

Danish gambling market statistics

Second quarter, 2018

Indhold

A.	Introduction	1
В.	Overview over market developments in second quarter of 2018	2
C.	Online casinos	5
Deve	lopments in GGR	5
	Quarterly developments	5
	Developments over the last twelve months	10
Cons	sumer behaviour	13
	Game types	13
	Sales channel	16
	When does gambling take place?	17
D.	Betting	20
Deve	lopment in GGR	20
	Quarterly developments	20
	Developments over the last twelve months	24
Cons	sumer behaviour	26
	Sales channels	26
	When does gambling take place?	26
FIFA	World Cup 2018	31
E.	Gaming machines	34
Cons	sumer behavior	38
F.	Land-based casinos	41
G.	Lotteries and betting on horse racing	44
Н.	R0FUS	46

A. Introduction

The Danish Gambling Authority is responsible for ensuring a well-regulated gambling market in Denmark. Quarterly statistics are collated and then published on the Danish Gambling Authority's homepage¹ to provide a common platform for transparency in relation to developments in the gambling market.

The gambling sector comprises of the following sub-sectors, each defined under the Danish Gambling Act (Lov om Spil): ² Lotteries; class lotteries; charity lotteries; online casinos; land-based casinos; the liberalized betting market; betting on horse, dog, and pigeon racing; and, gaming machines (AWP).



Each sub-sectors has its own licensing procedure, reflecting the varying regulatory and commercial issues associated with each market. As such, the data for gambling statistics is recorded at different points in time for each sub-sector, with varying levels of regularity. This report covers the four focus markets - the liberalized betting market,³ online casinos, gaming machines,⁴ and land-based casinos.

The data presented in this report is based upon the estimates that can be drawn from the data available at the time of going to press. These figures are still subject to change, for example in connection with delayed reporting of gambling duties, where previous published numbers have been registered based on estimations.

Statistics relating to gross gaming revenue (GGR), stakes, and winnings are based upon data submitted to the Danish Tax Agency (Skattestyrelsen). Data concerning consumer behavior in the gambling market, including gambling forms within individual markets and sales channels, is sourced from data submitted to the Danish Gambling Authority by gambling operators. Please note, based upon the different data collection methods for recording gambling duties and recording gambling transactions, slight statistical discrepancies between the two datasets are unavoidable.

Quarterly statistics are published approximately two-to-three months after the end of the relevant quarter, dependent upon the availability of data. This reflects the different tax reporting periods for the four focus markets.

¹ The Danish Gambling Authority's homepage can be found at www.spillemyndigheden.dk/en

² Bekendtgørelse af Lov om spil LBK nr. 1494 af 06/12/2016 kan findes her: https://www.retsinformation.dk/Forms/R0710.aspx?id=183646

³ Betting on horse, dog, and pigeon racing was liberalised on 1st of January 2018. From this point onwards, the term "betting" is used to describe the liberalised betting market.

⁴ From this point onwards, the term "gaming machines" is used instead of "prize-giving gaming machines". The Danish Gambling Authority does not hold data for gaming machines that do not offer cash prizes.

B. Overview over market developments in second quarter of 2018

Combined gross gaming revenue (GGR)⁵ figures for betting, online casinos, gaming machines, and landbased casinos was 1,630.3 million DKK for 2018 Q2 (see table 1).6 Quarterly GGR is 6.9 percent higher than 2018 Q1 and 11.5 percent higher than 2017 Q2. The difference between 2018 Q1 and 2018 Q2 stems primarily from 16.7 percent higher GGR for betting, furthermore GGR for online casinos is 3.1 percent higher in the same period. Both land-based casinos and gaming machines recorded lower quarterly GGR than 2018 Q1, with falls of 1.3 percent and 0.9 percent respectively.

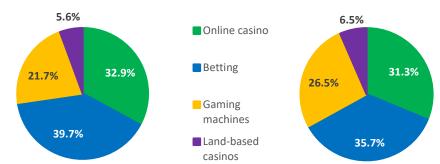
GGR for betting in 2018 Q2 is higher than 2018 Q1, which is a consequence of GGR for 2018 Q2 containing betting on horse races, and at the same time the FIFA World Cup is held in this period. GGR for online casinos continues to follow an upwards trajectory, while GGR for land-based casinos has been relatively stable since the third quarter of 2015. GGR for gaming machines continues to follow a slight downward trend.

As illustrated in Figure 1, betting accounts for the largest share (39.7 percent) of the combined four focus markets in 2018 Q2, followed by online casinos (32.9 percent), gaming machines (21.7 percent) and land-based casinos (5.6 percent). The order is unchanged from 2017 Q2, where betting accounted for 35.7 percent of combined GGR, online casinos for 31.3, gaming machines for 26,5 percent, and landbased casinos for 6.5 percent.

Figure 2 charts the developments in GGR for the individual markets since 2012, indexed against 2014 Q1 (index 100).7 The online casino market has experienced the most growth since 2012, followed by betting, and land-based casinos, while GGR from gaming machines has fallen in the same period. The market for betting was liberalized on 1st of January 2012, which simultaneously involves a regulated market for online casino games in Denmark.



Figure 1. Market shares of the four focus markets (compared to second quarter of 2017)



Source: Tax returns submitted to the Danish Tax Agency.

⁵ GGR is the sum of stakes placed, minus prizes, plus commission paid to participate in gambling.

⁶ Statistics for lotteries and horse racing (2012-2017) are published in a separate section - Section G. This is because the comparisons with the four aforementioned focus markets is set out annually due to different reporting periods, and therefore varies from the above due to a lower level of detail. Statistics on horse racing has been included in the quarterly numbers on the total betting market since 2018 Q2.

⁷ The first quarter of 2014 is chosen as the starting point, as it marks two years after the liberalisation of the betting and online casino markets, giving the markets time to have stabilised.

Table 1. Quarterly GGR for the four focus markets since first quarter of 2012 (million DKK)

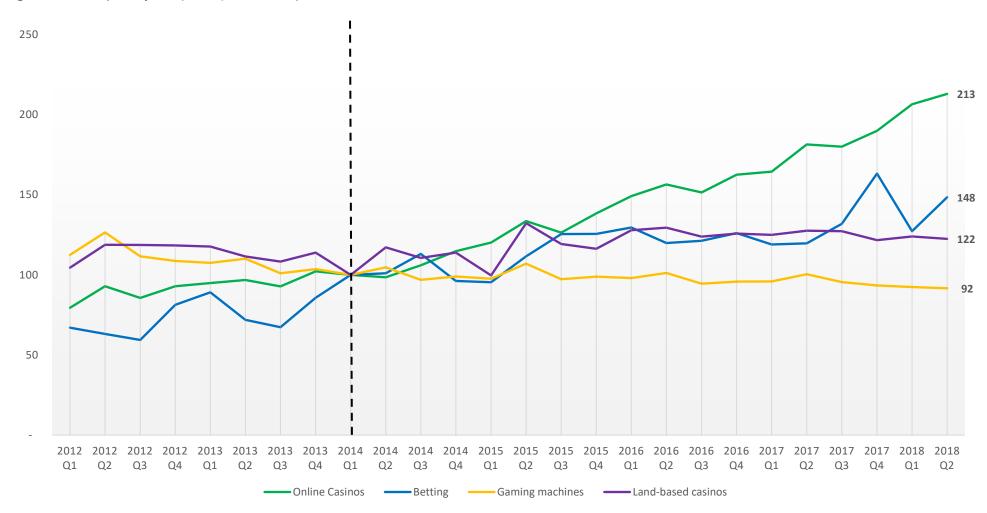
		Online ca- sinos	Betting	Gaming machines	Land-based casinos	Combined GGR
In millio DKK	n			5	(\$)	
	Q1	200.5	292.5	434.4	78.1	1,005.5
	Q2	234.4	275.9	488.4	88.7	1,087.4
2012	Q3	216.1	259.3	431.0	88.7	995.1
	Q4	234.4	347.3	419.8	88.5	1,090.1
	Year	885.4	1,175.0	1,773.6	344.0	4,178.0
	Q1	239.5	389.1	415.0	88.0	1,131.5
	Q2	244.3	313.9	425.2	83.3	1,066.8
2013	Q3	234.2	293.9	390.2	80.9	999.3
	Q4	257.9	374.3	400.1	85.1	1,117.5
	Year	975.9 👚	1,371.3 👚	1,630.5		4,315.0
	Q1	252.3	436.5	386.2	74.7	1,142.4
	Q2	248.4	440.8	404.2	87.6	1,199.2
2014	Q3	267.3	493.8	374.4	82.6	1,218.1
	Q4	289.7	420.1	382.2	85.1	1,177.1
	Year	1,057.8	1,791.2	1,546.9	00012 1	4,725.9
	Q1	303.3	416.4	376.8	74.5	1,171.0
0045	Q2	337.0	487.3	413.1	98.8	1,336.2
2015	Q3	318.8	547.6	375.6	89.2	1,331.2
	Q4	349.1	548.0	382.0	86.9	1,365.9
	Year	1,308.2	1,999.2	1,547.6	349.4	5,204.3
	Q1	376.3	565.4	378.6	95.6	1,415.8
2010	Q2	394.6	523.2	390.6	96.7	1,405.1
2016	Q3	382.1	529.3	364.8	92.6	1,368.8
	Q4 Year	410.0 1,562.9 1	550.4	370.0 1,504.0 ↓	94.0 378.9 1	1,424.4 5,614.1
	Q1	414.9	2,168.3 1 519.2	370.3	93.4	1,397.7
	Q1 Q2	457.5	519.2	387.5	95.4	1,462.8
2017	Q2 Q3	457.5 454.1	522.4 575.4	368.6	95.4 95.1	1,482.8
2017	Q3 Q4	479.1	712.4	360.6	90.9	1,637.9
	Year	1,805.6	2,329.4	1,487.0		5,996.8
	Q1	520.8	555.4	356.9	92.7	1,525.8
	Q2	537.2	648.1	353.8	91.5	1,630.6
2018	Q2 Q3	JJ 1 .Z	040.1	333.0	91.0	1,030.0
2010	Q3 Q4					
	Year					
	I Cal					

Development in combined GGR up until 2018 Q2:

Q1 2012 62.2 % Q1 2014 41.8 % Q1 2017 11.5 % Q4 2017 6.9 %

- frowth on previous year
- Decline on previous year

Figure 2. Indexed quarterly GGR (2014 Q1= index 100)



C. Online casinos

Developments in GGR

Quarterly developments

Online casinos registered 537.2 million DKK in GGR in 2018 Q2, growth of 3.1 percent (16.4 million DKK) relative to 2018 Q1. This equates to growth of 17.4 percent in relation to 2017 Q2, a rise of 79.7 million DKK (see Table 2). These developments follow the general upwards trend seen since 2012.

The reason for the growth in 2018 Q2 is due to games without commission, with a growth in GGR of 4.2 percent in 2018 Q2 compared to 2018 Q1. GGR for commission games, which include multi-player casino games where GGR is generated through payment of a fee (commission) to participate, has fallen 9.5 percent from 2018 Q1 to 2018 Q2. The fall in commission games happens after a growth of 27.7 percent from 2017 Q4 to 2018 Q1, which probably is due to the liberalization of online bingo, where games without commission have a large market share. The fall in games with commission from 2018 Q1 to 2018 Q2 is following the same tendency as every year since 2012.

Compared with 2014 Q1, quarterly BSI for online casinos has grown by 112.9 percent. This growth has been driven by games without commission, which lies 143.6 percent higher in 2018 Q2 than 2014 Q1. GGR for commission games has fallen by 20.9 percent in this period, with commission GGR highest in the first quarter of the year. Total quarterly GGR growth, non-commission GGR, and commission GGR are charted in Figure 3, indexed against the first quarter of 2014 and corrected for the varying lengths of each quarter.

In addition, Figure 4 charts the impact of the payout ratio on GGR for games without commission. The payout ratio has been gradually growing since 2012 with the lowest payout ratio of 95.6 percent in 2013 Q1, and the highest payout ratio of 96.5 percent in 2017 Q4. The payout ratio has been above 96.0 percent since 2015 Q1.

Table 2. Quarterly stakes, prizes, commission and GGR8 for online casinos (million DKK)



Q1 3,538.9 3,400.3 61.9 200.5 Q2 4,123.0 3,943.8 55.1 234.4 Q4 4,275.4 4,095.7 54.8 234.4 Year 15,674.9 15,016.3 226.7 885.4 Q1 4,186.2 4,003.3 56.6 239.5 Q2 4,672.2 4,478.0 50.1 244.3 2013 Q3 4,864.3 4,673.8 43.7 234.2 Q4 5,141.6 4,929.6 45.8 257.9 Year 18,864.4 18,084.7 196.2 975.9 Q1 5,109.8 4,904.5 46.9 252.3 Q2 5,242.3 5,031.7 37.8 248.4 2014 Q3 5,844.7 5,618.4 41.0 267.3 Q4 6,109.5 5,860.7 40.9 289.7 Year 22,306.4 21,415.2 166.6 1,057.8 Q1 6,447.0 6,189.0 45.3 303.3 Q2 7,318.3 7,023.6 42.3 337.0	In millio	on	Stakes	- Prizes	+	commission	=	GGR
2012 Q3 3,737.7 3,576.4 54.9 216.1 Q4 4,275.4 4,095.7 54.8 234.4 Year 15,674.9 15,016.3 226.7 885.4 Q1 4,186.2 4,003.3 56.6 239.5 Q2 4,672.2 4,478.0 50.1 244.3 2013 Q3 4,864.3 4,673.8 43.7 234.2 Q4 5,141.6 4,929.6 45.8 257.9 Year 18,864.4 18,084.7 196.2 975.9 Q1 5,109.8 4,904.5 46.9 252.3 Q2 5,242.3 5,031.7 37.8 248.4 2014 Q3 5,844.7 5,618.4 41.0 267.3 Q4 6,109.5 5,860.7 40.9 289.7 Year 22,306.4 21,415.2 166.6 1,057.8 Q1 6,447.0 6,189.0 45.3 303.3 Q2 7,318.3 7,023.6 42.3 337.0 2015 Q3 7,277.7 6,997.7		Q1	3,538.9	3,400.3		61.9		200.5
Q4 4,275.4 4,095.7 54.8 234.4 Year 15,674.9 15,016.3 226.7 885.4 Q1 4,186.2 4,003.3 56.6 239.5 Q2 4,672.2 4,478.0 50.1 244.3 2013 Q3 4,864.3 4,673.8 43.7 234.2 Q4 5,141.6 4,929.6 45.8 257.9 Year 18,864.4 18,084.7 196.2 975.9 Q1 5,109.8 4,904.5 46.9 252.3 Q2 5,242.3 5,031.7 37.8 248.4 2014 Q3 5,844.7 5,618.4 41.0 267.3 Q4 6,109.5 5,860.7 40.9 289.7 Year 22,306.4 21,415.2 166.6 1,057.8 Q1 6,447.0 6,189.0 45.3 303.3 2015 Q3 7,277.7 6,997.7 38.8 318.8 Q4 7,975.7 7,664.8 38.2 349.1 Year 29,018.7 27,875.1 164.6 <td></td> <td>Q2</td> <td>4,123.0</td> <td>3,943.8</td> <td></td> <td>55.1</td> <td></td> <td>234.4</td>		Q2	4,123.0	3,943.8		55.1		234.4
Year 15,674.9 15,016.3 226.7 885.4 Q1 4,186.2 4,003.3 56.6 239.5 Q2 4,672.2 4,478.0 50.1 244.3 2013 Q3 4,864.3 4,673.8 43.7 234.2 Q4 5,141.6 4,929.6 45.8 257.9 Year 18,864.4 18,084.7 196.2 975.9 Q1 5,109.8 4,904.5 46.9 252.3 Q2 5,242.3 5,031.7 37.8 248.4 2014 Q3 5,844.7 5,618.4 41.0 267.3 Q4 6,109.5 5,860.7 40.9 289.7 Year 22,306.4 21,415.2 166.6 1,057.8 Q1 6,447.0 6,189.0 45.3 303.3 Q2 7,318.3 7,023.6 42.3 337.0 2015 Q3 7,277.7 6,997.7 38.8 318.8 Q4 7,975.7 7,664.8 38.2 349.1 Year 29,278.5 8,921.1 37.1	2012	Q3	3,737.7	3,576.4		54.9		216.1
Q1			4,275.4	4,095.7		54.8		
Q2 4,672.2 4,478.0 50.1 244.3 2013 Q3 4,864.3 4,673.8 43.7 234.2 Q4 5,141.6 4,929.6 45.8 257.9 Year 18,864.4 18,084.7 196.2 975.9 Q1 5,109.8 4,904.5 46.9 252.3 Q2 5,242.3 5,031.7 37.8 248.4 2014 Q3 5,844.7 5,618.4 41.0 267.3 Q4 6,109.5 5,860.7 40.9 289.7 Year 22,306.4 21,415.2 166.6 1,057.8 Q1 6,447.0 6,189.0 45.3 303.3 Q2 7,318.3 7,023.6 42.3 337.0 2015 Q3 7,277.7 6,997.7 38.8 318.8 Q4 7,975.7 7,664.8 38.2 349.1 Year 29,018.7 27,875.1 164.6 1,308.2 Q1 8,590.2 8,255.7 41.7 376.3 Q2 9,278.5 8,921.1 37.1		Year	15,674.9	15,016.3		226.7		885.4
2013 Q3		Q1	4,186.2	4,003.3		56.6		239.5
Q4 5,141.6 4,929.6 45.8 257.9 Year 18,864.4 18,084.7 196.2 975.9 Q1 5,109.8 4,904.5 46.9 252.3 Q2 5,242.3 5,031.7 37.8 248.4 2014 Q3 5,844.7 5,618.4 41.0 267.3 Q4 6,109.5 5,860.7 40.9 289.7 Year 22,306.4 21,415.2 166.6 1,057.8 Q1 6,447.0 6,189.0 45.3 303.3 Q2 7,318.3 7,023.6 42.3 337.0 2015 Q3 7,277.7 6,997.7 38.8 318.8 Q4 7,975.7 7,664.8 38.2 349.1 Year 29,018.7 27,875.1 164.6 1,308.2 Q1 8,590.2 8,255.7 41.7 376.3 Q2 9,278.5 8,921.1 37.1 394.6 2016 Q3 8,819.0 8,470.8 33.9 382.1 Q4 10,028.8 9,654.6 35.8			4,672.2	4,478.0		50.1		244.3
Year 18,864.4 18,084.7 196.2 975.9 Q1 5,109.8 4,904.5 46.9 252.3 Q2 5,242.3 5,031.7 37.8 248.4 2014 Q3 5,844.7 5,618.4 41.0 267.3 Q4 6,109.5 5,860.7 40.9 289.7 Year 22,306.4 21,415.2 166.6 1,057.8 Q1 6,447.0 6,189.0 45.3 303.3 Q2 7,318.3 7,023.6 42.3 337.0 2015 Q3 7,277.7 6,997.7 38.8 318.8 Q4 7,975.7 7,664.8 38.2 349.1 Year 29,018.7 27,875.1 164.6 1,308.2 Q1 8,590.2 8,255.7 41.7 376.3 Q2 9,278.5 8,921.1 37.1 394.6 2016 Q3 8,819.0 8,470.8 33.9 382.1 Q4 10,028.8 9,654.6 35.8 410.0 Year 36,716.6 35,302.1 148.4<	2013	Q3	4,864.3	4,673.8		43.7		234.2
Q1 5,109.8 4,904.5 46.9 252.3 Q2 5,242.3 5,031.7 37.8 248.4 2014 Q3 5,844.7 5,618.4 41.0 267.3 Q4 6,109.5 5,860.7 40.9 289.7 Year 22,306.4 21,415.2 166.6 1,057.8 Q1 6,447.0 6,189.0 45.3 303.3 Q2 7,318.3 7,023.6 42.3 337.0 2015 Q3 7,277.7 6,997.7 38.8 318.8 Q4 7,975.7 7,664.8 38.2 349.1 Year 29,018.7 27,875.1 164.6 1,308.2 Q1 8,590.2 8,255.7 41.7 376.3 Q2 9,278.5 8,921.1 37.1 394.6 2016 Q3 8,819.0 8,470.8 33.9 382.1 Q4 10,028.8 9,654.6 35.8 410.0 Year 36,716.6 35,302.1 148.4 1,562.9 Q1 10,290.6 9,910.6 34.9 <td></td> <td>Q4</td> <td>5,141.6</td> <td>4,929.6</td> <td></td> <td>45.8</td> <td></td> <td>257.9</td>		Q4	5,141.6	4,929.6		45.8		257.9
Q2 5,242.3 5,031.7 37.8 248.4 2014 Q3 5,844.7 5,618.4 41.0 267.3 Q4 6,109.5 5,860.7 40.9 289.7 Year 22,306.4 21,415.2 166.6 1,057.8 Q1 6,447.0 6,189.0 45.3 303.3 Q2 7,318.3 7,023.6 42.3 337.0 2015 Q3 7,277.7 6,997.7 38.8 318.8 Q4 7,975.7 7,664.8 38.2 349.1 Year 29,018.7 27,875.1 164.6 1,308.2 Q1 8,590.2 8,255.7 41.7 376.3 Q2 9,278.5 8,921.1 37.1 394.6 2016 Q3 8,819.0 8,470.8 33.9 382.1 Q4 10,028.8 9,654.6 35.8 410.0 Year 36,716.6 35,302.1 148.4 1,562.9 Q1 10,290.6 9,910.6 34.9 414.9 Q2 11,604.3 11,179.8 33.0<		Year	18,864.4	18,084.7	1	196.2 👢		975.9 👚
2014 Q3 5,844.7 5,618.4 41.0 267.3 Q4 6,109.5 5,860.7 40.9 289.7 Year 22,306.4 21,415.2 166.6 1,057.8 Q1 6,447.0 6,189.0 45.3 303.3 Q2 7,318.3 7,023.6 42.3 337.0 2015 Q3 7,277.7 6,997.7 38.8 318.8 Q4 7,975.7 7,664.8 38.2 349.1 Year 29,018.7 27,875.1 164.6 1,308.2 Q1 8,590.2 8,255.7 41.7 376.3 Q2 9,278.5 8,921.1 37.1 394.6 Q3 8,819.0 8,470.8 33.9 382.1 Q4 10,028.8 9,654.6 35.8 410.0 Year 36,716.6 35,302.1 148.4 1,562.9 Q1 10,290.6 9,910.6 34.9 414.9 Q2 11,604.3 11,179.8 33.0 457.5 2017 Q3 11,428.0 11,005.3 31.		Q1	5,109.8	4,904.5		46.9		252.3
Q4 6,109.5 5,860.7 40.9 289.7 Year 22,306.4 21,415.2 166.6 1,057.8 Q1 6,447.0 6,189.0 45.3 303.3 Q2 7,318.3 7,023.6 42.3 337.0 2015 Q3 7,277.7 6,997.7 38.8 318.8 Q4 7,975.7 7,664.8 38.2 349.1 Year 29,018.7 27,875.1 164.6 1,308.2 Q1 8,590.2 8,255.7 41.7 376.3 Q2 9,278.5 8,921.1 37.1 394.6 2016 Q3 8,819.0 8,470.8 33.9 382.1 Q4 10,028.8 9,654.6 35.8 410.0 Year 36,716.6 35,302.1 148.4 1,562.9 Q1 10,290.6 9,910.6 34.9 414.9 Q2 11,604.3 11,179.8 33.0 457.5 2017 Q3 11,428.0 11,005.3 31.6 454.3 Q4 12,614.8 12,167.8 3		Q2	5,242.3	5,031.7		37.8		248.4
Year 22,306.4 21,415.2 166.6 ↓ 1,057.8 Q1 6,447.0 6,189.0 45.3 303.3 Q2 7,318.3 7,023.6 42.3 337.0 2015 Q3 7,277.7 6,997.7 38.8 318.8 Q4 7,975.7 7,664.8 38.2 349.1 Year 29,018.7 27,875.1 164.6 ↓ 1,308.2 Q1 8,590.2 8,255.7 41.7 376.3 Q2 9,278.5 8,921.1 37.1 394.6 2016 Q3 8,819.0 8,470.8 33.9 382.1 Q4 10,028.8 9,654.6 35.8 410.0 Year 36,716.6 35,302.1 148.4 ↓ 1,562.9 Q1 10,290.6 9,910.6 34.9 414.9 Q2 11,604.3 11,179.8 33.0 457.5 2017 Q3 11,428.0 11,005.3 31.6 454.3 Q4 12,614.8 12,167.8 32.1 479.1 Year 45,937.7 44,263.5	2014	Q3	5,844.7	5,618.4		41.0		267.3
Q1 6,447.0 6,189.0 45.3 303.3 Q2 7,318.3 7,023.6 42.3 337.0 2015 Q3 7,277.7 6,997.7 38.8 318.8 Q4 7,975.7 7,664.8 38.2 349.1 Year 29,018.7 27,875.1 164.6 1,308.2 Q1 8,590.2 8,255.7 41.7 376.3 Q2 9,278.5 8,921.1 37.1 394.6 2016 Q3 8,819.0 8,470.8 33.9 382.1 Q4 10,028.8 9,654.6 35.8 410.0 Year 36,716.6 35,302.1 148.4 1,562.9 Q1 10,290.6 9,910.6 34.9 414.9 Q2 11,604.3 11,179.8 33.0 457.5 2017 Q3 11,428.0 11,005.3 31.6 454.3 Q4 12,614.8 12,167.8 32.1 479.1 Year 45,937.7 44,263.5 131.6 1,805.6 Q2 13,697.3 13,197.3 <td< td=""><td></td><td>Q4</td><td>6,109.5</td><td>5,860.7</td><td></td><td>40.9</td><td></td><td>289.7</td></td<>		Q4	6,109.5	5,860.7		40.9		289.7
Q2 7,318.3 7,023.6 42.3 337.0 Q3 7,277.7 6,997.7 38.8 318.8 Q4 7,975.7 7,664.8 38.2 349.1 Year 29,018.7 27,875.1 164.6 1,308.2 1 Q1 8,590.2 8,255.7 41.7 376.3 Q2 9,278.5 8,921.1 37.1 394.6 2016 Q3 8,819.0 8,470.8 33.9 382.1 Q4 10,028.8 9,654.6 35.8 410.0 Year 36,716.6 35,302.1 148.4 1,562.9 Q1 10,290.6 9,910.6 34.9 414.9 Q2 11,604.3 11,179.8 33.0 457.5 2017 Q3 11,428.0 11,005.3 31.6 454.3 Q4 12,614.8 12,167.8 32.1 479.1 Year 45,937.7 44,263.5 131.6 1,805.6 Q1 12,615.7 12,135.9 41.0 520.8 Q2 13,697.3 13,197.3		Year	22,306.4 👚	21,415.2	1	166.6 ♣		1,057.8
2015 Q3 7,277.7 6,997.7 38.8 318.8 Q4 7,975.7 7,664.8 38.2 349.1 Year 29,018.7 27,875.1 164.6 1,308.2 Q1 8,590.2 8,255.7 41.7 376.3 Q2 9,278.5 8,921.1 37.1 394.6 2016 Q3 8,819.0 8,470.8 33.9 382.1 Q4 10,028.8 9,654.6 35.8 410.0 Year 36,716.6 35,302.1 148.4 1,562.9 Q1 10,290.6 9,910.6 34.9 414.9 Q2 11,604.3 11,179.8 33.0 457.5 2017 Q3 11,428.0 11,005.3 31.6 454.3 Q4 12,614.8 12,167.8 32.1 479.1 Year 45,937.7 44,263.5 131.6 1,805.6 Q1 12,615.7 12,135.9 41.0 520.8 Q2 13,697.3 13,197.3 37.1 537.2 2018 Q4			6,447.0	6,189.0		45.3		303.3
Q4 7,975.7 7,664.8 38.2 349.1 Year 29,018.7 27,875.1 164.6 1,308.2 Q1 8,590.2 8,255.7 41.7 376.3 Q2 9,278.5 8,921.1 37.1 394.6 Q3 8,819.0 8,470.8 33.9 382.1 Q4 10,028.8 9,654.6 35.8 410.0 Year 36,716.6 35,302.1 148.4 1,562.9 Q1 10,290.6 9,910.6 34.9 414.9 Q2 11,604.3 11,179.8 33.0 457.5 2017 Q3 11,428.0 11,005.3 31.6 454.3 Q4 12,614.8 12,167.8 32.1 479.1 Year 45,937.7 44,263.5 131.6 1,805.6 Q1 12,615.7 12,135.9 41.0 520.8 Q2 13,697.3 13,197.3 37.1 537.2 2018 Q3 Q4 12,615.7 12,135.9 41.0 520.8 Q4 13,697.3		Q2	7,318.3	7,023.6		42.3		337.0
Year 29,018.7 27,875.1 164.6 1,308.2 Q1 8,590.2 8,255.7 41.7 376.3 Q2 9,278.5 8,921.1 37.1 394.6 2016 Q3 8,819.0 8,470.8 33.9 382.1 Q4 10,028.8 9,654.6 35.8 410.0 Year 36,716.6 35,302.1 148.4 1,562.9 Q1 10,290.6 9,910.6 34.9 414.9 Q2 11,604.3 11,179.8 33.0 457.5 2017 Q3 11,428.0 11,005.3 31.6 454.3 Q4 12,614.8 12,167.8 32.1 479.1 Year 45,937.7 44,263.5 131.6 1,805.6 Q1 12,615.7 12,135.9 41.0 520.8 Q2 13,697.3 13,197.3 37.1 537.2 2018 Q3 Q4 12,615.7 12,135.9 41.0 520.8 Q2 13,697.3 13,197.3 37.1 537.2	2015	Q3	7,277.7	6,997.7		38.8		318.8
Q1 8,590.2 8,255.7 41.7 376.3 Q2 9,278.5 8,921.1 37.1 394.6 Q3 8,819.0 8,470.8 33.9 382.1 Q4 10,028.8 9,654.6 35.8 410.0 Year 36,716.6 35,302.1 148.4 1,562.9 Q1 10,290.6 9,910.6 34.9 414.9 Q2 11,604.3 11,179.8 33.0 457.5 2017 Q3 11,428.0 11,005.3 31.6 454.3 Q4 12,614.8 12,167.8 32.1 479.1 Year 45,937.7 44,263.5 131.6 1,805.6 Q1 12,615.7 12,135.9 41.0 520.8 Q2 13,697.3 13,197.3 37.1 537.2 2018 Q3 Q4 12,615.7 12,135.9 41.0 520.8 Q4 13,697.3 13,197.3 37.1 537.2		Q4	7,975.7	7,664.8		38.2		349.1
Q2 9,278.5 8,921.1 37.1 394.6 Q3 8,819.0 8,470.8 33.9 382.1 Q4 10,028.8 9,654.6 35.8 410.0 Year 36,716.6 35,302.1 148.4 1,562.9 Q1 10,290.6 9,910.6 34.9 414.9 Q2 11,604.3 11,179.8 33.0 457.5 2017 Q3 11,428.0 11,005.3 31.6 454.3 Q4 12,614.8 12,167.8 32.1 479.1 Year 45,937.7 44,263.5 131.6 1,805.6 Q1 12,615.7 12,135.9 41.0 520.8 Q2 13,697.3 13,197.3 37.1 537.2 2018 Q3 Q4		Year	29,018.7 👚	27,875.1	1	164.6 🖶		1,308.2 👚
2016 Q3 8,819.0 8,470.8 33.9 382.1 Q4 10,028.8 9,654.6 35.8 410.0 Year 36,716.6 35,302.1 148.4 1,562.9 Q1 10,290.6 9,910.6 34.9 414.9 Q2 11,604.3 11,179.8 33.0 457.5 2017 Q3 11,428.0 11,005.3 31.6 454.3 Q4 12,614.8 12,167.8 32.1 479.1 Year 45,937.7 44,263.5 131.6 1,805.6 Q1 12,615.7 12,135.9 41.0 520.8 Q2 13,697.3 13,197.3 37.1 537.2 2018 Q3 Q4 12,013.9 13,197.3 37.1 537.2		Q1	8,590.2	8,255.7		41.7		376.3
Q4 10,028.8 9,654.6 35.8 410.0 Year 36,716.6 35,302.1 148.4 1,562.9 Q1 10,290.6 9,910.6 34.9 414.9 Q2 11,604.3 11,179.8 33.0 457.5 2017 Q3 11,428.0 11,005.3 31.6 454.3 Q4 12,614.8 12,167.8 32.1 479.1 Year 45,937.7 44,263.5 131.6 1,805.6 Q1 12,615.7 12,135.9 41.0 520.8 Q2 13,697.3 13,197.3 37.1 537.2 2018 Q3 Q4 12,615.7 12,135.9 41.0 520.8 Q2 13,697.3 13,197.3 37.1 537.2		Q2	9,278.5	8,921.1		37.1		394.6
Year 36,716.6 35,302.1 148.4 1,562.9 Q1 10,290.6 9,910.6 34.9 414.9 Q2 11,604.3 11,179.8 33.0 457.5 2017 Q3 11,428.0 11,005.3 31.6 454.3 Q4 12,614.8 12,167.8 32.1 479.1 Year 45,937.7 44,263.5 131.6 1,805.6 Q1 12,615.7 12,135.9 41.0 520.8 Q2 13,697.3 13,197.3 37.1 537.2 2018 Q3 Q4 12,615.7 12,135.9 41.0 520.8 Q2 13,697.3 13,197.3 37.1 537.2	2016	Q3	8,819.0	8,470.8		33.9		382.1
Q1 10,290.6 9,910.6 34.9 414.9 Q2 11,604.3 11,179.8 33.0 457.5 2017 Q3 11,428.0 11,005.3 31.6 454.3 Q4 12,614.8 12,167.8 32.1 479.1 Year 45,937.7		Q4	10,028.8	9,654.6		35.8		410.0
Q2 11,604.3 11,179.8 33.0 457.5 Q3 11,428.0 11,005.3 31.6 454.3 Q4 12,614.8 12,167.8 32.1 479.1 Year 45,937.7		Year	36,716.6	35,302.1	1	148.4 👢		1,562.9
2017 Q3 11,428.0 11,005.3 31.6 454.3 Q4 12,614.8 12,167.8 32.1 479.1 Year 45,937.7 ↑ 44,263.5 ↑ 131.6 ↓ 1,805.6 ↑ Q1 12,615.7 12,135.9 41.0 520.8 Q2 13,697.3 13,197.3 37.1 537.2 2018 Q3 Q4		Q1	10,290.6	9,910.6		34.9		414.9
Q4 12,614.8 12,167.8 32.1 479.1 Year 45,937.7 44,263.5 131.6 1,805.6 Q1 12,615.7 12,135.9 41.0 520.8 Q2 13,697.3 13,197.3 37.1 537.2 2018 Q3 Q4		Q2	11,604.3	11,179.8		33.0		457.5
Year 45,937.7 ↑ 44,263.5 ↑ 131.6 ↓ 1,805.6 ↑ Q1 12,615.7 12,135.9 41.0 520.8 Q2 13,697.3 13,197.3 37.1 537.2 2018 Q3 Q4	2017	Q3	11,428.0	11,005.3		31.6		454.3
Q1 12,615.7 12,135.9 41.0 520.8 Q2 13,697.3 13,197.3 37.1 537.2 2018 Q3 Q4		Q4	12,614.8	12,167.8		32.1		479.1
Q2 13,697.3 13,197.3 37.1 537.2 2018 Q3 Q4		Year	45,937.7 👚	44,263.5	1	131.6		1,805.6
2018 Q3 Q4		Q1	12,615.7	12,135.9		41.0		520.8
Q4		Q2	13,697.3	13,197.3		37.1		537.2
	2018	Q3						
Year		Q4						
		Year						

1

Growth on previous year

1

Decline on previous year

 $^{^8}$ Stakes and prizes only cover games without commission. As such, GGR is the sum of commission and stakes minus winnings.

Table 3. Quarterly and yearly development in stakes, prizes, commission and \mathbf{GGR}^9 for online casinos



	ment on s quarter	Stakes -	Prizes +	commission	= GGR
· ·	-	-	-	-	-
	Q2	16.5%	16.0%	-10.9%	16.9%
2012	Q3	-9.3%	-9.3%	-0.5%	-7.8%
	Q4	14.4%	14.5%	-0.2%	8.5%
	-	-	-	-	
	Q1	-2.1%	-2.3%	3.3%	2.1%
	Q2	11.6%	11.9%	-11.3%	2.0%
2013	Q3	4.1%	4.4%	-12.9%	-4.1%
	Q4	5.7%	5.5%	5.0%	10.1%
	Year	20.3%	20.4%	-13.4%	10.2%
	Q1	-0.6%	-0.5%	2.3%	-2.2%
	Q2	2.6%	2.6%	-19.4%	-1.5%
2014	Q3	11.5%	11.7%	8.5%	7.6%
	Q4	4.5%	4.3%	-0.2%	8.4%
	Year	18.2%	18.4%	-15.1%	8.4%
	Q1	5.5%	5.6%	10.8%	4.7%
	Q2	13.5%	13.5%	-6.6%	11.1%
2015	Q3	-0.6%	-0.4%	-8.3%	-5.4%
2015	Q4	9.6%	9.5%	-1.5%	9.5%
	Year	30.1%	30.2%	-1.2%	23.7%
	Q1	7.7%	7.7%	9.2%	7.8%
	Q2	8.0%	8.1%	-11.0%	4.9%
2016	Q3	-5.0%	-5.0%	-8.6%	-3.2%
	Q4	13.7%	14.0%	5.6%	7.3%
	Year	26.5%	26.6%	-9.8%	19.5%
	Q1	2.6%	2.7%	-2.5%	1.2%
	Q2	12.8%	12.8%	-5.4%	10.3%
2017	Q3	-1.5%	-1.6%	-4.2%	-0.7%
	Q4	10.4%	10.6%	1.6%	5.5%
	Year	25.1%	25.4%	-11.3%	15.5%
	Q1	0.0%	-0.3%	27.7%	8.7%
	Q2	8.6%	8.7%	-9.5%	3.1%
2018	Q3				
	Q4				
	Year				

 9 Stakes and prizes only cover games without commission. As such, GGR is the sum of commission and stakes minus winnings.

Figure 3. Indexed development of quarterly GGR since 2012 (Q1 2014 = index 100)

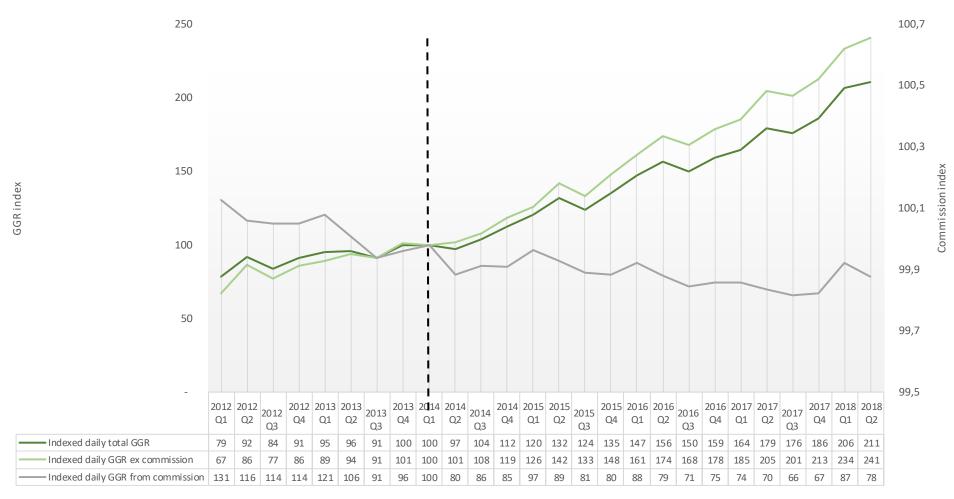
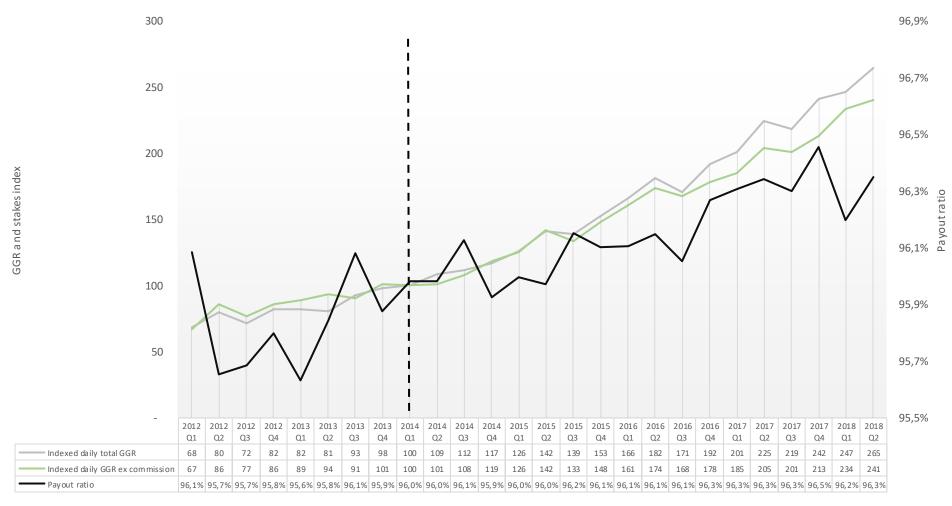


Figure 4. Indexed quarterly development in daily GGR, non-commission GGR and payout ratio for online casinos since 2012 (Q1 2014 = index 100)



Developments over the last twelve months

Online casinos registered 1,991.2 million DKK in GGR between July 2017 and June 2018. GGR was highest in June 2018, at 184.2 million DKK, and lowest in September 2017 at 147.9 million DKK. Higher GGR was recorded in each month in 2018 Q2 relative to the corresponding month in 2017.

Turnover for June 2018 was just over 4,726.8 million kroner, which equates to year-on-year growth of 994.1 million kroner (26.6 percent). There is a general upwards trend for turnover in this period. Total quarterly GGR growth, non-commission GGR, and commission GGR are charted in Figure 5, indexed against July 2017 and corrected for the varying lengths of each month.

The payout ratio for 2018 Q2 is similar to 2017 Q2 (96.3 percent). The payout ratio has the last twelve months fluctuated between 96.1 percent (January 2018) and 96.6 percent (November 2017), and lies at an average of 96.3 for the period. The payout ratio's effect upon GGR for online casino games without commission is illustrated in Figure 6.

Table 4. Monthly GGR for online casinos incl. commission (incl. Bingo), stakes, prizes (million DKK) and payout ratio

In million DKK		GGR incl. commission	Stakes	Prizes	Payout ratio
	April	158.9	4,028.3	3,880.6	96.3%
	May	147.3	3,843.3	3,707.2	96.5%
	June	151.3	3,732.7	3,591.9	96.2%
2017	July	155.9	3,842.4	3,697.4	96.2%
2017	August	150.4	3,757.7	3,617.3	96.3%
	September	147.9	3,828.0	3,690.6	96.4%
	October	150.8	4,033.5	3,893.0	96.5%
	November	153.8	4,167.6	4,024.3	96.6%
	December	174.5	4,413.7	4,250.6	96.3%
	January	174.5	4,086.1	3,926.0	96.1%
	February	162.4	3,925.3	3,775.3	96.2%
2018	March	183.9	4,604.3	4,434.6	96.3%
	April	174.2 🛨	4,518.0 👚	4,356.1 👚	96.4% 👚
	May	178.7 👚	4,452.5 👚	4,286.9 👚	96.3% 🖶
	June	184.2 👚	4,726.8	4,554.2	96.3% 🛨
Total	July'17 - June'18	1,991.2	50,355.9	48,506.3	96.3%

Source: Tax returns submitted to the Danish Tax Agency.

Growth on previous year
Decline on previous year

Figure 5. Indexed monthly development in GGR for online casinos (July 2017 = index 100)

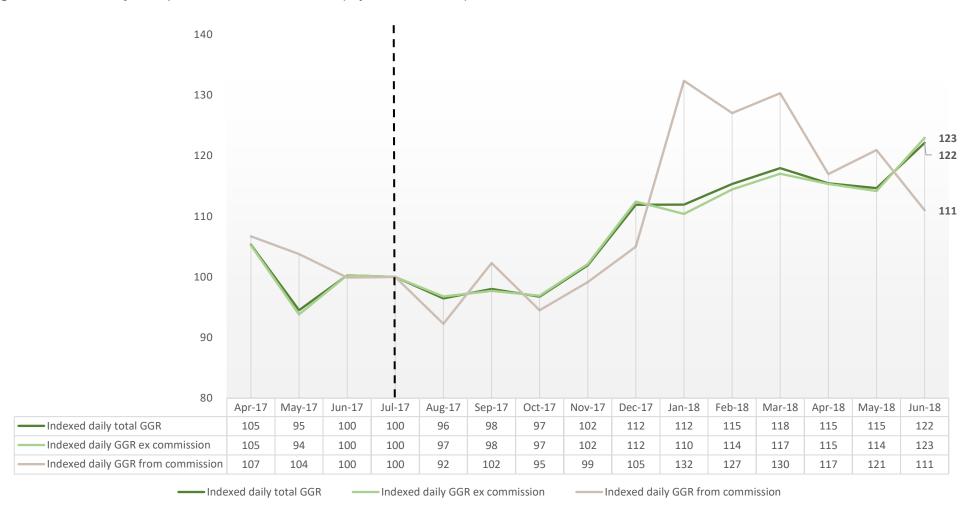
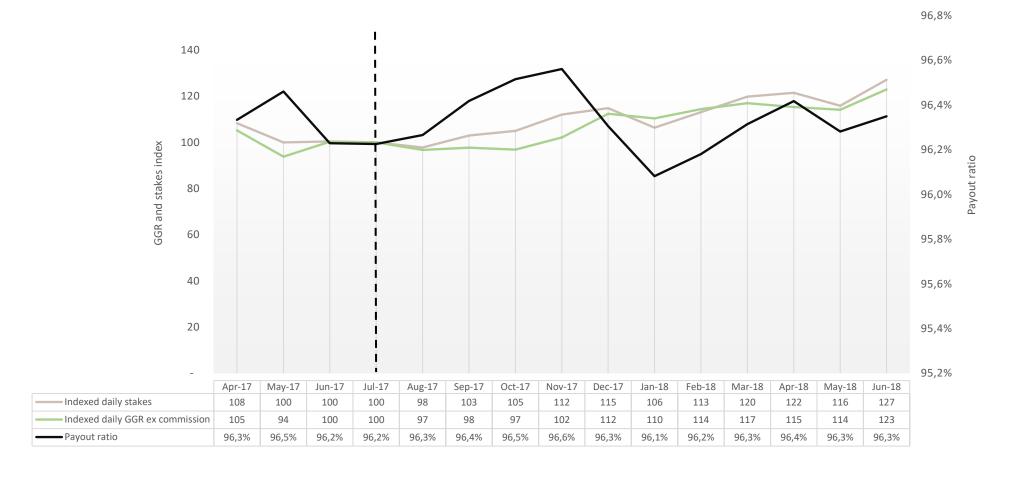


Figure 6. Indexed monthly development in stakes, GGR ex commission and payout ratio for online casinos (July 2017 = index 100)



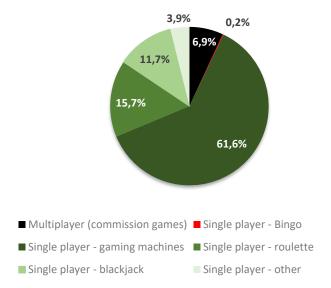
Consumer behaviour

Game types

Online casinos cover two categories of casino games: single player casino games (casino games without commission, including, inter alia, gaming machines, roulette, blackjack and bingo) and multi-player casino games (commission games, including multi-player poker and multi-player bingo).

Single player casino games are the largest of the two categories, accounting for 93.1 percent of the online casino market in 2018 Q2 (500.1 million DKK). Within single player casino games, gaming machines are the area where GGR is highest, with 61.6 percent of the entire online casino market in 2018 Q2. Multiplayer casino games account for 6.9 percent of the market (37.1 million DKK).

Figure 7. Market shares within online casinos in 2018 Q2



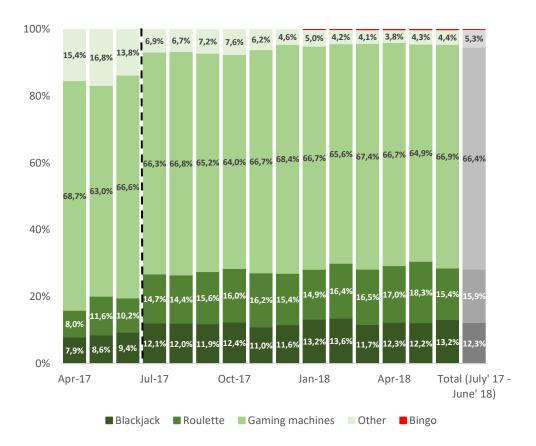
Source: Based upon gambling transaction data submitted by license holders to the Danish Gambling Authority.

Game types - Single player online casino games

Online gaming machines were the most popular type of single player online casino game over the last twelve months, with a market share of 66.4 percent. Roulette was the next most popular game with an average 15.9 percent market share, with blackjack in third place on 12.3 percent of the market. Bingo accounts for 0.1 percent or 12.3 million DKK which is divided relatively equal on each month.

As figure 8 illustrates, market shares for these game types has been relatively stable since July 2017. Previously the market shares were different. The Danish Gambling Authority is of the opinion that this is not necessarily a sign of significant changes in the market, but instead that many gambling operators have improved classification of their products instead of using the "other" category for their data. This means that it is likely that the figures for roulette and blackjack are higher than shown in Figure 8. In figure 8, "other" covers a range of various games including poker played against a machine, sometimes called video poker.

Figure 8. Market shares for online casinos (ex. commission games) April 2017 - June 2018



Source: Based upon gambling transaction data submitted by license holders to the Danish Gambling Authority. Market share is calculated according to the total value of stakes placed. Multi-player games, where GGR is calculated on the basis of commission, such as multi-player poker, are not included. Due to data irregularities, June 2017 figures are based upon estimates drawn from a selection of online casino operators.

Game types - Multi-player casino games (commission games)

For commission games, such as poker cash and poker tournaments, where players pay *commission* to online casino operators to participate, then afterwards play other players for the remaining stakes, GGR is defined as this commission. This commission is then used to calculate gambling duties and therefore stakes and winnings are not traced in the Danish Gambling Authority's statistics, which are based upon taxation data. Due to this difference, commission games are not included in the statistics in Figure 8.

Commission-based games are represented in Figure 9 and are based upon filings to the Danish Tax Authorities. There has been a steady downward trend in GGR from these games, both in absolute terms and as a proportion of total GGR, although the liberalisation of bingo has been influencing commission positively since January 2018.

During the second quarter of 2018, commission from online bingo equaled 12.2 million DKK, of which 3.9 million DKK was generated in April, 4.2 million DKK in May and 4.1 million DKK in June.

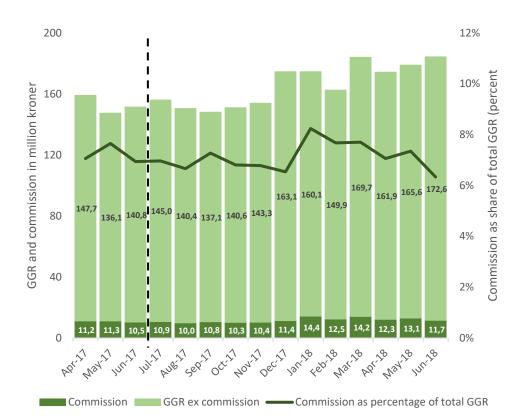


Figure 9. Development in commission as an element of GGR (April 2017 - June 2018)

Sales channel

Over the course of the twelve months between July 2017 and June 2018, 69.2 percent of GGR from online casinos came from standard websites, with the remaining 30.8 percent generated through mobile platforms. The data still shows an underlying trend whereby mobile transactions account for a growing share of the online casino market. Over this period, the share of GGR coming from mobile platforms has risen from 27.9 percent in July 2017 to 32.9 percent in June 2018, as shown in figure 10. Market share for mobile transactions is highest for 2018 Q2.

Figure 11 illustrates sales channels per game type, with bingo being 77.4 percent internet-based against 22.6 percent mobile-based, while it is 49.8 percent against 50.2 percent for gaming machines.

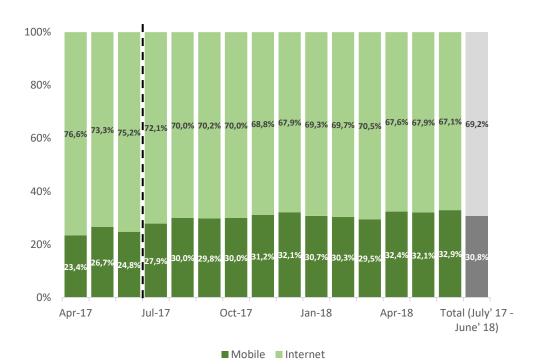


Figure 10. Market share for internet and mobile platforms, weighted by GGR

¹⁰ The definition of what constitutes sales through a "mobile" platform and sales through the "internet", i.e. gambling operators' standard desktop homepages, is defined by operators' themselves. Some sales classified as "internet" sales could, therefore, have taken place on mobile hardware running a desktop version of an operator's website.

100% 80% 49,8% 52,1% 57,4% 71,4% 77,4% 60% 40% 50,2% 47,9% 42,6% 20% 28,6% 22,6% Gaming machines Blackjack Roulette Other Bingo ■ Mobile ■ Internet

Figure 11. Market share per game type for internet- and mobile platforms, weighted by GGR in 2018 Q2.

When does gambling take place?

Gambling activity in online casinos is highest at the end of the month, coinciding with the day monthly salaries are typically paid out, as illustrated in Figure 12. Over the last twelve months, the date where the most transactions took place was 28th March 2018, with 32.3 million individual transactions.

For 2018 Q2, the value of total transactions in online casinos was highest on Fridays (16.0 percent), and lowest on Sundays (12.4 percent), as shown in Figure 13. However, in terms of the number of transactions taking place, Fridays are the day where most activity took place (15.5 percent), while Wednesdays were the day with the lowest number of individual transactions (13.3 percent).

¹¹ A transaction takes place every time a game is played. This means, for example, that every time a player clicks to spin a dial in a gaming machine, a new transaction takes place. Transactions are therefore distinct from gaming sessions.

Figure 12. Number of daily transactions (million) April 2017 - June 2018

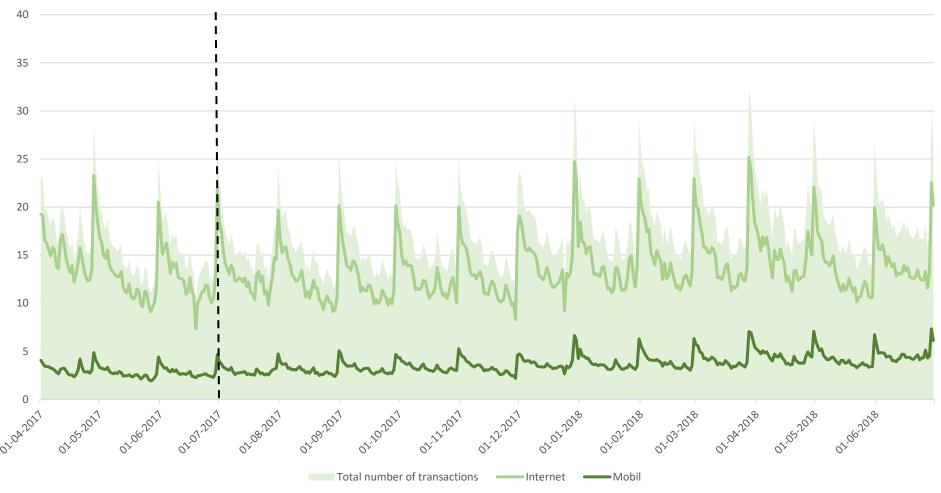
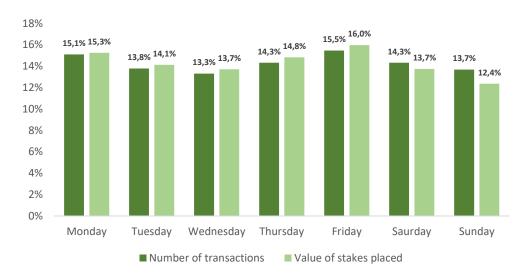


Figure 13. Number of transactions distributed according to day of the week (in percent) for $Q2\,2018$



D. Betting

Development in GGR

Quarterly developments

Betting operators¹² registered 648.1 million DKK in GGR in 2018 Q2, growth of 16.7 percent (92.7 million DKK) relative to 2018 Q1 (see Table 5). This figure equates to year-on-year growth of 24.1 percent, a rise of 125.7 million DKK. Quarterly GGR has remained relatively stable since 2015 Q3, with the exceptions of 2017 Q4 and 2018 Q2. In 2018 Q2, betting on horse racing has been included in the statistics, and the World Cup in football began.

As illustrated in Figure 14, the payout ratio has been fluctuating. The payout ratio demonstrated an upwards trend, though affected by the payout ratio for $2017 \, Q4^{13}$, which was the lowest observed payout ratio since 2012 Q1 of 86.2 percent. From 2018 Q1, the payout ratio returned to a level comparable with 2017 Q3.

Stakes have remained relatively stable since 2016 Q3, and have been in the region of 5.2 billion to 5.6 billion DKK each quarter, though with peaks in the second quarters of both 2016 and 2017 and so far 2018. These peaks correspond with the culmination of popular sports events for the Danish betting market, such as the end of the football season and international football tournaments. In 2018 Q2, the World Cup in football took place during the period from the 14th of June until the 15th of July. Therefore only half of the World Cup effect is registered in the data for 2018 Q2.

¹² Please note that betting on horse, dog, and pigeon racing was liberalised on 1st January 2018, and the statistics for betting on these events are included in the statistics regarding the total betting market for 2nd quarter 2018.

¹³ The trend was not unique to Denmark, with many other European lands reporting similar observations. It must therefore be assumed that the result of certain events where bets have been placed has continued to the fall in payout ratio, which has had positive results for operators' GGR.

Table 5. Market indicators for the betting market (GGR and stakes in million DKK)



In million DKK		Stakes	Payout ratio	GGR
	Q1	1,685.6	83.0%	292.5
	Q2	2,066.4	87.0%	275.9
2012	Q3	1,882.7	86.6%	259.3
	Q4	2,366.1	85.3%	347.3
	Year	8,000.9	85.6%	1,175.0
	Q1	2,308.7	83.3%	389.1
	Q2	2,234.9	86.1%	313.9
2013	Q3	2,353.4	87.7%	293.9
	Q4	2,945.0	87.5%	374.3
	Year	9,841.9	86.2%	1,371.3
	Q1	3,206.8	86.5%	436.5
	Q2	3,699.1	88.2%	440.8
2014	Q3	3,674.0	86.6%	493.8
	Q4	4,327.5	90.4%	420.1
	Year	14,907.3	88.1%	1,791.2
	Q1	4,349.5	90.5%	416.4
	Q2	4,711.1	89.7%	487.3
2015	Q3	4,146.4	86.9%	547.6
	Q4	4,938.6	89.0%	548.0
	Year	18,145.6	89.0%	1,999.2 👚
	Q1	5,271.3	89.3%	565.4
	Q2	6,063.5	91.4%	523.2
2016	Q3	5,272.3	90.0%	529.3
	Q4	5,333.0	89.7%	550.4
	Year	21,940.1	90.2%	2,168.3
	Q1	5,293.3	90.2%	519.2
	Q2	5,617.4	90.7%	522.4
2017	Q3	5,245.3	89.1%	575.4
	Q4	5,161.0	86.2%	712.4
	Year	21,317.0 👢	89.1%	2,329.4
	Q1	5,235.2	89.5%	555.4
	Q2	5,964.9*	89.2%*	648.1*
2018	Q3			
	Q4			
	Year			

Source: Tax returns submitted to the Danish Tax Agency. *2nd quarter 2018 contains betting on horse racing.



Growth on previous year

Table 6. Development in stakes, GGR and payout ratio (in percentage points) for betting



Development on previous quarter		Stakes	Payout ratio (PP)	Total GGR (ex. Commission)
	-	-	-	-
	Q2	22.6%	4.0	-5.7%
2012	Q3	-8.9%	-0.4	-6.0%
	Q4	25.7%	-1.3	33.9%
	-	-	-	-
	Q1	-2.4%	-2.0	12.0%
	Q2	-3.2%	2.8	-19.3%
2013	Q3	5.3%	1.6	-6.4%
	Q4	25.1%	-0.2	27.3%
	Year	23.0%	0.6	16.7%
	Q1	8.9%	-0.9	16.6%
	Q2	15.4%	1.6	1.0%
2014	Q3	-0.7%	-1.5	12.0%
	Q4	17.8%	3.7	-14.9%
	Year	51.5%	1.9	30.6%
	Q1	0.5%	0.1	-0.9%
	Q2	8.3%	-0.8	17.0%
2015	Q3	-12.0%	-2.9	12.4%
	Q4	19.1%	2.1	0.1%
	Year	21.7%	0.9	11.6%
	Q1	6.7%	0.4	3.2%
	Q2	15.0%	2.1	-7.5%
2016	Q3	-13.0%	-1.4	1.2%
	Q4	1.2%	-0.3	4.0%
	Year	20.9%	1.2	8.5%
	Q1	-0.7%	0.5	-5.7%
	Q2	6.1%	0.5	0.6%
2017	Q3	-6.6%	-1.7	10.2%
	Q4	-1.6%	-2.8	23.8%
	Year	-2.8%	-1.1	7.4%
	Q1	1.4%	3.3	-22.0%
	Q2	13.9%*	- 0.3*	16.7%*
2018	Q3			
	Q4			
	Year			

Source: Tax returns submitted to the Danish Tax Agency. *2nd quarter 2018 contains betting on horse racing.

Figure 14. Indexed development in stakes, GGR and payout ratio for betting (2014 Q1 = index 100) 200 93% 180 91% 160 140 89% 120 GGR and stakes index Payout ratio 100 80 85% 60 40 83% 20 81% Q1 Q2 Q3 Q4 Q1 Q2 Q3 Q4 Q1 Q2 Q3 Q2 Q3 Q4 Q1 Q2 Q3 Q4 Q1 Q2 Q3 Q4 Q1 Q2 Q4 Q1

Indexed daily stakes

Index 100

Payout ratio

Indexed daily total GGR

52

66

64

63

57 72

58

100

78

100 100

72

89

Indexed daily stakes

69

71

100

72

66

100

90

84

100

100

100

100

100 111

100

114 112 132

100

Indexed daily total GGR

94

100 100

136

95

145

110

100

 $83.0\% \ 87.0\% \ 86.6\% \ 85.3\% \ 83.3\% \ 86.1\% \ 87.7\% \ 87.5\% \ 86.5\% \ 88.2\% \ 86.6\% \ 90.4\% \ 90.5\% \ 89.7\% \ 86.9\% \ 89.0\% \ 89.3\% \ 91.4\% \ 90.0\% \ 89.7\% \ 90.2\% \ 90.7\% \ 89.1\% \ 86.2\% \ 89.5\% \ 89.2\% \ 99.2\% \ 89.2\% \ 89.2\% \ 99.2\% \ 89.2$

126

123

100

151 163

123 128

100 100

— ■ Index 100

189

120

100 100

163

120

163

123

100 100 100

Payout ratio

165

119

173

118

160 157

129

100

160 127

100

164

100

184

147

Developments over the last twelve months

Betting operators registered 2,491.5 million DKK in GGR between July 2017 and June 2018. Seen over the course of the past twelve months, GGR was highest in October 2017 at 271.7 million DKK, and lowest in February 2018 at 148.9 million DKK. In relation to 2017 Q2, GGR was higher in 2018 Q2 for both January, February and March.

As illustrated in Table 7, stakes were highest in June 2018 at 2,123.5 million DKK, and lowest in July 2017 at 1,488.5 million DKK. Developments in GGR, non-commission GGR, and commission GGR are charted in Figure 15, indexed against July 2017 and corrected for the varying lengths of each month.

The payout ratio is lower in 2018 Q2 (89.2 percent) compared with 2017 Q2 (90.7 percent). The payout ratio has over the last twelve months fluctuated between 84.7 percent (December 2017) and 91.4 percent (February 2018), with an average of 88.4 percent for the period. The effect of the payout ratio upon GGR for non-commission betting is illustrated in Figure 15.

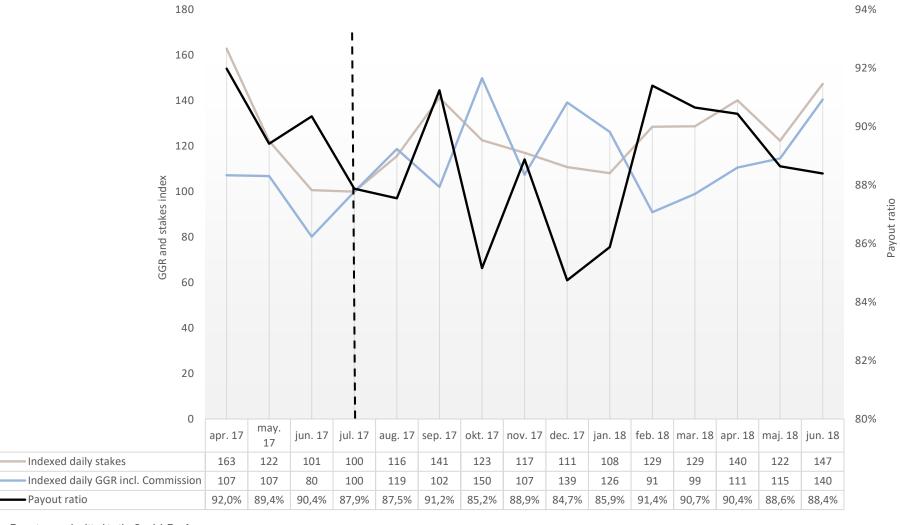
Table 7. Monthly GGR (incl. commission), stakes and payout ratio

)	GGR incl.		
In million DKK		commission	Stakes	Payout ratio
	April	188.1	2,346.8	92.0%
	May	193.6	1,820.1	89.4%
	June	140.7	1,450.5	90.4%
	July	181.2	1,488.5	87.9%
2017	August	215.2	1,721.5	87.5%
	September	179.0	2,035.2	91.2%
	October	271.7	1,825.0	85.2%
	November	188.4	1,686.6	88.9%
	December	252.4	1,649.4	84.7%
	January	227.2	1,603.5	85.9%
	February	148.9	1,722.4	91.4%
2018	March	179.4	1,909.3	90.7%
2010	April*	194.0 👚	2,019.4	90.4%
	May*	207.7	1,822.0	88.6%
	June*	246.4	2,123.5	88.4%
Total	July'17 – June'18	2,491.5	21,625.1	88.4%

Source: Tax returns submitted to the Danish Tax Agency. *2nd quarter 2018 contains betting on horse racing.



Figure 15. Indexed development in stakes, GGR and payout ratio for betting (July 2017 = index 100)



Consumer behaviour

Sales channels

Unlike the market for casino games, betting licenses may provide for both land-based and online gambling, with online betting divided between mobile and desktop (internet) platforms. As shown in Table 8, according to the Danish Gambling Authority's estimates¹⁴, in the second quarter of 2018, 48.7 percent of GGR from fixed odds betting came through mobile platforms, 17.6 percent from desktop versions of homepages, and the remaining 33.6 percent from land-based bookmakers.

When seen in relation to turnover (not GGR), the online sector continues to dominate, with mobile platforms accounting for 54.5 percent of total turnover between July 2017 and June 2018 (see Figure 16). Other online transactions (desktop homepages) accounted for 22.7 percent of turnover, while land-based transactions delivered the remaining 22.9 percent.

When looking at the total number of transactions taking place, land-based bookmakers lead the way however, accounting for over half of all transactions in the same period, with mobile transactions accounting for approximately a fourth of all transactions, as illustrated in Figure 17. As our statistics show, the frequency of mobile transactions have though overtaken internet transactions since July 2017.

In June 2018 the share of mobile- and internet transactions reached 32.5 percent and 23.0 percent, respectively. At the same time, land-based transactions fell to 44.4 percent, possibly a consequence of the World Cup, where live bettings are placed through mobile- and internet platforms.

When does gambling take place?

Consumer activity in the betting market is strongly effected by the sporting calendar, as illustrated in Figure 18, with the total value of stakes peaking in April 2017, September 2017 and yet again in April 2018. Furthermore, the effect of the World Cup in football clearly appears in June 2018. How large the effect has been will be explained further in the upcoming section regarding the World Cup. In 2018 Q2, the day of the week where the highest number of bets took place was Saturdays (24.1 percent) as charted in Figure 19, which was also the day where the total value of stakes were highest (18.9 percent).

¹⁴ It is important to note that the data presented in Table 6 are estimates based upon a comparison of two sets of data – data on gambling duties paid by gambling operators and figures drawn from the Danish Gambling Authority's gambling control system. The two systems measure different types of data and according to different timelines. Whereas data on transactions (stakes/turnover) is categorised according to sales channels, tax data is not. Instead, tax data is aggregated on a monthly basis, with GGR then calculated according to the formula set out by the Danish Tax Agency. In order to provide an estimate of GGR according to sales channels, transactions data for individual license-holders is compared with the turnover data used to calculate their GGR, which is then used as the basis for an estimate of aggregated GGR per sales channel. Furthermore, this data does not include data for incomelimited gambling licenses.

Table 8. Market share according to sales channel, fastodds betting, weighted by GGR



Weighted by GGR	Land-based	Internet	Mobile
2017 Q2	34.7 %	15.5 %	49.8 %
2017 Q3	33.4 %	16.1%	50.5 %
2017 Q4	34.8 %	15.3 %	49.9 %
2018 Q1	35.3 %	14.9 %	49.9 %
2018 Q2	33.6 %	17.6 %	48.7 %
Average Last twelve months	34.3 %	16.0 %	49.7 %

Source: The Danish Tax Agency / Danish Gambling Authority's Gambling Control System

Figure 16. Sales channels for betting, according to Turnover

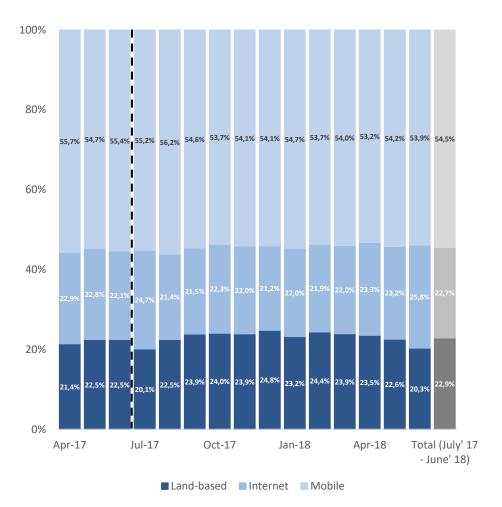


Figure 17. Sales channels for betting, according to total **number** of bets placed

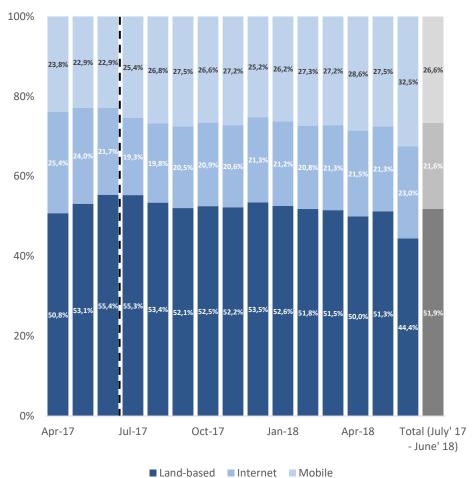


Figure 18. Value of stakes placed per day from April 2017 - June 2018 (million kroner)

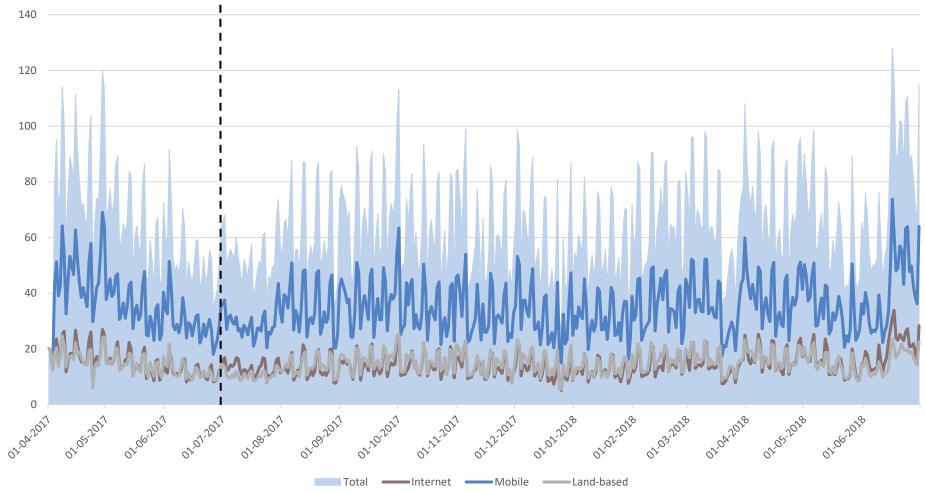
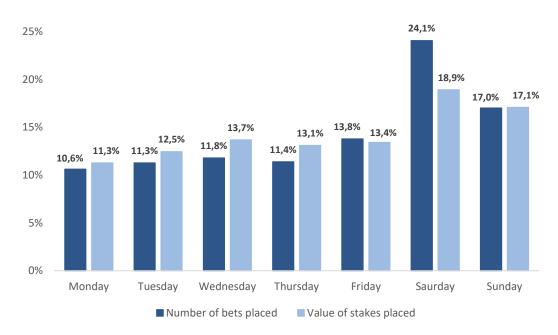


Figure 19. Number of bets placed and turnover distributed according to the day of the week (in percent) for $2018\ Q2$



FIFA World Cup 2018

Betting stakes have been higher during the World Cup compared to the days before and after, as illustrated in figure 20. In association, stakes were higher on days where Denmark was playing, and the day with the highest stakes on the betting market coincides with the eighth-final match between Denmark and Croatia on 1st of July 2018. The next highest stakes were observed on the 16th of June 2018 where Denmark played their first match, which was against Peru. Furthermore, according to stakes, figure 20 illustrates a special interest in matches where Brazil, Germany and France played. The day of the final match reports the third-highest stakes during the World Cup.

Stakes for the World Cup 2018 are in total 72.5 percent higher compared to the World Cup in 2014. Denmark was not qualified for the World Cup in 2014, which could have had an effect alongside the general growth in the betting market. Compared to the European football championship in 2016, without Danish qualification, there have been a growth in stakes of 12.9 percent. Due to the fact that there are more matches at the World Cup (64) compared to the European football championship (51), average stakes per match are 10.0 percent lower for the World Cup 2018.

Data are based upon stakes for the total betting market and therefore it is not possible in absolute numbers to indicate a level of stakes for the World Cup alone, although it is assumed that the matches during the World Cup are strong drivers of stakes due to the relatively high increase in stakes in the hours before a match begins and the level of stakes during the World Cup period are higher compared to days outside the World Cup period.

Figure 20. World Cup fever barometer based on stakes per hour (11th of June – 17th of July 2018)

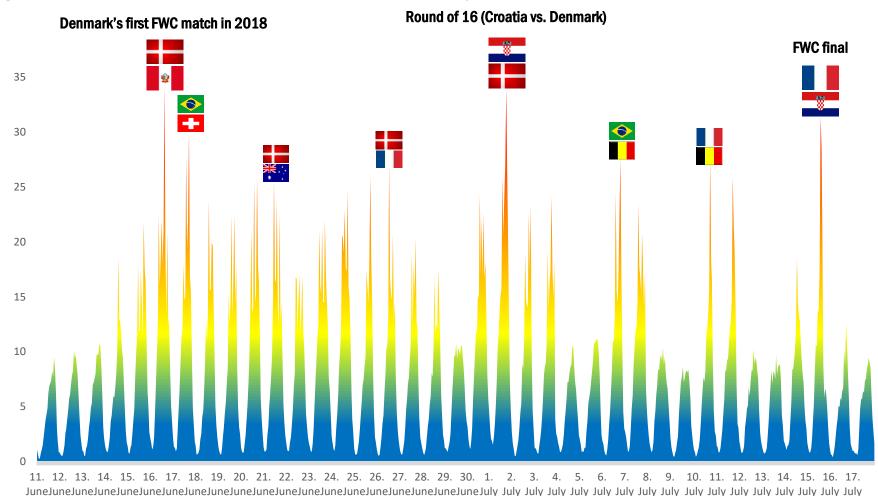
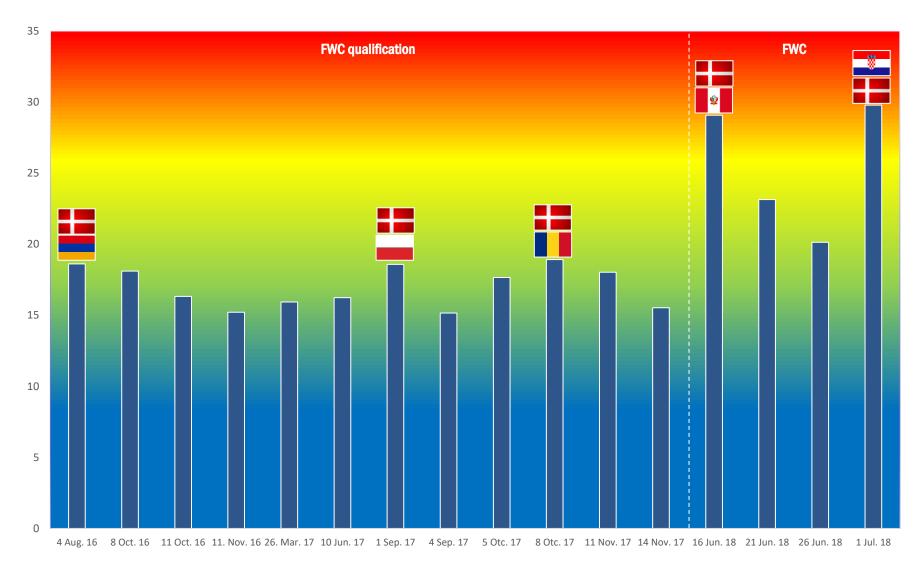


Figure 21. Barometer on the Danish national matches during the World Cup and qualifications based on stakes per day (4th of August 2016 – 1st of July 2018)



E. Gaming machines

Gaming machines generated 353.8 million DKK in GGR in 2018 Q2, a decline of 0.9 percent (3.1 million DKK) relative to 2018 Q1 (see Table 9). This equates to a fall of 8.7 percent relative to 2017 Q2, with GGR 33.7 million DKK lower.

GGR for gaming machines in restaurants fell by 1.9 percent between 2018 Q1 and 2018 Q2, as did GGR from gaming arcades, though by a lesser degree, 0.5 percent, as shown in table 10. Quarterly GGR from gaming machines has been declining since 2012, as is illustrated in Figure 22.

Seen in relation to 2014 Q1, gaming machines in restaurants have experienced a relatively larger decline in GGR than gaming machines in gaming arcades, falling by 9.8 percent as opposed to 7.9 percent, which is charted in Figure 22. As Figure 22 shows, GGR is highest in the second quarter of each year, both for restaurants and for gaming arcades, although it is not applicable on 2018 Q2.

Gaming machines generated 1,439.9 million kroner in GGR over the twelve months between July 2017 and June 2018, as set out in Figure 23. On average, restaurants generated 27.6 million kroner in GGR per month, whilst arcades generated 92.4 million kroner a month. For both restaurants and arcades, GGR was highest in March 2018, totaling 30.1 million and 98.4 million kroner respectively, while GGR was lowest in February 2018 for restaurants at 25.9 million DKK and for gaming arcades in June 2018 at 87.5 million DKK.

Table 9. Quarterly GGR for gaming machines



In million DKK		Restaurants	Gaming arcades	Total GGR	
	Q1	111.8	322.7	434.4	
	Q2	120.1	368.3	488.4	
2012	Q3	109.2	321.8	431.0	
	Q4	103.8	315.9	419.8	
	Year	444.9	1,328.7	1,773.6	
	Q1	99.2	315.8	415.0	
	Q2	100.3	325.0	425.2	
2013	Q3	92.0	298.1	390.2	
	Q4	124.7	275.4	400.1	
	Year	416.2 👢	1,214.3	1,630.5 🕂	
	Q1	89.8	296.4	386.2	
	Q2	92.7	311.5	404.2	
2014	Q3	89.4	284.9	374.4	
	Q4	88.8	293.4	382.2	
	Year	360.7 👢	1,186.1	1,546.9 🔱	
	Q1	87.6	289.3	376.8	
	Q2	92.7	320.4	413.1	
2015	Q3	87.5	288.2	375.6	
	Q4	86.1	295.9	382.0	
	Year	353.8 🕂	1,193.7	1,547.6 👚	
	Q1	85.0	293.6	378.6	
	Q2	86.4	304.2	390.6	
2016	Q3	84.0	280.8	364.8	
	Q4	84.9	285.0	370.0	
	Year	340.3 🕹	1,163.6 ♣	1,504.0 👢	
	Q1	85.2	285.0	370.3	
	Q2	87.6	299.9	387.5	
2017	Q3	84.0	284.6	368.6	
	Q4	83.3	277.3	360.6	
	Year	340.2	1,146.9	1,487.0 👢	
	Q1	82.6	274.3	356.9	
	Q2	81.0	272.8	353.8	
2018	Q3				
	Q4				
	Year				

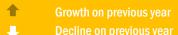


Table 10. Quarter-on-quarter development in GGR from gaming machines



Development on previous quarter		Restaurants	Gaming arcades	Total GGR
2012	- Q2	- 7.4%	- 14.1%	- 12.4%
	Q2 Q3	-9.1%	-12.6%	-11.8%
	Q3 Q4	-9.1% -4.9%	-12.6%	-11.6% -2.6%
	-	-4.9 //	-1.0 //	-2.0%
	Q1	-4.5%	0.0%	-1.1%
	Q2	1.1%	2.9%	2.5%
2013	Q2 Q3	-8.2%	-8.3%	-8.3%
2013	Q4	35.5%	-7.6%	2.5%
	Year	-6.4%	-8.6%	-8.1%
	Q1	-28.0%	7.6%	-3.5%
	Q1 Q2			
0014		3.2%	5.1%	4.7%
2014	Q3 Q4	-3.5%	-8.5%	-7.4%
ı		-0.7%	3.0%	2.1%
	Year	-13.3%	-2.3%	-5.1%
	Q1	-1.4%	-1.4%	-1.4%
	Q2	5.9%	10.8%	9.6%
2015	Q3	-5.7%	-10.1%	-9.1%
	Q4	-1.6%	2.7%	1.7%
	Year	-1.9%	0.6%	0.0%
	Q1	-1.2%	-0.8%	-0.9%
	Q2	1.6%	3.6%	3.2%
2016	Q3	-2.8%	-7.7%	-6.6%
	Q4	1.1%	1.5%	1.4%
	Year	-3.8%	-2.5%	-2.8%
	Q1	0.3%	0.0%	0.1%
	Q2	2.8%	5.2%	4.7%
2017	Q3	-4.1%	-5.1%	-4.9%
	Q4	-0.9%	-2.6%	-2.2%
	Year	0.0%	-1.4%	-1.1%
2018	Q1	-0.8%	-1.1%	-1.0%
	Q2	-1.9%	-0.5%	-0.9%
	Q3			
	Q4			
	Year			

Figure 22. Development in quarterly GGR indexed against 2014 Q1 (index 100)

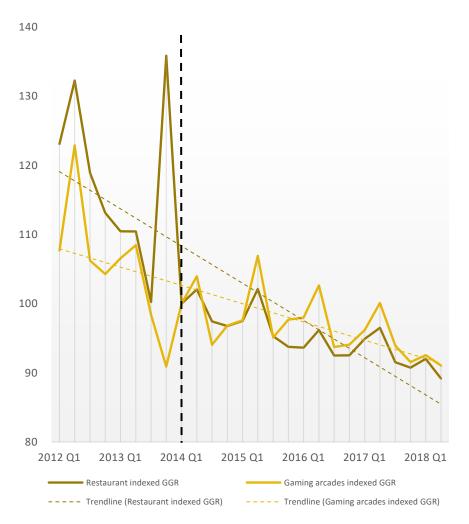
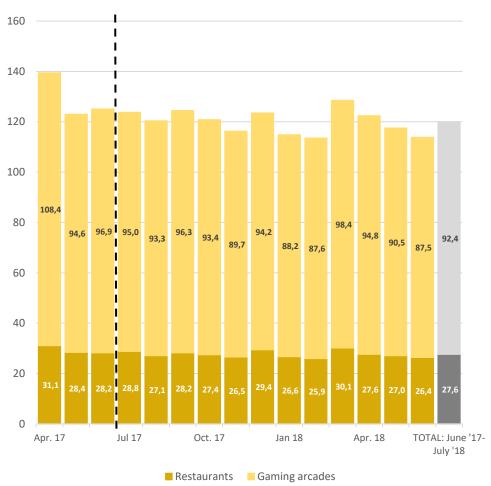


Figure 23. Monthly GGR for gaming machines (January 2017 - March 2018)



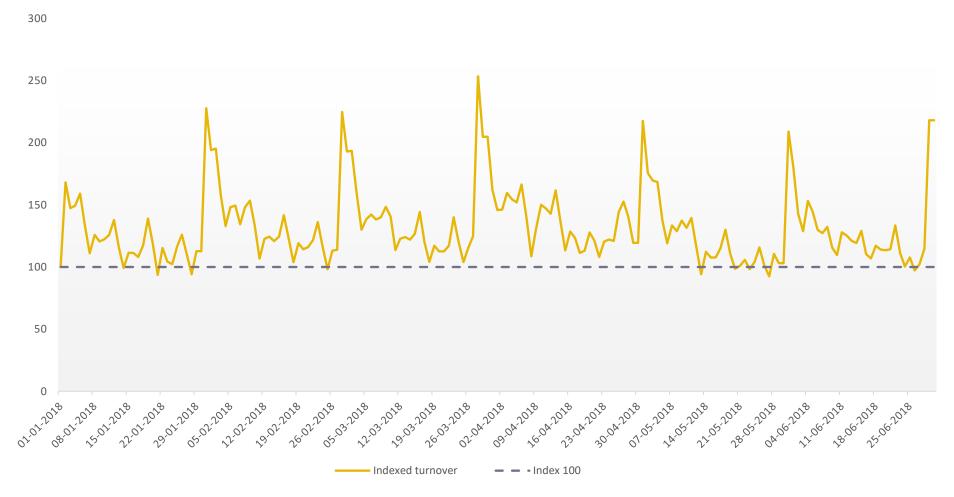
Consumer behavior

The stakes index as illustrated in figure 24 shows that the days with the highest stakes for gaming machines coincides with the days salaries are usually paid out. From January 2018 until June 2018, stakes have been highest on the 28^{th} of March and lowest on the 27^{th} of May.

Moreover, divided into weekdays stakes are highest on Fridays for both 2018 Q1 and 2018 Q2 at 16.7 percent and 16.5 percent, respectively (see figure 25). Sundays have had the lowest stakes at 10.8 percent in 2018 Q1 and 12.2 percent in 2018 Q2.

According to figure 26, stakes are, on an hourly basis, increasing from 7 am until between 3 pm and 4 pm, where the stakes are highest. Afterwards stakes are declining until midnight and between midnight and 7 am there are no stakes reported.

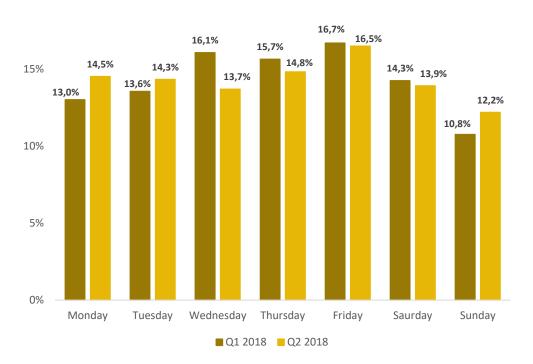
Figure 24. Stakes index per day from January 2018 until June 2018 (index 100 = 1st of January 2018)



Source: Based upon gambling transaction data submitted by license holders to the Danish Gambling Authority.

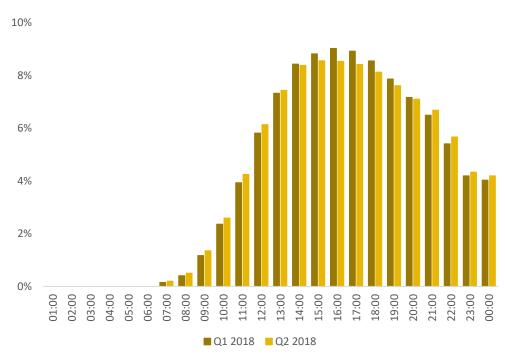
Figure 25. Quarterly value of stakes distributed according to the day of the week (in percent)





Source: Based upon gambling transaction data submitted by license holders to the Danish Gambling Authority.

Figure 26. Quarterly value of stakes per hour (in percent)



Source: Based upon gambling transaction data submitted by license holders to the Danish Gambling Authority.

F. Land-based casinos

Denmark's seven land-based casinos, including the DFDS Oslo Ferry, registered 91.5 million DKK in GGR in 2018 Q12 a rise of 1.3 percent (1.2 million DKK) relative to 2018 Q1 (see Table 11). However, this equates to a fall of 4.0 percent relative to 2017 Q2, with GGR 3.9 million DKK lower.

Figure 27 charts the value of average quarterly GGR indexed against the first quarter of 2014 (index = 100). Quarterly GGR grew until 2015 Q2, and has remained relatively stable since then in the region of 93 million DKK per quarter.

Over the course of the twelve months, between July 2017 and June 2018, land-based casinos generated 370.2 million DKK in GGR, an average of 30.9 million DKK a month. When taking account for the varying lengths of each month, as shown in Figure 28, GGR was lowest in February 2018 (0.94 million DKK GGR per day), while March 2018 was highest (1.16 million DKK GGR per day). Seen in relation to 2017 Q2, GGR was approximately 3.4 million DKK lower in April 2018, 0.4 million DKK lower in May and 0.1 million DKK lower in June 2018. On average, land-based casinos generated 1.01 million DKK per day between July 2017 and June 2018.

Table 11. Quarterly GGR and development on previous quarter

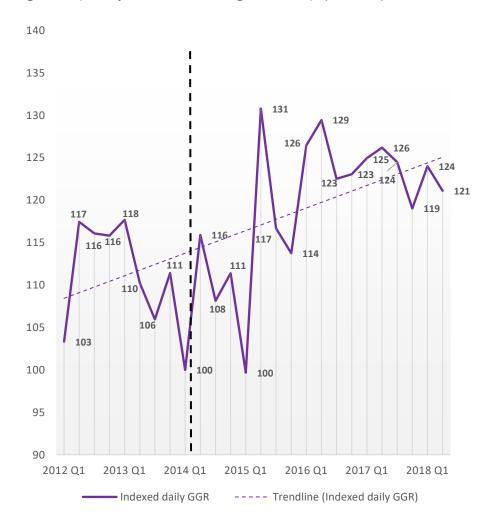


In million DKK		Total GGR	Development on previous quarter
	Q1	78.1	-
	Q2	88.7	13.6%
2012	Q3	88.7	-0.1%
	Q4	88.5	-0.2%
	Year	344.0	-
	Q1	88.0	-0.6%
	Q2	83.3	-5.3%
2013	Q3	80.9	-2.8%
	Q4	85.1	5.2%
	Year	337.3 🗸	-1.9%
	Q1	74.7	-12.2%
	Q2	87.6	17.2%
2014	Q3	82.6	-5.7%
	Q4	85.1	3.0%
	Year	330.1 👢	-2.2%
	Q1	74.5	-12.5%
	Q2	98.8	32.7%
2015	Q3	89.2	-9.8%
	Q4	86.9	-2.5%
	Year	349.4	5.9%
	Q1	95.6	10.0%
	Q2	96.7	1.2%
2016	Q3	92.6	-4.3%
	Q4	94.0	1.6%
	Year	378.9	8.5%
	Q1	93.4	-0.7%
	Q2	95.4	2.1%
2017	Q3	95.1	-0.3%
	Q4	90.9	-4.4%
	Year	374.8 👢	-1.1%
	Q1	92.7	1.9%
	Q2	91.5	-1.3%
2018	Q3		
	Q4		
	Year		



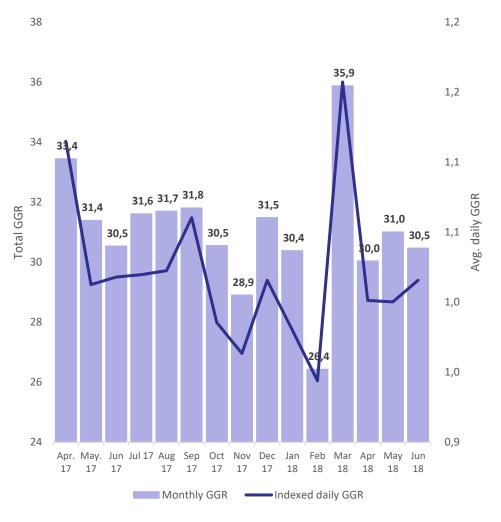
Growth on previous year

Figure 27. Quarterly GGR benchmarked against 2014 Q1 (index 100)



Source: Tax returns submitted to the Danish Tax Agency.

Figure 28. Monthly GGR for land-based casinos



G. Lotteries and betting on horse racing

Combined GGR for lotteries – Danske Spil A/S's lotteries, the three class lotteries (Klasselotteriet, Varelotteriet, and Landbrugslotteriet), and charitable lotteries – is almost unchanged from 2016, and is estimated to just over 3.1 billion kroner for 2017¹⁵. Lotteries are the single largest component of the Danish gambling market, accounting for 33.7 percent of the total gambling market in 2017; in 2016, this figure stood at 35.1 percent.

Total GGR for the Danish gambling sector has grown each year since 2012. As shown in Table 12, the total gambling market grew by 383 million kroner, or 4.3 percent, between 2016 and 2017. However, growth in total GGR for the gambling market is solely due to higher GGR in the markets for betting and online casinos. The strength of the legal markets for betting and online casinos since liberalisation explains why the lottery sector is decreasing proportionately.

As shown in Figure 30, betting on horse racing has seen both market share and GGR fall in recent years, ending 2017 on 116 million kroner. Betting on horse racing was subject to a monopoly operated by Danske Lotteri Spil A/S in 2017, though as of 1^{st} of January 2018, has been liberalised. Data on horse racing have been included in the quarterly statistics for the total betting market from 2018 Q2.

Table 12. Total GGR for the gambling market, 2012-2017











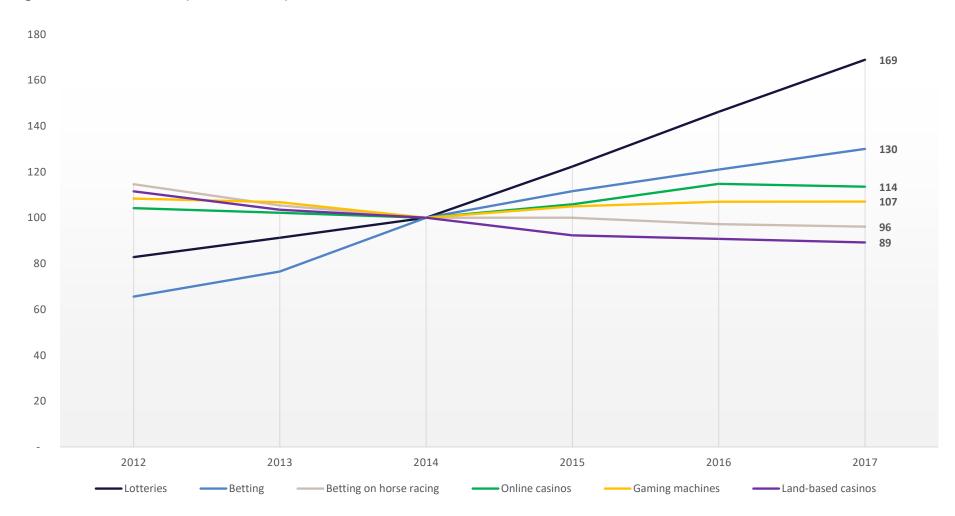


In million DKK	Online casino	Betting	Gaming ma- chines	Land-based casinos	Lotteries	Betting on horse racing	Total GGR
2012	885	1,175	1,774	344	3,145	145	7,468
2013	976	1,371	1,630	337	3,100	135	7,549
2014	1,069	1,791	1,547	330	2,902	130	7,769
2015	1,308	1,999	1,548	349	3,046	120	8,370
2016	1,563	2,168	1,504	379	3,105	118	8,837
2017	1,806	2,329	1,487	375	3,107	116	9,220

Source: Tax returns submitted to the Danish Tax Agency, hereunder Dansk Lotteri Spil A/S and Klasselotterierne. The figures for the three class lotteries are based upon estimates from available data.

¹⁵ GGR for lotteries are reported annually rather than quarterly or monthly (as seen in the four focus areas for this report). Figures from *Landbrugslotteriet* and *Varelotteriet* lie outside of the Danish Gambling Authority's field of responsibility, and are included in this report due to the goodwill shown by these lotteries. Due to estimates stemming from varying accounting periods, there may be slight adjustments to these figures in the future reports.

Figure 29. Indexed annual GGR (2014 = index 100)



Source: Tax returns submitted to the Danish Tax Agency, hereunder Dansk Lotteri Spil A/S and Klasselotterierne. The figures for the three class lotteries are based upon estimates from available data.

H. ROFUS

ROFUS is the Danish Gambling Authority's voluntary gambling self-exclusion register. Registrations in ROFUS cover all online gambling services offered by gambling operators licensed by the Danish Gambling Authority. From January 6th 2017, registration in ROFUS also includes land-based casinos.

As can be seen in Table 13, there has been an average monthly increase in registrations of 360 individuals per month (net growth rather than the number of new entries). The significant rise between January 2018 and February 2018 of 702 registrations, where the proportion of permanent self-exclusions fell. The rise in the number of excluded persons may be due to a cinema campaign on ROFUS which ran at the end of 2017 and the start of 2018.

On 1st of August 2018, there were 4,149 more registrations in ROFUS than there were on the 1st of August 2017, equating to year-on-year growth of 37.1 percent. The number of permanent self-exclusions grew by 2,821 in the period, accounting for 68.0 percent of growth in registrations. As shown in Figure 30, the proportion of total registrations that are permanent exclusions varies from month to month, though in general follows a stable upwards trend.

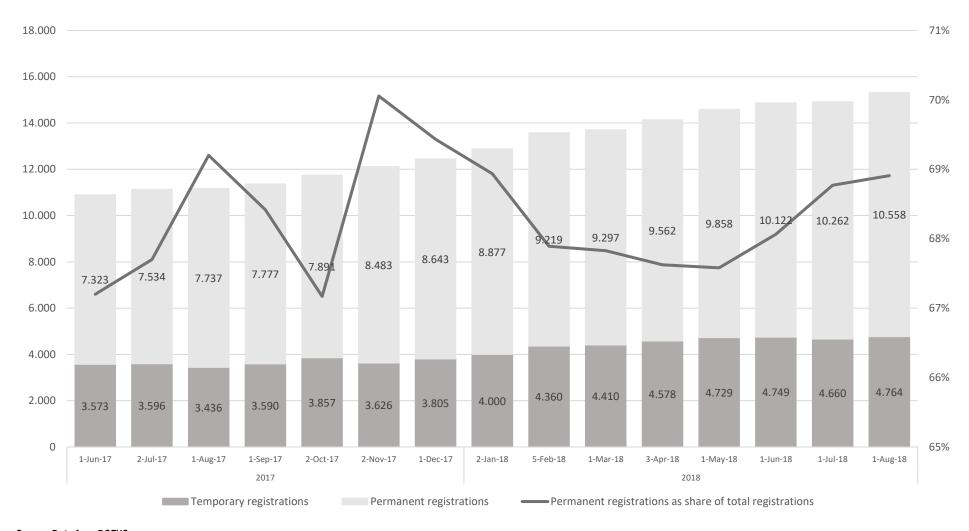
Table 13. Registrations in ROFUS

-	1
♥,	
	_

ROFUS		Total registrations	Of which, permanent	_	
	1-Jun-17	10.896	7.323	67,2%	
	2-Jul-17	11.130	7.534	67,7%	
	1-Aug-17	11.173	7.737	69,2%	
	1-Sep-17	11.367	7.777	68,4%	
0047	2-0ct-17	11.748	7.891	67,2%	
2017	2-Nov-17	12.109	8.483	70,1%	
	1-Dec-17	12.448	8.643	69,4%	
	2-Jan-18	12.877	8.877	68,9%	
	5-Feb-18	13.579	9.219	67,9%	
	1-Mar-18	13.707	9.297	67,8%	
2018	3-Apr-18	14.140	9.562	67,6%	
	1-May-18	14.587	9.858	67,6%	
	1-Jun-18	14.871	10.122	68,1%	
	1-Jul-18	14.922	10.262	68,8%	
	1-Aug-18	15.322	10.558	68,9%	

Source: Data from ROFUS.

Figure 30. ROFUS - Total registrations (temporary and permanent) and share of registrations



Source: Data from ROFUS.