

Investigation of substitution effects and adoption patterns across hotel distribution channels

A multigeneration perspective

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Abstract:

The evolution of distribution channels in the hospitality sector has followed different paths over time depending on the technology used. This research analyses the evolution of market shares of different clusters or generations of distribution channels using multi-generation diffusion methods. The data for the study are a series of annual member surveys by hotelleriesuisse since 2002 which monitored the evolution of market shares of 15 individual distribution channels. We grouped the distribution channels into three generations starting with the pre-World-Wide-Web era (travel agent, destination organisation, etc.); the middle generation comprises Internet-based direct booking channels (e-mail, reservation forms on hotel websites, etc.) and the latest generation includes online intermediaries such as Online Travel Agencies and social media. The results of our analysis show substitution effects across different clusters of distribution channels and shed light on the dynamics of competing sales funnels. From the practitioner's point of view, the study gives insight into the future evolution of the distribution mix. This evolution is crucial for hotel marketing strategies as the Internet is the most powerful marketing tool in the hospitality industry today.

Key words: hotel, distribution, OTA, Switzerland, Fisher-Pry model, substitution effects.

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Notes:



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Agenda

Introduction

Today's context in hotel distribution

Goal of Study

Past evolution of distribution channels (2002-2012)

Simulation of future evolution

Generations of distribution channel (Kracht & Wang)

Multi-generation diffusion models (Meade & Islam)

Simulation results

Discussion and conclusions

Hotels in a complex landscape of distribution (I)

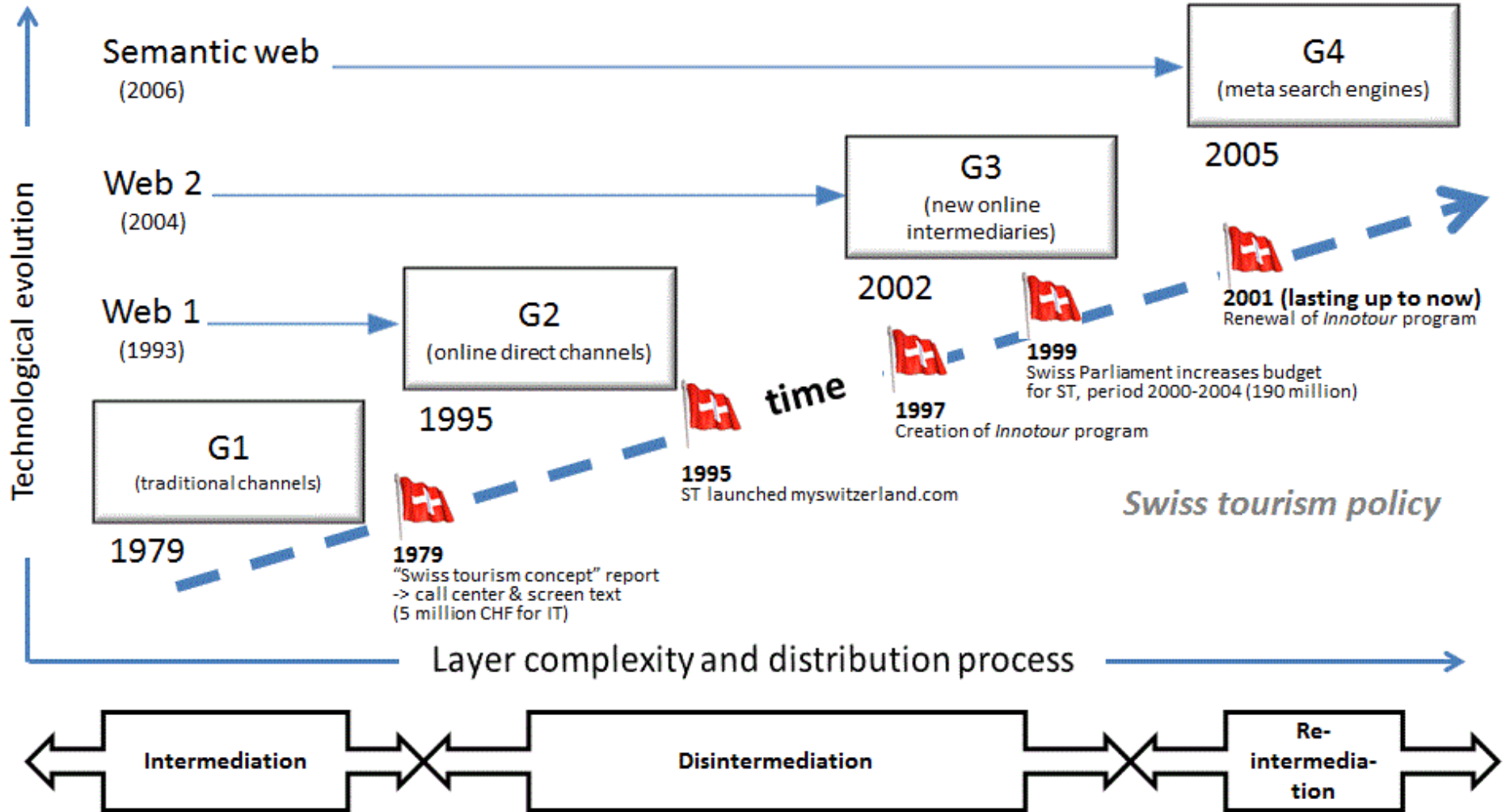
- Online intermediaries such as **OTAs play a major role** in the distribution of hotel rooms all over the world (Ku & Fan, 2009) (24*7*365)
- **Hotels have underestimated** in the past the importance of an effective online marketing strategy whereas OTAs have invested with success in **online marketing** and **aggressive conversion techniques** (Egger & Buhalis, 2008).
- Many hotels still do **not fully exploit their own website** (c.f. Schegg, Scaglione, Liebrich, & Murphy, 2007) as a tool for selling hotel rooms and as a way to gain a competitive advantage

Hotels in a complex landscape of distribution (II)

The advances of ICT have “not reduced the number of intermediaries in the distribution channel, but rather resulted in an increasingly complex array of intermediaries.”

Kracht and Wang (2010, p. 736)

Evolution of distribution channels in Switzerland



Research Objectives

There is still little research - with the exception of the work by O'Connor and Frew (2002) - looking at the **evolution** and the **future market share** of (online) distribution channels.

The aim of this research is thus to model the substitution effects across different clusters of distribution channels in the Swiss hotel sector and thus gain an understanding of the dynamics of competing sales funnels.

Multi-generation diffusion models

- Aim is to **model diffusion/substitution effects across several generations of technologies** - i.e. : successive generations of mobile bands (Meade & Islam, 2006, 2008), replacement of cash payment by electronic means in European countries (Snellman, Vesala, & Humphrey, 2001).
- **Substitution effects** show the evolution of the share of each generation when it is replaced by a new one (Meade & Islam, 2006)

Data and methodology

- Data utilised was gathered since 2002, on a nearly yearly basis, through online surveys completed by the over 2,000 members of *hotelleriesuisse*
- The online questionnaire monitored how **bookings** are distributed among available **direct** (telephone, fax, walk-in, etc.) and **indirect** (tour operator, tourism office, GDS, OTA etc.) distribution channels; hoteliers specified how much each channel accounts for in percentages (Schegg & Fux, 2010; 2013).

Data and methodology (cont')

- Based on the distribution channel typology of Kracht & Wang (2010), we have aggregated the individual channels in the following way in order to analyse the evolution of market shares of successive distribution channel generations (see Table 1):
 - **Generation 1 (traditional channels):** Telephone, fax, letter, travel agency, tour operator, DMO (local, regional or Swiss Tourism), conference organizers, CRS of hotel chain or franchisee, GDS, others.
 - **Generation 2 (online direct channels):** E-mail, reservation form on website, real-time booking on the property website.
 - **Generation 3 (new online intermediaries):** OTA, social media channel.

Data and methodology (cont')

year (n=number of hotels participating in survey)	G1	G2	G3	total
2002 (n=202)	0.68	0.29	0.02	0.99
2003	.	.	.	.
2004	.	.	.	.
2005 (n=94)	0.62	0.34	0.03	1.00
2006 (n=100)	0.56	0.39	0.04	1.00
2007	.	.	.	.
2008 (n=184)	0.55	0.40	0.06	1.00
2009 (n=198)	0.49	0.40	0.11	1.00
2010 (n=211)	0.46	0.41	0.14	1.00
2011 (n=196)	0.46	0.37	0.17	1.00
2012 (n=200)	0.42	0.37	0.21	1.00

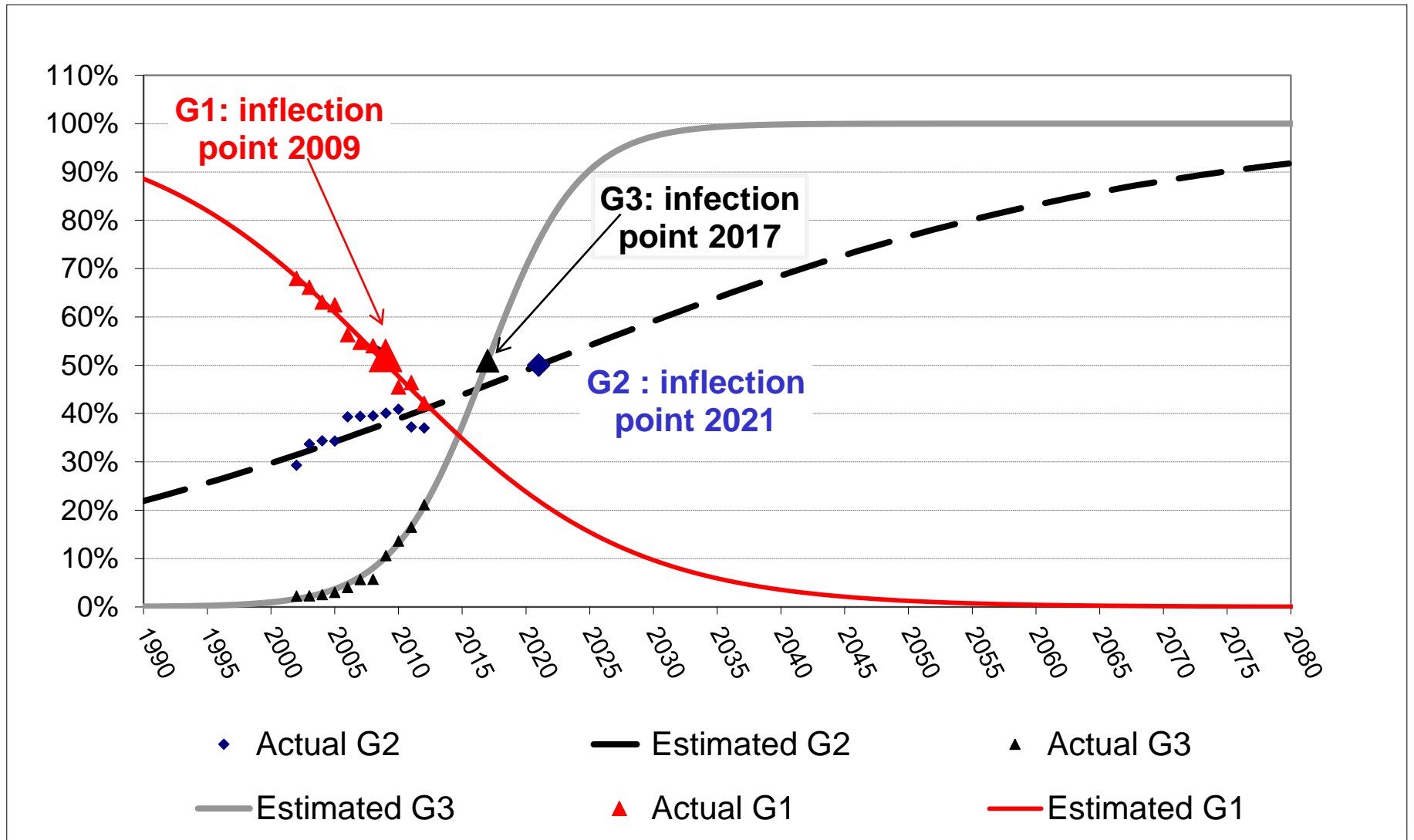
Results

Nonlinear 3SLS Estimates

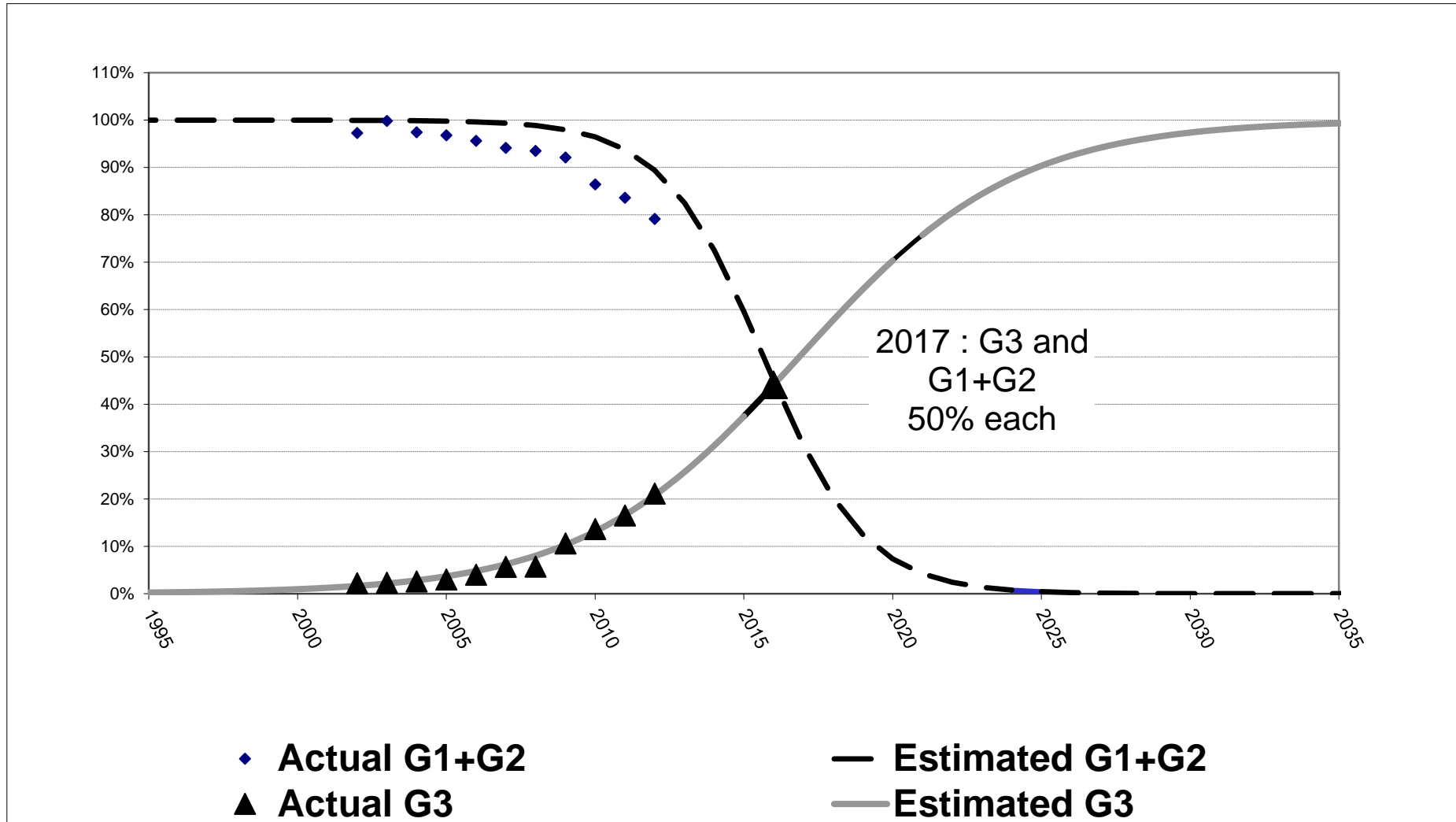
Model	Term	Estimate	Approx Std Err	t Value	Approx Pr > |t|	Estimate year f=0.5
G1	2α	-0.107	0.003	-32.76	<.0001	2009
	t_0	8.144	0.180	45.28	<.0001	
G2	2α	0.041	0.008	5.16	0.0004	2021
	t_0	19.991	2.870	6.96	<.0001	
G3	2α	0.275	0.011	25.08	<.0001	2017
	t_0	15.862	0.331	47.87	<.0001	

Note : annual fractional growth for the third generation is more than 6 times greater than the second (0.27/0.04).

Simulation and forecasts

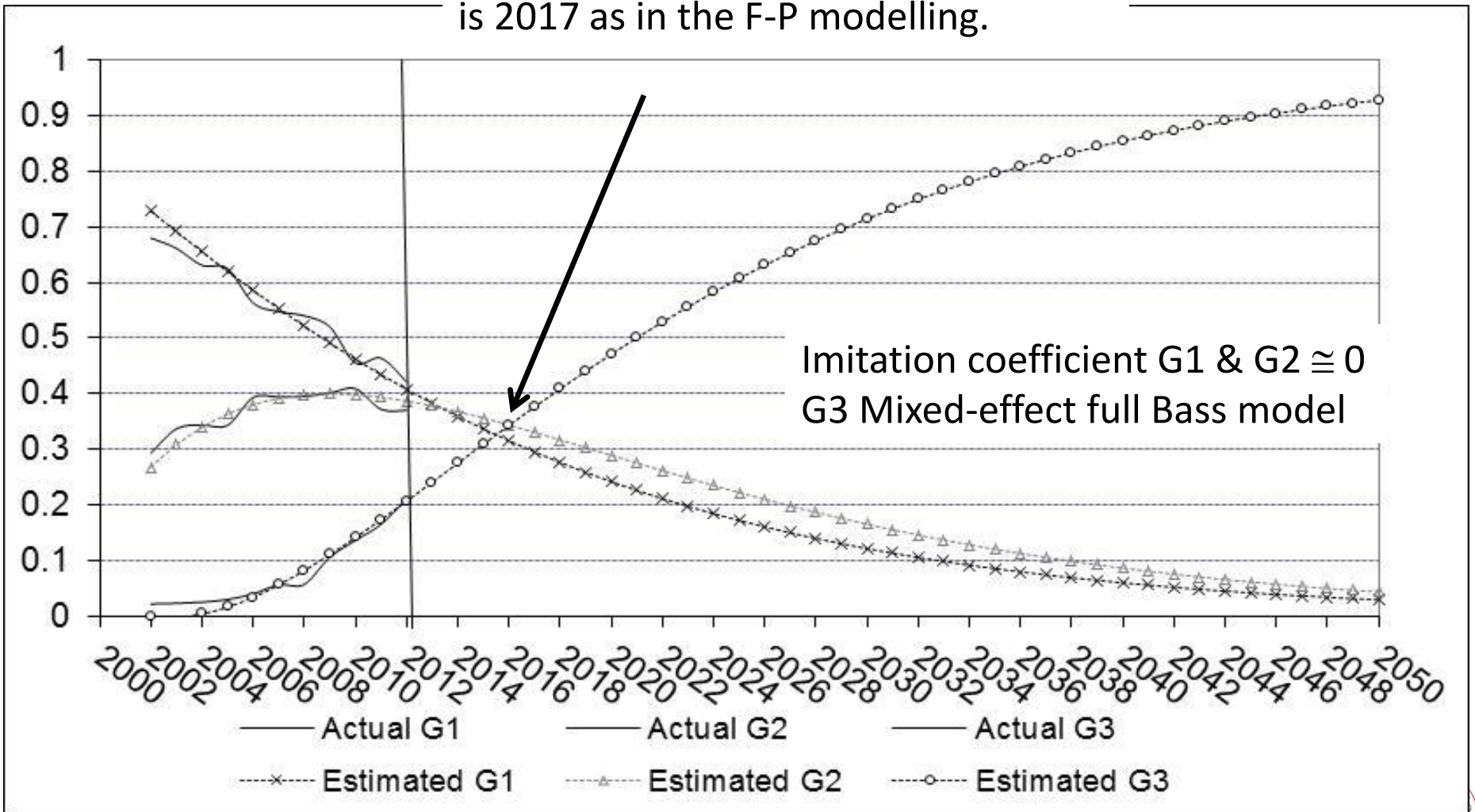


Remodelling F-P with G1+G2 as first generation



Bass Norton estimation

The point of 50% penetration for G3 is 2017 as in the F-P modelling.



Discussion

- *Ceteris paribus*, the **third generation** of channels will reach half of booking share by 2017 and in the long run dominate the booking channels.
- The **long- run forecast has to be taken with parsimony**, as this is just a **theoretical trend**, which does not take into account the rise of possible forthcoming generations of distribution channels.
- It does, however, give some evidence of the domination of the last generation over the two previous ones.

Conclusions

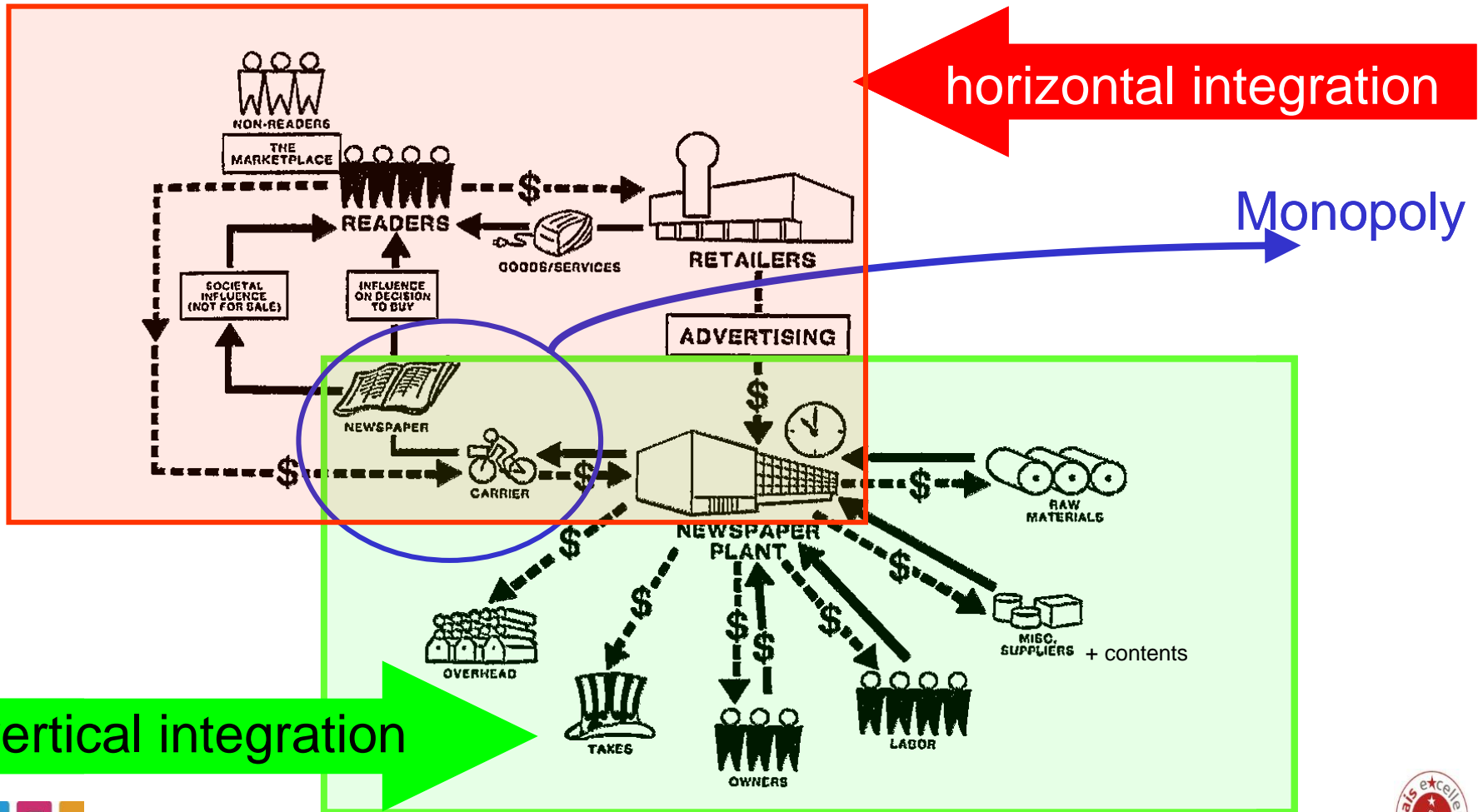
- The foreseen very **high market share of OTAs** is a serious **threat** for the Swiss lodging sector.
- Online intermediaries have become increasingly powerful in recent years and this development puts hotels in a difficult position of having to sell steadily growing portions of their inventory at (often) **discounted rates and with high commission rates through third party intermediaries** (Carroll & Siguaw, 2003).
- Driven by prices, the comodization risk of tourism products is high and a thread for the sector.

Déjà vu ...

Other sectors

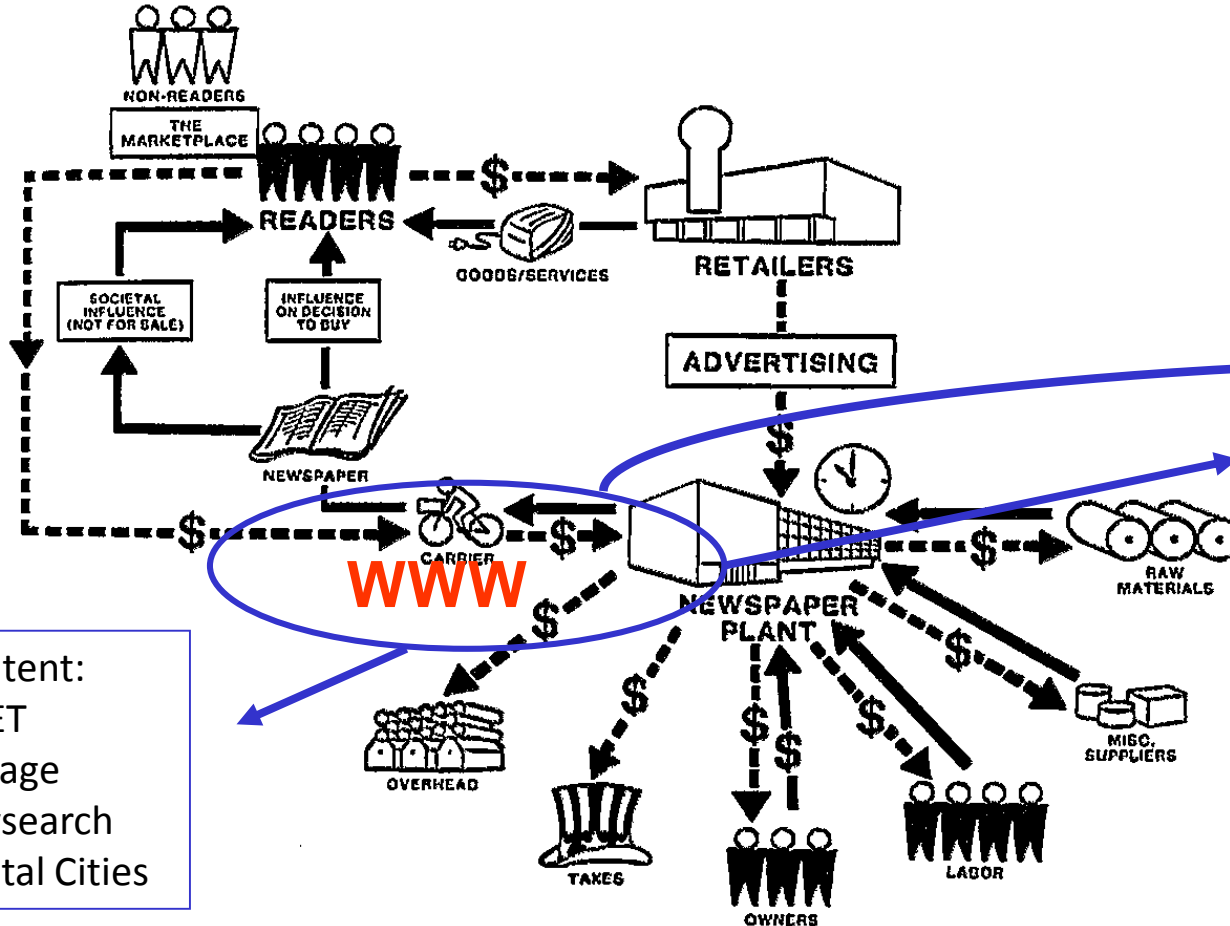
Traditional newspaper business

Evans & Wurster (2000)



Internet & newspapers

Online newcomers attack the model in three major sectors: audience, display advertising and classified sales



No longer monopoly

i.e :Monsters.com

- Content:
- CNET
- iVillage
- Citysearch
- Digital Cities



Another example: telecommunication industry (Telcos)

- **Market liberation** and the penetration of the **Internet** affected Telcos **value chain**.
- Before 2007, Telcos dominated both **infrastructures** and **services** (networking provisioning, network operations, network-related services provisioning, billing, added value services and sales).
- After 2007, “on the top” companies (OTTC) took advantage of the standard IP-based Internet connection, by adding new services ⇒ **infrastructure and services become independent**.
- MSM defeated by Social Networks....at least in the multimedia transmission (i.e. MMS are dead)
- **Voice transmission** primary revenue generator of Telcos substituted by new services (Skype, etc.)

What if...

... the OTAs players or other external actors begin to restructure the value chain in the lodging sectors (concentration process)?

...actors coming from the ICT sector foster processes of vertical integration in the tourism sector?