Media Firms’ Strategies and Market Dynamics in Digital TV: Towards Quality- or Variety-Based Competition?

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Structure of the Presentation

› Background
› Aims of the research
› Methodology
› Research model
› Results
› Conclusions and policy implications
Introduction

› Switchover to digital TV in most EU countries
› In analogue terrestrial TV (DTT), previous spectrum (variety) limitations
› Digital TV provides wealthier contents within a more restricted bandwidth
› Main advantages experienced by terrestrial broadcasters
› Investors develop DTV when a sufficient audience is attracted to it (“chicken and egg” problem)
› “Strategic trade-off”: Should firms invest in quality or in variety?
› Quality, variety and scope of media products make DTV markets a new emerging field of study
Aims of the research

› Should media firms enhance quality or variety?
› How are consumers’ preferences affected by access to larger variety/higher quality of contents?
› The effects of firms’ strategies on market dynamics
› Various policy concerns, to ease the transition to DTV:
› Is investment in quality reinforcing media consolidation?
› Or should investment in variety (=more subjects?) be preferred?
› Taking into account these evolving trade-offs:
› How to regulate digital content
› How to regulate digital infrastructure
Methodology

› A large mainstream (IO) literature has studied content and variety choices, mainly statically
› Two main traditions: monopolistic competition and horizontal differentiation models
› Quality strategies typically result in higher market concentration.
› Vertical differentiation models, under free entry:
› Investment in variety relaxes price competition and yields less concentration, while strategic investment in quality is conducive to monopolization
› These models present well-known limitations.
Methodology

› Main shortcomings of this literature:
› No general results on variety, quality and market competition
› Consumers’ preferences not influenced by supply-side
› Rely on a few strategic variables, due to equilibrium constraints: DTV adds more complexity (FTA and Pay-TV pricing)
› Typically these models do not include the role of technical change.
› DTV fast evolving
Methodology

› Multi-period simulation model
› Economy with 1,000 economic agents ("consumers")
› 5 Broadcasters
› "Ideal" DTT benchmark for the EU markets
› Utility = F \{ Distance between (high) preferences and quality of contents, Price \}
› Broadcasters investing in content development
› Varying scope of preferences – limited/expanded investment possibilities
Diverse tastes of consumers

Subscription packages

Profits

Content production

Subscription fees

Diverse tastes of consumers

See the paper for a mathematical presentation!
Results

Growth in the quality of channels over time

- 2 channels
- 5 channels
- 15 channels
- 30 channels
- 60 channels

Normalized average quality vs. time (t)
Results

Quality increases with variety to a point.
Results

Quality decreases with variety when contents are highly diversified.
Contents become more diversified when the possible variety increases to a point. Differences in quality decrease with variety, when diversity is high.
Conclusions (preliminary)

› Relations between quality and variety explored.
› Strategic considerations are highlighted (“enhance quality or expand variety?”).
› Significant and positive relations between variety (diversity of channels) and their quality.
› **Favourable strategy:** 
  
  *Compete by enhancing the quality of content, rather than by diversifying investment, and attract new audiences.*
› Fierce competition results in small differences in quality.
› **Main policy implication:** Minimal intervention, but limit the scope of broadcasting when needed.