



**United Kingdom**

Blue Fin Building  
110 Southwalk Street  
London SE1 0TA  
Phone: +44 (0)20 7922 1930  
Fax: +44 (0)20 7922 1931  
www.strglobal.com

**United States**

735 East Main Street  
Hendersonville  
TN 37075  
Phone: +1 (615) 824 8664  
Fax: +1 (615) 824 3848  
www.strglobal.com

## Sample Market Forecast

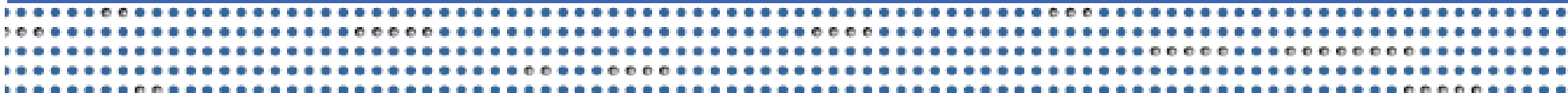


Created May 2016

	Tab
Table of Contents	1
Recent Market Performance	2
At A Glance - Annual & Quarterly Outlook	3
At A Glance - Monthly	4
Forecast Comparison	5
Rankings	6
Macro Forecasts	7
Macro Summary	8
International Visitors	9
Raw Data	10
Glossary	11
Methodology	12

**Disclaimer:**

While STR takes reasonable steps to provide accurate data, the information contained in this report is simply a forecast and is not a guarantee of future events or of future performance. The information in the forecast is not intended to constitute legal, tax, consulting or other similar advice or services, and is subject to change by STR as circumstances may warrant. Please consult your agreement or contract for any further warranties or disclaimers associated with this report.





## Recent Market Performance

Current Metrics (Euro - €)						
	Occupancy (%)	ADR	RevPAR	Supply (mn)	Demand (mn)	Revenue (mn)
2016 Q1	65.2%	106.48	69.46	1.1	0.7	74.67
2016 YTD	65.2%	106.48	69.46	1.1	0.7	74.67
2016 Q1 (% change year ago)	-1.0%	-1.8%	-2.8%	2.8%	1.8%	-0.1%
2016 YTD (% change year ago)	-1.0%	-1.8%	-2.8%	2.8%	1.8%	-0.1%

Recent Growth (CAGR)*						
	Occupancy	ADR	RevPAR	Supply	Demand	Revenue
Past 6 months	-1.2%	1.0%	-0.2%	2.8%	1.5%	2.5%
Past 12 months	-1.0%	-1.8%	-2.8%	2.8%	1.8%	-0.1%
Past 2 years	-1.4%	4.6%	3.1%	1.4%	-0.1%	4.5%
Past 5 years	2.6%	1.7%	4.3%	1.9%	4.6%	6.3%
2016 - 2018	1.0%	2.1%	3.1%	2.6%	3.7%	5.8%

\* Compound Annual Growth Rate (CAGR) is the annualised growth rate over that period

Cumulative Growth						
	Occupancy	ADR	RevPAR	Supply	Demand	Revenue
Past 2 years	-2.8%	9.4%	6.3%	2.8%	-0.2%	9.2%
Past 5 years	13.9%	8.6%	23.7%	9.9%	25.1%	35.9%
2016 - 2018	2.0%	4.1%	6.2%	5.4%	7.5%	11.9%

Average occupancy fell -1% on a year-over-year basis, in 2016 Q1, while ADR dropped -1.8%

Revenue Per Available Room (RevPAR) has fallen -2.8%, in 2016 YTD

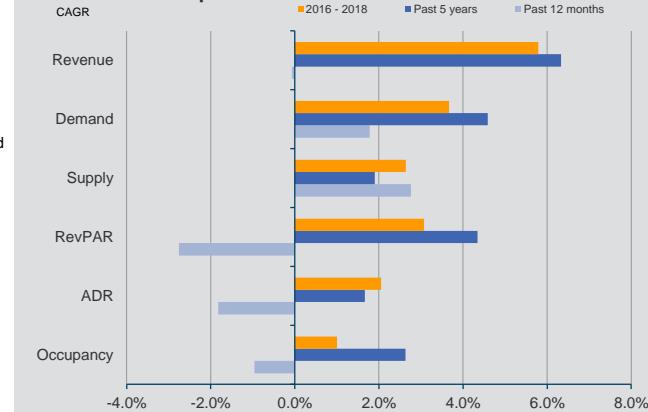
Over the next two years occupancy growth is expected to be below the average for the last 5 years

ADR growth is expected to be faster than during the last 5 years  
Consequently, RevPAR growth is expected to exceed growth during the last 5 years

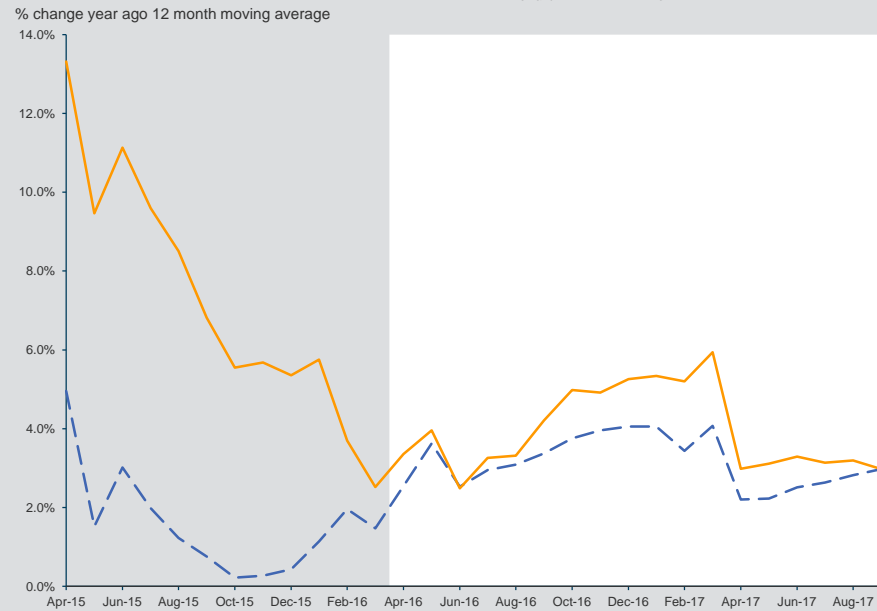
Over the past five years, room demand has expanded 25.1%, an average of 4.6% per annum

Meanwhile, ADR has expanded 8.6%, an average of 1.7% per annum

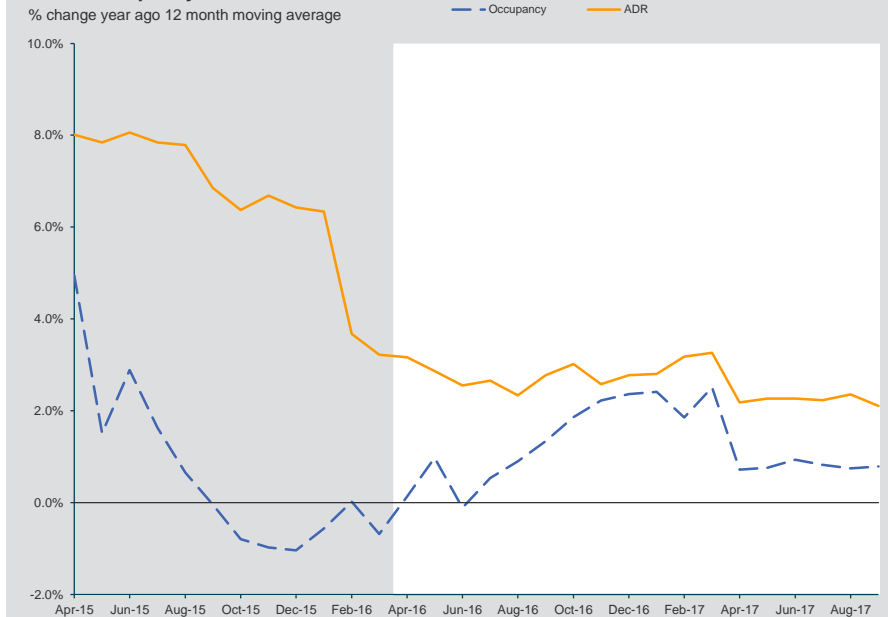
### Performance Comparisons Over Time



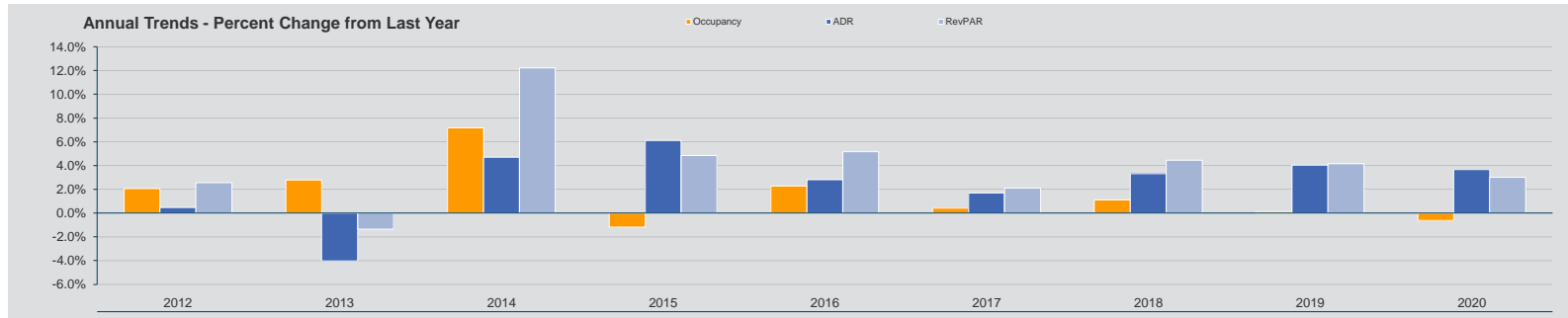
### Market Demand and RevPAR



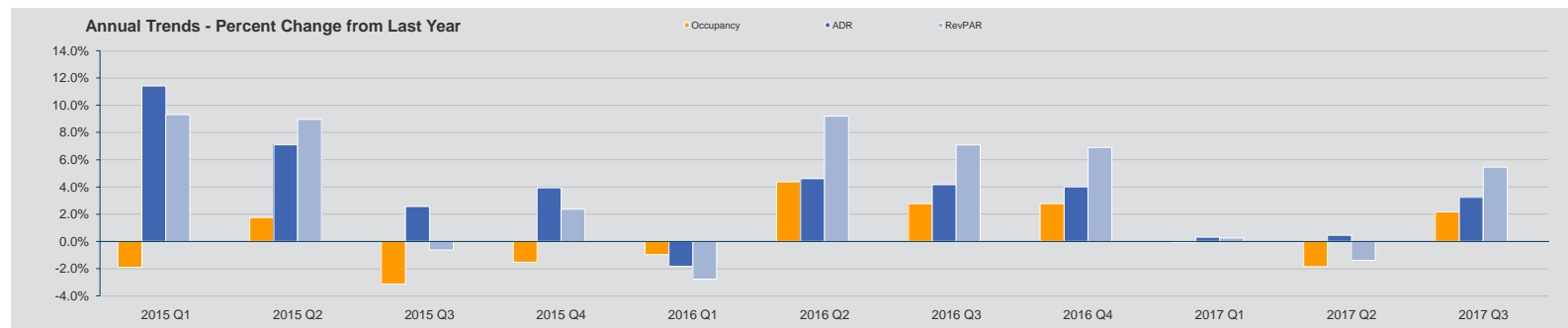
### Market Occupancy and ADR



At A Glance - Annual & Quarterly Outlook



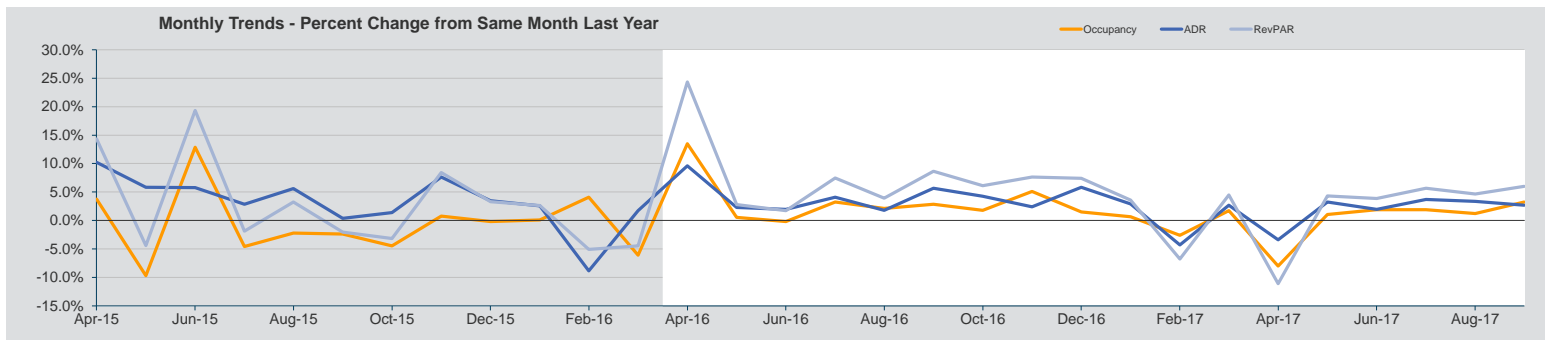
Annual Performance		Occupancy		ADR		RevPAR		Supply		Demand		Revenue	
	Year	%	% Change	Euro - €	% Change	Euro - €	% Change	Room nights - Mn	% Change	Room nights - Mn	% Change	Euro - € mn	% Change
Actual	2012	63.2	2.1%	98.14	0.5%	62.03	2.6%	4.2	4.3%	2.7	6.4%	261.76	6.9%
	2013	65.0	2.8%	94.19	-4.0%	61.19	-1.3%	4.2	0.5%	2.8	3.3%	259.57	-0.8%
	2014	69.6	7.2%	98.62	4.7%	68.66	12.2%	4.2	0.0%	3.0	7.2%	291.28	12.2%
	2015	68.8	-1.2%	104.64	6.1%	71.98	4.8%	4.3	1.5%	3.0	0.3%	309.95	6.4%
Forecast(f)	2016	70.4	2.3%	107.59	2.8%	75.70	5.2%	4.4	1.6%	3.1	4.0%	331.27	6.9%
	2017	70.7	0.4%	109.40	1.7%	77.30	2.1%	4.5	2.4%	3.2	2.8%	346.36	4.6%
	2018	71.4	1.1%	113.02	3.3%	80.74	4.5%	4.6	3.5%	3.3	4.7%	374.61	8.2%
	2019	71.5	0.1%	117.58	4.0%	84.10	4.2%	4.8	3.0%	3.4	3.1%	401.86	7.3%
	2020	71.1	-0.6%	121.87	3.7%	86.63	3.0%	4.9	3.0%	3.5	2.3%	426.24	6.1%



Quarterly Performance		Occupancy		ADR		RevPAR		Supply		Demand		Revenue	
	Quarter	%	% Change	Euro - €	% Change	Euro - €	% Change	Room nights - Mn	% Change	Room nights - Mn	% Change	Euro - € mn	% Change
Actual	2015 Q1	65.9	-1.9%	108.45	11.4%	71.43	9.3%	1.0	0.0%	0.7	-1.9%	74.72	9.3%
	2015 Q2	69.0	1.7%	103.65	7.1%	71.53	9.0%	1.1	0.4%	0.7	2.2%	75.99	9.5%
	2015 Q3	68.1	-3.1%	98.48	2.6%	67.03	-0.6%	1.1	2.8%	0.7	-0.4%	73.65	2.1%
	2015 Q4	72.1	-1.5%	108.06	3.9%	77.89	2.4%	1.1	2.8%	0.8	1.2%	85.58	5.2%
	2016 Q1	65.2	-1.0%	106.48	-1.8%	69.46	-2.8%	1.1	2.8%	0.7	1.8%	74.67	-0.1%
Forecast(f)	2016 Q2	72.0	4.4%	108.43	4.6%	78.10	9.2%	1.1	2.3%	0.8	6.8%	84.87	11.7%
	2016 Q3	70.0	2.8%	102.60	4.2%	71.78	7.1%	1.1	0.3%	0.8	3.0%	79.06	7.3%
	2016 Q4	74.1	2.8%	112.39	4.0%	83.26	6.9%	1.1	1.3%	0.8	4.1%	92.67	8.3%
	2017 Q1	65.2	-0.1%	106.81	0.3%	69.64	0.3%	1.1	2.2%	0.7	2.2%	76.53	2.5%
	2017 Q2	70.7	-1.8%	108.91	0.4%	77.01	-1.4%	1.1	2.5%	0.8	0.6%	85.78	1.1%
	2017 Q3	71.5	2.2%	105.91	3.2%	75.69	5.5%	1.1	2.7%	0.8	4.9%	85.60	8.3%



At A Glance - Monthly



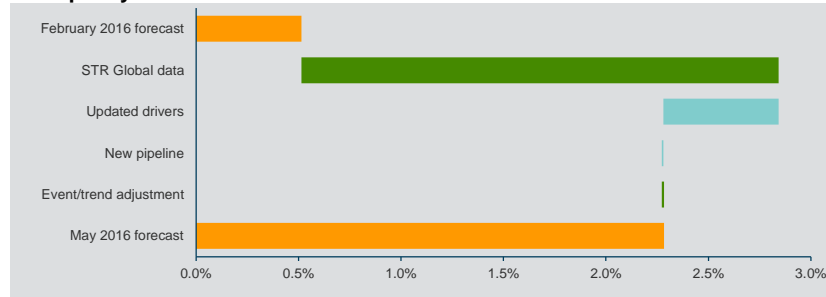
Monthly Performance

	Month	Occupancy		ADR		RevPAR		Supply		Demand		Revenue	
		%	% Change	Euro - €	% Change	Euro - €	% Change	RN - Mn	% Change	RN - Mn	% Change	Euro - € mn	% Change
<b>Actual</b>	Apr-2015	67.0	3.7%	102.30	10.2%	68.54	14.3%	0.3	0.0%	0.2	3.7%	23.90	14.3%
	May-2015	66.0	-9.7%	104.51	5.9%	69.01	-4.4%	0.4	0.0%	0.2	-9.7%	24.87	-4.4%
	Jun-2015	74.0	12.9%	104.06	5.8%	77.04	19.4%	0.4	1.3%	0.3	14.4%	27.22	20.9%
	Jul-2015	68.6	-4.6%	94.53	2.9%	64.82	-1.9%	0.4	2.8%	0.3	-2.0%	24.00	0.8%
	Aug-2015	59.7	-2.2%	89.76	5.6%	53.56	3.3%	0.4	2.8%	0.2	0.4%	19.83	6.1%
	Sep-2015	76.2	-2.4%	109.22	0.4%	83.24	-2.1%	0.4	2.8%	0.3	0.3%	29.83	0.6%
	Oct-2015	79.3	-4.5%	112.14	1.4%	88.89	-3.2%	0.4	2.8%	0.3	-1.9%	32.91	-0.5%
	Nov-2015	75.6	0.7%	110.29	7.6%	83.38	8.4%	0.4	2.8%	0.3	3.5%	29.87	11.4%
	Dec-2015	61.5	-0.2%	100.14	3.5%	61.58	3.3%	0.4	2.8%	0.2	2.6%	22.80	6.2%
	Jan-2016	59.1	0.1%	98.73	2.6%	58.34	2.6%	0.4	2.8%	0.2	2.8%	21.60	5.5%
	Feb-2016	70.0	4.1%	112.30	-8.8%	78.64	-5.1%	0.3	2.8%	0.2	7.0%	26.30	-2.5%
	Mar-2016	67.1	-6.1%	107.81	1.7%	72.29	-4.5%	0.4	2.8%	0.2	-3.5%	26.77	-1.9%
	<b>Forecast (f)</b>	Apr-2016	76.0	13.5%	112.11	9.6%	85.24	24.4%	0.4	2.8%	0.3	16.6%	30.54
May-2016		66.4	0.5%	106.87	2.3%	70.93	2.8%	0.4	2.7%	0.2	3.3%	26.26	5.6%
Jun-2016		73.9	-0.2%	106.09	1.9%	78.37	1.7%	0.4	1.4%	0.3	1.2%	28.07	3.1%
Jul-2016		70.8	3.2%	98.40	4.1%	69.64	7.4%	0.4	0.0%	0.3	3.2%	25.78	7.4%
Aug-2016		60.9	2.1%	91.37	1.8%	55.66	3.9%	0.4	0.0%	0.2	2.0%	20.60	3.9%
Sep-2016		78.4	2.8%	115.42	5.7%	90.46	8.7%	0.4	0.9%	0.3	3.7%	32.69	9.6%
Oct-2016		80.7	1.8%	116.90	4.2%	94.32	6.1%	0.4	0.8%	0.3	2.7%	35.22	7.0%
Nov-2016		79.5	5.1%	112.95	2.4%	89.75	7.6%	0.4	0.9%	0.3	6.0%	32.44	8.6%
Dec-2016		62.4	1.5%	105.94	5.8%	66.14	7.4%	0.4	2.2%	0.2	3.7%	25.02	9.7%
Jan-2017		59.5	0.7%	101.59	2.9%	60.44	3.6%	0.4	2.2%	0.2	2.9%	22.87	5.9%
Feb-2017		68.2	-2.6%	107.50	-4.3%	73.30	-6.8%	0.3	2.2%	0.2	-0.5%	25.06	-4.7%
Mar-2017		68.2	1.7%	110.73	2.7%	75.52	4.5%	0.4	2.3%	0.3	4.1%	28.61	6.9%
Apr-2017		69.9	-8.0%	108.32	-3.4%	75.76	-11.1%	0.4	2.4%	0.3	-5.8%	27.79	-9.0%
May-2017	67.1	1.0%	110.33	3.2%	73.98	4.3%	0.4	2.5%	0.3	3.6%	28.07	6.9%	
Jun-2017	75.2	1.9%	108.16	1.9%	81.38	3.8%	0.4	2.6%	0.3	4.6%	29.92	6.6%	
Jul-2017	72.1	1.9%	102.04	3.7%	73.57	5.6%	0.4	2.8%	0.3	4.7%	27.99	8.6%	
Aug-2017	61.7	1.2%	94.43	3.3%	58.24	4.6%	0.4	3.0%	0.2	4.2%	22.19	7.7%	
Sep-2017	80.9	3.3%	118.48	2.7%	95.89	6.0%	0.4	2.2%	0.3	5.5%	35.42	8.4%	

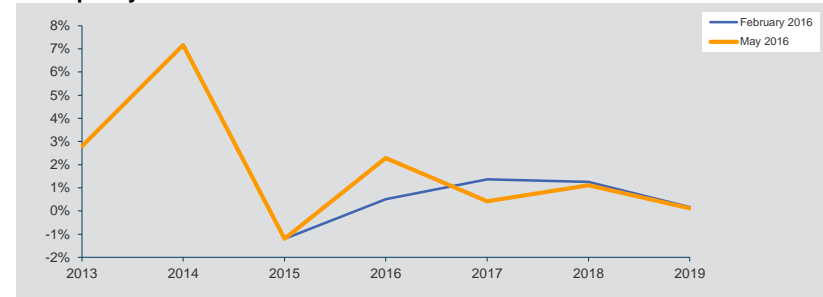
Market Forecast is a publication of STR and is intended solely for use by paid subscribers. Reproduction or distribution of the Market Forecast, in whole or part, without permission of STR is prohibited and subject to legal action. Site licenses are available. Ownership, distribution and use of the Market Forecast and its contents are subject to the terms of the contract you have entered into with STR. Source: 2016 STR.



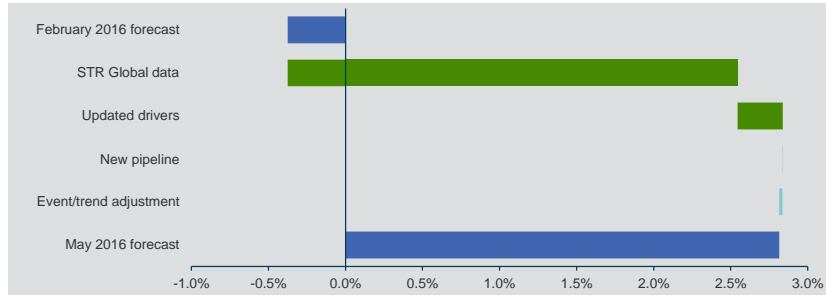
### Occupancy Forecast Evolution 2016



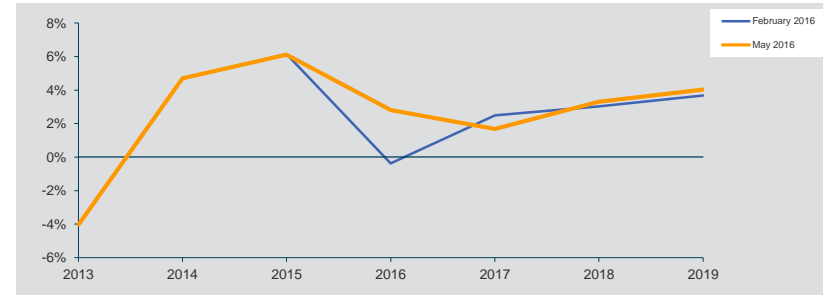
### Occupancy Growth



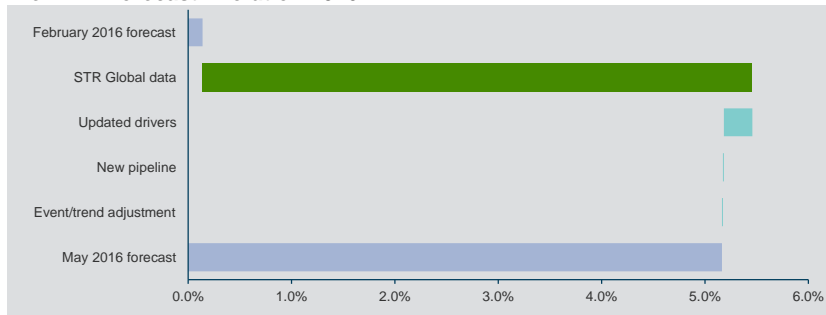
### ADR Forecast Evolution 2016



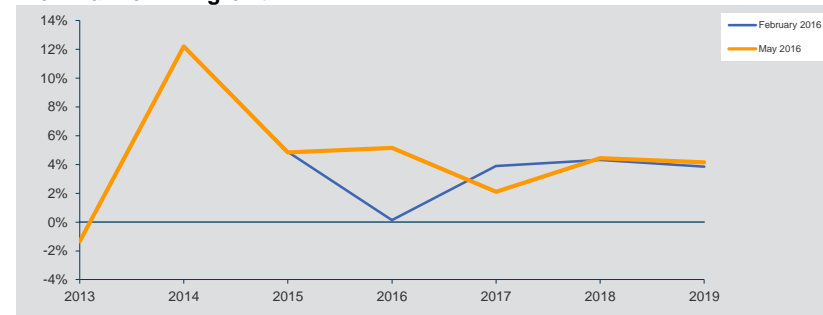
### Nominal ADR Growth



### RevPAR Forecast Evolution 2016



### Nominal RevPAR growth



Charts compare the latest forecast for Occupancy, ADR and RevPAR with forecasts under the previous update. Bar charts show the different effects that new data and forecast assumptions have had on the outlook for the current year:

- STR Global data - the difference between expected performance and actual data in recent months for which we now have new data
- Updated drivers - the impact of changes to the economic outlook on expected lodging performance
- New pipeline - broader effects of changes to the supply outlook due to changes in the pipeline of properties in development
- Event/trend adjustment - the impact of new planned events in that market or other non-economic factors that need to be taken into consideration according to expert judgment



<b>Sample Market</b>		<b>(growth rankings)</b>			
Based on average growth over period		Sort by...			
		Demand		Last 12 months	
		Next 6 months	Next 12 months	Next 2 years	Last 12 months
1	Amsterdam	6	21	21	1
2	Prague	22	25	17	2
3	Moscow	8	6	6	3
4	Barcelona	11	7	16	4
5	Vienna	18	19	19	5
6	Madrid	19	22	13	6
7	Frankfurt	4	10	23	7
8	Dublin	12	11	20	8
9	Berlin	15	13	5	9
10	Hamburg	7	16	3	10
11	Stuttgart	3	17	8	11
12	Athens	14	9	7	12
13	Regional UK (Without London)	13	14	14	13
14	Warsaw	2	23	22	14
15	Zurich	9	15	10	15
16	Copenhagen	20	24	25	16
17	Munich	5	4	15	17
18	London	10	12	9	18
19	Budapest	21	20	12	19
20	Milan	25	8	18	20
21	Rome	16	18	11	21
22	Dusseldorf	1	3	4	22
23	Cologne	17	5	24	23
24	Brussels	24	2	2	24
25	Paris	23	1	1	25

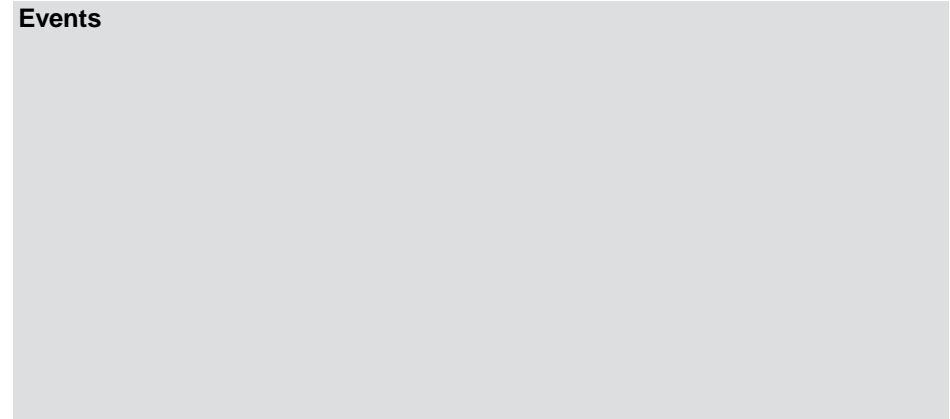
<b>Demand</b>				
	Next 6 months	Next 12 months	Next 2 years	Last 12 months
Sample Market	4.9%	2.2%	3.7%	1.8%
Average	1.0%	3.2%	2.7%	0.9%
Top Market	7.8%	13.0%	7.1%	11.2%
Bottom Market	-11.1%	-0.2%	0.0%	-11.8%

Market Forecast is a publication of STR and is intended solely for use by paid subscribers. Reproduction or distribution of the Market Forecast, in whole or part, without permission of STR is prohibited and subject to legal action. Site licenses are available. Ownership, distribution and use of the Market Forecast and its contents are subject to the terms of the contract you have entered into with STR. Source: 2016 STR.



<b>Forecast for Germany</b>						
(Annual percentage changes unless specified)						
	2014	2015	2016	2017	2018	2019
Domestic Demand	1.3	1.4	2.8	2.5	2.2	1.7
Private Consumption	1.0	1.9	1.9	1.7	1.4	1.1
Fixed Investment	3.5	1.7	2.9	3.7	3.5	2.3
Stockbuilding (% of GDP)	-0.8	-1.3	-0.9	-0.5	-0.2	0.1
Government Consumption	1.7	2.4	3.1	1.9	1.3	1.2
Exports of Goods and Services	3.9	4.8	0.1	3.2	3.2	3.2
Imports of Goods and Services	3.7	5.4	2.5	4.8	4.4	3.9
GDP	1.6	1.5	1.7	1.9	1.8	1.4
Industrial Production	1.5	0.6	0.8	1.7	1.7	1.3
Consumer Prices	0.9	0.2	0.5	1.8	2.0	2.0
Current Balance (% of GDP)	7.4	8.6	8.4	7.7	7.0	6.5
Government Budget (% of GDP)	0.3	0.6	-0.1	0.2	0.2	0.1
Short-Term Interest Rates (%)	0.2	0.0	-0.2	-0.3	-0.1	0.2
Long-Term Interest Rates (%)	1.2	0.5	0.2	0.8	1.5	2.0
Exchange Rate (US\$ per Euro)	1.33	1.11	1.09	1.06	1.09	1.12
Exchange Rate (£ per Euro)	1.24	1.38	1.28	1.35	1.36	1.34

Events



<b>Regional Forecasts</b>						
(Annual percentage change unless specified)						
Sample city	2014	2015	2016	2017	2018	2019
City GDP	2.3	1.5	1.3	2.1	1.9	1.5
City Employment	1.5	0.5	0.7	0.0	0.0	0.0
City Unemployment rate (%)	5.3	5.2	5.1	5.4	5.5	5.5
Household disposable income	2.4	2.5	3.1	1.9	1.5	1.3

<b>Pipeline Development Summary</b>		
(properties and rooms in development)		
	Hotels	Rooms
Existing Stock	237	23,987
Under Construction	4	1,037
Planning Stages	3	868



# Germany Economy

## Overview

### Starting the year with a bang

The latest batch of data suggests that the German economy will have made an impressive start to the year after a lacklustre H2 2015. While industrial production fell by 0.5% in February, this only reversed a small proportion of the previous month's impressive 2.3% rise and means that production is on track to have risen by almost 2% in Q1 as a whole. This would be the strongest quarterly rise since early 2011 and, other things equal, would lift quarterly GDP growth by 0.6pp relative to Q4.

Meanwhile, the resilience of the services PMI and healthy retail sales and new car registrations data mean that our GDP indicator points to a quarterly rise in GDP of about 1% in Q1, a marked pick-up from Q4's 0.3% increase.

For now, we have pencilled in a less robust gain of 0.7% in Q1, suggesting that there is scope for an upside surprise. But note that we suspect that much of Q1's pick-up will reflect temporary factors. So, given the weak global backdrop, it seems unlikely that quarterly industrial production growth of 2% can be sustained for long. Unseasonably warm weather is likely to have supported construction in Q1 as well. Accordingly, the sharper the rise in GDP in Q1, the bigger the likely 'payback' in Q2.

### Recovery to regain steam later in the year

The big picture is that in H1 we expect average quarterly GDP growth to exceed the 0.3% recorded in H2 2015 and over the year as a whole we see average quarterly expansion of about 0.5%. This reflects a number of factors:

- **Exports to recover** – although exports are likely to remain weak in Q1, leading to another notable drag from net trade, we expect the negative forces from the external sector to gradually recede, which will be supportive for growth in the wider economy. And if our forecast for the euro to reverse some of its recent appreciation proves correct, this should also provide exports with a further lift.
- **Consumer spending to remain a bright spot** – household spending is likely to remain strong beyond Q1. Employment continues to rise and although there are few signs of a significant increase in wage pressures in the aggregate data yet, we expect supply bottlenecks to

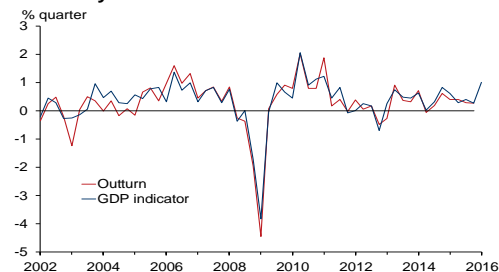
eventually boost wage growth. All this, combined with muted CPI inflation, should result in real household disposable income rising at its sharpest pace since the early 1990s. Against this backdrop, our forecast of household spending growth of 1.9% this year, the same as in 2015, could prove overly cautious and there are thus upside risks to this forecast.

- **Investment to regain momentum** – despite the weak backdrop, investment rose 1.5% in Q4, the strongest since early-2014. Nonetheless, in response to ongoing risks and the slightly weaker export growth outlook, we expect fairly modest investment growth in the coming quarters. Even so, underlying indicators of investment prospects such as profitability and capacity utilisation are positive. What is more, the ECB's more direct attempts to boost the lending channel via the revamp of the Targeted Longer-Term Refinancing Operations and the decision to purchase corporate bonds may support investment. In addition, rising labour costs may also ensure that investment plays a fuller role in the recovery as the year progresses.
- **Stockbuilding to provide a boost** – over the past couple of years, firms have consistently reduced their inventories and we estimate that the volume of stocks is at its lowest since the early-1990s. We assume firms reduce the level of stocks throughout 2016, but at a slower pace than in 2015. This would boost GDP by 0.1% points a quarter this year – whereas in the year to Q3 2015, stock building reduced GDP by 0.1% points a quarter.

Overall, we still see GDP expanding by an above-trend 1.7% this year and expect a further modest acceleration to 1.9% in 2017. Beyond that, we see GDP growth easing back towards its trend rate.

Given Germany's openness to trade, the downside risks to growth stemming from abroad are well flagged. But equally, if the external environment solidifies a bit more quickly, Germany's strong fundamentals could result in more robust growth over the next few quarters.

Germany: GDP



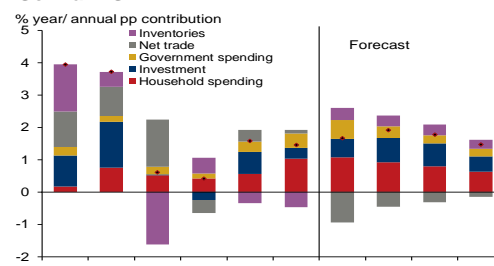
Source : Oxford Economics/Haver Analytics

Germany: Exports and world trade



Source : Oxford Economics/Haver Analytics

German: GDP



Source: Oxford Economics

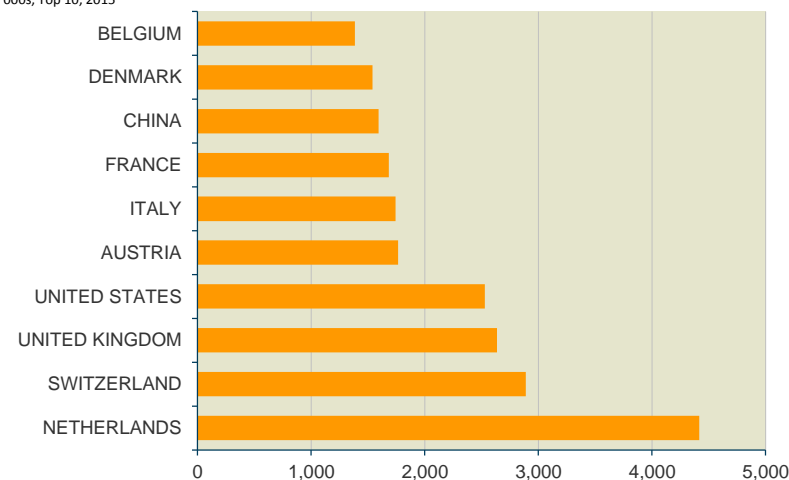




International Visitors to Germany by Country of Origin (000s)		2015
1	NETHERLANDS	4,414.41
2	SWITZERLAND	2,888.00
3	UNITED KINGDOM	2,635.95
4	UNITED STATES	2,527.46
5	AUSTRIA	1,764.14
6	ITALY	1,743.53
7	FRANCE	1,683.39
8	CHINA	1,591.88
9	DENMARK	1,539.69
10	BELGIUM	1,385.43
11	SPAIN	1,037.83
12	SWEDEN	973.95
13	POLAND	927.84
14	RUSSIAN FEDERATION	761.29
15	JAPAN	660.21
16	CZECH REPUBLIC	476.44
17	NORWAY	474.19
18	TURKEY	339.51
19	ISRAEL	338.54
20	FINLAND	326.31

International visits to Germany

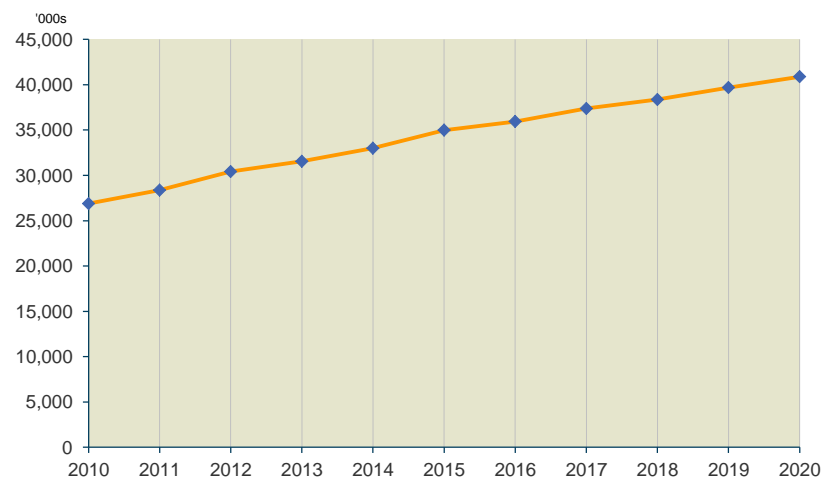
'000s, Top 10, 2015



Source: Tourism Economics, TDM

Expected Annual Average Growth in Visitors to Germany - 2016-2020			
		Average change per year, 000s	% CAGR
1	CHINA	152.76	8.0%
2	UNITED STATES	119.03	4.2%
3	UNITED KINGDOM	118.02	4.0%
4	NETHERLANDS	88.21	1.9%
5	FRANCE	63.28	3.5%
6	ITALY	62.84	3.3%
7	BELGIUM	56.38	3.7%
8	SWEDEN	54.49	5.0%
9	SWITZERLAND	51.68	1.7%
10	JAPAN	50.85	6.5%

International visits to Germany



Source: Tourism Economics, TDM



Monthly Series Sample													
		Occupancy	ADR Euro - €	RevPAR Euro - €	Supply (Millions RN)	Demand (Millions RN)	Room Revenue Euro - € mn	Occupancy (% change)	ADR (% change)	RevPAR (% change)	Supply (% change)	Demand (% change)	Room Revenue (% change)
<b>Actual</b>	Apr-15	67.0%	102.30	68.54	0.3	0.2	23.90	3.7%	10.2%	14.3%	0.0%	3.7%	14.3%
	May-15	66.0%	104.51	69.01	0.4	0.2	24.87	-9.7%	5.9%	-4.4%	0.0%	-9.7%	-4.4%
	Jun-15	74.0%	104.06	77.04	0.4	0.3	27.22	12.9%	5.8%	19.4%	1.3%	14.4%	20.9%
	Jul-15	68.6%	94.53	64.82	0.4	0.3	24.00	-4.6%	2.9%	-1.9%	2.8%	-2.0%	0.8%
	Aug-15	59.7%	89.76	53.56	0.4	0.2	19.83	-2.2%	5.6%	3.3%	2.8%	0.4%	6.1%
	Sep-15	76.2%	109.22	83.24	0.4	0.3	29.83	-2.4%	0.4%	-2.1%	2.8%	0.3%	0.6%
	Oct-15	79.3%	112.14	88.89	0.4	0.3	32.91	-4.5%	1.4%	-3.2%	2.8%	-1.9%	-0.5%
	Nov-15	75.6%	110.29	83.38	0.4	0.3	29.87	0.7%	7.6%	8.4%	2.8%	3.5%	11.4%
	Dec-15	61.5%	100.14	61.58	0.4	0.2	22.80	-0.2%	3.5%	3.3%	2.8%	2.6%	6.2%
	Jan-16	59.1%	98.73	58.34	0.4	0.2	21.60	0.1%	2.6%	2.6%	2.8%	2.8%	5.5%
	Feb-16	70.0%	112.30	78.64	0.3	0.2	26.30	4.1%	-8.8%	-5.1%	2.8%	7.0%	-2.5%
	Mar-16	67.1%	107.81	72.29	0.4	0.2	26.77	-6.1%	1.7%	-4.5%	2.8%	-3.5%	-1.9%
<b>Forecast (f)</b>	Apr-16	76.0%	112.11	85.24	0.4	0.3	30.54	13.5%	9.6%	24.4%	2.8%	16.6%	27.8%
	May-16	66.4%	106.87	70.93	0.4	0.2	26.26	0.5%	2.3%	2.8%	2.7%	3.3%	5.6%
	Jun-16	73.9%	106.09	78.37	0.4	0.3	28.07	-0.2%	1.9%	1.7%	1.4%	1.2%	3.1%
	Jul-16	70.8%	98.40	69.64	0.4	0.3	25.78	3.2%	4.1%	7.4%	0.0%	3.2%	7.4%
	Aug-16	60.9%	91.37	55.66	0.4	0.2	20.60	2.1%	1.8%	3.9%	0.0%	2.0%	3.9%
	Sep-16	78.4%	115.42	90.46	0.4	0.3	32.69	2.8%	5.7%	8.7%	0.9%	3.7%	9.6%
	Oct-16	80.7%	116.90	94.32	0.4	0.3	35.22	1.8%	4.2%	6.1%	0.8%	2.7%	7.0%
	Nov-16	79.5%	112.95	89.75	0.4	0.3	32.44	5.1%	2.4%	7.6%	0.9%	6.0%	8.6%
	Dec-16	62.4%	105.94	66.14	0.4	0.2	25.02	1.5%	5.8%	7.4%	2.2%	3.7%	9.7%
	Jan-17	59.5%	101.59	60.44	0.4	0.2	22.87	0.7%	2.9%	3.6%	2.2%	2.9%	5.9%
	Feb-17	68.2%	107.50	73.30	0.3	0.2	25.06	-2.6%	-4.3%	-6.8%	2.2%	-0.5%	-4.7%
	Mar-17	68.2%	110.73	75.52	0.4	0.3	28.61	1.7%	2.7%	4.5%	2.3%	4.1%	6.9%
	Apr-17	69.9%	108.32	75.76	0.4	0.3	27.79	-8.0%	-3.4%	-11.1%	2.4%	-5.8%	-9.0%
	May-17	67.1%	110.33	73.98	0.4	0.3	28.07	1.0%	3.2%	4.3%	2.5%	3.6%	6.9%
	Jun-17	75.2%	108.16	81.38	0.4	0.3	29.92	1.9%	1.9%	3.8%	2.6%	4.6%	6.6%
	Jul-17	72.1%	102.04	73.57	0.4	0.3	27.99	1.9%	3.7%	5.6%	2.8%	4.7%	8.6%
	Aug-17	61.7%	94.43	58.24	0.4	0.2	22.19	1.2%	3.3%	4.6%	3.0%	4.2%	7.7%
Sep-17	80.9%	118.48	95.89	0.4	0.3	35.42	3.3%	2.7%	6.0%	2.2%	5.5%	8.4%	

Market Forecast is a publication of STR and is intended solely for use by paid subscribers. Reproduction or distribution of the Market Forecast, in whole or part, without permission of STR is prohibited and subject to legal action. Site licenses are available. Ownership, distribution and use of the Market Forecast and its contents are subject to the terms of the contract you have entered into with STR. Source: 2016 STR.



## About Us

### STR

STR provides premium global data benchmarking, analytics and insights for multiple market sectors. Our data is confidential, reliable, accurate and actionable, and our solutions empower our clients to strategize and compete within markets. Founded in 1985, STR's presence has expanded to 10 countries around the world with a corporate North American headquarters in Hendersonville, Tennessee, and an international headquarters in London, England. Our range of products and unrivalled market insights help our clients make better business decisions. But the work we do goes beyond the numbers. Every day, we empower people and their businesses to reach new heights.

### Contacts

North American Clients: Jessica Haywood (jhaywood@str.com)

Non-North American Clients: Forecast Team (forecast@strglobal.com)

### Tourism Economics

Tourism Economics is an Oxford Economics company with a singular focus on quantitative analysis of the travel industry. By combining rigorous modeling with industry knowledge, Tourism Economics develops custom market strategies, industry forecasts, policy analysis and economic impact studies. Our parent company, Oxford Economics, is one of the world's leading providers of economic analysis, forecasts and consulting advice. Founded in 1981 as a joint venture with Oxford University's business college, Oxford Economics enjoys a reputation for high quality, quantitative analysis and evidence-based advice.

### Contacts

North American Clients: Adam Sacks (adam@tourismeconomics.com) or Aran Ryan (aran.ryan@tourismeconomics.com)

Non-North American Clients: David Goodger (dgoodger@oxfordeconomics.com) or Helen McDermott (hmcdermott@oxfordeconomics.com)

## Glossary

The data used to compile this report has been formatted to comply with the accounting policies set out in the tenth Uniform System of Account

### Supply

The number of guest room nights available for sale in the period.

### Demand

The number of guest room nights sold (excludes complimentary rooms) during the period.

### Room Revenue

Total room revenue generated from the sale of guest rooms excluding any taxes and service charges.

### Occupancy

The ratio of occupied rooms to total available rooms expressed as a percentage.

### Average Daily Rate (ADR)

Room revenue (excluding services and taxes) divided by the number of occupied rooms.

### Revenue Per Available Room (RevPAR)

Room revenue divided by available rooms. It can also be calculated by multiplying the average room rate by the room occupancy.

### Percentage Change

Amount of growth or decline from the same period last year (month, year-to-date, twelve months). Calculated as  $((\text{This year} - \text{Last year}) / \text{Last Year}) * 100$ .

### Year to Date (YTD)

Average of sum of values starting January 1 of the given year.

### Business Cycle

Amount of growth or decline from the seasonally adjusted trend. The figures indicate the direction of business whether its growing or declining.

### Smooth Trend

Statistical method to even out small shifts in data and distribute any performance peaks over time.

### Twelve Month Moving Average

The average value of the previous 12 months ending in the current month.

### Compound Annual Growth Rate

The smoothed annualized growth rate over a given time period. Calculated as  $(\text{Ending Value} / \text{Beginning Value})^{(1 / \text{Number of Years})} - 1$ .



## Forecast Methodology Overview

### Overview

Tourism Economics have worked with STR and STR Global to develop a suite of models to accurately track and forecast hotel performance across a number of markets worldwide. Robust equations have been econometrically estimated that closely follow past movements in hotel performance as measured by STR and STR Global data. These equations are used to forecast hotel performance using economic forecasts from Oxford Economics' global macroeconomic database as well as Oxford Economics' global city and region forecasts.

Economic forecasts are augmented with specific intelligence to determine the additional effect on hotel demand and ADR of any events hosted within that market.

Detailed calculation is undertaken using estimated relationships for Supply, Demand and ADR. Occupancy, Revenue and RevPAR are calculated as identities:  $\text{Occupancy} = \text{Demand} / \text{Supply}$ ;  $\text{Revenue} = \text{Demand} * \text{ADR}$ ;  $\text{RevPAR} = \text{Revenue} / \text{Supply}$

### Supply

Expected room supply is calculated in the near term according to the STR and STR Global pipeline database, adjusted for each property's stage in the development process. Projects under construction are more likely to be completed, and completed on time, than those still in the planning process. Different probabilities of completion have also been calculated according to the size and complexity of each project. Property conversions and closures are also accounted for, with estimates of other commercial property demand.

In the medium to long-run the pipeline database is augmented with estimates of past supply trends and the relationship with occupancy. Typically supply growth follows periods of demand and occupancy growth. Notably, periods of sustained above average occupancy rates are followed by supply growth necessary to restore average occupancy. The historic volatility of supply is taken into consideration as well as the lag between occupancy and supply growth and the time taken for occupancy to return to the long-run average.

### Demand

Room demand is estimated and forecast according to a set of key economic drivers relating to both the destination and key origin markets. The relative importance of each economic driver is estimated according to multi-variate regression analysis and the relative volatility of drivers and demand. Long-run trends are also included within the modelling as well as short-run dynamics.

The key drivers are listed below along with the average elasticity across all markets (economic drivers relate to data for the country where not stated). Actual coefficients applied vary to reflect estimated historic relationships specific to each market.

Market GDP	0.24
Country GDP	0.39
Origin country GDP	0.45
Net Wealth	0.10
Company Profits	0.10
Unemployment	-0.02
Exchange Rate	-0.17
ADR (lagged)	-0.15

Note: elasticities refer to the percent change in demand according to the percent change in each driver - a combination of the volatility of each driver as well as it's correlation with demand. For example, this does not necessarily mean that GDP is a better predictor of demand than wealth, but shows that wealth is more volatile so one percent change in wealth has less impact on demand than one percent change in GDP. All indicators are statistically valid.

### Average Daily Rate (ADR)

ADR is estimated and forecast according to recent changes in occupancy as well as price inflation within the country. Over time ADR tends to move in line with prices and wages in the wider economy. As with room demand, long-run trends are also included as well as short-run dynamics. Specifically long-run dynamics ensure that real inflation adjusted ADR returns to long-run trends over the medium to long-run outlook.

In the short-run the relationship between ADR and occupancy is crucial. The lag between changes in occupancy and ADR has been estimated for each market, with different lag timing identified for periods of rising and falling occupancy. With falling occupancy the effect on ADR is almost immediate while there is typically a lag of 6-12 months at other times. The level of occupancy relative to that market's long-run average is also an important factor in determining ADR. For example, falling occupancy but at a historically high level will not have a significant impact on ADR. Similarly rising occupancy will not have as large effect on ADR if occupancy is at a historically low level.