

Global Aviation Monitor (GAM)

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

March 2020



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 2019: More than 39.5 M non-stop flights 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
- Recent and expected flight plan cancellations have been included in the forecast

Analysis: April 2019 – March 2020

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 1.4 % in February 2020 (seasonally adjusted -2%)
- March 2020 (base data 1.3): 3.1 M flights supplied (-4.5 %)
- Airports: Heterogeneous development of no. of flights offered; strong growth e.g. at Delhi and Jakarta (5 % and more), strong decrease at Beijing (-40.2%), Rank 33, in February Rank 7
- Airlines: Heterogeneous development of no. of flights offered; strong growth e.g. of IndiGo, Azul and Air France (Air France incl. Hop!), strong decrease of China Southern (-40%) and China Eastern Airlines (-45.6%)

World Regions, Europe

- In Europe, 1.4 % traffic decrease; in Asia decrease around 18 %
- Airports: decline at most airports, e.g. Rome Fiumicino (-13.2%) due to the coronavirus
- Airlines: Heterogeneous developments of flights, growth in the low cost segment, e.g. Ryanair and Wizz; Some airlines, e.g. Eurowings with decreasing supply; Some additional flights of Ryanair with Lauda flight number

Germany

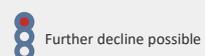
- Airports: Some small airports e.g. Dortmund, with traffic growth; most German airports with downward trend, e.g. Berlin Schoenefeld
- Airlines: Heterogeneous developments of number of flights offered; strong growth of e.g. Wizz Easyjet and Ryanair with decreasing traffic

Outlook: April 2020 – June 2020

Global

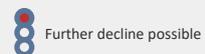
- For the next few months, a traffic decline of around 25 % is expected

Trend for the next six months



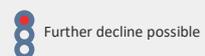
World Regions, Europe

- For the next few months, a traffic decline of around 55 % is expected



Germany

- For the next few months, a traffic decline of around 55 % is expected



Rank	Airport	03/2020	Growth rate
1	Chicago O'Hare International	38,687	2.8
2	Atlanta Hartsfield-Jackson Intl	38,184	-0.9
3	Dallas/Fort Worth Intl	29,509	4.5
4	Los Angeles International	26,485	-6.7
5	Denver Intl	26,356	4.5
6	Charlotte	23,709	3.9
7	Delhi	20,746	14.0
8	Houston George Bush Intercontinental	20,065	0.4
9	Jakarta Soekarno-Hatta	19,933	13.8
10	Amsterdam	19,591	-1.5
11	London Heathrow	19,571	-2.0
12	Frankfurt International	19,471	-5.0
13	Tokyo Haneda	19,443	-2.6
14	Paris Charles de Gaulle	18,614	-1.6
15	Phoenix Sky Harbor Intl .	18,347	3.1
16	New York J F Kennedy International	18,258	-2.8
17	Newark Liberty International	18,166	3.2
18	Mexico City Juarez International	18,068	2.1
19	Seattle/Tacoma International	18,009	3.9
20	San Francisco International	17,402	-2.7
21	Toronto Lester B Pearson Intl	17,308	-4.4
22	Boston Logan International	17,096	4.9
23	Istanbul Ataturk	17,061	-3.3
24	Madrid Barajas	16,460	1.3
25	Detroit Wayne County	16,455	-0.3

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

Rank	Airport	03/2020	Growth rate
1	Frankfurt International	19,471	-5.0
2	Munich International	15,888	-2.0
3	Dusseldorf International	8,081	-6.5
4	Berlin Tegel	7,313	-7.6
5	Hamburg	5,287	-5.6
6	Stuttgart	4,249	-0.3
7	Cologne/Bonn K.A.	3,338	-3.2
8	Berlin Schoenefeld	2,795	-11.0
9	Hanover	1,870	-0.1
10	Nuremberg	1,326	-6.2
11	Bremen	890	13.5
12	Leipzig/Halle	821	-9.0
13	Dortmund	751	15.0
14	Dresden	695	1.6
15	Munster	415	27.3
16	Memmingen	397	5.3
17	Frankfurt Hahn	361	-26.3
18	Karlsruhe/Baden Baden	264	-5.7
19	Friedrichshafen	230	-12.9
20	Dusseldorf Niederrhein	191	-17.7
21	Saarbrücken Ensheim	186	232.1
22	Paderborn	163	-23.5
23	Mannheim	146	80.2
24	Rostock-Laage	48	---
25	Westerland	24	-11.1

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

Rank	Airport	03/2020	Growth rate
1	Amsterdam	19,591	-1.5
2	London Heathrow	19,571	-2.0
3	Frankfurt International	19,471	-5.0
4	Paris Charles de Gaulle	18,614	-1.6
5	Istanbul Ataturk	17,061	-3.3
6	Madrid Barajas	16,460	1.3
7	Munich International	15,888	-2.0
8	Moscow Sheremetyevo International	14,783	-5.6
9	Barcelona	12,619	1.7
10	London Gatwick	10,720	-2.8
11	Vienna	10,713	5.1
12	Copenhagen	10,387	-2.1
13	Rome Fiumicino	10,349	-13.2
14	Oslo	10,283	2.4
15	Stockholm Arlanda	9,534	-2.0
16	Istanbul Sabiha Gokcen	9,369	1.5
17	Zurich	9,135	-6.9
18	Paris Orly	8,956	-1.3
19	Dublin	8,668	-0.0
20	Lisbon	8,577	4.7
21	Dusseldorf International	8,081	-6.5
22	Brussels	8,066	0.7
23	Helsinki	7,714	-0.7
24	Moscow Domodedovo	7,557	-0.3
25	Berlin Tegel	7,313	-7.6

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

Rank	Airline	03/2020	Growth rate
1	American Airlines	201,977	1.0
2	Delta Air Lines	172,686	2.6
3	United Airlines	157,812	2.4
4	Southwest Airlines	119,749	-2.5
5	Ryanair	60,148	4.5
6	IndiGo Air	49,699	19.5
7	easyJet	48,547	1.7
8	Air Canada	46,179	-6.4
9	LATAM	45,322	17.5
10	Lufthansa German Airlines	44,959	-4.8
11	China Southern Airlines	40,566	-40.0
12	Alaska Airlines	40,552	3.3
13	Turkish Airlines	39,066	-3.9
14	China Eastern Airlines	35,601	-45.6
15	All Nippon Airways	34,406	-3.8
16	Air France	32,527	18.2
17	JetBlue Airways Corporation	31,841	-1.9
18	Air China	31,840	-23.2
19	British Airways	30,544	-1.2
20	Aeroflot Russian Airlines	29,284	-2.6
21	SAS Scandinavian Airlines	26,565	-0.2
22	Azul	26,160	14.6
23	Japan Airlines International	24,809	-3.4
24	Qantas Airways	24,015	3.1
25	Gol Transportes Aereos	23,695	17.2

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

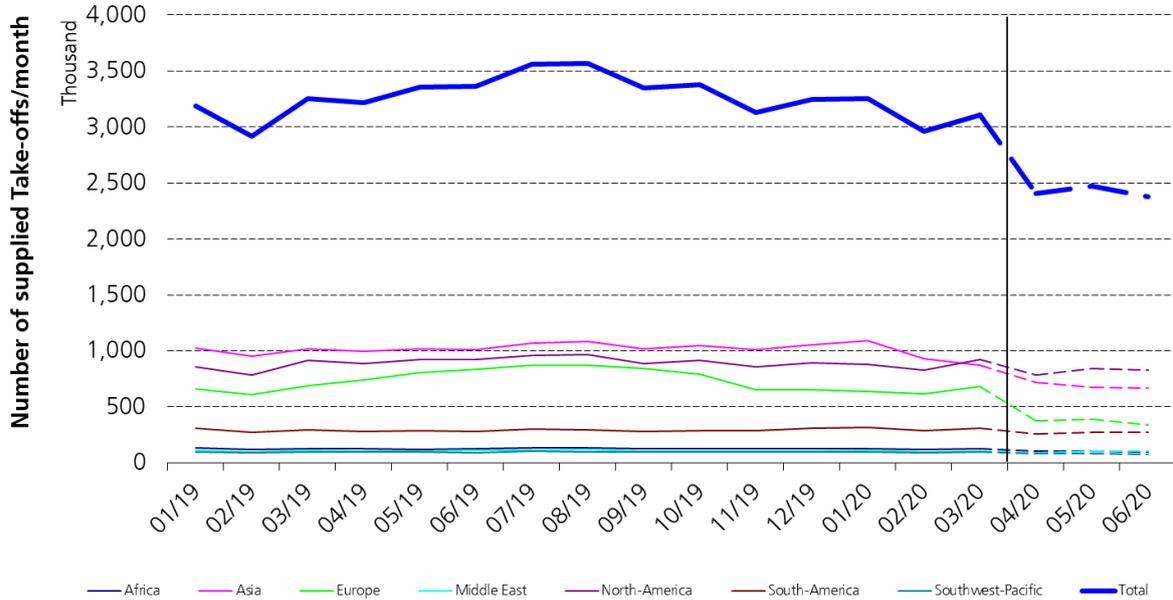
Rank	Airline	03/2020	Growth rate
1	Lufthansa German Airlines	28,031	-4.5
2	Eurowings	11,028	-11.2
3	easyJet	4,696	-9.3
4	Ryanair	3,724	-12.2
5	British Airways	1,560	-9.2
6	Swiss	1,455	7.9
7	Austrian Airlines AG	1,356	-11.0
8	Wizz Air	1,323	28.3
9	KLM-Royal Dutch Airlines	1,318	-2.9
10	Air France	1,262	8.3
11	Turkish Airlines	1,160	-2.5
12	Condor Flugdienst	1,124	-8.2
13	Air Dolomiti	1,080	87.5
14	SAS Scandinavian Airlines	1,039	-2.6
15	TUIfly	885	1.3
16	Aeroflot Russian Airlines	884	0.5
17	Lauda	701	29.3
18	SunExpress	642	5.8
19	LOT - Polish Airlines	617	2.2
20	Pegasus Airlines	550	6.0
21	Iberia	454	0.7
22	United Airlines	449	11.1
23	Finnair	432	8.0
24	TAP Air Portugal	393	-15.3
25	Alitalia	341	27.7

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

Rank	Airline	03/2020	Growth rate
1	Ryanair	58,443	4.3
2	easyJet	47,570	1.2
3	Lufthansa German Airlines	41,682	-4.3
4	Turkish Airlines	33,303	-5.7
5	Air France	29,004	21.0
6	SAS Scandinavian Airlines	26,243	0.0
7	British Airways	24,778	-2.5
8	Aeroflot Russian Airlines	24,688	-3.0
9	KLM-Royal Dutch Airlines	18,679	-1.7
10	Iberia	16,723	2.2
11	Eurowings	16,267	-11.9
12	Wizz Air	16,190	22.0
13	Vueling Airlines	15,156	1.1
14	Pegasus Airlines	14,193	3.9
15	Alitalia	12,578	-11.1
16	Flybe	12,077	-12.7
17	Finnair	10,882	3.1
18	Swiss	10,833	-2.9
19	LOT - Polish Airlines	10,622	2.2
20	Wideroe's Flyveselskap	10,595	6.5
21	Austrian Airlines AG	10,480	0.6
22	TAP Air Portugal	9,656	1.0
23	Norwegian Air Shuttle	8,938	-5.4
24	Aer Lingus	7,822	-1.2
25	Air Europa	7,180	-9.7

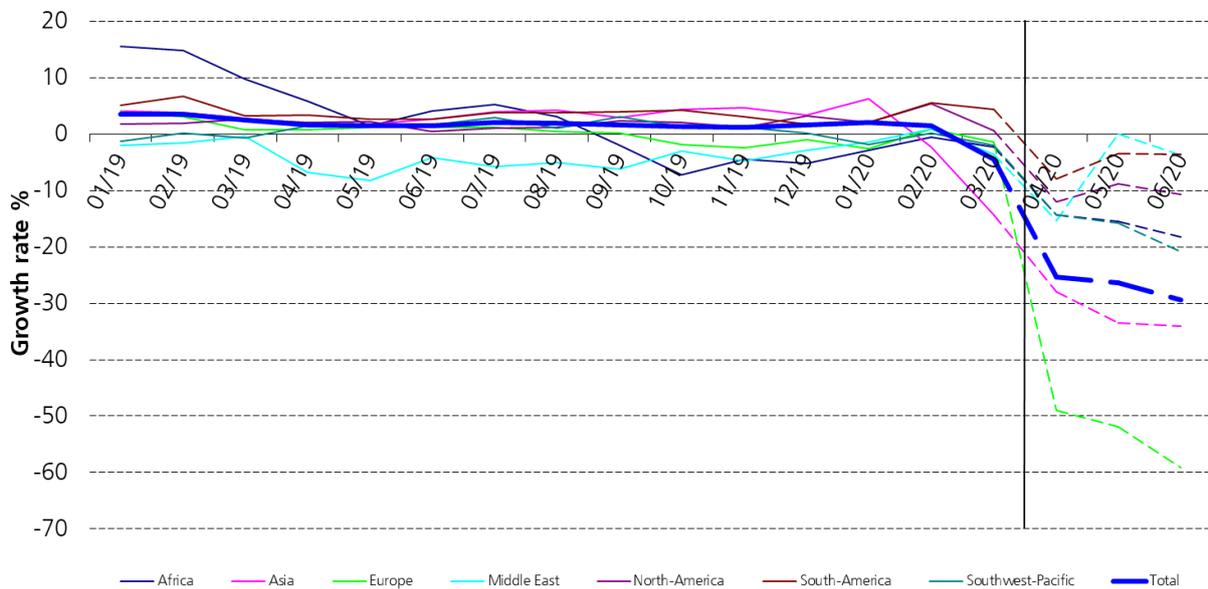
Tab. 5: Number of monthly Take-offs by the largest Airlines in Europe from European airports

Source: OAG 2019/20, DLR 2019/20 (OAG data as of 3/1/2020)



Source: OAG 2019/2020, DLR 2019/2020

Fig. 1: Development of the Global Air Transport Supply (OAG until March as of 3/1/2020, Forecast as of 3/13/2020)



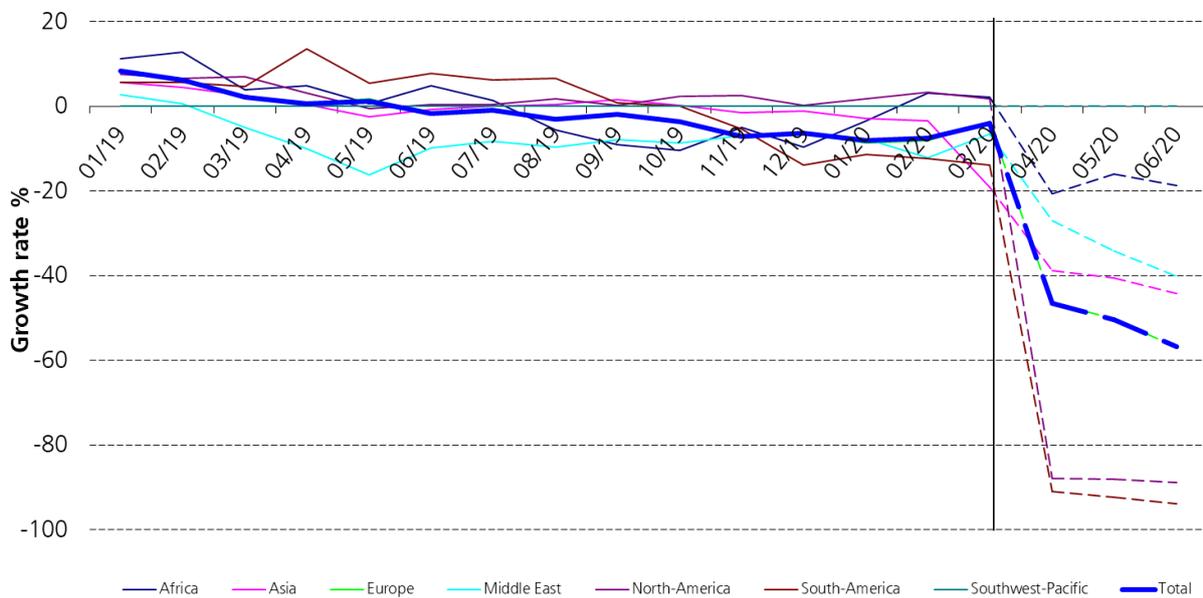
Source: OAG 2019/2020, DLR 2019/2020

Fig. 2: Changes in the Global Air Transport Supply (seasonally adjusted, OAG until March as of 3/1/2020, Forecast as of 3/13/2020)



Source: OAG 2019/2020, DLR 2019/2020

Fig. 3: Development of the German Air Transport Supply (OAG until March as of 3/1/2020, Forecast as of 3/13/2020)



Source: OAG 2019/2020, DLR 2019/2020

Fig. 4: Changes in the German Air Transport Supply (seasonally adjusted, OAG until March as of 3/1/2020, Forecast as of 3/13/2020)

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