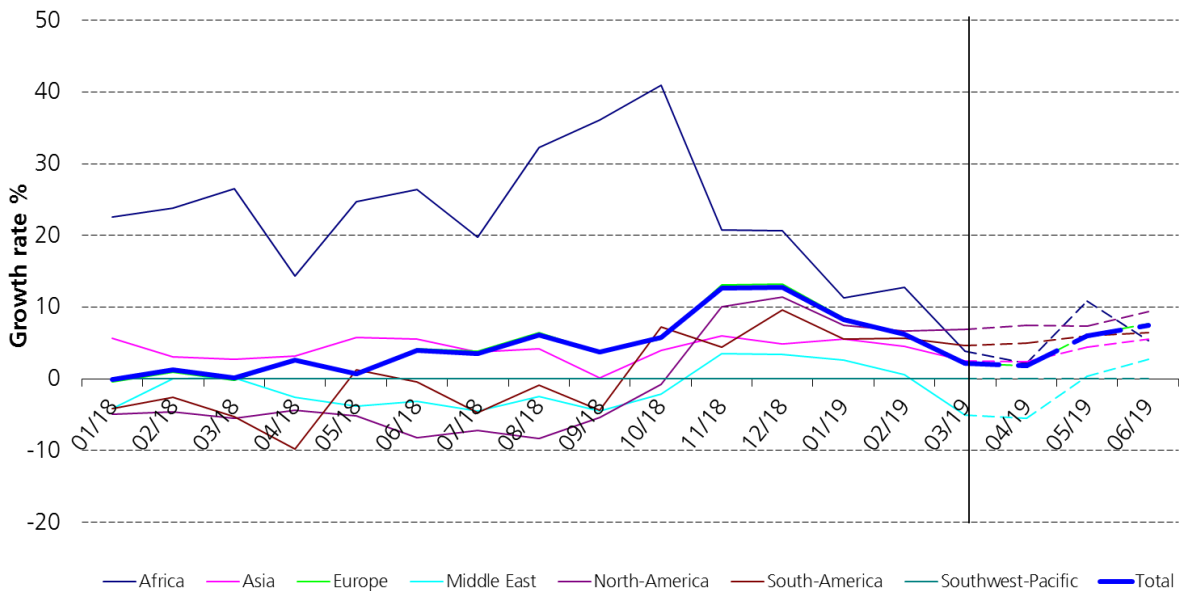
Source: OAG 2018/2019, DLR 2018/2019

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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