



Danish gambling market statistics

First quarter, 2018

Indhold

A.	Introduction	1
B.	Overview over market developments in first quarter of 2018	2
C.	Online casinos	5
	Developments in GGR	5
	Quarterly developments	5
	Developments over the last twelve months	11
	Consumer behaviour	14
	Game types.....	14
	Sales channel	18
	When does gambling take place?	18
D.	Betting.....	21
	Development in GGR.....	21
	Quarterly developments	21
	Developments over the last twelve months	26
	Consumer behaviour	28
	Sales channels	28
	When does gambling take place?	28
E.	Gaming machines	32
F.	Land-based casinos	36
G.	Lotteries and betting on horse racing	39
H.	ROFUS	41

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 liberalised 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 liberalised 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. The report is, as of the first quarter of 2018, expanded with data for 2012 and 2013.

Statistics relating to gross gaming revenue (GGR), stakes, and winnings are based upon data submitted to the Danish Tax Authority (SKAT). Data concerning consumer behaviour 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.spilmyndigheden.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 first quarter of 2018

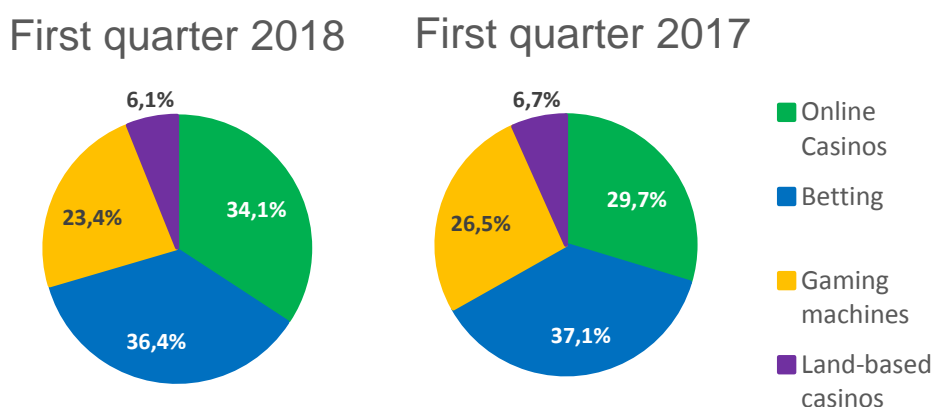
Combined gross gaming revenue (GGR)⁵ figures for betting, online casinos, gaming machines, and land-based casinos was just over 1.5 billion DKK for 2018 Q4 (see table 1).⁶ Quarterly GGR is 7.1 percent lower than 2017 Q4, but 9.2 percent higher than 2017 Q1. The difference between 2017 Q4 and 2018 Q1 stems primarily from 22.0 percent lower GGR for betting, though gaming machines also recorded 1.0 percent lower GGR in the same period. Both land-based casinos and online casinos recorded higher quarterly GGR than 2017 Q4, with growth of 2.0 percent and 8.7 percent respectively.

GGR for betting in 2017 Q4 was relatively high, which was due to a relatively low payout ratio. This ratio has returned in 2018 Q1 to a level comparable with 2017 Q3, which explains the 22.0 percent fall in GGR since 2017 Q4. 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 (36.4 percent) of the combined four focus markets in 2018 Q1, followed by online casinos (34.1 percent), gaming machines (23.4 percent) and land-based casinos (6.1 percent). The order is unchanged from 2017 Q1, where betting accounted for 37.1 percent of combined GGR, online casinos for 29.7, gaming machines for 26,5 percent, and land-based casinos for 6.7 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 liberalised 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 first quarter of 2017)








Source: Tax returns submitted to the Danish Tax Authority.

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

⁶ Statistics for lotteries and horse racing 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.

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 kroner)

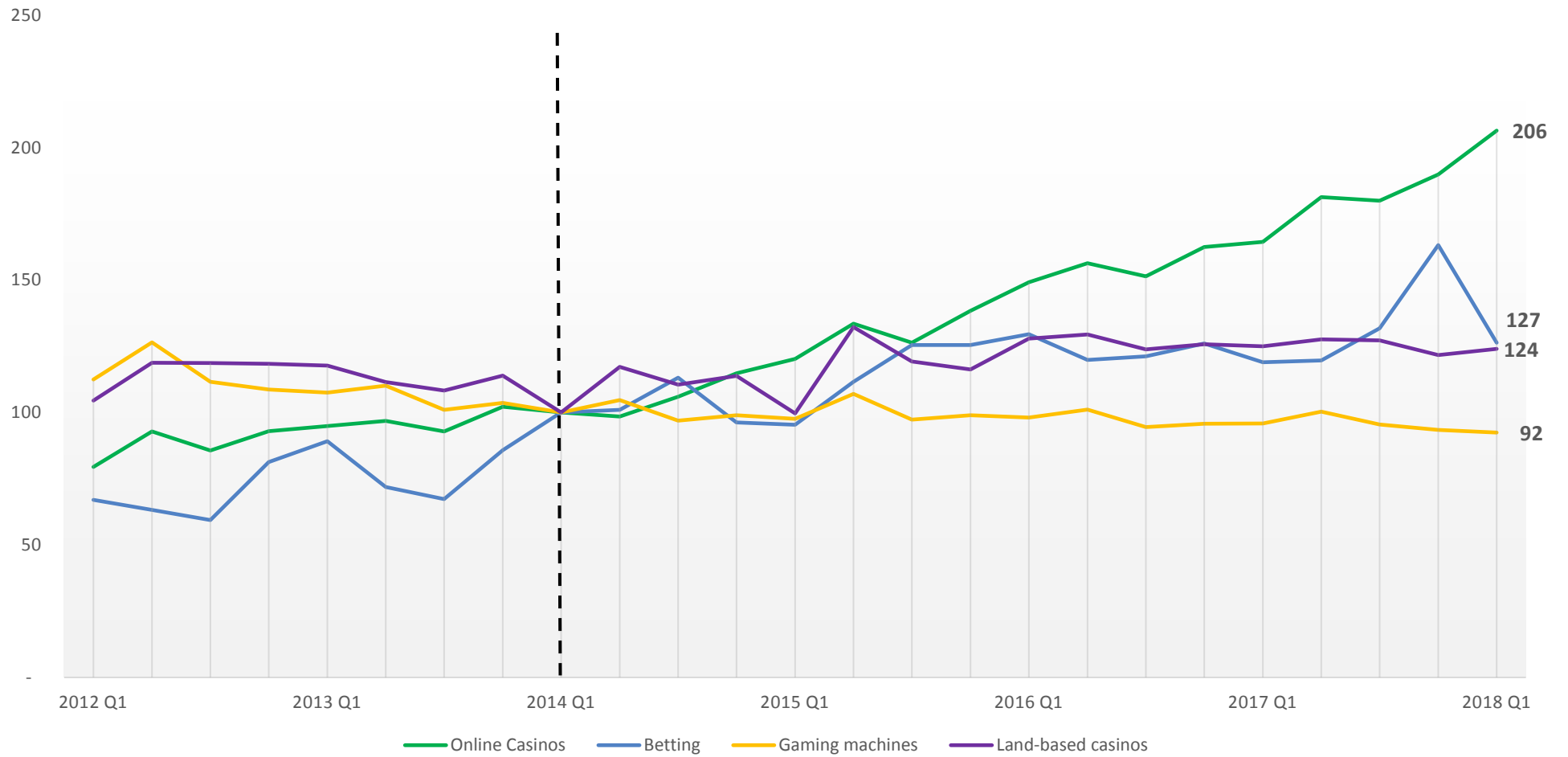
In million kroner		Online casinos	Betting	Gaming machines	Land-based casinos	Combined GGR
						
2012	Q1	200,5	292,5	434,4	78,1	1.005,5
	Q2	234,4	275,9	488,4	88,7	1.087,4
	Q3	216,1	259,3	431,0	88,7	995,1
	Q4	234,4	347,3	419,8	88,5	1.090,1
	Year	885,4	1.175,0	1.773,6	344,0	4.178,0
2013	Q1	239,5	389,1	415,0	88,0	1.131,5
	Q2	244,3	313,9	425,2	83,3	1.066,8
	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 ↓	337,3 ↓	4.315,0 ↑
2014	Q1	252,3	436,5	386,2	74,7	1.142,4
	Q2	248,4	440,8	404,2	87,6	1.199,2
	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 ↓	330,1 ↓	4.725,9 ↑
2015	Q1	303,3	416,4	376,8	74,5	1.171,0
	Q2	337,0	487,3	413,1	98,8	1.336,2
	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 ↑
2016	Q1	376,3	565,4	378,6	95,6	1.415,8
	Q2	394,6	523,2	390,6	96,7	1.405,1
	Q3	382,1	529,3	364,8	92,6	1.368,8
	Q4	410,0	550,4	370,0	94,0	1.424,4
	Year	1.562,9 ↑	2.168,3 ↑	1.504,0 ↓	378,9 ↑	5.614,1 ↑
2017	Q1	414,9	519,2	370,3	93,4	1.397,7
	Q2	457,5	522,4	387,5	95,4	1.462,8
	Q3	454,1	575,4	368,6	95,1	1.481,1
	Q4	479,1	712,4	360,6	90,9	1.637,9
	Year	1.805,6 ↑	2.329,4 ↑	1.487,0 ↓	374,8 ↓	5.996,8 ↑
2018	Q1	520,8*	555,4	356,9	92,7	1.525,8*
	Q2					
	Q3					
	Q4					
	Year					

Source: Tax returns submitted to the Danish Tax Authority. *First quarter 2018 includes online bingo.

Development in combined GGR up until 2018 Q1:

Q1 2012	51,7 %	
Q1 2014	32,7 %	↑ Growth on previous year
Q1 2017	9,2 %	↓ Decline on previous year
Q4 2017	-7,1 %	

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



Source: Tax returns submitted to the Danish Tax Authority.

C. Online casinos

Developments in GGR

Quarterly developments

Online casinos registered 520.8 million DKK in GGR in 2018 Q1, growth of 8.7 percent (41.7 million DKK) relative to 2017 Q4. This equates to growth of 25.5 percent in relation to 2017 Q1, a rise of 105.9 million DKK (see Table 2). These developments follow the general upwards trend seen since 2012.

Growth in 2018 Q1 has been proportionately largest for commission games, which include multi-player casino games where GGR is generated through payment of a fee (commission) to participate. These games have seen GGR grow by 27.7 percent relative to the 2017 Q4, while games without commission saw GGR grow by 7.3 percent for the same period. The relatively high growth in commission is a result of the liberalisation of online bingo as of 1st January 2018, where commission games have a high market share.

Compared with 2014 Q1, quarterly BSI for online casinos has grown by 106.4 percent. This growth has been driven by games without commission, which lies 133.7 percent higher in 2018 Q1 than 2014 Q1. GGR for commission games has fallen by 12.6 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.

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



In million kroner		Stakes	- Prizes	+ commission	= GGR
2012	Q1	3.538,9	3.400,3	61,9	200,5
	Q2	4.123,0	3.943,8	55,1	234,4
	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
2013	Q1	4.186,2	4.003,3	56,6	239,5
	Q2	4.672,2	4.478,0	50,1	244,3
	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 ↑
2014	Q1	5.109,8	4.904,5	46,9	252,3
	Q2	5.242,3	5.031,7	37,8	248,4
	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 ↑
2015	Q1	6.447,0	6.189,0	45,3	303,3
	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 ↑
2016	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 ↑
2017	Q1	10.290,6	9.910,6	34,9	414,9
	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 ↑	44.263,5 ↑	131,6 ↓	1.805,6 ↑
2018	Q1	12.615,7*	12.135,9*	41,0*	520,8*
	Q2				
	Q3				
	Q4				
	Year				

Source: Tax returns submitted to the Danish Tax Authority. *First quarter 2018 includes online bingo.



Growth on previous year



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 GGR⁹ for online casinos

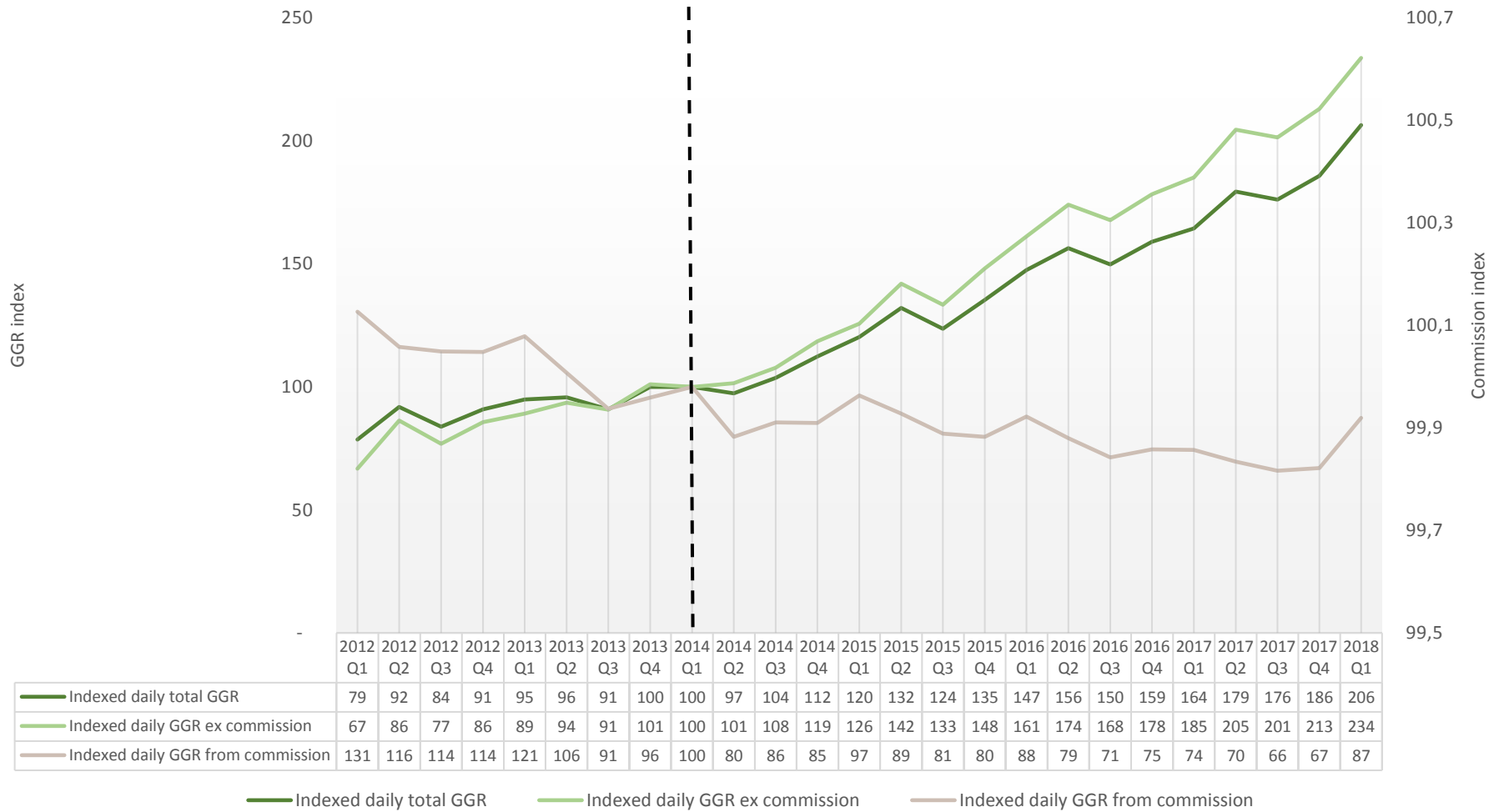


Development on previous quarter		Stakes	- Prizes	+ commission	= GGR
	-	-	-	-	-
2012	Q2	16,5%	16,0%	-10,9%	16,9%
	Q3	-9,3%	-9,3%	-0,5%	-7,8%
	Q4	14,4%	14,5%	-0,2%	8,5%
	-	-	-	-	-
2013	Q1	-2,1%	-2,3%	3,3%	2,1%
	Q2	11,6%	11,9%	-11,3%	2,0%
	Q3	4,1%	4,4%	-12,9%	-4,1%
	Q4	5,7%	5,5%	5,0%	10,1%
	Year	20,3%	20,4%	-13,4%	10,2%
2014	Q1	-0,6%	-0,5%	2,3%	-2,2%
	Q2	2,6%	2,6%	-19,4%	-1,5%
	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%
2015	Q1	5,5%	5,6%	10,8%	4,7%
	Q2	13,5%	13,5%	-6,6%	11,1%
	Q3	-0,6%	-0,4%	-8,3%	-5,4%
	Q4	9,6%	9,5%	-1,5%	9,5%
	Year	30,1%	30,2%	-1,2%	23,7%
2016	Q1	7,7%	7,7%	9,2%	7,8%
	Q2	8,0%	8,1%	-11,0%	4,9%
	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%
2017	Q1	2,6%	2,7%	-2,5%	1,2%
	Q2	12,8%	12,8%	-5,4%	10,3%
	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%
2018	Q1	0,0%*	-0,3%*	27,7%*	8,7%*
	Q2				
	Q3				
	Q4				
	Year				

Source: Tax returns submitted to the Danish Tax Authority. *First quarter 2018 includes online bingo.

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 2021 (Q1 2014 = index 100)

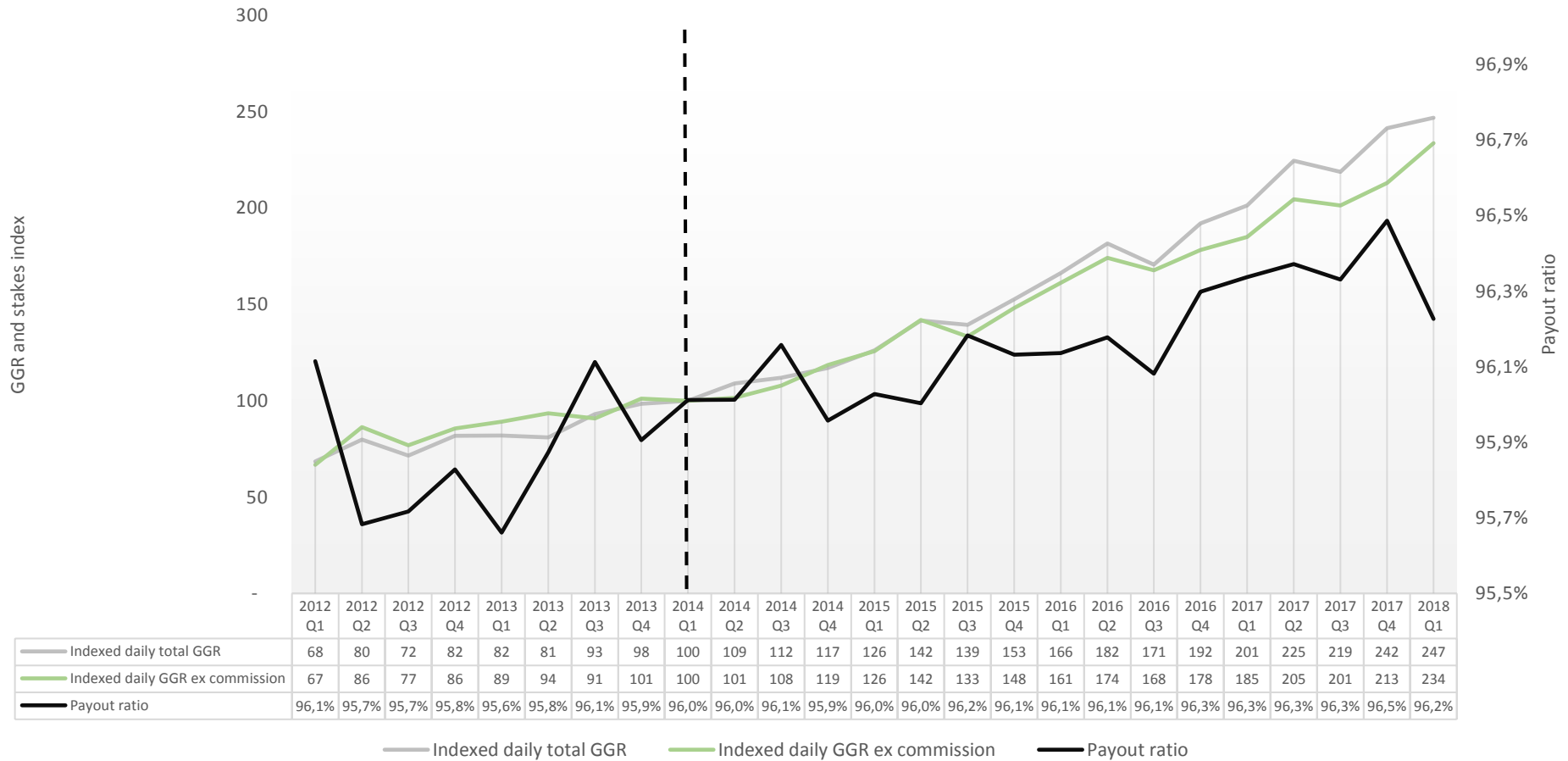


Source: Tax returns submitted to the Danish Tax Authority.

Since 2012, there has been a gradual rise in quarterly average payout ratio, from a low of 95.6 percent in 2013 Q1 to a high of 96.5 percent in 2017 Q4. The payout ratio has constantly been over 96.0 percent since 2015 Q1. Figure 4 charts the impact of the payout ratio on GGR for non-commission games.

Even though growth in the payout ratio has been gradual, even small adjustments in the payout ratio can have significant consequences for GGR. For example, GGR would have been 14.2 million DKK higher in 2018 Q1 with a payout ratio of 96.2 percent compared to 2012 Q1 with a payout ratio of 96.1 percent.

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



Source: Tax returns submitted to the Danish Tax Authority.














Developments over the last twelve months

Online casinos registered 1,911.6 million DKK in GGR between April 2017 and March 2018. GGR was highest in March 2018, at 183.9 million DKK, and lowest in May 2017 at 147.3 million DKK. Higher GGR was recorded in each month in 2018 Q1 relative to the corresponding month in 2017.

Turnover for March 2018 was just over 4.6 billion kroner, which equates to year-on-year growth of over one billion kroner (30.3 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 April 2017 and corrected for the varying lengths of each month.

The payout ratio is lower in 2018 Q1 (96.2 percent) compared with 2017 Q1 (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 5. Monthly GGR for online casinos incl. commission (incl. Bingo), stakes, prizes (million kroner) and payout ratio

					
In million kroner		GGR incl. commission	Stakes	Prizes	Payout ratio
2017	January	141,2	3.425,2	3.296,9	96,3%
	February	134,7	3.331,2	3.207,5	96,3%
	March	139,0	3.534,2	3.406,2	96,4%
	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%
	July	155,9	3.842,4	3.697,4	96,2%
	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%
2018	January*	174,5 	4.086,1 	3.926,0 	96,1% 
	February*	162,4 	3.925,3 	3.775,3 	96,2% 
	March*	183,9 	4.604,3 	4.434,6 	96,3% 
Total	April '17 – march '18	1.911,6	48.262,9	46.488,8	96,3%

Source: Tax returns submitted to the Danish Tax Authority. *First quarter 2018 includes online bingo.

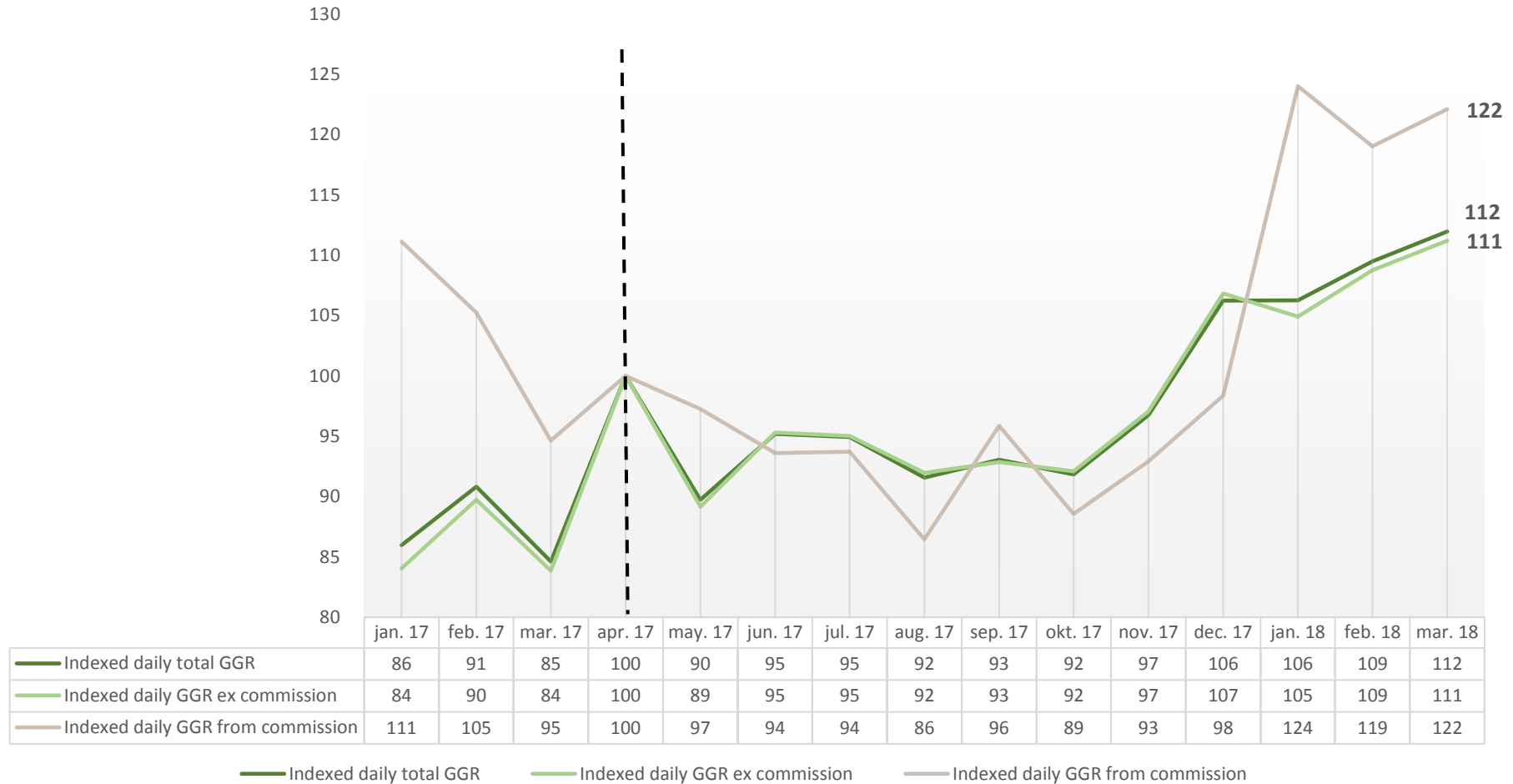


Growth on previous year



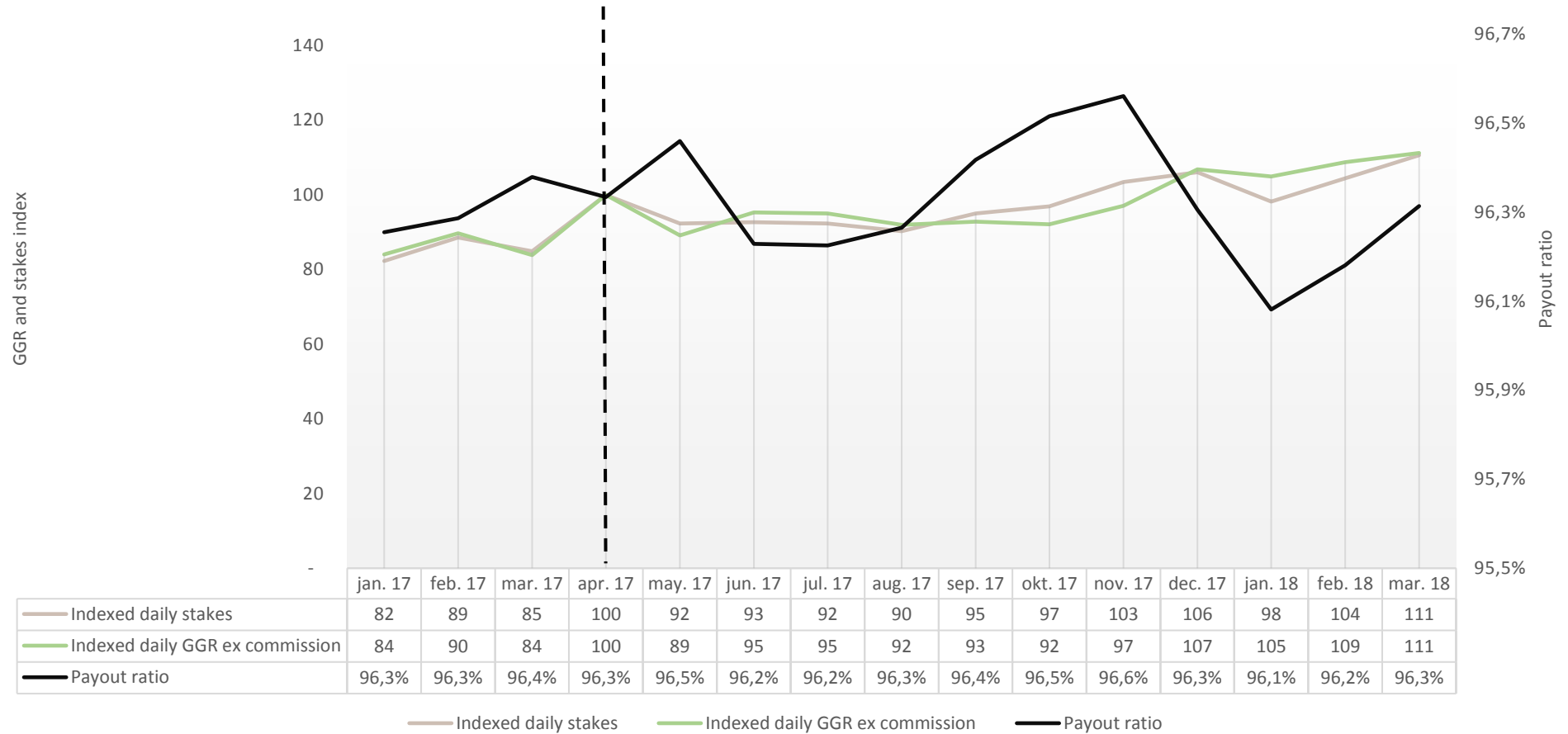
Decline on previous year

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



Source: Tax returns submitted to the Danish Tax Authority.

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



Source: Tax returns submitted to the Danish Tax Authority.

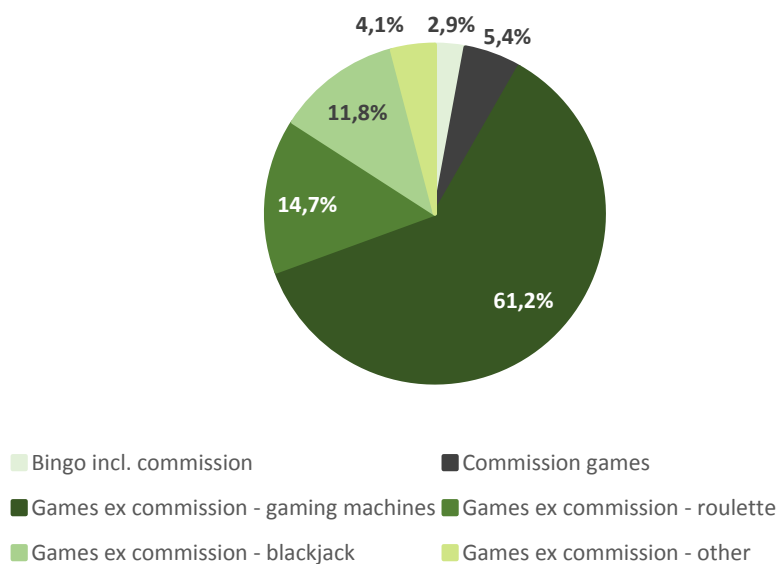
Consumer behaviour

Game types

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

Single player casino games are the largest of the three categories, accounting for 91.8 percent of the online casino market in 2018 Q1 (477.9 million DKK). Within single player casino games, gaming machines are the area where GGR is highest, with 61.2 percent of the entire online casino market in 2018 Q1. Multiplayer casino games are the next largest category with 5.4 percent of the market (28 million DKK), with bingo in third place 2.9 percent market share (15 million DKK).

Figure 7. Market shares within online casinos



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

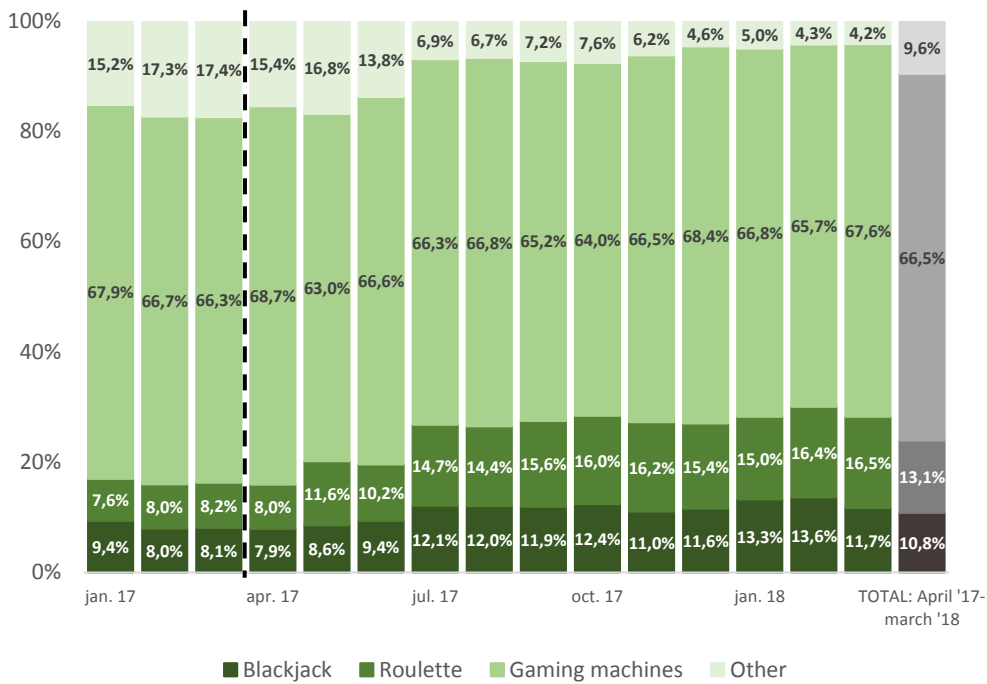
Game types – Single player online casino games

Online gaming machines were the most popular type of single player online casino game over the last twelve months, with a market share of 66.5 percent.¹⁰ Roulette was the next most popular game with an average 13.1 percent market share, with blackjack in third place on 10.8 percent of the market.

As figure 8 illustrates, market shares for these game types was relatively stable until June 2017. From July 2017 and onwards, market shares for roulette and blackjack have risen. 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.

¹⁰ Measured according to GGR from non-commission games, and excluding bingo.

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



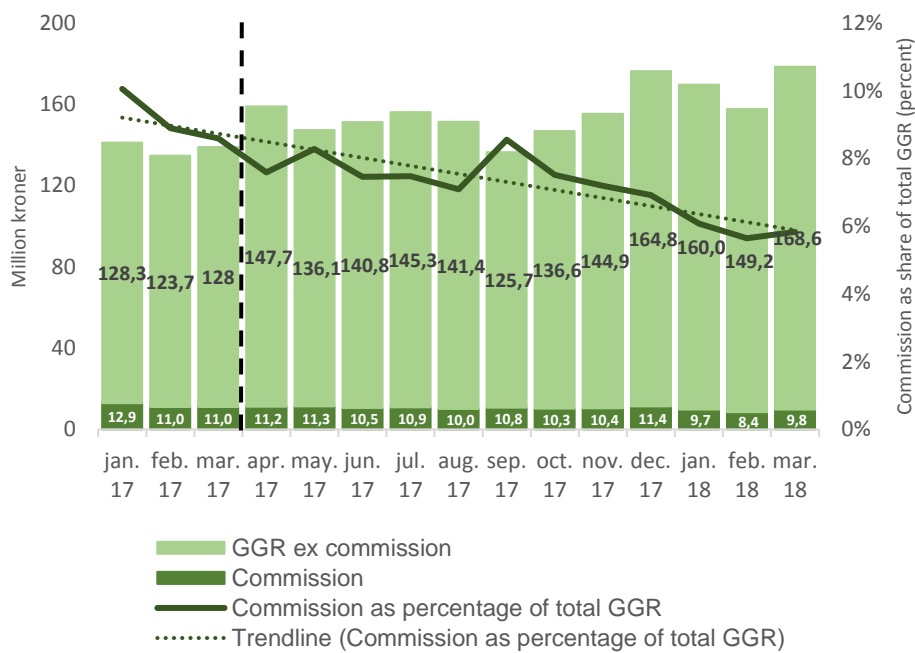
Source: Based upon gambling transaction data submitted by license holders to the Danish Gambling Authority. Market share is calculated according to the total value of stakes placed. Multi-player games, where GGR is calculated on the basis of commission, such as multi-player poker, are not included. Due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

Game types – 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.

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



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

Game types – Bingo

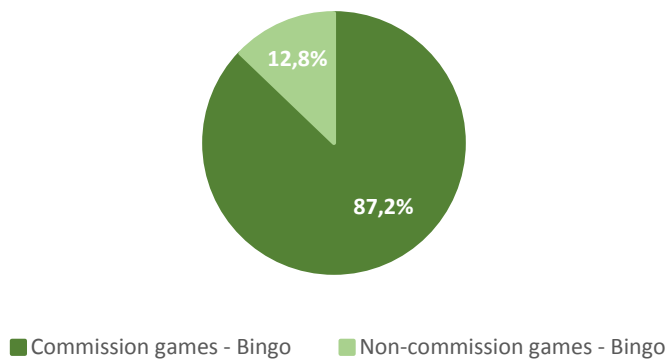
Liberalisation of online bingo took effect on 1st January 2018. In 2018 Q1, GGR is estimated to 14.9 million DKK (see Table 6). Commission based bingo (multi-player bingo) accounts for 87.2 percent of this GGR, as set out in Figure 9. GGR grew between January 2018 (4.8 million DKK) and March 2018 (5.4 million DKK). As this is a relatively new area, figures may be effected by statistical irregularities and it is anticipated that adjustments to these figures will come in future reports.

Table 6. GGR for online bingo

Million kroner	Stakes	Prizes	GGR ex. commission	Commission
January	5,2	5,2	0,1	4,7
February	6,4	5,6	0,8	4,0
March	8,5	7,5	1,1	4,3
Q1 2018	20,2	18,2	1,9	13,0

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

Figure 10. Commission games as share of GGR for online bingo

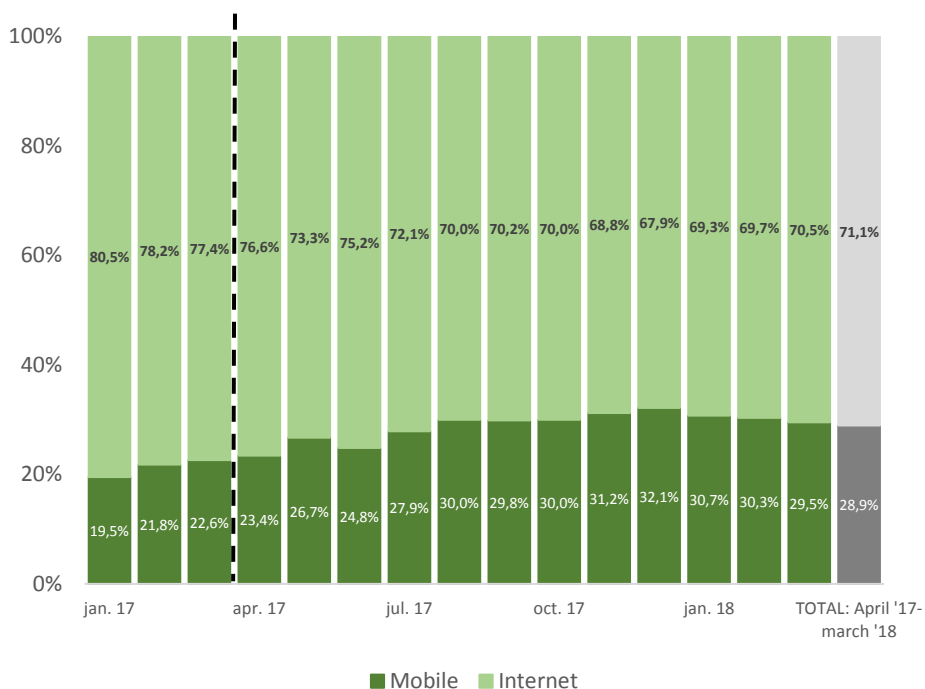


Source: Based upon gambling transaction data submitted by license holders to the Danish Gambling Authority.

Sales channel

Over the course of the twelve months between April 2017 and March 2018, 71.1 percent of GGR from online casinos came from standard websites, with the remaining 28.9 percent generated through mobile platforms.¹¹ 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 23.4 percent in April 2017 to 29.5 percent in March 2018, as shown in figure 11. Market share for mobile transactions is though lower for 2018 Q1 than 2017 Q4.

Figure 11. Market share for internet and mobile platforms, weighted by GGR



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

When does gambling take place?

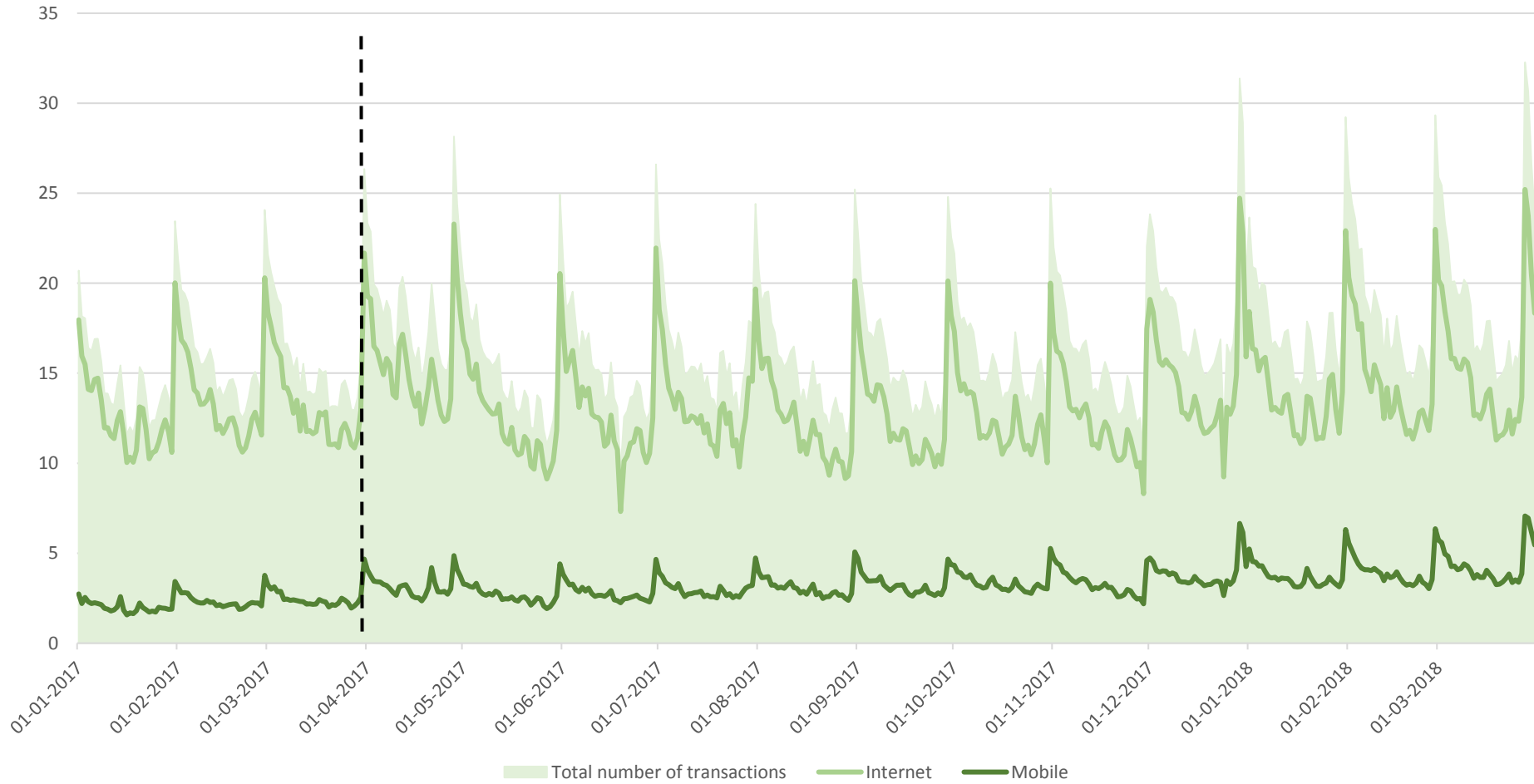
Gambling activity in online casinos is highest at the end of the month, coinciding with the day monthly salaries are typically paid out, as illustrated in Figure 12. Over the last twelve months, the date where the most transactions took place was 28th March 2018, with 32.3 million individual transactions.¹²

For 2018 Q1, the value of total transactions in online casinos was highest on Wednesdays (16.2 percent), and lowest on Sundays (12.0 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 (15.6 percent), while Sundays were also the day with the lowest number of individual transactions (12.7 percent).

¹¹ 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.

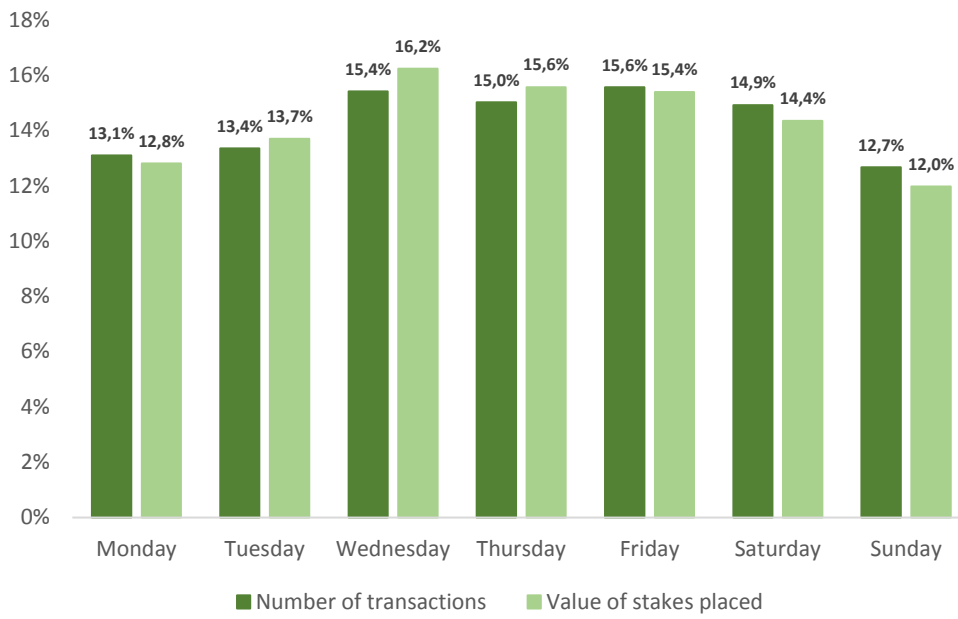
¹² A transaction takes place every time a game is played. This means, for example, that every time a player clicks to spin a dial in a gaming machine, a new transaction takes place. Transactions are therefore distinct from gaming sessions.

Figure 12. Number of daily transactions (million)
January 2017 - March 2018



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

Figure 13. Number of transactions distributed according to day of the week (in percent) for Q1 2018



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

D. Betting

Development in GGR

Quarterly developments

Betting operators¹³ registered 555.4 million DKK in GGR in 2018 Q1, a decline of 22.0 percent (157.0 million DKK) relative to 2017 Q4 (see Table 7). However, this figure equates to growth of 7.0 percent relative to 2017 Q1, a rise of 36.3 million DKK. Quarterly GGR has remained relatively stable since 2015 Q3, with the exception of 2017 Q4.

The fall in GGR between 2017 Q4 and 2018 Q1 is primarily due to a relatively low payout ratio in 2017 Q4. As can be seen in Table 8, it is unusual for the payout ratio to drop by as much as 2.8 percent between the third and fourth quarters, which was the case in 2017. In 2018 Q1, the payout ratio has risen by 3.3 percentage points, which means that despite growth in stakes of 1.4 percent, GGR is lower in 2018 Q1 than 2017 Q1.

Stakes have remained relatively stable since 2015 Q4, and have been in the region of 4.9 billion to 5.3 billion DKK each quarter, though with peaks in the second quarters of both 2016 and 2017. 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.

¹³ Please note that while betting on horse, dog, and pigeon racing was liberalised on 1st January 2018, statistics for betting on these events are not included in the statistics presented in Section D for betting.

Table 7. Market indicators for the betting market (GGR and stakes in million kroner)



In million kroner		Stakes	Payout ratio	GGR
2012	Q1	1.685,6	83,0%	292,5
	Q2	2.066,4	87,0%	275,9
	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
2013	Q1	2.308,7	83,3%	389,1
	Q2	2.234,9	86,1%	313,9
	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 ↑
2014	Q1	3.206,8	86,5%	436,5
	Q2	3.699,1	88,2%	440,8
	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 ↑
2015	Q1	4.349,5	90,5%	416,4
	Q2	4.711,1	89,7%	487,3
	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 ↑
2016	Q1	5.271,3	89,3%	565,4
	Q2	6.063,5	91,4%	523,2
	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 ↑
2017	Q1	5.293,3	90,2%	519,2
	Q2	5.617,4	90,7%	522,4
	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 ↑
2018	Q1	5.235,2	89,5%	555,4
	Q2			
	Q3			
	Q4			
	Year			

Source: Tax returns submitted to the Danish Tax Authority.

↑
↓

Growth on previous year

Decline on previous year

Table 8. Development in stakes, GGR and payout ratio (in percentage points) for betting



Development on previous quarter	Stakes	Payout ratio (PP)	Total GGR (ex. Commission)
-	-	-	-
2012	Q2	22,6%	4,0
	Q3	-8,9%	-0,4
	Q4	25,7%	-1,3
	-	-	-
2013	Q1	-2,4%	-2,0
	Q2	-3,2%	2,8
	Q3	5,3%	1,6
	Q4	25,1%	-0,2
	Year	23,0%	0,6
2014	Q1	8,9%	-0,9
	Q2	15,4%	1,6
	Q3	-0,7%	-1,5
	Q4	17,8%	3,7
	Year	51,5%	1,9
2015	Q1	0,5%	0,1
	Q2	8,3%	-0,8
	Q3	-12,0%	-2,9
	Q4	19,1%	2,1
	Year	21,7%	0,9
2016	Q1	6,7%	0,4
	Q2	15,0%	2,1
	Q3	-13,0%	-1,4
	Q4	1,2%	-0,3
	Year	20,9%	1,2
2017	Q1	-0,7%	0,5
	Q2	6,1%	0,5
	Q3	-6,6%	-1,7
	Q4	-1,6%	-2,8
	Year	-2,8%	-1,1
2018	Q1	1,4%	3,3
	Q2		
	Q3		
	Q4		
	Year		

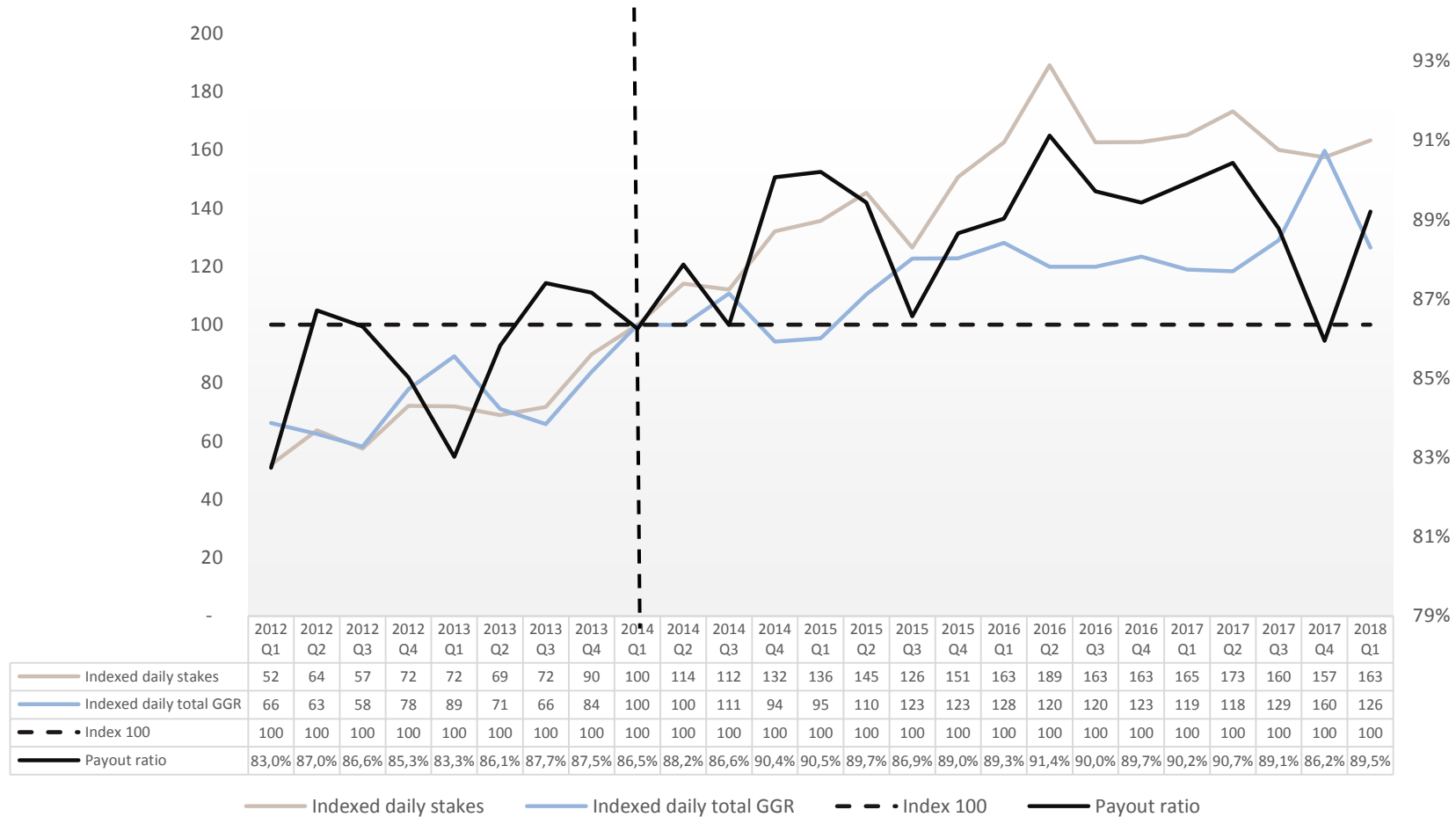
Source: Tax returns submitted to the Danish Tax Authority.

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 Q4¹⁴, which was the lowest observed payout ratio since 2012 Q1. In 2018 Q1, the payout ratio returned to a level comparable with 2017 Q3.

Although growth in the payout ratio has been gradual, even small adjustments in the payout ratio can have significant consequences for GGR. For example, GGR would have been 338 million DKK higher in 2018 Q1 with a payout ratio of 89.5 percent compared to 2012 Q1 with a payout ratio of 83.0 percent.

¹⁴ 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.

Figure 14. Indexed development in stakes, GGR and payout ratio for betting (2014 Q1 = index 100)



Source: Tax returns submitted to the Danish Tax Authority.


Developments over the last twelve months

Betting operators registered 2,365.8 million DKK in GGR between April 2017 and March 2018. Seen over the course of the past twelve months, GGR was highest in October 2017 at 271.7 million DKK, and lowest in June 2017 at 140.7 million DKK. In relation to 2017 Q1, GGR was higher in 2018 Q1 for both January and March, but lower for February.

As illustrated in Table 10, stakes were highest in April 2017 at approximately 2.35 billion DKK, and lowest in June 2017 at 1.45 billion DKK. Developments in GGR, non-commission GGR, and commission GGR are charted in Figure 15, indexed against April 2017 and corrected for the varying lengths of each month.

The payout ratio is lower in 2018 Q1 (89.5 percent) compared with 2017 Q1 (90.2 percent). The payout ratio has over the last twelve months fluctuated between 84.7 percent (December 2017) and 92.0 percent (April 2017), with an average of 88.8 percent for the period. The Effect of the payout ratio upon GGR for non-commission betting is illustrated in Figure 15.

Table 10. Monthly GGR (incl. commission), stakes and payout ratio



In million kroner		GGR incl. commission	Stakes	Payout ratio
2017	January	223,9	1.744,8	87,2%
	February	157,6	1.672,1	90,6%
	March	137,6	1.876,5	92,7%
	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%
	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%
2018	January	227,2 ↑	1.603,5 ↓	85,9% ↑
	February	148,9 ↓	1.722,4 ↑	91,4% ↑
	March	179,4 ↑	1.909,3 ↑	90,7% ↓
Total	April '17 – march '18	2.365,8	21.258,9	88,8%

Source: Tax returns submitted to the Danish Tax Authority.

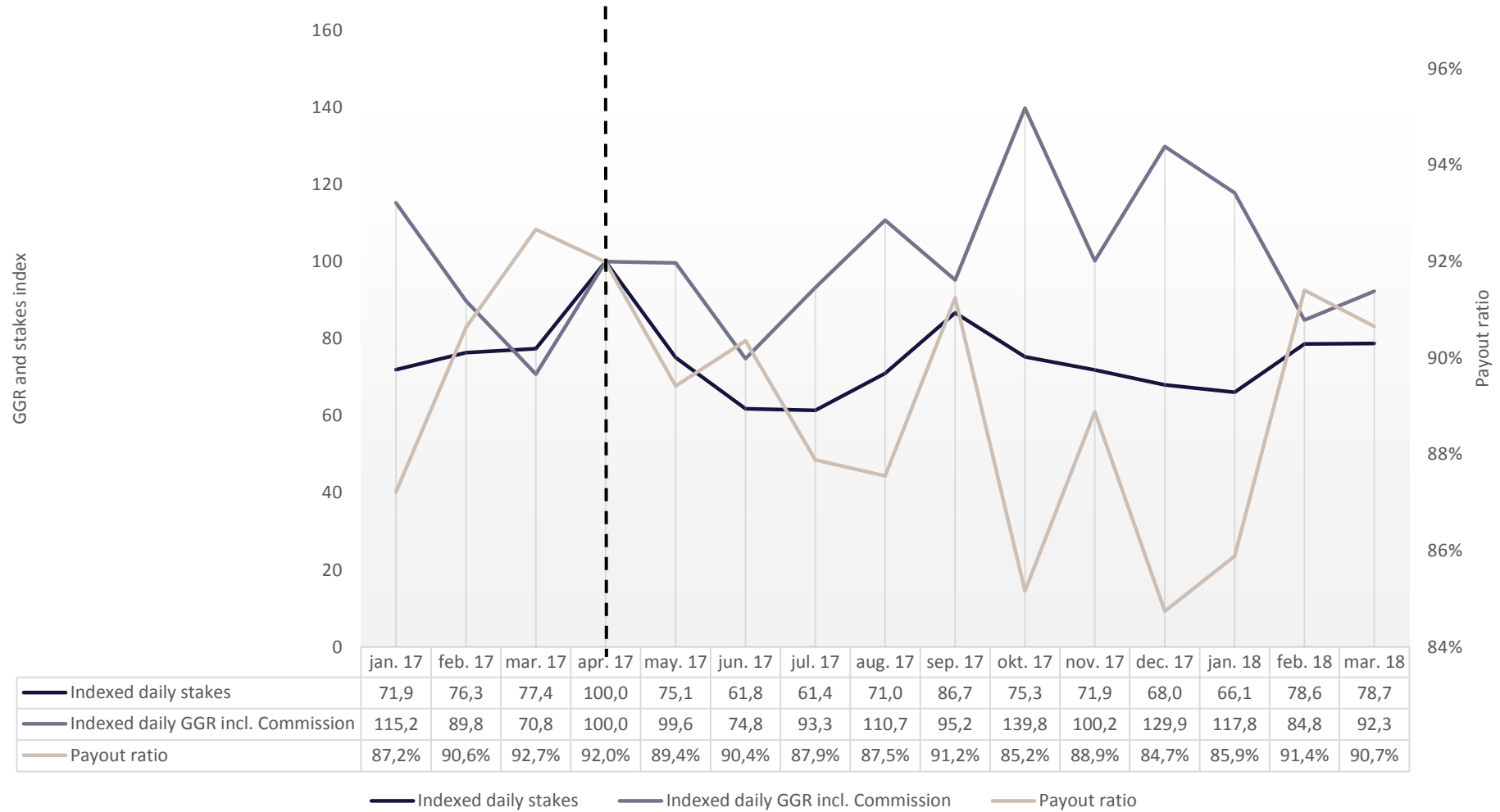


Growth on previous year



Decline on previous year

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



Source: Tax returns submitted to the Danish Tax Authority.

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 11, according to the Danish Gambling Authority's estimates¹⁵, in the fourth quarter of 2017, 50.0 percent of GGR from fixed odds betting came through mobile platforms, 15.4 percent from desktop versions of homepages, and the remaining 34.6 percent from land-based bookmakers.














When seen in relation to turnover (not GGR), the online sector continues to dominate, with mobile platforms accounting for 54.7 percent of total turnover between April 2017 and March 2018 (see Figure 16). Other online transactions (desktop homepages) accounted for 22.2 percent of turnover, while land-based transactions delivered the remaining 23.1 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.

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 and September 2017 over the past twelve months. The day where the value of stakes was highest was 29th April 2017, with stakes worth 120 million DKK placed with bookmakers. In 2018 Q1, the day of the week where the highest number of bets took place was Saturdays (19.4 percent) as charted in Figure 19, which was also the day where the total value of stakes were highest (18.4 percent).

Table 11. Market share according to sales channel, fastodds betting, weighted by GGR

 Weighted by GGR	Land-based	Internet	Mobile
2017 Q1	34,3 %	16,5 %	49,2 %
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 % 
Average Last twelve months	34,6 %	15,4 %	50,0 %

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

¹⁵ 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 Authority. 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 income-limited gambling licenses.

Figure 16. Sales channels for betting, according to Turnover

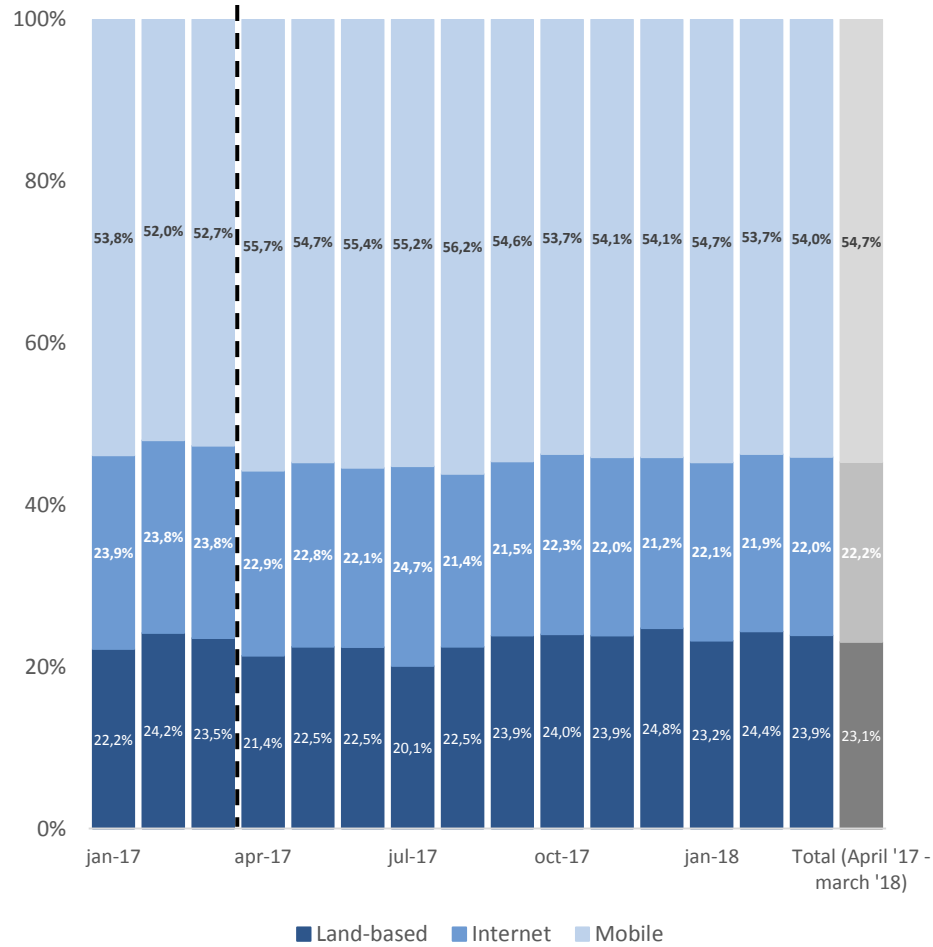
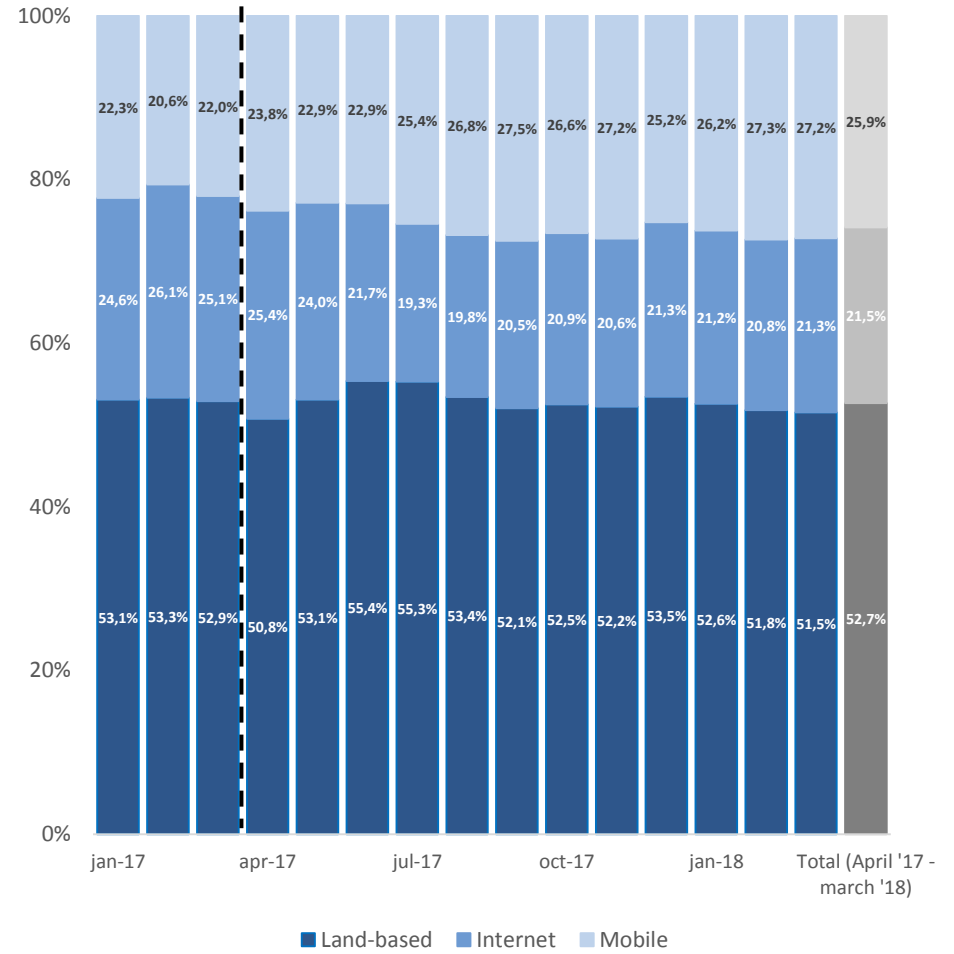
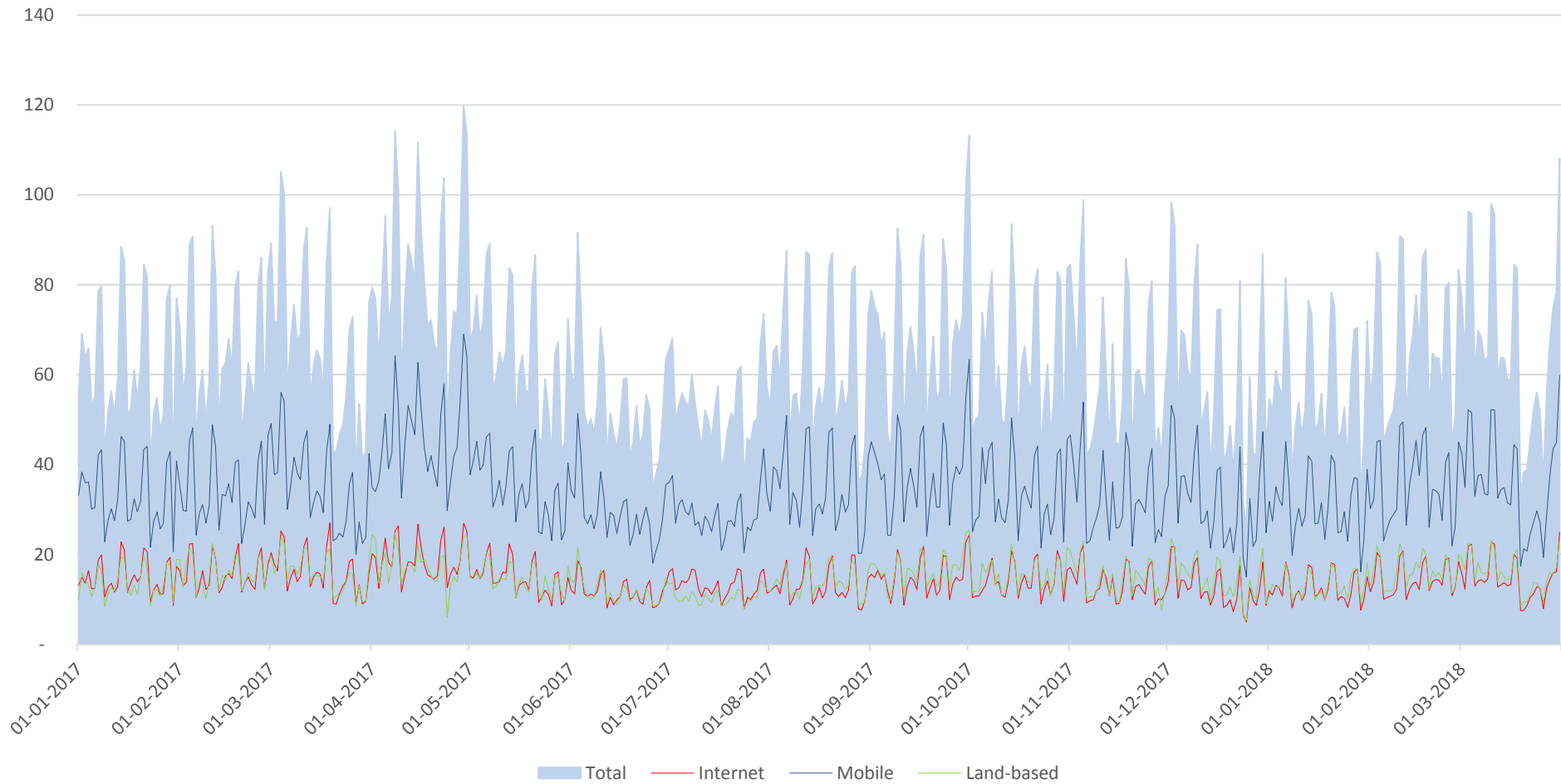


Figure 17. Sales channels for betting, according to total number of bets placed



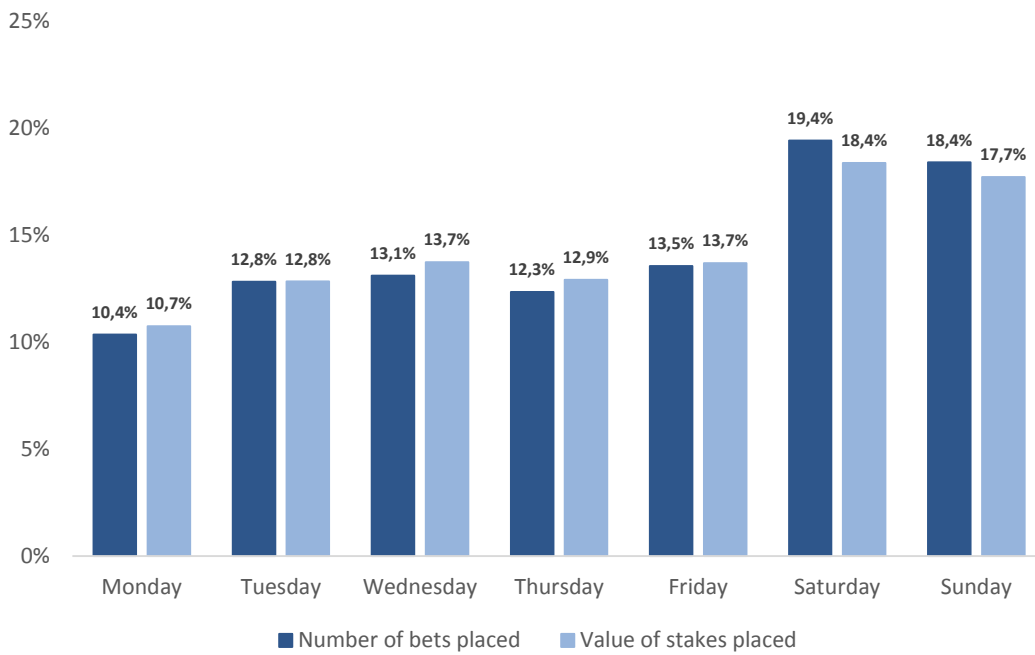
Source: Based upon gambling transaction data submitted by license holders to the Danish Gambling Authority.

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



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

Figure 19. Number of bets placed and turnover distributed according to the day of the week (in percent) for 2018 Q1



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

E. Gaming machines

Gaming machines generated 356.9 million DKK in GGR in 2018 Q1, a decline of 1.0 percent (3.7 million DKK) relative to 2017 Q4 (see Table 12). This equates to a fall of 3.6 percent relative to 2017 Q1, with GGR 13.4 million DKK lower.

Quarterly GGR has remained relatively stable since 2015 Q3, with the exception of 2017 Q4. GGR from gaming arcades fell by 1.1 percent between 2017 Q4 and 2018 Q1, as did GGR for gaming machines in restaurants, though by a lesser degree, 0.8 percent, as shown in table 13. Quarterly GGR from gaming machines has been declining since 2012, as is illustrated in Figure 20.

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 8.0 percent as opposed to 7.4 percent, which is charted in Figure 20. As Figure 20 shows, GGR is highest in the second quarter of each year, both for restaurants and for gaming arcades.

Gaming machines generated 1.5 billion kroner in GGR over the twelve months between April 2017 and March 2018, as set out in Figure 21. On average, restaurants generated 28.1 million kroner in GGR per month, whilst arcades generated 94.7 million kroner a month. For both restaurants and arcades, GGR was highest in April 2017, totaling 31.1 million and 108.4 million kroner respectively, while GGR was lowest in February 2018 for both restaurants and gaming arcades, at 25.9 million DKK and 87.6 million DKK respectively.

Table 12. Quarterly GGR for gaming machines



In million kroner		Restaurants	Gaming arcades	Total GGR
2012	Q1	111,8	322,7	434,4
	Q2	120,1	368,3	488,4
	Q3	109,2	321,8	431,0
	Q4	103,8	315,9	419,8
	Year	444,9	1328,7	1773,6
2013	Q1	99,2	315,8	415,0
	Q2	100,3	325,0	425,2
	Q3	92,0	298,1	390,2
	Q4	124,7	275,4	400,1
	Year	416,2 ↓	1214,3 ↓	1630,5 ↓
2014	Q1	89,8	296,4	386,2
	Q2	92,7	311,5	404,2
	Q3	89,4	284,9	374,4
	Q4	88,8	293,4	382,2
	Year	360,7 ↓	1186,1 ↓	1546,9 ↓
2015	Q1	87,6	289,3	376,8
	Q2	92,7	320,4	413,1
	Q3	87,5	288,2	375,6
	Q4	86,1	295,9	382,0
	Year	353,8 ↓	1193,7 ↑	1547,6 ↑
2016	Q1	85,0	293,6	378,6
	Q2	86,4	304,2	390,6
	Q3	84,0	280,8	364,8
	Q4	84,9	285,0	370,0
	Year	340,3 ↓	1163,6 ↓	1504,0 ↓
2017	Q1	85,2	285,0	370,3
	Q2	87,6	299,9	387,5
	Q3	84,0	284,6	368,6
	Q4	83,3	277,3	360,6
	Year	340,2 ↓	1146,9 ↓	1487,0 ↓
2018	Q1	82,6	274,3	356,9
	Q2			
	Q3			
	Q4			
Year				

Source: Tax returns submitted to the Danish Tax Authority.

 Growth on previous year
 Decline on previous year

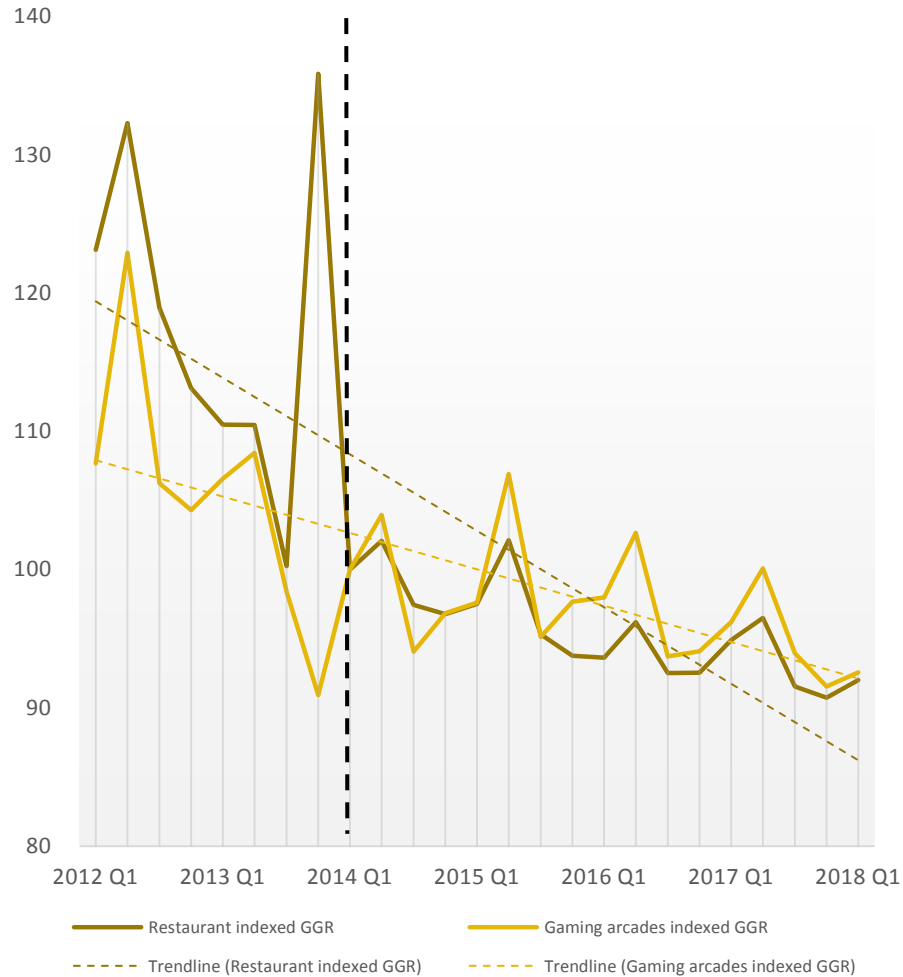
Table 13. Quarter-on-quarter development in GGR from gaming machines



Development on previous quarter	Restaurants	Gaming arcades	Total GGR
	-	-	-
2012	Q2	7,4%	14,1%
	Q3	-9,1%	-12,6%
	Q4	-4,9%	-1,8%
	Year	-	-
2013	Q1	-4,5%	0,0%
	Q2	1,1%	2,9%
	Q3	-8,2%	-8,3%
	Q4	35,5%	-7,6%
	Year	-6,4%	-8,6%
2014	Q1	-28,0%	7,6%
	Q2	3,2%	5,1%
	Q3	-3,5%	-8,5%
	Q4	-0,7%	3,0%
	Year	-13,3%	-2,3%
2015	Q1	-1,4%	-1,4%
	Q2	5,9%	10,8%
	Q3	-5,7%	-10,1%
	Q4	-1,6%	2,7%
	Year	-1,9%	0,6%
2016	Q1	-1,2%	-0,8%
	Q2	1,6%	3,6%
	Q3	-2,8%	-7,7%
	Q4	1,1%	1,5%
	Year	-3,8%	-2,5%
2017	Q1	0,3%	0,0%
	Q2	2,8%	5,2%
	Q3	-4,1%	-5,1%
	Q4	-0,9%	-2,6%
	Year	0,0%	-1,4%
2018	Q1	-0,8%	-1,1%
	Q2		
	Q3		
	Q4		
	Year		

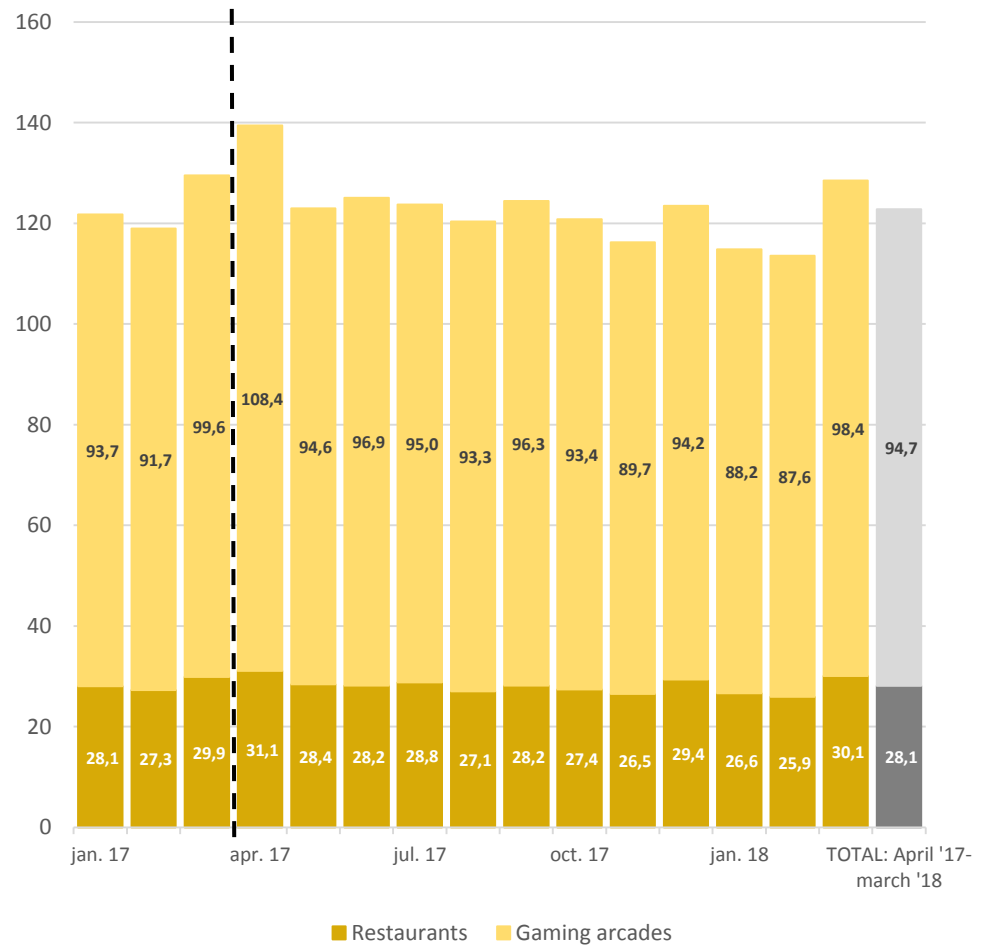
Source: Tax returns submitted to the Danish Tax Authority.

Figure 20. Development in quarterly GGR indexed against 2014 Q1 (index 100)



Source: Tax returns submitted to the Danish Tax Authority.

Figure 21. Monthly GGR for gaming machines (January 2017 – March 2018)



Source: Tax returns submitted to the Danish Tax Authority.

F. Land-based casinos

Denmark's seven land-based casinos, including the DFDS Oslo Ferry, registered 92.7 million DKK in GGR in 2018 Q1, a rise of 1.9 percent (1.7 million DKK) relative to 2017 Q4 (see Table 14). However, this equates to a fall of 0.8 percent relative to 2017 Q1, with GGR 0.8 million DKK lower.

Figure 22 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 April 2017 and March 2018, land-based casinos generated 374.1 million DKK in GGR, an average of 31.2 million DKK a month. Seen in relation to 2017 Q1, GGR was approximately 2 million DKK lower in January and February 2018, but 3.6 million DKK higher in March 2018. When taking account for the varying lengths of each month, as shown in Figure 23, 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). On average, land-based casinos generated 1.02 million DKK per day between April 2017 and March 2018.

Table 14. Quarterly GGR and development on previous quarter



In million kroner		Total GGR	Development on previous quarter
2012	Q1	78,1	-
	Q2	88,7	13,6%
	Q3	88,7	-0,1%
	Q4	88,5	-0,2%
	Year	344,0	-
2013	Q1	88,0	-0,6%
	Q2	83,3	-5,3%
	Q3	80,9	-2,8%
	Q4	85,1	5,2%
	Year	337,3 ↓	-1,9%
2014	Q1	74,7	-12,2%
	Q2	87,6	17,2%
	Q3	82,6	-5,7%
	Q4	85,1	3,0%
	Year	330,1 ↓	-2,2%
2015	Q1	74,5	-12,5%
	Q2	98,8	32,7%
	Q3	89,2	-9,8%
	Q4	86,9	-2,5%
	Year	349,4 ↑	5,9%
2016	Q1	95,6	10,0%
	Q2	96,7	1,2%
	Q3	92,6	-4,3%
	Q4	94,0	1,6%
	Year	378,9 ↑	8,5%
2017	Q1	93,4	-0,7%
	Q2	95,4	2,1%
	Q3	95,1	-0,3%
	Q4	90,9	-4,4%
	Year	374,8 ↓	-1,1%
2018	Q1	92,7	1,9%
	Q2		
	Q3		
	Q4		
	Year		

Source: Tax returns submitted to the Danish Tax Authority.

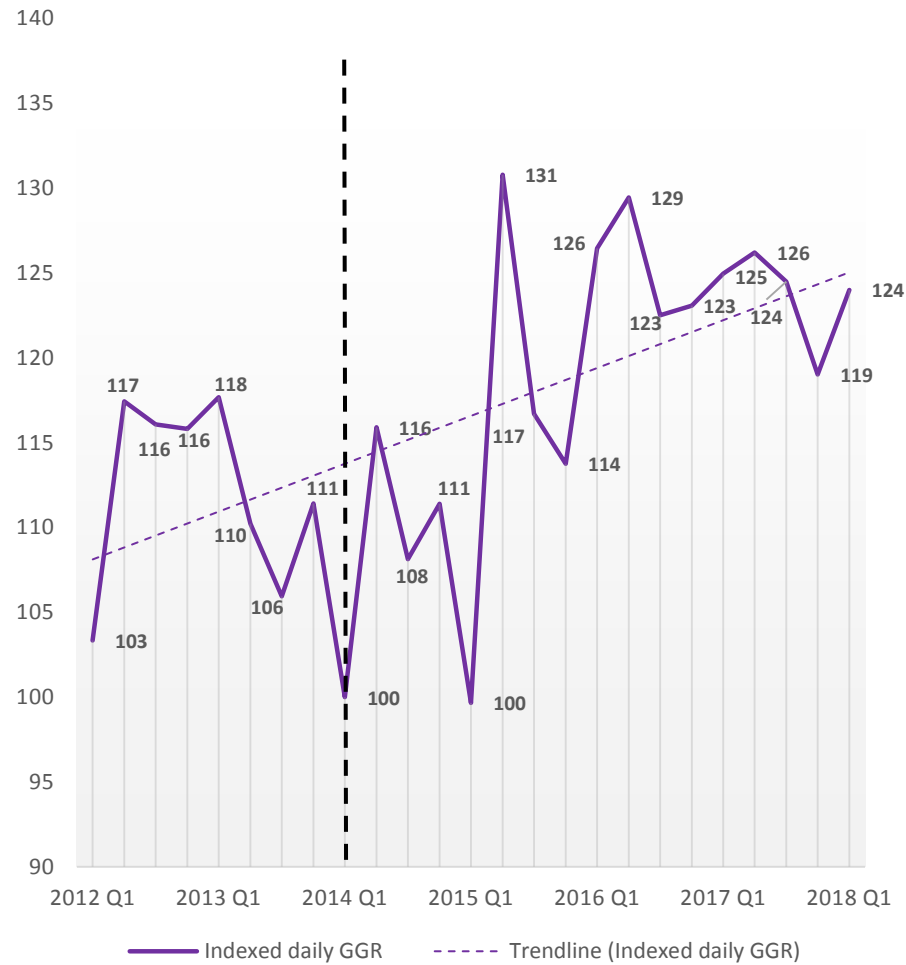


Growth on previous year



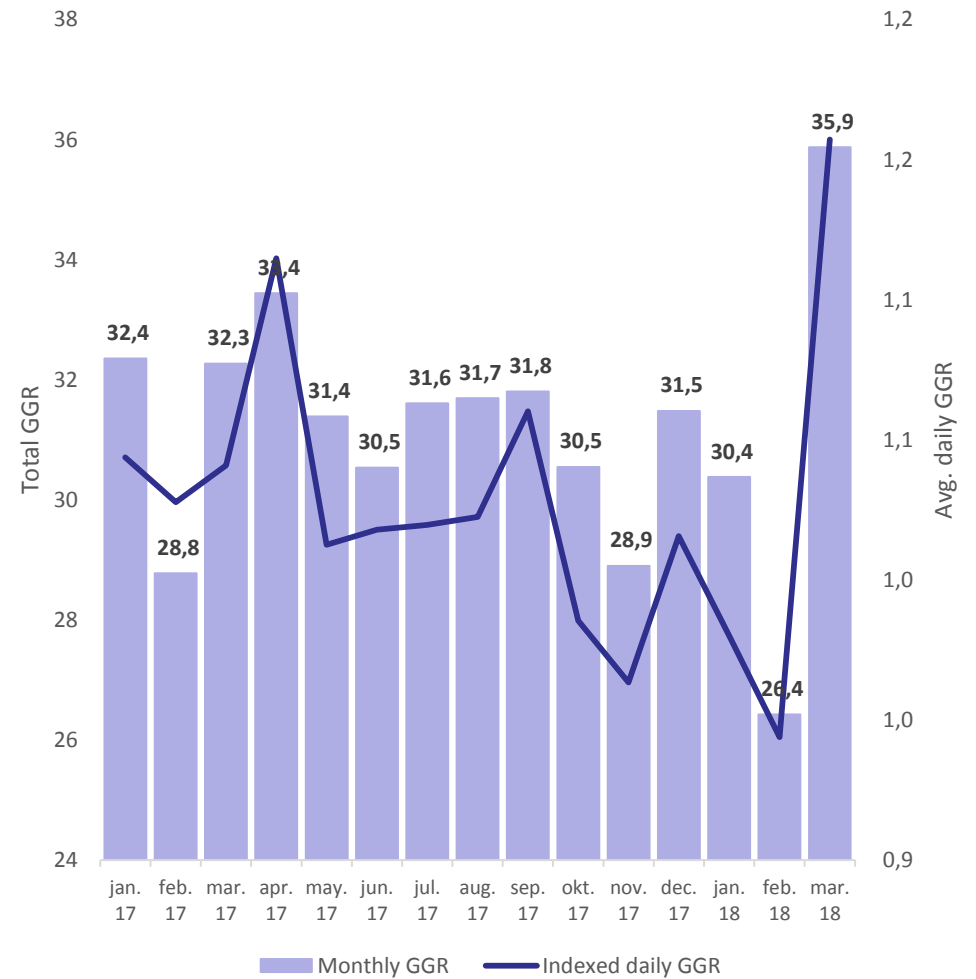
Decline on previous year

Figure 22. Quarterly GGR benchmarked against 2014 Q1 (index 100)



Source: Tax returns submitted to the Danish Tax Authority.

Figure 23. Monthly GGR for land-based casinos



Source: Tax returns submitted to the Danish Tax Authority.







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 2017¹⁶. 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 15, 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 24, 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 1st of January 2018, has been liberalised. Monthly data for horse racing is not available at this point in time, but will be included in our market reports when feasible to do so.

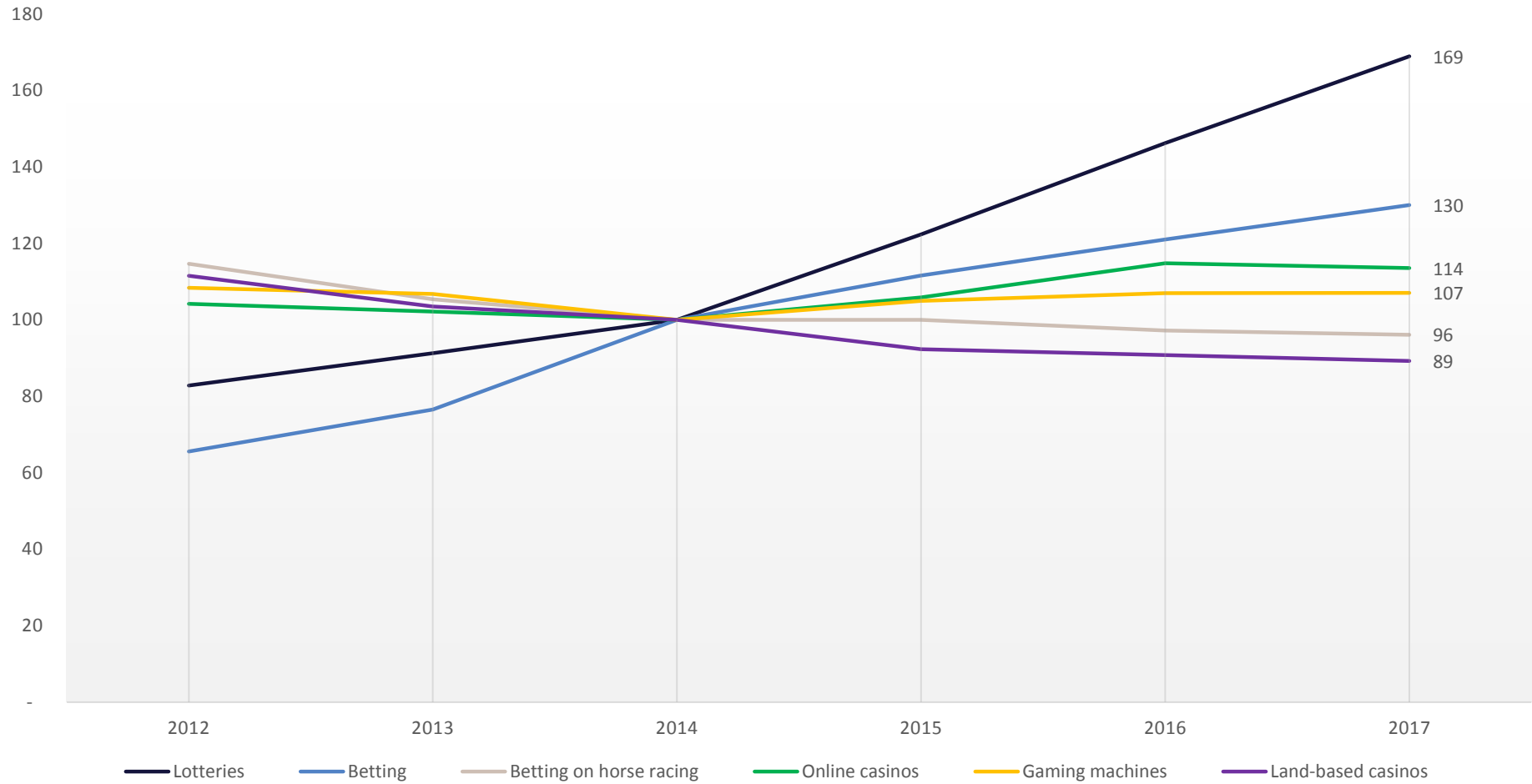
Table 15. Total GGR for the gambling market, 2012-2017

							
In million kroner	Online casino	Betting	Gaming machines	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 Authority, hereunder Dansk Lotteri Spil A/S and Klasselotterieme. The figures for the three class lotteries are based upon estimates from available data.

¹⁶ 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 24. Indexed annual GGR (2014 = index 100)



Source: Tax returns submitted to the Danish Tax Authority, 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 16, there has been an average monthly increase in registrations of 356 individuals per month (net growth rather than the number of new entries). The increase of 922 registrations between January 2017 and February 2017 may be due to the ROFUS (TV) infomercial that was shown in "OBS" and the TV-2 channels from Boxing Day 2016 to the end of January 2017. Similarly, there was a 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.

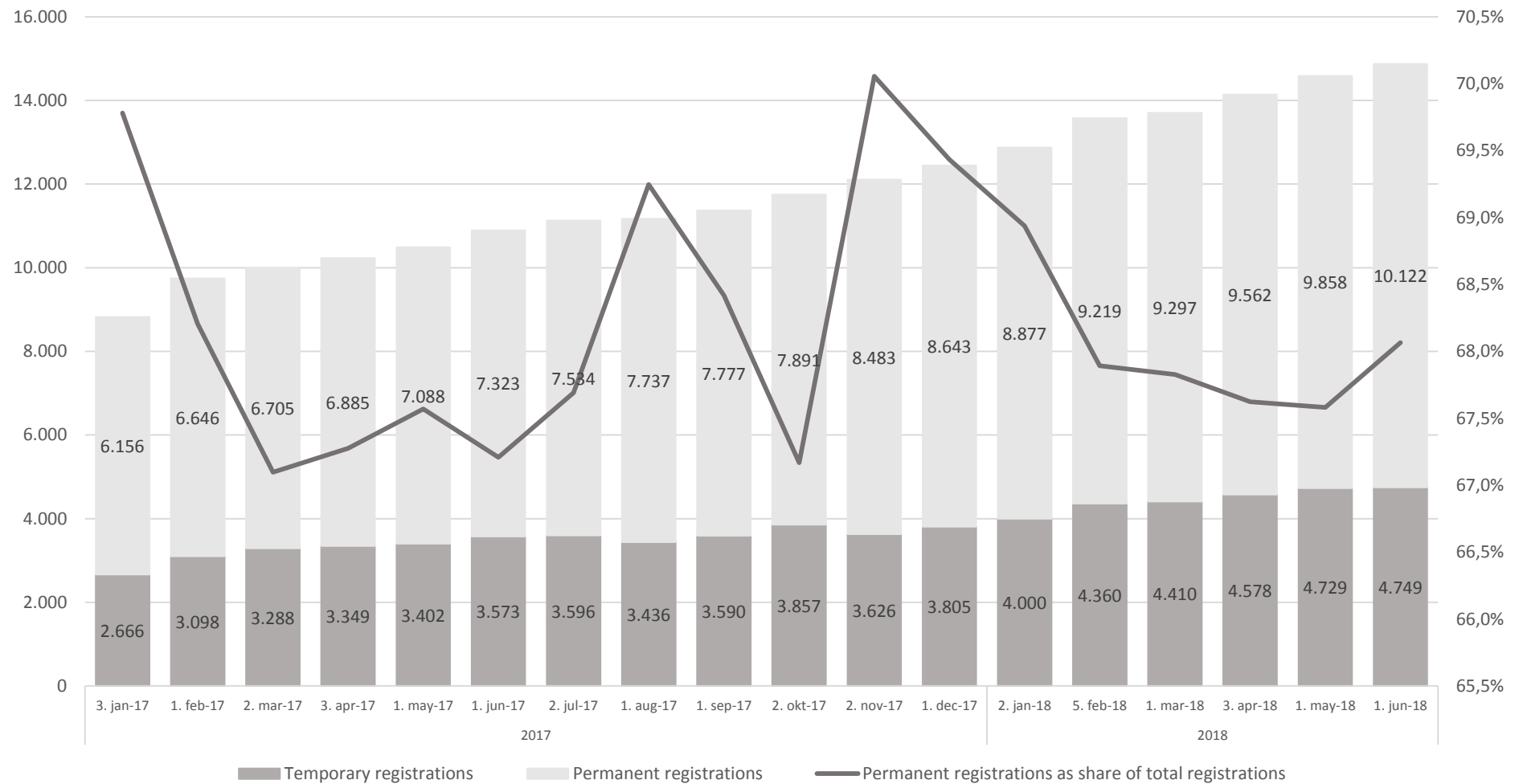
On 1st June 2018, there were 3,975 more registrations in ROFUS than there were on the 1st June 2017, equating to year-on-year growth of 36.5 percent. The number of permanent self-exclusions grew by 2,799 in the period, accounting for 70.4 percent of growth in registrations. As shown in Figure 25, the proportion of total registrations that are permanent exclusions varies from month to month, though in general follows a stable upwards trend.

Table 16. Registrations in ROFUS

ROFUS		Total registrations	- Of which, permanent	Permanent registrations as share of total registrations
2017	3. jan-17	8.822	6.156	69,8%
	1. feb-17	9.744	6.646	68,2%
	2. mar-17	9.993	6.705	67,1%
	3. apr-17	10.234	6.885	67,3%
	1. may-17	10.490	7.088	67,6%
	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%
	2. okt-17	11.748	7.891	67,2%
	2. nov-17	12.109	8.483	70,1%
	1. dec-17	12.448	8.643	69,4%
2018	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%
	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%

Source: Data from ROFUS.

Figure 25. ROFUS – Total registrations (temporary and permanent) and share of registrations



Source: Data from ROFUS.

