



Danish gambling market statistics

Third quarter,
2018

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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 website¹ to provide a common platform for transparency in relation to developments in the gambling market.

The gambling sector is comprised 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-sector 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.

Statistics relating to gross gaming revenue (GGR), stakes, and winnings are based upon data submitted to the Danish Tax Agency (Skattestyrelsen). Data concerning consumer behaviour in the gambling market, including types of gambling activities 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 months after the end of the relevant quarter, depending on the availability of data. This reflects the different tax reporting periods for the four focus markets.

¹ The Danish Gambling Authority's website 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.

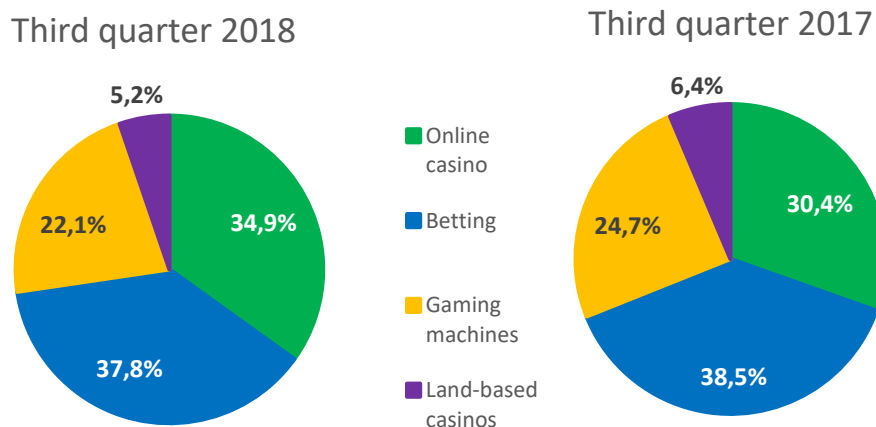
B. Overview of market developments in third quarter of 2018

Combined gross gaming revenue (GGR)⁵ figures for betting, online casinos, gaming machines, and land-based casinos were DKK 1,560.4 million for 2018 Q3 (see table 1).⁶ Quarterly GGR is 4.3 percent lower than 2018 Q2 and 4.5 percent higher than 2017 Q3. The difference between 2018 Q2 and 2018 Q3 stems primarily from 1.4 percent higher GGR for online casinos. Furthermore, GGR for betting is 9.1 percent lower in the same period, which continues to include betting on horseracing. Both land-based casinos and gaming machines recorded lower quarterly GGR than 2018 Q2 as well, with falls of 10.6 percent and 2.8 percent respectively. GGR for land-based casinos is the lowest recorded since 2015 Q1.

As illustrated in Figure 1, betting accounts for the largest share (37.8 percent) of the combined four focus markets in 2018 Q3, followed by online casinos (34.9 percent), gaming machines (22.1 percent) and land-based casinos (5.2 percent). The order is unchanged from 2017 Q3, when betting accounted for 38.5 percent of the combined GGR, online casinos for 30.4, gaming machines for 24.7 percent, and land-based casinos for 6.4 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 as of the 1st of January 2012, which simultaneously involved a regulated market for online casino games in Denmark.

Figure 1. Market shares of the four focus markets (compared to third 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)

In million DKK		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	537.2	648.1	353.8	91.5	1,630.6
	Q3	544.7	589.3	344.6	81.8	1,560.4
	Q4					
Year						

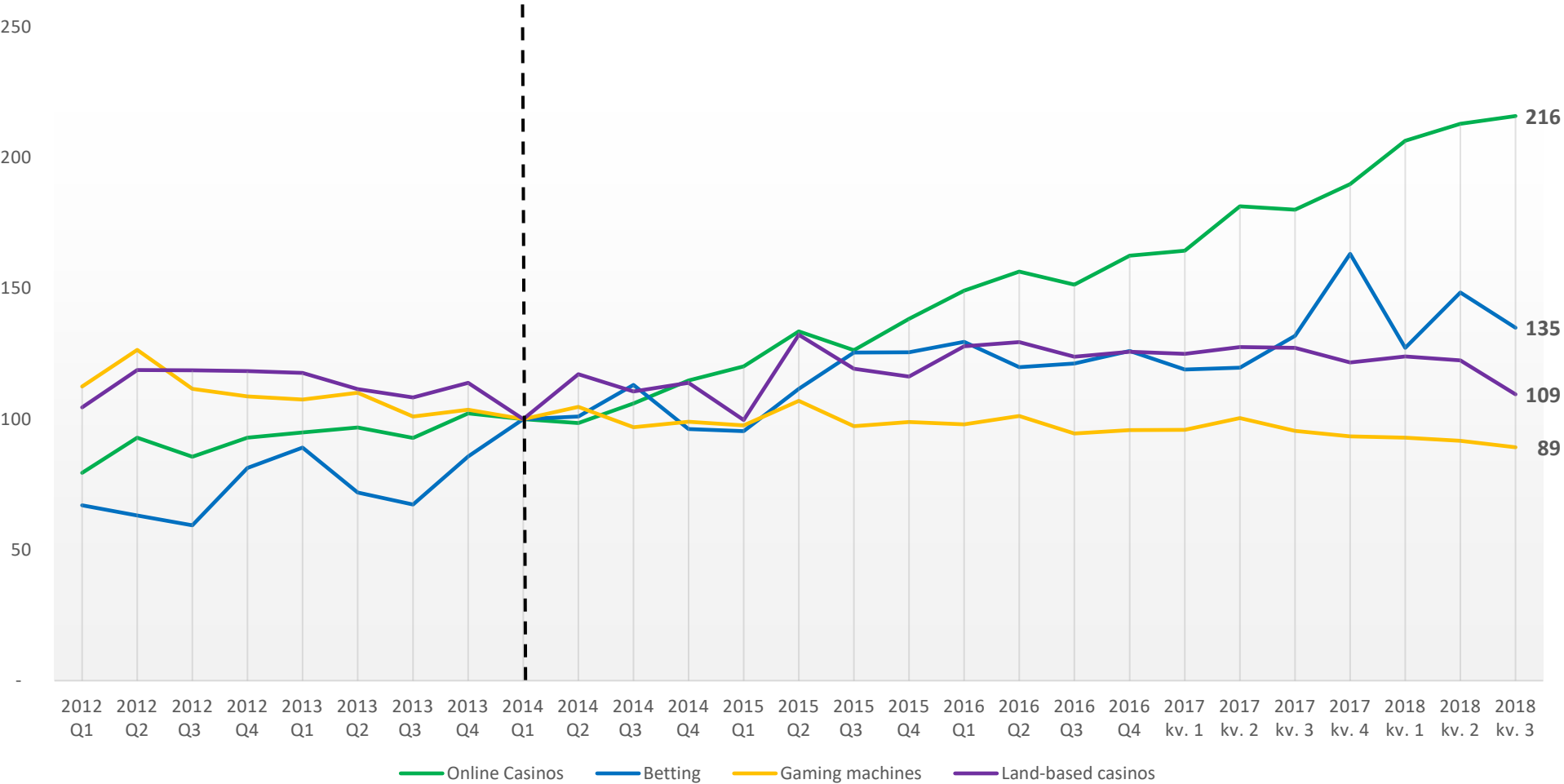
Source: Tax returns submitted to the Danish Tax Agency.

Development in combined GGR up until 2018 Q3:

Q1 2012	55.2 %
Q1 2014	35.7 %
Q3 2017	4.5 %
Q2 2018	-4.3 %

- ↑ Growth on previous year
↓ Decline on previous year

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



Source: Tax returns submitted to the Danish Tax Agency.

C. Online casinos

Developments in GGR

Quarterly developments

Online casinos registered DKK 544.7 million in GGR in 2018 Q3, growth of 1.4 percent (DKK 7.5 million) relative to 2018 Q2. This equates to growth of 19.9 percent in relation to 2017 Q3, a rise of DKK 90.6 million (see Table 2). These developments follow the general upwards trend seen since 2012.

The growth in 2018 Q3 is due to games without commission, with a growth in GGR of 1.7 percent in 2018 Q3 compared to 2018 Q2. GGR for commission games, which include multi-player casino games where GGR is generated through payment of a fee (commission) to participate, has fallen 3.1 percent from 2018 Q2 to 2018 Q3. The fall in games with commission from 2018 Q2 to 2018 Q3 is following the same tendency as every year since 2012.

Compared with 2014 Q1, quarterly BSI for online casinos has grown by 115.9 percent. This growth has been driven by games without commission, which lies 147.8 percent higher in 2018 Q3 than 2014 Q1. GGR for commission games has fallen by 23.4 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)



In million DKK		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	13,697.3		13,197.3		37.1		537.2
	Q3	13,396.1		12,887.4		35.9		544.7
	Q4							
	Year							

Source: Tax returns submitted to the Danish Tax Agency.



Growth on previous year



Decline on previous year

⁸ Stakes and prizes only cover games without commission. Thus, 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

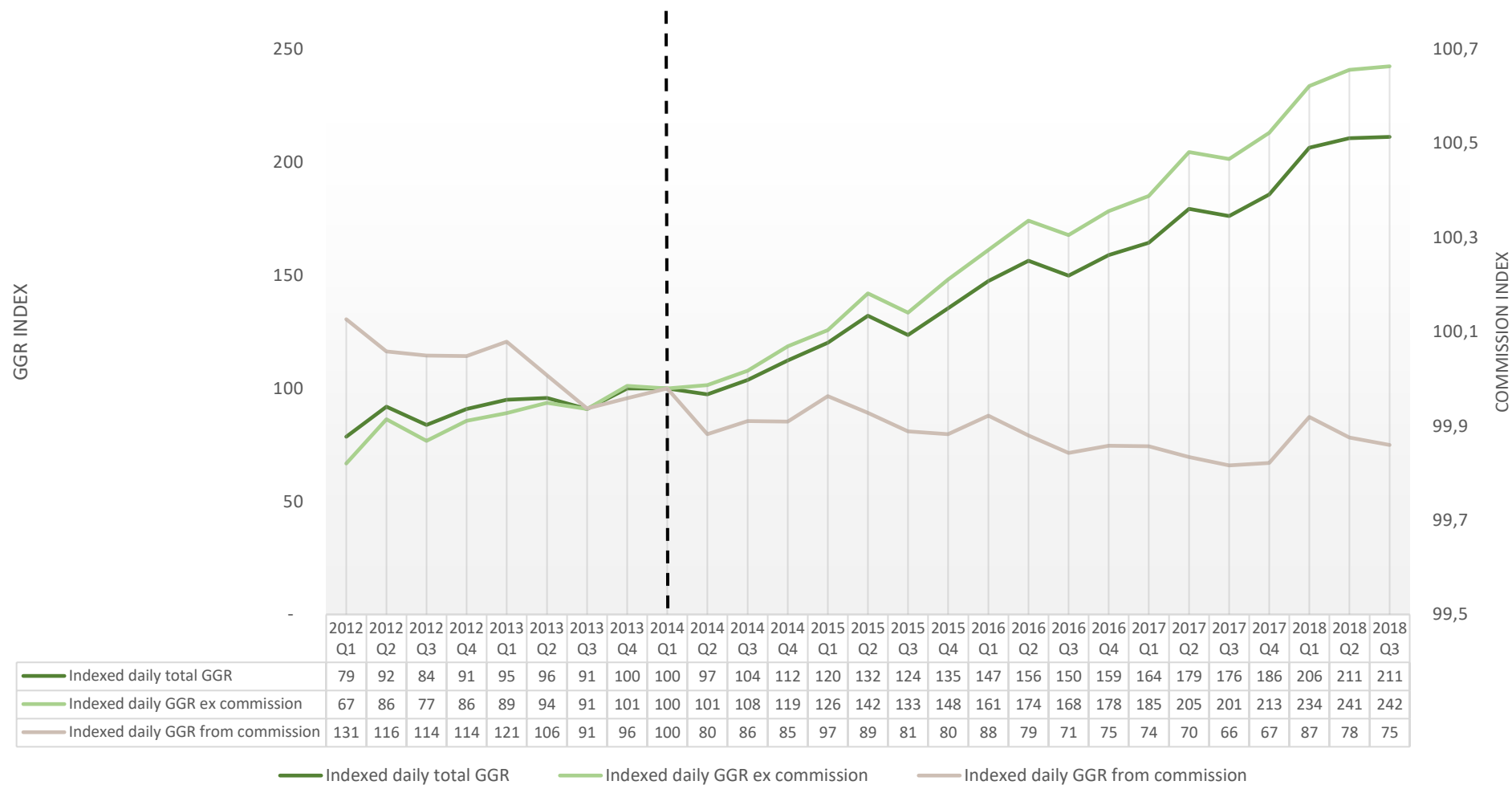


Development on previous quarter	Stakes	-	Prizes	+	commission	=	GGR
2012	-	-	-	-	-	-	-
	Q2	16.5%	16.0%		-10.9%		16.9%
	Q3	-9.3%	-9.3%		-0.5%		-7.8%
	Q4	14.4%	14.5%		-0.2%		8.5%
	-	-	-	-	-	-	-
2013	Q1	-2.1%	-2.3%		3.3%		2.1%
	Q2	11.6%	11.9%		-11.3%		2.0%
	Q3	4.1%	4.4%		-12.9%		-4.1%
	Q4	5.7%	5.5%		5.0%		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	8.6%	8.7%		-9.5%		3.1%
	Q3	-2.2%	-2.3%		-3.1%		1.4%
	Q4						
	Year						

Source: Tax returns submitted to the Danish Tax Agency.

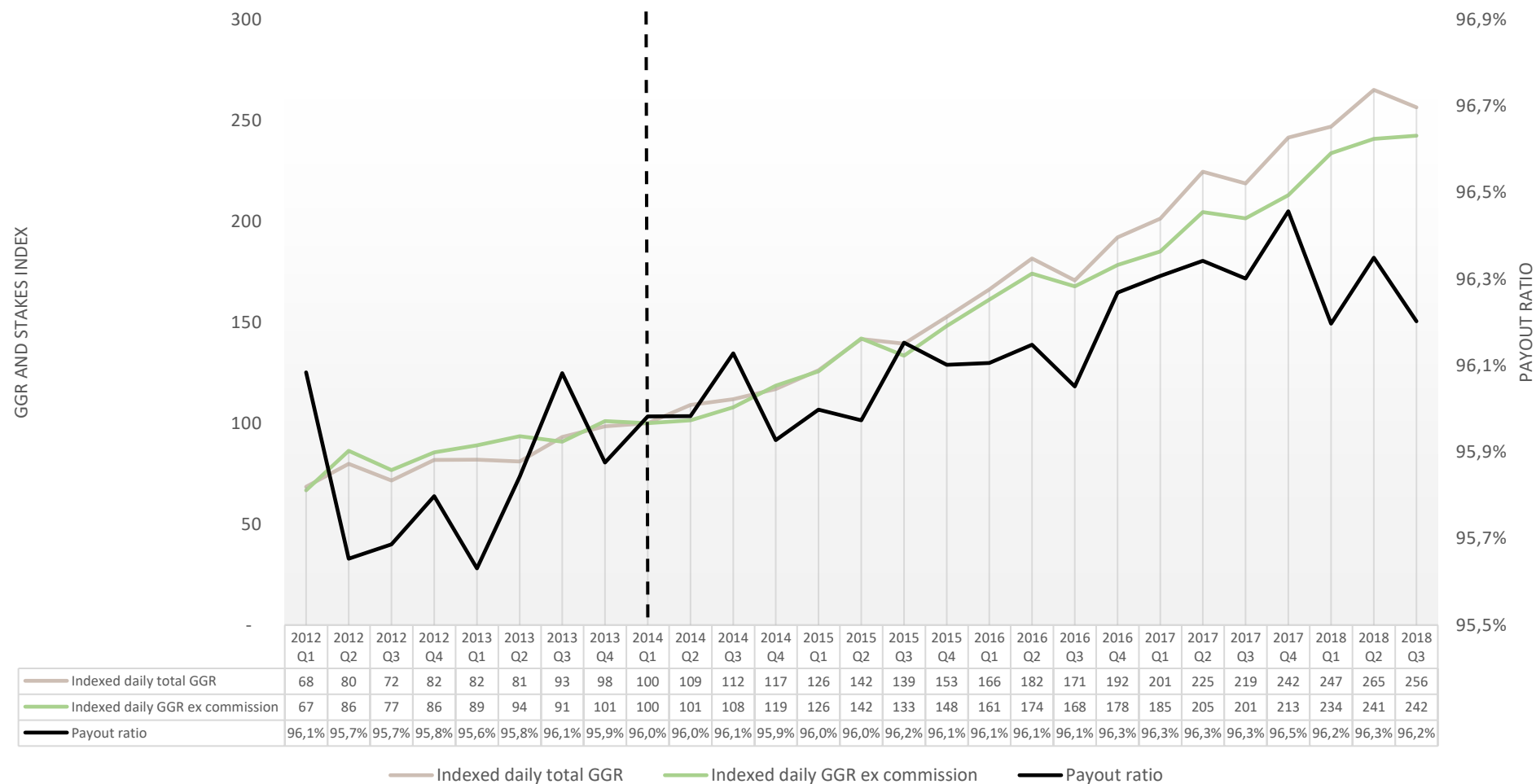
⁹ Stakes and prizes only cover games without commission. Thus, GGR is the sum of commission and stakes minus winnings.

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



Source: Tax returns submitted to the Danish Tax Agency.

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 Agency.














Developments over the last twelve months

Online casinos registered DKK 2,081.7 million in GGR between October 2017 and September 2018. GGR was highest in July 2018, at DKK 189.1 million, and lowest in October 2017 at DKK 150.8 million. Higher GGR was recorded in each month in 2018 Q3 relative to the corresponding month in 2017.

Turnover for September 2018 was just over DKK 4,461.7 million, equaling a year-on-year growth of DKK 633.7 million (16.6 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 October 2017 and corrected for the varying lengths of each month.

The payout ratio for 2018 Q3 (96.2 percent) is lower than 2017 Q3 (96.5 percent). During the last twelve months, the payout ratio has fluctuated between 96.1 percent (January and July 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

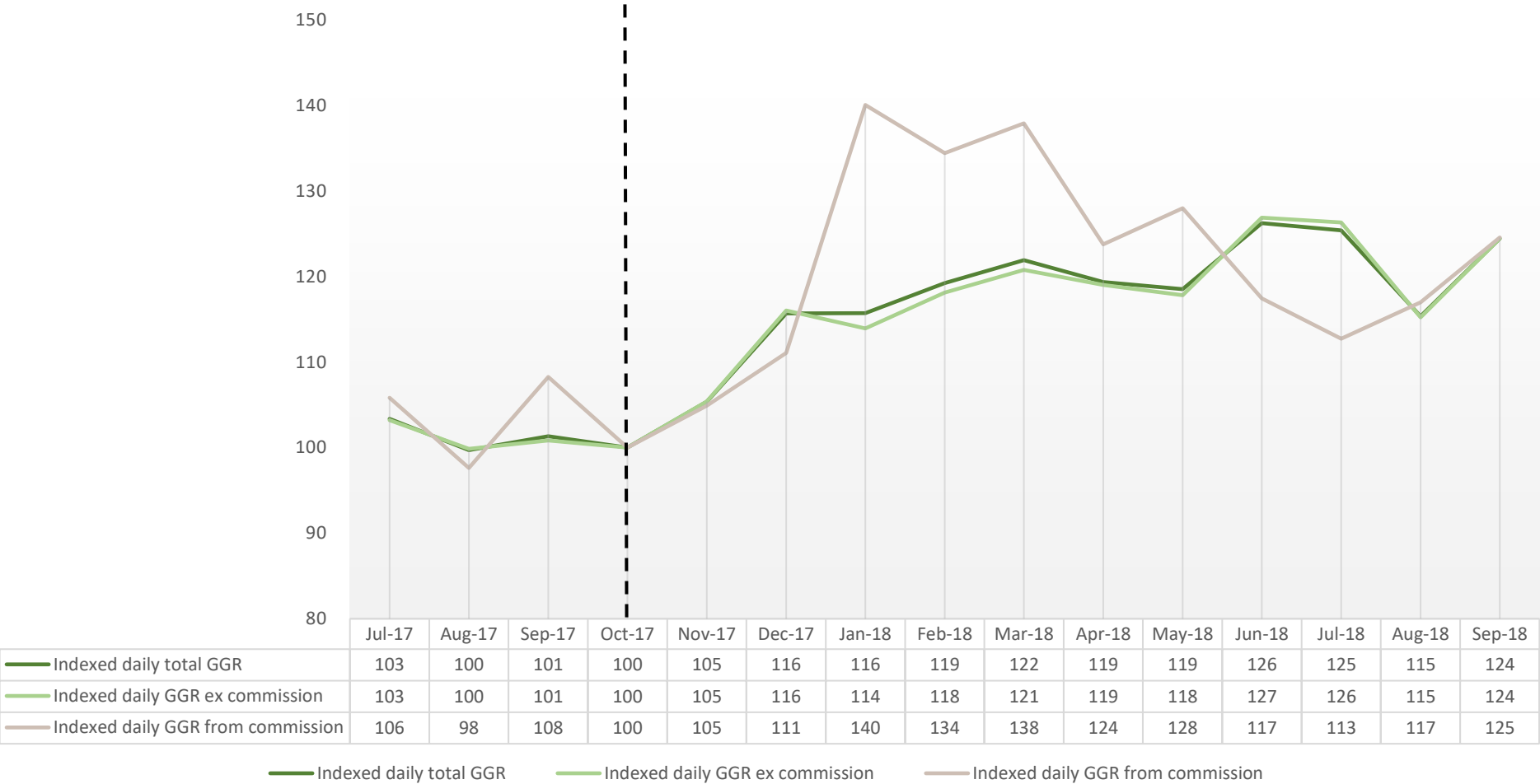
 In million DKK		GGR incl. commission	Stakes	Prizes	Payout ratio
2017	July	155.9	3,842.4	3,697.4	96.2%
	August	150.4	3,757.7	3,617.3	96.3%
	September	147.9	3,828.0	3,690.6	96.4%
	October	150.8	4,033.5	3,893.0	96.5%
	November	153.8	4,167.6	4,024.3	96.6%
	December	174.5	4,413.7	4,250.6	96.3%
2018	January	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%
	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%
	July	189.1 	4,535.6 	4,358.1 	96.1% 
	August	174.0 	4,398.8 	4,236.9 	96.3% 
	September	181.6 	4,461.7 	4,292.5 	96.2% 
Total	Oct' 17 – Sep' 18	2,081.7	52,323.9	50,388.5	96.3%

Source: Tax returns submitted to the Danish Tax Agency.



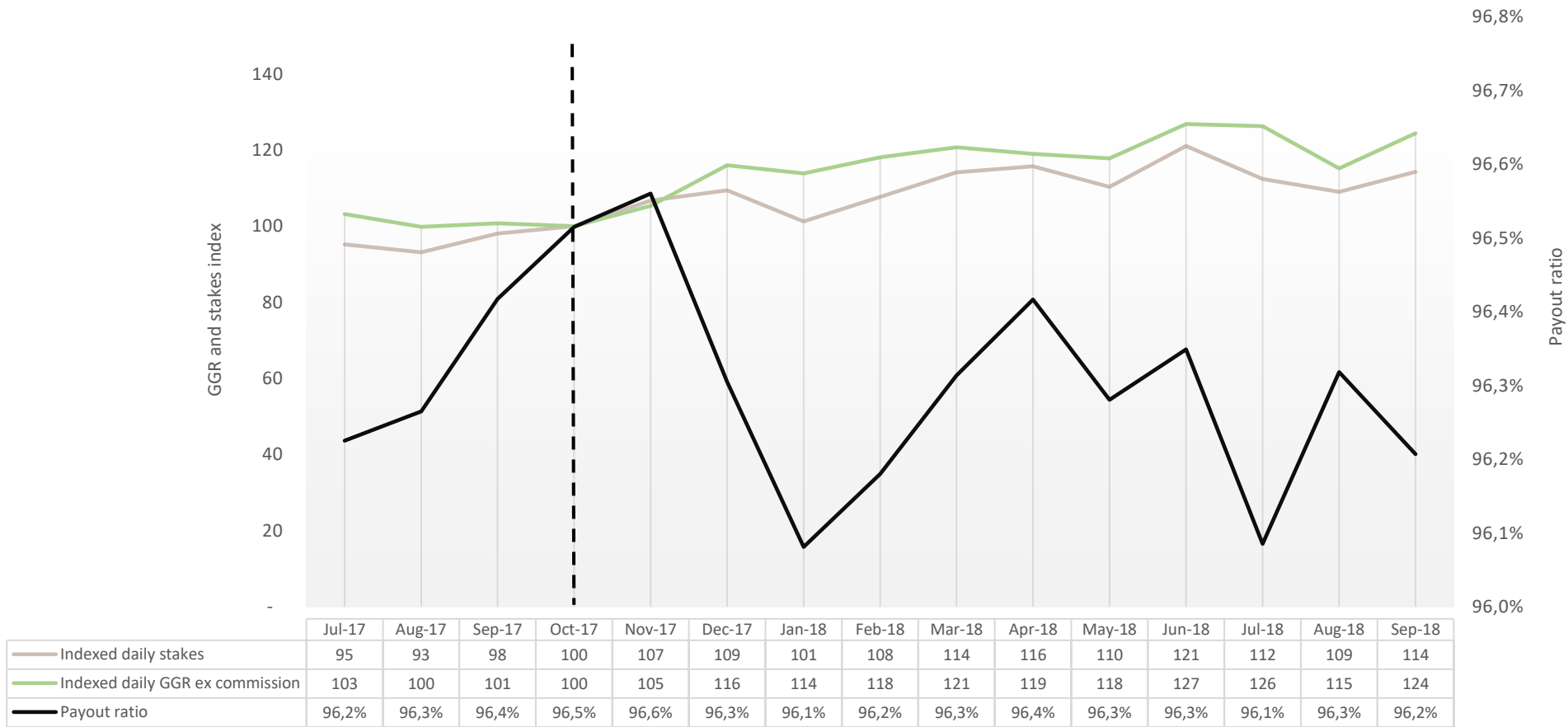
Growth on previous year
Decline on previous year

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



Source: Tax returns submitted to the Danish Tax Agency.

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



Source: Tax returns submitted to the Danish Tax Agency.

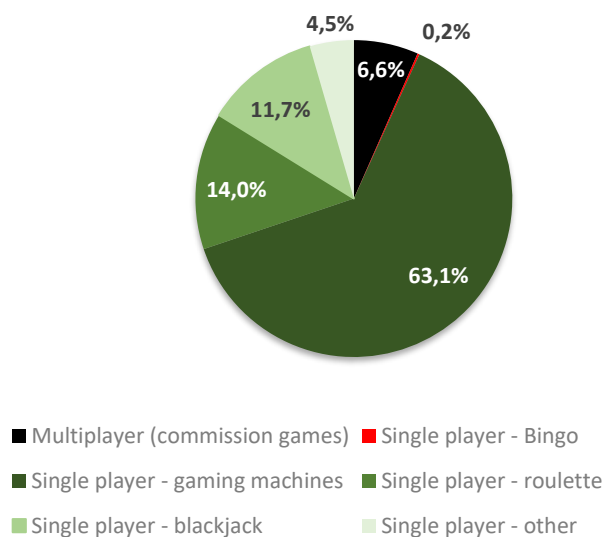
Consumer behaviour

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 93.4 percent of the online casino market in 2018 Q3 (DKK 508.7 million). Within single player casino games, gaming machines comprise the area where GGR is highest, with 63.1 percent of the entire online casino market in 2018 Q3. Multiplayer casino games account for 6.6 percent of the market (DKK 35.9 million).

Figure 7. Market shares within online casinos in 2018 Q3



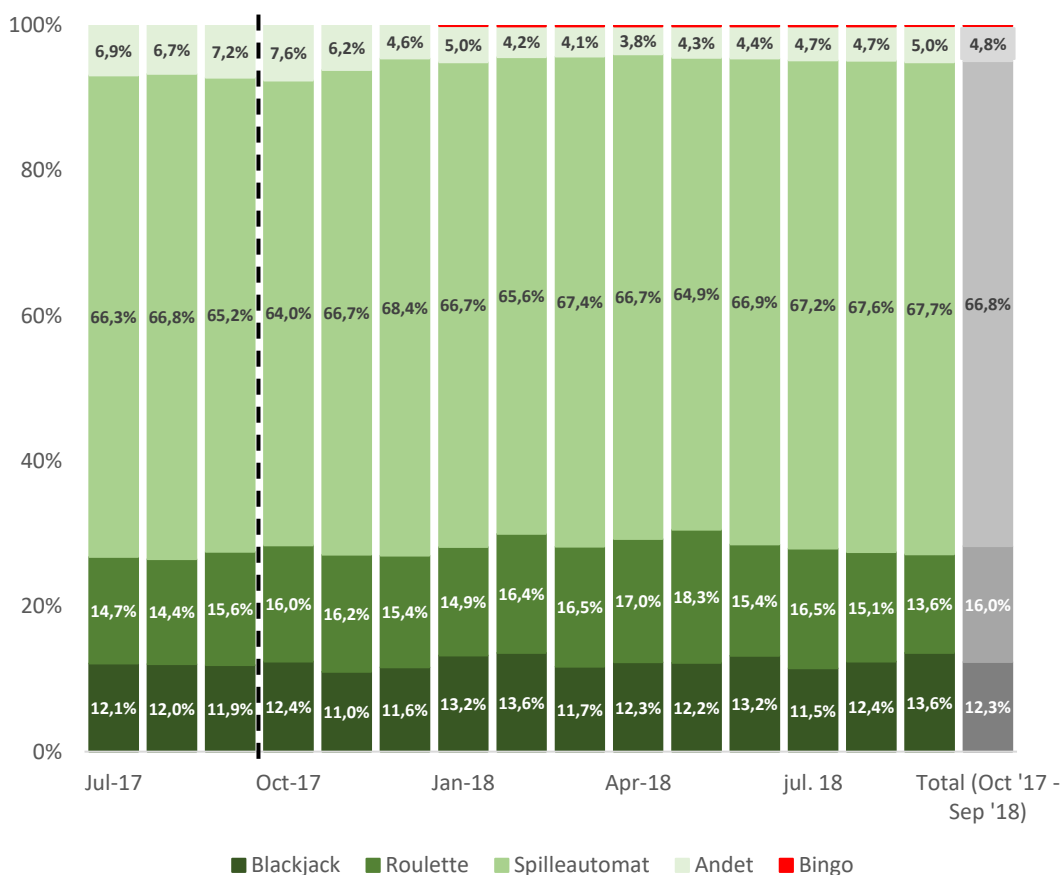
Source: Based upon gambling transaction data submitted by license holders to the Danish Gambling Authority.

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 66.8 percent. Roulette was the next most popular game with an average of 16.0 percent of the market share, with blackjack in third place on 12.3 percent of the market. Bingo accounts for 0.1 percent or DKK 2.4 million which is divided relatively equal between each month.

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) July 2017 – September 2018



Source: Based upon gambling transaction data submitted by licence 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.

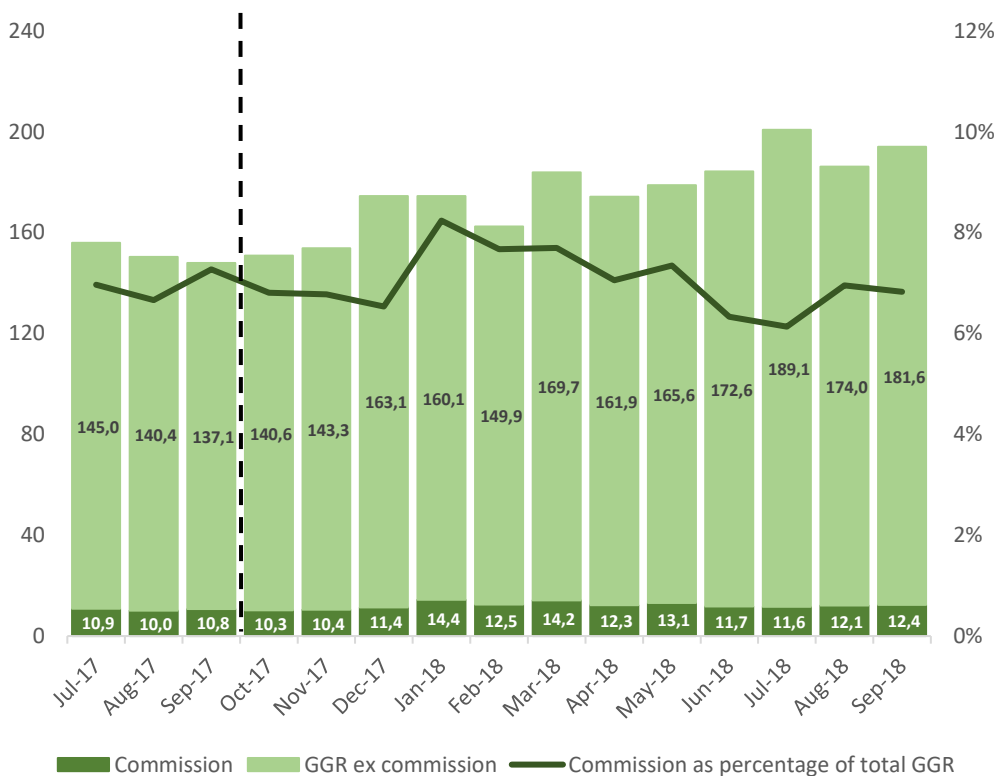
Game types – Multi-player casino games (commission games)

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 trend in GGR from these games since July 2017, both in absolute terms and as a proportion of total GGR, although the liberalisation of online bingo has been influencing commission positively since January 2018.

During the second quarter of 2018, commission from online bingo equaled DKK 10.6 million, of which DKK 3.9 million was generated in July, DKK 3.6 million in August and DKK 3.1 million in September.

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

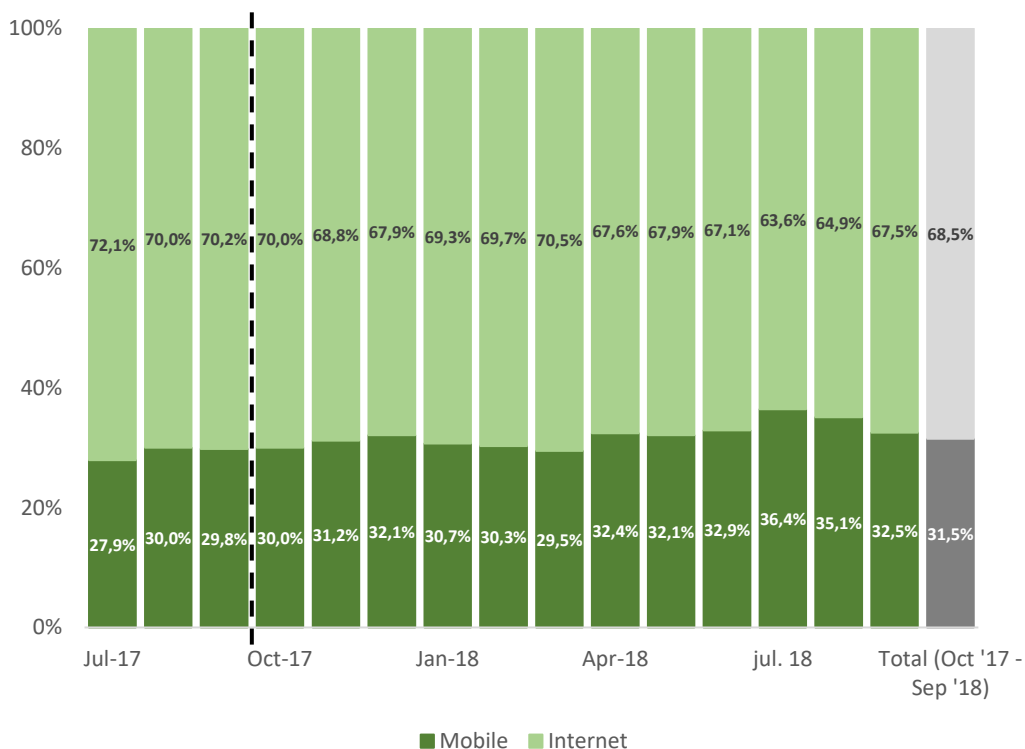


Source: Based upon gambling transaction data submitted by licence holders to the Danish Gambling Authority.

Sales channel

Over the course of the twelve months between October 2017 and September 2018, 68.5 per cent of GGR from online casinos came from standard websites, with the remaining 31.5 per cent generated through mobile platforms.¹⁰ 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 30.0 percent in October 2017 to 32.5 percent in September 2018, as shown in figure 10. Market share for mobile transactions is highest for 2018 Q3.

Figure 10. 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.

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.

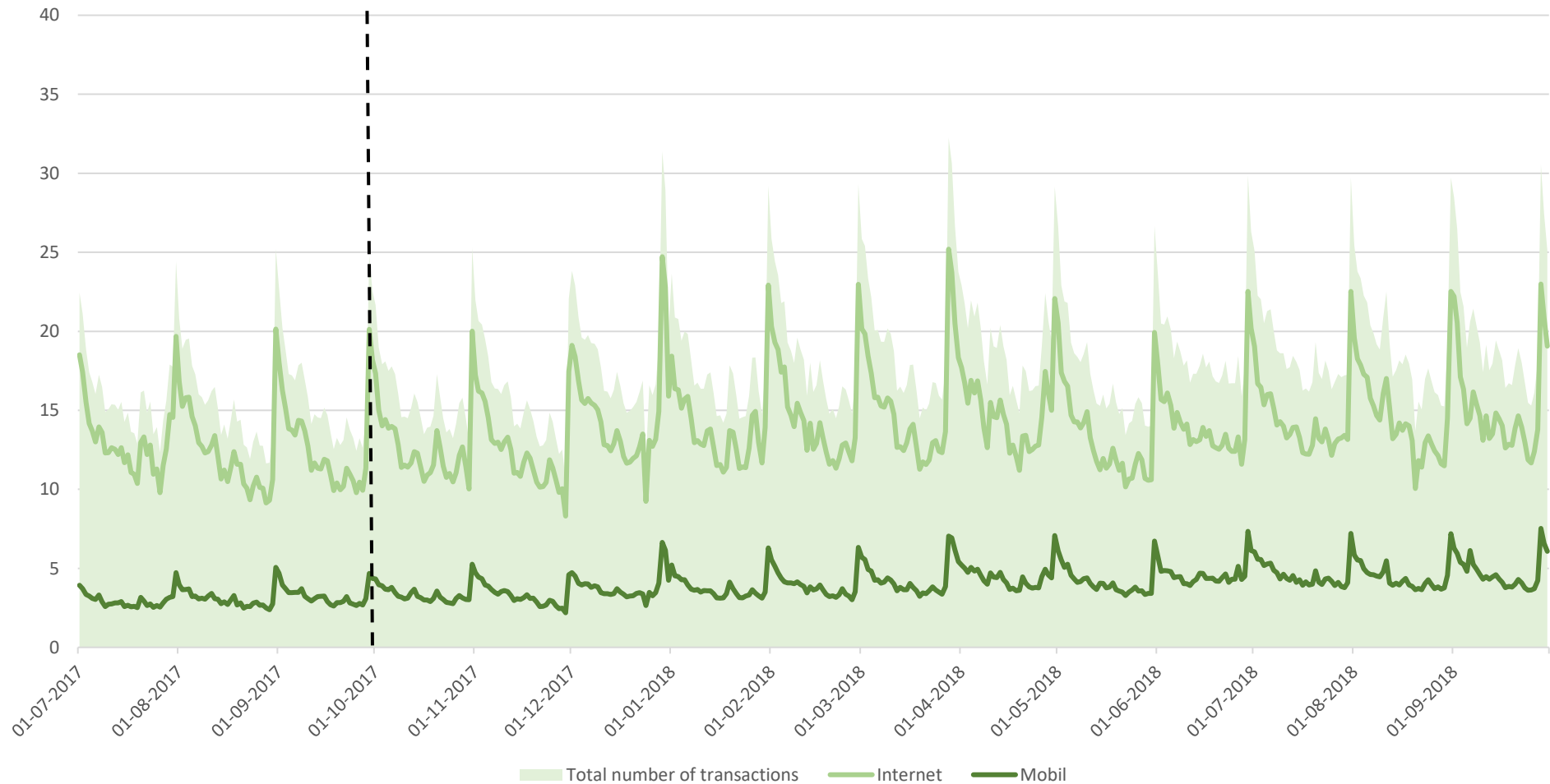
When does gambling take place?

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 11. Over the last twelve months, the date where most transactions took place was 28 March 2018, with 32.3 million individual transactions.¹¹

For 2018 Q3, the value of total transactions in online casinos was highest on Fridays (15.9 percent), and lowest on Mondays (13.2 percent), as shown in Figure 12. However, in terms of the number of transactions taking place, Fridays and Sundays are the days when most activity took place (15.6 percent), while Mondays were the days with the lowest number of individual transactions (13.1 percent).

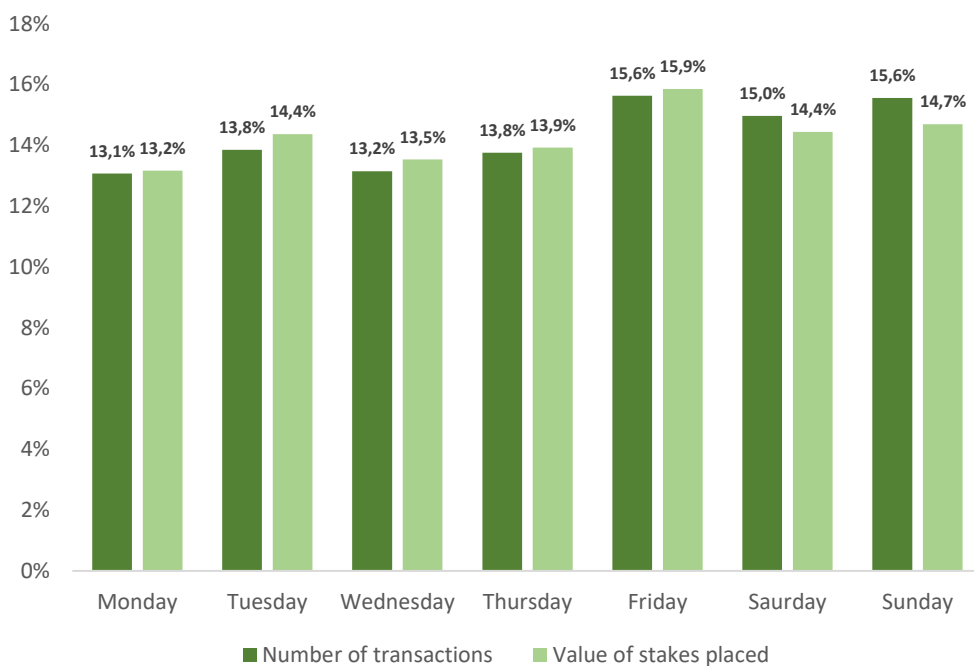
¹¹ A transaction takes place every time a game is played. This means, for example, that every time a player clicks to spin a dial in a gaming machine, a new transaction takes place. Transactions are therefore distinct from gaming sessions.

Figure 11. Number of daily transactions (million) July 2017 - September 2018



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

Figure 12. Number of transactions distributed according to day of the week (in percent) for 2018 Q3



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

D. Betting

Development in GGR

Quarterly developments

Betting operators¹² registered DKK 589.3 million in GGR in 2018 Q3, a fall of 9.1 percent (DKK 58.9 million) relative to 2018 Q2 (see Table 5). This figure equals a year-on-year growth of 2.4 percent, a rise of DKK 13.8 million. Quarterly GGR has remained relatively stable since 2015 Q3, with the exceptions of 2017 Q4. From 2018 Q2, betting on horse racing has been included in the statistics, and the World Cup in football was played during 2018 Q2 and 2018 Q3. The World Cup might have influenced GGR.

As illustrated in Figure 13, the payout ratio has been fluctuating. The payout ratio has risen by 0.8 percent from 2018 Q2 to 2018 Q3. The payout ratio has been relatively stable since 2017 Q4, which was the lowest observed payout ratio since 2012 Q1 of 86.2 percent, which contributed to the highest registered GGR on the betting market.

Stakes are higher in 2018 Q2 and 2018 Q3 relative to the same quarters in 2017. Stakes have peaked in the second quarter of the year since 2016. 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 and 2018 Q3, the World Cup in football took place during the period from the 14th of June until the 15th of July.

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 since 2nd quarter 2018.

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



In million DKK		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	5,964.9	89.2%	648.1
	Q3	5,809.2	89.9%	589.3
	Q4			
	Year			

Source: Tax returns submitted to the Danish Tax Agency.



Growth on previous year
Decline on previous year

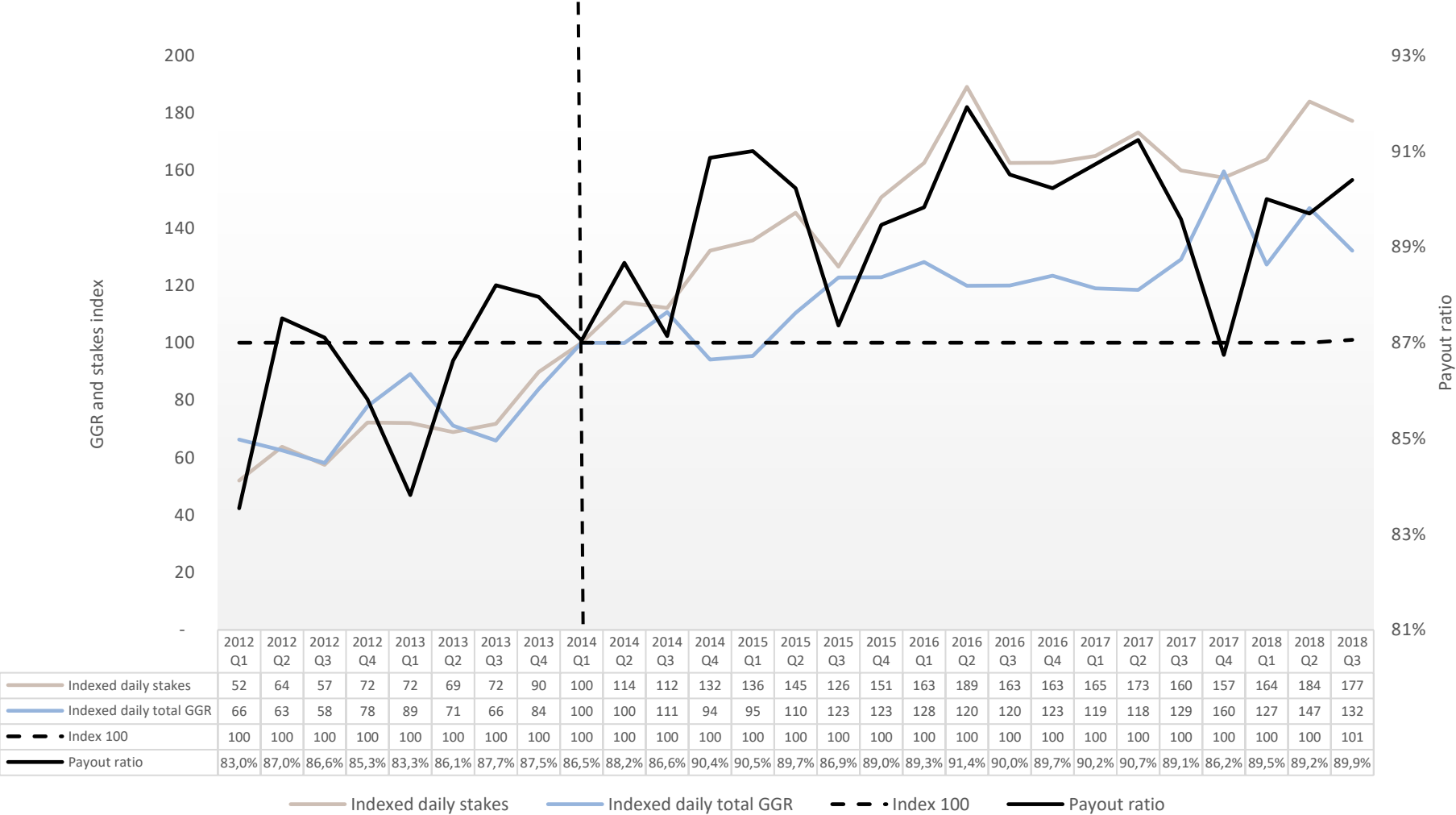
Table 6. Development in stakes, GGR and payout ratio (in percentage points) for betting



Development on previous quarter	Stakes	Payout ratio (PP)	Total GGR (ex. Commission)
-	-	-	-
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	13.9%	-0.3
	Q3	-2.6%	0.8
	Q4		
	Year		

Source: Tax returns submitted to the Danish Tax Agency.

Figure 13. Indexed development in stakes, GGR and payout ratio for betting (2014 Q1 = index 100)



Source: Tax returns submitted to the Danish Tax Agency.


Developments over the last twelve months

Betting operators registered DKK 2,505.4 million in GGR between October 2017 and September 2018. Seen over the course of the past twelve months, GGR was highest in October 2017 at DKK 271.7 million, and lowest in February 2018 at DKK 148.9 million. In relation to 2017 Q3, GGR was higher in 2018 Q3 in July but lower in both August and September.

As illustrated in Table 7, stakes were at their highest in June 2018 at DKK 2,123.5 million, and lowest in January 2018 at DKK 1,603.5 million. Developments in GGR, non-commission GGR, and commission GGR are charted in Figure 14, indexed against October 2017 and corrected for the varying lengths of each month.

The payout ratio is higher in 2018 Q3 (89.9 percent) compared to 2017 Q3 (88.9 percent). Over the last twelve months, the payout ratio has fluctuated between 84.7 percent (December 2017) and 92.0 percent (September 2018), with an average of 88.7 percent for the period. The effect of the payout ratio upon GGR for non-commission betting is illustrated in Figure 14.

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



In million DKK		GGR incl. commission	Stakes	Payout ratio
2017	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%
	April	194.0	2,019.4	90.4%
	May	207.7	1,822.0	88.6%
	June	246.4	2,123.5	88.4%
	July	246.8 ↑	1,885.4 ↑	87.0% ↓
	August	185.3 ↓	1,971.4 ↑	90.6% ↑
	September	157.2 ↓	1,952.4 ↓	92.0% ↑
Total	Oct '17 – Sep '18	2,505.4	22,189.0	88.7%

Source: Tax returns submitted to the Danish Tax Agency.

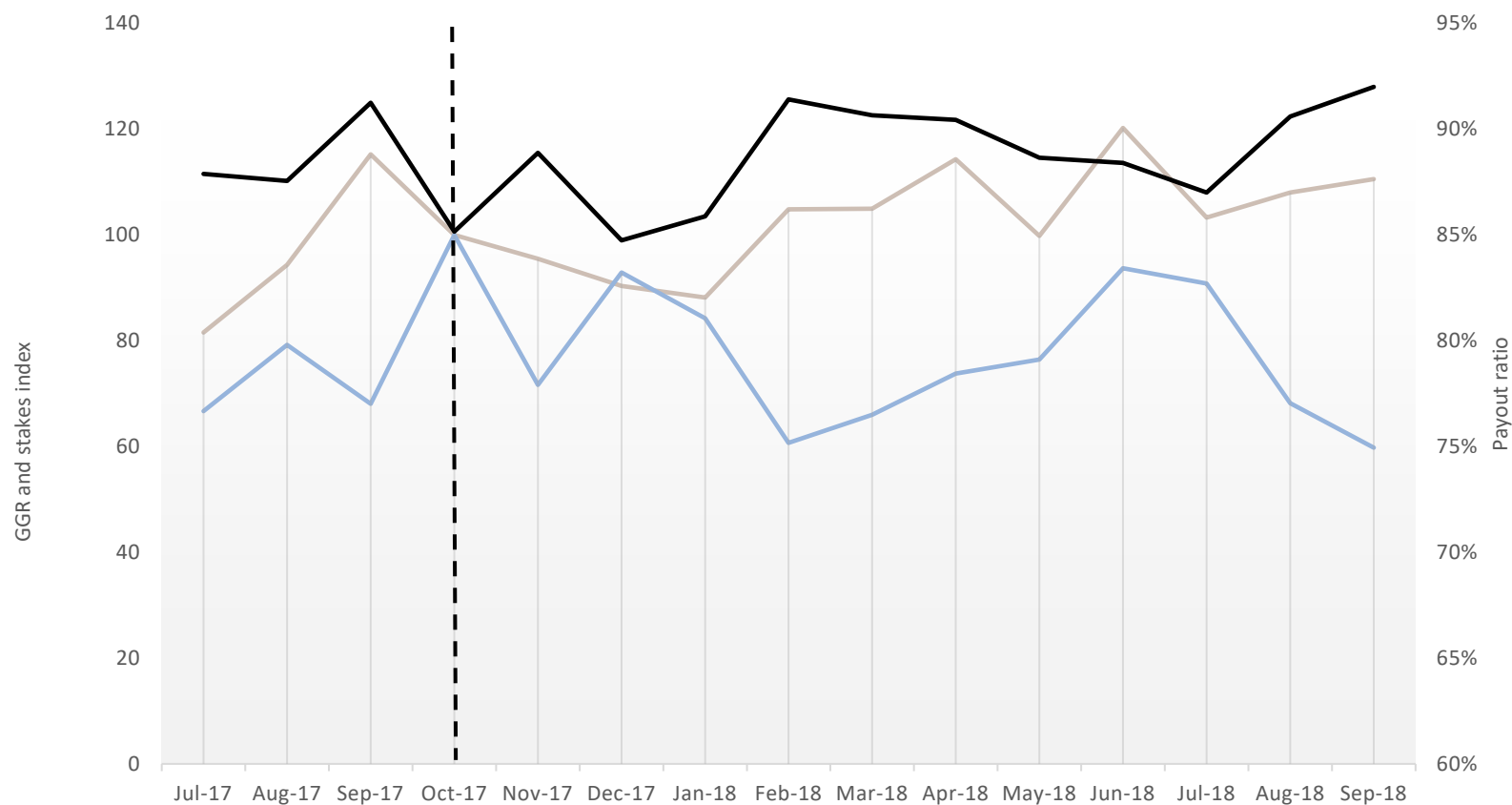


Growth on previous year



Decline on previous year

Figure 14. Indexed development in stakes, GGR and payout ratio for betting (October 2017 = index 100)



	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18
Indexed daily stakes	82	94	115	100	95	90	88	105	105	114	100	120	103	108	111
Indexed daily GGR incl. Commission	67	79	68	100	72	93	84	61	66	74	76	94	91	68	60
Payout ratio	87,9%	87,5%	91,2%	85,2%	88,9%	84,7%	85,9%	91,4%	90,7%	90,4%	88,6%	88,4%	87,0%	90,6%	92,0%

Source: Tax returns submitted to the Danish Tax Agency.

Consumer behaviour

Sales channels

Unlike the market for casino games, betting licences 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 estimates¹³, in the third quarter of 2018, 50.4 percent of GGR from fixed odds betting came through mobile platforms, 15.6 percent from desktop versions of websites, and the remaining 34.0 percent from land-based bookmakers.

When seen in relation to turnover, the online sector continues to dominate, with mobile platforms accounting for 54.1 percent of total turnover between October 2017 and September 2018 (see Figure 15). Other online transactions (desktop websites) accounted for 22.8 percent of turnover, while land-based transactions delivered the remaining 23.1 percent.

However, when looking at the total number of transactions taking place, land-based bookmakers lead the way, 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 16. As our statistics show, the frequency of mobile transactions have 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. The development continues in July 2018 although it has been normalised after the World Cup period ended.

¹³ 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 licence-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 licences.

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



Weighted by GGR	Land-based	Internet	Mobile
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 % ↓
2018 Q3	34.0 % ↓	15.6 % ↑	50.4 % ↓
Average Last twelve months	34.4 %	15.9 %	49.7 %

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

When does gambling take place?

Consumer activity in the betting market is strongly affected by the sporting calendar, as illustrated in Figure 17. Furthermore, the effect of the World Cup in football clearly appears in June and July 2018 with the highest reported stakes on the 1st of July 2018.

In 2018 Q3, the day of the week when the highest number of bets took place was Saturdays (22.8 percent) as charted in Figure 18. The day of the week when the total value of stakes was highest (18.5 percent) was on Sundays.

Figure 15. Sales channels for betting, according to **Turnover**

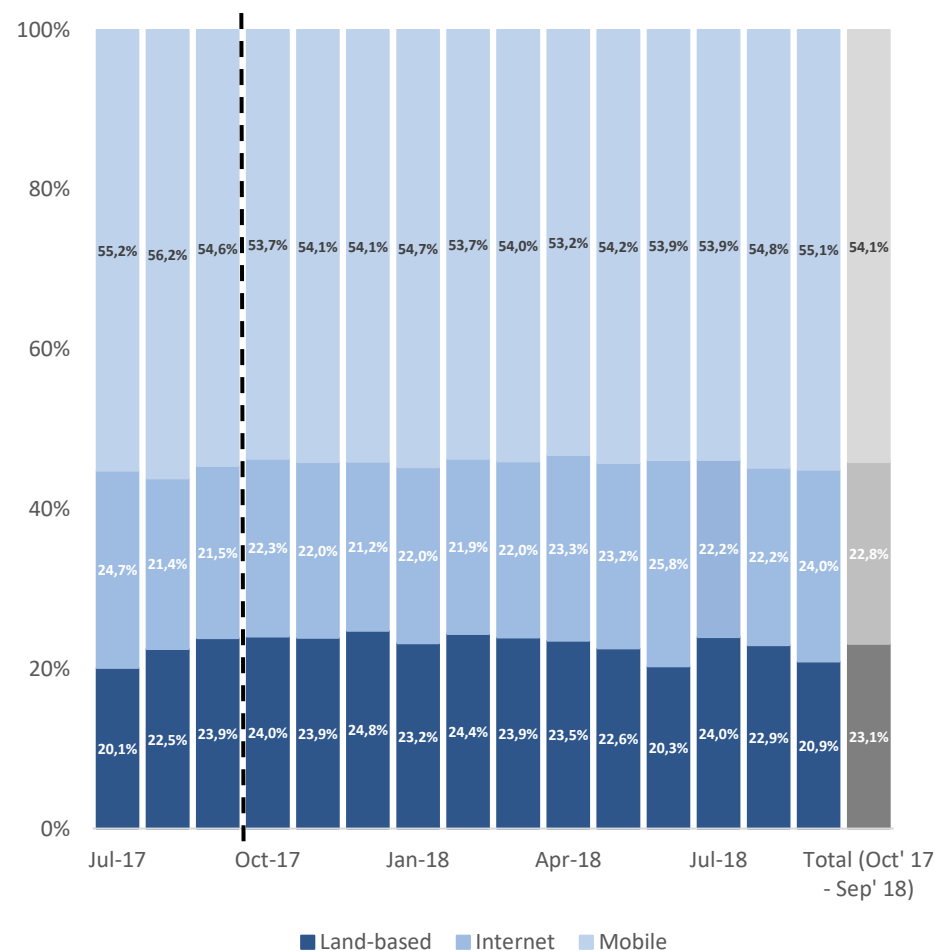
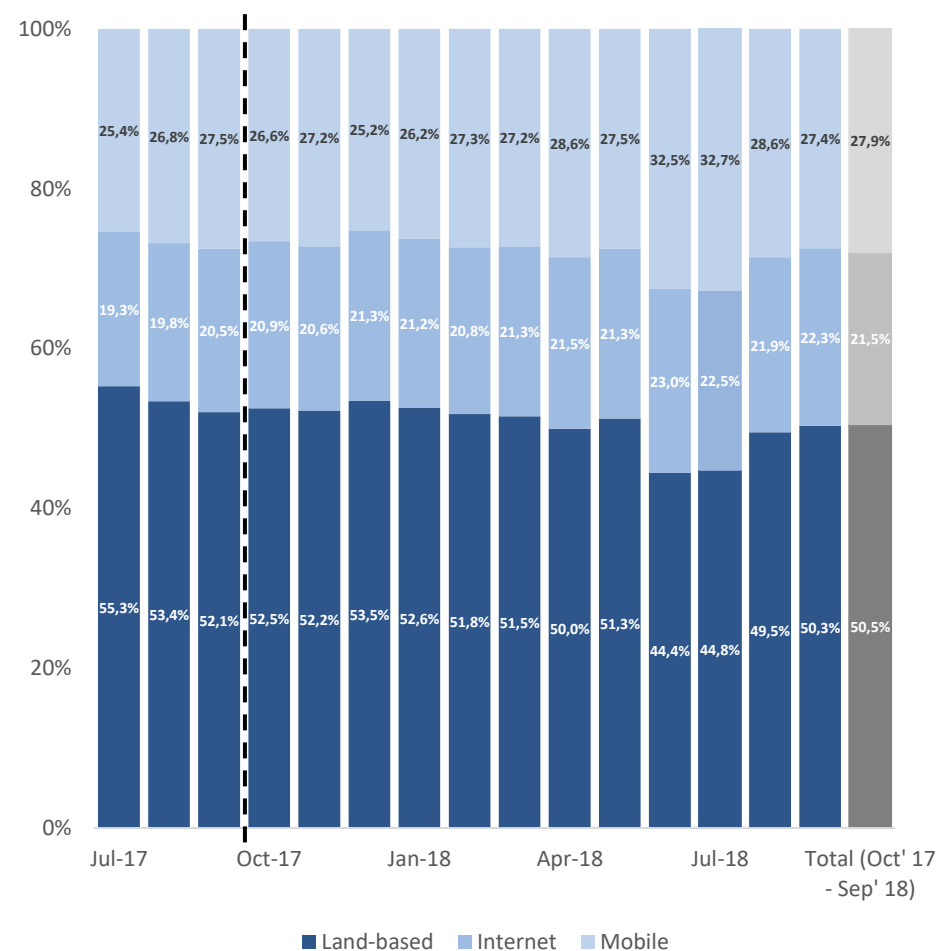
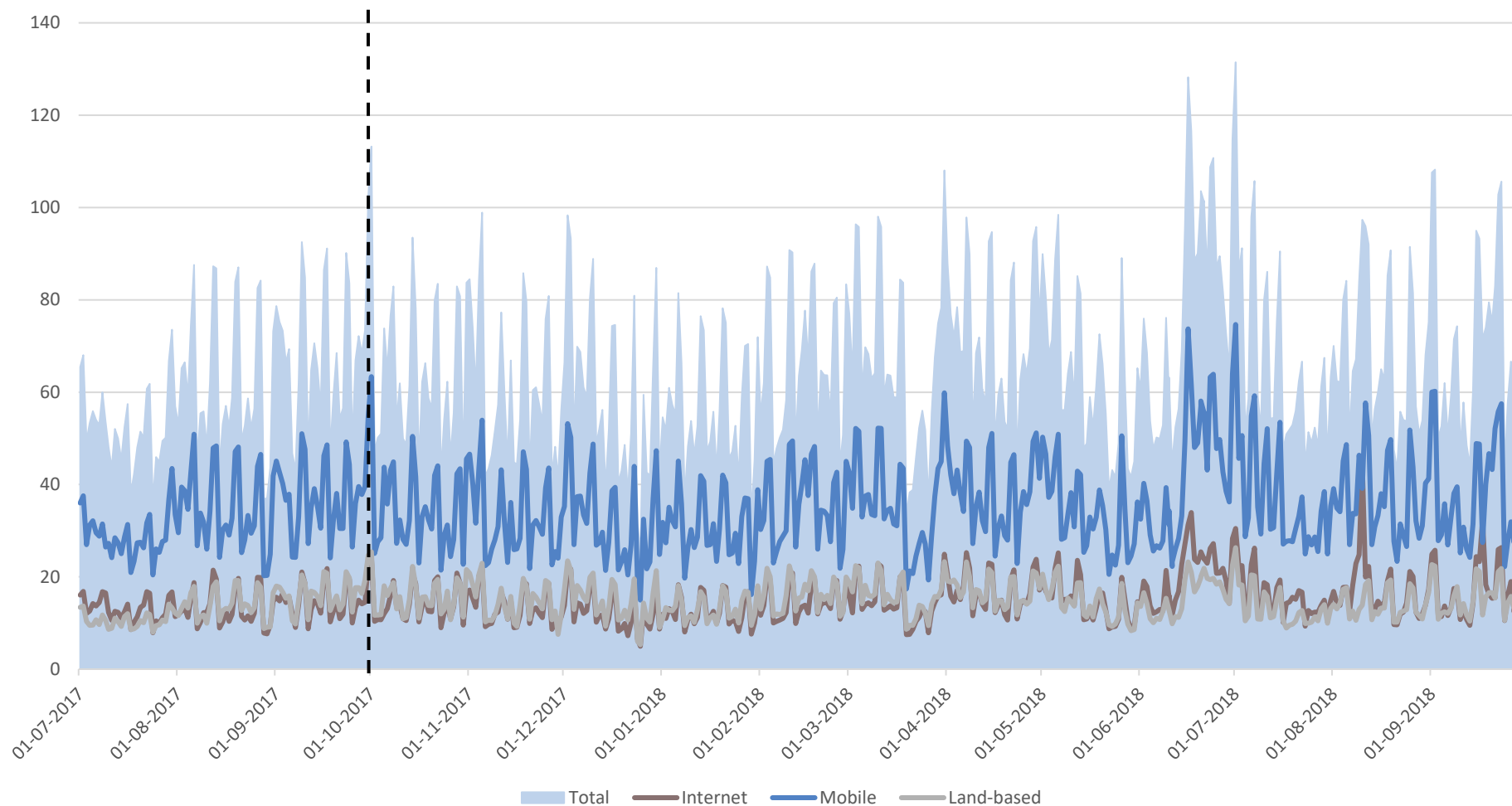


Figure 16. Sales channels for betting, according to total **number** of bets placed



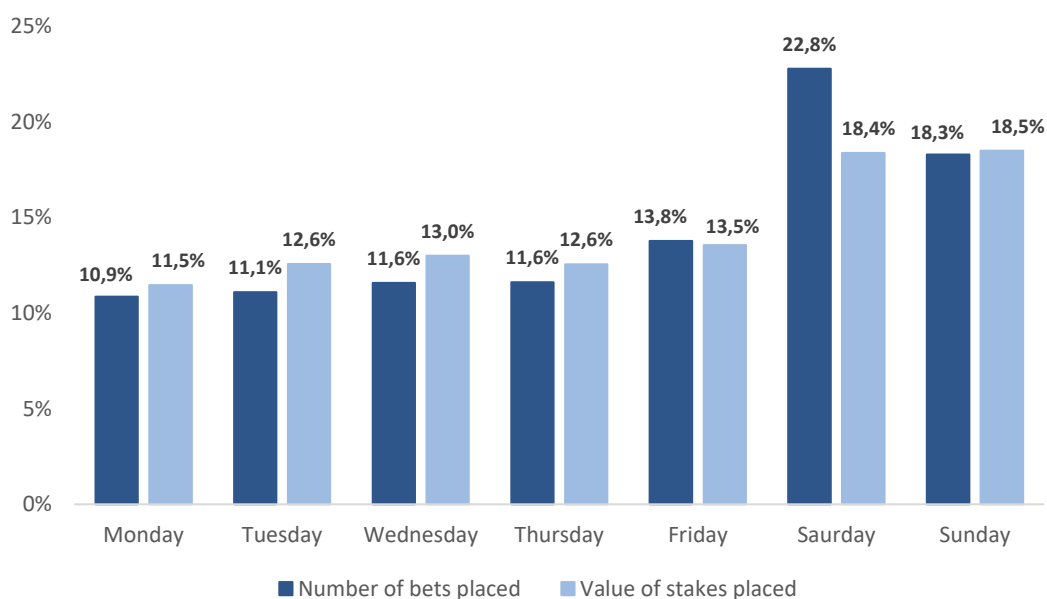
Source: Based upon gambling transaction data submitted by licence holders to the Danish Gambling Authority.

Figure 17. Value of stakes placed per day from July 2017 - September 2018 (million DKK)



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

Figure 18. Number of bets placed and turnover distributed according to the day of the week (in percent) for 2018 Q3



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

E. Gaming machines

Gaming machines generated DKK 344.6 million in GGR in 2018 Q3, a decline of 2.6 percent (DKK 9.2 million) relative to 2018 Q2 (see Table 9). This equals to a fall of 6.5 percent relative to 2017 Q3, with GGR DKK 24.0 million lower.

GGR for gaming machines in restaurants fell by 3.6 percent between 2018 Q2 and 2018 Q3, as did GGR from gambling arcades, though by a lesser degree, 2.3 percent, as shown in table 10. Quarterly GGR from gaming machines has been declining since 2012, as is illustrated in Figure 19.

Seen in relation to 2014 Q1, gaming machines in restaurants have experienced a relatively larger decline in GGR than gaming machines in gambling arcades, falling by 13.0 percent as opposed to 10.1 percent, which is charted in Figure 19. Furthermore, figure 20 shows that GGR is lower in third quarters compared to second quarters each year for both gaming machines in restaurants and gambling arcades.

Over the twelve months between October 2017 and September 2018, gaming machines generated DKK 1,415.9 million in GGR, as set out in Figure 20. On average, restaurants generated DKK 27.1 million in GGR per month, whilst arcades generated DKK 90.9 million a month. In 2018 Q3, GGR for gaming machines in restaurants was highest in August and September at DKK 26.3 million and lowest in July at DKK 25.5 million. GGR for gambling machines in gaming arcades was highest in September at DKK 92.9 million and lowest in July at DKK 83.8 million.

Table 9. Quarterly GGR for gaming machines



In million DKK		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	1,328.7	1,773.6
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 ↓	1,214.3 ↓	1,630.5 ↓
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 ↓	1,186.1 ↓	1,546.9 ↓
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 ↓	1,193.7 ↑	1,547.6 ↑
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 ↓	1,163.6 ↓	1,504.0 ↓
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 ↓	1,146.9 ↓	1,487.0 ↓
2018	Q1	82.6	274.3	356.9
	Q2	81.0	272.8	353.8
	Q3	78.1	266.5	344.6
	Q4			
	Year			

Source: Tax returns submitted to the Danish Tax Agency.



Growth on previous year



Decline on previous year

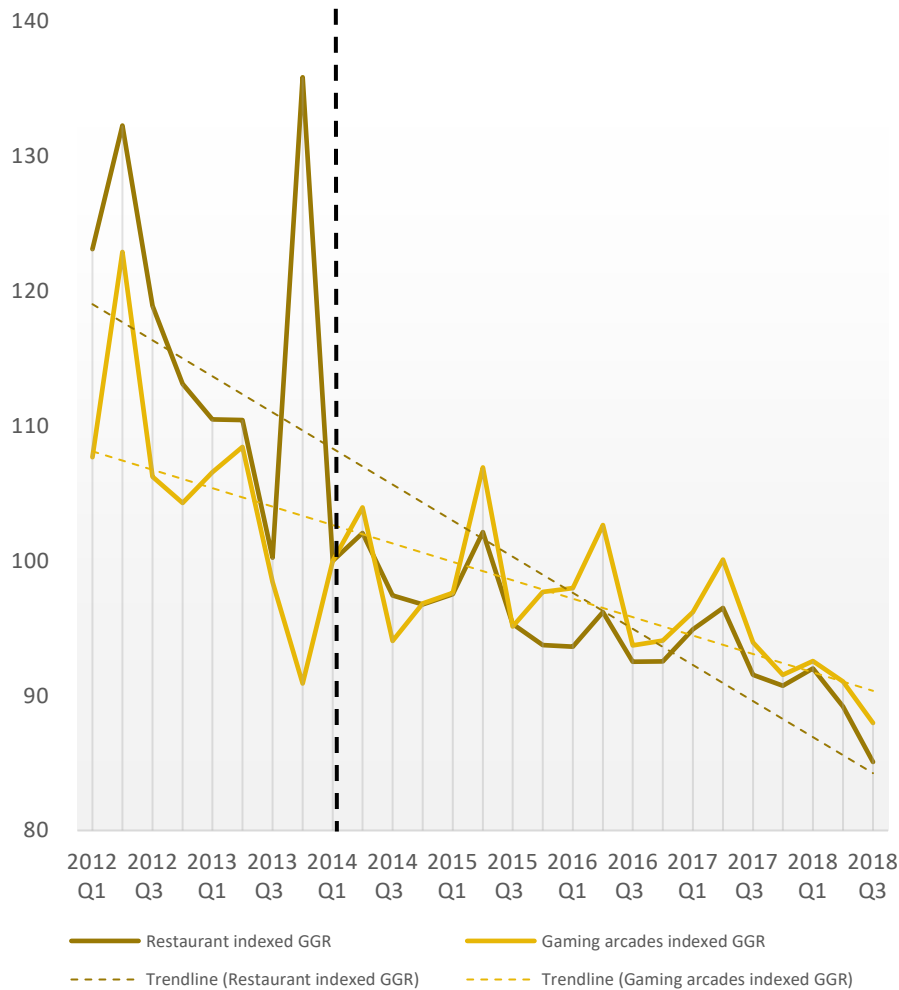
Table 10. Quarter-on-quarter development in GGR from gaming machines



Development on previous quarter	Restaurants	Gaming arcades	Total GGR
	-	-	-
2012	Q2	7.4%	14.1%
	Q3	-9.1%	-12.6%
	Q4	-4.9%	-1.8%
	-	-	-
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	-1.9%	-0.5%
	Q3	-3.6%	-2.3%
	Q4		
	Year		

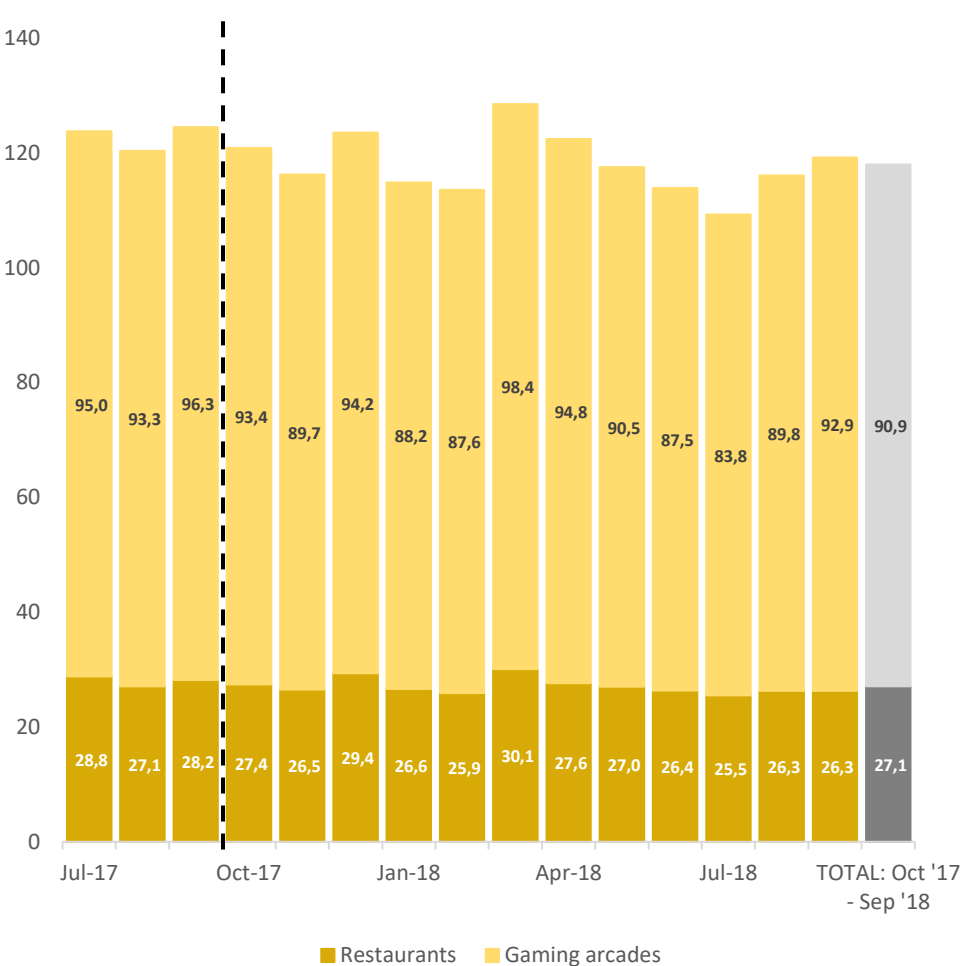
Source: Tax returns submitted to the Danish Tax Agency.

Figure 19. Development in quarterly GGR indexed against 2014 Q1 (index 100)



Source: Tax returns submitted to the Danish Tax Agency.

Figure 20. Monthly GGR for gaming machines (January 2017 – March 2018)



Source: Tax returns submitted to the Danish Tax Agency.

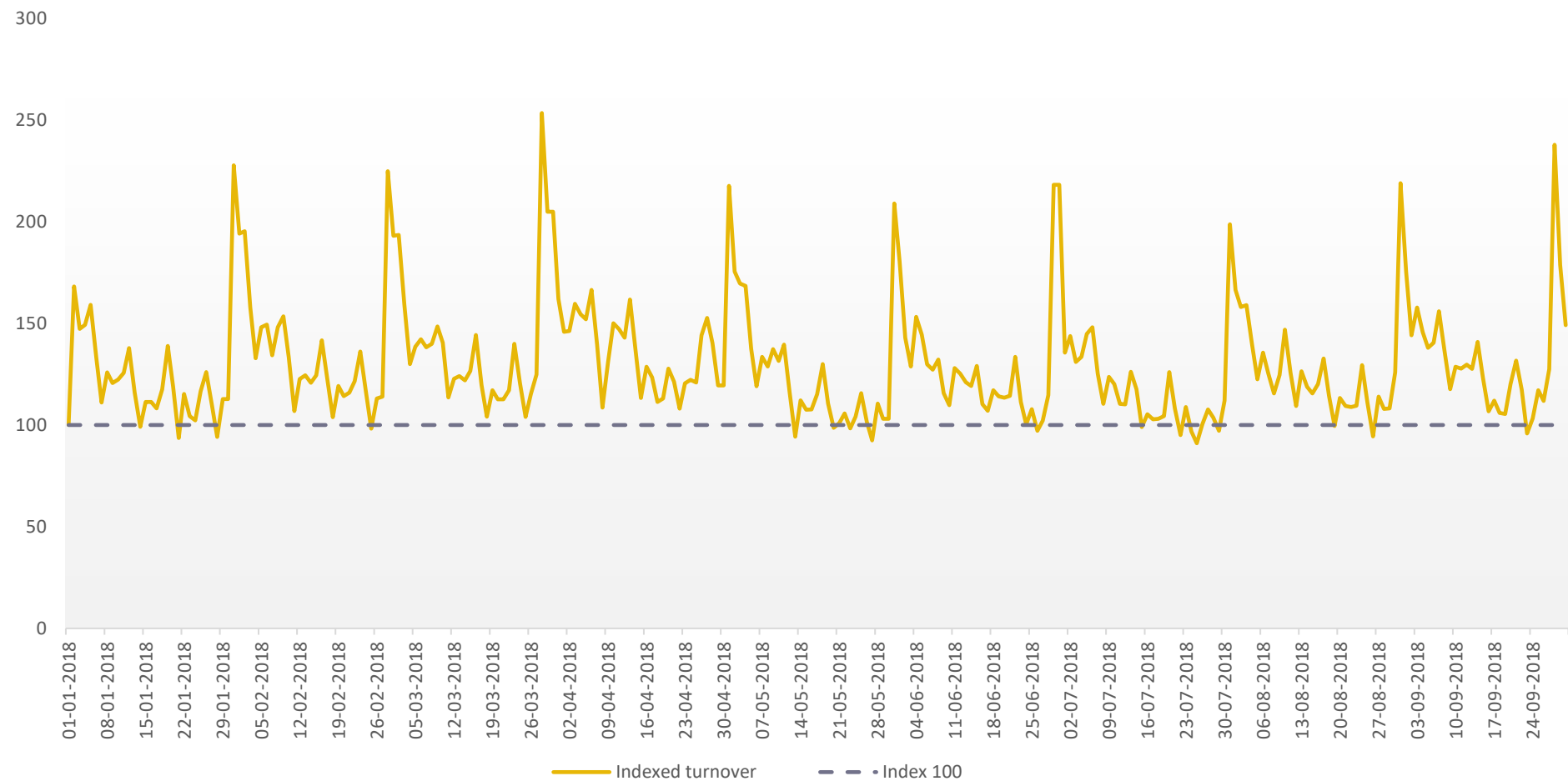
Consumer behavior

The stakes index as illustrated in figure 21 shows that the days with the highest stakes for gaming machines coincide with the days on which salaries are usually paid out. From January 2018 until September 2018, stakes have been highest on the 28th of March and lowest on the 25th of July.

Moreover, divided into weekdays stakes are highest on Fridays for both 2018 Q2 and 2018 Q3 at 16.5 percent and 17.0 percent, respectively (see figure 22). Sundays reported the lowest stakes at 12.2 percent in 2018 Q2 and 13.3 percent in 2018 Q3.

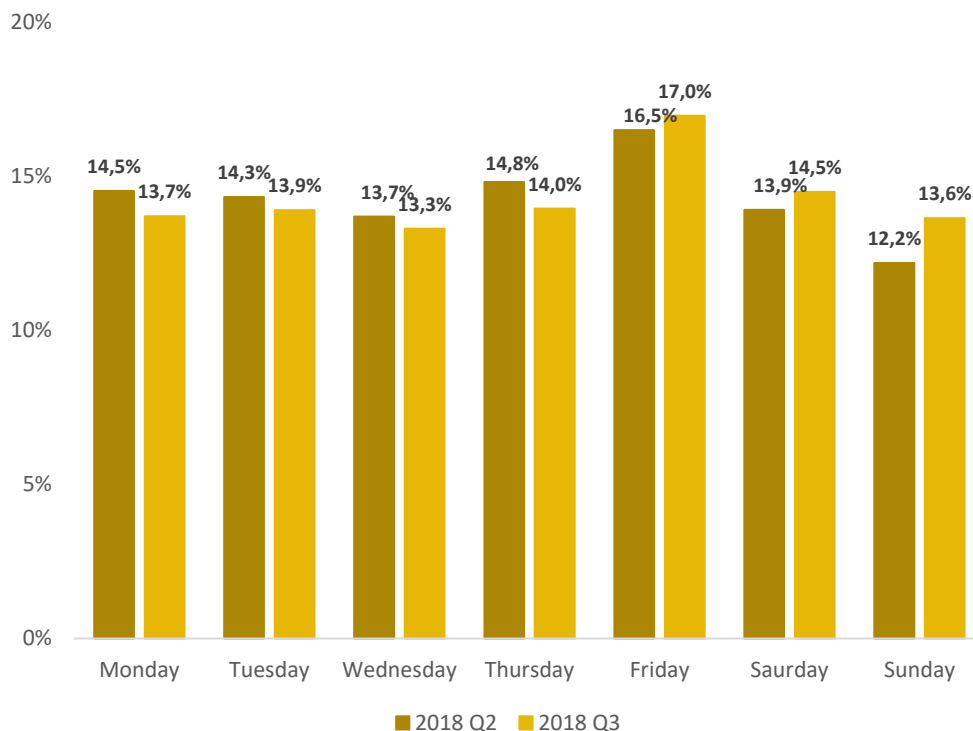
According to figure 23, stakes on an hourly basis, increase from 7 am until between 3 pm and 4 pm, when the stakes are highest. Afterwards, stakes decline until midnight and between midnight, and 7 am there are no stakes reported. In 2018 Q3, stakes are higher in the afternoon hours compared to 2018 Q2, although lower in the morning- and evening hours.

Figure 21. Stakes index per day from January 2018 until September 2018 (index 100 = 1st of January 2018)



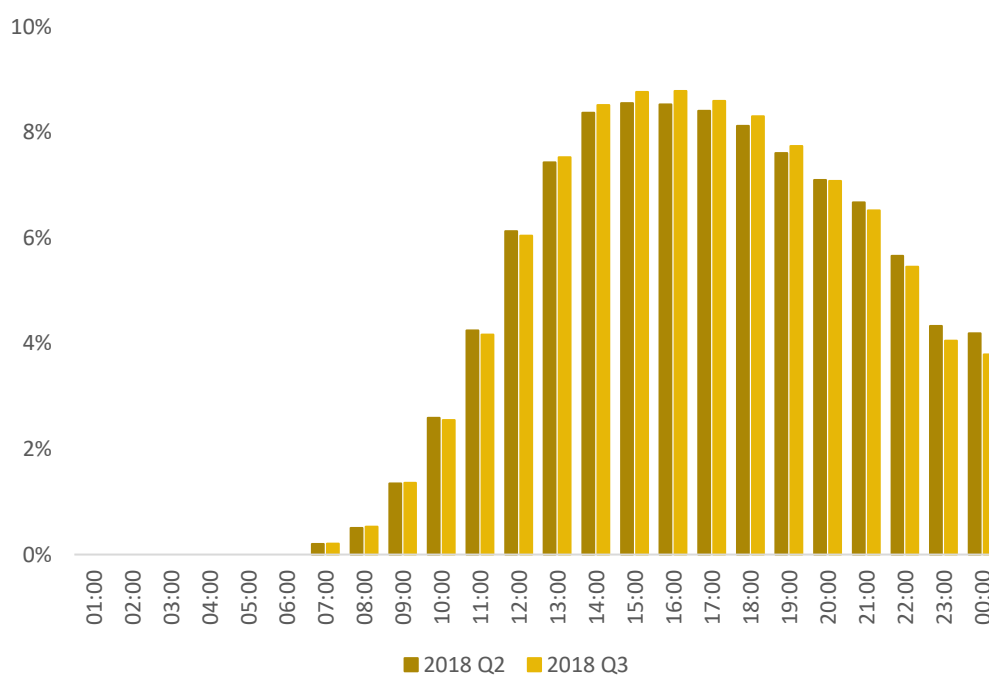
Source: Based upon gambling transaction data submitted by license holders to the Danish Gambling Authority.

Figure 22. 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 23. 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 DKK 81.8 million in GGR in 2018 Q3, a fall of 10.6 percent (9.7 million DKK) relative to 2018 Q2 (see Table 11). Furthermore, this equals to a fall of 14.0 percent relative to 2017 Q3, with GGR DKK 13.3 million lower.

Figure 24 charts the value of average quarterly GGR indexed against the first quarter of 2014 (index = 100). Quarterly GGR has been declining since 2015 Q2 with an average of DKK 92.5 million.

Over the course of the twelve months, between October 2017 and September 2018, land-based casinos generated DKK 356.9 million in GGR, an average of DKK 29.7 million a month. When taking into account the varying lengths of each month, as shown in Figure 25, GGR was lowest in August 2018 (DKK 0.74 million GGR per day), while March 2018 was highest (DKK 1.16 million GGR per day). Seen in relation to 2017 Q3, GGR was approximately DKK 0.8 million lower in July 2018, DKK 8.8 million lower in August and DKK 3.6 million lower in September 2018. On average, land-based casinos generated DKK 0.98 million per day between October 2017 and September 2018.

Table 11. Quarterly GGR and development on previous quarter



In million DKK		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	91.5	-1.3%
	Q3	81.8	-10.6%
	Q4		
	Year		

Source: Tax returns submitted to the Danish Tax Agency.

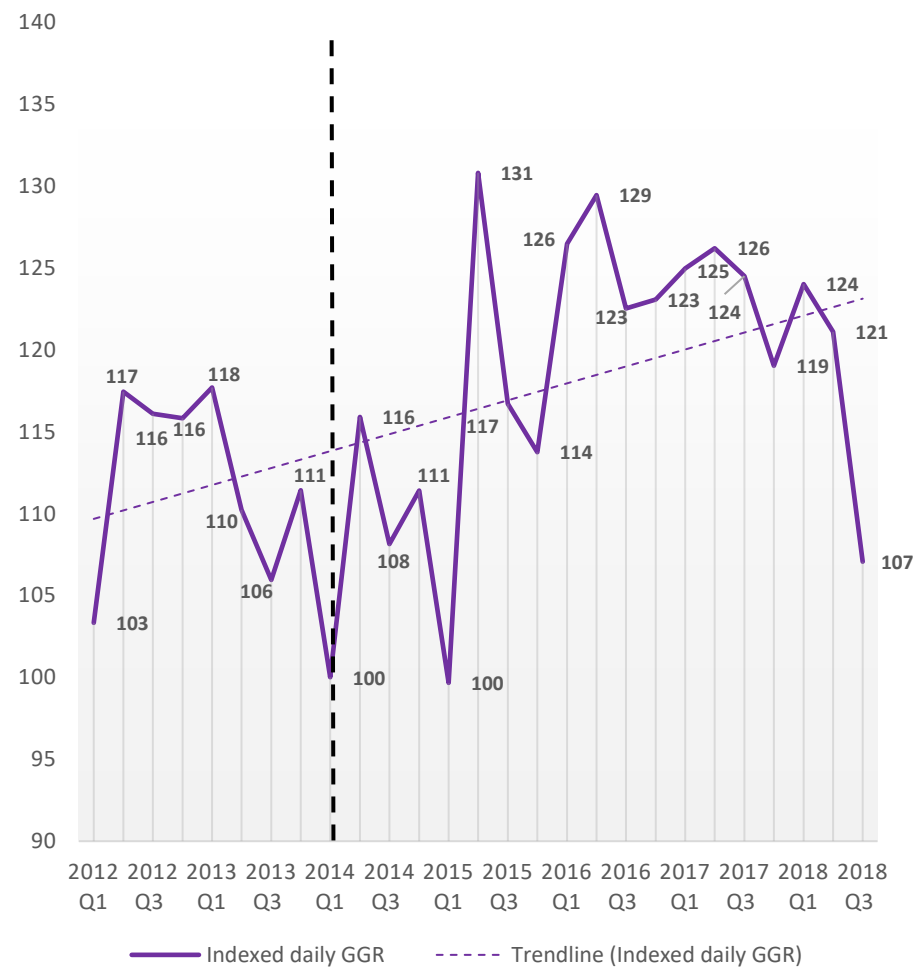


Growth on previous year



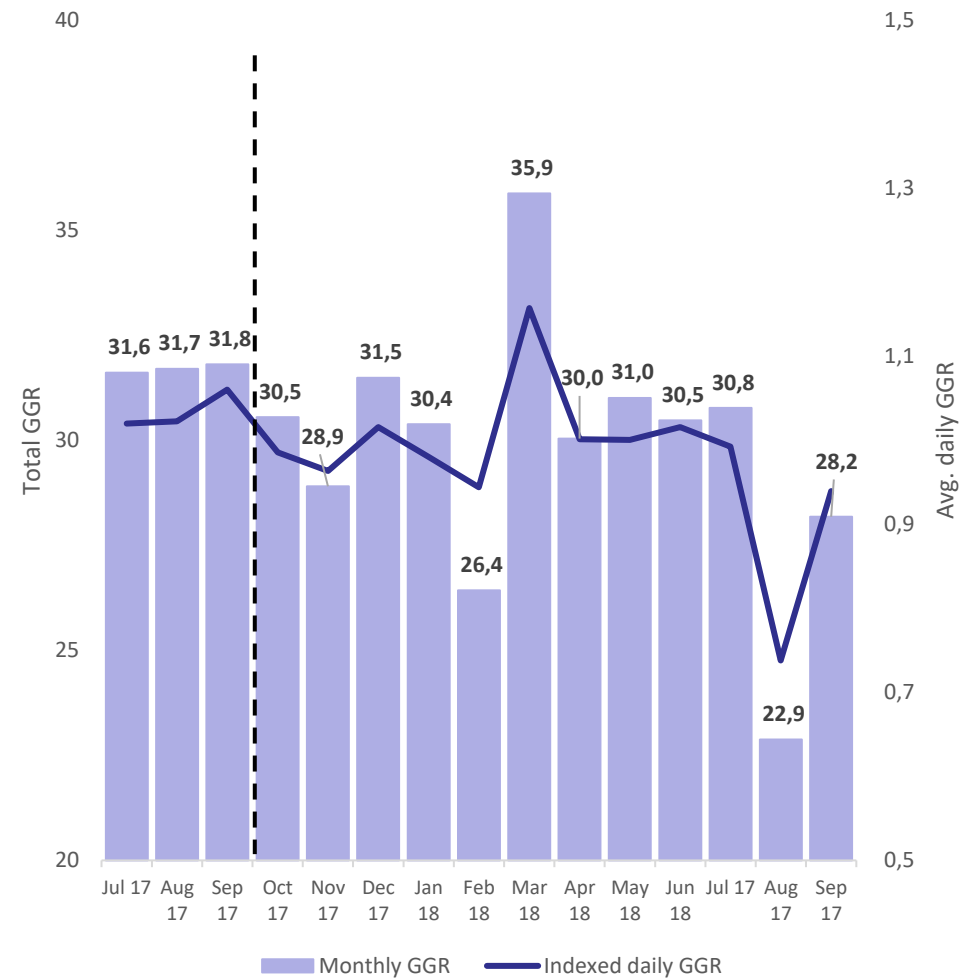
Decline on previous year

Figure 24. Quarterly GGR benchmarked against 2014 Q1 (index 100)



Source: Tax returns submitted to the Danish Tax Agency.

Figure 25. Monthly GGR for land-based casinos



Source: Tax returns submitted to the Danish Tax Agency.







G. Lotteries and betting on horse racing

The 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 DKK 3.1 billion for 2017¹⁴. 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 DKK 383 million, 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 26, betting on horse racing has seen a fall in both the market share and GGR in recent years, ending 2017 on DKK 116 million. 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, it has been liberalised. Data on horse racing have been included in the quarterly statistics for the total betting market from 2018 Q2.

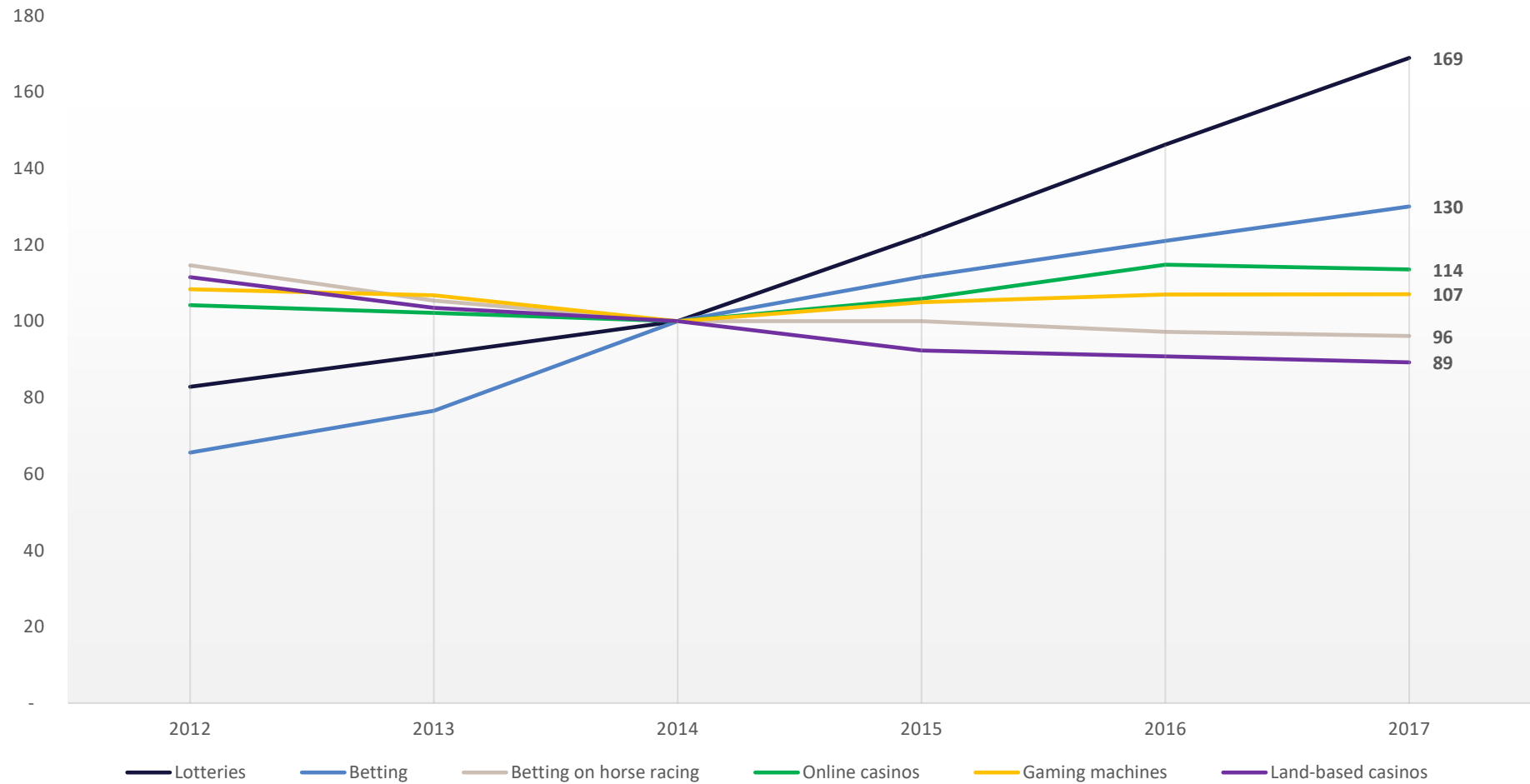
Table 12. Total GGR for the gambling market, 2012-2017

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

¹⁴ 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 26. 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 6 January 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 387 individuals per month (net growth rather than the number of new entries). The significant rise between January 2018 and February 2018 of 702 registrations, when 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 1 November 2018, there were 4,595 more registrations in ROFUS than there were on the 1 November 2017, equaling a year-on-year growth of 37.9 percent. The number of permanent self-exclusions grew by 2,877 in the period, accounting for 62.6 percent of growth in registrations. As shown in Figure 27, the proportion of total registrations that are permanent exclusions varies from month to month, though in general it follows a stable upwards trend.

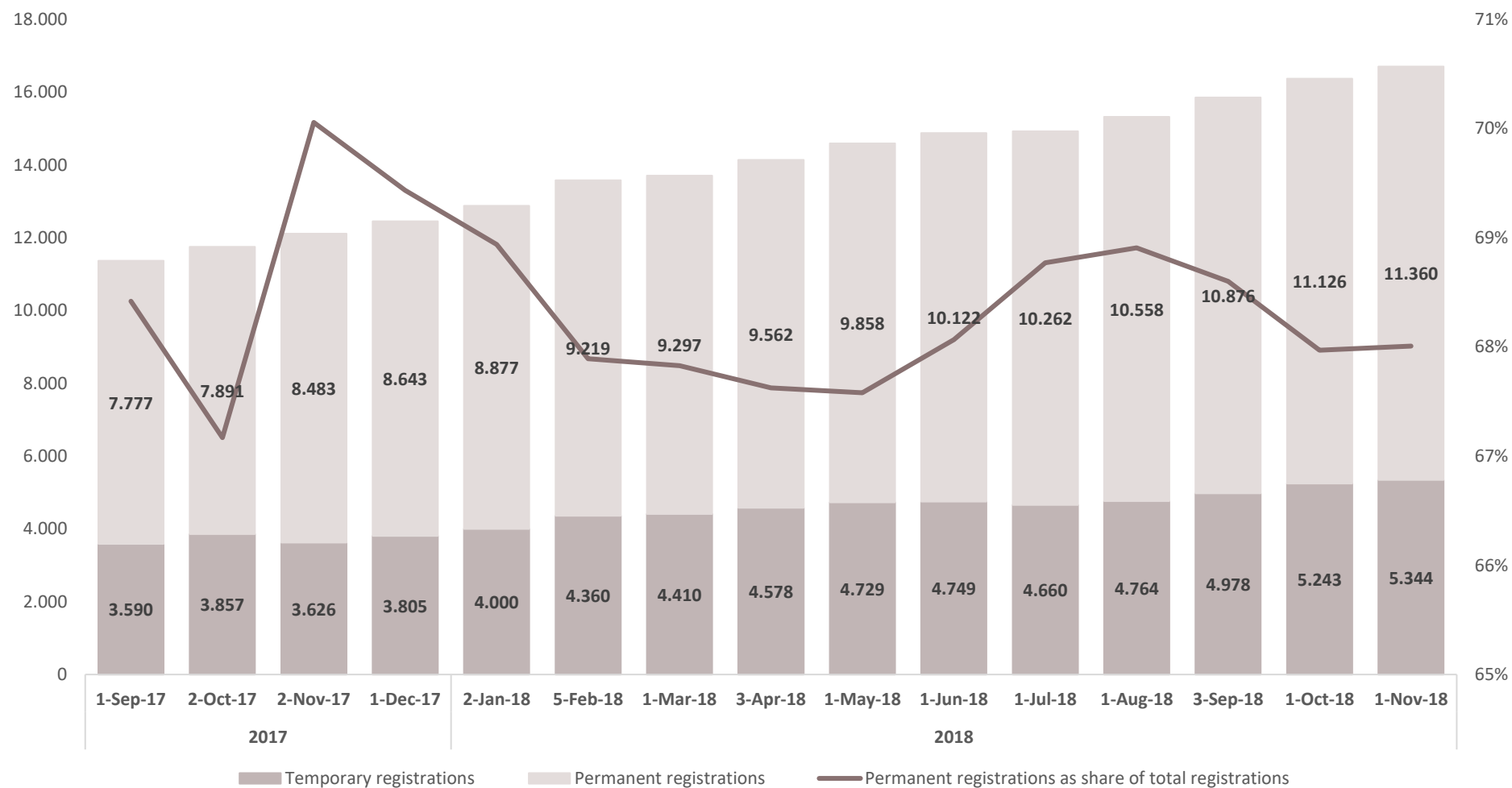
Table 13. Registrations in ROFUS



		Total registra- tions	Of which, permanent	Permanent registra- tions as share of to- tal registrations
2017	1-Sep-17	11.367	7.777	68.4%
	2-Oct-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%
	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%
	3-Sep-18	15.854	10.876	68.6%
	1-Oct-18	16.369	11.126	68.0%
	1-Nov-18	16.704	11.360	68.0%

Source: Data from ROFUS.

Figure 27. ROFUS – Total registrations (temporary and permanent) and share of registrations



Source: Data from ROFUS.

