



Nofima

IIFET 2016, Aberdeen
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Present and emerging Arctic fisheries
Crombie A



Floor prices in the cod market

Market implications



Photo: Lofotposten.no

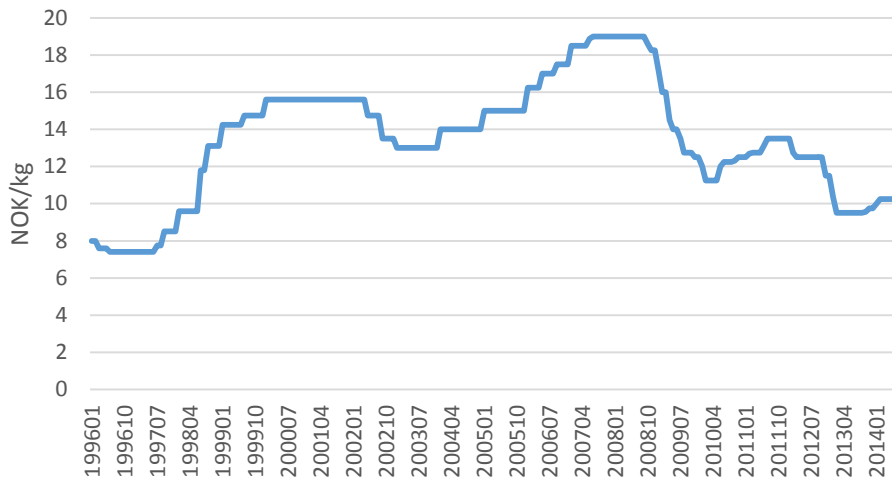
Background

- Cod fisheries in Norway
- Market power
- Floor prices introduced
 - Fishermen owned sales organisations



Henningsvær 1951, Sverre A. Børretzen

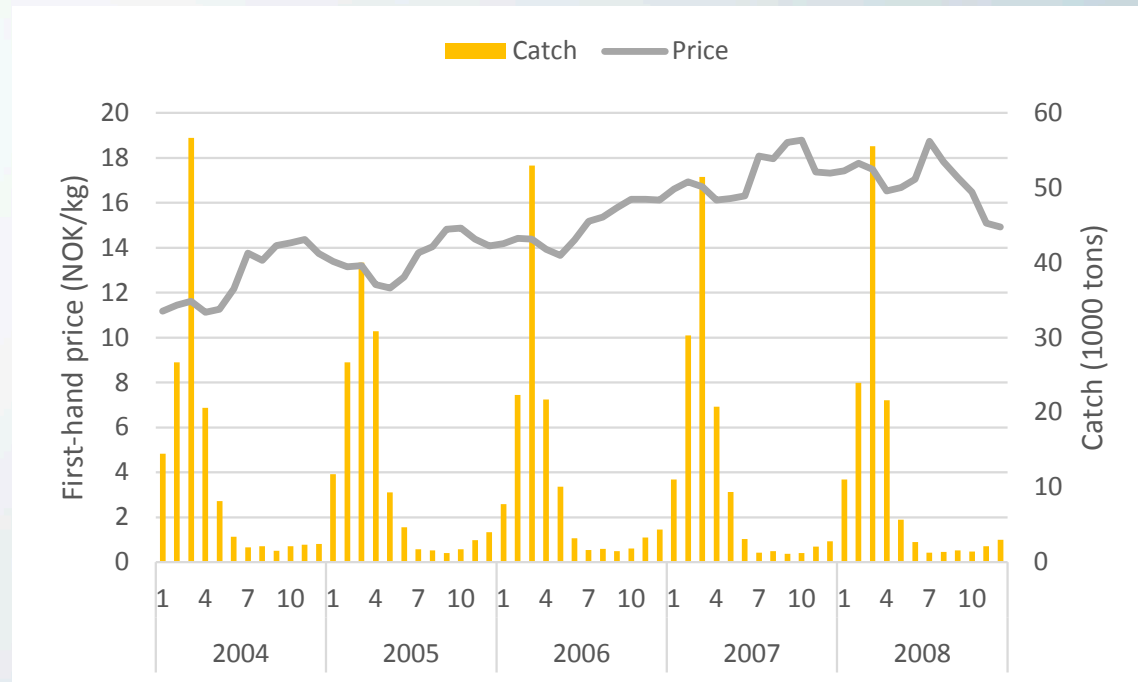
1-2,5 kg



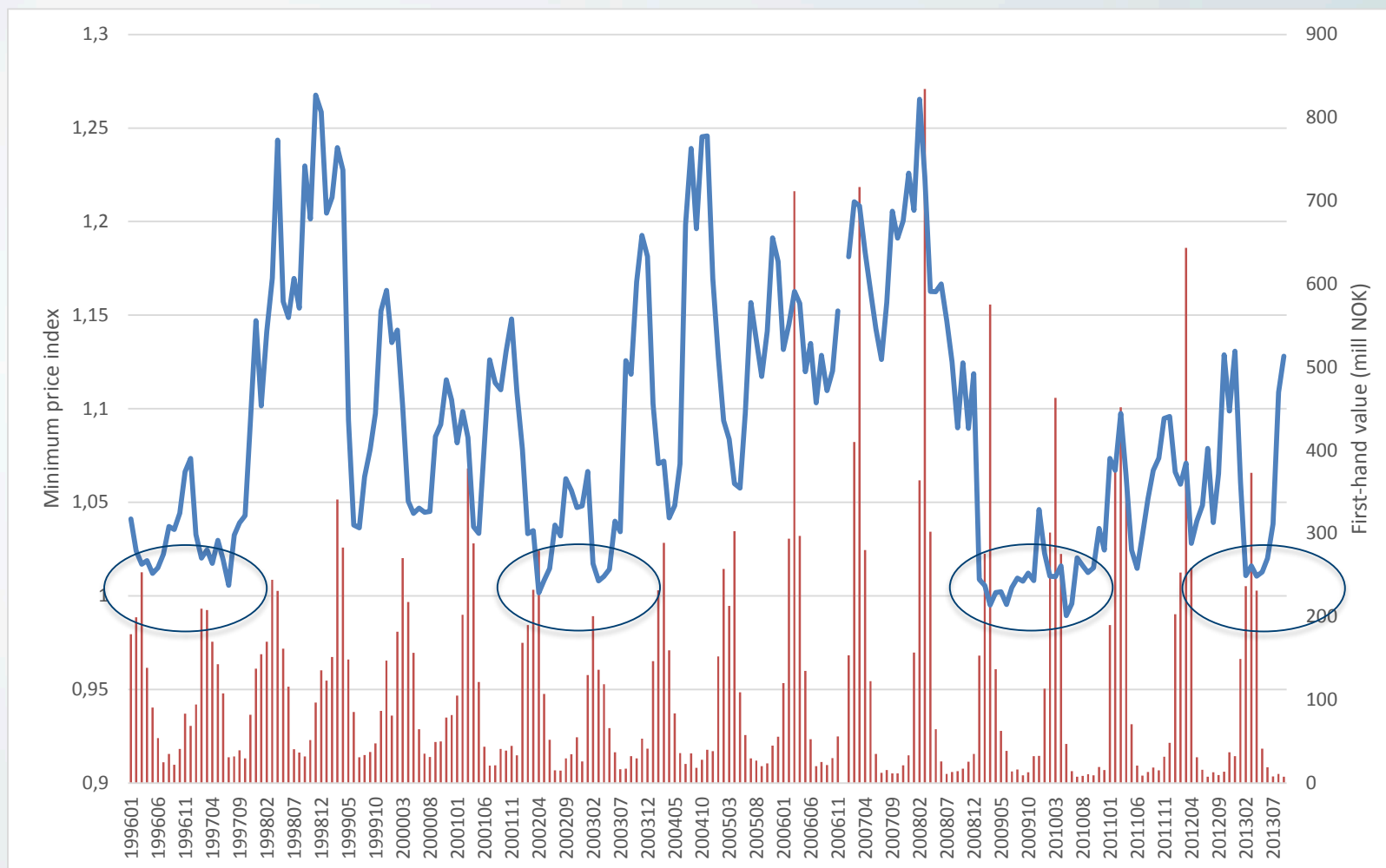
Research questions

- Binding floor prices?
- Effects on seasonality of landings?

- Uncertainties
 - Average pricing
 - Unreported landings



Data – floor price index

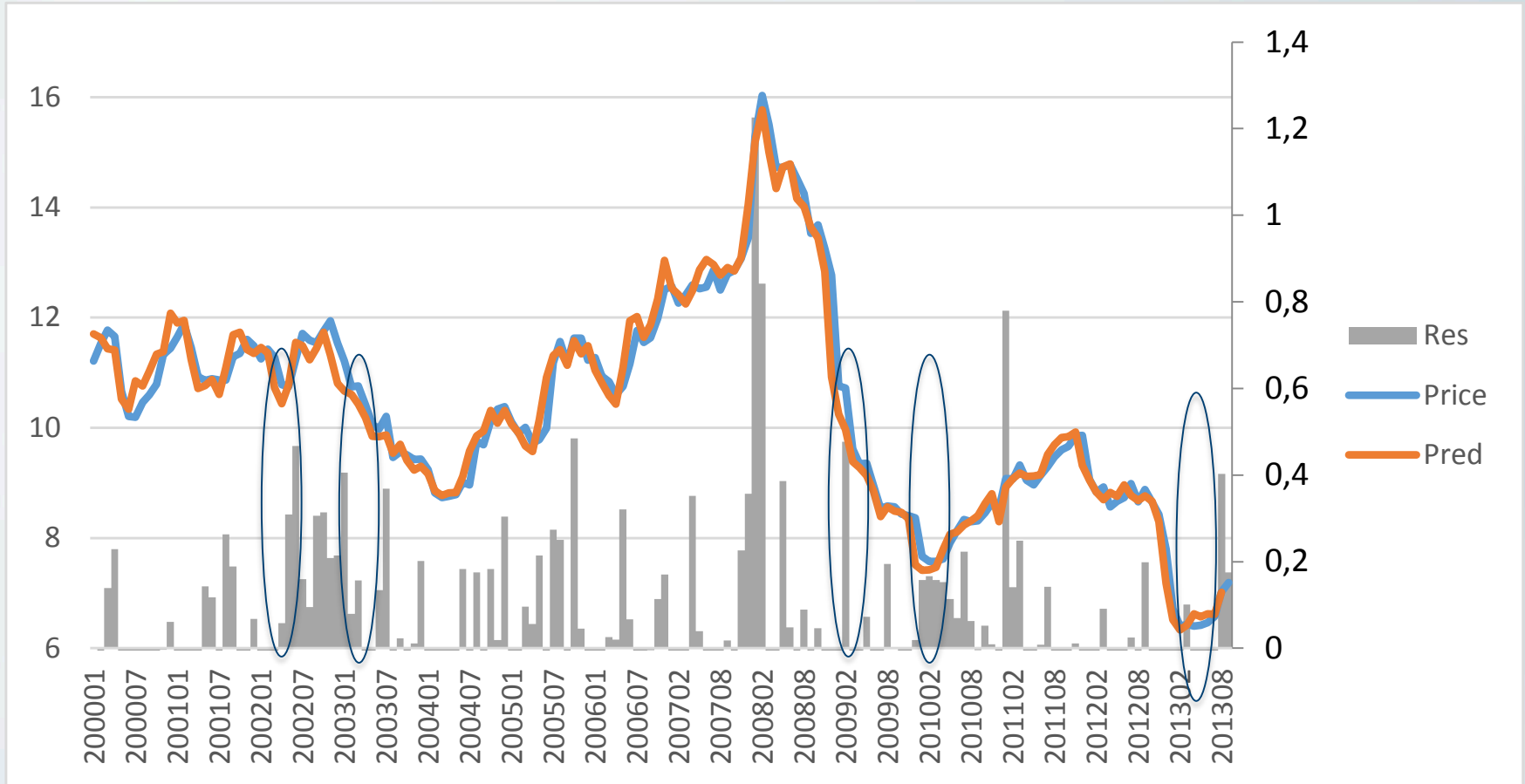


Model - what if no price floor?

- Not able to set up a supply model
- Inverse demand model
 - Q_t = Harvest quantity
 - PS_t = Price of substitutes (FAO Food Price Index)
 - GNI_t = *Income* (World)
 - D_i = Monthly dummy variables
 - $M = 1$ if value/minimum value is less than 1.05
 - Fisher price index
 - Instruments: Export quantity, Exchange rates for EUR and USD

$$\ln P_t = \alpha + \beta \ln Q_t + \gamma \ln PS_t + \delta \ln GNI_t + \sum_{i=1}^{11} \epsilon D_i \ln Q_t + \sum_{i=1}^{11} \theta D_i + \mu M + \sum_{i=1}^{11} \rho M D_i \ln Q_t + \sigma \ln F_t + \tau M \ln F_t + \omega \ln P_{t-1}$$

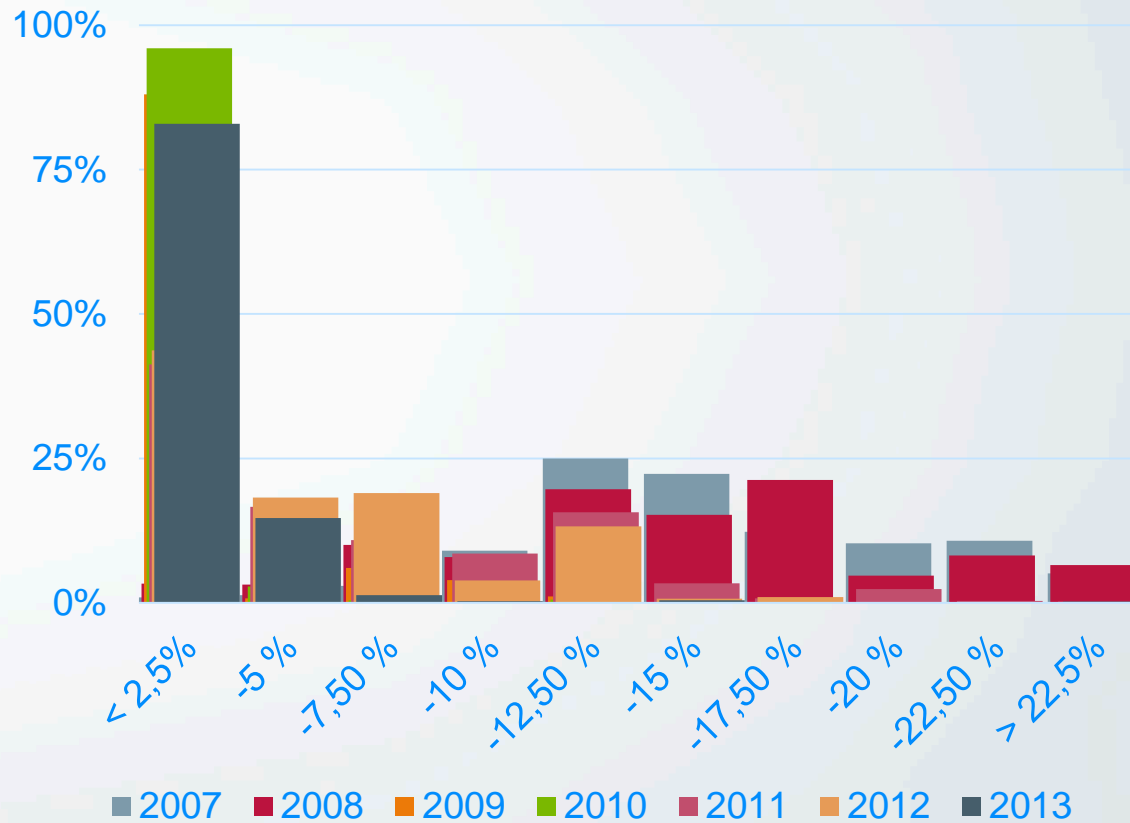
Model results



		Coef.	Std. Err.	z	P> z
lnprice					
	lnqty	-.1520348	.0255602	-5.95	0.000
	lnfaofood	.0440182	.01894	2.32	0.020
	lngnipc	-.3428801	.11364	-3.02	0.003
	lnfisher	.194095	.0367517	5.28	0.000
lnprice					
	L1.	.8495932	.0257888	32.94	0.000
month					
	2	-1.637903	.5901893	-2.78	0.006
minste					
		.5276351	.1933687	2.73	0.006
minste#month#c.lnqty					
	1 1	-.0401927	.0118831	-3.38	0.001



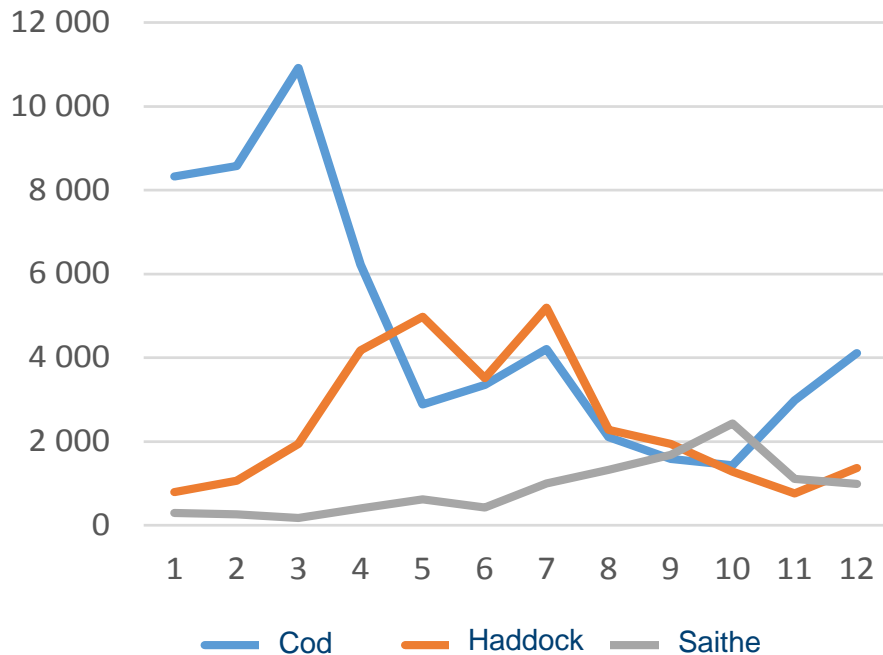
Distribution of prices



Further work

- Improve current model
- Supply side model
 - Instrument monthly catchability

Danish seine, Finnmark, 15-21 m





Thanks for the attention!

Hopefully time for questions!



Takk for oppmerksomheten

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