

Norway: The slot machine and problem gambling

A study commissioned by the Norwegian Gaming and Foundation Authority

IJ Bakken¹, A Øren¹, KG Götestam²

¹SINTEF Health Research

²Norwegian University of Science and Technology (NTNU)

The Norwegian gambling market 2007

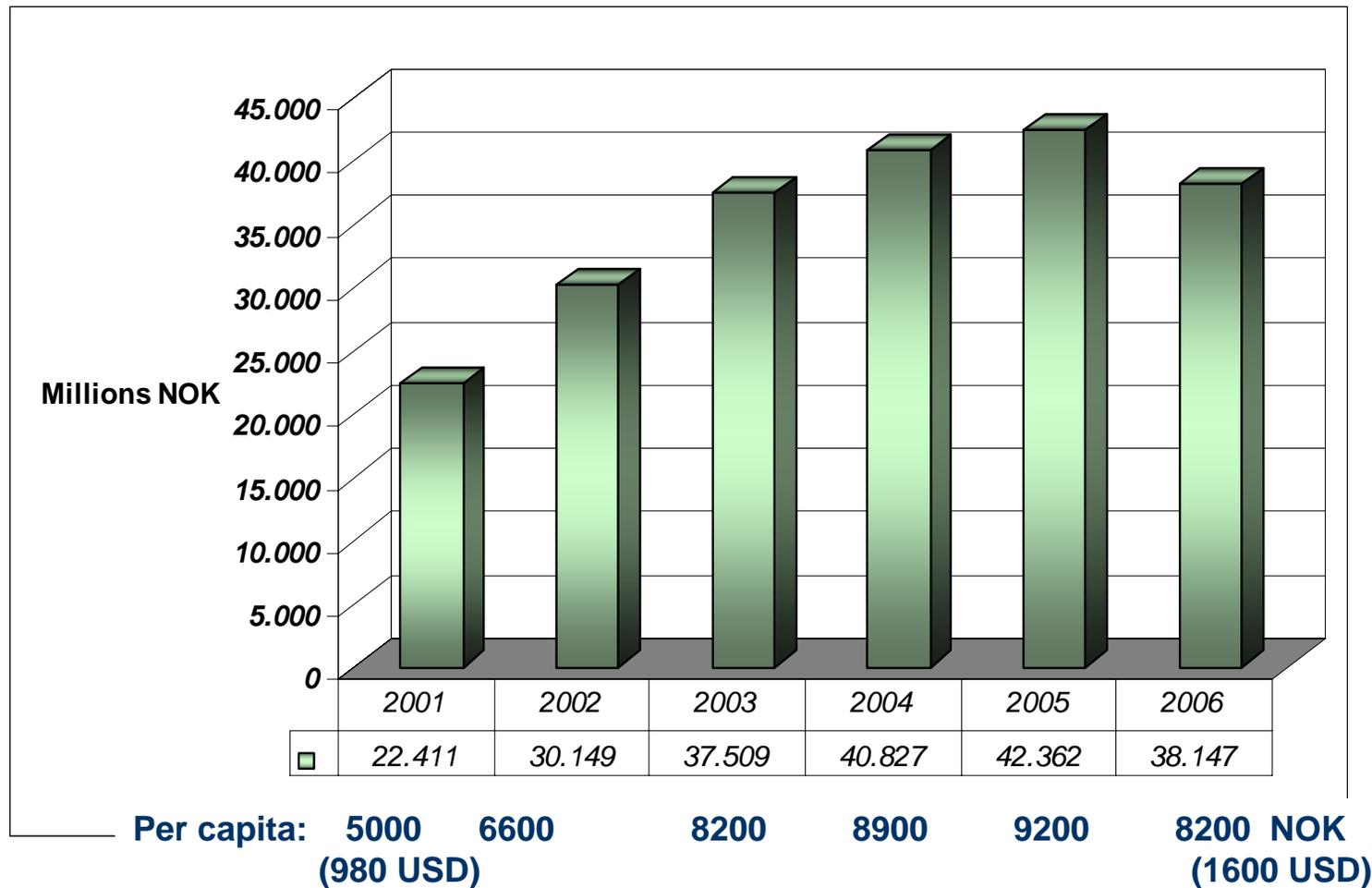
- Before July 1:
 - Norsk Tipping (lotteries, football pools, Keno, sports betting)
 - RiksToto (horse-betting)
 - 15 000 Slot machines in public places (bill ban, closed during night time)
- July 1: Slot machine ban effectuated, all slot machines immediately removed

Our study was carried out Jan-March 2007

Norwegian slot machines pre July 2007



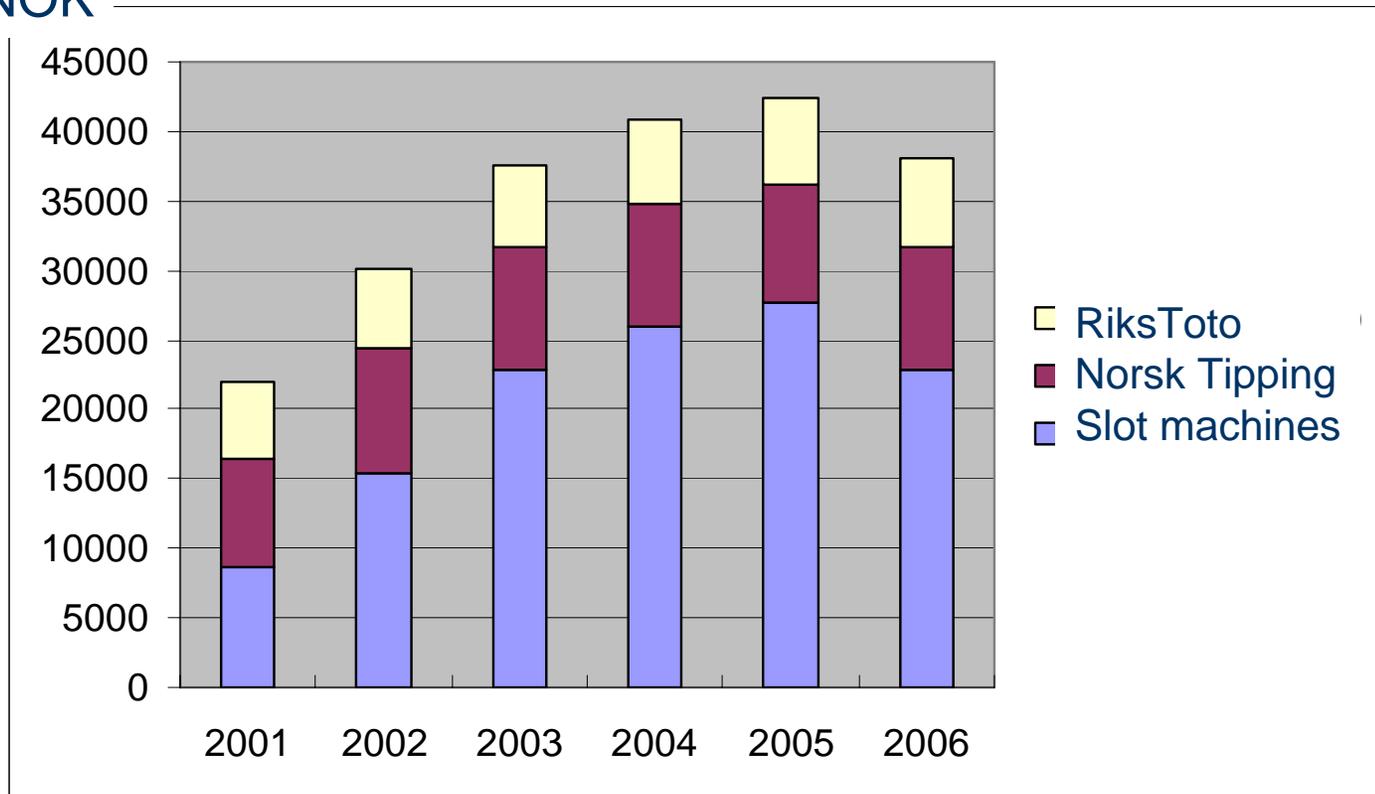
Gross turnover 2001-2006



www.lottstift.no

Gross turnover 2001-2006 by supplier

Millions NOK



www.lottstift.no

Scope 1 (Commission)

- To assess prevalence of problem and pathological gambling by age and gender

Scope 2

- To take a closer look at slot machine gamblers

Materials and Methods

- Postal survey
- Stratified probability sample (age, gender, county)
- Age-group 16-74 years
- 10,000 invitees
- Response rate 36.1% (N=3,483)

Questionnaire

- Demographic data
- Gambling behaviour (games played, frequency)
- Preferred games
- Self-reported health and psychological impairments
- The NODS Screen for assessment of problematic gambling

The NODS Screen

- Based on the DSM-IV Criteria
- 10 items for lifetime gambling problems
- 10 items for past-year gambling problems
- Problem gambling: 3-4 items
- Pathological gambling: 5+ items

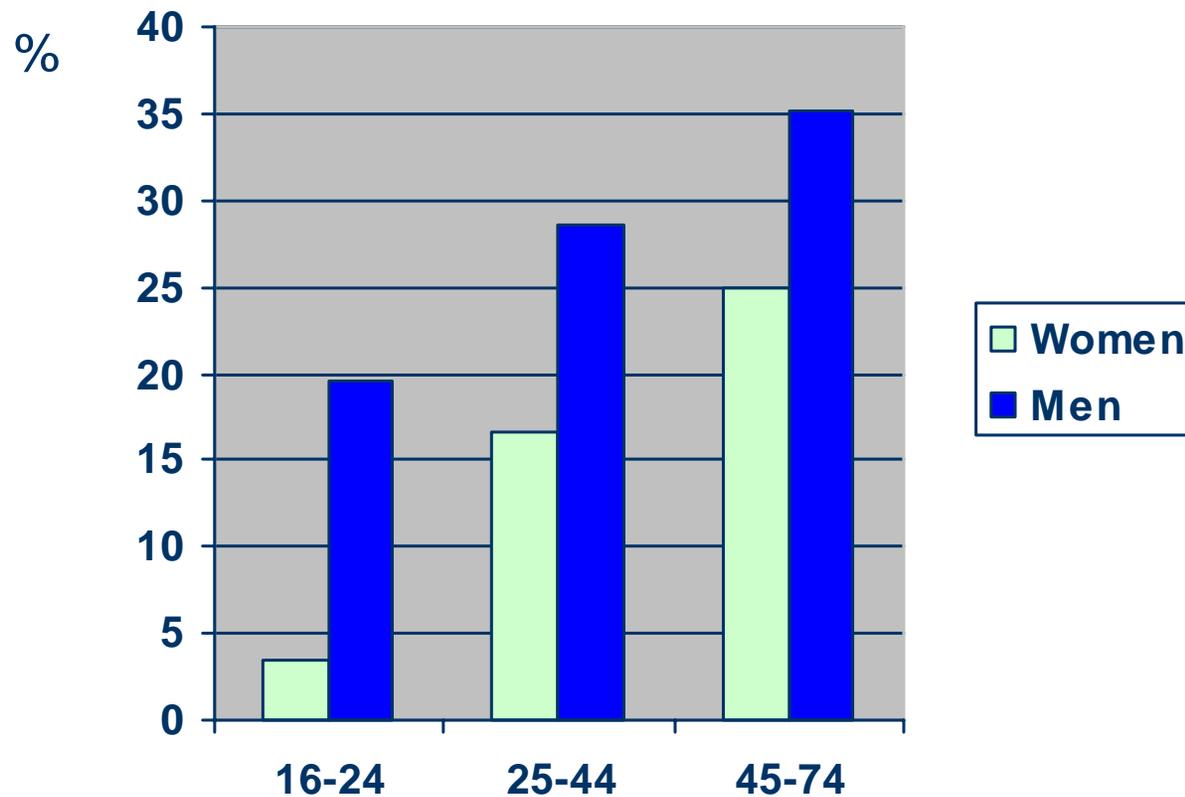
- Problematic gambling: 3+ items

Results

Part 1: Gambling behaviour and problematic gambling

- 80% were life-time gamblers
- 69.7% had gambled over the past year
- Large gender differences

Proportion (%) weekly gamblers



Games played (%) in the past year

	16-24		25-44		45-64		65-74	
	W	M	W	M	W	M	W	M
Slot machines	34	63	10	21	4	11	2	5
Horse gambling	6	8	10	19	7	22	3	15
Football pools	12	27	9	24	8	22	6	22
Sports betting (Norwegian)	6	21	2	15	2	11	-	2
Lotto	56	46	80	80	83	84	70	85
Scratch Cards	81	56	57	45	33	31	30	30
Internet poker	1	20	2	6	0,2	1	-	-
Other Internet gambling	1	8	1	7	0,2	2	-	-

NODS scores

■ Lifetime

■ 0:	93.7%
■ 1-2:	4.6%
■ 3-4:	1.1%
■ 5+:	0.6%

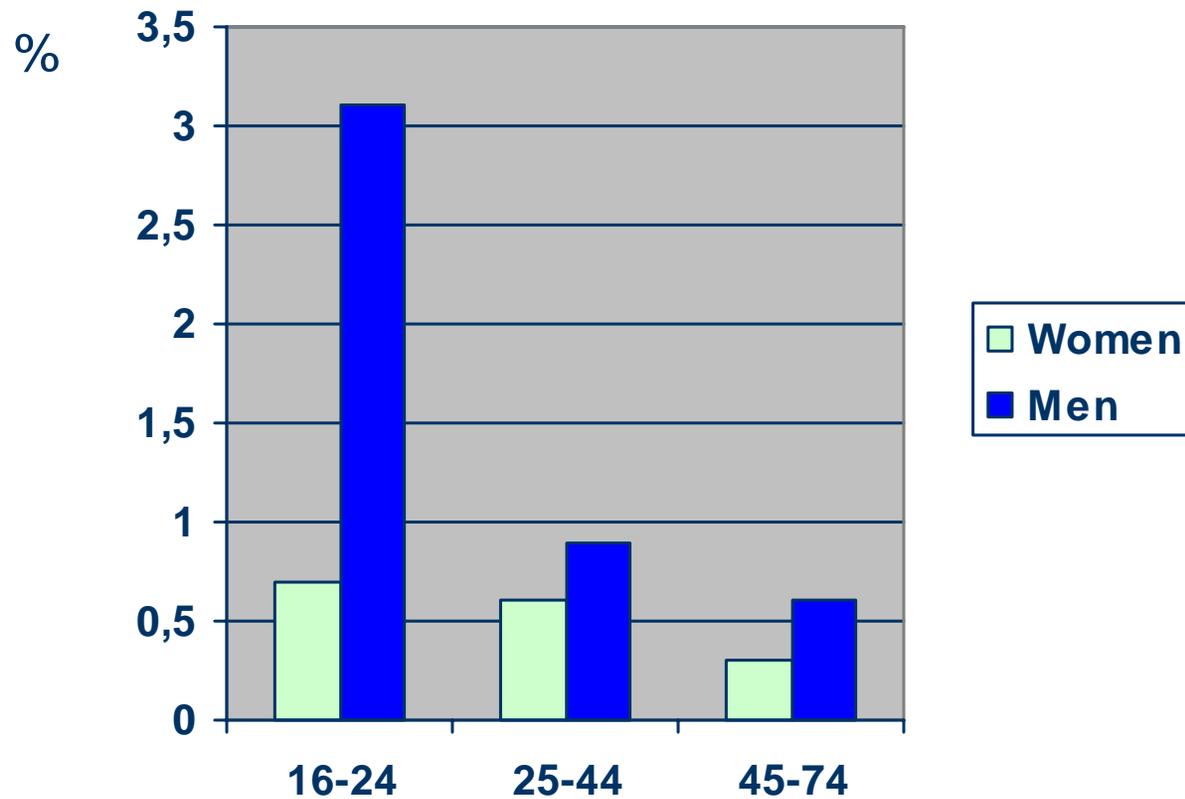
■ Past-year

■ 0:	96.5%
■ 1-2:	2.8%
■ 3-4:	0.4%
■ 5+:	0.3%

Problematic gambling (NODS 3+)

■ Lifetime:	1.7% (95% CI: 1.3%-2.2%)
■ Past-year:	0.7% (95% CI: 0.5%-1.1%)

Problematic gambling (past-year) by gender and age



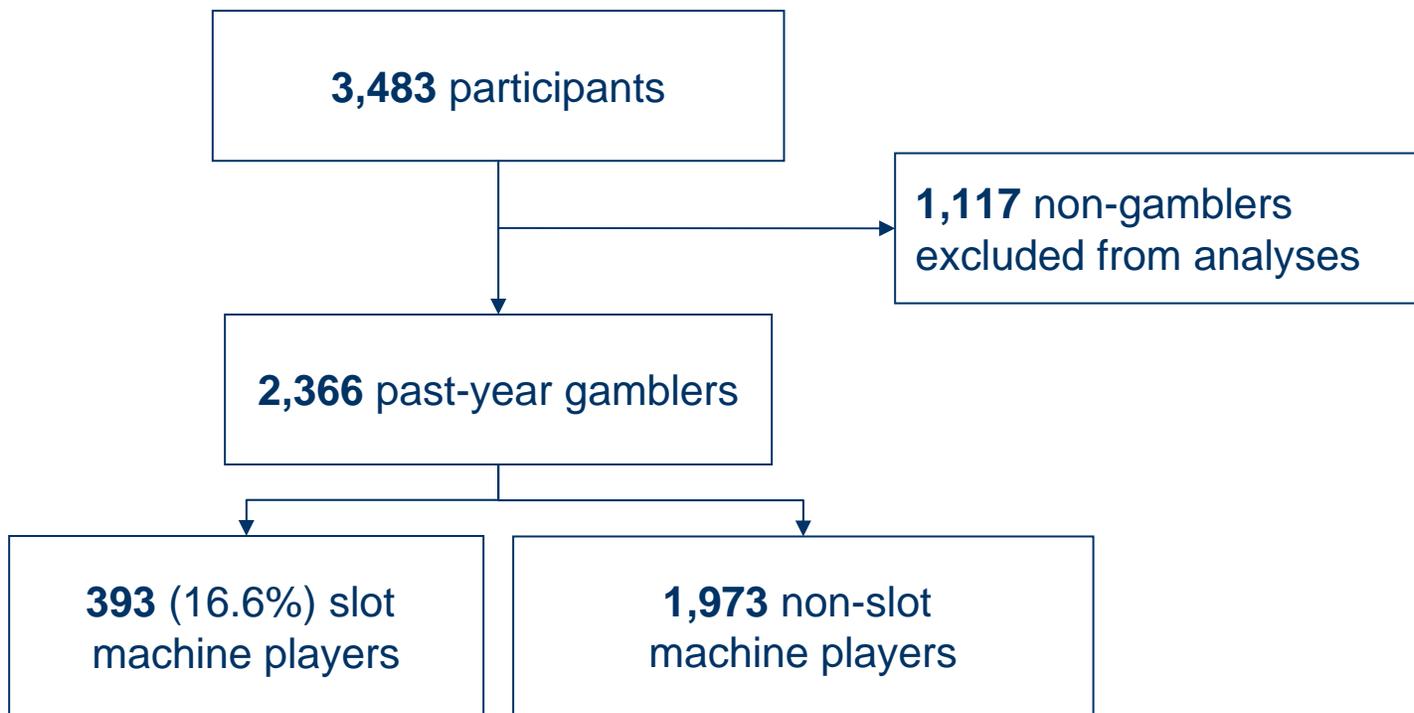
Prevalence of past-year problematic gambling (%)	
<i>Gender</i>	
Female (ref)	0.4
Male	1.1*
<i>Age group</i>	
16-24 (ref)	1.8
25-44	0.7
45-74	0.4
<i>Country of birth</i>	
Norway (ref)	0.7
Other Western country	1.2
Non-Western country	3.4*
<i>Marital status</i>	
Cohabiting/married (ref)	0.4
Single	1.6*
<i>Educational level</i>	
Low (ref)	1.0
Medium	1.4
High	0.1*

Single most important game (%)

	Non-problem gamblers	Problematic gamblers
Slot machines	3.0	35.5
Horse betting	2.1	3.4
Football pools	4.9	3.4
Sports betting	1.7	5.1
Lotto	44.9	5.1
Scratch cards	9.5	8.4
Internet poker	0.6	10.1

Results

Part 2: Slot machine players



Prevalence of past-year slot machine playing (%)	
<i>Gender</i>	
Female (ref)	10.4
Male	21.9
<i>Age group</i>	
16-24 (ref)	13.7
25-44	9.5
45-74	5.1
<i>Marital status</i>	
Cohabiting/married (ref)	10.8
Single	30.0
<i>Subjective financial situation</i>	
Good (ref)	12.9
Satisfactory	21.4
Unsatisfactory	29.7

Participation (%) in various games

	Slot-machine playing	
	No	Yes
Slot machines	0	100
Bingo	1.6	4.8
Horse gambling (Norwegian)	11.8	20.6
Football pools (Norwegian)	14.5	28.0
Sports betting (Norwegian)	6.1	18.4
Lotteries except scratch cards	81.8	69.7
Scratch cards	39.9	66.0
Internet gambling*	2.1	6.9
Cards, dart etc	4.4	1.8

*Internet gambling includes foreign vendors only (poker, casino, betting, bingo etc)

Slot machine playing and the single most important game ever

	Slot-machine playing	
	No	Yes
Slot machines	0.2	19.9
Bingo	0.4	1.3
Horse gambling (Norwegian)	2.7	2.6
Football pools (Norwegian)	4.3	5.4
Sports betting (Norwegian)	2.0	3.3
Lotteries except scratch cards	66.7	40.3
Scratch cards	8.8	10.7
Internet gambling*	1.9	4.3
Cards, dart etc	1.9	5.9

*Internet gambling includes foreign vendors only (poker, casino, betting, bingo etc)

Slot machine playing and mental problems

	Slot-machine playing		
	No	Yes	
Sleep disorders	27.8	30.6	
Feeling of depression	17.5	21.1	
<i>Suicidal ideations</i>	1.3	3.6	*
<i>Anxiety</i>	6.8	11.0	*
<i>Obsession/compulsion</i>	1.3	5.4	*
<i>Alcohol/substance abuse</i>	1.1	9.2	*
None of the above	61.7	57.2	

*Statistical significant (Chi-square)

Slot machine playing and reasons to play

	Slot-machine playing		
	No	Yes	
<i>For excitement/challenge</i>	35.5	52.7	*
<i>For fun/entertainment</i>	53.2	68.4	*
To win money	55.8	58.6	
To improve financial situation	10.3	10.5	
<i>To chase previous losses</i>	0.4	3.3	*
For distraction from problems	0.3	0.7	
To support a good cause	18.5	16.3	
<i>To be around other people</i>	5.4	10.4	*
<i>To achieve a feeling of arousal</i>	0.3	4.0	*

*Statistical significant (Chi-square)

NODS score (past-year) and slot machine playing

NODS	Slot machine playing	
	No	Yes
0	97.1	85.2
1-2	2.5	10.5
3-4	0.3	2.6
5+	0.2	1.8

The other way round:

68.0% of all past-year problematic gamblers (NODS 3+) had played the slot machine during the last year.

A close look: Single most important game (%) among slot machine players

	Gambling problems	
	No	Yes
Slot machines	18.5	47.4
Bingo	1.1	5.3
Horse gambling (Norwegian)	2.4	5.3
Football pools (Norwegian)	5.6	-
Sports betting (Norwegian)	2.9	10.5
Lotteries except scratch cards	42.4	-
Scratch cards	11.4	-
Internet gambling*	2.9	31.6
Cards, dart etc	6.2	-

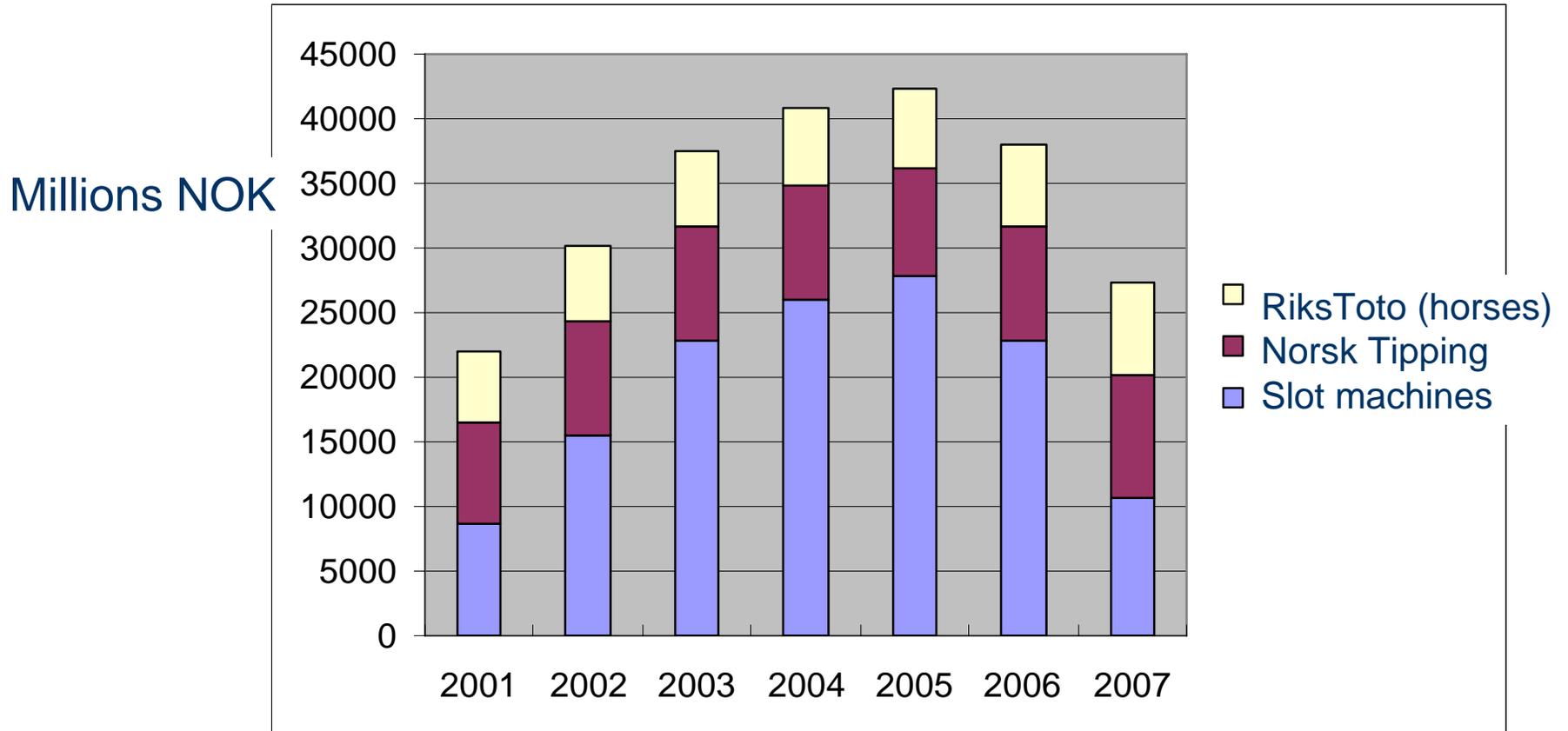
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July 1, 2007

15,000 Slot machines removed from the Norwegian market.

Immediate effect on gross turnover:



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Removal of slot machines

Immediate effect on gambling help-line calls:

	2003	2004	2005	2006	2007
Jan	x	227	197	183	107
Feb	x	217	192	188	155
March	x	231	197	231	148
April	100	201	198	177	99
Mai	463	177	186	211	110
June	308	178	187	172	86
July	222	159	142	119	61
August	201	148	183	80	48
Sep	283	162	152	94	75
Oct	303	212	162	120	69
Nov	192	186	198	117	91
Dec	165	178	139	100	68
Total	2237	2276	2133	1792	1117

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New population-based study

Summer 2008: A new population-based gambling study commissioned by the Norwegian Gaming and Foundation Authority is being conducted by SINTEF Health Research.

First results will be available December 2008.



New gambling machines (Norsk Tipping)

Introduced gradually from August 2008

Registered gamblers only

Age limit 18 years

Maximum loss

per game: 50 NOK

per day: 400 NOK

per month: 2200 NOK

Maximum playing time 1 h (10 minutes break)



"Gambling Terminals"

Trondheim, Norway



The Nidaros Cathedral



The Gate to Good Fortune Bridge

Thanks!