

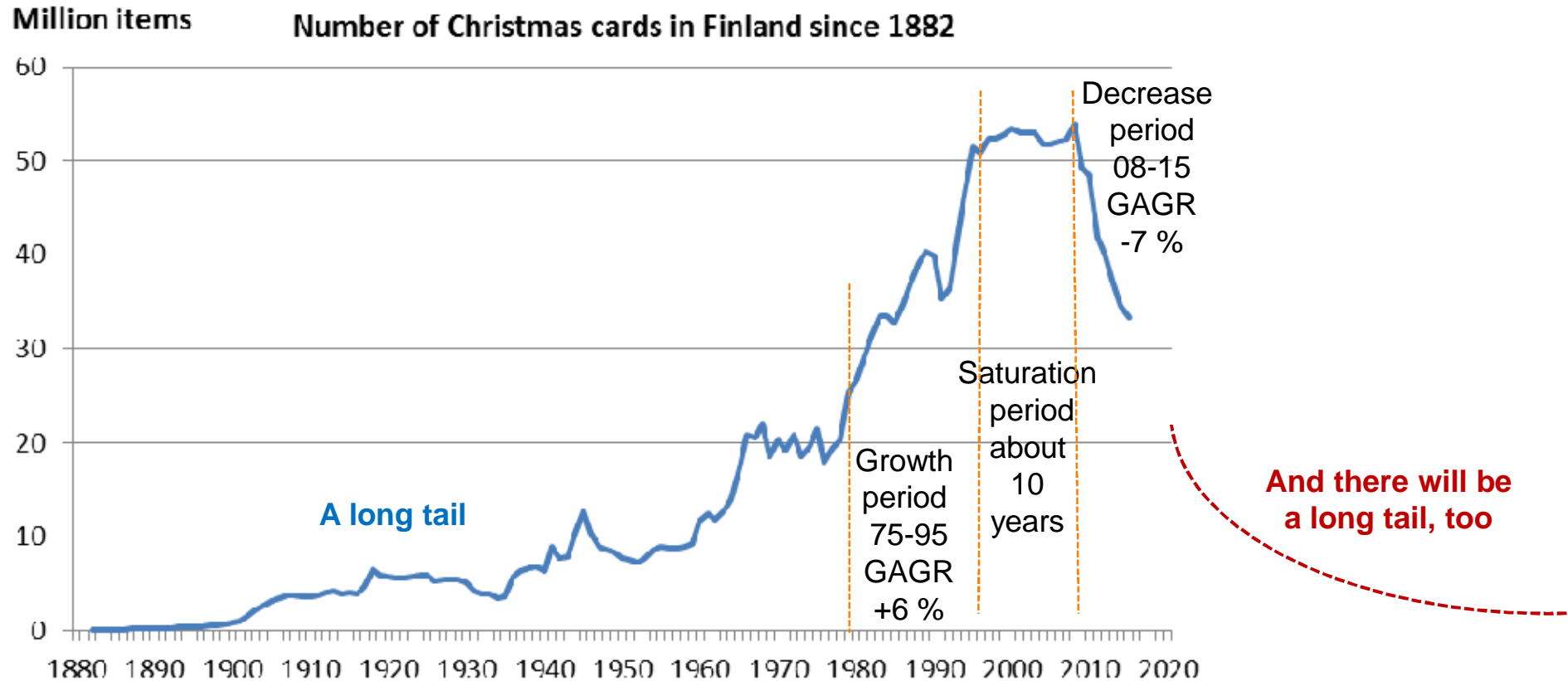
# **Demand for newspapers and magazines in Finland in the digital era**

**9th bi-annual conference on "*E-commerce, Digital Economy and Delivery services*" in Toulouse on March 31<sup>st</sup> – April 1<sup>st</sup>, 2016.**

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# A brief lesson to the history of digitalization of paper communication



- The demand curve is symmetric.
- The change on the decrease period will be faster than it was on the growth phase.
- Paper communication life cycle will be for few hundred years but the significant phase remains for few decades.

# The presentation

Demand for newspapers and magazines in Finland in the digital era

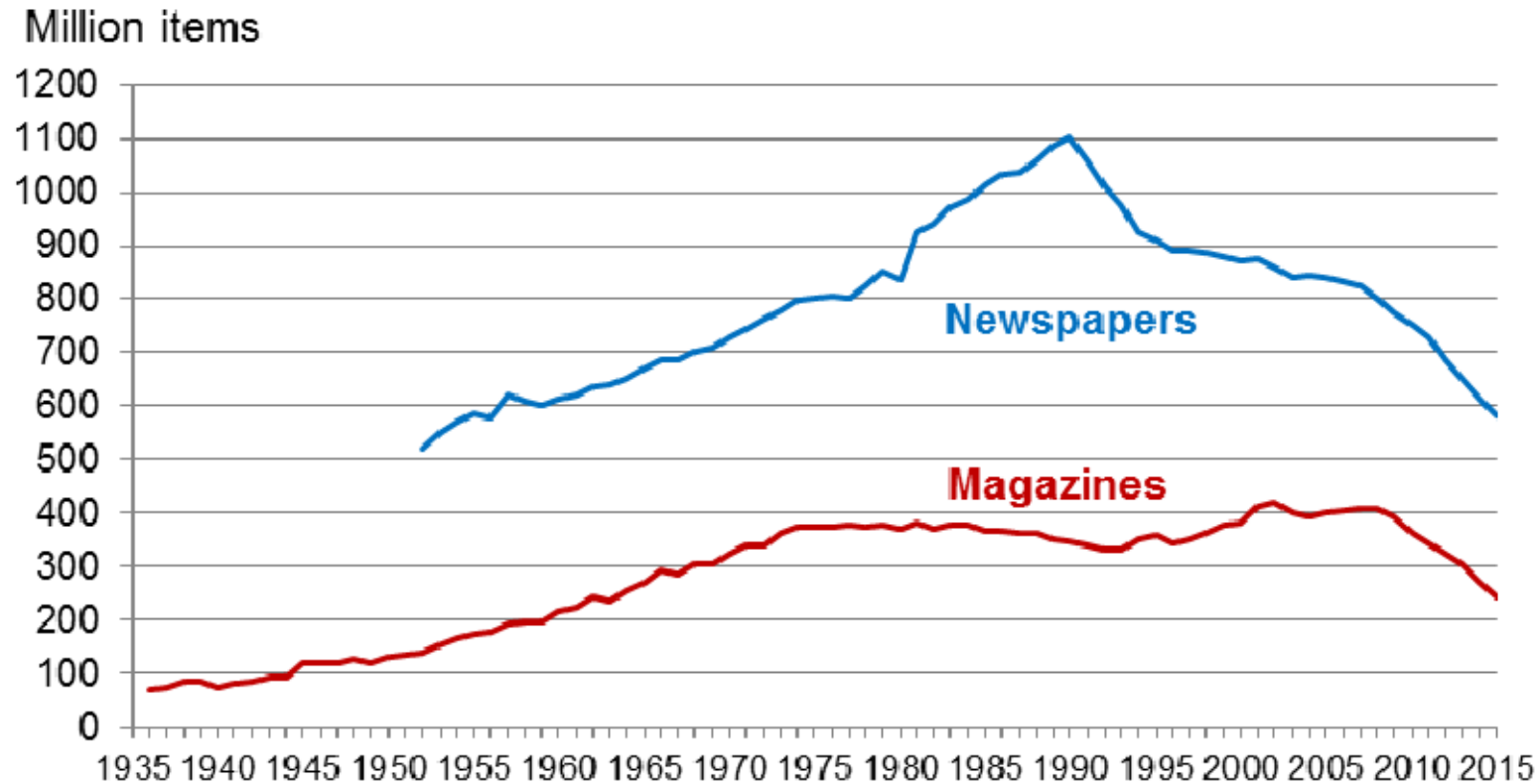
## Aim

The objective is to understand the demand of printed newspapers and magazines in the competition with the electronic media.

## Finns and printed press

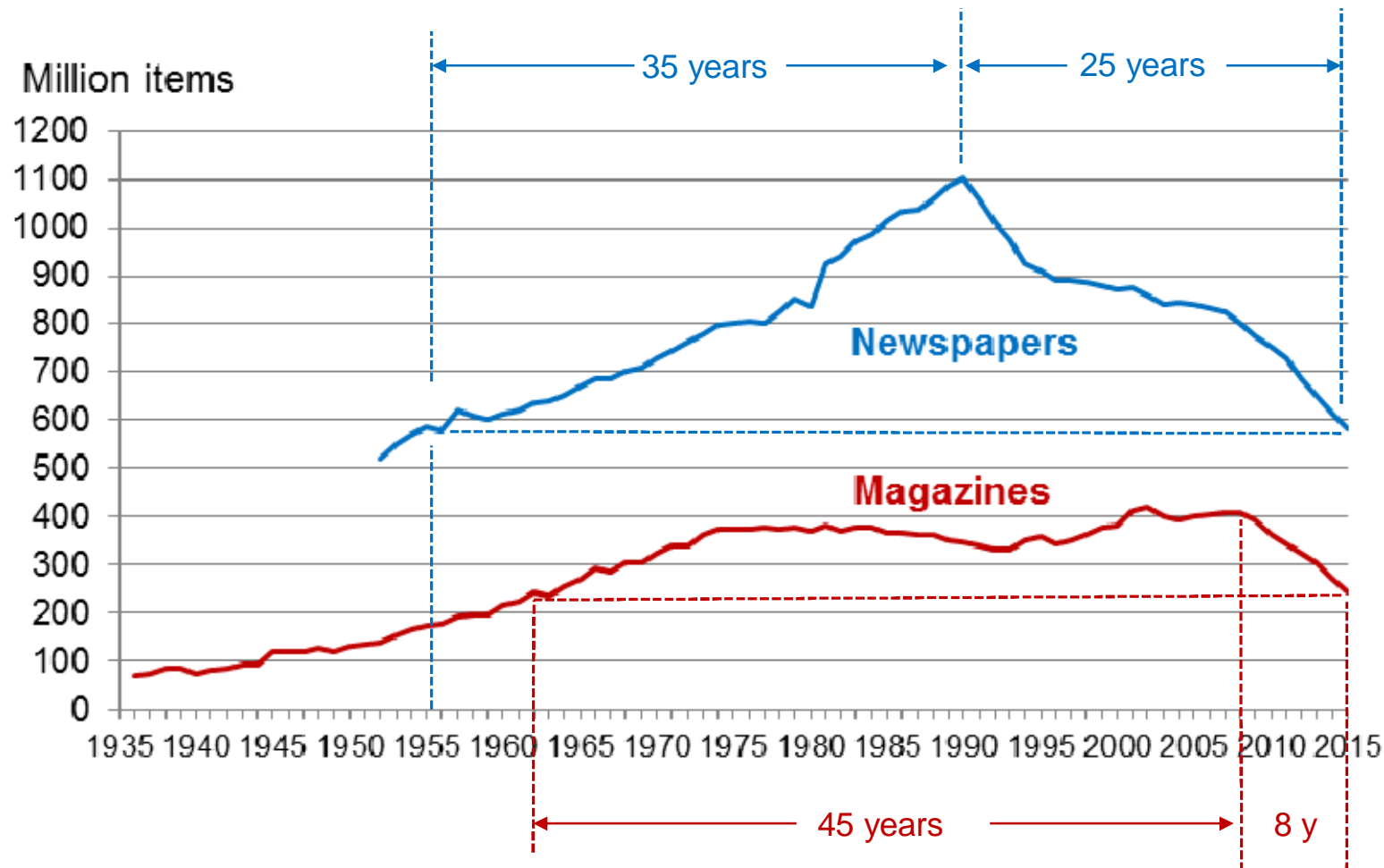
- 78% of 15+ Finns regularly follow printed newspapers, and 93% follow news on paper or electronically. The corresponding figures for France are 59% and 68%, and for the United States 45% and 56% (Reuters Institute, 2015).
- 90 % of newspapers and magazines are subscribed to and distributed to people's homes in Finland?
- Two separate distributions:
  - 70 % of newspapers are delivered in the early-morning delivery every day, before 7 o'clock in the morning
  - Normal postal delivery

# Total volumes of printed newspapers and magazines in Finland 1935/1952–2015



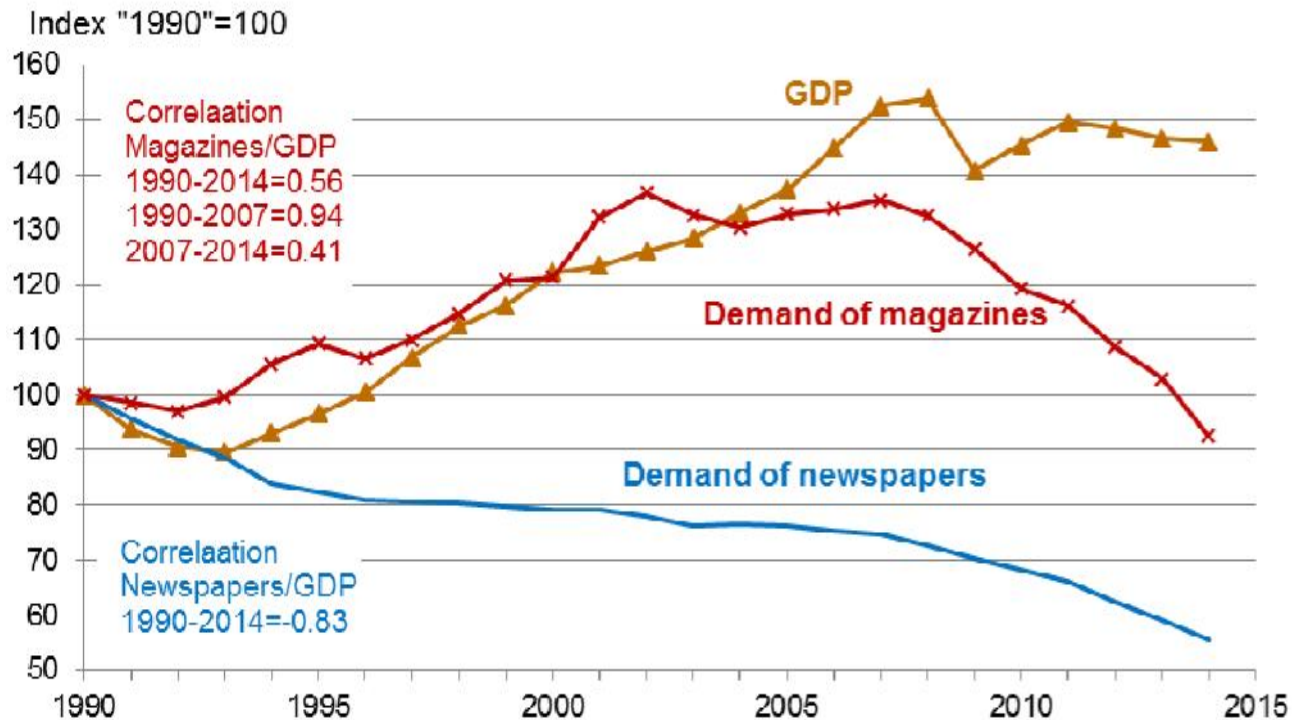
- The erosion of newspapers demand began 25 years ago and that for magazines 8 years ago.
- The reasons are different: news distribution via internet for newspapers and social media (SoMe) for magazines.

# The development has gone for decades backwards



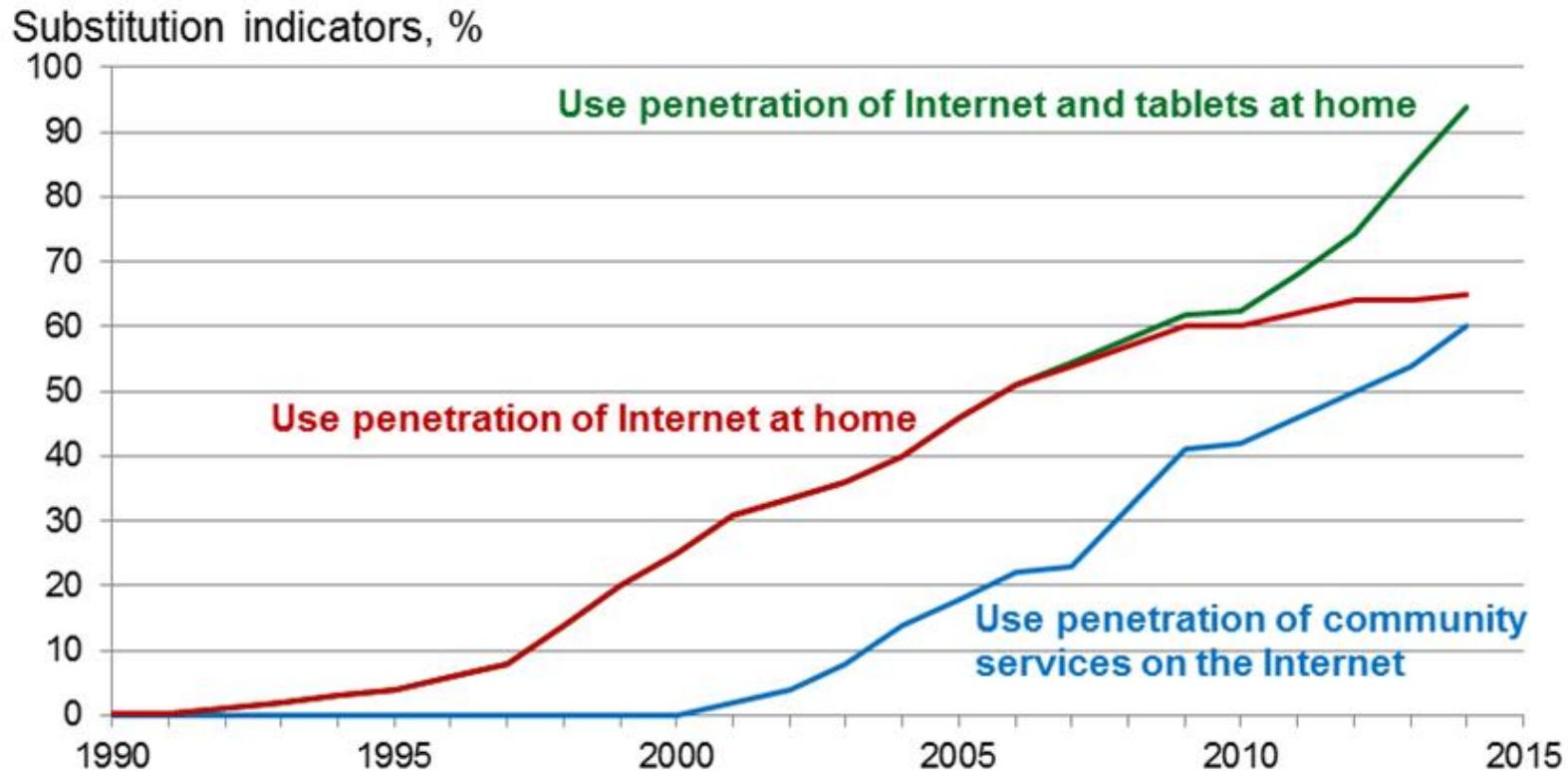
- The newspaper market is today at the same level as in the middle of the 1950s and the magazine market at the beginning of the 1960s.
- The change in demand for newspapers took place in 25 years and that for magazines only in 8 years.

## Correlation between the volume of printed newspapers/magazines and gross domestic product (GDP) in Finland 1990–2014



- It seems that the development of GDP has had no impact on the demand for newspapers:
  - 1993-2008, GDP grew +72% and the demand for newspapers reduced -18%.
- The demand for magazines has closely followed the GDP development:
  - Because the role of magazines is related to readers' leisure time and relaxation, it is no wonder that the purchase of publications is a money issue.
  - But the situation changed: Since 2008, GDP has fallen by -6%, while the demand for magazines has dropped by -40%.

# Substitution indicators for newspaper and magazine demand



- There are many alternative channels for paper communication, their number is increasing and their meanings in the substitution process also change over time.
- The most of consumers have many different channels through which they can substitute printed newspapers and magazines.
- The substitution indicators describe the number of opportunities for substitution and the models estimate to what extent these opportunities has been used.

# Development of real subscription rates of newspapers and magazines in Finland 1990–2014



- The prices of newspapers and magazines have developed differently.
- While the demand for newspapers has fallen, publishers have reacted by increasing the prices to secure their profitability.
- Magazines have reacted to market changes by fragmenting the market, i.e. by introducing new publications intended for even smaller target groups and at special prices.
- The share of postal delivery prices have been all the time about 20-30 % of total subscription prices.



# Demand models for printed newspapers and magazines in Finland

$$\text{Newspapers} \quad q_t / n_t = 1339.0 * T_t^{0.27} * P_t^{-0.61} * e_t^{-0.0042 * D_t}$$

(13.4)      (3.3)      (-7.9)      (-6.1)

t = years 1990–2014

R<sup>2</sup> = 0.99

DW = 1.48

q = total demand for newspapers subject to a charge in Finland

n = number of people aged over 15

T = GDP volume

P = real price index of newspapers

D = substitution indicator: a combined variable that describes the increasingly common use of the Internet and tablet computers at home

$$\text{Magazines} \quad q_t / n_t = 3.04 * T_t^{0.91} * P_t^{-0.23} * e_t^{-0.0075 * D_t}$$

(0.7)      (5.8)      (-0.5)      (-7.0)

t = years 1990–2014

R<sup>2</sup> = 0.90

DW = 1.58

q = total demand for magazines subject to a charge in Finland

n = number of people aged over 15

T = GDP volume

P = real price index of magazines

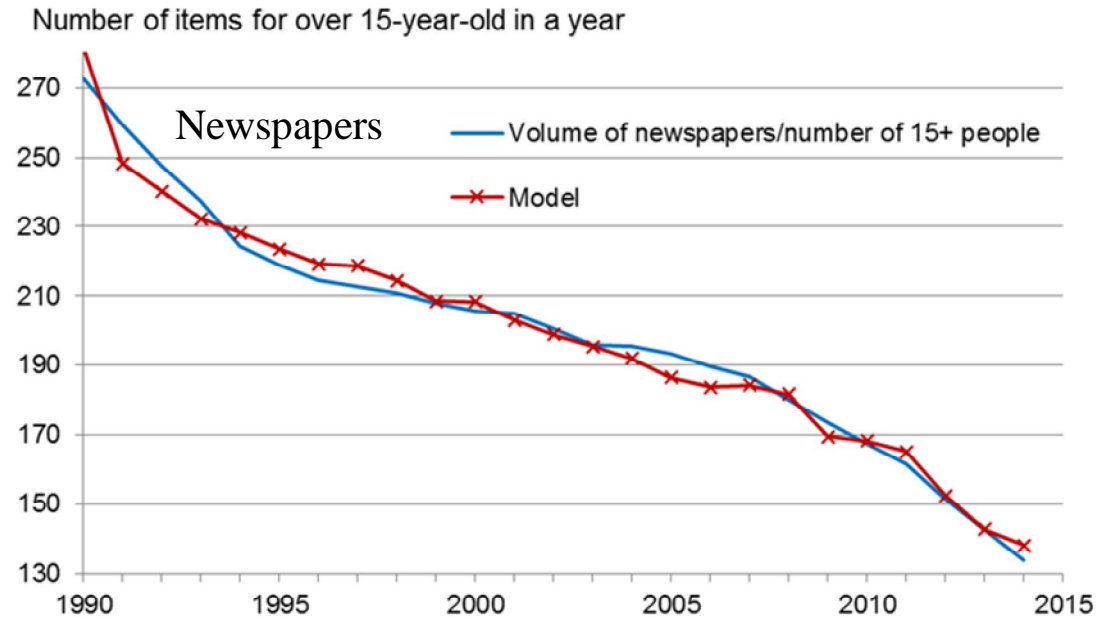
D = substitution indicator: penetration of the use of Internet community services among people aged 15–74

The models differ from each other in all the essential demand factors

Factor	Newspapers	Magazines
Trend, GDP	National economy does not guide the demand	National economy is a key demand factor
Price	Price sensitive demand, the prices have risen a lot, average price effect on the demand -1.6 %/year in 1990-2014	No price sensitive demand, the prices have risen moderately, average price effect on the demand -0.25 %/year in 1990-2014
Substitution	Internet and tablets use at home, the effect began in the 1990's, it kept the demand on the decrease	Use of Internet community services (SoMe), the effect began soon after the turn of the millennium, this turned the demand to a quick fall since 2008

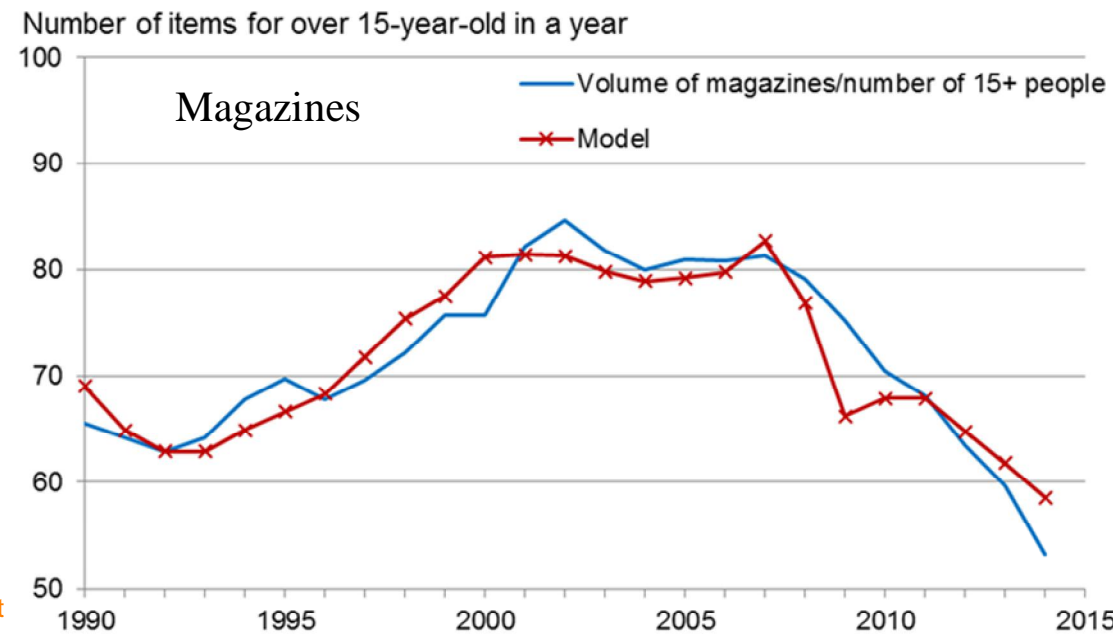
# The models follow the actual demand well

When the slope of demand curve changes the model will take a shortcut.



Statistically very reliable model.

Several turning points on the demand curve. The model makes shortcuts, but it finds the turning points quite well.



Statistically quite reliable model.



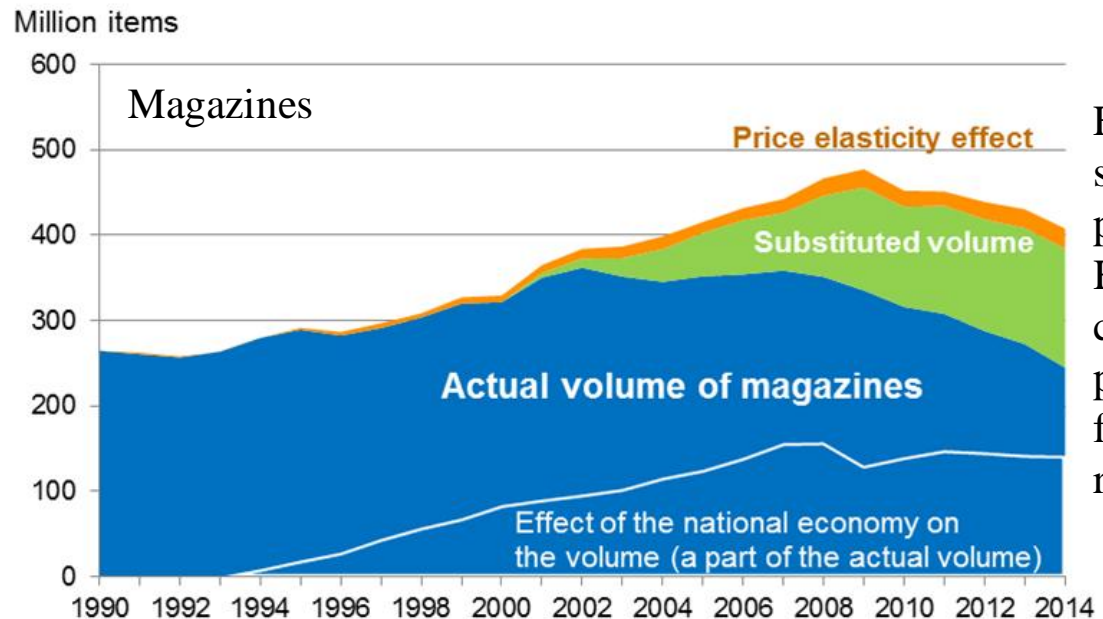
# Effects of different demand factors on the demand for newspapers and magazines in Finland 1990–2014

Newspapers have reacted to the substitution by raising the prices.



Rising prices and big price elasticity have caused the biggest demand drop. Substitution effect has been only slightly smaller.

Magazines have reacted to the substitution by fragmenting the market.



Fast substitution has surprised the publishers. However, the strict competition has prevented them from making price rises.

# Conclusions

- Printed newspapers and magazines have had to adapt themselves to the competition with electronic media.
- Similar factors can be found at the background of the demand for printed newspapers and magazines, but their demand effects differ a great deal from each other.
  - National economy has a decisive impact on the demand for magazines, but with regard to newspapers its impact is slight.
  - Price elasticity has played a key role in the fall in demand for newspapers, but with magazines its impact has remained small.
  - The follow-up of news on the Web and the reading of publications' websites and digital editions with tablets and smartphones have been at the background of the digitization of paper newspapers.
  - The digitization of paper magazines is guided by the increasingly common use of SoMe. This is still a quite new phenomenon, but the development has been fast during the past 10 years. It is difficult to find a corresponding speed of digitization of paper communication. SoMe offers the same relaxation for daily life as magazines.
- Newspapers compete more for the consumers' media attentions (news and advertising) and magazines for the consumers' (media) time than for consumers' money.

# Thanks for your attention

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