



Danish gambling market statistics

Second quarter,
2017

Indhold

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A. Introduction

The Danish gambling market underwent a partial liberalisation in 2012, with the markets for betting and online casinos opened up to new operators. The gambling sector comprises of the following eight sub-sectors, each defined under the Danish Gambling Act (Lov om Spil): *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).*

These categories are used for defining the markets and the recording of gambling statistics. The sub-sectors each have their 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 liberalised betting market,¹ online casinos, gaming machines,² and land-based casinos. Statistics for lotteries, class lotteries, charitable lotteries and betting on horse-racing³ are not available for the second quarter of 2017 at the time of publication.

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. Following improved calculation methods, the Danish gambling authority has changed from rounding GGR numbers to the nearest DKK 5 million, and now rounds numbers to the nearest DKK 1 million; in some instances, the nearest DKK 100,000. These figures are still subject to change, for example in connection with delayed reporting of fees. Figures do not take account for inflation.

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 months after the end of the relevant quarter. This reflects the different tax reporting periods for the four focus markets.

¹ As noted in the opening paragraph, betting on horse, dog, and pigeon racing is not liberalised. From this point onwards, the term "betting" is used to describe the liberalised betting market.

² 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.

³ The Danish Gambling Authority does not collect statistics for trackside betting pools at dog and pigeon races.

B. Quarterly market statistics for the Danish Gambling market

The latest quarterly GGR figures for the liberalised betting market, online casinos, gaming machines, and land-based casinos indicate that the Danish gambling market has experienced approximately five percent growth relative to the first quarter of 2017, though this has primarily been driven by online casinos. Sectoral figures for betting, gaming machines, and land-based casinos are in keeping with seasonal trends. Nonetheless, at just shy of 1.5 billion kroner, the second quarter of 2017 set a record for combined GGR for the four focus markets.

Table 1. Quarterly GGR for the four focus markets since first quarter of 2014 (million kroner)

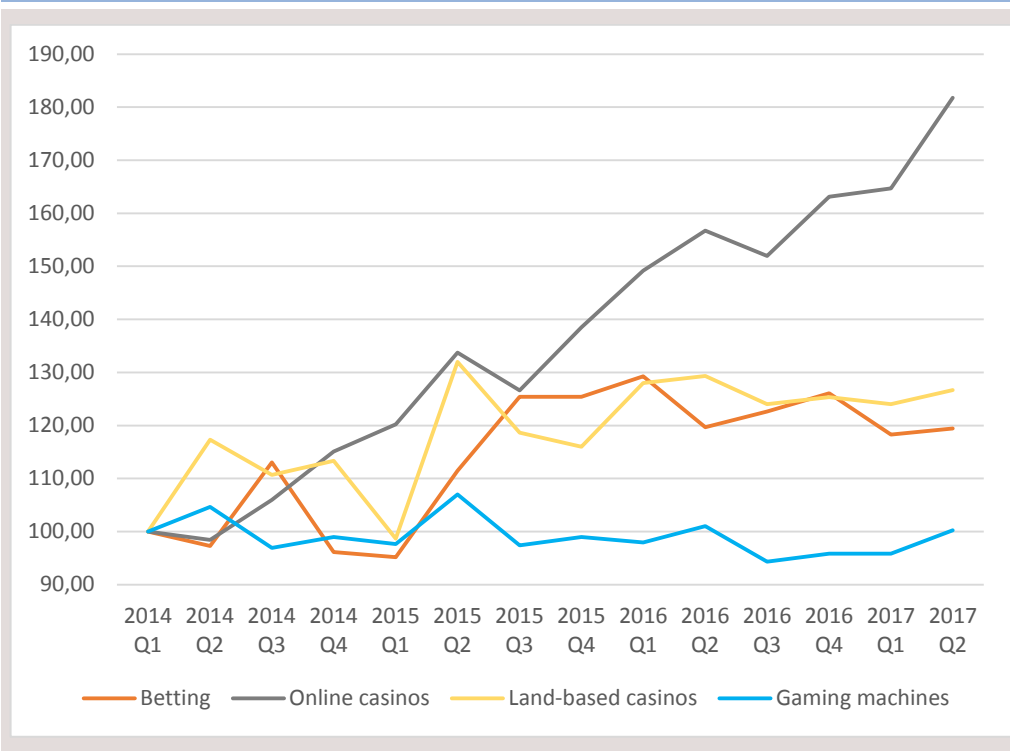
		Q1	Q2	Q3	Q4	Year
2014	Combined	1150	1165	1218	1177	4710
	Betting	437	425	494	420	1775
	Online casinos	252	248	267	290	1058
	Land-based casinos	75	88	83	85	330
	Gaming machines	386	404	374	382	1547
2015	Combined	1171	1336	1331	1366	5204
	Betting	416	487	548	548	1,999
	Online casinos	303	337	319	349	1,308
	Land-based casinos	74	99	89	87	349
	Gaming machines	377	413	376	382	1,547
2016	Combined	1416	1405	1376	1425	5621
	Betting	565	523	536	551	2175
	Online casinos	376	395	383	411	1565
	Land-based casinos	96	97	93	94	379
	Gaming machines	378	390	364	370	1503
2017	Combined	1395	1462	-	-	-
	Betting	517	522	-	-	-
	Online casinos	415	458	-	-	-
	Land-based casinos	93	95	-	-	-
	Gaming machines	370	387	-	-	-

Source: Tax returns submitted to the Danish Tax Authority.

As Table 1 shows, combined GGR for the four sectors is 312 million kroner higher than the first quarter of 2014. However, this growth has not been equally distributed, with online casinos recording the bulk of this growth (206 million kroner). The varying quarterly GGR growth rates are presented in figure 1, where, taking a starting point in the first quarter of 2014,⁴ quarterly GGR in each sector is benchmarked at index 100. Here it is clear to see the relative strength of the online casino market contra the three other focus areas. Gaming machines have recorded relatively consistent quarterly GGR figures since the first quarter of 2014, albeit with a slight downward trend, whilst quarterly GGR for both betting and land-based casinos grew until the second quarter of 2015, since when they have both remained stable.

⁴ The first quarter of 2014 is chosen as the starting point, as this point in time marks two years after the liberalisation of the betting and online casino markets, giving the markets time to have stabilised.

Figure 1. Indexed quarterly GGR (2014 Q1: index 100)



Source: Tax returns submitted to the Danish Tax Authority.

C. Online casinos

The online casino market recorded significant growth in GGR in the second quarter of 2017 relative to the foregoing quarter, up by 42.7 million Danish kroner, equivalent to growth of 10.3 percent.

Second quarter figures are also significantly higher than the second quarter of 2016, with year-on-year growth standing at 15.9 percent. The strongest growth segment has been single-player casino games, with second quarter figures 11.7 percent higher than the first quarter of 2017. As these figures suggest, GGR from multi-player casino games, where GGR is earned through commission, fell, with second quarter figures 5.4 percent lower than the first quarter of 2017. Quarterly figures for online casinos are presented in Table 2.

Table 2. Quarterly stakes, prizes, commission, and GGR⁵ for online casinos (million kroner)

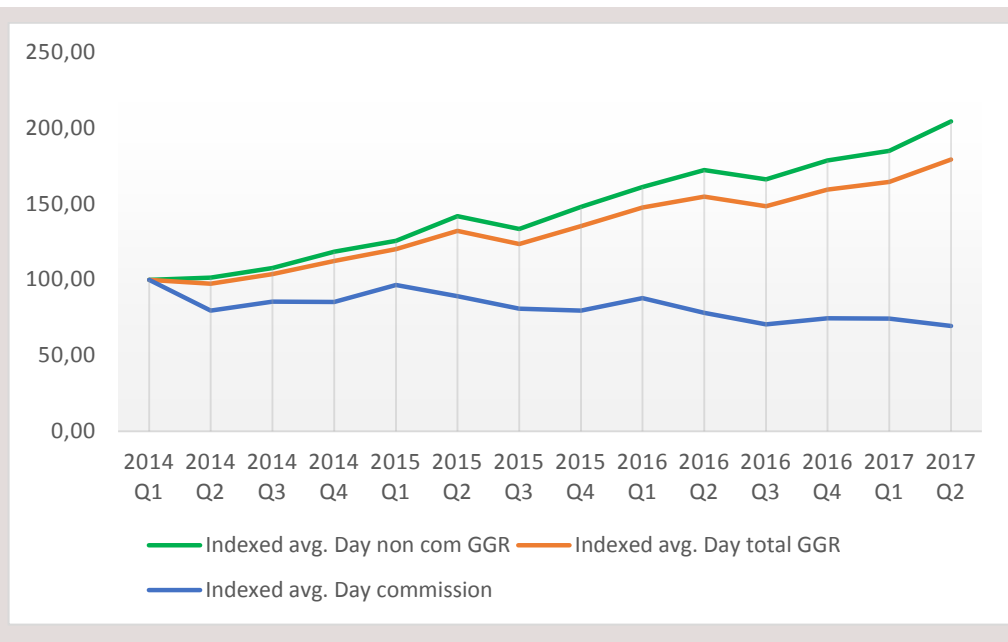
		Quarter 1	Quarter 2	Quarter 3	Quarter 4	Year
2014	Total GGR	252,3	248,4	267,3	289,7	1.057,7
	- Stakes	5.109,8	5.242,3	5.844,7	6.109,5	22.306,3
	- Prizes	4.904,5	5.031,7	5.618,4	5.860,7	21.415,2
	- Commission	46,9	37,8	41,0	40,9	166,6
2015	Total GGR	303,3	337,0	318,8	349,1	1.308,2
	- Stakes	6.447,0	7.318,3	7.277,7	7.975,7	29.018,7
	- Prizes	6.189,0	7.023,6	6.997,7	7.664,8	27.875,1
	- Commission	45,3	42,3	38,8	38,2	164,6
2016	Total GGR	376,3	394,9	382,6	410,9	1.564,6
	- Stakes	8.590,2	9.278,5	8.819,0	10.028,8	36.716,6
	- Prizes	8.255,7	8.920,8	8.470,3	9.653,6	35.300,4
	- Commission	41,7	37,1	33,9	35,8	148,4
2017	Total GGR	414,8	457,5	-	-	-
	- Stakes	10.290,6	11.604,3	-	-	-
	- Prizes	9.910,6	11.179,8	-	-	-
	- Commission	34,9	33,0	-	-	-

Source: Tax returns submitted to the Danish Tax Authority.

Taking the first quarter of 2014 as a benchmark, by the end of the second quarter of 2017, GGR generated by online casinos grew by 79.3 percent. As figure 2 shows, this high growth rate has been primarily driven by the single-player online casino market, with second quarter 2017 figures 104.4 percent higher than the first quarter of 2014. In contrast, average daily GGR from commission to participate in multi-player games fell by 30.5 percent over the same period. Total quarterly GGR growth, non-commission GGR, and commission GGR is charted in Figure 2, benchmarked against the first quarter of 2014.

⁵ Stakes and prizes only cover games without commission. As such, GGR is the sum of commission and stakes minus winnings.

Figure 2. Indexed development of quarterly GGR since 2014



Source: Tax returns submitted to the Danish Tax Authority.

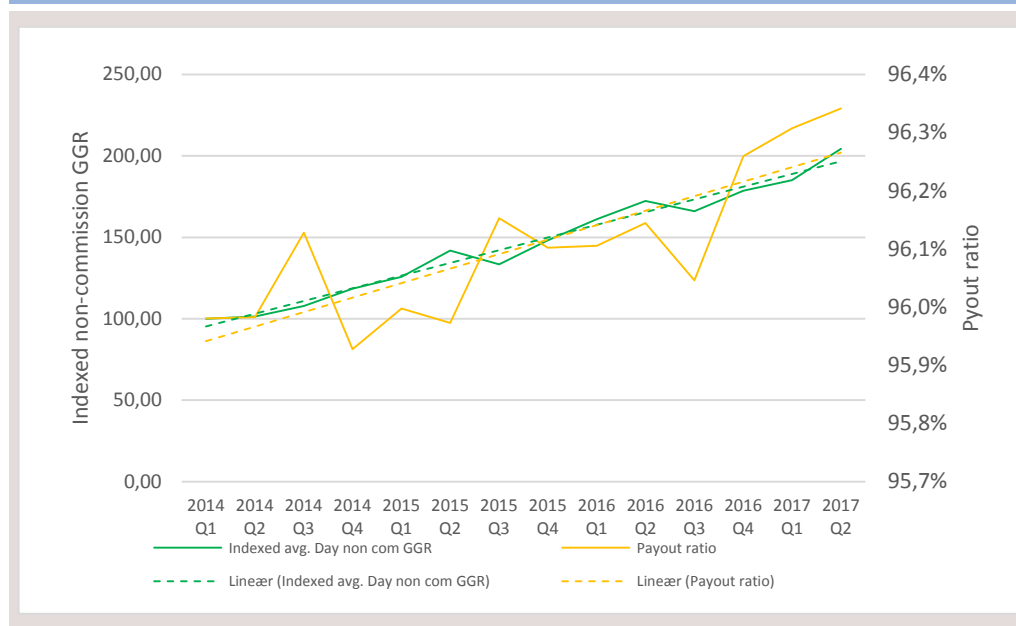
The high growth seen for single player online casino games means that stakes placed in online casinos have also more than doubled since the first quarter of 2014. Whereas just over 5.1 billion kroner in stakes were placed in the first quarter of 2014, in the second quarter of 2017, this had risen to 11.6 billion kroner.

However, it is important to put these figures in the right context. Stakes are not equivalent to money deposited in a gambling account. A player that starts with 100 kroner and stops with 40 kroner has typically placed stakes worth 1,000 kroner, and won prizes worth 960 kroner, without the player ever having deposited more than 100 kroner in their account. The figures become higher, as stakes and prizes are measured for every “spin”. In a similar vein, a payout ratio of 96 percent does not necessarily mean that if an individual plays in an online casino 100 times, wagering a kroner a spin, they will win 96 times. A 96 percent payout ratio could equally be achieved with a 96 kroner payout with the last spin of an online slot machine.

While there has been significant growth in GGR since the first quarter of 2014, the payout ratio has remained in the region of 96 percent in this entire period. In the three-and-a-half years since, a difference of just 0.414 percent between the highest and lowest payout ratio was recorded, with figure 3 below illustrating this slight upward trend in the payout ratio.

Incremental adjustments to the payout ratio can have significant consequences for GGR. Although growth has been gradual, it is worth noting that, ceteris paribus, if the payout ratio from the last quarter of 2014 (the quarter with the lowest payout ratio) was applied to the stakes placed in the second quarter of 2017, GGR would have been 48.0 million kroner higher. This would have pushed quarterly GGR above the 0.5 billion kroner mark. On the other hand, if the payout ratio from the second quarter of 2017 was applied to stakes wagered in the first quarter of 2014, GGR would have been 18.5 million kroner lower. These slight adjustments to the payout ratio explain why the growth rate for stakes has outstripped that for GGR.

Figure 3. Development in daily GGR from non-commission games and payout ratio



Source: Tax returns submitted to the Danish Tax Authority.

As figure 3 shows, developments in the quarterly payout ratio and quarterly GGR from non-commission online casino games have followed a similar trajectory to growth in average daily GGR from these non-commission games. However, as has been discussed above, the two figures are mutually exclusive in the sense that a lower payout ratio to increase GGR. Nonetheless, given the manner in which the two indicators have developed since the first quarter of 2014, this suggests that gambling operators see a correlation between payout ratios and long-term GGR development. The correlation between payout ratio and GGR is well illustrated through closer examination of these figures for the past twelve months. As table 3 shows, GGR was highest for non-commission online casino games in April 2017, though the month with the highest payout ratio was May 2017, when nearly 3.85 billion kroner in stakes were placed. However, GGR was 4.7 million kroner higher in June 2017 when just 3.73 billion in stakes were placed, due to a 0.3 percent lower payout ratio.

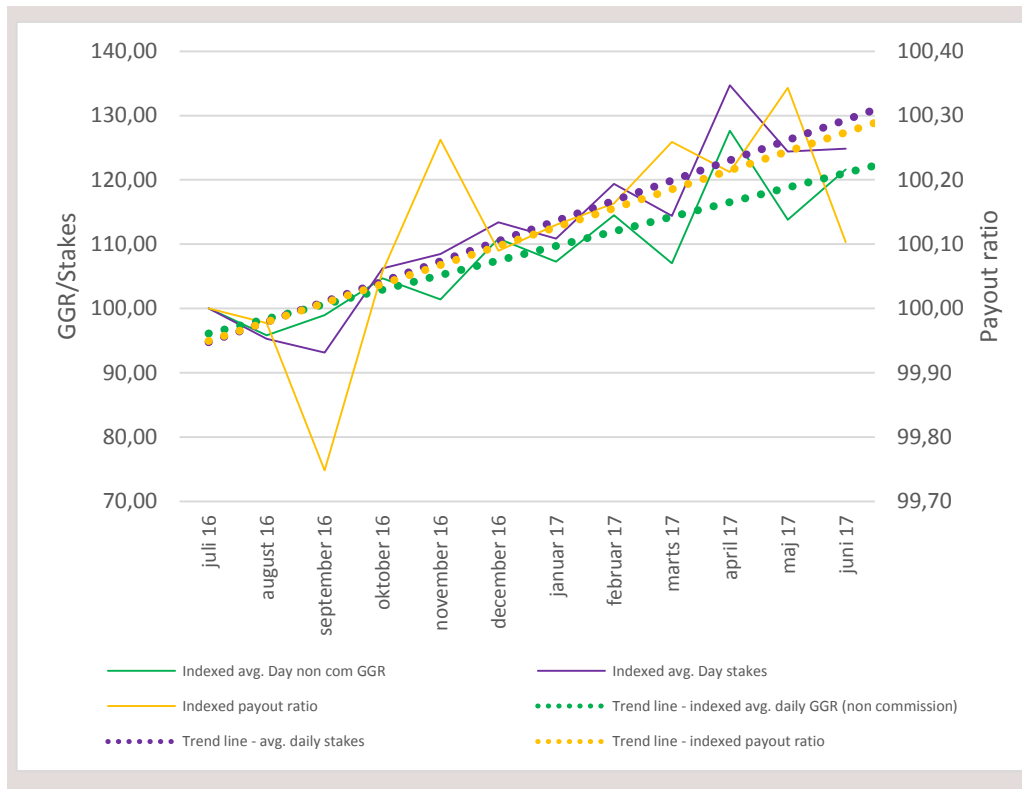
Table 3. Monthly GGR for online casino (million kroner), ex. GGR from commission games

	GGR (ex. com)	Stakes	Prizes	Pay-out ratio
Jun 17	140,8	3.732,7	3.591,9	96,2%
Maj 17	136,1	3.843,3	3.707,2	96,5%
Apr 17	147,7	4.028,3	3.880,6	96,3%
Mar 17	128,0	3.534,2	3.406,2	96,4%
Feb 17	123,7	3.331,2	3.207,5	96,3%
Jan 17	128,3	3.425,2	3.296,9	96,3%
Dec 16	132,6	3.503,6	3.371,0	96,2%
Nov 16	117,3	3.243,2	3.125,9	96,4%
Okt 16	125,2	3.282,0	3.156,8	96,2%
Sep 16	114,5	2.784,8	2.670,3	95,9%
Aug 16	114,6	2.944,2	2.829,6	96,1%
Jul 16	119,6	3.089,9	2.970,3	96,1%
Last twelve months	1.528,4	40.742,7	39.214,3	96,2%

Source: Tax returns submitted to the Danish Tax Authority.

As figure 4 shows, through indexing the values for average stakes, payout ratios, and non-commission GGR on a daily basis, it is possible to see that while stakes, non-commission GGR and the payout ratio have all grown over the twelve months between July 2016 and June 2017, they have grown at slightly different rates. The payout ratio has grown at a marginally slower rate than growth in stakes, hence growth in GGR does not match growth in stakes.

Figure 4. Indexed development n GGR, stakes, and payout ratio (index 100 = June 2016)



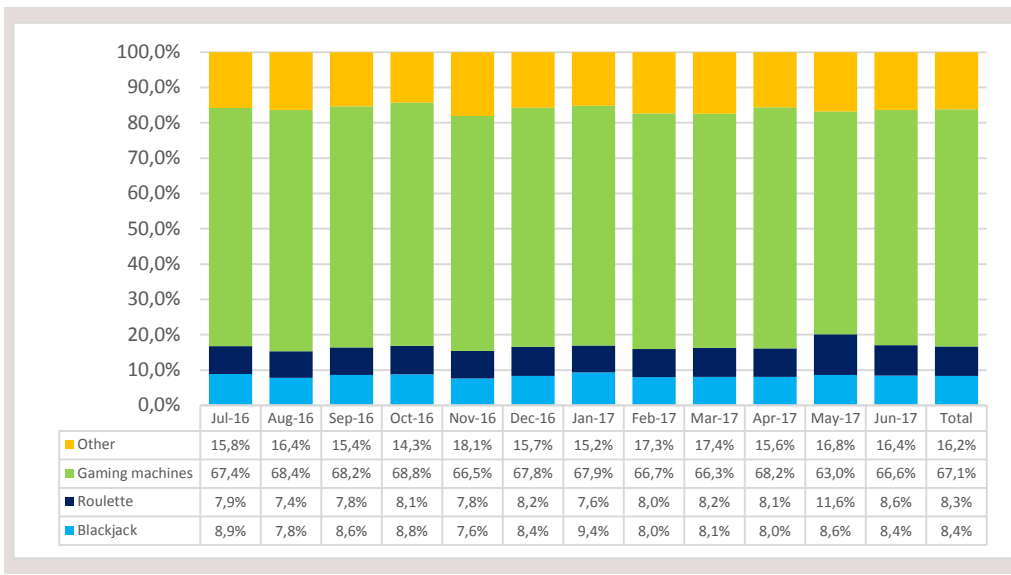
Source: Tax returns submitted to the Danish Tax Authority.

Game types (online casino)

Online gaming machines, the online equivalent to gaming machines found in land-based casinos, restaurants, and gaming arcades, were the most popular type of casino game over the last twelve months, with a market share of 67.1 percent.⁶ Blackjack and roulette accounted for 8.4 percent and 8.3 percent of the market respectively, with other gaming forms accounting for the remaining 16.2 percent. As figure 5 illustrates, market shares for these gaming forms has been relatively stable over the past twelve months, with the exception of May 2017, which proved a particularly popular month for roulette, primarily at the expense of gaming machines.

⁶ Measured according to turnover – therefore only calculated according to turnover from non-commission games

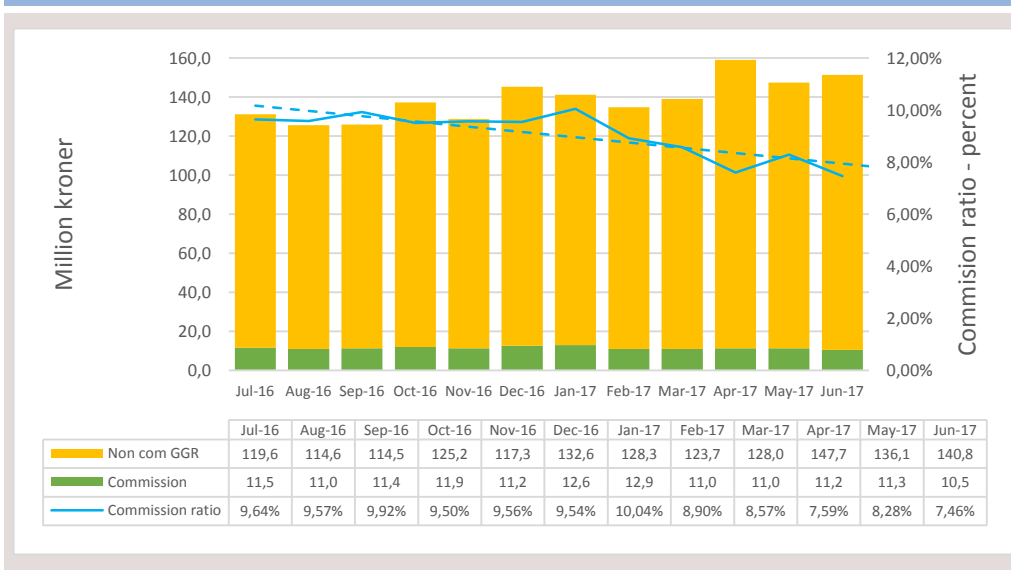
Figure 5. Market share stakes, online casino (ex. com. games) – July 2016 – June 2017



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.

In figure 5, “other” covers a range of various games including poker played against a machine, sometimes called video poker. 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 5 and elsewhere. Commission-based games are instead represented in figure 6 and are based upon GGR filings submitted to the Danish Tax Authorities by gambling operators. There has been a steady downward trend in GGR from these games, both in absolute terms and as a proportion of total GGR. However, lower GGR may also be an indicator of lower prices and sharper competition for online casinos.

Figure 6. Development in commission as an element of GGR – last twelve months

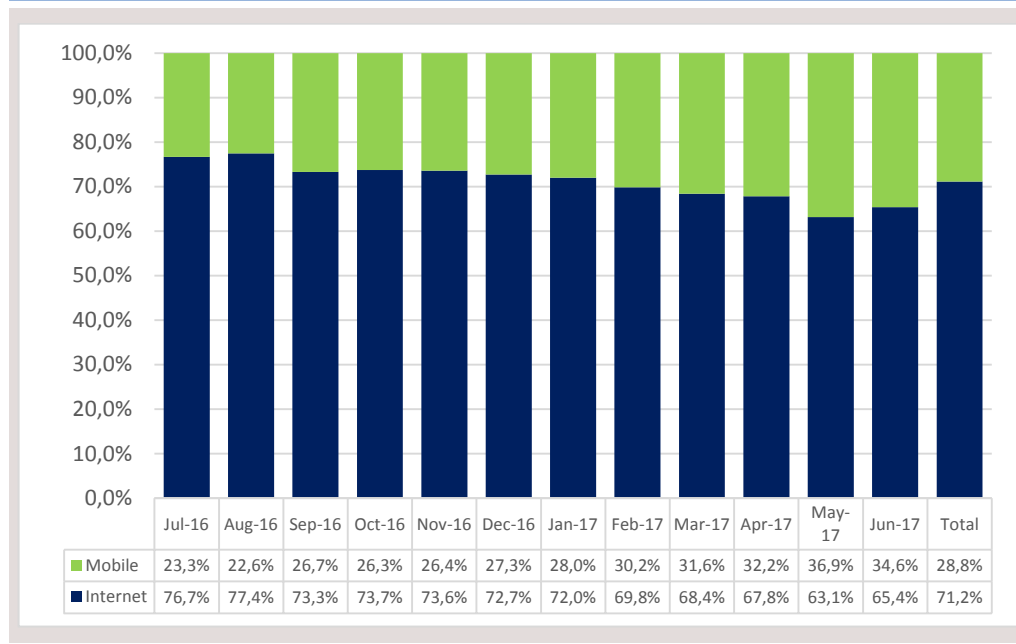


Source: Tax returns submitted to the Danish Tax Authority.

Sales channel

Over the course of the twelve months between July 2016 and June 2017, 71.2 percent of total turnover in online casinos came from gaming providers' standard websites, with the remaining 28.8 percent generated from mobile platforms.⁷ Over this period, the share of turnover coming from mobile platforms has risen from 23.3 percent to 34.6 percent, as shown in figure 7.

Figure 7. 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.

⁷ 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.

D. Betting

In the second quarter of 2017, the betting market grew by 0.6 percent relative to the first quarter of 2017, though was 0.2 percent lower than the second quarter of 2016. When taking account for the varying lengths of each quarter, average GGR generated per day was in fact also lower for the second quarter of 2017 than the first quarter. Nonetheless, GGR is still 85.8 million kroner higher than what was recorded in the first quarter of 2014. Quarterly GGR has though remained relatively stable since the third quarter of 2015, with a slight downward trend.

Table 4. Market indicators for the betting market (financial figures in million kroner)

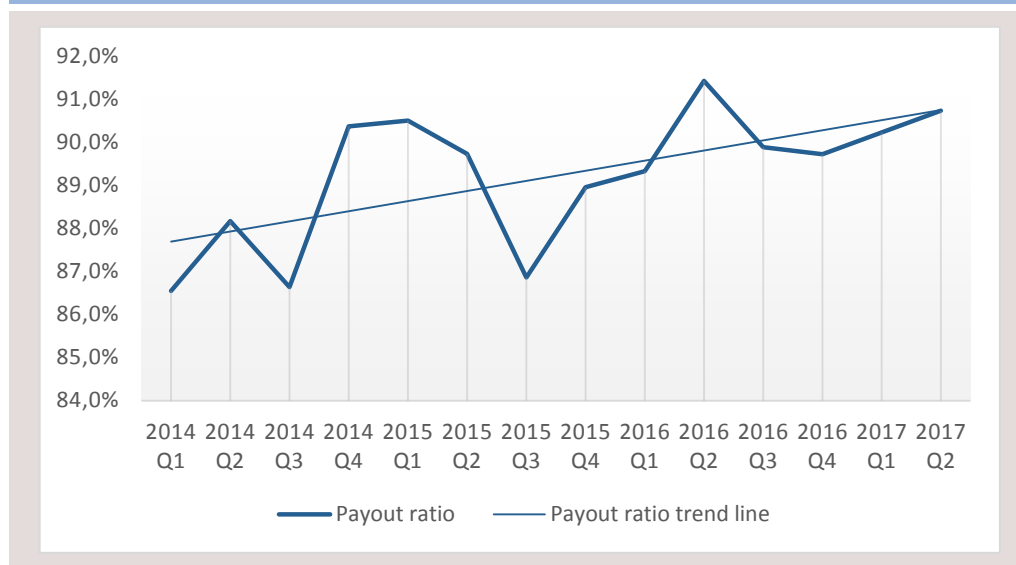
		Quarter 1	Quarter 2	Quarter 3	Quarter 4	Total
2014	Total GGR	436,5	440,8	493,8	420,1	1.791,2
	- Payout ratio	86,5%	88,2%	86,6%	90,4%	88,1%
	- Stakes	3.206,8	3.699,1	3.674,0	4.327,5	14.907,3
	- Quarterly growth	-	1,0%	12,0%	-14,9%	-
2015	Total GGR	416,4	487,3	547,6	548,0	1.999,2
	- Payout ratio	90,5%	89,7%	86,9%	89,0%	89,0%
	- Stakes	4.349,5	4.711,1	4.146,4	4.938,6	18.145,6
	- Quarterly growth	-0,9%	17,0%	12,4%	0,1%	-
2016	Total GGR	565,4	523,2	535,9	550,6	2.175,1
	- Payout ratio	89,3%	91,4%	89,9%	89,7%	90,1%
	- Stakes	5.271,3	6.063,5	5.272,3	5.333,0	21.940,1
	- Quarterly growth	3,2%	-7,5%	2,4%	2,7%	-
2017	Total GGR	519,2	522,4	-	-	-
	- Payout ratio	90,2%	90,7%	-	-	-
	- Stakes	5.293,3	5.617,4	-	-	-
	- Quarterly growth	-5,7%	0,6%	-	-	-

Source: Tax returns submitted to the Danish Tax Authority.

It is worth noting that in the second quarter of 2017, unlike in the same quarter in 2016, there was no sports mega event comparable to a European Championship in football, yet quarterly GGR was broadly the same. Measured according to stakes though, demand for betting was lower in the second quarter of 2017 than the second quarter of 2016, with stakes nearly 450 million kroner lower this year.⁸ However, whereas in the second quarter of 2016 the payout ratio was 91.4 percent, last quarter it was 90.7 percent, a difference of a full 0.7 percent.

⁸ There is a delay between placing a bet and collecting winnings that one does not see in the online casino market. While a fair proportion of bets are most likely placed in the immediate period before or during an event, the Danish Gambling Authority does not have (automatic) access to data on which events individual place their bets upon. The outcome of some bets will first be determined in the months to come.

Figure 8. Payout ratio for betting – 2014 Q1 - 2017 Q2



Source: Tax returns submitted to the Danish Tax Authority.

As the data shows, and is illustrated in figure 9 above, variations in the payout ratio have significant consequences for GGR. The 4.2 percent difference between the payout ratio in the first quarter of 2014 (86.5 percent) and the second quarter of 2017 (90.7 percent), would mean that if the 2014 first quarter rate was applied in the second quarter of 2017, this would have yielded an extra 235.2 million kroner in GGR. Likewise, if the 2017 second quarter payout ratio was applied in the first quarter of 2014, GGR would have been 134.5 million kroner lower. Since the first quarter of 2014, there has been an upward trend in the payout ratio, as seen in figure 9 above, with the 90.7 percent recorded in the second quarter of 2017, second only to the high of 91.4 percent in the second quarter of 2016.

Table 5. GGR, stakes, and payout ratio for betting (million kroner) – July 2016 to June 2017

	GGR ⁹	Stakes	Payout ratio
June-17	139,9	1.450,5	90,4%
May-17	192,6	1.820,1	89,4%
April-17	188,1	2.346,8	92,0%
March-17	137,6	1.876,5	92,7%
February-17	156,6	1.672,1	90,6%
January-17	223,0	1.744,8	87,2%
December-16	170,8	1.735,3	90,2%
November-16	176,4	1.769,4	90,0%
October-16	200,8	1.828,3	89,0%
September-16	198,5	2.022,5	90,2%
August-16	147,8	1.609,4	90,8%
July-16	186,8	1.640,4	88,6%
Twelve month total	2.118,9	21.516,1	90,2%

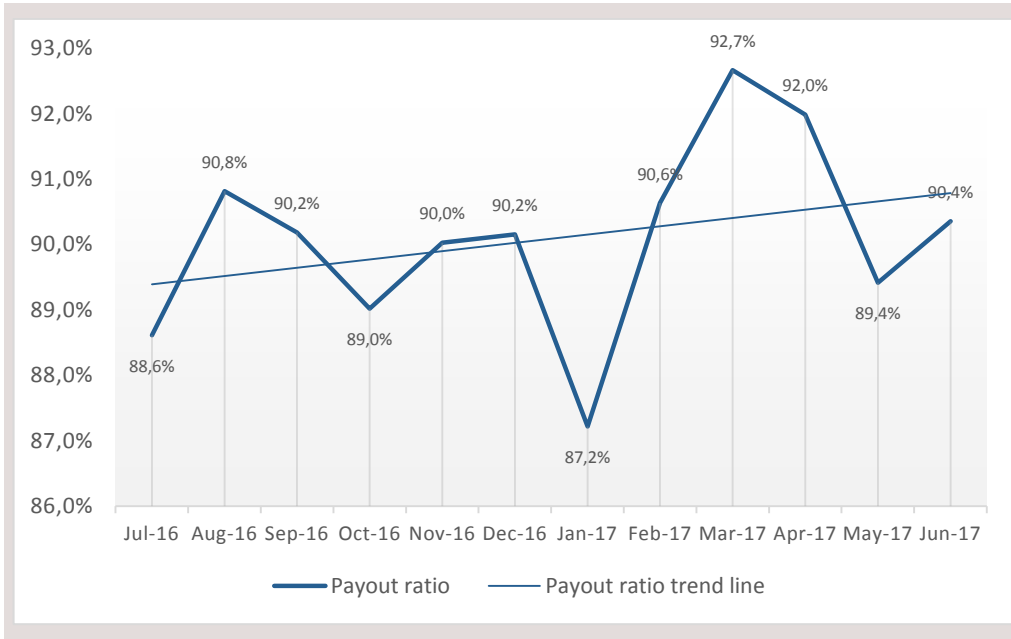
Source: Tax returns submitted to the Danish Tax Authority.

Between July 2016 and June 2017, April 2017 was the busiest month for bookmakers, with over 2.3 billion kroner wagered. But it was far from the most profitable; this honour fell to January 2017, where bookmakers earned 223 million kroner. The variation in GGR is reflected by a payout ratio with far greater variation over the twelve months than for online casinos. The average monthly

⁹ Excluding GGR from commission

payout ratio for the betting market was as high as 92.7 percent in March 2017, but in July 2016, was a full 4.1 percent lower at 88.6 percent. The 2.6 percent lower payout ratio in May 2017 as opposed to April 2017 explains why bookmakers were able to earn 4.5 million kroner more on over 0.5 billion kroner less in stakes. As Figure 9 shows, between July 2016 and June 2017, there was a slight upward trend over the period, with the payout ratio averaging 90.2 percent. This was though 0.2 percent lower than the average for the four quarters between April 2016 and March 2017 (90.4 percent), which included June 2016 when the European Championships in football were held.

Figure 9. Betting pay-out ratio (calculated per month) – April 2016 – March 2017



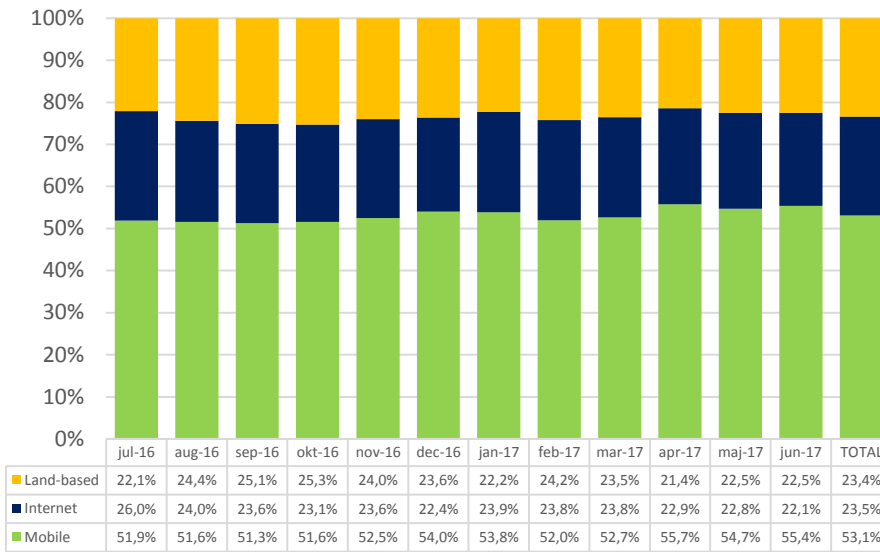
Source: Tax returns submitted to the Danish Tax Authority.

Sales channels

Unlike the market for casino games, betting licenses follow the same procedure for both land-based and online gambling. However, the online market dominates, with stakes placed via mobile platforms alone accounting for 53.1 percent of total turnover over the twelve months between July 2016 – June 2017. Other Internet transactions (desktop homepages) accounted for 23.5 percent of transactions, while transactions at land-based bookmakers accounted for the remaining 23.4 percent of transactions.¹⁰ However, in terms of the number of transactions taking place, land-based bookmakers still lead the way, accounting for 53.9 percent of the number of individual transactions taking place. The figures for stakes, where the value of the transactions are taken into account, and individual transactions, where the value of each transaction is not taken into account are presented below in figures 10 and 11 respectively.

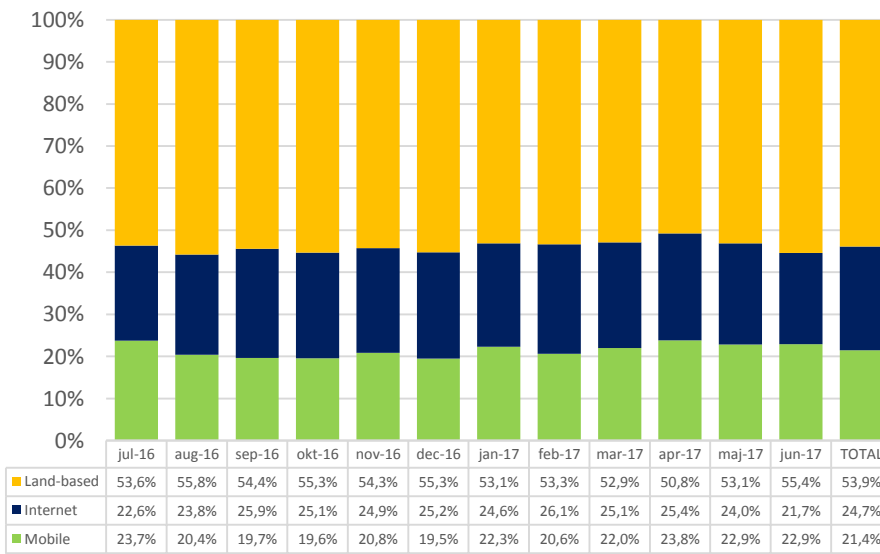
¹⁰ This figure includes self-service machines. In the Danish Gambling Authority's report for the first quarter of 2017, figures for self-service machines were not available, but are now, and are included in this report. There are therefore slight variations to the figures between the two reports.

Figure 10. Sales channels for betting, ex. commission betting, according to turnover



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

Figure 11. 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.

E. Gaming machines/Slot machines

Table 6. Quarterly GGR for gaming machines

		Quarter 1	Quarter 2	Quarter 3	Quarter 4	Total
2014	Total	386,2	404,2	374,4	382,2	1.546,9
	- Restaurants	89,8	92,7	89,4	88,8	360,7
	- Gaming arcades	296,4	311,5	284,9	293,4	1.186,1
2015	Total	376,8	413,1	375,6	381,9	1.547,5
	- Restaurants	87,6	92,7	87,5	86,0	353,8
	- Gaming arcades	289,3	320,4	288,2	295,9	1.193,7
2016	Total	378,5	390,5	364,6	369,8	1.503,4
	- Restaurants	84,9	86,3	83,9	84,8	340,0
	- Gaming arcades	293,6	304,2	280,6	285,0	1.163,4
2017	Total	370,1	387,0	-	-	-
	- Restaurants	85,1	87,5	-	-	-
	- Gaming arcades	285,0	299,5	-	-	-

Source: Tax returns submitted to the Danish Tax Authority.

As with previous years, second quarter 2017 GGR figures were higher for gaming machines than first quarter figures. If the same pattern holds for the remainder of 2017, GGR from gaming machines will end in the region of 1.5 billion kroner for 2017. While GGR in the second quarter of 2017 was 4.6 percent higher than the first quarter (see Table 7 below), it was just under 1 percent lower than the second quarter of 2016.

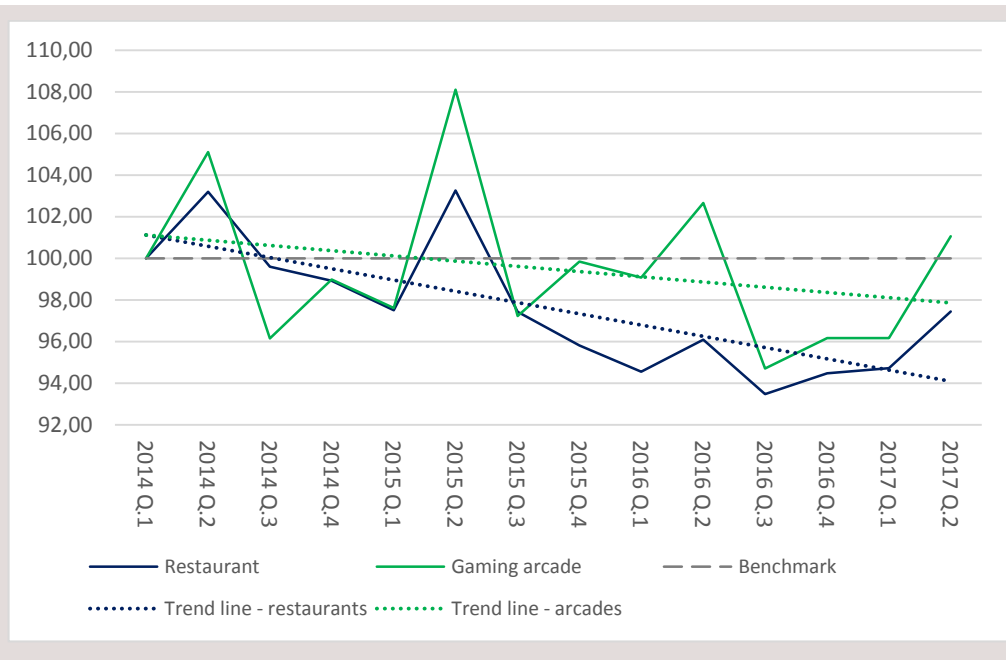
Table 7. Quarter-on-quarter growth in GGR from gaming machines

		Quarter 1	Quarter 2	Quarter 3	Quarter 4
2014	Total	-3,5%	4,7%	-7,4%	2,1%
	- Restaurants	-28,0%	3,2%	-3,5%	-0,7%
	- Gaming arcades	7,6%	5,1%	-8,5%	3,0%
2015	Total	-1,4%	9,6%	-9,1%	1,7%
	- Restaurants	-1,4%	5,9%	-5,7%	-1,7%
	- Gaming arcades	-1,4%	10,8%	-10,1%	2,7%
2016	Total	-0,9%	3,2%	-6,6%	1,4%
	- Restaurants	-1,3%	1,6%	-2,7%	1,1%
	- Gaming arcades	-0,8%	3,6%	-7,7%	1,5%
2017	Total	0,1%	4,6%		
	- Restaurants	0,3%	2,9%		
	- Gaming arcades	0,0%	5,1%		

Source: Tax returns submitted to the Danish Tax Authority.

As was also the case with the first quarter figures for 2017, GGR from gaming machines in the second quarter was also lower than the equivalent quarters in 2014 and 2015. In contrast to the second quarter of 2015, the quarter with highest GGR since the start of 2014, GGR was a full 26.1 million kroner in the second quarter of 2017, a 6.3 percent drop. As Figure 12 shows, both restaurants and arcades have followed a downward trend.

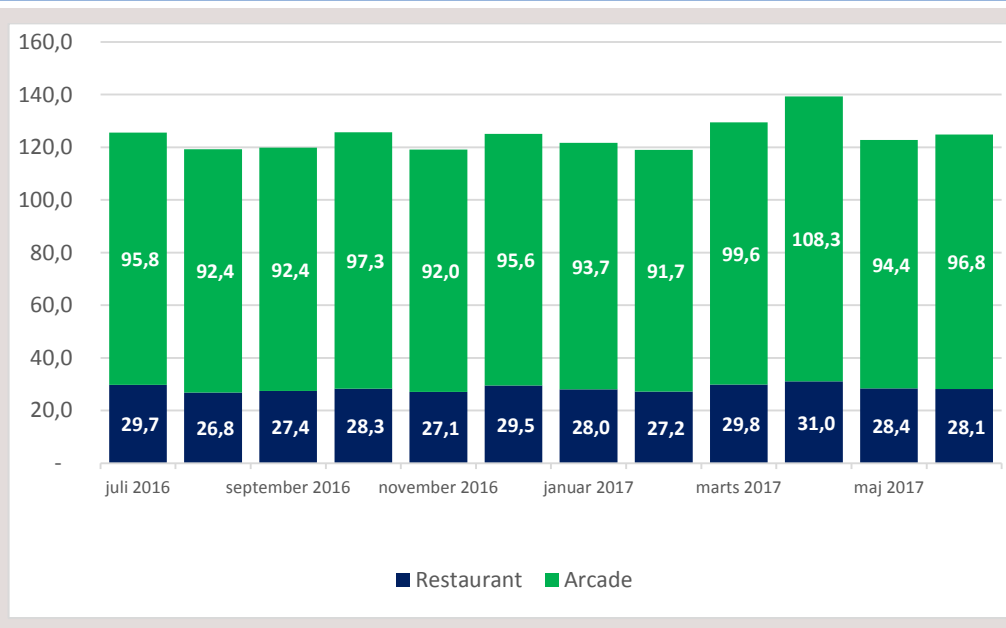
Figure 12. Development in quarterly GGR indexed against 2014 Q1 (index 100) – gaming machines



Source: Tax returns submitted to the Danish Tax Authority.

Gaming machines generated 1.49 billion kroner in GGR over the twelve months between July 2016 and June 2017. On average, restaurants generated 28.4 million kroner in GGR a month, whilst arcades generated 95.8 million kroner a month. Put another way, GGR from restaurants and arcades combined averaged 4.1 million kroner a day. For both restaurants and arcades, GGR was highest in April 2017, totalling 31.0 million and 108.3 million respectively.

Figure 13. Monthly GGR for gaming machines, July 2016 – June 2017



Source: Tax returns submitted to the Danish Tax Authority.

F. Land-based casinos

Quarterly GGR generated by Denmark's seven land-based casinos in the second quarter of 2017 is slightly higher than the first quarter of 2017 (see table 8). However, as with the first quarter of 2017, second quarter GGR is marginally down on the same quarter in 2017.

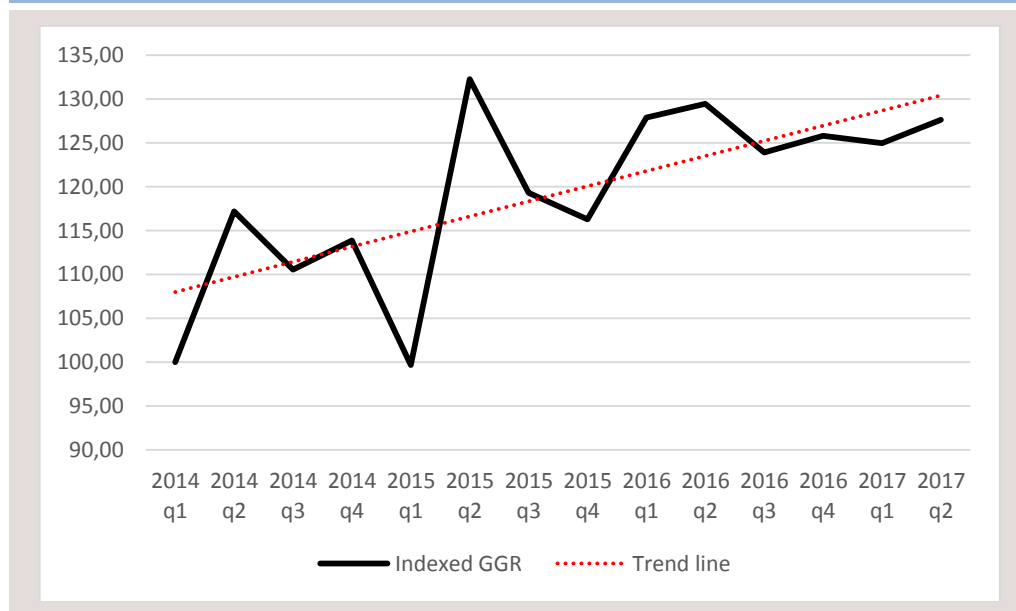
Table 8. Quarterly GGR and growth on previous quarter

	Quarter 1	Quarter 2	Quarter 3	Quarter 4
2014	74,7	87,6	82,6	85,1
- Growth on previous quarter	-12,2%	17,2%	-5,7%	3,0%
2015	74,5	98,8	89,2	86,9
- Growth on previous quarter	-12,5%	32,7%	-9,8%	-2,5%
2016	95,6	96,7	92,6	94,0
- Growth on previous quarter	10,0%	1,2%	-4,3%	1,6%
2017	93,4	95,4		
- Growth on previous quarter	-0,7%	2,1%		

Source: Tax returns submitted to the Danish Tax Authority.

Figure 14 charts the value of quarterly GGR indexed against the first quarter of 2014 (index = 100). As Figure 14 shows, developments in GGR have followed a slight upward trend in this period. Quarterly GGR was highest in the second quarter of 2015, though this followed a drop in the first quarter of 2015. Quarterly GGR has remained relatively consistent in the period since.

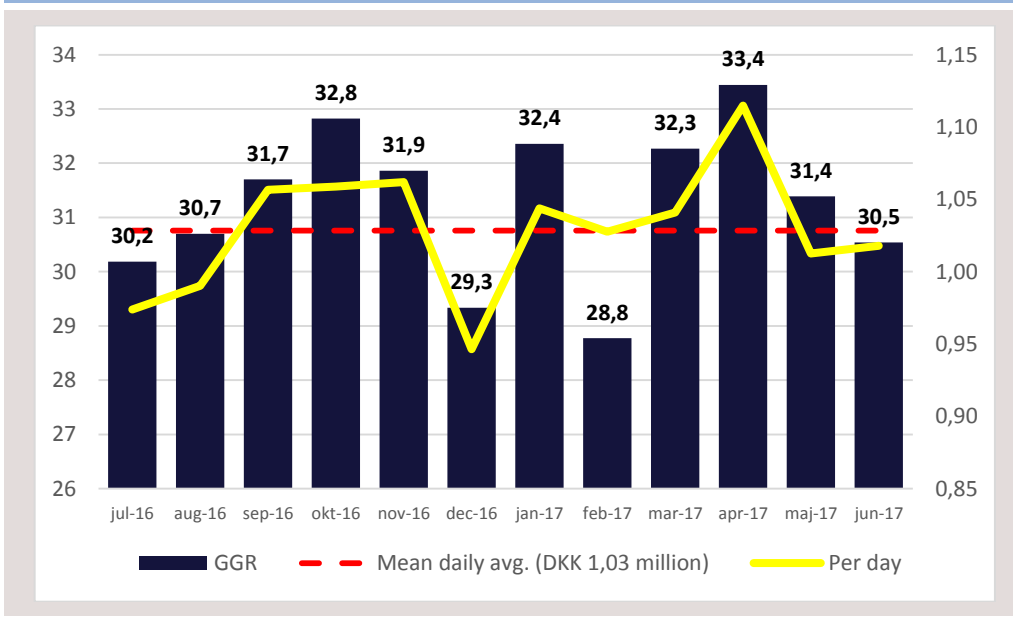
Figure 14. Quarterly GGR benchmarked against Quarter 1, 2014 (index 100) – land casinos



Source: Tax returns submitted to the Danish Tax Authority.

Over the course of the twelve months between July 2016 and June 2017, land-based casinos generated 375.4 million kroner in GGR, or an average of 31.3 million kroner a month. When taking account for the varying lengths of each month, GGR was lowest in December 2016 (0.95 million kroner in GGR per day), while April 2017 was the month with highest daily GGR (1.11 million kroner a day). On average, casinos generated 1.03 million kroner a day in GGR between July 2017 and June 2016.

Figure 15. Monthly GGR for land-based casinos – last twelve months



Source: Tax returns submitted to the Danish Tax Authority.

G. 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.

Table 9. Registrations in ROFUS

Date	Total registrations	- of which, permanent
October 3 2016	7962	5627
November 1 2016	8338	5811
December 2 2016	8512	5943
January 3 2017	8822	6156
February 1 2017	9744	6646
March 2 2017	9993	6705
April 3 2017	10234	6885
May 1 2017	10490	7088
June 12 2017	10896	7323
July 3 2017	11130	7534
August 1 2017	11173	7737
September 1 2017	11367	7777

Source: Data from ROFUS

As can be seen from the table, the monthly increase has typically been around 2-300 persons (these are the total number of entries, not the number of new entries). The increase of more than 1200 registrations between December and February is probably due to the ROFUS (TV) infomercial that has been shown in "OBS" and the TV-2 channels from Boxing Day 2016 to the end of January 2017.

H. Appendix

According to the Danish Gambling Authority's estimates,¹¹ in the second quarter of 2017, 49.8 percent of GGR from fixed odds betting came through mobile platforms, 15.5 percent from desktop versions of homepages, and 34.7 percent from land-based betting.

Table 10. Market share according to sales channel, fixed odds betting, weighted by GGR

Sales channel	2016 Q3	2016 Q4	2017 Q1	2017 Q2
Land-based	35.9%	35.9%	34.3%	34.7%
Internet	18.1%	17.1%	16.5%	15.5%
Mobile	46.0%	47.0%	49.2%	49.8%

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

We apologise for the delay in providing this information, due to quality issues with the data received by the Danish Gambling Authority. In future reports, this information will be included with our quarterly reports.

¹¹ It is important to note that the data presented in Tables 1 and 2 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 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.