

Alcohol consumption and the crisis –
an overview of alcohol use and misuse in Iceland before
and during the crisis.

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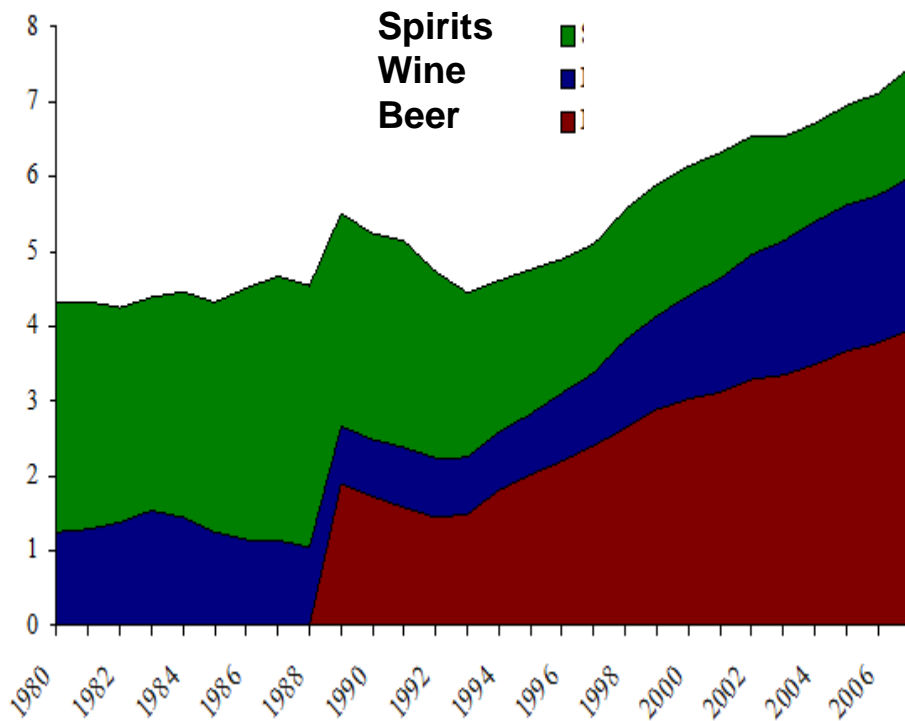
26. august 2010

Coverage

- Alcohol use before 2008
- Alcohol use after 2007
- Alcohol related problems
- Social status and alcohol problems

Registered alcohol sale in Iceland

Goal of the national health plan for 2010. Published in 2001



Alcohol liters sold per capita 15 year old and older from 1980 to 2007

Why the increase?

changes in price and purchasing power

1996-2003		Up
Price of spirit		26%
Price of wine		15%
Price of beer		15%
Disposable income		71%
General Price index		28%
Minimum income for the retired		52%

- Increased service, opening hours, number of outlets etc.

Research question

- Does alcohol use increase or decrease during the economic crisis?
- Do alcohol related problems increase in bad times?
- Is the social gradient in health mediated by alcohol use and alcohol related harm in bad times?

Two related processes with opposite effects

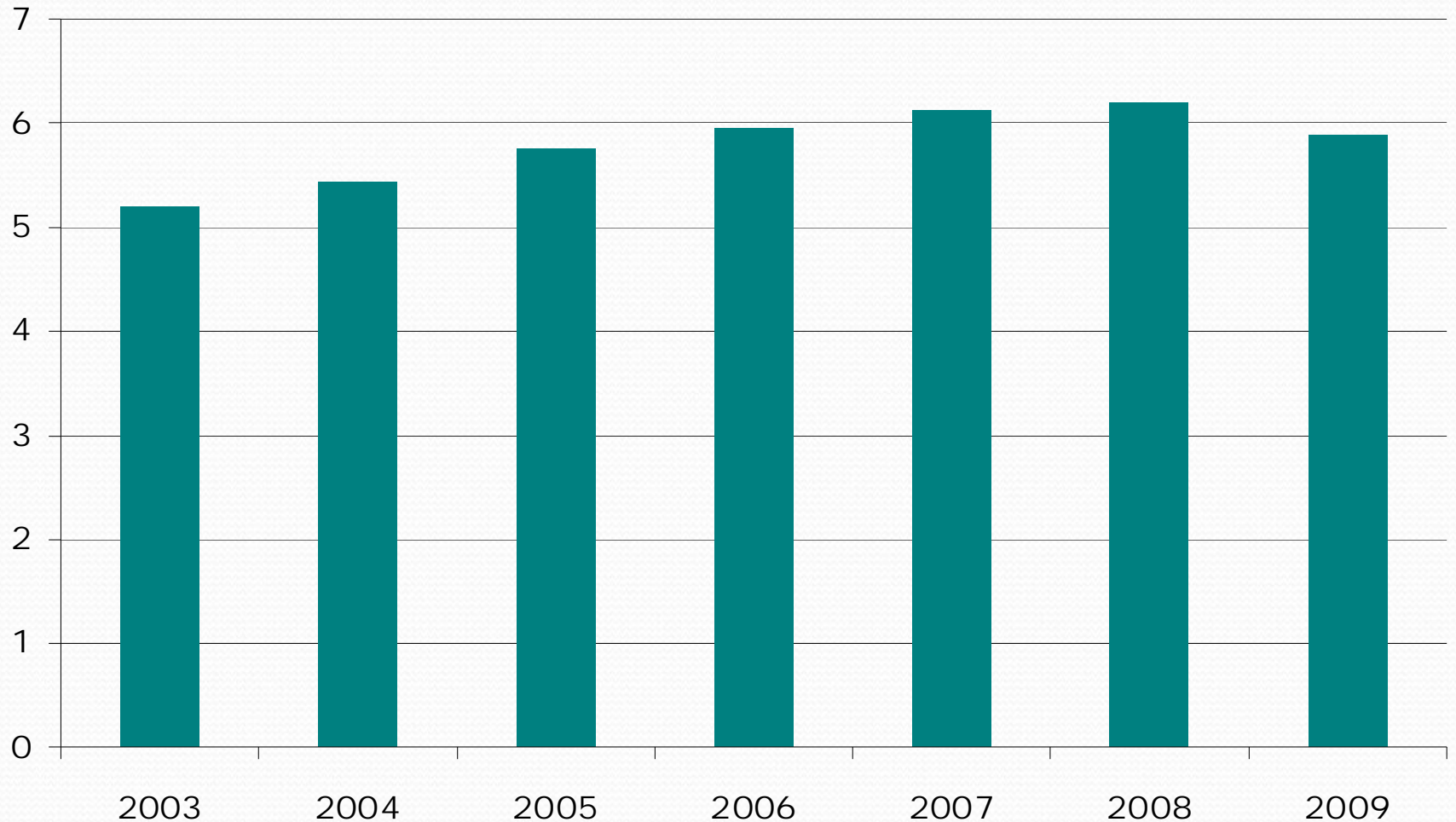
- More unemployment
 - Some may use alcohol to react to economic and employment related problems
 - Use and misuse may increase as a reaction to stress and changes role in the society
- Reduced purchasing power
 - reduced alcohol consumption

Consumption after 2007

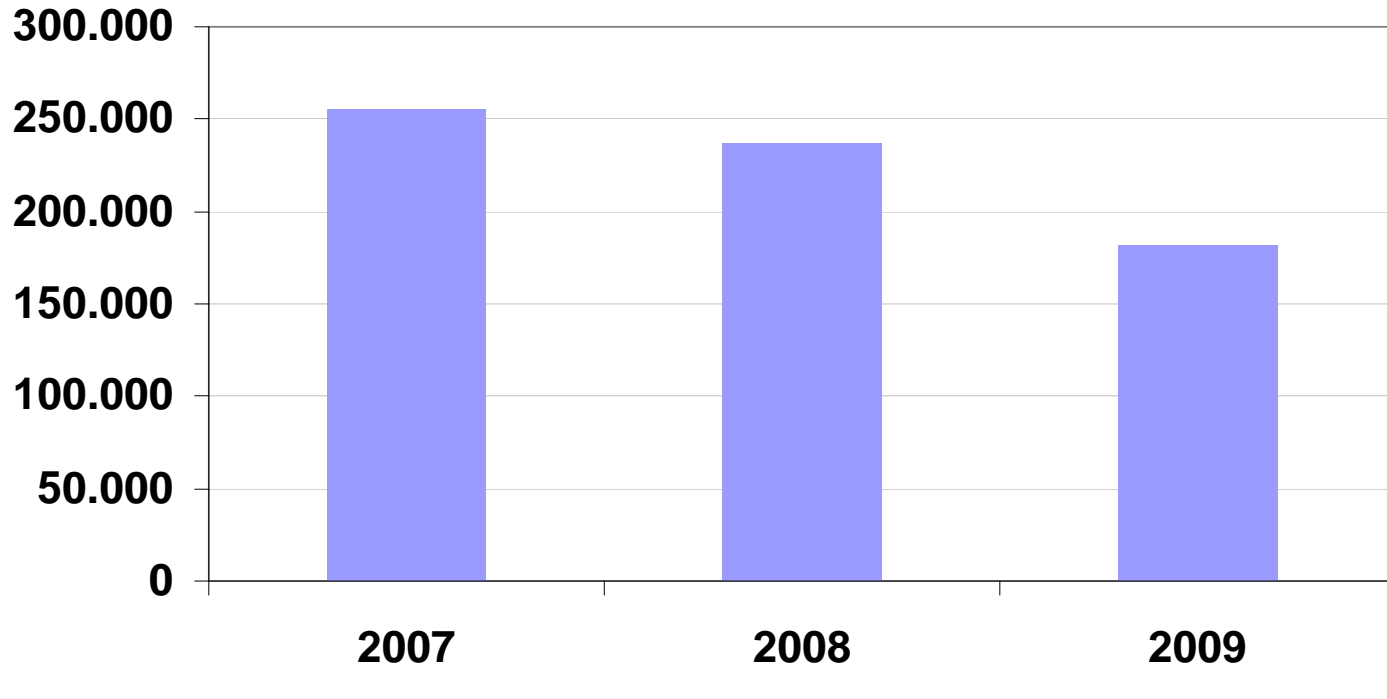
- Lack of good data
- Statistics Iceland add sold alcohol liters from
 - state alcohol stores and
 - alcohol sold by others avenues, mostly restaurants
 - due to the crisis, Statistics Iceland no longer publish this data
- Data from the duty free store at the international airport are hard to get.
- Difficult to separate departure and arrival sale
- Experiments to estimate the volume of unregistered alcohol use suggest additional 7,5% (2004) to domestic sale (unregistered includes travelers legal or illegal import, home made, smuggling etc)

Alcohol liters sold by state monopoly store 2003-2009

Per capita 15+ year old



Total alcohol liters sold by the duty free store Keflavik Airport



2007 2008 2009
255.470 236.495 181.312

Based on sales figures by number of items sold by type of alcohol.
Authors estimated alcohol liters
(With fixed assumptions about volume per item and alcohol level per item)

Survey data from 2007 & 2009



Sample size and attrition

	N	%	Af 2007 úrtaki
Sample 2007	9807		
Responses 2007	5918	60,3	
Agree to follow up study	5411	91,4	55,2
Present 2009	5303	98,0	54,1
Responses in 2009	4098	77,3	41,8

Survey conducted in October 2007 and October 2009

18-79 year old in 2007, same people in 2009, but 2 years older.

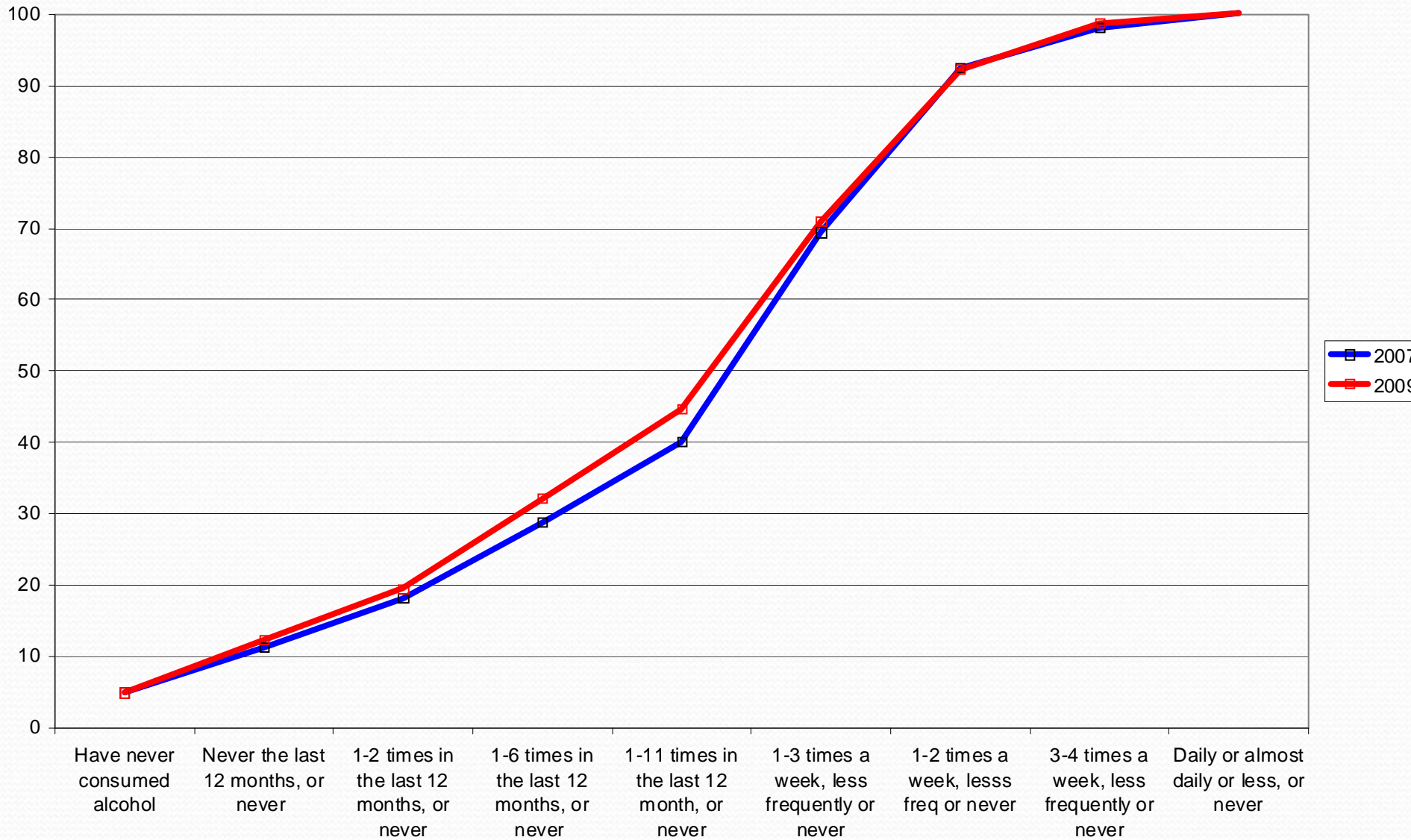
Analysis only based on those that answer both surveys

Do people drink less?

How often in the last 12 months did drink at least one glass of drink that contains alcohol. (%)

	2007	2009
Daily or almost daily	1,9	1,3
3-4 times a week	5,7	6,5
1-2 times a week	23,0	21,3
1-3 times a month	29,4	26,3
7-11 times in the last 12 months	11,3	12,6
3-6 times in the last 12 months	10,6	12,5
1-2 times in the last 12 months	6,9	7,2
Never the last 12 months	6,4	7,4
Have never consumed alcohol	4,9	4,9

Cumulative proportions

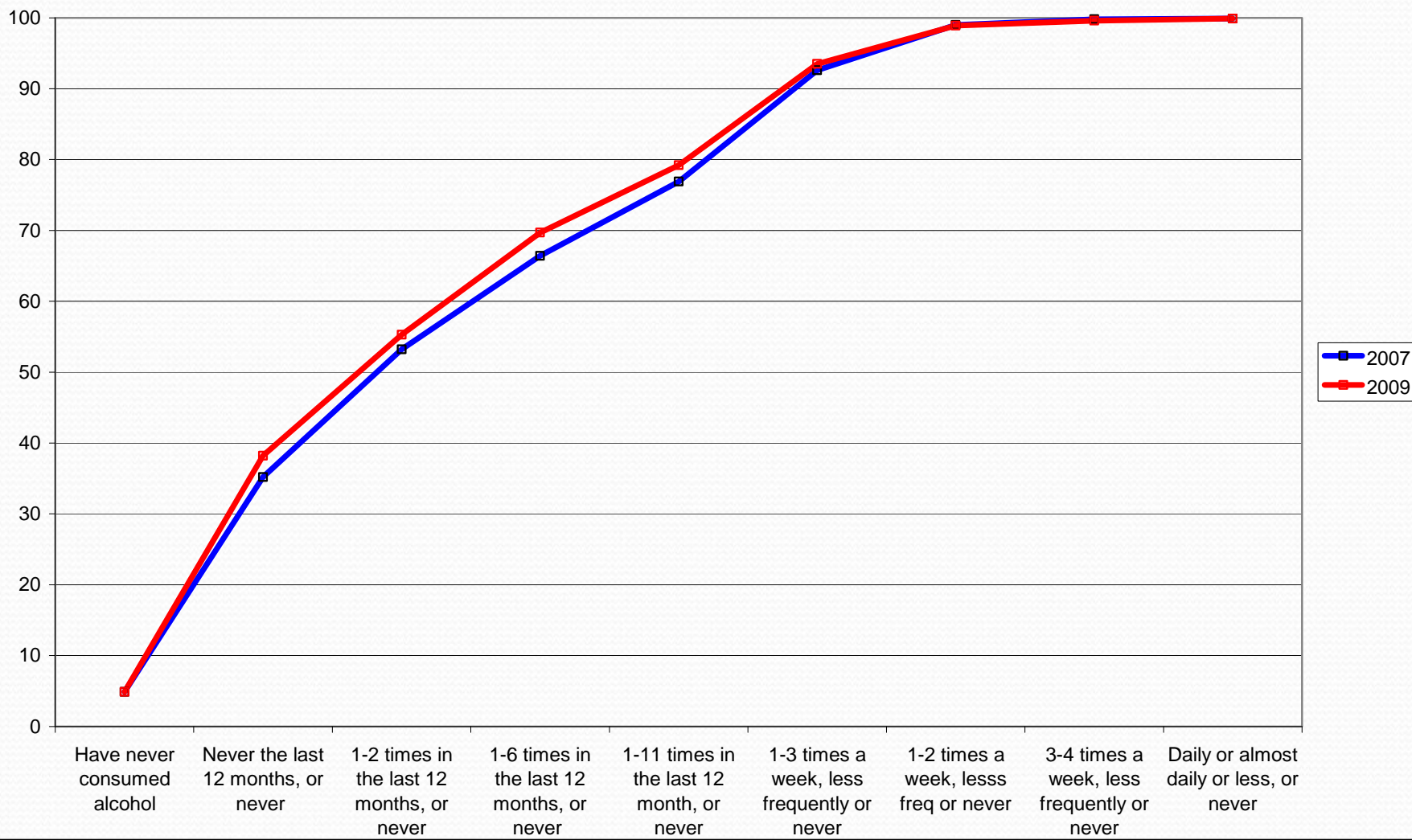


How often in the last 12 months have you consumed on the same day at least 5 alcoholic drinks?

	2007	2009
Daily or almost daily	,1	,3
3-4 times a week	,8	,7
1-2 times a week	6,4	5,4
1-3 times a week	15,7	14,3
7-11 times in the last 12 months	10,5	9,5
3-6 times in the last 12 months	13,2	14,4
1-2 times in the last 12 months	18,0	17,1
Never the last 12 months	30,3	33,3
Have never consumed alcohol	4,9	4,9

Cumulative proportions.

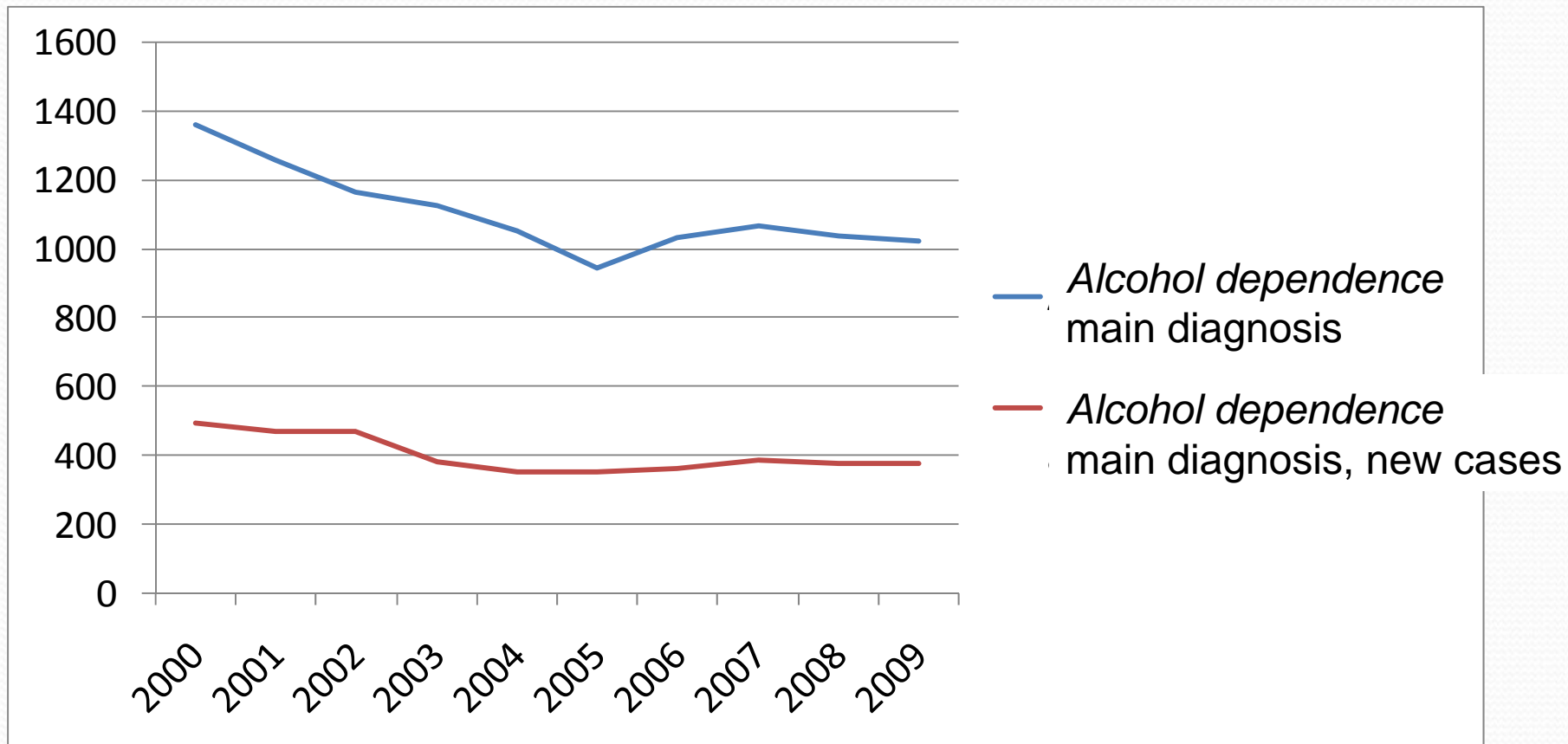
Reduced binge drinking from 2007 to 2009



Alcohol problems, data from

- National Center of Addiction Medicine (SÁÁ)
- The mail survey

Alcohol dependence at the SAA - National Center of Addiction Medicine



Source: SAA popwer point presentation,

How often the last 12 months have you.....

Had drink the day after to feel better

		2007	2009
Never consumed (the last 12m)	i	11,4	12,4
Never		82,6	82,0
Monthly or less		4,7	4,3
1-3 times a month		,8	1,1
Weekly		,4	,1
Daily or almost daily		,1	,1

How often the last 12 months have you.....

Had remorse after drinking

	2007	2009
Never consumed (the last 12m)	11,4	12,5
Never	65,1	66,0
Monthly or less	20,0	19,1
1-3 times a month	2,2	1,6
Weekly	,8	,4
Daily or almost daily	,4	,4

How often in the last 12 months have you.....

Started to drink, could not stop

	2007	2009
Never consumed (the last 12m)	11,4	12,5
Never	80,1	80,7
Monthly or less	6,5	5,2
1-3 times a month	1,3	1,0
Weekly	,5	,3
Daily or almost daily	,2	,2

How often in the last 12 months have you.....

Had blackout

	2007	2009
Never consumed (the last 12m)	11,4	12,5
Never	68,8	69,3
Monthly or less	17,9	16,6
1-3 times a month	1,4	1,4
Weekly	,3	,2
Daily or almost daily	,3	,1

How often in the last 12 months have you.....

Unable to tend your duties due to alcohol use

		2007	2009
1	Never consumed (the last 12m)	11,4	12,5
1	Never	78,2	79,1
2	Monthly or less	9,3	7,7
3	1-3 times a month	1,0	,4
4	Weekly	,1	,1
5	Daily or almost daily	,1	,2

Scale to measure alcohol related problems

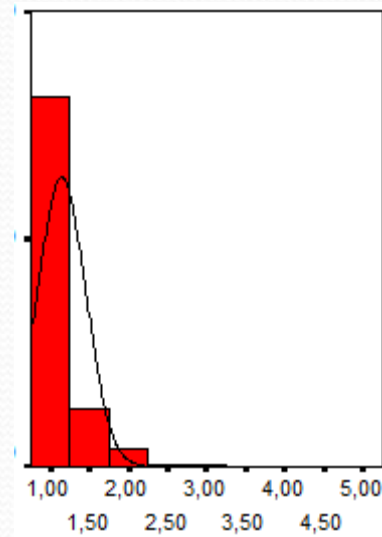
Scale 2007 og 2009

Highest possible mean = 5

Lowest possible value = 1

Average over 5 items

Skewed distribution



Research questions

- Is alcohol use possibly increasing social gradient in health?
- Is alcohol problem increasing in specified subgroups of the population?

Mean alcohol problem by status

	2007	2009	Staðalfrávik 07	Staðalfrávik 09
Was laid off afther the collaps	1,178	1,157	0,321	0,336
\ Others	1,172	1,148	0,353	0,309

	2007	2009	Staðalfrávik 07	Staðalfrávik 09
Unemployed 2009	1,289	1,232	0,483	0,462
Others	1,176	1,146	0,346	0,281

Sex and education

Education	Males		Females	
	2007	2009	2007	2009
Primary	1,210	1,206	1,104	1,111
Older primary	1,313	1,248	1,099	1,067
Secondary	1,328	1,289	1,171	1,082
Other secondary	1,214	1,205	1,079	1,104
Technical school	1,134	1,149	1,131	1,055
First university degree	1,235	1,171	1,106	1,088
Master	1,144	1,137	1,136	1,089
Doctoral degree q	1,268	1,100	1,089	1,066
	1,233	1,206	1,112	1,090

Multiple regression model (OLS)

	B	Std. Error	Beta	t	Sig.
(Constant)	,600	,040		14,825	,000
Alcohol problems 2007	,569	,013	,626	43,125	,000
Female	-,027	,009	-,046	-2,983	,003
Age	-,001	,000	-,058	-3,665	,000
How easy is it for you and your family to let your income suffice for daily needs	-,007	,004	-,027	-1,818	,069
Reduced income due to crash	-,007	,010	-,010	-,696	,487
Unemployed 2007	,000	,028	,000	,002	,999
Unemployed 2009	,033	,020	,024	1,635	,102
voluntary work	-,001	,003	-,003	-,231	,817
Social support friends	-,013	,005	-,043	-2,563	,010
Social support spouse	-,007	,004	-,022	-1,511	,131
Social support coworker	,009	,005	,030	1,818	,069
Inter personal trust	,004	,005	,013	,832	,405
Trust in institutions	,000	,001	-,004	-,272	,785
University education	-,018	,011	-,029	-1,652	,099
Secondary education	-,006	,010	-,010	-,569	,570

Summary

- Alcohol use increased with increased disposable income and reduced cost of alcohol
- Reduce alcohol use and alcohol related problems during the economic crisis
- Results from the survey does not suggest that reduced legal alcohol sale is compensated by illegal alcohol
- Economic hardship reduces alcohol related problems
- But signs that unemployment may increase alcohol related problems