

Danish gambling market statistics

First quarter 2017

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 subsectors, 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 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 first 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.

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 without prizes.

³ The Danish Gambling Authority does not have data for betting pools at horse and pigeon races.

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 is relatively stable, though GGR is down on both the last quarter of 2016 and the first quarter of 2016. Combined figures for the four markets has remained in the region of 1.4 billion kroner since the last quarter of 2015. Quarterly GGR figures are presented below in table 1.

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

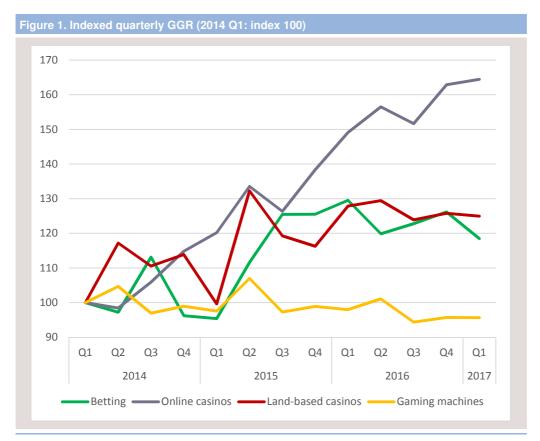
		Q1	Q2	Q3	Q4	Year
2014	Combined	1150	1165	1218	1177	4710
	Betting (Liberalised market)	437	425	494	420	1775
	Online casinos	252	248	267	290	1058
	Land-based casinos	75	88	83	85	330
	Prize-giving gaming machines	386	404	374	382	1547
2015	Combined	1171	1336	1331	1366	5204
	Betting (Liberalised market)	416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

Source: Tax returns submitted to the Danish Tax Authority.

Combined GGR for the four sectors is 245 million kroner higher than the first quarter of 2014. However, this growth has not been equally distributed, with the bulk of the growth generated by online casinos (163 million kroner).

Taking a starting point in the first quarter of 2014,⁴ where the size of GGR in each sector is benchmarked at index 100, figure 1 highlights the varying GGR growth rates seen across the four sectors relative to the value of GGR recorded in the first quarter of 2014. The online casino market has seen GGR grow by 64.4 percent in that period, while land-based casinos have grown by 25.0 percent and the liberalised betting market by 18.5 percent. However, GGR from land-based prize-giving gaming machines has fallen by 4.3 percent over the past three years.

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.



Online casinos

The online casino market saw marginal growth in GGR in the first quarter of 2017 relative to the foregoing quarter, up by a fraction under 4 million Danish kroner, equivalent to growth of 0.9 percent. Quarterly figures for GGR are presented in table 2. Seen in relation to the first quarter of 2016 however, year-on-year quarterly growth stands at 10.2 percent; a full 38.5 million kroner higher. When measured according to GGR, the online casino market has seen almost constant growth since the first quarter of 2014.

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

2015 To	otal GGR Stakes Prizes Commission Total GGR Stakes	252.3 5109.8 4904.5 46.9 303.3	248.4 5242.3 5031.7 37.8 337.0	267.3 5844.7 5618.4 41.0	289.7 6109.5 5860.7 40.9	1057.7 22306.3 21415.2 166.6
- - (2015 To	Prizes Commission Total GGR	4904.5 46.9	5031.7 37.8	5618.4	5860.7	21415.2
2015 To	Commission Total GGR	46.9	37.8			
2015 To	otal GGR			41.0	40.9	166 6
- :		303.3	227.0			100.0
	Stakes		337.0	318.8	349.1	1308.2
_		6447.0	7318.3	7277.7	7975.7	29018.7
- '	Prizes	6189.0	7023.6	6997.7	7664.8	27875.1
- (Commission	45.3	42.3	38.8	38.2	164.6
2016 To	otal GGR	376.3	394.9	382.6	410.9	1564.6
- ;	Stakes	8590.2	9278.5	8819.0	10028.8	36716.6
- 1	Prizes	8255.7	8920.8	8470.3	9653.6	35300.4
- (Commission	41.7	37.1	33.9	35.8	148.4
2017 To	otal GGR	414.8	-	-	-	-
- ;	Stakes	10290.6	-	-	-	-
- 1	Prizes	9910.6	-	-	-	-
- (Commission	34.9	-	-	-	-

Source: Tax returns submitted to the Danish Tax Authority.

The growth rate for quarterly GGR has been outstripped by the growth rate for stakes. In the first quarter of 2014, approximately 5.1 billion kroner was placed in online casinos, 6 with 4.9 billion kroner in prizes. In comparison, in the first quarter of 2017, nearly 10.3 billion kroner was placed, with 9.9 billion kroner in winnings. In other words, while GGR has risen by 64.4 percent, stakes placed are 101.4 percent higher.

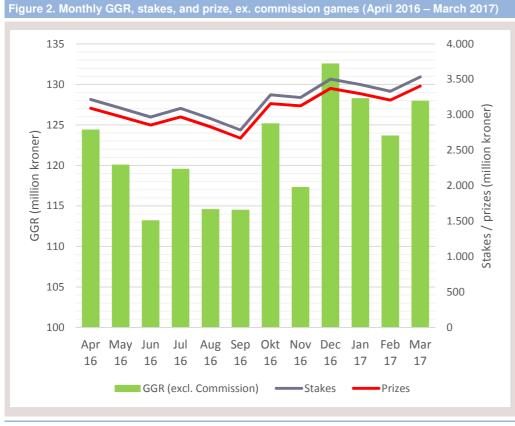
⁵ Stakes and prizes only cover games without commission. As such, GGR is the sum of commission and stakes minus winnings.

⁶ With regard to interpretation of stakes (revenue), 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 1000 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".

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

	GGR	Stakes	Prizes	Pay-out ratio
March 2017	128.0	3534.2	3406.2	96.4%
February 2017	123.7	3331.2	3207.5	96.3%
January 2017	128.3	3425.2	3296.9	96.3%
December 2016	132.6	3503.6	3371.0	96.2%
November 2016	117.3	3243.2	3125.9	96.4%
October 2016	125.2	3282.0	3156.8	96.2%
September 2016	114.5	2784.8	2670.3	95.9%
August 2016	114.6	2944.2	2829.6	96.1%
July 2016	119.6	3089.9	2970.3	96.1%
June 2016	113.2	2967.5	2854.3	96.2%
May 2016	120.1	3094.0	2973.9	96.1%
April 2016	124.4	3217.0	3092.6	96.1%
Last twelve months	1461.6	38416.9	36955.3	96.2%

Over the past twelve months (April 2016 – March 2017), GGR from non-commission based games to-talled just over 1.46 billion kroner, generated from 38.4 billion kroner in stakes. December 2016 was the month where GGR was highest (see table 3), though was only second-highest for stakes, surpassed by March 2017 (by approximately 31 million kroner), when just over 3.5 billion kroner in stakes were placed.



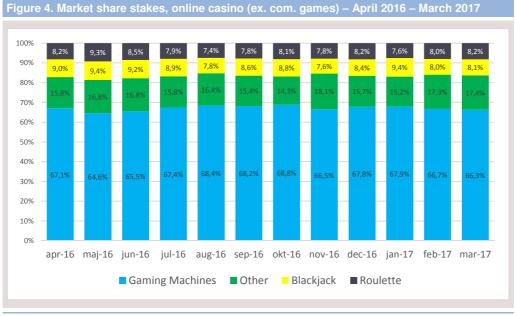
Source: Tax returns submitted to the Danish Tax Authority.

At the same time, the pay-out ratio for online casino has risen to 96.4 percent in March 2017 (excluding commission-based games), with a market average over the last twelve months of 96.2. This is the highest monthly average pay-out ratio seen for online casinos, at least in the time since January 2014. The pay-out ratio over the past twelve months is charted in figure 3 below.

96,4% 96,4% 96,4% 96,3% 96,3% 96,2% 96,2% 96,1% 96,1% 96,1% 96,1% 96,1% 96,1% 96,1% 96,1% 96,1% 96,1% 96,1% 96,1% 96,1% 97,9% 95,9% 95,9% 95,9% 95,9% 95,9% 95,9% Payout ratio 12 month average

Game types (online casino)

Online prize-giving 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. Blackjack and roulette accounted for 8.6 percent and 8.1 percent of the market respectively, with other gaming forms accounting for 16.0 percent.

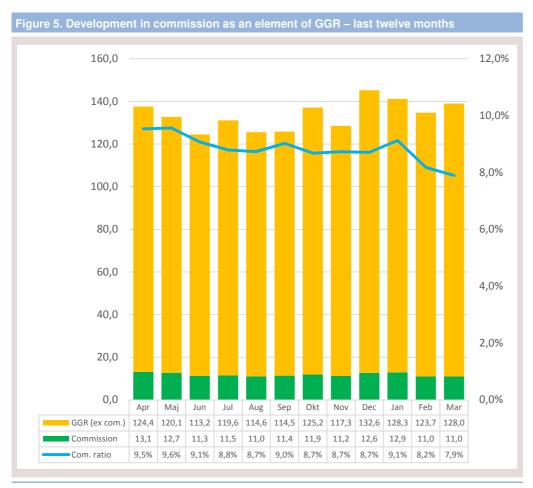


Based upon gambling transaction data submitted by license holders to the Danish Gambling Authority. Market share is calculated according to the total value of stakes placed. Multi-player games, where GGR is calculated on the basis of commission, such as multi-player poker, are not included.

⁷ Measured according to turnover – therefore only calculated according to turnover from non-commission games

In figure 4, "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 4 and elsewhere.

Commission-based games are represented in figure 5 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.



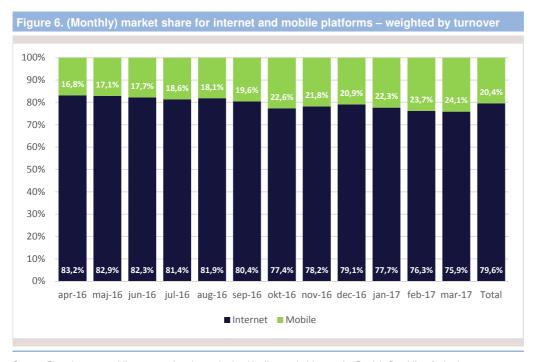
Source: Tax returns submitted to the Danish Tax Authority.

Sales channel

Over the course of the last twelve months, 79.6 percent of total turnover in online casinos came from gaming providers' standard websites, with the remaining 20.4 percent generated from mobile platforms.⁸

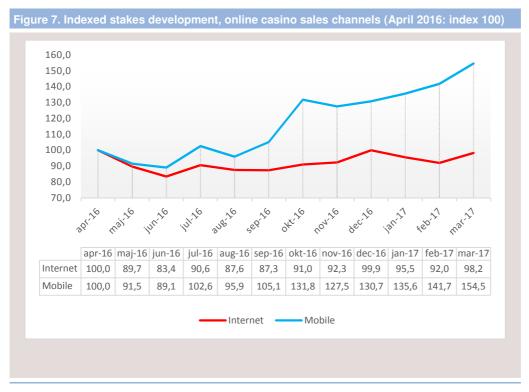
⁸ The definition of what constitutes sales through a "mobile" platform and sales through the "internet", i.e. gambling operators' standard desktop homepages, is defined by operators' themselves. Some sales classified as "internet" sales could, therefore, have taken place on mobile hardware running a desktop version of an operator's website.

However, mobile platforms are on an upward trajectory, with 24.1 percent of all turnover coming from mobile platforms in March 2017. Market share is shown in figure 6, and is based upon all transactions for single player casino games.



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

As can be seen in figure 7, below, the value of total stakes placed via standard webpages remains relatively constant over the course of the last twelve months, while stakes placed on mobile platforms has increased. Over the course of the last twelve months, the monthly value of stakes placed in mobile platforms grew by 54.4 percent between April 2016 and March 2017.



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

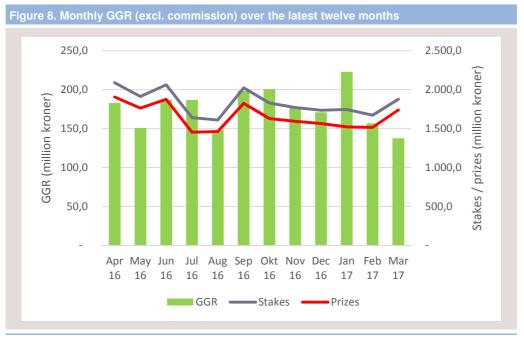
Betting

Table 4. Quarterly GGR for the liberalised betting market

		Quarter 1	Quarter 2	Quarter 3	Quarter 4	Total
2014	Total	436,5	424,5	493,8	420,1	1.774,9
	- Stakes	3.206,8	3.473,9	3.674,0	4.327,5	14.682,2
	- Prizes	2.775,4	3.052,3	3.183,1	3.910,6	12.921,3
	- Commission	5,1	2,9	2,9	3,2	14,1
2015	2015 Total	416,4	487,3	547,6	548,0	1.999,2
	- Stakes	4.349,5	4.711,1	4.146,4	4.938,6	18.145,6
	- Prizes	3.936,5	4.227,1	3.601,6	4.393,4	16.158,6
	- Commission	3,3	3,3	2,8	2,7	12,2
2016	2016 Total	565,4	523,2	535,9	550,6	2.175,1
	- Stakes	5.271,3	6.063,5	5.272,3	5.333,0	21.940,1
	- Prizes	4.708,8	5.543,4	4.739,2	4.785,0	19.776,4
	- Commission	2,9	3,1	2,8	2,6	11,3
2017	2017 Total	517,2	-	-	-	-
	- Stakes	5.293,3	-	-	-	-
	- Prizes	4.776,1	-	-	-	-
	- Commission	_9	-	-	-	-

Source: Tax returns submitted to the Danish Tax Authority.

The betting market has enjoyed strong growth over the past three years. GGR has grown by 82.6 million kroner between the first quarter of 2014 and the first quarter of 2017. Quarterly GGR has however remained relatively stable since the third quarter of 2015, with a slight downward trend, which can be seen in figure 8 below.



⁹ Commission figures (betting exchanges) for the first quarter of 2017 are not yet available. This data will be published in due course.

Measured according to stakes (i.e. turnover), the market is slightly down in the first quarter of 2017 compared to the last quarter of 2016, though total stakes placed has remained relatively consistently in the region of 5.3 billion kroner in the last five quarters. The exception was the second quarter of 2016, where stakes placed exceeded 6 billion kroner. This might be attributable to the European Championships in men's football. These extra stakes did not result in an increase in GGR, which fell. In fact, GGR in the second quarter of 2016 was just 4.1 million kroner higher than the first quarter of 2017, yet stakes were 770.2 million kroner higher.

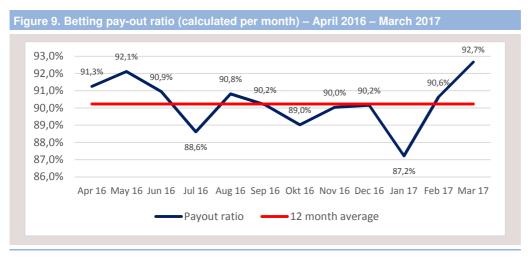
Table 5. GGR (ex. commission) for betting (million kroner) – last twelve months

	GGR (ex. com.)	Stakes	Prizes	Pay-out ratio
March 2017	137,6	1.876,5	1.738,8	92,7%
February 2017	156,6	1.672,1	1.515,4	90,6%
January 2017	223,0	1.744,8	1.521,8	87,2%
December 2016	170,8	1.735,3	1.564,5	90,2%
November 2016	176,4	1.769,4	1.593,0	90,0%
October 2016	200,8	1.828,3	1.627,6	89,0%
September 2016	198,5	2.022,5	1.824,0	90,2%
August 2016	147,8	1.609,4	1.461,6	90,8%
July 2016	186,8	1.640,4	1.453,6	88,6%
June 2016	186,6	2.061,6	1.875,0	90,9%
May 2016	150,8	1.913,0	1.762,3	92,1%
April 2016	182,7	2.088,9	1.906,2	91,3%
Last twelve months	2.118,4	21.962,2	19.843,7	90,4%

Source: Tax returns submitted to the Danish Tax Authority.

Seen over the course of the last twelve months, the steady consistency of quarterly GGR is not replicated in month-by-month figures. For example, monthly GGR was highest in January 2017, yet lowest in March 2017 – two months in the same quarter.¹⁰

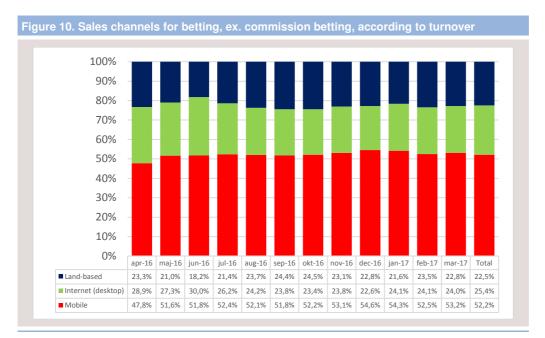
Figure 9 charts the total monthly pay-out ratio, together with stakes and winnings for betting without commission. Over the whole period, the pay-out ratio was 90.4 percent.



¹⁰ There is a temporal lag 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.

Sales channel

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 52.2 percent of total turnover over the last twelve months (April 2016 – March 2017).



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

Figure 10 shows that more individual bets are placed through land-based betting providers than the combined number of mobile and online transactions in the period between April 2016 and March 2017. Mobile transactions accounted for approximately 20.6 percent of all individual transactions over the course of the last twelve months, while internet (desktop) transactions stood at 25.1 percent and land-based transactions accounted for 54.0 percent.

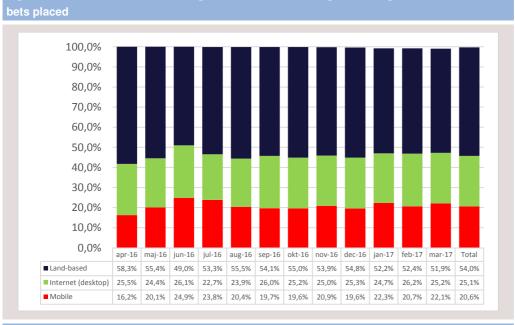


Figure 11. Sales channels for betting, ex commission betting, according to total number of bets placed

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

Gaming 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	360,8
	- Gaming arcades	296,4	311,5	284,9	293,4	1.186,1
2015	Total	376,8	413,1	375,6	381,9	1.547,4
	- Restaurants	87,6	92,7	87,5	86,0	353,8
	- Gaming arcades	289,3	320,4	288,1	295,9	1.193,6
2016	Total	378,4	390,4	364,5	369,6	1.502,9
	- Restaurants	84,9	86,2	83,9	84,8	339,9
	- Gaming arcades	293,5	304,2	280,5	284,8	1.163,0
2017	Total	369,5	-	-	-	-
	- Restaurants	84,9	-	-	-	-
	- Gaming arcades	284,7	-	-	-	-

Source: Tax returns submitted to the Danish Tax Authority.

As shown in table 6 above, GGR from gaming machines was virtually unchanged in the first quarter of 2017 relative to the last quarter of 2016. GGR was down compared to the first quarter of 2016, also standing lower than the first quarters of both 2014 and 2015. Quarterly growth rates (relative to previous quarter) for gaming machines are presented below in table 7 below.

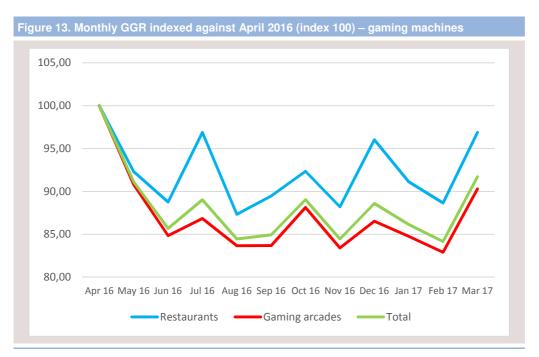
Table 7. Quarter-on-quarter growth in GGR from gaming machines

		Quarter 1	Quarter 2	Quarter 3	Quarter 4
2014	Total	-3,5%	4,7%	-7,4%	2,1%
	- Restaurants	-27,9%	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%	-2,6%	1,1%
	- Gaming arcades	-0,8%	3,6%	-7,8%	1,5%
2017	Total	0,0%	-	-	-
	- Restaurants	0,0%	-	-	-
	- Gaming arcades	0,0%	-	-	-

Source: Tax returns submitted to the Danish Tax Authority.

Monthly GGR for gaming machines over the last twelve months is presented in figure 12, while monthly GGR indexed against April 2016 is presented in figure 13.





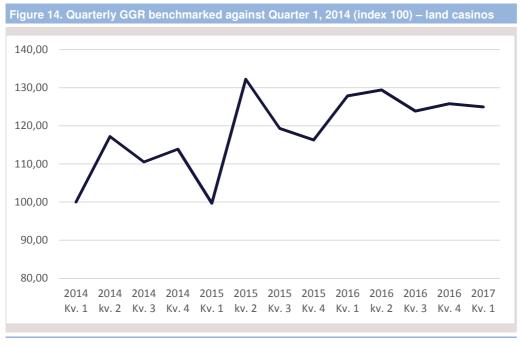
Land-based casinos

Quarterly GGR in Denmark's seven land-based casinos, including of course the waterborne DFDS Oslo ferry, is slightly down on the last quarter of 2016 (see table 8). GGR is though 18.7 million kroner higher than it was in the first quarter of 2014.

	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			
- Growth on previous quarter	-0,7%			

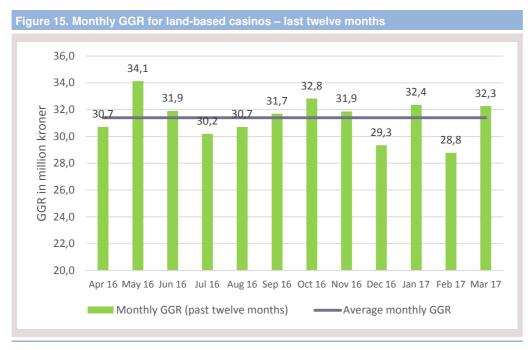
Source: Tax returns submitted to the Danish Tax Authority.

Figure 14 charts the value of quarterly GGR indexed against the first quarter of 2014 (index = 100). 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.



Source: Tax returns submitted to the Danish Tax Authority.

Over the course of the last twelve months (April 2016 – March 2017), land-based casinos generated 376.8 million kroner in GGR. The equivalent figure for the preceding twelve months (April 2015 – March 2016) was 370.5 million kroner. GGR has remained relatively stable on a month-by-month basis, peaking in May 2016 and hitting a low in February 2017 (the shortest month).



ROFUS

ROFUS is the Danish Gambling Authority's 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, your 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

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.