



# **Quantitative methods in merger control in Denmark.**

Christian Schultz

Dias 1



Merger control, in DK introduced i 2000, effective as from 2010

§ 12 stk. 2 "En fusion, der *ikke hæmmer* den effektive konkurrence betydeligt, navnlig som følge af skabelsen eller styrkelsen af en dominerende stilling, skal godkendes.....*hæmmer ...forbydes.*"

"A merger or concentration ,which would significantly impede effective competition,...,shall be declared incompatible with the common market".

- In 2010 thresholds were adjusted to international standards.



## When is effective competition significantly impeded?

- Not so easy to answer, no data for the future!
- Compare two scenarios: With merger /without merger
- Homogeneous or differentiated market?
- Unilateral or coordinated effects?
- Today: **Unilateral** and **differentiated**
- Standard methods using market shares and HHI are well founded in economic theory for homogenous markets. Less so for differentiated.
- In differentiated markets some goods are closer substitutes than others. The delineation of the market is not always clear. High end/low end separate markets? Often pearls on a string.



## Differentiated markets, diversion ratios

- In differentiated markets some products are closer substitutes than others. Crucial for competitive pressure. But which products?
- Often (always?) we do not have the data needed.
- Questionnaires: " Which product did you buy last time? If this product were not available, which product would you buy?
- Diversion Ratio: The fraction of costumers of product  $a$ , which shifts to  $b$ .
- Adding a few assumptions: Gives us information about the fraction of costumers of product  $a$  who would switch to  $b$  if the price increases 5-10%

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(SSNIP)

Dias 4



## Upward Price Pressure, UPP

- Two firms  $a$  and  $b$
- Assume  $a$  increases the price of good  $a$ .
- This decreases demand for  $a$  and gives a loss.
- How large a loss? : Price \* lost demand – cost saved
- Part of demand lost shifts to  $b$ . How much, can be figured out using diversion ratio.
- After a merger, where the merged firm produces good  $a$  and  $b$ , the loss is (partly) recuperated through sales of  $b$ .
- Makes it more attractive to increase price of  $a$
- If we know the profitability of the sale of  $b$ , we can calculate the amount of recouperation
- Synergies from the merger may reduce costs
- Adding the two last steps gives the Upward Pricing Pressure.



## Illustrative Price Rise, IPR

- Adding the assumption that all firms react optimally to price increases makes it possible to calculate theoretically the total price increase as a consequence of the merger. The Illustrative Price Rise.
- Important to understand that UPP is pretty simple and does not take so many assumptions.
- IPR does.

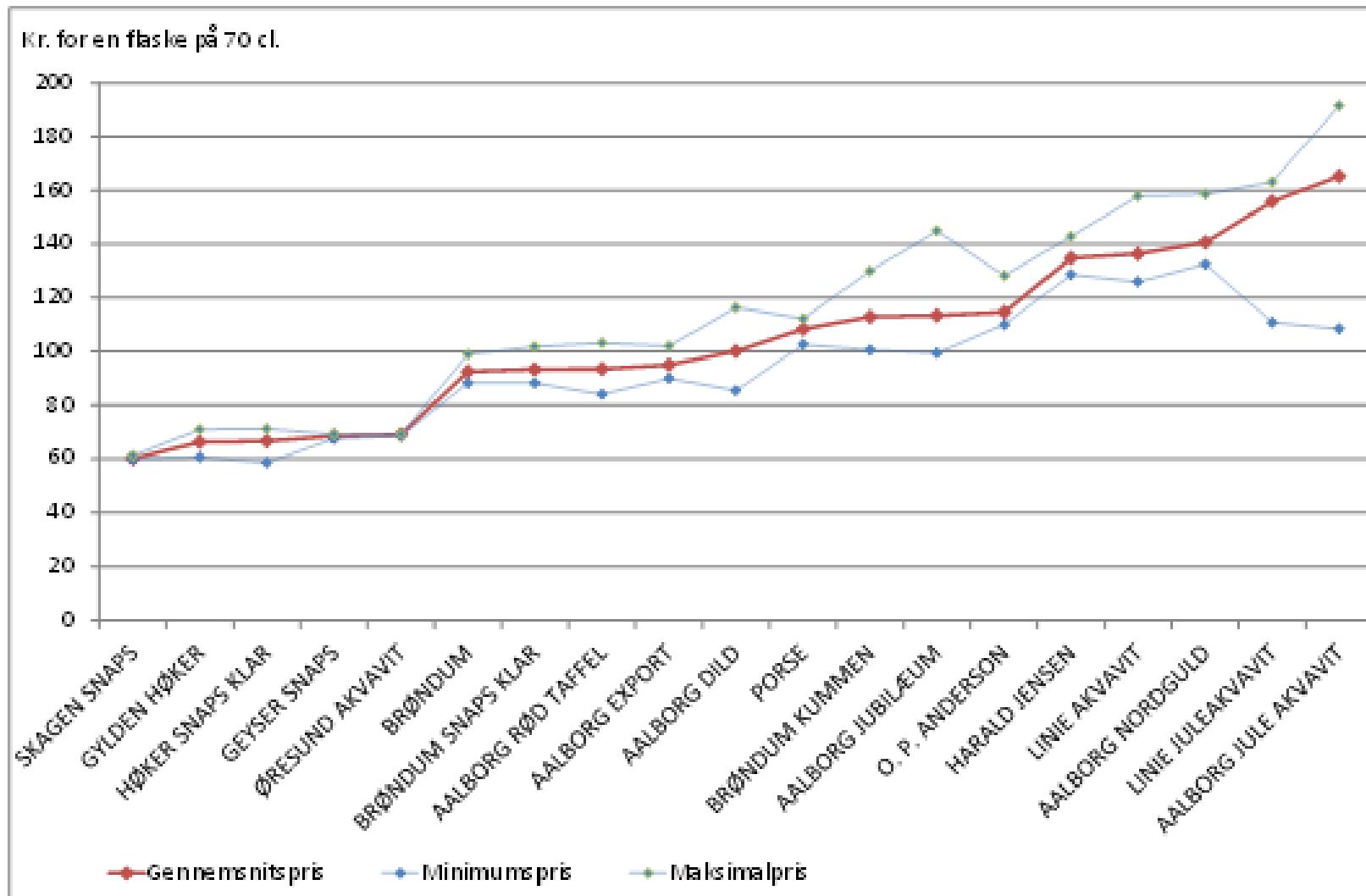


## Arcus Groups aqucision of Pernod Ricard DK

- Arcus, Norway's leading producer of liquor.
- Including the snaps, Linje Akvavit.
- Result of merger: Arcus aquires the big Danish brands  
Ålborg, Brøndums etc
- Delineation of market: Rests on the Danish frokost – lunch-culture. Hering, cheese and aquavit. It was decided there is a Danish market for aquavit (and not liquor). Limited to the retail-market.



## Prices for 19 aquavits



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Dias 8



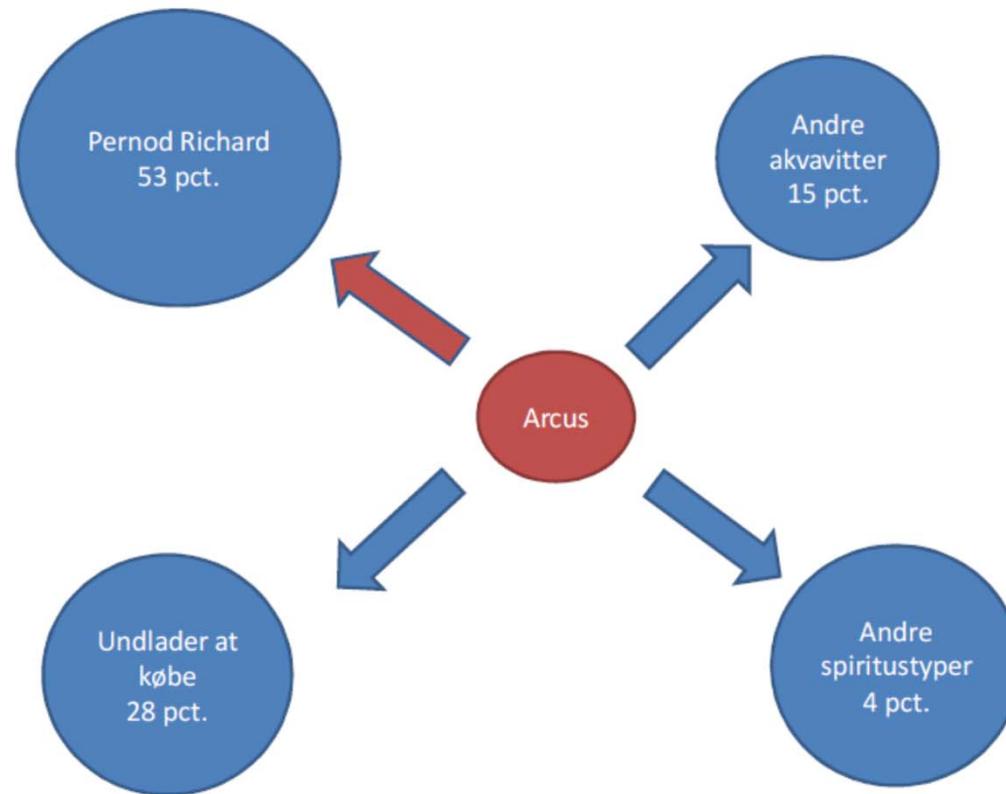
## Akvavitmærker, Salgsandele og ændringer i HHI 2011

	ARCUS	PERNOD RICARD DENMARK	ALTIA	ØVRIGE KONKURRENTER
Brands	Linie Aquavit Loiten Linie Gammel Opland Gilde	Taffel (Rød Aalborg) Brøndum Nordguld Høker m.fl	O.P. Anderson Skåne	Bommerlunder Bornholmer Frøken Nielsen Gylden
Mkt shares				
- Pre merger	[10-20]	[70-80]	[5-10]	[5-10]
- Post merger		<b>[80-90]</b>	<b>[5-10]</b>	<b>[5-10]</b>
HHI pre merger	HHI post merger		Change in HHI <b>[1.500-2.000]</b>	
<b>[6.000-7.000]</b>	<b>[8.000-9.000]</b>			



<b>Pernod Ricard Denmarks aquavits</b>	
BRAND	MARKET SHARE
Aalborg	[50-60]
Brøndum	[10-20]
Høker	[5-10]
<b>In total</b>	<b>[70-80]</b>



**Figur 5: Diversion ratio fra Arcus til Pernod Ricard Denmark**

## Diversion ratios IPR beregninger

- Diversion ratio Arcus towards Pernod, 53%
- Diversion ratio Pernod towards Arcus 18%
- Positive UPP
- IPR Arcus price increase 4-10%, Pernod increase 2-4%
- It was decided that the merger would significantly impede competition.
- The parties suggested that they would sell off Brøndums as a remedy. The merger was then cleared.



## IMERCO – Inspiration Merger, August 2017

- Both active in the market for mid/high end retail market for housing articles ( e.g. tabletop, kitchenware, electronic household appliances).
- Relatively low market shares ([20-30] pct. and [5-10] pct.)
- But they were each others closest competitor.
- Very high diversion ratios: Imerco to Inspiration [30-40] pct., Inspiration to Imerco [40-50] pct.
- UPP very positive. Cost savings had to amount to [20-30] pct in order to eliminate the upward pricing pressure.
- IPR (Illustrative Price Rise) [10-20] pct. for Inspiration and [10- 20] pct. for Imerco.
- The merger was found to impede competition.
- As a remedy a number of Inspiration shops was taken out of the merger and a new chain was formed.
- The merger was then cleared.



## Summing up

- Danish merger regulation is now up to international standards
- In the tool-box we now (also) have UPP and IPR
- Very useful in DIFFERENTIATED mkts.
- They are tools, not the only ones, and should be used as tools not more.

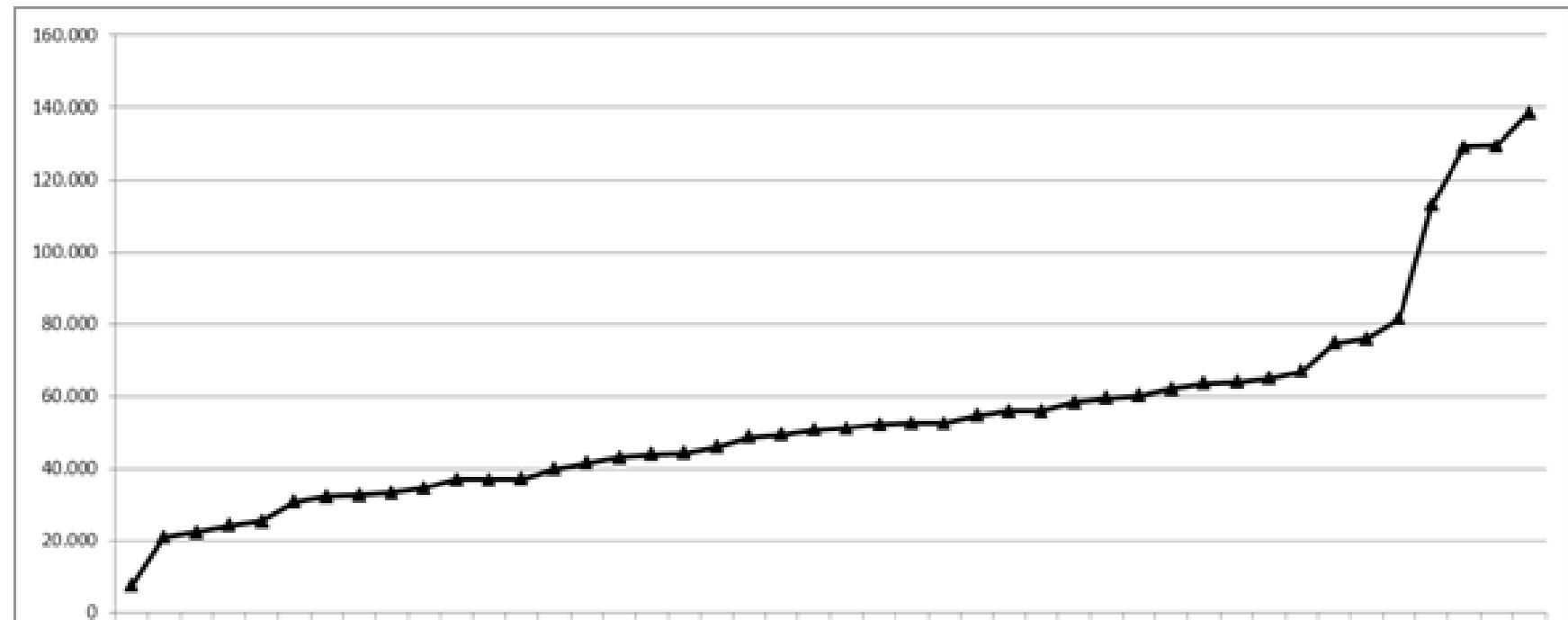


## Jysks erhvervelse af Iddesign, det kontrafaktiske scenarie

- Hvad er det relevante kontrafaktiske scenarie til fusion?
- Jysk, ejer Bolia og Jysk kæden
- Iddesign ILVA og IDEmøbler
- parternes markedsandele på detailmarkedet for salg af møbler eksl. senge og have møbler var hhv. [5-10]% og [10-20]% og samlet [20-30]%, på detailmarkedet for salg af sengestel og madrasser var de tilsvarende tal hhv. [20-30]% og [10-20]% og samlet [30-40].
- Det kontrafaktiske scenarie. Iddesign på kanten af konkurs
- Konkurrencestyrelsen spurgte til potentiel entry fra store Europæiske virksomheder. Men ikke om der ville være entry, hvis konkurs. Det blev betragtet som en selvopfyldende profeti
- Kontrafaktisk scenarie: Konkurs
- Typisk differentierede markeder



## Gennemsnitspriser møbler excl senge



## Centralt spgm markedsandele i kontrafaktiske scenarie?

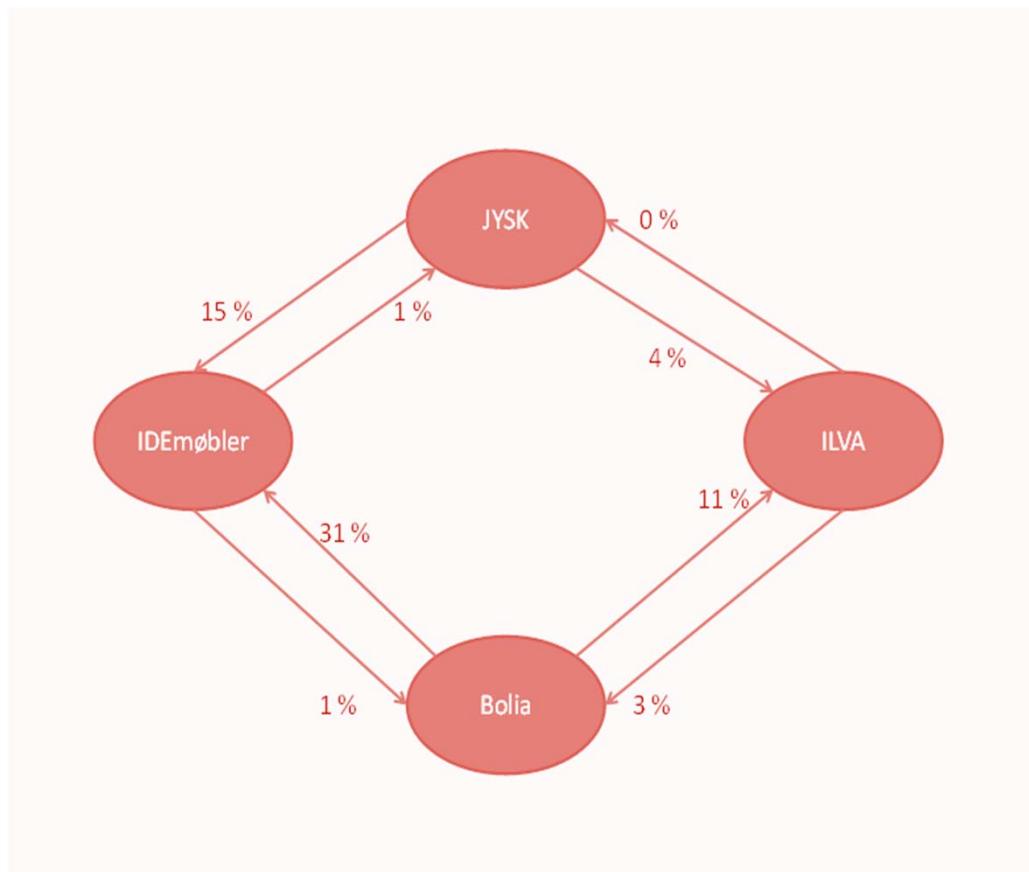
- Hvis IDdesign går konkurs, hvad er så de relevante markedsandele?
- IDEmøbler/Ilva havde [10-20] % markedsandele på de vigtigste markeder (møbler / senge).
- Diversion ratios blev brugt til at konstruere hypotetiske markedsandele i konkurs-scenariet.



## HHI, disk markedsandele kontrafaktiske

<b>Detailmarkedet for salg af møbler ekskl. senge og havemøbler</b>	<b>HHI - fusion</b>	<b>HHI - det kontrafaktiske scenarie</b>
HHI efter fusion/det kontrafaktiske scenarie	[1.000-1.200]	[800-1.000]
Delta HHI fusion vs. det kontrafaktiske scenarie		[200-400]
Detailmarkedet for salg af senkestel og madrasser	Markedsandel (pct.) og HHI - fusion	Markedsandel (pct.) og HHI - det kontrafaktiske scenarie
HHI efter fusion/det kontrafaktiske scenarie	[1.200-1.400]	[800-1.000]
Delta HHI fusion vs. det kontrafaktiske scenarie		[400-600]

## Diversion ratios



## Illustrative prisstigninger fusion møbler

Tabel 4. Illustrative prisstigninger for parternes kæder - møbler inkl. senge og havemøbler ved fusion

Virksomhed	Direkte priseffekt, pct.
JYSK	[10-20]
Bolia	[5-10]
Idemøbler	[0-5]
ILVA	[0-5]
I alt gennemsnitligt på markedet	[0-5]



## Illustrative prisstigninger kontrafaktiske scenarie

Tabel 5. Illustrative prisstigninger ved det kontrafaktiske scenarie – møbler inkl. senge og havemøbler	
Virksomhed	Direkte priseffekt, pct.
JYSK	[5-10]
Bolia	[10-20]
IKEA	[30-40]
Danbo	[5-10]
Møbelkæden	[20-30]
Smag og Behag	[0-5]
I alt	[10-20]



## Resultatet

- Ilva lægger et betydeligt konkurrencepres på IKEA, og det blev det afgørende argument.
- Fusionen blev godkendt uden tilsagn
- Den beslutning var klart hjuplet af de nye økonomiske metoder.

